

**JANO Consulting**

<b><u>Team Member Name</u></b>	<b><u>Year</u></b>	<b><u>Major</u></b>
Member 1: Jada Roy	Senior	Entrepreneurship
Member 2: Alice Zhou	Senior	Accounting
Member 3: Olivian Sanderson	Junior	Accounting & Economics
Member 4: Robert Francis	Senior	Finance & Management

**Advisors:** Jeff Muton & Amna Chalwati

**Topic Title:** From Plastic to Plants: The Next Generation of Packaging

**Audience:** Owners of Harris Ranch

**Sustainable Development Goals**

SDG #13: Climate Change: Take urgent action to combat climate change and its impacts

SDG #12: Responsible Consumption and Production: Ensure sustainable consumption and production patterns

**Executive Summary**

Plastic waste from food packaging has become a major environmental and regulatory challenge, particularly within the meat industry. Conventional plastic films used to package fresh products are difficult to recycle, contribute significantly to global plastic pollution, and are increasingly targeted by environmental regulations. More than 400 million tons of plastics are produced every year worldwide, half of which is designed to be used only once. Of that, less than 10% is recycled. In California, where Harris Ranch is based, new legislation such as Senate Bill 1053 banning and fining retailers using single-use plastic bags and broader packaging reforms are accelerating the transition toward sustainable alternatives. At the same time, global initiatives including the Paris climate commitments and the United Nations Sustainable Development Goals are placing increasing pressure on companies to reduce plastic waste and adopt environmentally responsible materials. For major retailers and suppliers, failure to adapt will increasingly result in competitive disadvantages, reputational risk, and millions of dollars in financial penalties.

To address this challenge, our proposal introduces Harris Ranch to a seaweed-based bioplastic film. Alaagi, a Nova Scotian company developing bioplastics, is producing the world's first commercially available 10,000 OTR film, the oxygen transmission rate required for meat packaging to maintain freshness and prevent spoilage. Unlike conventional petroleum-based plastics, the material is derived from renewable resources and offers a sustainable, scalable alternative that meets industry performance standards. By integrating bioplastic packaging into Harris Ranch's supply chain, the company can reduce plastic waste, align with emerging regulations, and position itself as a leader in sustainable food packaging. This solution not only mitigates environmental impact but also allows Harris Ranch to proactively adapt to the future of packaging while strengthening its brand and regulatory resilience.