

National security concerns regarding overzealous ERISA regulation

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“A series of powerful cross-cutting trends, made more complex by the ongoing economic crisis, threatens to complicate international relations and make the exercise of U.S. statecraft more difficult. The rising demand for resources, rapid urbanization of littoral regions, the effects of climate change, the emergence of new strains of disease, and profound cultural and demographic tensions in several regions are just some of the trends whose complex interplay may spark or exacerbate future conflicts.”¹ - The Quadrennial Defense Review Report of 2010

Immediate action is required to address a pending threat, of unprecedented scope and scale, to our national security. Without your direct action, as well as broad participation from every level of society and governance, liberty and freedom are in crisis. For over a decade, the national security agencies of the federal government have consistently recognized climate change as a serious threat to national security with the Pentagon publishing at least 35 products explicitly addressing this concern.² The Pentagon further strategizes that, “Climate and environmental resilience efforts span all levels and lines of effort, and are not framed as a separate program.”³

¹ DEP’T OF DEF., QUADRENNIAL DEFENSE REVIEW REPORT (2010), <https://archive.defense.gov/qdr/QDR%20as%20of%2029JAN10%201600.pdf>.

² Michelle Melton, *Climate Change and National Security, Part I: What is the Threat, When’s It Coming, and How Bad Will It Be?*, LAW FARE BLOG (Nov. 19, 2018, 8 AM), <https://www.lawfareblog.com/climate-change-and-national-security-part-i-what-threat-whens-it-coming-and-how-bad-will-it-be>.

³ DEP’T OF DEF., REPORT ON EFFECTS OF A CHANGING CLIMATE TO THE DEPARTMENT OF DEFENSE (2019), https://climateandsecurity.files.wordpress.com/2019/01/sec_335_ndaa-report_effects_of_a_changing_climate_to_dod.pdf.

Since at least 1988, the security community has been expressing increasing concern about the global security risks of climate change.⁴ Climate change will result in multiple chronic conditions occurring globally and at the same time frame.⁵ As food production declines, diseases increase, clean water becomes increasingly scarce, and large populations move in search of resources as the impact of climate change becomes more acute.⁶ Governments weakened by these factors foster the conditions for internal conflicts, racial antagonism, and movement toward increased authoritarianism and violent extremist ideologies.⁷ Managing the security impacts of climate change require an immediate reduction of climate change impacts right now and adapting to the inevitable changes which are already happening.⁸

In contrasting the tactical outlook of climate change with the Cold War, former Chief of Staff, U.S. Army, General Gordon R. Sullivan states,

“The situation, for much of the Cold War, was stable, and the challenge was to keep it stable, to stop the catastrophic event from happening. We spent billions on that strategy. Climate change is exactly the opposite. We have a catastrophic event that appears to be inevitable. And the challenge is to stabilize things—to stabilize carbon in the atmosphere. Back then, the challenge was to stop a particular action. Now, the challenge is to inspire a particular action. We have to act if we’re to avoid the worst effects.”⁹

⁴ *A Security Threat Assessment of Global Climate Change: How Likely Warming Scenarios Indicate a Catastrophic Security Future*, THE NAT’L SEC., MIL. AND INTELLIGENCE PANEL ON CLIMATE CHANGE (Feb. 2020), <https://climateandsecurity.files.wordpress.com/2020/03/a-security-threat-assessment-of-climate-change.pdf> [hereinafter *NSMIP*].

⁵ *National Security and the Threat of Climate Change*, THE CNA CORP (2007), https://www.cna.org/CNA_files/pdf/National%20Security%20and%20the%20Threat%20of%20Climate%20Change.pdf [hereinafter *CNA*].

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

⁹ *Id.*

Without leadership and swift action to mitigate the destructive impact of climate change, American interests are currently in extreme peril of high-to-catastrophic threats to national security from plausible climate change trajectories.¹⁰ Addressing climate change requires people to act now to redress consequences that will not occur until far into the future which requires the kind of thinking and decision making in which people often do not naturally engage.¹¹ The USA, along with our allies, can rise to this challenge however.

Regarding the costs of this threat, General Anthony C. “Tony” Zinni, USMC (Ret.), former Commander-in-Chief of U.S. Central Command (CENTCOM), contemplates,

“We will pay for this one way or another. We will pay to reduce greenhouse gas emissions today, and we’ll have to take an economic hit of some kind. Or we will pay the price later in military terms. And that will involve human lives. There will be a human toll. There is no way out of this that does not have real costs attached to it. That has to hit home.”¹²

100 companies cause roughly 70% of the world’s greenhouse gas emissions and more than half of global industrial emissions since 1988 can be traced back to 25 corporate or state-owned entities.¹³ Meat production makes more greenhouse gases than all the planes, trains, and cars in the world combined.¹⁴ About a quarter of climate change is due to agricultural

¹⁰ *A Security Threat Assessment of Global Climate Change: A Product of the National Security, Military and Intelligence Panel on Climate Change*, THE CENTER FOR CLIMATE & SEC. (Feb 24, 2020), <https://climateandsecurity.org/a-security-threat-assessment-of-global-climate-change/>.

¹¹ Richard J. Lazarus, *Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future*, 94 CORNELL L. REV. 1153, <https://www.lawschool.cornell.edu/research/cornell-law-review/upload/Lazarus.pdf>.

¹² *NSMIP*, *supra* note 4.

¹³ Tess Riley, *Just 100 Companies Responsible for 71% of Global Emissions, Study Says*, THE GUARDIAN (Jul. 10, 2017), <https://www.theguardian.com/sustainable-business/2017/jul/10/100-fossil-fuel-companies-investors-responsible-71-global-emissions-cdp-study-climate-change>.

¹⁴ *Fight Climate Change with Diet Change*, FACTORY FARMING AWARENESS COALITION (Updated 2018), <https://veganoutreach.org/wp-content/uploads/FC.pdf>. [hereinafter *FFAC*]

production.¹⁵ If cattle were their own nation, they would be the world's third largest emitter of greenhouse gases.¹⁶ Consumers eating fewer animal products, especially eating less beef, is one of the best ways to mitigate climate change.¹⁷

Beef production requires 20 times more land and produces 20 times more greenhouse gas emissions per gram of edible protein than crops such as lentils, beans, or peas.¹⁸ For every 100 grams of protein fed a chicken, only 40 grams are harvested back.¹⁹ Only a 10% return is seen for pork and a mere 5% from beef.²⁰ When it comes to environmental impacts, a plant-based diet is much less harmful while one rich in beef is particularly problematic.²¹

On average, a single gallon of milk takes as much water to produce as taking 27 showers.²² Not eating a pound of beef saves more water than not showering for six months.²³ In California, the meat and dairy industry use 47% of water in the state.²⁴ This is grossly inefficient.²⁵ A recent 2017 study found that if United States consumers made no other changes

¹⁵ Julie Compton, *How Our Diets Impact Climate Change – and What We Can Do About It*, NAT'L BROAD. CO. NEWS (Aug. 12, 2019, 7:57 AM), <https://www.nbcnews.com/better/lifestyle/how-our-diets-impact-climate-change-what-we-can-do-ncna1041301>.

¹⁶ Janet Ranganathan & Richard Waite, *Sustainable Diets: What You Need to Know in 12 Charts*, WORLD RES. INST. (Apr. 20, 2016), <https://www.wri.org/blog/2016/04/sustainable-diets-what-you-need-know-12-charts>.

¹⁷ Eliza Mackintosh, *What the New Report on Climate Change Expects from You*, CABLE NEWS NETWORK (Updated Oct. 8, 2018 8:31 PM), <https://www.cnn.com/2018/10/08/world/ipcc-climate-change-consumer-actions-intl/index.html>.

¹⁸ RANGANATHAN & WAITE, *supra* note 16.

¹⁹ FACC, *supra* note 14.

²⁰ *Id.*

²¹ RANGANATHAN & WAITE, *supra* note 16.

²² FACC, *supra* note 14.

²³ *Fight Climate Change with Diet Change*, PEOPLE FOR THE ETHICAL TREATMENT OF ANIMALS, <https://www.peta.org/features/fight-climate-change-with-diet-change/>.

²⁴ Julian Fulton, Heather Cooley, & Peter Gleick, *California's Water Footprint*, PACIFIC INST. (Dec. 2012), https://pacinst.org/wp-content/uploads/2012/12/ca_ftprint_full_report3.pdf.

²⁵ FACC, *supra* note 14.

than substituting beans for beef, the United States could achieve 46-74% of the reductions needed to meet a key greenhouse gas emissions target.²⁶

Market hunger for products derived from cattle is also responsible for 80% of clearing in the Amazon rainforest.²⁷ About 200 million heads of cattle are raised within Brazil and rainforest the size of California, Massachusetts, and New Jersey combined have been converted to cattle pasture over recent decades.²⁸ To circumvent attempts at more sustainable land management and to regulate unlawful clearing for ranches, a black market with a complex system of cattle laundering developed.²⁹ A cow might spend a significant portion of its life in prohibited or supposedly protected areas, where ranching activity is not supposed to occur, and then finished before slaughter at a location within the terms of the accord.³⁰ A cow's ranch of origin, typically where the unauthorized deforestation activity takes place, is not always clear.³¹ Embargoes are imposed for violations however these have been largely ineffective.³² JBS S.A., the largest meat processing company in the world, is headquartered in Brazil but more than half of their revenue comes from the USA.³³

Despite these loopholes the United States agreed to expeditiously schedule a technical visit by the United States Department of Agriculture's (USDA) Food Safety and Inspection

²⁶ Helen Harwatt et al., *Substituting Beans for Beef as a Contribution Toward US Climate Change Targets*, CLIMATE CHANGE 143 (July 2017), <https://link.springer.com/article/10.1007%2Fs10584-017-1969-1#article-info>.

²⁷ Clifford Krauss, David Yaffe-Bellany, & Mariana Simões, *Why Amazon Fires Keep Raging 10 Years After a Deal to End Them*, N.Y. TIMES (Oct. 18, 2019), <https://www.nytimes.com/2019/10/10/world/americas/amazon-fires-brazil-cattle.html>.

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ Zoe Sullivan, *Brazilian Beef Industry Plays Outsized Role in Tropical Carbon Emissions: Report*, MONGABAY (Oct. 3, 2019), <https://news.mongabay.com/2019/10/brazilian-beef-industry-plays-outsized-role-in-tropical-carbon-emissions-report/>.

³² Dom Phillips et al., *Revealed: Rampant Deforestation of Amazon Driven by Global Greed for Meat*, THE GUARDIAN (July 2, 2019), <https://www.theguardian.com/environment/2019/jul/02/revealed-amazon-deforestation-driven-global-greed-meat-brazil>.

³³ Andrew Wasley et al., *JBS: The Brazilian Butchers Who Took Over the World*, THE BUREAU OF INVESTIGATIVE JOURNALISM (July 7, 2019), <https://www.thebureauinvestigates.com/stories/2019-07-02/jbs-brazilian-butchers-took-over-the-world>.

Service to allow for the increased Brazilian beef imports.³⁴ The USDA further suggested that Brazil should increase production to meet new US demand cattle products.³⁵ Additional markets in Europe also are on the rise for Amazon rainforest raised beef.³⁶ This will likely contribute to further rainforest devastation and illegal ranching in the years ahead.

This action by the USDA is a threat to global stability and the national security interests of the USA because the Amazon produces about 20% of the world's oxygen³⁷ and is an important factor in regulating climate.³⁸ The plants themselves help regulate climate in complex and unexpected ways.³⁹ The Amazon rainforest itself, which generates its own weather system, might be an important weather regulator as it's vegetation discharges roughly 17% more water into the atmosphere than from the Amazon river at an estimated 20 trillion liters per day.⁴⁰ Half or more of the rainfall over continental interiors comes from plants processing water into the atmosphere in this manner.⁴¹ The region hosts 40% of the world's remaining rainforest, 25% of our terrestrial biodiversity, and more types of fish than any other river system.⁴² We are not just killing cattle to eat more beef. We are killing our planet.

³⁴ THE WHITE HOUSE, JOINT STATEMENT FROM PRESIDENT DONALD J. TRUMP AND PRESIDENT JAIR BOLSONARO (Mar. 19, 2019), <https://www.whitehouse.gov/briefings-statements/joint-statement-president-donald-j-trump-president-jair-bolsonaro/>.

³⁵ *Brazilian Meat Industry 2019*, IMBAREX, <https://www.imbarex.com/brazilian-meat-industry-2019/>.

³⁶ Alex Lockwood, *Every Meat-Eater on the Planet is Helping to Fuel the Amazon Forest Fires – Here's How*, INDEPENDENT (Aug. 23, 2019), <https://www.independent.co.uk/voices/amazon-forest-fire-brazil-beef-meat-vegan-vegetarian-brazil-a9076236.html>

³⁷ Eliza Mackintosh, *The Amazon is Burning Because the World Eats so Much Meat*, CABLE NEWS NETWORK (Aug. 23, 2019), <https://www.cnn.com/2019/08/23/americas/brazil-beef-amazon-rainforest-fire-intl/index.html>.

³⁸ *Inside the Amazon*, WORLD WIDE FUND FOR NATURE, https://wwf.panda.org/knowledge_hub/where_we_work/amazon/about_the_amazon/;

The Vital Links Between the Amazon Rainforest, Global Warming and You, WORLD WIDE FUND FOR NATURE, https://wwf.panda.org/knowledge_hub/where_we_work/amazon/about_the_amazon/why_amazon_important/.

³⁹ Gabriel Popkin, *Forests Emerge as a Major Overlooked Climate Factor*, QUANTA MAG. (Oct. 9, 2018), <https://www.quantamagazine.org/forests-emerge-as-a-major-overlooked-climate-factor-20181009/>.

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Why the Amazon's Biodiversity is Critical for the Globe: An Interview with Thomas Lovejoy*, THE WORLD BANK (May 22, 2019), <https://www.worldbank.org/en/news/feature/2019/05/22/why-the-amazons-biodiversity-is-critical-for-the-globe>.

The average American is consuming over 220 pounds of meat per year.⁴³ Americans are eating more meat per capita than any other nation earth.⁴⁴ Each year there are over nine billion farm animals bred and slaughtered in the United States of America alone.⁴⁵ When it comes to individual choices, our choice of food has tremendous environmental impact.⁴⁶ Our nation's massive consumption of meat and other animal products places US national security interests in jeopardy by accelerating climate change.

It is necessary for our economy and our industries to change gear. Moving away from commercial animal agriculture is an essential component to addressing climate change. Business innovation is needed to drive the cultural and consumer habit shift that we need and to deliver goods that are a quality alternative to animal derived products. Purchasing power is power capable of making a meaningful impact.⁴⁷ By taking personal accountability and collaborating in our community we can effectively counter this great threat to our nation with sustainable, mindful, and compassionate choices in the products we purchase.⁴⁸ Regarding this need, one scholar writes,

“It is becoming more and more apparent [...] that treating broader social issues and corporate strategy as separate and distinct has long been unwise, never more so than today [...] The same disconnect between social and corporate strategy is also common among leaders in the social sector. There is a tendency to view firms as adversaries - not as allies in advancing social causes. Yet we are learning that the most effective way to address many of the world's most pressing problems is to mobilize the corporate sector in

⁴³ *Americans will Consume a Record Amount of Meat in 2018*, GLOBAL AGRIC. (Mar. 1, 2018), <https://www.globalagriculture.org/whats-new/news/en/32921.html>.

⁴⁴ Hannah Ritchie, *Which Countries Eat the Most Meat?*, BRIT. BROAD. CORP. (Feb. 4, 2019), <https://www.bbc.com/news/health-47057341>.

⁴⁵ FACC, *supra* note 14.

⁴⁶ *Id.*

⁴⁷ Lisa Palmer, *Purchasing Power*, YALE CLIMATE CONNECTIONS (Oct. 14, 2014), <https://www.yaleclimateconnections.org/2014/10/purchasing-power/>.

⁴⁸ Sharie Derrickson, *Sustainability Essential for National Security and World Peace*, THE WHITE HOUSE (Mar. 21, 2013, 1:20 PM), <https://obamawhitehouse.archives.gov/blog/2013/03/21/sustainability-essential-national-security-and-world-peace>.

a context of rules, incentives, and partnerships where both companies and society can benefit.”⁴⁹

Economic policy, business, politics, diplomacy, the military, and security interests can collaborate to build coalitions in order to maintain stability when challenged by dramatic climate change.⁵⁰ Many businesses are already implementing important action in this arena. For example, global office sharing company WeWork no longer reimburses expense claims for meat or serve meat at company events.⁵¹ WeWork co-founder Miguel McKelvey stated “New research indicates that avoiding meat is one of the biggest things an individual can do to reduce their personal environmental impact - even more than switching to a hybrid car.”⁵² The company estimates the policy will save 16.7 billion gallons of water, 445 million pounds of carbon dioxide emissions, and more than 15 million animals by 2023.⁵³ Organizational reduction of consumption of animal products is an effective means to make a business more sustainable and environmentally responsible.⁵⁴

Businesses are also taking the animal food products head on. Business Wire, a Berkshire Hathaway Company that focuses on press release and regulatory disclosure for investors⁵⁵, estimates that the global plant-based meat alternative market is valued at approximately 12.1 billion dollars in 2019 and is likely to reach 27.9 billion dollars by 2025, growing at a compound annual growth rate of 15.0% during this forecast period.⁵⁶ They further anticipate animal food

⁴⁹ Michael Porter et al., *Tomorrow's Markets: Global Trends and Their Implications for Business*, UNEP (2002), http://pdf.wri.org/tm_front_matter.pdf.

⁵⁰ *CNA supra* note 5.

⁵¹ Emma Batha, *WeWork Goes Meat-Free 'to Leave a Better World'*, REUTERS (July 18, 2018, 9:40 AM), <https://www.reuters.com/article/us-environment-meat-ban/wework-goes-meat-free-to-leave-a-better-world-idUSKBN1K82AF>.

⁵² *Id.*

⁵³ *Id.*

⁵⁴ RANGANATHAN & WAITE, *supra* note 16.

⁵⁵ *About Us*, BUS. WIRE, <https://services.businesswire.com/about-us>.

⁵⁶ *Plant-Based Meat Market, 2025*, BUS. WIRE (July 9, 2019, 4:58 AM), <https://www.businesswire.com/news/home/20190709005395/en/Plant-based-Meat-Market-2025-Source-Soy-Wheat>.

product market disruptions from an increased demand for plant-based foods in the near future.⁵⁷ This sector of the market is an ideal place for long term investment. Legislative efforts to promote a “Green New Deal” led by Alexandria Ocasio-Cortez and others in an effort to remake the US economy to drastically reduce climate changing impacts would likely help spur growth in this industry even more.⁵⁸ In the long run we will have to transition towards an economy that depends on less conventional meat and “[f]ar-sighted investors should plan ahead for this day.”⁵⁹ One estimate speculates that plant-based substitutes for animal-based foods will capture 10% of the meat market over the next 15 years.⁶⁰ The NASDAQ reported in October 2019:

“Meatless alternatives have witnessed an uptick in demand of late as more health- and environment-conscious US citizens grow increasingly skeptical of the amount of meat they put on their plate. Needless to say, several companies have begun to address this issue, introducing a range of plant-based meat products. Given the increasing number of consumers switching to a diet devoid of meat products, investors could invest in companies focusing on meat alternatives for decent returns in the long run.”⁶¹

The initial public offering (IPO) for Beyond Meat, the plant-based meat alternative company, was estimated to trade at \$19 to \$21 but nearly doubled after initial offering instead.⁶²

⁵⁷ *Id.*

⁵⁸ See Danielle Kurtzleben, *Rep. Alexandria Ocasio-Cortez Releases Green New Deal Outline*, NAT’L PUB. BROAD. (Feb. 7, 2019, 5:01 AM), <https://www.npr.org/2019/02/07/691997301/rep-alexandria-ocasio-cortez-releases-green-new-deal-outline> (a shift away from industrial animal agriculture would be required to reach the expressed legislative goals).

⁵⁹ James Hamblin, *Here Comes the Meat Tax*, THE ATLANTIC (Dec. 15, 2017), <https://www.theatlantic.com/health/archive/2017/12/should-meat-cost-more-than-gold/548264/>.

⁶⁰ Leslie P. Norton, *3 Stocks That Could See Real Gains from the Fake Meat Boom*, BARRON’S (Updated Aug. 1, 2019), <https://www.barrons.com/articles/amazon-costco-hershey-stocks-fake-meat-51564076583>.

⁶¹ *4 Stocks to Benefit from Boom in Plant-Based Meat Demand*, NASDAQ (Oct. 28, 2019, 11:32 AM), <https://www.nasdaq.com/articles/4-stocks-to-benefit-from-boom-in-plant-based-meat-demand-2019-10-28>.

⁶² Kelsey Piper, *Beyond Meat is Going Public. Meat Alternatives are Going Mainstream.*, VOX (May 2, 2019, 12:49 PM), <https://www.vox.com/2019/5/2/18525601/beyond-meat-ipo-vegan-burger>.

Revenue for the company has tripled each of the past two years.⁶³ Gross margins are multiples higher than similar beef products.⁶⁴ In 2019 restaurant sales nearly quadrupled with 298 million dollars in revenue.⁶⁵ The company is now trialing menu items at McDonald's and Kentucky Fried Chicken, with permanent menu items possible this year.⁶⁶ The Dow Jones Industrial Average logged the largest point drop in its 123 year history on March 9th, 2020.⁶⁷ This new record was then shattered later that week on March 12th.⁶⁸ Despite the stock market calamity of the COVID-19 crisis, Beyond Meat stock soared by 40% in April of 2020 fueled by supply chain difficulties of major meat producers Tyson, JBS, and WH Group owned Smithfield as well as the promise of Starbucks adding Beyond Meat beef alternatives at Chinese locations.⁶⁹

Also in response to the COVID-19 crisis, musician Snoop Dogg helped the company donate a million of the vegan burgers to hospitals over 30 days to healthcare workers.⁷⁰ The rap legend also invested in Outstanding Foods' pig-less pork rind alternative that is both vegan and kosher, with 10% of sales donated to help inner-city children with special needs.⁷¹

Beyond Meat is not the only new market contender attempting to dethrone beef. Impossible Food's Impossible Burger uses two microbes to help mimic the taste of meat in the meat alternative.⁷² Regarding the innovation the founder of Beyond Meat states,

⁶³ Brian Stoffel, *Beyond Meat is Sizzling. Here is Why I'm Still Not Buying*, THE MOTLEY FOOL (Apr. 28, 2020, 11:33 AM), <https://www.fool.com/investing/2020/04/28/beyond-meat-is-on-fire-heres-why-still-not-buying.aspx>.

⁶⁴ *Id.*

⁶⁵ Jon Quast, *Is Now a Good Time to Buy Beyond Meat Stock*, THE MOTLEY FOOL (Mar. 20, 2020, 8:30 AM), <https://www.fool.com/investing/2020/03/20/is-now-a-good-time-to-buy-beyond-meat-stock.aspx>.

⁶⁶ *Id.*

⁶⁷ Sean Williams, *Stock Market Crash 2020: Everything You Need to Know*, THE MOTLEY FOOL (Mar. 10, 2020, 5:51 AM), <https://www.fool.com/investing/2020/03/10/stock-market-crash-2020-everything-you-need-to-kno.aspx>.

⁶⁸ Sean Burch, *Black Thursday: Dow Suffers Biggest Point Drop Ever, as Disney and Apple Fall Hard*, THE WRAP (Updated Mar. 13, 2020, 1:18 PM), <https://www.thewrap.com/dow-biggest-point-drop-ever-disney-apple/>.

⁶⁹ Paul R. La Monica, *Meat Shortage and China Deals Send Beyond Meat's Stock Spiking*, CABLE NETWORK NEWS (Updated April 27, 2020, 9:42 AM), <https://www.cnn.com/2020/04/27/investing/beyond-meat-stock-food-supply-shortage-starbucks-china/index.html>.

⁷⁰ Anna Starostinetskaya, *Snoop Dogg Helps Beyond Meat Donate One Million Vegan Burgers to Frontline Workers During COVID-19*, VEG NEWS (Apr. 14, 2020), <https://vegnews.com/2020/4/snoop-dogg-helps-beyond-meat-donate-one-million-vegan-burgers-to-frontline-workers-during-covid-19>.

⁷¹ *Snoop Dogg Invests in Pigless Pork Rinds from Outstanding Foods*, VEGCONOMIST (Mar. 12, 2020), <https://vegconomist.com/marketing-and-media/snoop-dogg-invests-in-pigless-pork-rinds-from-outstanding-foods/>.

⁷² Julie Wolf, *The Microbial Reasons Why the Impossible Burger Tastes So Good*, AM. SOC'Y FOR MICROBIOLOGY (May 16, 2019), <https://www.asm.org/Articles/2019/May/The-Microbial-Reasons-Why-the-Impossible-Burger-Ta>.

“The whole reason the company exists, and the reason we have so many amazingly great scientists working here, is that we are working on the most important and urgent problem in the world right now. Arguably, the most important and urgent problem our species has ever faced is the catastrophic meltdown in biodiversity and the relentless progression of climate change. [...] The [solution] is to create products that consumers prefer that can compete successfully in the marketplace against those products.”⁷³

With this new process, Impossible Foods claims to create a burger that uses a 20th of the land, a quarter of the water, and produces an 8th of the greenhouse gas emissions of a traditional beef patty.⁷⁴ Several taste testers have struggled to tell the difference between it and traditional beef burgers.⁷⁵ As rival Beyond Meat shares surged by 500% after IPO, investors are hungry for a part of the action.⁷⁶ This technology, and technologies like it, are absolutely critical to the long term national security of the USA.

Market disruption is not exclusive to beef alternatives. The plant-based milk market is expected to reach 21.52 billion dollars by 2024.⁷⁷ The industry had an estimated value of 11.9 billion in 2017.⁷⁸ The U.S. National Library of Medicine estimates that 65% of people have difficulty digesting lactose after infancy and dairy consumption is associated with various other health concerns.⁷⁹ 50% of Americans are now purchasing some dairy alternatives.⁸⁰ With a surge

⁷³ *Id.*

⁷⁴ Matt Simon, *The Impossible Burger: Inside the Strange Science of the Fake Meat That ‘Bleeds’*, WIRED (Sept. 20, 2017, 11 AM), <https://www.wired.com/story/the-impossible-burger/>.

⁷⁵ Kelsey Piper, *Impossible Foods’ Meatless Burgers Have Made It’s a \$2 Billion Company*, VOX (May 13, 2019, 1 PM), <https://www.vox.com/future-perfect/2019/5/13/18617828/impossible-foods-meatless-burgers-investors>.

⁷⁶ Amelia Lucas, *Investors Reportedly Clamoring to Buy Into Impossible Foods Ahead of Potential IPO*, CNBC (Updated Aug. 23, 2019, 7:14 PM), <https://www.cnbc.com/2019/08/22/investors-reportedly-clamor-to-buy-into-impossible-foods-ahead-of-ipo.html>.

⁷⁷ *Global Plant Based Milk Market is Expected to Reach US\$21.52 Billion in 2024, Growing at a CAGR of 10.18%*, BUS. WIRE (Mar. 5, 2020, 6:27 AM), <https://www.businesswire.com/news/home/20200305005398/en/Global-Plant-Based-Milk-Market-Expected-Reach>.

⁷⁸ Brian Kateman, *Non-Dairy Milk Alternatives Are Experiencing A ‘Holy Cow!’ Moment*, FORBES (Aug. 19, 2019, 12:15 PM), <https://www.forbes.com/sites/briankateman/2019/08/19/non-dairy-milk-alternatives-are-experiencing-a-holy-cow-moment/#2394acb84c44>.

⁷⁹ *Id.*

⁸⁰ *Canadian Sustainable Plant Milk Company ‘Happy Planet’ Donates 100,000 Servings of Food to Food Banks Each Year*, VEGCONOMIST (May 9, 2019), <https://vegconomist.com/companies-and-portraits/canadian-sustainable-plant-milk-company-happy-planet-donates-100000-servings-of-food-to-food-banks-each-year/>.

in popularity, oat milk saw a 425% growth in the year of 2019.⁸¹ Sale of oat milk in the USA spiked by nearly 480% for a week in March of 2020.⁸²

These industries have a lot of potential for retirement investments. Considering the long-term hazards of climate change, it seems reasonable for a retirement plan to focus on investments that are more sustainable and environmentally responsible in addition to offering a promising return. Why save for a retirement at all if the planet is dead or in the grip of war and famine by the time you get there? Long term investment in meat alternatives is a sound strategy for future retirees.

In 1974, Congress enacted the Employee Retirement Income Security Act (ERISA) for the purpose of protecting and regulating employee retirement and pension benefits.⁸³ Some of the significant legislation that impacts ERISA since then are the Multiemployer Pension Plan Amendments Act of 1980, the Retirement Equity Act of 1984, the Single-Employer Pension Plan Amendments Act of 1986, the Rural Telephone Cooperative Associations ERISA Amendments Act of 1991, the Pension Annuitants Protection Act of 1994, Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Small Business Job Protection Act of 1996, the Newborns' and Mothers' Health Protection Act of 1996, the Mental Health Parity Act of 1996, the Savings Are Vital to Everyone's Retirement Act of 1997, the Women's Health and Cancer Rights Act of 1998, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, the Pension Funding Equity Act of 2004, the Working Families Tax Relief Act of 2004, the Pension Protection Act of 2006, the Worker, Retiree, and Employer Recovery Act of 2008, the Genetic Information Nondiscrimination Act of 2008, the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010, and the Patient Protection and Affordable Care Act of 2010.⁸⁴ Not surprisingly, ERISA is an incredibly complex area of law with wide and far reaching impacts on American society. Tax advantages to employers for

⁸¹ *Id.*

⁸² Anna Starostinetskaya, *US Vegan Oat Milk Sales Surge By Nearly 480 Percent in One Week*, VEG NEWS (Mar. 25, 2020), <https://vegnews.com/2020/3/us-vegan-oat-milk-sales-surge-by-nearly-480-percent-in-one-week>.

⁸³ 29 U.S.C.A. § 1001et seq.

⁸⁴ JACK B. HOOD, BENJAMIN A. HARDY JR., & LAUREN A. SIMPSON, *WORKERS' COMPENSATION AND EMPLOYEE PROTECTION LAWS IN A NUTSHELL*, WEST ACADEMIC PUBLISHING (6th ed. 2017).

having ERISA pension plans were estimated to result in 142 billion dollars in tax savings in 2011 and another 177 billion for health benefit plans.⁸⁵

In 2014, there was 6.345 trillion dollars in private pension plans.⁸⁶ Plans covered by ERISA offer serious tax benefits and tax deferral options to employees as well as employers. The plans covered by ERISA include retirement and pension plans but also includes significant discussion of health care benefits as well. ERISA does not require or mandate the establishment of these benefits for employees however it regulates benefits if an employer provides them. Because of the broad scope of this purpose ERISA, much like animal law, touches on several other branches of jurisprudence. Responsibility for implementation is spread between the Department of Labor, the Department of the Treasury, the Department of Commerce, and the Pension Benefit Guaranty Corporation (PBGC).⁸⁷ The PBGC was a government agency created by ERISA “to encourage the continuation and maintenance of private-sector defined benefit pension plans, provide timely and uninterrupted payment of pension benefits, and keep pension insurance premiums at a minimum.”⁸⁸

PBGC is not funded by tax revenue but insurance premiums from employers, investments, and funds it receives from plans it takes over.⁸⁹ The Office of the General Counsel of the PBGC consists of four departments: A) Bankruptcy, Litigation, and Terminations Department; B) Bankruptcy, Transactions, and Terminations Department; C) General Law and Operations Department; and D) Program Law and Policy Department.⁹⁰ Created in 2012 by the Moving Ahead for Progress in the 21st Century Act, PBGC also has an advocate who serves as a liaison between sponsors, participants, and the PBGC.⁹¹

⁸⁵ STEVEN L. WILLBORN ET AL., *EMPLOYMENT LAW: CASES AND MATERIALS* 689-692 (5th ed. 2012).

⁸⁶ Rebecca J. Miller et al., *ERISA: 40 Years Later*, *JOURNAL OF ACCOUNTANCY* (Aug. 31, 2014), <https://www.journalofaccountancy.com/issues/2014/sep/erisa-20149881.html>.

⁸⁷ *Who We Are*, PENS. BEN. GUAR. CORP., <https://www.pbgc.gov/about/who-we-are>.

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *PBGC Departments*, PENS. BEN. GUAR. CORP., <https://www.pbgc.gov/about/who-we-are/pg/pbgc-departments>.

⁹¹ *PBGC Advocate FAQs*, PENS. BEN. GUAR. CORP., <https://www.pbgc.gov/about/oppssa-home/pbgc-advocate-faqs>.

There is a trend in socially responsible investing which can appear as mutual funds or exchange traded funds that integrate environmental, social, and governance factors (ESG) or choosing to invest directly in businesses which support values beyond the cash earning potential. Benefit plans covered by ERISA can run aground here, because of extremely high statutory fiduciary duties of plan administrators including prudence in investment described in 29 U.S.C. § 1104. Despite the fact there is real danger in not shifting investment behaviors and the financial potential such investments carry, particularly for the long-term, ERISA is oddly prohibitive of this investment consideration.

The Department of Labor regulates plan management of fiduciaries. In a 2018 bulletin,

“...the Department reiterated its longstanding view that, because every investment necessarily causes a plan to forego other investment opportunities, plan fiduciaries are not permitted to sacrifice investment return or take on additional investment risk as a means of using plan investments to promote collateral social policy goals... Fiduciaries must not too readily treat ESG factors as economically relevant to the particular investment choices at issue when making a decision. It does not ineluctably follow from the fact that an investment promotes ESG factors, or that it arguably promotes positive general market trends or industry growth, that the investment is a prudent choice for retirement or other investors. Rather, ERISA fiduciaries must always put first the economic interests of the plan in providing retirement benefits. A fiduciary’s evaluation of the economics of an investment should be focused on financial factors that have a material effect on the return and risk of an investment based on appropriate investment horizons consistent with the plan’s articulated funding and investment objectives.”⁹²

This is extraordinarily damaging to the long-term welfare of our society and chills market enthusiasm for the very sort of investments this country is in dire need of. This provides a serious handicap for ESG investments for the purposes of retirement planning. Like farm subsidies, this

⁹² U.S. DEP’T OF LAB., FIELD ASSISTANCE BULLETIN NO. 2018-01 (Apr. 23, 2018), <https://www.dol.gov/agencies/ebsa/employers-and-advisers/guidance/field-assistance-bulletins/2018-01>.

type of government interference is highly detrimental to long-term economic growth by incentivizing short-term choices that do not consider environmental impact as the essential factor it is. The American Bar Association further observes,

“The Guidance also reiterates that a plan fiduciary may add ESG-themed investment alternatives to a 401(k) plan’s investment lineup, provided that such an addition does not cause other non-ESG-themed investment options to be excluded... It remains the case that ESG issues do not in and of themselves make an employee benefit plan investment option prudent. Unless and until there are more precise and reliable means to measure ESG factors and to weigh them together with the other factors relevant to a prudent investment decision-making process, it seems unlikely that there will be widespread endorsement of these investments.”⁹³

This leaves two seeable goals for animal and environmental advocates: improve measurement of ESG factors and change the extraordinary rigid stance of the Department of Labor that limits access to tax advantages for selecting investments using ESG factors. If this is done, investment will flow more smoothly into the long-term thinking opportunities our nation and non-human animals desperately need.

Using non-financial criteria to evaluate investments has a long-established history. For example, trade unions have used Economically Targeted Investments (ETIs) to invest in project’s that have a benefit for their members.⁹⁴ Disinvestment in South Africa’s apartheid regime is another example.⁹⁵ The DOL released interpretive bulletins on ESG/ETIs in 1994, 2008, 2015, and 2018.⁹⁶ The 1994 bulletin was intended to correct a popular misconception that

⁹³ Russell L. Hirschhorn & Thomas A. Utzinger, *Are ESG-Related Investments Right For Your ERISA Plan?*, AM. BAR ASS’N (Sept. 03, 2018), https://www.americanbar.org/groups/labor_law/publications/ebc_news_archive/fall-2018-issue/Are_ESG-Related_Investments_Right_For_Your_ERISA_Plan/.

⁹⁴ Dan Cassidy, *Using ESG Factors in ERISA Plans*, INV. & WEALTH INST. (2018), <https://investmentsandwealth.org/getattachment/af5814b7-6b09-46c1-90c0-0ad18a9e3674/IWM18SepOct-UsingESGFactorsInERISAPlans.pdf>.

⁹⁵ *Id.*

⁹⁶ *Id.*

investments in ETIs were incompatible with ERISA’s fiduciary obligations and gave various criteria under which an ETI was not excluded.⁹⁷ This created the “all things being equal” test as an ETI that was equally competitive to its alternative could be selected.⁹⁸

In 2008 the DOL issued another bulletin to clarify this issue addressing concentration risk of investments.⁹⁹ It warned fiduciaries that they could not only consider investments in “green” companies.¹⁰⁰ It further stated that fiduciary consideration of non-economic factors should be rare and documented in a manner that demonstrated compliance with ERISA’s rigorous fiduciary standards.¹⁰¹ The functionally prohibited most ERISA plan investment in ESG type funds and projects.¹⁰² The DOL later conceded that this set a higher and unclear standard for plan fiduciaries.¹⁰³ This is problematic as it chilled a major sector of investment in products and businesses that address issues like climate change caused by intensive animal agriculture by manufacturing and marketing plant-based alternatives.

By 2015 research was showing that ESG factors improve investment results.¹⁰⁴ The DOL 2015 bulletin was the first to specifically mention ESG, not just ETI.¹⁰⁵ The 2015 bulletin stated the 2008 bulletin unduly discouraged fiduciaries from these considerations.¹⁰⁶ The DOL withdrew the 2008 bulletin.¹⁰⁷ This flip-flopping of position by the DOL was still problematic from the perspective of long-term investment planning that is central to effective retirement savings strategies. The 2015 guidance still did not permit fiduciaries to use plan assets to promote environmental causes at the expense of financial interests of plan participants but that collateral benefits could serve as tie breakers.¹⁰⁸ This appears to reconstitute the 1994 guidance by stating, “Fiduciaries need not treat commercially reasonable investments inherently suspect or

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

in need of special scrutiny merely because they take into consideration environmental, social, or other such factors.”¹⁰⁹ It also removed the additional documentation requirements.¹¹⁰

The 2018 guidance for fiduciaries continues to complicate this matter significantly. It allows investment in ESGs but without regard to any collateral benefits that the investment may produce and suggests that promotion of ESG factors does make the investment a prudent choice.¹¹¹ Concerningly, it states that investment policy statements do not need to contain ESG guidelines but if it does it may not be prudent for plan fiduciaries, including ERISA investment managers, to follow them.¹¹² Specifically, “if it is imprudent to comply with the investment policy statement in a particular instance, the manager must disregard it.”¹¹³ This does the opposite of ensure investor confidence and serves to promote uncertainty in investment plan selection.

The 2018 guidance also addresses 401(k) plans by drawing a distinction between qualified default investment alternatives (QDIA) and another investment alternative in plan line-ups however notes that nothing suggests that fiduciaries should make such choices based on collateral public policy goals.¹¹⁴ Regarding QDIA, the decision to favor the fiduciary’s own policy preferences in selecting an ESG-themed investment option for a 401(k) without regard to possibly different or competing views of plan participants and beneficiaries would raise questions about the fiduciary’s compliance with the required duty of loyalty.¹¹⁵ An ESG-themed target-date fund as a QDIA would not be “prudent” under the bulletin if the fund would provide a lower expected rate of return than available non-ESG alternative target-date funds with commensurate degrees of risk or if the risk was higher than those yielding the same return.¹¹⁶

ESG investing continues to grow and accounts for more than 16 trillion of actively managed equity.¹¹⁷ One law firm notes, “In our view, ESG will continue to evolve and proliferate,

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ Rebecca Moore, *DOL Clarifies How ESG Investment Considerations Should Be Made Under ERISA*, PLANADVISER (Apr. 24, 2018), <https://www.planadviser.com/dol-clarifies-esg-investment-considerations-made-erisa/>.

¹¹⁶ *Id.*

¹¹⁷ Cassidy, *supra* note 94.

while also garnering the attention of both the DOL and SEC on a number of levels. ESG is, in essence, entirely fluid and will continue to present business opportunities and compliance challenges.”¹¹⁸ A 2018 survey shows that institutional investors are embracing greater use of ESG investing programs that factor considerations like upstream and downstream environmental wastes as well as climate change as part of overall risk and return analysis.¹¹⁹ The survey shows that 45% of institutional investors feel it is difficult to measure and understand financial versus nonfinancial performance considerations when establishing ESG programs and that this factor is holding back greater adoption.¹²⁰ There is some legitimate hesitation to embracing ESGs in that corporations might be attempting to “greenwash” to enhance their appeal to prospective ESG investors.¹²¹ Some initiatives, such as the Sustainable Stock Exchanges Initiative, are seeking to improve ESG disclosure and transparency.¹²² Greater clarity, both in reporting of ESG and fiduciary responsibilities relating to it is needed.

Regarding the importance of ESGs in modern finance, Paul Smith, CFA, president and CEO of CFA Institute, states:

“CFA Institute believes that every investment analyst should be able to identify and properly evaluate investment risks, and ESG issues are a part of this evaluation, our exam curriculum emphasizes risk management, and our members are increasingly interested in continuing education materials on ESG. [...] One view is that confronting climate change through government policy, such as the EU’s emissions-trading system, has yet to generate the desired results. Investors should not knowingly leave something to governments that governments have yet to deal with effectively and that will inevitably affect the lives of beneficiaries of the investments.”¹²³

¹¹⁸ John Manganaro, *2019 Could Be Banner Year for ESG in ERISA Plans*, PLANSPONSOR (Jan. 16, 2019), <https://www.plansponsor.com/in-depth/2019-banner-year-esg-erisa-plans/>.

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² *Environmental, Social, and Governance Issues in Investing*, CFA INST. (2015), <https://www.cfainstitute.org/-/media/documents/article/position-paper/esg-issues-in-investing-a-guide-for-investment-professionals.ashx>.

¹²³ *Id.*

It is curious why the DOL so strongly objects to easing ESG inclusion in tax privileged pension plans under ERISA. Both traditional pension plans and 401(k) plans have the four ERISA fiduciary standards of acting solely in the interests of participants and beneficiaries, act as a prudent expert, diversify investments, and act in accordance with plan documents.¹²⁴ One could argue that acting in the interest of participants, and especially distant beneficiaries, it is prudent to consider how an investment selection will impact climate change.

The Executive Order on Promoting Energy Infrastructure and Economic Growth, signed in 2019, to increase domestic production of crude oil and natural gas in the US is problematic because it directs the DOL to review retirement plan energy investment trends.¹²⁵ The executive order does not require the DOL to make the results available to the public.¹²⁶ ERISA is one of the few federal statutes that regulates investor behavior and this review could result in future restrictions being issued.¹²⁷ This could result in further problematic regulations related to additional retirement planning requirements that are in conflict to the long-term interests of plan participants and national security interests.

Regrettably, it appears at this time, ERISA is restrained in its power to be leveraged to promote compassion, dignity, and environmental responsibility in consideration of the long-term impact of retirement investments. Ironically, this most devalues the benefits younger persons will receive from their tax privileged retirement plans. It also provides a tax incentive for investment in objectionable industries by default without considering long-term environmental consequences that are harmful to participant and beneficiary long-term interests. ERISA, as it stands, has a great deal of room to improve how it helps the employees it was intended to protect over the long term.

Additionally, or in alternative, “fiduciary duty” for the purposes of ERISA should exclude investments in carbon majors and other highly environmentally destructive industries like CAFOs as prudent because of the extraordinary accelerant to climate change that their commercial activities directly result in. It is not in the interest of long-term investors, such as

¹²⁴ Cassidy, *supra* note 94.

¹²⁵ *DOL to Review ESG Investing, Proxy Voting Rules*, GROOM LAW GROUP (Apr. 15, 2019), <https://www.groom.com/resources/dol-to-review-esg-investing-proxy-voting-rules/>.

¹²⁶ *Id.*

¹²⁷ *Id.*

with retirement planning, to be investing in companies which are directly and significantly degrading the quality of life in the future.

The DOL should consider companies that cause significant climate change impact to not be prudent investments for the purposes of ERISA because of this. Tax privileged investments for these environmentally destructive companies is against the interests of long-term investors and future retirees because they foreseeably degrade the quality of future life in addition to being counter to national security interests. We deserve a safe, stable, and hospitable environment capable of sustaining life in which to retire. Without such, one wonders what the purpose of retirement planning even is. However, for various reasons, a preference might exist for deregulatory measures alone.

The DOL should consider adoption of a long-term view that takes both the seriousness and the inevitability of climate change into consideration in determining what is a prudent investment for retirement planning purposes. This would support national security interests, as recommended by the Pentagon, for government to address climate and environmental resilience efforts at all levels and lines of effort. Current fiduciary standards to be compliant with ERISA are a tangible threat to national security and represent excessive interference by the federal government in the free market. These dangerous restrictions unduly restrain tax advantaged investment and development of future essential industries, like meat and dairy alternative manufacturers, while also conflicting with the best interests of future retirees.