

### Are Market Mechanisms Moral?

he Paris Agreement marks a significant step forward in international efforts to mitigate damage from climate change and prevent further global warming. 195 nations consented to the agreement, which outlines emission reduction goals that must be met to hold warming below 2° Celsius. The document does not establish specific methods of emission reduction, but many observers believe an all-of-the-above approach is necessary. While using all available tools may seem wise when faced with the formidable challenges presented by climate change, there are moral authorities — including Pope Francis, patriarch of the world's approximately 1.2 billion Roman Catholics — who have cautioned against blind acceptance of one popular approach, market-based mechanisms.

In the Papal Encyclical Laudato Si', released in May 2015, Pope Francis highlighted the linkage between environmental degradation and social injustice. He cautioned against "deify[ing]

the market" and admonished the throw-away culture prevalent in much of the developed world. It seems fair for this pastor from the global South to question the use of market-driven methods to solve problems largely caused by the very same incentivization of profits over all other concerns.

As the environmental law and policy field absorbs the Paris Agreement and begins to focus on methods of achieving the goals consented to, it will be important for thought leaders to step back and examine the tools at their disposal from the perspective of the global community, particularly the poor and marginalized, as well as weigh other market-based programs to reduce pollutants like mercury or sulfur dioxide. Can a market overcome the moral failure of the tragedy of the commons? Can it be constructed to incentivize social equity — economic, geographic, and generational? Could there be equitable benefits of a market approach over command-and-control? Can problems like pollution hot spots be avoided?



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Leslie Carothers Visiting Scholar Environmental Law Institute





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Bob Perciasepe President CENTER FOR CLIMATE AND ENERGY Solutions

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## Morality Matters at the Climate Conference

Leslie Carothers

s an ELI observer during the Paris Conference of the Parties to the climate change convention, I roamed the halls seeking insights into the policy dynamics of the negotiations and the path forward after an agreement was reached. I saw that moral convictions were driving the parties toward an aggressive climate protection goal and that many regulatory strategies, including market mechanisms, would be needed to achieve it.

The parties' recognition of the severe environmental, economic, and social impacts of climate change caused them not only to reaffirm the ambitious goal of limiting the postindustrial temperature rise to 2°C but also to "pursue efforts" toward a lower limit of 1.5°C. Visible and effective representatives of southern hemisphere developing countries and especially many small island states presented the need for a lower limit. Al Gore supported them with a well-attended presentation of stunning recent photographs showing floods, fires, and droughts afflicting many countries and increasingly attributed by scientists to conditions caused by climate change.

Regulatory strategies for achieving even greater reductions in greenhouse gas emissions to meet the targets were secondary concerns at the meeting. The Paris Agreement is composed of Nationally Determined Contributions (emission reduction targets) volunteered by almost all countries and implemented by methods of their own choosing. The improving availability and affordability of renewable energy technologies and the importance of financing for mitigation and adaptation measures in developing coun-

tries were major topics at the Paris meeting, to be sure, but few expect technology and finance alone to accelerate the transition from fossil fuel—based economies. Today's aggressive climate protection goals demand reducing emissions more and faster than contemplated in prior international negotiations, covering more industrial and commercial sectors, and moderating cost increases that would be damaging to energy users. This is where well-designed market mechanisms could make a crucial contribution.

The single reference to marketbased solutions in the Paris documents appears in the decision statement recognizing "the important role of providing incentives for emission reduction activities, including tools such as domestic policies and carbon pricing." Advocates for market mechanisms were also encouraged by Section 6 of the agreement that addresses the use of "internationally transferred mitigation outcomes," a clunky new name for emission offsets and credits. Its text emphasizes avoiding double counting of reductions and contemplates a role for the United Nations in developing that rule.

In addition, a diverse group of 18 countries, led by New Zealand and including the United States, Germany, Indonesia, Senegal, Papua New Guinea, and Ukraine, issued a declaration supporting carbon markets and committing to work together to ensure the development of consensus standards and guidelines for international market mechanisms.

Pope Francis and others wary of market mechanisms fear that business interests will secure unfair financial advantage from market-based regulation of greenhouse gases. The intended benefits of a tax on emissions or a cap-and-trade system are to give regulated entities both policy direction and greater flexibility in choosing and timing compliance methods and to achieve the required overall emission reductions more efficiently and cheaply.

Even assuming good-faith efforts by businesses to follow the rules, critics doubt that public-sector regulators and their advisors are capable of setting a carbon tax at a level that will induce the desired behavior, allocating the tax revenues to address adverse impacts on low-income people, and adjusting the tax plan if the initial actions are not motivating the desired results. So far, there are few durable carbon tax programs with a sufficient track record to convert the skeptics.

The record of cap-and-trade market approaches in pollution regulation is stronger; but in the case of carbon regulation, it is still too soon to trumpet their success in delivering faster and cheaper emission reductions in the real world. The European Union cap-and-trade program and the Regional Greenhouse Gas Initiative in the Northeast have been buffeted by the 2008 recession and volatile fuel prices, making it difficult to assess their impact in reducing emissions. California's ambitious program covering more emission sources is too new to demonstrate success in reducing carbon emissions, moderating costs, and providing effective remedies for any adverse local pollution impacts from sources buying credits instead of installing emission controls.

The Paris Agreement of 2015 affirms that protection of people and the planet from severe damage from climate change is a moral imperative demanding worldwide action. Market mechanisms to reduce carbon pollution promise to be an efficient means to that moral end. Learning from experience with programs underway, policy analysts and advocates should be able to explain and confirm the integrity and effectiveness of market-based regulation and to earn wider support.

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# Climate Policy Requires Markets — and Equity

Joel Darmstadter

wo landmark events last year signaled the urgency of the need for an intensified and aggressive worldwide assault on the greenhouse warming threat.

In May, an Encyclical Letter by Pope Francis (in English, "On Care for Our Common Home") argued eloquently for both recognition of that threat and a determined resolve to overcome the forces which, arguably, have impeded decisive action. The Encyclical cited, as a root cause for that impediment — in effect, a moral failing — a market-oriented world order at odds with the humanitarian challenge posed by global warming and other ecological risks.

With equal passion, the papal document underscored the imperative of sparing the world's developing countries the full extent of their proportionate financial burden in pursuit of global climate amelioration. The problem of global warming "is aggravated by a model of development based on the intensive use of fossil fuels, which is at the heart of the worldwide energy system." But many of "those who possess resources and economic or political power seem mostly to be concerned with masking the problems or conceding their symptoms." Yet, the gravest impacts of environmental degradation are "suffered by the poorest."

More recently, the agreement reached at the global climate negotiations in Paris in December was less preoccupied with identifying systemic institutional failures to address the climate problem than confronting three urgent priorities: respecting maximum tolerable temperature increases; the consequent magnitude of mitigation initiatives consistent with that constraint; and a concur-

rent pursuit of resilience and adaptation to impacts no longer avoidable. Tools — e.g., carbon prices or tradable permits — by which countries would choose to pursue these goals did not figure in the Paris agenda.

But echoing what is underscored in the Pope's message, the Paris negotiators voiced no less a commitment to help developing countries lessen the cost to which a fully functioning international accord would otherwise expose them. Specifically, "developed country parties shall provide financial resources to assist developing countries with respect to both mitigation and adaptation" and do so with a minimum annual disbursement (beginning in 2020) of \$100 billion, an amount judged vital to fulfill that task.

How to coalesce around these distinct, if overlapping, perspectives – one, highlighting ethical obligations; the other, concrete goals that would clearly need to be cast within a global economic and policy setting? A thoughtful explication of that dichotomy is admirably considered by William Nordhaus' *New York Review* article, "The Pope and the Market," October 8, 2015.

One essential part of the answer is the reassuring finding in the most recent report by the Intergovernmental Panel on Climate Change that the estimated cost (measured by worldwide GDP foregone) to meet climatic goals such as those basically reaffirmed at Paris would be exceedingly slight in both absolute terms and relative to estimated benefits (measured by damage avoided). Alas, that formulation is cast within the luxury of treating the globe as a single entity; and through the lens of a key analytical tool — a *globally* oriented benefit-cost analysis — that replaces a construct heretofore applied within a purely domestic context. It is, indisputably, a significant paradigm shift.

The United States' situation exemplifies the dilemma. EPA's Clean Power Plan relies on a "social cost of carbon" calculation whose benefits exceed costs by a substantial margin. That is because, while domestically incurred costs are calibrated by reduction in U.S. carbon dioxide emissions, benefits are reckoned in terms of the positive international consequences of that reduction. If EPA's stipulated emission curbs had been governed by much more limited U.S. beneficial climatic impacts, the debate surrounding the CPP might have taken a less strident turn—if one fueled by a strictly inward-looking approach to an overriding global phenomenon.

In short, a benefit-cost approach traditionally applied solely to internal issues — like, say, the interstate provisions of the 1990 Clean Air Act Amendments — must here be framed in a way that reflects the extent to which United States' and other nations' emissions contribute to worldwide climatic harm.

But, in my judgment, that's precisely how it should be: the uniqueness of the climate threat justifies nothing less than "globalization" of the benefits side of U.S. benefit-cost estimates. Nonetheless, it is important to note that at least a small, but vocal, minority of both respected economists and legal scholars — their intellectual acceptance of global warming notwithstanding — decry what they perceive to be a perversion of established analytical practice, thereby undermining both economic logic and legal precedent.

If, separate from the benefit-cost controversy, there is the prospect of transfer of significant financial assistance from advanced to poor countries — seen as vital in both the Paris Agreement and the Encyclical — further political sparring may await us. In the end, I hope that the specter of the climatic threat will allow fresh thinking in both concept and policymaking to prevail.

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#### Markets Alone Can't Produce Social Justice

CAROLINE FARRELL

pope Francis' Encyclical Laudato Si' defines the environment broadly to include not only nature, but human society as well. The Pope recognizes that "a true ecological approach always becomes a social approach; it must integrate questions of justice in debates on the environment, so as to hear both the cry of the earth and the cry of the poor."

The Pope encourages us to take a comprehensive approach to addressing environmental harms to resolve persistent human social problems. Throughout the Encyclical, the Pope references the disproportionate impacts poor people throughout the world experience from pollution throughout the lifecycle of production: extraction, manufacturing, distribution, and disposal. Environmental solutions should transform how we produce and consume goods and services for the benefit of all.

Because of this broad vision of what environmental protection means, the Pope expresses skepticism that the markets can deliver adequate protection: "By itself the market cannot guarantee integral human development and social inclusion." The Pope also cautions against subjugating environmental interests to "deify the market." The Pope criticizes the prevalent mindset that "let us allow the invisible forces of the market to regulate the economy, and consider their impact on society and nature as collateral damage.'

The Pope's comprehensive approach to defining the environment and critique of the market shares much in common with the environmental justice cause. The movement grew out of the reality

that low-income communities and communities of color in the United States and the global South are disproportionately harmed by the fossil fuel economy. Communities of color live at the fenceline of polluting facilities that contribute to climate change. These facilities not only emit greenhouse gases, but also particulate matter, volatile organic compounds, and toxic contaminants that harm human health and the ecosystem. Because of these copollutants and the disproportionate pollution burden experienced by low-income communities and communities of color, environmental justice advocates have long criticized market mechanisms as a right to pollute rather than a solution to climate change.

Market mechanisms are touted as a popular solution because they set a price on carbon which sends a signal to the market spurring research, development, and adoption of greenhouse gas-reducing technology based on cost effectiveness. Common market mechanisms include cap-and-tax proposals such as the recently introduced Climate Protection and Justice Act of 2015 by Senator Bernie Sanders (I-VT) or cap-and-trade systems such as those adopted by California in 2012 or outlined in the Environmental Protection Agency's Clean Power Plan.

Under a cap-and-trade strategy, regulators set emission-reduction targets, inventory emission reductions necessary to meet that cap, and then allow flexibility in how greenhouse gas emitters meet the targets. Polluters are given the choice: reduce emissions at the site, purchase credits or allowances from other facilities regulated under the cap that reduced emissions, or purchase offsets from other sectors outside the cap that lowered their emissions. The key criteria for determining which option a polluter will use is cost effectiveness rather than pollution burden or community development opportunities.

By relying on polluters' financial considerations to motivate action on climate change, we are missing an important opportunity to examine our values and to find more comprehensive solutions to climate change that solve multiple problems.

The Pope invites us to join this values-based conversation and to not rely only on the markets to guide us. He recognizes that technological and market choices are not neutral, "For they create a framework which ends up conditioning lifestyles shaping social possibilities along the lines dictated by the interests of certain powerful groups." Environmental justice advocates question the morality of allowing polluter interests and power to define what is possible as we address this global problem.

This critique was visible during the Paris climate talks in December. Global environmental justice and human rights activists gathered to advocate for more socially responsible commitments to reduce climate impacts. The Paris Agreement that emerged from the talks exceeded expectations by setting a goal of holding the increase in global temperature to below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C. However, while the agreement does acknowledge health, sustainability, and human rights obligations as considerations when addressing climate change, the plan's framework relies heavily on voluntary, market-based measures that from the outset do not meet the goal. As we move forward to adopt and implement the Paris Agreement, we must use this opportunity to accept the Pope's invitation to have an inclusive discussion leading to comprehensive solutions that go beyond the market to protect our common home and solve persistent social and environmental problems.

**Caroline Farrell** is the executive director of the Center on Race, Poverty & the Environment.

#### **Markets Are Mostly Moral** -But It Depends

STEPHEN F. HARPER

have had the professional pleasure of wrestling with the practical and moral aspects of market-based environmental policies for over 30 years. First in California, managing a transferable development credits program in the Santa Monica Mountains. Then as an EPA staffer helping lead a failed effort to kill the first air bubble policy in the mid-1980s. Then as an EPA consultant in a peripheral role in the implementation of the Montreal Protocol and Acid Rain programs. More recently I have worked on cap-and-trade approaches to climate change and the development of nutrient-trading strategies for cleaning up the Chesapeake Bay.

These experiences have given me an appreciation of the virtues and limitations of market-based policies. Regarding the morality of such policies, I believe the answer is mostly "yes," but that it depends on the types of problems they are focused on and how such policies are designed. The devil is indeed in the details.

The first question in deciding whether to apply a market-based policy is: Will it work? This is the "effectiveness" criterion. Michael Sandel, in What Money Can't Buy, adds two other criteria that deal with morality. He labels them "equity" and "corruption." Would the policy in question be fair in social terms? Would its application corrupt the very nature of the resource being managed? Combining the three provides a good analytical frame for deciding whether to apply market policies.

Regarding effectiveness, some problems lend themselves better than others to market solutions.

Climate change seems an ideal candidate, since most climate emissions can be monitored and tracked with reasonable precision. The integrity of market policies rests on the ability to quantify/verify emissions reductions.

Climate change does not present local equity challenges, since solutions do not create pollution hotspots. And market-based climate policies need not create generational or have/have not equity issues if designed properly. Indeed, they can enhance equity by accelerating and targeting climate action. From a corruption standpoint, Sandel and others would label pollution as a social "bad" that should be punished, not priced. However, climate change involves excessive emissions of an essential gas — CO<sub>2</sub> — not a pollutant in the conventional sense.

Targeting market policies to address local pollution problems, like VOCs and NOx air emissions, may be different, because of the potential for creating concentrations that compromise equity. But even there, it often is possible to build in protections that prevent such inequities. Here again I see no problem from a corruption perspective.

But more important than equity and corruption, in my view, is the question of: "What's the alternative?" Traditional "command-andcontrol" policies tend to be more expensive than their market alternatives. If the cost differential is significant, solving the environmental problem means higher taxes and/ or product prices. Since these costs typically are distributed regressively (the poor pay more), non-market approaches raise their own equity concerns.

Moreover, command-and-control approaches, in part because they can be expensive, often fail the effectiveness test. Traditional policies can become so costly that they are not politically sustainable. This makes market approaches attractive in the first place. Moreover, less expensive

market approaches can, in fact, create positive equity benefits by making it possible to both solve resource threats and solve them more quickly.

"Corruption" is the most difficult criterion to confidently apply. In part, that is because the concept entails difficult subjective aspects. There are some hypothetical proposals that can be readily dismissed on corruption grounds (like selling billboard space on the North Rim of the Grand Canyon in order to raise funds for better park management), but more often the answer is in the eye of the beholder. The corruption concern comes down to the morality of putting a price on resources we consider priceless. Commandand-control policies put a price on the priceless; that price simply is administered in a different manner. In other cases, by failing to price resources we render them effectively valueless. This is the essence of the tragedy of the commons.

Finally, when judging market policies, we should realize that, historically, many of the most successful environmental management programs have been market-based. In the United States, the phaseout of lead in gasoline, begun in the mid-1970s, has been called the agency's most important public health triumph. Key to this success was a lead credit-trading program which allowed refiners to phase out lead more cheaply and quickly than otherwise would have been possible. Next came the dramatic reduction in acid rain, based on trading markets for VOCs and SO<sub>2</sub>. This historical record of success in dealing with extremely challenging resource threats should not be ignored as we search for effective tools to deal with today's challenges.

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#### Markets Can Be Socially Responsible

BOB PERCIASEPE

hen faced with a problem, it makes sense to find the most cost-effective solution. Climate change is already imposing real and rising costs on society, and most economists agree that market-based approaches like cap-and-trade or a carbon tax can reduce climate-altering emissions at the lowest possible cost.

Some may be uneasy relying on market forces to provide a solution, when market-based economies in the past failed to take climate change into account. Others worry that doing so will exacerbate existing inequities, leaving the poor and most vulnerable worse off. But experience shows that well-crafted, market-based approaches can effectively combat pollution while also serving other societal needs.

First, there is the implicit benefit of cost-effectiveness. By tackling climate change at the lowest possible cost — in other words, by getting the most bang for our buck — market-based approaches allow us to be more ambitious in our carbon-cutting efforts, while diverting fewer resources from other social priorities.

Second, a market-based approach can be explicitly designed to shield low-income families from undue costs, or even to devote resources to make them better off.

We don't need to rely on economic theory; we have experience to show market approaches work. We significantly reduced the sulfur dioxide pollution responsible for acid rain through a cap-and-trade program created in 1990 by a bipartisan Congress. Emissions were cut about twice as fast as predicted and at a fraction of the cost of traditional regulation.

Ten states — home to more than a quarter of the U.S. population — now have a price on carbon emissions. California is cutting emissions through a cap-and-trade program while experiencing one of the nation's best job growth rates. The nine Northeast states in the Regional Greenhouse Gas Initiative have cut carbon emissions from power plants 40 percent since 2005 without significant increases in consumers' electric bills.

The impacts of climate change — rising sea level and more frequent and intense heat waves, droughts, and downpours — disproportionately affect those who can least afford to get out of harm's way. Cutting greenhouse gases cost-effectively means we can do more to reduce these risks.

The costs of climate impacts have not been factored into the price we pay for energy, and that would change. Transitioning to a clean-energy economy requires some upfront costs to avoid the far greater costs of increased warming. When we minimize these initial investments through market-based approaches, we place less burden on those who can least afford it.

Cutting carbon pollution also produces significant health benefits for vulnerable populations, including children, the elderly, and the poor. By burning less fossil fuel — the major source of carbon emissions — we also reduce lungdamaging smog and other harmful air pollution. Allowing market forces to decide where to cut carbon for instance, through emissions trading — doesn't weaken our rigorous standards for harmful pollutants like mercury. But by creating an economic incentive for energy investment and innovation, it can help reduce all pollutants from burning fossil fuels.

By creating carbon pricing policies thoughtfully, we can reduce emissions while also ensuring lowincome families aren't hurt by rising energy costs, which consume a bigger share of their budgets.

A carbon tax generates revenues that can be used for beneficial and progressive purposes, such as reducing payroll taxes to put more money in workers' pockets or giving lowincome families aid for energy bills. A cap-and-trade program can also be designed to generate revenues to help poor families, improve their home energy efficiency to keep bills down, or even help them generate their own energy. Careful design can also assure that the health co-benefits are delivered to all communities, including the most vulnerable.

California requires that a quarter of its cap-and-trade revenues go to help disadvantaged communities. Nearly \$15 million will go to install solar panels in disadvantaged neighborhoods, saving each household \$1,000 a year in energy costs. A significant portion of over \$1 billion in RGGI proceeds has gone to energy efficiency. These investments are projected to save participants \$2.3 billion on energy bills.

The Environmental Protection Agency's proposed Clean Energy Incentive Program would encourage a market-based approach to complying with the Clean Power Plan and stimulate investment in low-income communities by providing tradable credits to programs to increase energy efficiency in those communities.

Humanity has largely caused climate change and we have a moral responsibility to fix it. It is critical to learn from experience to minimize unintended consequences, and maximize benefits. Thoughtfully crafted market-based policies let us reduce emissions at the lowest cost and protect vulnerable communities from the costs of transitioning to a clean-energy economy.

**Bob Perciasepe,** an environmental policy leader for more than 30 years and former deputy EPA administrator, is president of the Center for Climate and Energy Solutions.

#### **Tapping Our** Better Nature to Solve Global Woes

Lucia A. Silecchia

The well-worn story of the tragedy of the commons warns that when activity causes harm that does not fall on those who cause it, logical people will seek to maximize their personal benefit regardless of costs to others. Shifting costs back to those who generate harm is a form of "marketbased mechanism." The opposite is also true. Just as markets can penalize those who cause harm, so too can markets reward those who produce benefits.

Environmental law's most wellknown market-based mechanisms are emissions credits — domestic and international systems for exchanging the "right" to discharge a quantity of a pollutant. However, variations of this model can certainly be found or contemplated elsewhere.

Proponents argue that such incentives effectively reduce emissions by motivating creativity to generate efficient methods of pollution reduction. They argue that this is more palatable than command-and-control regimes, that positive incentives are preferable to punitive taxes and fines, and that this strategy allows those who can reduce pollution more cheaply to do so, since costs of pollution reduction vary among different industries and facilities.

Yet, practical and philosophical criticism of market-based incentives is also rampant. Because most systems allocate credits based on existing discharges, do market-based systems give perverse incentives to delay environmentally beneficial conduct in order to be allocated more credits? Do market-based incentives help areas that are economically developed rather than those that have little industry to use as a basis for the initial credit allocation? Will the ability to buy credits enable industries to stockpile allotments and use them to concentrate pollution in

hot spots afflicting distressed communities? Do credits create a morally questionable right to pollute that commodifies harmful activity?

This summer, Pope Francis weighed in on the morality of market-based incentives in his Encyclical Laudato Si'. In doing so, he added a new perspective to the debate. The Encyclical is a wide-ranging critique of ecological woes. More broadly, it is a sober perspective on social, economic, moral, and political factors that Pope Francis fears contribute both to environmental and social concerns. He laments that the same throw-away culture that creates the waste and consumption that harms creation also "throws away" vulnerable, suffering people, causing grave social and humanitarian woes.

*Laudato Si'* is replete with urgent, desperate pleas for effective solutions to environmental problems. In light of this urgency, one might think that Pope Francis would include marketbased incentives in his menu of proposals if there is any evidence that they have potential. Yet, the Encyclical emphatically rejects them.

Pope Francis writes that credits "can lead to a new form of speculation which would not help reduce the emission of polluting gases worldwide," creating merely a superficial solution masquerading as environmental commitment that fails to demand "radical change." The Pope fears that such incentives will be used to permit continued, "excessive consumption" by some. He warns that "environmental protection cannot be assured solely on the basis of financial calculations. . . The environment cannot be adequately safeguarded or motivated by market forces. We need to reject a magical conception of the market which would suggest that problems can be solved simply by an increase in the profits. . . Is it realistic to hope that those who are obsessed with maximizing profits will stop to reflect on the environmental damage which they may leave behind for future generations?"

This pessimism could be based on pragmatic fear that market-based incentives will fail. Pope Francis says bluntly that this "will not help." Yet, he presents no empirical evidence that well-designed, carefully regulated, and honestly monitored regimes are

Instead, his skepticism flows from moral reservation. *Laudato Si'* is rife with warnings about what overemphasis on profit can do to humanity and the ways in which desire for personal comfort and economic gain leads people, entities, and nations to pursue self-interest and neglect others who live today and will live in generations to come. He laments the ways in which self-centeredness undermines fundamental relationships with God, with others, and with creation — a gift from God to be "our common home."

Thus, Pope Francis's reservation about market-based incentives may stem from his reluctance to tap profit motives as a solution. He may fear deploying precisely the weakness he believes causes environmental degradation to be part of the solution. Certainly, the Pope says, "Business is a noble profession" and he praises creativity and ambition. Yet, Laudato Si's critique of self-interest warns that, whatever benefits market-based incentives have, there must be clear-eyed recognition that they rely on the same self-interest that the Pope believes caused environmental woes.

If market-based incentives are to be rejected because they tap into what Pope Francis fears is humanity at its worst, what is left? Could it be that behind his pessimism about marketbased incentives lies deep-seated optimism that, at its best, humanity is capable of radical selflessness? While Francis questions whether "it is reasonable to hope" that market-based incentives work, he may be asking a morally more profound question: Is it "reasonable to hope" that at its best, without self-centered incentives, humanity is capable of radical, selfless good?

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