

## REVIEWS

# Book Review of *More from Less: The Surprising Story of How We Learned to Prosper Using Fewer Resources—and What Happens Next*, by Andrew McAfee

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In 2001, Chertow described certain schools of thought that considered Industrial Ecology as a discipline that recognizes that “increases in population and affluence can, in many cases, be balanced by improvements to the environment offered by technological systems.” This view of industrial ecology presented a stark alternative to the reigning understanding of the industrial ecology analogy that human industry should aim to more closely resemble natural ecology. Two decades later, environmental advocacy and business interests have become as familiar as an old married couple. Their wedding took place at the same time that industrial ecology was born, when the Cold War ended and sustainable development offered the new global framework for improving the lot of humanity. By diplomatically emphasizing both the environment and the economy, sustainable development made it axiomatic that the problem of competing environmental and business interests could always be finessed. Both could win out, and markets could expand while the environment improves.

Does the decoupling of economic activity from environmental impact in richer economies signal a coming decrease in the environmental impact from human economies overall? *More from Less* by MIT Business professor Andrew McAfee argues that it does, claiming that technological innovation and free markets offer the single best way forward to solving looming environmental problems. The book’s title summarizes the point, “More” economic goods and services can be provided using “Less” natural resources.

Drawing on evidence from a wide selection of data sources, the book shows that economies based on technological progress, market-based capitalism and tamed by democratic norms, have the best chance of achieving the vaunted state of Sustainability. The arguments made represent a sophisticated effort at validating a phenomenon known to economists as the environmental Kuznets curve (EKC), which posits that as social wealth passes a certain threshold, society reduces its consumption of natural resources and generation of pollution. Improved urban air quality in OECD countries over the last decades offers one example. Another oft-cited line of evidence comes from the decoupling of economic growth from energy use and minerals consumption in those countries. By taking the theory to its logical conclusion, the EKC implies that the entire globe would similarly benefit from enhancing economic activity. Critics might argue that such analysis underplays the upstream supply chains and the infrastructure needed to support the sleek and compact modern electronic devices that continue to suffuse industrial societies.

McAfee attributes the positive environmental developments in advanced economies to ongoing technological and organizational innovations that enable greater output of goods and services per unit of resource input. The cap and trade system is offered as an example of an effective market solution to reducing sulfur dioxide emissions in the United States. The environmental ills of nonmarket solutions are also amply illustrated. The case of Venezuela is offered as a timely reminder of the broad failure of societies that lack the correcting mechanism of market prices. A further example comes from Soviet quotas for whalers that had no corrective price mechanism and resulted in much needless slaughter of whales.

The book highlights the failure of environmentalist strategies from the 1960s. Specifically mentioned is the “CRIB” group of strategies from that decade (Consume less, Recycle, Impose limits, and Back to the land). The author demonstrates how each one of these strategies proved ineffective, even as some remain popular decades later. According to McAfee, measures focused on limiting economic activity are destined to fail because it is not limits, but markets, that are most effective at achieving environmental objectives. Prices matter most. Describing the famous wager between economist Julian Simon and biologist Paul Ehrlich in 1980 about whether the price for a basket of 10 commodities would rise or fall over the course of the decade, McAfee offers the same challenge to any takers in 2019.

Consistent with its technology friendly approach, the book endorses nuclear energy and precision agriculture as ways to advance public welfare with the least environmental cost. Unsurprisingly, the book also advocates for a carbon tax. A candid assessment reveals the unfavorable balance of costs and benefits for the German renewable energy program after decades of public investment. Elsewhere, the book declares electricity from wind and solar cost competitive, a conclusion that relies more on sophisticated economic and policy arguments than technical ones based on physics and engineering.

The discussion reveals a mechanistic view of science as a machine that churns out useful technologies in proportion to the money put in. To support the assertion that industry can always squeeze more value from raw material, the author heaps praise on Nobel Prize winning economist Paul Romer, whose theory of endogenous technological change supports the notion that businesses can essentially create value indefinitely through innovation while at the same time reducing environmental impact. McAfee seems confident that the market will always stimulate technological solutions that make resources less scarce and thus more accessible. We may assume that the limits imposed by nature on technology may be disregarded if there is enough capital out there looking for a return.

In hewing to zeitgeist, the book complements similar volumes released in past years that champion the cause of the “enlightenment” and “science” in the fight against the populists and religionists of our day. The desire to advocate for democratic capitalism and celebrate the modern economic order can cause contemporary books of this genre to downplay dysfunction within and between human societies. To his credit, the author raises the issue of social disconnection in modern societies and its increasing importance, drawing attention to the widening social gap in the United States, mentioning rising levels of suicide and overdose, and even conceding that economists are at a loss to handle it. However, while raising the issue, the book immediately seeks technocratic answers that essentially dismiss the problem because it escapes economic measure.

*More from Less* offers much sound knowledge and insight about long-term technological trends that favor the environment and even instances of social improvement. This reader nonetheless remains skeptical about whether expanding markets and more efficient production and consumption will ultimately solve global environmental problems. More likely, expanding markets will always *slow their rate* of adding to environmental damage *but always add* to it nonetheless.

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## REFERENCE

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