

ENVIRONMENTAL SUSTAINABILITY AND ECONOMIC GROWTH: PARTNERS IN THE FUTURE OF THE PLANET

DAWN ANDERSON

This essay is a discussion of the effects of environmental sustainability on economic growth. The question explored is how each can exist alongside the other. The position taken is of the opportunity for environmental responsibility and a capitalist, growth economy to partner in a sustainable future. The discussion explores how excessive consumerism contributes to the issue. It also includes information on where economists have explored for unaccounted costs, and how they view this topic, as well as what areas of governance could address the issues surrounding the sustainability debate. Research has been conducted for more than forty years but to date no significant sustainability programs have been enacted by capitalist stakeholders. Individual taxpayers absorb the cost, and most of the actions taken to mitigate catastrophes have been by individuals. Activism is being led by youth, whose very future is at stake. The paper concludes that capitalist companies can make significant gains from environmental initiatives, contrary to their current opinion. The future of capitalist profits, stakeholders and organizations may depend on it.

It is necessary for the world to ensure that environmental sustainability and economic growth can work together. Climate change is having a profound impact on the economic growth of many countries. A solution for the future is possible. Still, people must be willing to modify their ways of living to provide for the sustainability of the environment. Environmental costs are not currently accounted for when the market prices of goods and services are determined or included when calculating economic growth. This non-accounting leaves taxpayers to cover the expenses for the clean-up activities required following events that are impacted by climate change. The realities of resource shortages, such as food, are already being

experienced. More of these types of deficiencies are expected to follow, such as fresh water to drink. Current "fast fashion" practices and excessive consumerism are one way that current levels of this excessiveness can be addressed. Business organizations ignore the costs to the environment to realize the short-term profits from this type of consumerism. This essay will explore these aspects of the harmonious existence of environmental sustainability and economic growth. Although there are many other areas to investigate, those will not be addressed in this condensed forum.

One of the world's most successful experiments to date is capitalism¹. Our best hope for the future is to look through the lens of such theories as sustainable capitalism. Current trends in capitalism do not account for its costs to the environment, which is one of the main factors in the many ecological issues currently being faced.² Capitalism needs to be held accountable for damage caused to the environment. Plastics fill our oceans, water is scarce in some areas and poisonous in others. Excessive extraction of fossil fuels to feed the machinery that require it are causing not only environmental damage. This extraction practice may very well be destroying the social structure of society, as struggles occur over land usage rights. Damage to the environment has resulted in immense profits and wealth for a few, at the expense and poverty of many. Income inequality is at an extremely high level in the wealthiest countries, with Canada receiving a "C" grade against peer countries. A peer country is one that has similar living standards, such as costs of living or healthcare quality and includes countries such as Denmark, Sweden and Finland, who won "A" ratings. The US received a "D" grade in the comparison³. Economists have devised sophisticated formulas to calculate the economy in relation to ecological costs, which consider the GDP of a region, its population, and what value is contributed to the relevant marketplace.⁴

If specific formulas for these types of calculations can be prepared to account for these types of costs to the environment, then other methods of calculation, besides GDP, could be created to account for economic growth in whatever way best benefits the planet and the sustainment of life on it. For example, formulas to calculate how efficient capitalism is at sustaining the environment or formulas for the health or sickness of populations could be used. These formulas would account for the impact that capitalism and the environment are having on each other, and it would be a new and sustainable way of calculating growth. There could be

¹Carl Hall. 2014. *The Environmental Capitalists: Making Billions by Saving the Planet*. LID Publishing.

²David Schweickart. 2010. "Is Sustainable Capitalism Possible?" *Procedia - Social and Behavioral Sciences* 2 (5) 6739–52.

³How Canada Performs. 2013. The Conference Board of Canada. January.

⁴William Nordhaus. 2011. "Designing a Friendly Space for Technological Change to Slow Global Warming." *Energy Economics* 33 (4) 665–73.

education put in place for tomorrow's economists and governments to understand how to value economies in this way.

Capitalism could be at risk in an uncertain future unless governments are willing to turn to a sustainable environmental capitalist economy.⁵ Capitalism depends on natural and human resources to create goods and services to sell. As the environment deteriorates, these resources become harder to utilize effectively. Natural disasters impede efficient productivity, as workers' homes are flooded or destroyed and as organizations' facilities themselves are ruined or rendered useless for short to long periods of time. Some areas may not recover from such disasters, requiring organizations to look for new places to do business. The newly relocated business would then need to hire and train new employees to get production back up to previous levels. In the clean-up process for climate events, governments could also require some of the businesses to provide products and services to help with recovery, costing those businesses their profits.

A sustainable environmental capitalist economy might include, for example, opportunities for venture capital firms to invest in green entrepreneurs or for governments to support the diversification of their carbon-generating economies to allow for a more certain future. As well, there is the potential for conversion of extractive workers to green jobs, with support from government programs for transferred salaries, benefits and accrued pensions.⁶ For these types of adjustments to be made, people must be willing to examine the kinds of consumerism they participate in and their reliance on disposable or single-use goods. Lifestyles should be examined to determine if quality of life can be adjusted to accept ways of living that do not exist in our current capitalist economies.⁷ Populations must be willing to exchange these for a future in which soil can regenerate, floods can be reduced, and wildfires can be more controlled.

A reliance on things like electricity and its associated grids impacts weather and climate events, such as droughts, as rivers are dammed and re-routed to generate power. The electrical networks themselves are susceptible to destruction from winds and tornadoes, causing avoidable fires when live electricity ignites dry, brittle trees, shrubs and undergrowth near any downed wires. Replacing electrical grids with solar or wind-generated power, known as grid defection, reduces the potential of these added hazards for weather-caused events. These resulting systems are more localized and easily disconnected from those areas that are in the paths of approaching storms.⁸ They may also be less vulnerable to the rolling or mass

⁵Carl Hall. 2014. *The Environmental Capitalists: Making Billions by Saving the Planet*. LID Publishing.

⁶Naomi Klein, interview by Jayme Poisson. 2019. "Climate Strikes, Greta and the Green New Deal." *CBC Front Burner PodCast*. (September 22).

⁷David Schweickart. 2010. "Is Sustainable Capitalism Possible?" 6739–52.

⁸David Frankel, and Amy Wagner. 2017. *Battery storage: The next disruptive technology in the power sector*. Article, San Francisco, CA: McKinsey & Company.

blackouts that are implemented as part of attempts to mitigate these extreme weather incidents.

Reversing a growing trend of the privatization of utilities like water and electricity to public or private-public partnerships could remove pure profit motivation.⁹ Making these utilities more accountable to public scrutiny has been found to make a difference. The introduction of carbon-reducing programs, such as more energy-efficient household items, has helped immensely in reducing carbon emissions.¹⁰ However, there are still many areas in which to improve. An embracing of even more reductions will help governments to manage their countries more effectively with an environmental capitalist economy.

Another way that governments could improve the management of the environment, and to better ensure its sustainability, is to more carefully assess how the producers of goods and services cost out, pay and subsequently price those goods and services. Currently, for example, a tomato farmer would calculate the cost of the labour and other services, such as delivery to market, to price a batch of tomatoes. They do not calculate the cost of the damage to the environment from things like the carbon generated by the irrigation systems or the truck that delivers goods to the market.¹¹ This lack of accounting lets many organizations, corporations and their shareholders leave taxpayers to absorb these costs directly. Governments incorporate those costs into future budgets to account for the abatement or clean up after unusual climate events, floods or droughts.¹² Producers receive the benefit of shared costs, rather than directly accounting for them in their work. Arguments against these types of adjustments include the increased costs to consumers that would be realized if goods and services were priced this way. There may also be limited expertise available in some smaller businesses to calculate these costs and then to implement these practices. However, these costs are already being paid by consumers in ways that they may not even recognize. High incidence of extreme weather events, interruptions of work, and the relocation of destroyed buildings and jobs create costs that creep into every individual's cash flow, taxes, and other costs. These subsequently appear as increased costs of consumer goods because of lost profits and other costs associated with this extreme weather. If governments were to create initiatives to address these types of cost accounting and support businesses to manage the implementing of sustainable practices, the public would be able to

⁹Eva Lieberherr, and Bernhard Truffer. 2015. "The Impact of Privatization on Sustainability Transitions: A Comparative Analysis of Dynamic Capabilities in Three Water Utilities." *Environmental Innovation and Societal Transitions* 101–22.

¹⁰David Schweickart. 2010. "Is Sustainable Capitalism Possible?" 6739–52.

¹¹Nicholas Z Muller, Robert Mendelsohn, and William Nordhaus. 2011. "Environmental Accounting for Pollution in the United States Economy." *American Economic Review* Vol. 101: 1649-1675.

¹²William Nordhaus. 2013. *The Climate Casino: Risk, Uncertainty, and Economics for a Warming World*. Yale University Press.

more easily see where their dollars are going, rather than absorbing them unknowingly.

Corporations, especially those that operate globally, could see a sustainable environment as an opportunity to grow their organizations, by diversifying product and service portfolios and investing in those countries in which they do business. According to a study in 2018, "sustainable investments can increase beneficial performance such as financial returns, and other work continues to find a correlation between financial returns and investments in sustainability" in North America and parts of Asia.¹³ There is every reason for investments in sustainability to be implemented or increased from current levels by these corporations. An environmental capitalist economy would be supportive of these types of initiatives by corporations, as governments could create tax incentives, reduce or eliminate cap and trade or make other carbon-tax offers. Venture capital firms that focus on green corporations and entrepreneurs could expand their mandates and take an interest in such innovations within corporations, or those corporations could attract new investors who are putting their money and futures behind these types of activities. This blend of government programs and incentives, paired with the decentralized method that the market has of addressing the needs and prospects of its growth, could be the best way forward.¹⁴ A heavy-handed socialist-type of solution would not be required if capitalists could make environmentalism an essential part of their plans and futures.

It will soon be mandatory for people to articulate their demands for what they will accept as their future and then to apply pressure on their governments and politicians to set the goals and standards required to achieve those results.¹⁵ Recent events in Lebanon, Chile and Hong Kong have proven that the voices of the people will be heard. In some countries, a simple majority of people is enough to sway politicians to back new initiatives. And people must be ready to push if humanity is to survive on the planet as "...there are people in power who can be pushed and are not immune to pressure" from their citizens.¹⁶ This same pressure could be applied to corporations and organizations that are dependent on existing bases of customers for sustaining or growing their markets. People have the leverage to influence the behaviours of such organizations and groups. Citizens have the power to demand that the companies they support be environmentally aware and proactive in the policies, products and programs that they deliver. And the people and

¹³Kyungbok Kim, and Sang-Myung Lee. 2018. "Does Sustainability Affect Corporate Performance and Economic Development? Evidence from the Asia-Pacific region and North America." *Sustainability* (10 no. 4: 909).

¹⁴Carl Hall. 2014. *The Environmental Capitalists: Making Billions by Saving the Planet*. LID Publishing.

¹⁵Scott J. Callan, and Janet M Thomas. 2007. *Environmental Economics & Management: Theory, Policy, and Applications; Fourth Edition*. Mason, OH: Thomson Higher Education.

¹⁶Naomi Klein, interview by Jayme Poisson. 2019. "Climate Strikes, Greta and ..." (September 22)

organizations that are the wealthiest or have gained the most from the mismanagement of valuable earth resources must be made to pay.¹⁷

There is global concern about these types of environmental circumstances, and the United Nations has taken on a project for insurance companies to ensure they are adequately accounting for climate issues when underwriting coverage.¹⁸ A guide has recently (2019) been released by the United Nations Environment Programme Finance Initiative (UNEP FI), including heat maps for various industries, for insurance underwriters to ensure that underwriting allows for the coverage of potential disasters and various other issues. If there comes a time when no insurance coverage is available for companies who are ignoring, or who think they can manage these risks, they will very likely see dropping confidence in their ability to sustain growth as an organization.¹⁹ Falling share prices or waning interest in investing would impact their ability to pay shareholders.

There are both informal and more formalized social movements to give further voice to concerns. One informal movement called "Grab Your Wallet" is a campaign, conducted via social media, that frequently takes on causes to create awareness of the types of policies and programs that various companies support. This campaign provides consumers with options for choosing how to spend their money and demonstrate support or opposition to specific issues, as well as a way of conveying the importance of these problems and actions through economic coercion. Consumers are sending strong messages of tolerance or intolerance to the offending companies. These types of movements can have an immediate impact on a company's public image. They will cause a quick response to a company's positions on those issues. This type of campaigning has become so effective that some companies are employing programs, such as sentiment analysis, to monitor the reactions of current and potential customers.²⁰ This analysis enables company managers to respond in a timely fashion to avoid extreme effects on company performance.

More formal types of movements can also bring pressure to make changes to corporate and organizational strategies for remaining economically viable. Such actions could include lobbying for government policy intervention and regulation

¹⁷Naomi Klein. 2019. *On Fire: The Burning Case for a Green New Deal*. Alfred A. Knopf, Canada.

¹⁸UNEP-Financial Initiative. 2019. *Global guidance on the integration of environmental, social and governance risks into insurance underwriting*. New York, NY: United Nations Environment Programme Finance Initiative.

¹⁹Zhiyan Cao, and Ganapathi Narayanamoorthy. 2014. "Accounting and Litigation Risk: Evidence from Directors' and Officers' Insurance Pricing." *Review of Accounting Studies* Vol. 19, No. 1: 1–42.

²⁰Kalle Petteri Nuortimo, and Janne Härkönen. 2019. *Journal of Intelligence Studies in Business* Vol. 9, No. 1 5-16.

to force corporations into environmental compliance. There are examples of these types of movements, over the history of democracies, including women's suffrage, fighting for the right for women to vote, or Mothers Against Drinking and Driving (MADD) that have caused significant amendments to policy and laws in North America.²¹ Combinations of these types of movements can be very effective ways to have the voice of the people heard and acted on by their governments, corporations and other types of economy-contributing organizations. In the end, capitalist economies are supported by those who hold the power of the pocketbook.²²

By no means is an uprising, even by a majority of the people, a guarantee that any required changes will be enacted. In recent years, there have been many movements toward economic nationalism, which is a desire to prioritize domestic issues over global ones. These movements are impediments to achieving an international consensus on environmental sustainability and "the costs of emission reductions are national while the benefits from slowing climate change are widely dispersed around the globe."²³ Nationalist economic movements are demanding to see results for their tax dollars in their own countries and not to be supporting countries that are viewed as not contributing their share. In many of the countries where these economic nationalist movements are prevalent, they are generally in the minority but are growing.²⁴ Those who raise their concerns are shouted down by this vocal minority in the name of patriotism. Those raising concerns about the demise of the human race and the need to leave a place for their children's future are being drowned out.

Fundamental transformations will be required for the basic needs of society: housing, transportation, food and energy, particularly in developing countries.²⁵ These transformations will be needed to provide assurances of national security for some developed countries. Shortages of resources to cover basic needs are already causing civil wars in some areas of the world, creating massive amounts of refugees and asylum seekers who are looking for help from their more affluent neighbours. While nationalist movements are currently seeking to limit or eliminate refugees or asylum seekers entering their countries, these countries could eventually face even

²¹Loewit-Phillips, Patricia Melody, and Abbie Goldbas. 2013. "Mothers Against Drunk Driving (MADD): History and Impact." *International Journal of Childbirth Education* Vol. 28, No. 4: 62-67.

²²Katherine White, Rishad Habib, and David J Hardisty. 2019. "How to SHIFT Consumer Behaviors to be More Sustainable: A Literature Review and Guiding Framework." *American Marketing Association Journal of Marketing* Vol 83 (3) 22-49.

²³William Nordhaus. 2013. *The Climate Casino: Risk, Uncertainty...* Yale University Press.

²⁴Claudia Postelnicescu. 2016. "Europe's New Identity: The Refugee Crisis and the Rise of Nationalism." *Europe's Journal of Psychology* Vol. 12, Iss. 2: 203-209.

²⁵Naomi Klein, interview by Jayme Poisson. 2019. "Climate Strikes, Greta and ..." (September 22)

more peril if entry is forced. As already desperate people living in drought and disaster-stricken areas become more desperate, countries trying to limit the entry of migrants will realize that "...climate change isn't just about things getting hotter and wetter: under our current economic and political order, it's about things getting meaner and uglier."²⁶

Proactive governments that wish to remain in power, or to retain the functions of democracy, would be reducing the possibility of events, like revolution or nationalization of resources, if they began a transformation to environmental capitalism sooner rather than later. There is a question, though, of how 195-plus separate countries with distinct economies will agree on an approach that has a goal of one result for the planet.²⁷ Responsible economic management will force governments to realize that they cannot "... continue to grow economically with no regard for the future."²⁸ The sooner that action is taken, the sooner the realization that " ... there is a solution, although it will be a compromise. First, we have to decide what level of environmental quality is acceptable, and then we need to make the appropriate adjustments in market behaviour to sustain that quality."²⁹ When the rise of populism in many countries is added, mostly in the name of nationalism and more right-leaning governments, this becomes an even more complex problem as countries are trending toward looking inward, more and more, to develop and enhance "their own." The political right, however, has the most to gain from the kinds of changes that are required. They are most often the ones to stand for prosperity and growth and an environment that no longer works will mean that economies are no longer expanding.³⁰

As demonstrated through this discussion, there are vast arrays of possibilities for tackling environmental sustainability without compromising the growth of a capitalist economy – through an environmental capitalist economy. People must be willing to decide what future they want to belong to and put pressure on their governments to make the necessary changes. Many movements have recently shown that changes can be made through public pressure. Environmental sustainability has no borders and must be a global effort. The Paris Climate Accord was a good place to start, but the rise of economic nationalism threatens to derail these types of global efforts. Right leaning and conservative politicians have much to gain from supporting green initiatives since they most naturally promote capitalism and economic prosperity. Left leaning and liberal politicians also have

²⁶Naomi Klein. 2019. *On Fire: The Burning Case for a Green New Deal*. Alfred A. Knopf, Canada.

²⁷Carl Hall. 2014. *The Environmental Capitalists: Making Billions by Saving the Planet*. LID Publishing.

²⁸Callan, Thomas. 2007. *Environmental Economics & Management: Theory ...*

²⁹Callan, Thomas. 2007. *Environmental Economics & Management: Theory ...*

³⁰Carl Hall. 2014. *The Environmental Capitalists: Making Billions by Saving the Planet*. LID Publishing.

much to gain if they want to see the free market, which supports government programs, remain the leading example of how economies grow. Some democratic-socialist governments are already well ahead of the curve with environmental capitalism, for example, in Scandinavian countries. A rising socialist sentiment in many other countries provides an opportunity for the socialist politicians leading those populist movements to take the lead in pushing the governments that they are part of toward more sustainable environmental policies and practices. Together, they could make a difference in the future of the planet.

BIBLIOGRAPHY

- CALLAN, SCOTT J, AND JANET M THOMAS. 2007. *Environmental Economics & Management: Theory, Policy, and Applications; Fourth Edition*. Mason, OH: Thomson Higher Education.
- CAO, ZHIYAN, AND GANAPATHI NARAYANAMOORTHY. 2014. "Accounting and Litigation Risk: Evidence from Directors' and Officers' Insurance Pricing." *Review of Accounting Studies* Vol. 19, No. 1: 1–42. Accessed Nov 2019. doi:10.1007/s11142-013-9249-4.
- FRANKEL, DAVID, AND AMY WAGNER. 2017. *Battery storage: The next disruptive technology in the power sector*. Article, San Francisco, CA: McKinsey & Company. Accessed October 31, 2019.
<https://www.mckinsey.com/business-functions/sustainability/our-insights/battery-storage-the-next-disruptive-technology-in-the-power-sector#>.
- HALL, CARL. 2014. *The Environmental Capitalists: Making Billions by Saving the Planet*. LID Publishing.
- HOW CANADA PERFORMS. 2013. *The Conference Board of Canada*. January. Accessed November 3, 2019.
<https://www.conferenceboard.ca/hcp/Details/society/income-inequality.aspx?AspxAutoDetectCookieSupport=1>.
- KIM, KYUNGBOK, AND SANG-MYUNG LEE. 2018. "Does Sustainability Affect Corporate Performance and Economic Development? Evidence from the Asia-Pacific region and North America." *Sustainability* (10 no. 4: 909) 1–18. <https://www.mdpi.com/2071-1050/10/4/909>.
- KLEIN, NAOMI, interview by Jayme Poisson. 2019. "Climate Strikes, Greta and the Green New Deal." *CBC Front Burner PodCast*. (September 22).
- KLEIN, NAOMI. 2019. *On Fire: The Burning Case for a Green New Deal*. Alfred A. Knopf, Canada.
- LIEBERHERR, EVA, AND BERNHARD TRUFFER. 2015. "The Impact of Privatization on Sustainability Transitions: A Comparative Analysis of Dynamic Capabilities in Three Water Utilities." *Environmental Innovation and Societal Transitions* 101–22. Accessed Nov 2019.
doi:10.1016/j.eist.2013.12.002.
- LOEWIT-PHILLIPS, PATRICIA MELODY, AND ABBIE GOLDBAS. 2013. "Mothers Against Drunk Driving (MADD): History and Impact." *International Journal of Childbirth Education* Vol. 28, No. 4: 62–67. Accessed Nov 2019.
- MINTZ, ERIC, DAVID CLOSE, AND OSVALDO CROCI. 2019. *Politics, Power, and the Common Good: An Introduction to Political Science*. Fifth Edition. Don Mills, ON: Pearson Canada Inc.

- MULLER, NICHOLAS Z, ROBERT MENDELSON, AND WILLIAM NORDHAUS. 2011. "Environmental Accounting for Pollution in the United States Economy." *American Economic Review* Vol. 101: 1649-1675. Accessed Oct 2019.
- NORDHAUS, WILLIAM. 2011. "Designing a Friendly Space for Technological Change to Slow Global Warming." *Energy Economics* 33 (4) 665–73. doi:10.1016/j.eneco.2010.08.005.
- NORDHAUS, WILLIAM. 2013. *The Climate Casino: Risk, Uncertainty, and Economics for a Warming World*. Yale University Press.
- NUORTIMO, KALLE PETTERI, AND JANNE HÄRKÖNEN. 2019. *Journal of Intelligence Studies in Business* Vol. 9, No. 1 5-16. Accessed October 31, 2019.
- POSTELNICESCU, CLAUDIA. 2016. "Europe's New Identity: The Refugee Crisis and the Rise of Nationalism." *Europe's Journal of Psychology* Vol. 12, Iss. 2: 203-209. Accessed Nov 2019. doi:10.5964/ejop.v12i2.1191.
- SCHWEICKART, DAVID. 2010. "Is Sustainable Capitalism Possible?" *Procedia - Social and Behavioral Sciences* 2 (5) 6739–52. Accessed November 3, 2019. doi:10.1016/j.sbspro.2010.05.020.
- UNEP-FINANCIAL INITIATIVE. 2019. *Global guidance on the integration of environmental, social and governance risks into insurance underwriting*. New York, NY: United Nations Environment Programme Finance Initiative. <https://www.unepfi.org/psi/underwriting-esg-risks/>.
- WHITE, KATHERINE, RISHAD HABIB, AND DAVID J HARDISTY. 2019. "How to SHIFT Consumer Behaviors to be More Sustainable: A Literature Review and Guiding Framework." *American Marketing Association Journal of Marketing* Vol 83 (3) 22-49.
-