



Sources	BCG		
Date	March 2021		
Potential scale of impact	Certainty of outcome	Impact horizon	
★★★★☆	★★☆☆	H1	H2 H3

The world’s consumers love animal-based protein—so much so that in 2020 they ate 574 million metric tons’ worth of meat, seafood, dairy, and eggs—almost 75 kilograms per person. Moreover, the amount consumed is still increasing, especially in developing markets. Yet concerns about the environmental costs of growing all the animals we eat, how those animals are treated, and the consequences for human health of eating so much conventional protein are rising even faster.

That’s why alternative proteins have morphed in just the past few years from a niche product to a mainstream phenomenon. Plant-based meats are now a fixture at fast-food restaurants around the world, and plant-based milk is a household staple. Alternatives based on microorganisms have been available for decades, and you can taste meat grown from animal cells in restaurants in Singapore and Israel. Indeed, consumers will soon be able to make nine out of ten of the world’s most popular dishes—especially those using less-structured meat, such as ground beef—with reasonably priced alternative proteins.

By 2035, after alternative proteins reach full parity in taste, texture, and price with animal proteins, 11% of all the meat, seafood, eggs, and dairy eaten around the globe is very likely to be alternative. With a push from regulators and step changes in technology, that number could reach 22% in 2035. By then, Europe and North America will have reached the point of “peak meat,” and consumption of animal proteins will begin to decline.

In addition to its beneficial impact on human health, the shift to alternatives can make a real contribution to the efforts to combat climate change. By 2035, the shift to alternatives will save as much carbon dioxide equivalent (CO2-e) as Japan emits in a year, conserve enough water to supply the city of London for 40 years, and promote biodiversity and food security. Consumers can eat tasty food while helping protect the planet and making progress toward several of the UN’s Sustainable Development Goals (SDGs). Investors focused on environmental, social, and governance (ESG) criteria can participate in a fast-growing market.

**THE PROTEIN INDUSTRY**  
 The protein industry is transforming as demand for alternatives to animal protein rises