





A better way to cook.



Closing the Loop

Engineering a Sustainable Packaging
Experience

SUSTAINABILITY *at Blue Apron*

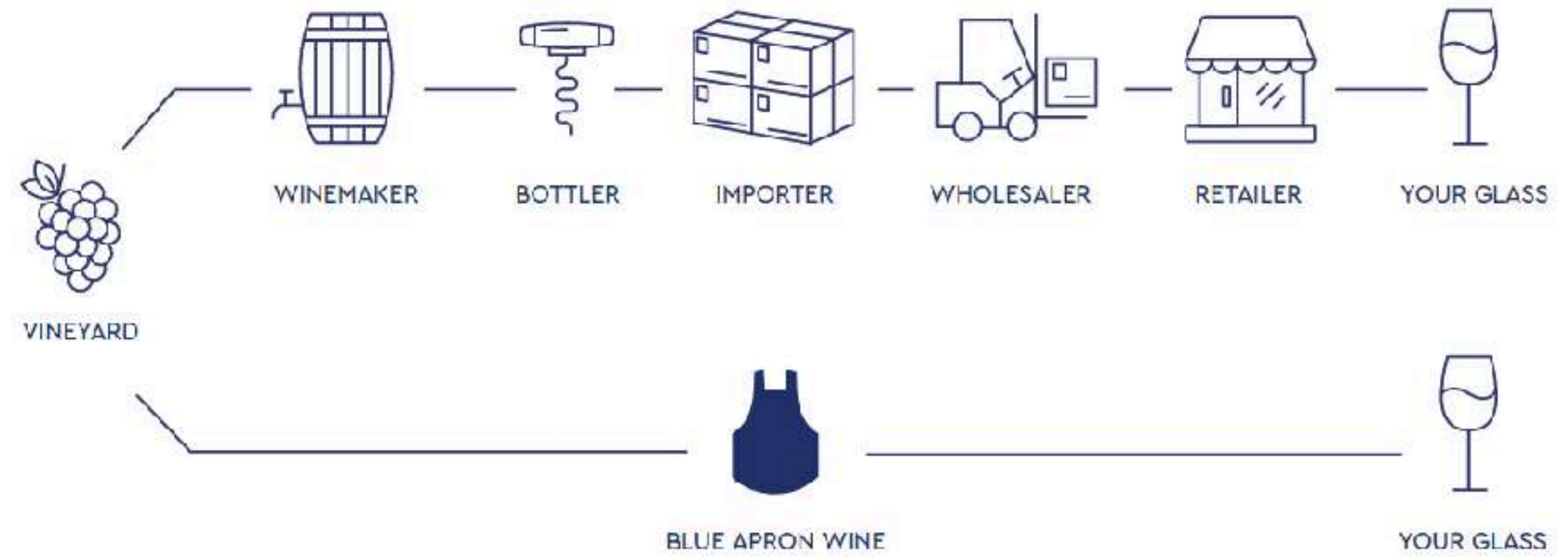
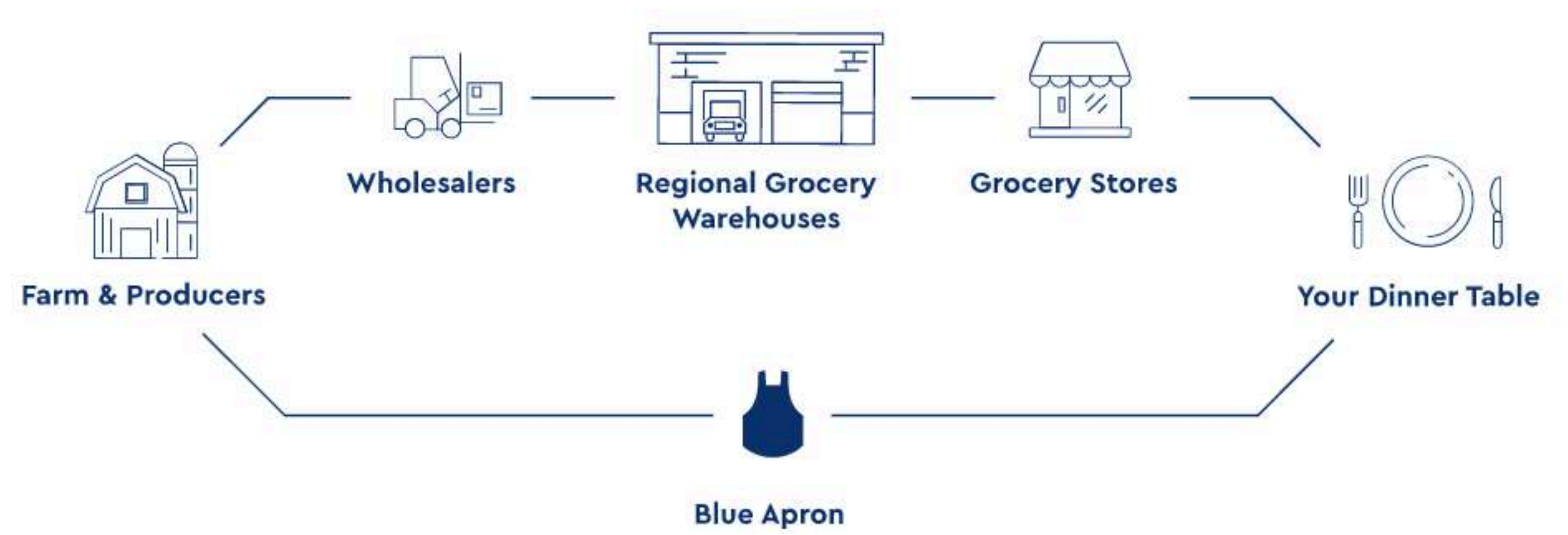
A commitment to reducing food waste, and setting sustainable standards for ingredient sourcing.



In 2019, Blue Apron reached it's 2030 goal by reducing food waste by over 53% in just 2 years.



USDA & EPA Program *U.S. Food Loss and Waste 2030 Champions*

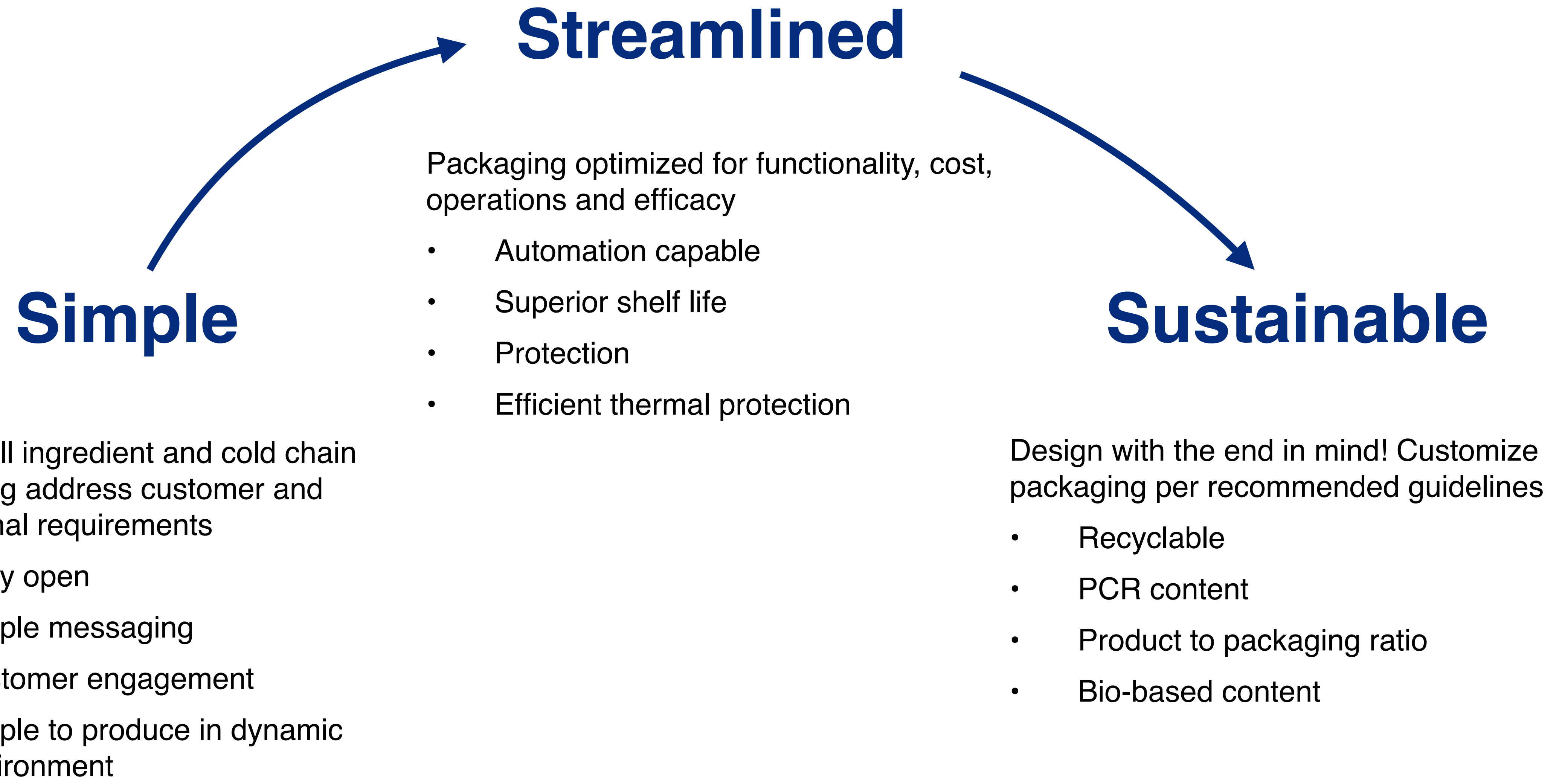


PACKAGING *at Blue Apron*

Dynamic Packaging Portfolio

- 500+ unique ingredients
- Product changes every week
- Shelf life requirements
- Cold-chain requirements
- Ingredient storage requirements
- Temperature zones within the box
- Shipping in multiple temperature geographical zones





CHALLENGES *in Packaging*

CHALLENGES



Improving the sustainability of meal kit packaging through industry-wide partnerships



85% of the Blue Apron packaging is recyclable

ENVIRONMENT JUNE 4, 2017

The Truth About Meal-Kit Freezer Packs

They're big. They're filled with goo. And they're rapidly accumulating in a landfill near you.

 **KIERA BUTLER**
Senior Editor
[Bio](#) | [Follow](#)

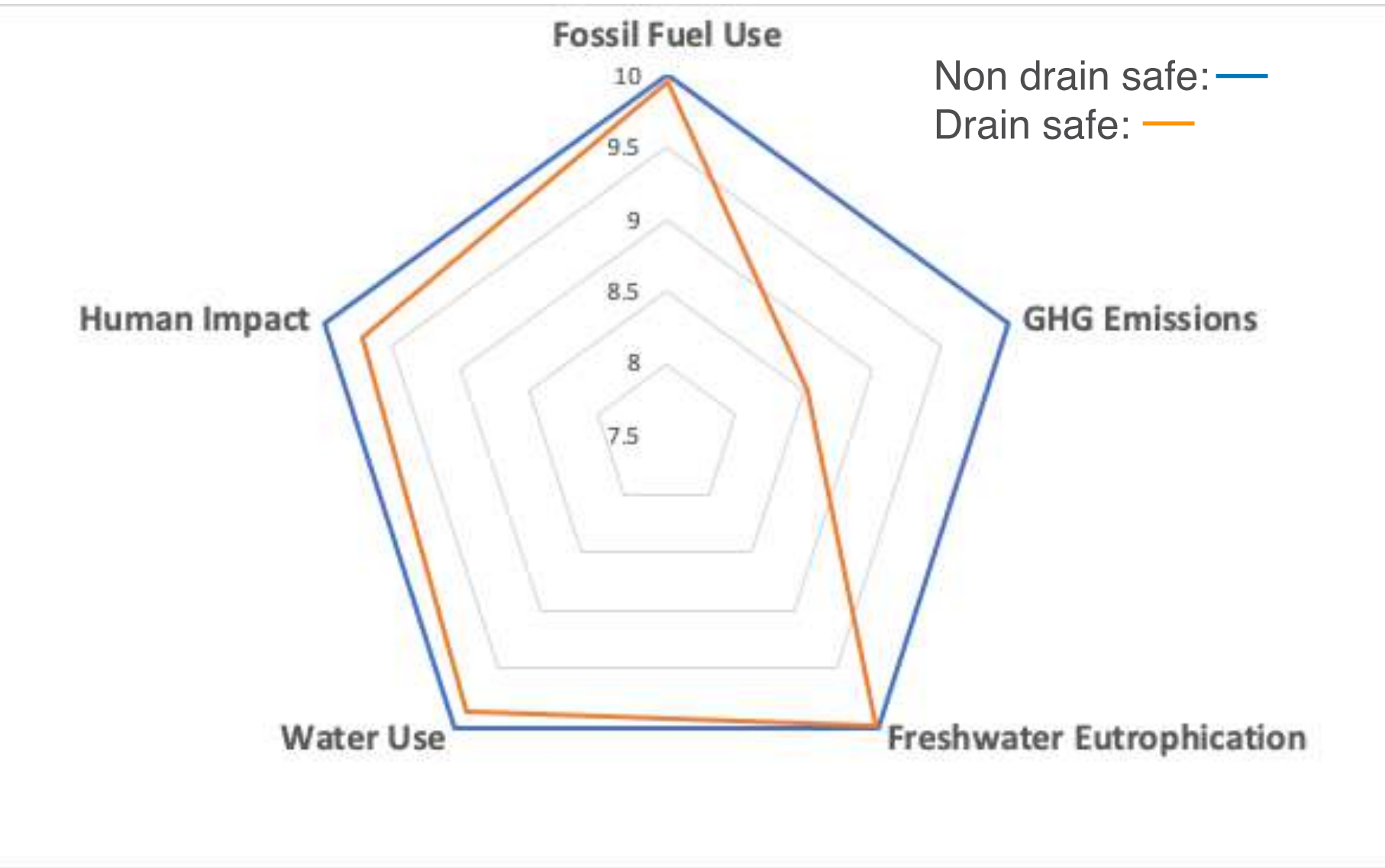
The stuff inside freezer packs is made from the same stuff as fossil fuels, and it doesn't biodegrade.

Meal-kit companies assure their customers that the freezer-pack goo is nontoxic. That's true. But while sodium polyacrylate poses little to no danger to meal-kit customers, it's a different story for the people who manufacture the substance. (Meal-kit companies typically contract with freezer-pack manufacturers rather than making their own.) In its powdered state, it can get into workers' lungs, where it can cause serious problems. The Centers for Disease Control and Prevention [noted](#) in 2011 that workers in a sodium polyacrylate plant in India developed severe lung disease after inhaling the powder. [Animal studies](#) have shown that exposure to high concentrations of sodium polyacrylate can harm the lungs. Because of these known risks, some European countries have set limits on workers' exposure to sodium polyacrylate.

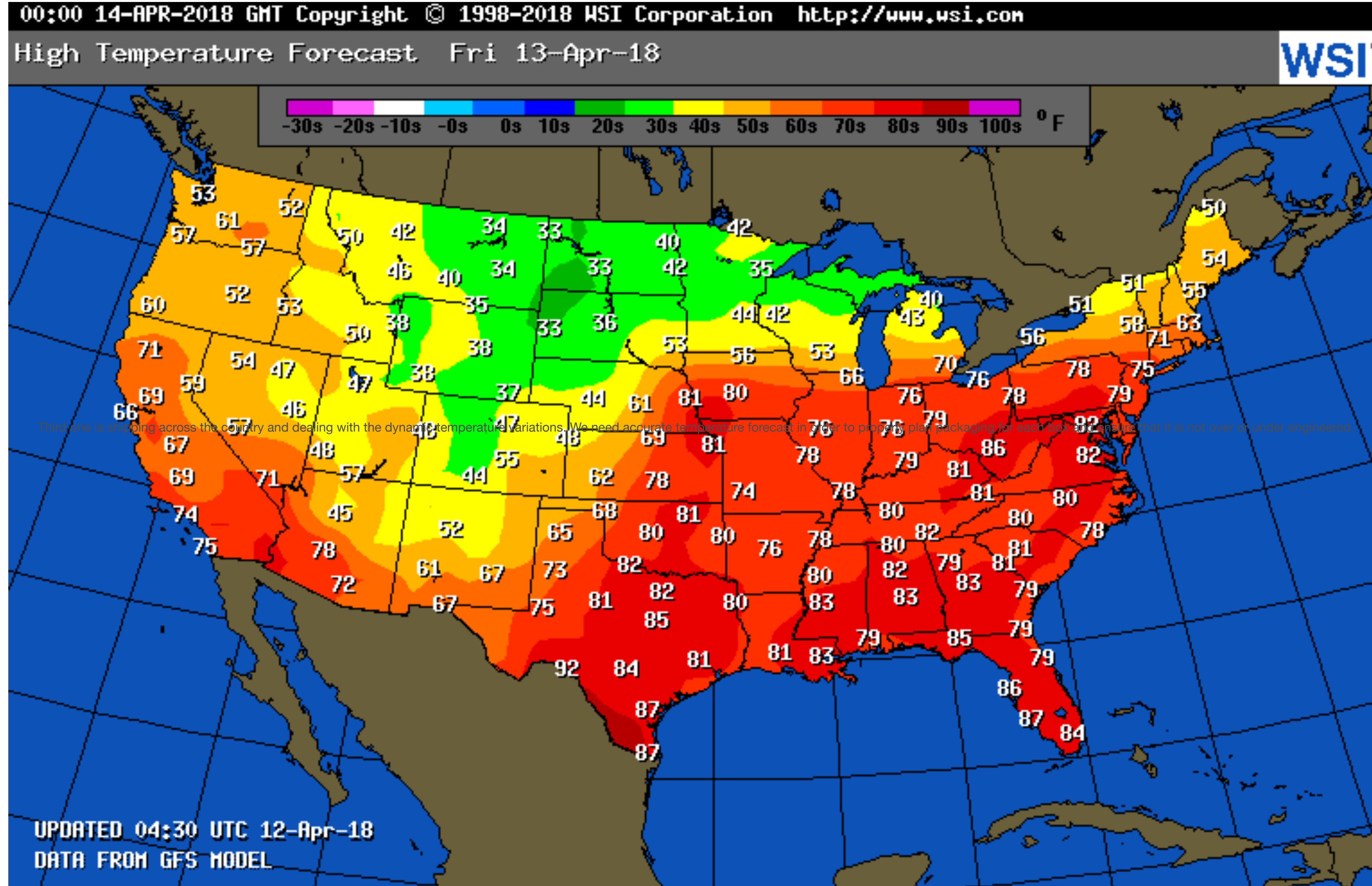


DRAIN-SAFE GEL PACKS

Blue Apron launched drain safe gel packs in 2018 due to customer demand. It allowed consumers to drain the gel solution in kitchen sink. This switch made a huge difference in LCA indicators, as well as met consumer expectations.



CHALLENGES



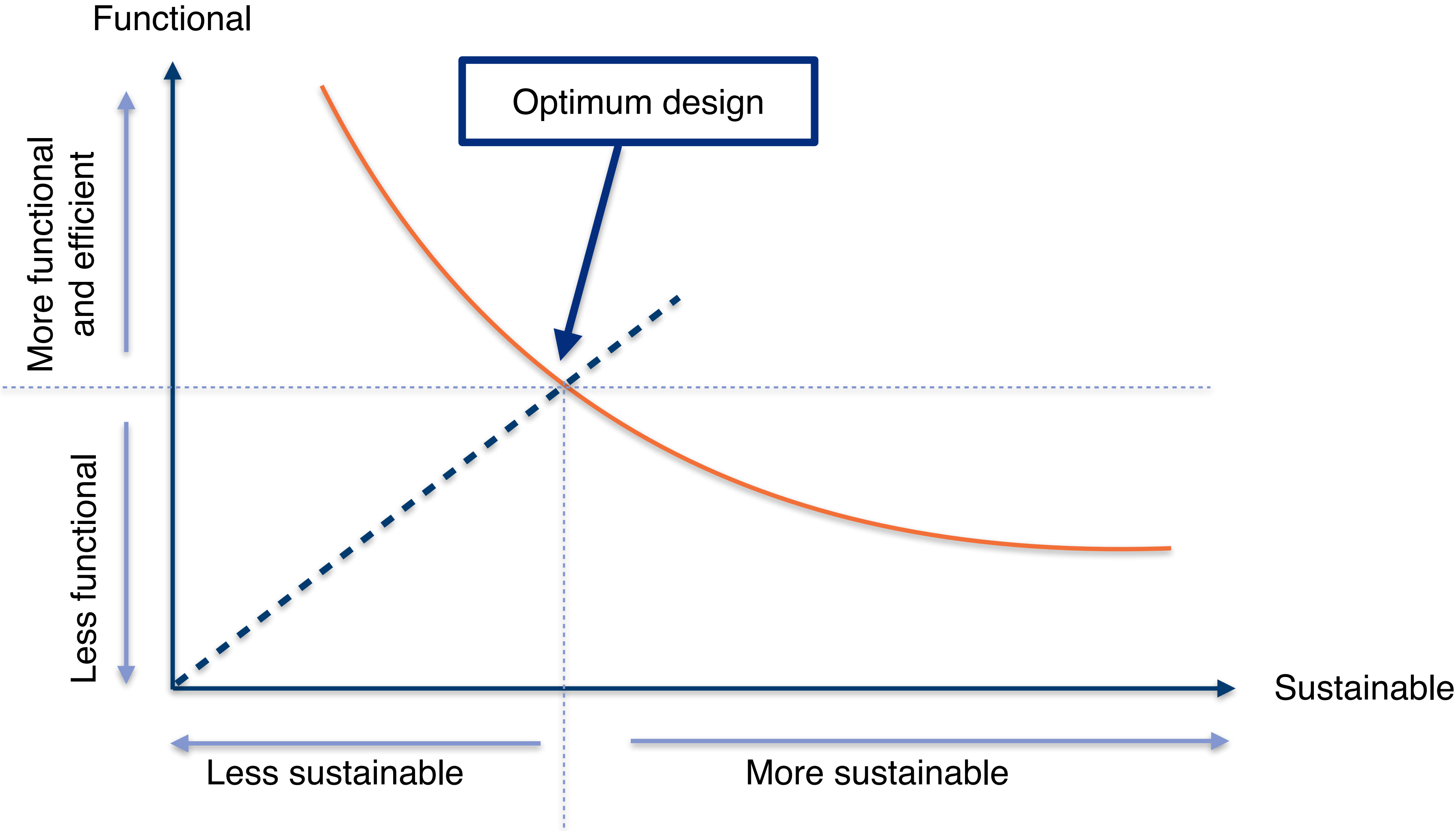
COLD CHAIN SOLUTION FOR MULTIPLE SEASONS AND ZONES

Dynamic cold chain packaging system

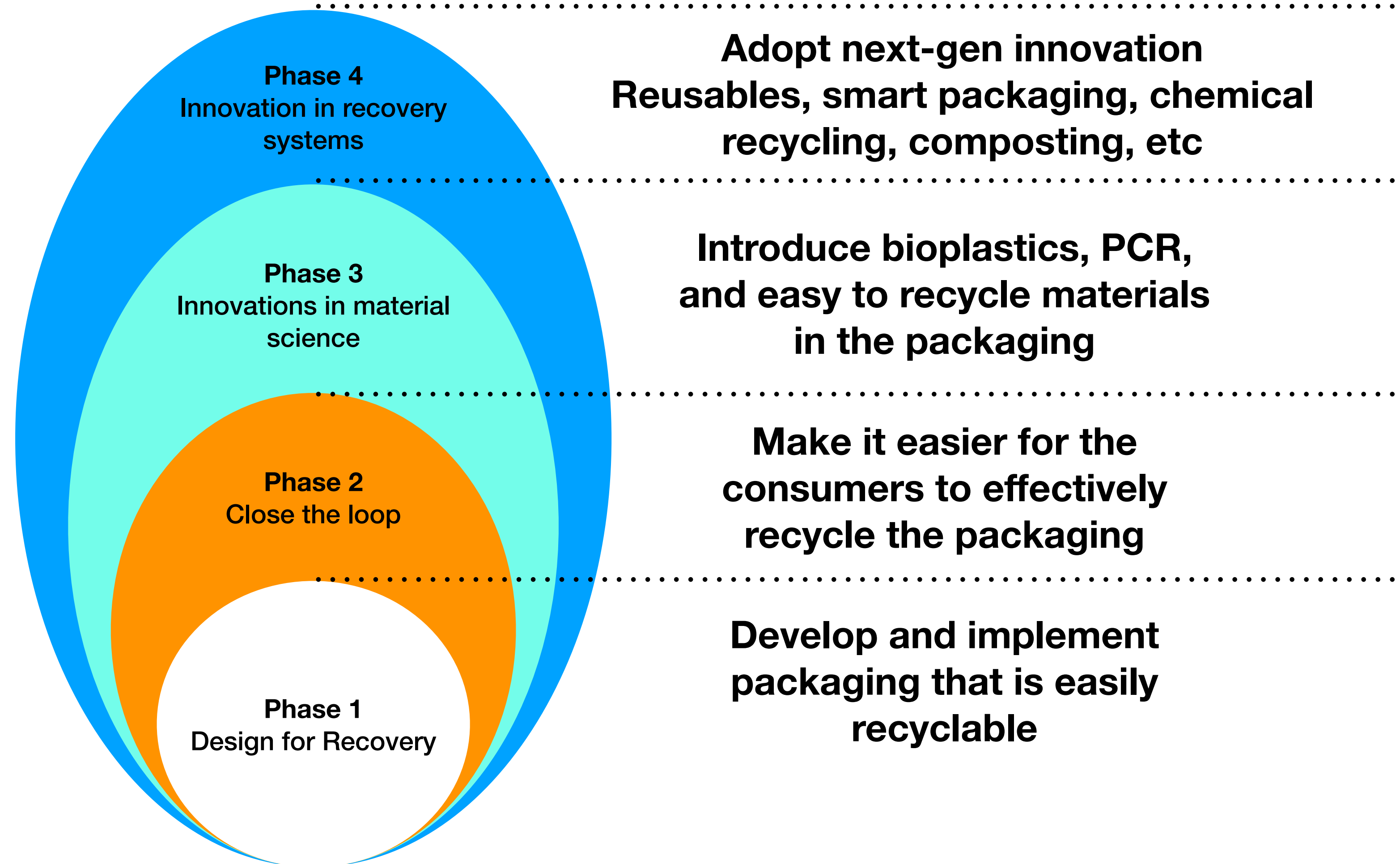
- Seasons
- Shipping lanes/zones
- Optimized for performance, cost and sustainability
- Testing per ASTM and ISTA standards
- Proprietary shipping methods
- Unique packaging for gel pack placement in the box



CHALLENGES



Improving the experience



Industry Recognition



INNOVATOR
— AWARDS —

**Award for Innovations in
Sustainable Packaging**



The Packaging
Innovation Awards
brought to you by 

**Award for Innovations in
Gel Packs**

FUTURE *of Packaging*

REUSABLE PACKAGING – PRIMARY AND SECONDARY

Solve for challenges related to reusable packaging

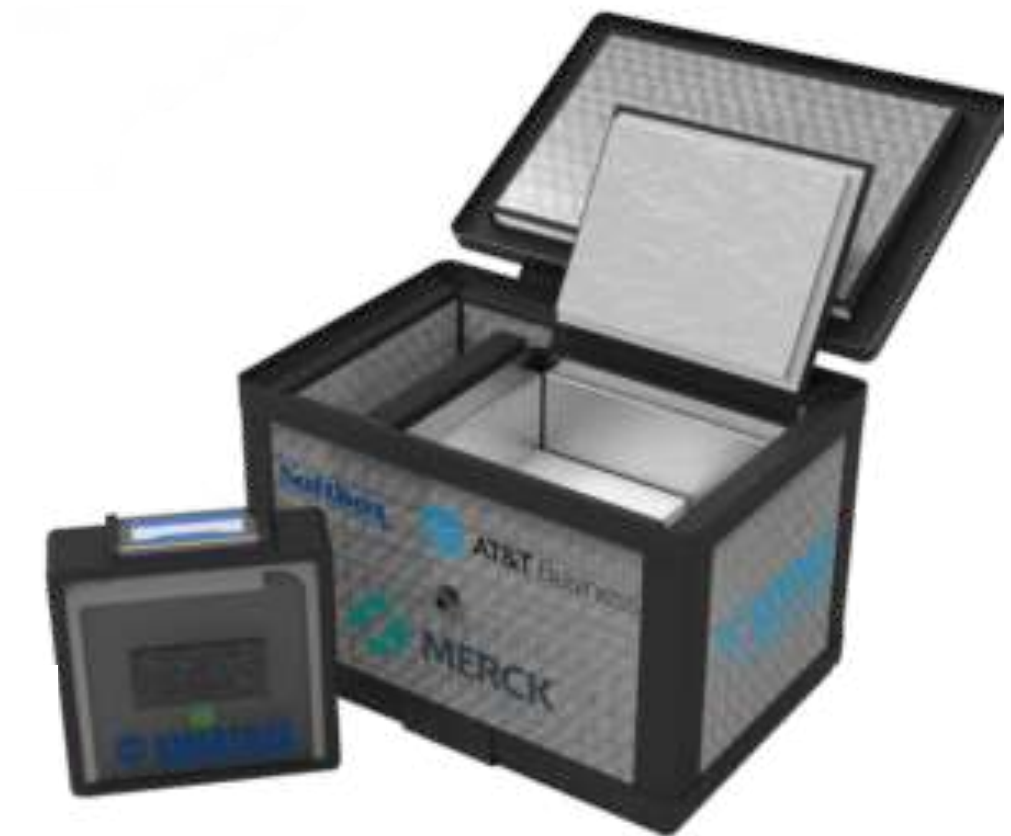
- Return logistics
- Durable, collapsible, ergonomic design
- Optimizing product journey : pack - cook - return
- Cleaning and sanitation
- Consumer participation
- Drop off programs



SMART PACKAGING

Incorporate tech and smart sensors in packaging

- IoT enabled devices
- Active packaging
- Temperature monitoring
- Tamper proofing
- GPS
- Temperature indicator for customers



FUTURE

INNOVATIONS IN DELIVERY TECHNOLOGIES

Drone Delivery



Robotic Delivery





Thank You

Gaurav Kale

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