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DINA CIARMATORI

Research Analyst, Sustainable Equity Team

How Sustainable Are Your Proteins?

Trends and considerations

The Sustainable Equity team recently participated in a webinar focused on Changing the Protein Supply Chain, sponsored by the Forum for Sustainable and Responsible Investment (US SIF). The following are some key takeaways from the discussion.

In 2020, the alternative protein industry raised \$3.1 billion in investments—more than in any single year in the industry’s history.¹ These investments targeted companies creating sustainable alternatives to conventional animal-based foods, including plant-based meat, egg and dairy companies, cultivated meat companies and fermentation companies dedicated to alternative proteins.

¹ Good Food Institute (GFI) 2020 State of the Industry Highlights blog, March 18, 2021.

ANNUAL ALTERNATIVE PROTEIN INVESTED CAPITAL AND DEAL COUNT

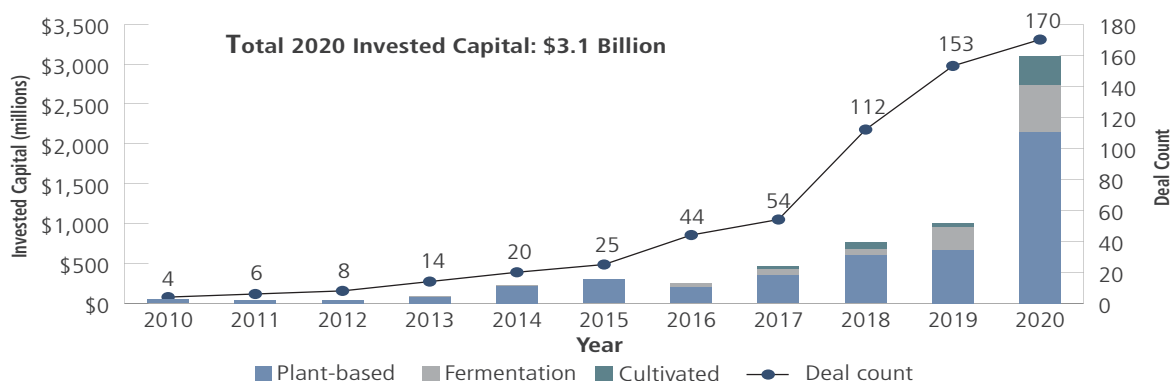


Chart data as of December 31, 2020.

Trends around health and wellness and a growing sense of climate change concerns have given rise to the growing acceptance of a flexitarian diet. Recent consumer surveys show that 3% of U.S. consumers state they follow a vegan diet, 3% are pescatarian, and 5% are vegetarian. However, the majority (53%) of consumers are primarily omnivorous, with 36% of consumers identifying themselves as flexitarian, consuming meat or poultry and vegan or vegetarian meals.² The flexitarian consumer is a meaningful segment of the market in terms of the sheer numbers of consumers willing to convert to plant-based offerings and shift their diet away from meat.

Why do we believe it is imperative to diversify the protein supply chain?

Traditional protein production, or livestock production, may present investors with potential material risks embedded throughout the supply chain. The industrialization of the world's meat production could have adverse environmental and social impacts ranging from deforestation, GHG emissions, biodiversity loss, water pollution, poor animal welfare to antimicrobial resistance, poor working conditions and human rights violations. For instance, emissions from livestock account for about 14.5% of total greenhouse gas emissions, globally, and roughly two-thirds of those emissions come from cattle.³ Approximately 70% of all medically important antibiotics in the United States are sold for use in animals which can potentially lead to antimicrobial resistance in the general population.⁴

There are also concerns around global population and how to meet the rising demands for protein as we reach 9 billion people by 2050. We have seen reports that suggest beef, for example, is more resource-intensive than other protein sources. Livestock takes up nearly 80% of global agricultural land, yet produces less than 20% of the world's supply of calories.⁵ Beef production requires about seven times more land and emits seven times more greenhouse gases as chicken per gram of protein, and is 20 times as land- and greenhouse gas-intensive as beans.⁶

In our view, it is clear that diversifying protein supply is necessary to help meet the world's demand sustainably.

What could this mean for companies and net-zero targets?

The Intergovernmental Panel on Climate Change (IPCC) released a report in October 2018 on the 1.5°C target; it concluded that global emissions need to reach net zero around 2050 to give a reasonable chance of limiting warming to 1.5°C.⁷ Given the significant amounts of Greenhouse Gas (GHG) emissions emitted by meat production, we believe related industries must move aggressively to reach net-zero emissions targets by mid-century.

² Flexitarian on the Rise; Transparency Tops 2021 Trends. *Food Technology magazine*. Margaret Malochleb. December 1, 2020.

³ <http://www.fao.org/news/story/en/item/197623/icode/>.

⁴ <https://www.fda.gov/media/102160/download>.

⁵ Our World in Data.

⁶ WRI.

⁷ The Intergovernmental Panel on Climate Change (IPCC), the United Nations body for assessing the science related to climate change. <https://www.ipcc.ch/sr15/chapter/glossary/>.

Companies operating in various food and agribusiness industries such as the protein producers, retailers and consumer goods-related industries with complex protein and agricultural supply chains are all likely to be exposed to and impacted by these issues centered around deforestation, factory farming, antimicrobial resistance and other social and environmental concerns. And it appears that consumers have become increasingly aware.

In many cases, the targeted engagements within our Sustainable Equity portfolios, focused on encouraging companies to expand their product offerings, are an extension of their efforts to make their traditional or meat protein supply chains more sustainable. The following examples highlight how some of our portfolio companies are responding to consumer demands for sustainable proteins while addressing emissions embedded within their supply chains related to livestock farming.

A **consumer goods company**, already examining its agricultural and protein supply chain and looking at high-risk commodities linked to deforestation such as palm oil, soy, beef, had already made strong commitments in these areas, committing to sourcing 100% palm oil, etc. But in recent years, we have seen the business shift from a series of acquisitions that the company has made to respond to the plant-based/alternative protein trends in the marketplace. The company is now targeting more than \$1 billion in sales from plant-based meat and dairy alternatives within the next five to seven years. The growth is being driven by some of these acquisitions, including vegan alternatives from some of their popular existing brands. This also complements commitments they have made on lowering calorie, salt and sugar levels across products as they address health and wellness. Their aim to transform the global food system could also help the company meet its science-based emissions targets.

A **food service company** that serves 5.5 billion meals a year to hospitals, universities and corporations as part of their emissions-reduction efforts, have identified two ways they could make an impact: by reducing food waste and by expanding offerings in sustainable, alternative proteins. In trying to meet their overall climate goals, they found strong consumer demand for their alternative proteins and won sizable contracts due to their expanded offerings. In fact, they are getting their wholesale supply chain to coordinate offerings with their chefs so that they can better structure menus to match more closely what's available on the supply side to consumer taste and preference for these types of products.

A **U.S. grocer** announced in 2020 that it will be adding more than 50 new products to its plant-based line, including new non-dairy cheeses, oat milk ice cream, and plant-based meat options. By the end of 2020, they had reached a plant-based collection of more than 75 vegan- and flexitarian-friendly foods, snacks, and beverages.

Although many companies have taken steps to source sustainably and responsibly, they've also made progress on commitments that we believe will benefit them in the long term to be competitively advantaged. We believe we are still in the early days of the protein supply chain transformation that would result in an overall more sustainable and healthier global food system, which is also aligned with the Paris Climate Agreement goals.

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Neuberger Berman
1290 Avenue of the Americas
New York, NY 10104-0001

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