Executive Summary

This is a critical moment for our food system. As evidence mounts regarding the challenges and risks associated with industrialized animal agriculture, the opportunity to support the growth of the alternative protein industry has never been more prescient or urgent. Diversifying our protein supply to include products from plant sources, fermentation, and cellular agriculture is integral to creating a healthier, more just, and more sustainable food system.

While the current animal protein paradigm is increasingly ecologically and economically unsustainable, transforming the global food and agriculture industry requires massive changes to infrastructure, supply chains, and commodity markets—not to mention scientific breakthroughs and cultural shifts—all of which demand time, human resources, and significant capital. When positive demand shifts occur, even under optimal circumstances, physical limitations constrain the supply side’s ability to shift quickly enough to meet demand. While the growth of the alternative protein industry in recent years has been unprecedented, organic growth alone may not be fast enough to eliminate the increasing imbalances between supply and demand.

GFI’s Role in Catalyzing Growth

As a nonprofit organization whose mission is to accelerate the growth of the alternative protein industry, The Good Food Institute (GFI) has a unique and vital role to play in combating these challenges and transforming each segment of the value chain more quickly and on a larger scale than conventional market forces would dictate. GFI is working to accelerate the transition to a better food system by surfacing the most pressing problems and most needed solutions in the alternative protein market. By offering a menu of recommendations for building a resilient and sustainable alternative protein industry, GFI helps businesses, investors, nonprofits, academic researchers, and policymakers prioritize efforts supporting the alternative protein industry and ensure that resources are channeled effectively.

To identify the most impactful interventions for building a robust alternative protein industry, GFI conducted white space ideation exercises to solicit research and commercial solutions.
across the industry. In parallel, we conducted a market-shaping analysis to systematically probe challenges and canvass opportunities to accelerate the industry’s growth. These efforts collectively form the **Advancing Solutions for Alternative Proteins** initiative.

The market-shaping analysis built on frameworks first developed in the public health sector by organizations such as USAID; the Bill & Melinda Gates Foundation; and Gavi, the Vaccine Alliance, to create thriving markets for vaccines and essential medical supplies. The intent of this analysis—and the actionable private- and public-sector recommendations that emerge from it—is to accelerate important market shifts that otherwise would have occurred too slowly or not at all and to ensure equitable global access.

Market shaping encompasses the following **elements**:  

1) Identifying ways that the current market deviates from the ideal.  
2) Determining the root causes of these market shortcomings.  
3) Analyzing potential market interventions.  
4) Recruiting partners to implement needed interventions.  
5) Evaluating ongoing market health and the impact of applied interventions.

This project represents the first three stages of this process. As part of the Advancing Solutions for Alternative Proteins initiative, GFI spent several months conducting extensive research and interviewing more than 120 experts throughout the alternative protein value chain to identify the existing and future bottlenecks as well as potential solutions to the industry’s most pressing challenges. The result is a living roadmap for building a resilient and successful alternative protein industry.

**Generating Open-Access Insights**

GFI’s findings are all open-access to catalyze activity and solicit engagement from a broad array of stakeholders. The reports linked below are intended to spur creative thinking and guide future iterations of the process, which we plan to revisit annually to solicit fresh input from thought leaders across the industry. Two dynamic resources—the innovation priorities list and the solutions database—exist as continually updated web pages, for which we actively invite new contributions from the community. All of these resources are meant to help businesses, nonprofits, academic researchers, and governments prioritize their efforts, ensuring that resources are channeled toward activities with the highest anticipated impact.

**Get Involved**

To learn more about these efforts, contribute to any of the identified opportunities, or elevate new ideas for accelerating the industry, please reach out. All of this work is made possible by our generous community of donors. If you’d like to support GFI’s open-access research and efforts to catalyze the alternative protein industry, please contact philanthropy@gfi.org.
Reports and Dynamic Resources

Innovation Priorities

- Provides an overview of the key challenges limiting the growth of alternative proteins.
- Explores the bottlenecks at every step of the supply chain, which will be continually updated as the industry evolves and grows.
- Elucidates needs for research, investment, business solutions, and ecosystem-level interventions.

Solutions Database

- Provides a repository of concrete, actionable solutions to support the growth of alternative proteins.
- Serves as a living resource that will continue to grow through contributions from GFI’s team and from external stakeholders.
- Encompasses solutions suitable for companies, governments, entrepreneurs, investors, researchers, academic institutions, and nongovernmental organizations, including research projects; commercial opportunities; and ecosystem-level market interventions, such as policy and regulatory solutions.

Advancing Solutions for Alternative Proteins Project Report

- Describes the motivation, methodology, and key findings of the Advancing Solutions for Alternative Proteins initiative conducted from late 2019 through mid-2020.
- Details the composition of the stakeholder and industry expert participants.
- Highlights key areas for concerted industry-building efforts throughout the value chain.

Future-Proofing Alternative Proteins: Advancing Solutions for Long-Term Resilience

- Presents the key findings from our premortem analysis of potential threats to the widespread adoption of alternative proteins and strategies for avoiding or mitigating the most pressing risks.
- Provides recommendations for positioning the alternative protein ecosystem for long-term growth.

Futures Wheels as Tools for Elucidating Non-obvious Opportunities and Challenges for Industry Growth

- Explores possibilities of future-growth scenarios for alternative proteins, supporting better decision-making in the present.
- Provides recommendations for conducting future exercises to surface additional strategic insights.
About the Authors

This summary is part of the Advancing Solutions for Alternative Proteins (ASAP) initiative, collaboratively authored by members of the ASAP team. If you have questions, please reach out to the corresponding author.

Liz Specht, Ph.D.
Associate Director of Science and Technology, The Good Food Institute

- LizS@gfi.org
- Liz Specht
- @LizSpecht

Morgan Zaidel
Market Shaping Research Fellow, The Good Food Institute
Associate, Oliver Wyman

- MorganZ@gfi.org
- Morgan Zaidel

Blake Byrne
Business Innovation Specialist, The Good Food Institute

- BlakeB@gfi.org
- Blake Byrne

Nate Crosser
Startup Growth Specialist, The Good Food Institute

- NateC@gfi.org
- Nate Crosser
- @NateCrosser

Zak Weston (corresponding author)
Foodservice and Supply Chain Manager, The Good Food Institute

- ZakW@gfi.org
- Zak Weston
- @ZakWeston

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About GFI

The Good Food Institute is a global nonprofit building a sustainable, healthy, and just food system. With expertise across the scientific, regulatory, industry, and investment landscape, we are accelerating the transition of the world’s food system to alternative proteins, using the power of food innovation and markets.