

# There's No Getting Around the R-Word

by Stan Cox

The human economy is already saddling the Earth's ecosystems with an impossible burden. It has become clear that the only kind of society that can endure and flourish over the long haul will have to be very different from today's. It must be a society in which production is deeply curtailed and restrained within strict ecological boundaries; furthermore, given those boundaries, there must be means to ensure fair shares of essential goods for all. To do both—to practice restraint while achieving sufficiency—will require us to devise new forms of rationing.

### Warning: Please stay behind the line

The ecological limits that science has warned us about for decades are coming into view, and it's now possible to see how little room remains for growth. In 2009, a group of 29 scientists from seven countries published a paper in which they defined nine "planetary boundaries" within which humanity can "operate safely." If we cross those boundaries and don't pull back, they reasoned, there could be catastrophic ecological breakdown on a global scale. [1] The boundaries were defined by limits on an array of indicators: atmospheric carbon dioxide concentration; other air pollutants; stratospheric ozone

---

### We face the unprecedented problem of rationing in the face of abundance.

---

damage; industrial fixation of nitrogen; breakdown of coral and microscopic sea organisms; human consumption of freshwater; land area used for cultivation of crops; species extinction; and chemical pollution. The group noted that we have already transgressed three of the limits: greenhouse-gas concentration, species extinction, and nitrogen output. Furthermore, they concluded, "humanity is approaching, at a rapid pace, the boundaries for freshwater use and land-system change," while we're dangerously degrading the land that is already sown to crops. The ocean acidification boundary is at risk as well.

And if we continue to regard limitless growth as essential to the human economy, then we'll burst through all nine of those boundaries (and others), ecosystems worldwide will crash, and the Earth will succeed in doing what we have failed to do: put a permanent stop to economic growth. [2]

Reversal of growth could instead be achieved preemptively, to ward off such a collapse. The burden of that intentional contraction, however, must be borne by the rich corporations, governments, and

populations of the global North, because that's where the sheer volume of growth has been concentrated, with a correspondingly huge impact on the ecosphere. Impoverished nations, on the other hand, have contributed far less to global breakdown and will require some headroom for the growth required to meet people's basic needs. But everyone will be living under new limits. That will mean strict control of resources used in production, and many of the goods and services that are produced will need to be rationed.

### Is there a ration card in your future?

Rationing of energy, water, food, medical care, and many other goods and services occurs throughout existing economies, usually through the mechanism of prices. But rationing by ability-to-pay can have results that are, in the words of eminent economist Amartya Sen, "thoroughly unequal and nasty." Letting prices prevail in a no-growth or negative-growth economy would be even nastier. Therefore, price controls on essential goods would be required. That, in turn, would trigger formal rationing by quantity, to ensure that everyone has access to a fair share. To see how it might work, let's look at one example: the possibility of rationing fossil fuels in the United States.

Stop right there, you might say. Why would we do that? Isn't America poised to surpass Saudi Arabia in crude oil extraction by 2020, according to the International Energy Agency? [3] Aren't pumping methods bringing a glut of natural gas? Isn't talk of "energy independence" in the air?

Yes, yes, and yes. And in fact, if all those cornucopian prospects come to fruition (by no means a sure thing), rationing of fossil fuels and probably other resources will become even more essential. A little math shows that if humanity is to have a decent chance

holding the rise in the Earth's average atmospheric temperature to less than two degrees Celsius—a margin beyond which lies catastrophe—we will have to leave two-thirds to four-fifths of the world's

---

**...taxes are an indirect, often unreliable, and always unpopular means of curbing consumption.**

---

current fossil-fuel reserves in the ground, at least beyond 2050.[4]

But if we continue to allow prices alone to ration fuels, the bulk of that ancient carbon will, inevitably, find its way to the surface and into the atmosphere as rapidly as possible. And if we persist in our all-out assault on “unconventional” fuels like tar-sand oil and shale gas, augmenting our headlong exploitation of conventional reserves, we’ll not only cook the Earth even faster but also do irreparable damage to landscapes, water supplies, and ecosystems.

We have no choice but to take more drastic measures, to impose strict limits on extraction of fossil fuels. That in turn will create the need for a combination of price controls and fair-shares rationing—something resembling the measures adopted in America and Europe during World War II. Or consider another example from the past: the standby plan for gasoline rationing that the US Congress passed in 1980. (It called for rationing by the gallon rather than by license-plate number as was done in the 1970s and for a brief period in parts of New York and New Jersey after Superstorm Sandy.) When the 1980s oil glut arrived, the idea of gallon rationing was dropped. But had Congress’s plan gone into effect, and had we managed to hold per-capita gas consumption steady for the next three decades, we could have saved 800 billion gallons—about six years of current output from US refiners. [5]

Rationing by quantity has been practiced many times throughout history, but always in the face of scarcity. Now we face the unprecedented problem of rationing in the face of abundance.

To manage abundance, we need a “cap and ration” system. The most widely discussed alternative to cap-and-ration, the “tax and dividend” approach proposed by NASA scientist and climate activist James Hansen, features a universal tax on carbon emissions, with universal reimbursement of revenues as an equal-shares dividend. Early in 2009, Australia actually adopted a carbon tax, accompanied by income-tax breaks and compensation aimed primarily at lower-income households.

Such consumption taxes ration resources by increasing prices. As a result, taxes are an indirect, often unreliable, and always unpopular means of curbing consumption. Even with the equal-shares dividend, a carbon tax would be unfair to lower-income households. In Australia, the compensation scheme had the perverse effect of increasing overall consumption. [6]

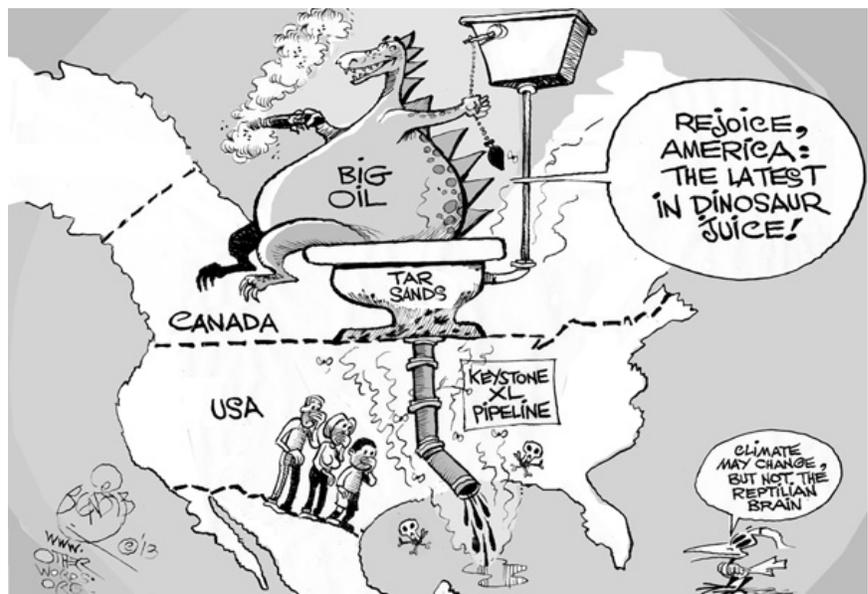
A competing approach, developed in various forms by several UK-based groups, would ration carbon emissions through mechanisms such as “personal carbon allowances.” Under these systems, there would be a national carbon budget—a hard cap—that ratchets down year by year, with Britons re-

ceiving equal shares of that budget in the form of emissions permits to be used when paying home energy bills or buying vehicle fuel. [7]

Meanwhile, French experts have proposed gasoline rationing by the liter, and entire population of Norfolk Island in the Pacific will be taking a crack at voluntary carbon quotas. But no full-blown carbon rationing policy has yet come close to being put into place. [8]

A feature common to all systems for rationing personal or household emissions that are currently on the table is tradability of ration credits. That’s intended to reward good conservers by allowing them to sell unused credits while allowing others to consume and emit more than their share, but only by buying permits at a high price.

Tradability, however, would allow the rich to buy their way out of conservation, while tougher rules would apply to those with less money. Personal carbon trading could also end up linking household finances to volatile “upstream” carbon markets like the European Union Emissions Trading System, riddled as they are with speculation and dubious “offset” provisions that undermine the goal of curbing emissions.



The safer, stronger path would be to retain the hard cap and have equal-shares rations but make them non-tradable, as they were in wartime. The cap would need to be fairly generous at first but quickly tighten year by year, to allow society to adjust. With access to fossil fuels strictly limited, there would be stronger incentives than ever to develop new living arrangements and low-energy technologies.

An alternative to tradability (one considered as long ago as the 1940s) would include a mechanism that allows families who cannot afford to use all of their ration credits to sell their spare ones back to the government. The government would bury, not resell, those credits.

That would enhance the family's income while keeping a tight lid on consumption society-wide and preventing the rise of black markets. The government could raise money for the buyback program by raising taxes on the wealthy. [9]

### More jobs, less work?

What we need in the long term is a transformation of the world economy, one that shifts power from the now-dominant "1%" to the 99% who actually produce the world's wealth. But meanwhile, ecological crises are bearing down on us. We have

---

---

## At the root of today's stagnation is not a lack of productivity but rather overproduction.

---

---

to become a society that puts the brakes on consumption and does it in an egalitarian way. In fact, by embracing the right kind of rationing, we might even discover a happier, better-fed, healthier, more comfortable, and more secure world than the one we inhabit today.

The vision of an economy that can manage sufficiency for all, even while shrinking, provides little comfort to economists, politicians, and corporate boards. They will greet any mention of the "r-word," let alone any talk of growth reversal, with dire warnings of stagnation. But of course, chronic stagnation and unemployment have already become all-too-familiar features of the world economy. And ironically, at the root of today's stagnation is not a lack of productivity but rather the same phenomenon that has fostered ecological crisis: overproduction.

Over the past half-century, corporations—especially the mega-corporations that have come to dominate the world's economies—have become too good at what they do. They squeeze more production and profit out of their workforces every year, and capital piles up faster than they can invest it profitably. The inevitable result—stagnation—has become the norm in Western economies.

In a world of pervasive stagnation, pundits and politicians continue to talk about jobs as if they are

businesses' gift to society. In the real economy, employers keep their workforces as lean as they can. Intensifying pressure on employees, outsourcing jobs, and substituting fossil-powered technology for human power are all reliable ways to increase profitability. The result has been long strides in productivity, defined as wealth creation per worker. That has provided businesses huge payroll savings and

---

---

## If capping and rationing leads to a shift back toward human power, many more jobs will be created.

---

---

boosted profits, but at the cost of accelerating the slide toward overproduction, stagnation, and unemployment.

But in a rationed economy, wouldn't it be even more difficult to provide jobs for everyone? Not necessarily. Peter Victor of York University in Toronto has shown that—if public policy and productive forces are explicitly directed toward sustaining a high quality of life for all and not toward enriching a few—a negative-growth economy can enjoy deep reductions in unemployment and poverty rates, with a decrease in debt as well. Greenhouse-gas emissions would also decline steeply, by as much as 80%.

If capping and rationing leads to a shift away from resource-hungry technologies back toward human power, many more jobs will be created. Tim Jackson, author of the book *Prosperity Without Growth: Economics for a Finite Planet* has suggested that employment be shifted over to low-productivity jobs of high social value. And because the working people who've achieved those past increases in productivity have not so far been rewarded with higher pay anyway, we might as well take advantage of those gains by instead working shorter hours to produce the same or a smaller volume of goods rather than continuing to overproduce. In Harvard economist Juliet Schor's view, "it is difficult to imagine a globally ethical, timely, and politically feasible resolution to the global ecological crisis in which populations in the North do not reduce the number of hours worked per capita." [11]

Of course, such restraint would trigger a severe allergic reaction in any major economy. That should be taken as a sign that it's the economy, not the idea of restraint, that is defective. Shorter work weeks, slower production, lower stress, lower consumption, and smaller ecological footprints can become a reality—but only after a radical economic transformation.

Stan Cox's book *Any Way You Slice It: The Past, Present, and Future of Rationing*, will be published in May by The New Press.

Notes

1. Johan Rockström et al., Planetary Boundaries: Exploring the Safe Operating Space for Humanity, *Ecology and Society* 14, no. 2 (2009): art. 32.
  2. There are many other indicators of the impossibility of permanent economic growth. See James Brown et al., Energetic Limits to Economic Growth, *Bioscience* 61 (2011): 19–26; J.R. Burger et al., The Macroecology of Sustainability. *PLoS Biology* 10, no. 6 (2012), <http://www.plosbiology.org/article/info%3Adoi%2F10.1371%2Fjournal.pbio.1001345>
  3. IEA, World Energy Outlook 2012, <http://www.worldenergyoutlook.org>
  4. See Lorne Stockman, IEA Acknowledges Fossil Fuel Reserves Climate Crunch, *Oil Change International*, November 12, 2012, <http://priceofoil.org/2012/11/12/iea-acknowledges-fossil-fuel-reserves-climate-crunch>
  5. Stan Cox, *Any Way You Slice It: The Past, Present, and Future of Rationing* (New York: The New Press, 2013), 49–50.
  6. James Hansen, Carbon Tax & 100% Dividend vs. Tax & Trade, testimony given to the Committee on Ways and Means, US. House of Representatives, February 25, 2009; Colin Brinsden, Spending Rises as Compensation Rolls Out, *Herald Sun*, July 4, 2012.
  7. David Fleming and Shaun Chamberlin, *TEQs: Tradable Energy Quotas* (London: House of Commons and Lean Economy Connection, 2011); Tina Fawcett and Yael Parag, An Introduction to Personal Carbon Trading, *Climate Policy* 10 (2010): 329–38.
  8. Charles Raux and Grégoire Marlot, A System of Tradable CO2 Permits Applied to Fuel Consumption by Motorists, *Transport Policy* 12 (2005): 255–65; Cox, *Any Way You Slice It*, 95–97.
  9. George Feiwel, Kalecki's Ingenious Expenditure Rationing Scheme, *Keio Economic Studies* 11 (1974): 67–87.
  10. Peter Victor, Growth, Degrowth and Climate Change: A Scenario Analysis, *Ecological Economics* 24 (2011): 206–12.
  11. Juliet Schor, Sustainable Consumption and Worktime Reduction, *Journal of Industrial Ecology* 9 (2005): 37–50.
-