



HERMET

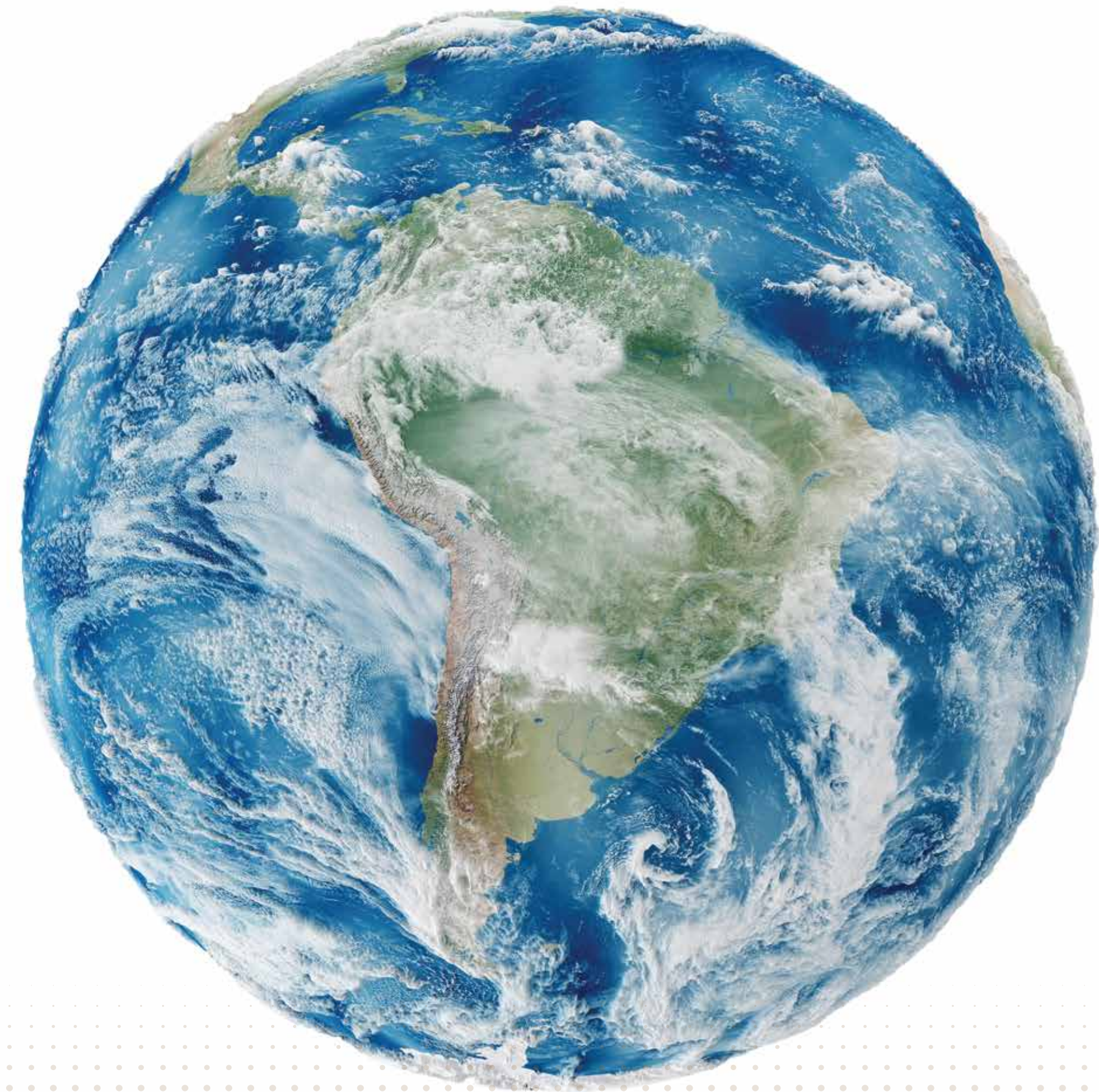
THE START OF THE GREEN SUPPLY CHAIN
THE END OF SINGLE USE

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“THE” PROBLEM

- One third of all greenhouse emissions come from the production, distribution and consumption of food
- One third of all food produced on the planet is wasted
- One trillion bottles and cans are used in the beverage industry annually
- The wine industry alone creates over 30 billion bottles annually
- 14% of all liter comes from beverage bottles
- Over 80% of plastic and 75% of glass bottles end up in landfills
- Climate change and environmental degradation is “THE” problem. The greatest challenge that humanity faces



HERMET

The “Solution” aligns incentives and provides compelling value to each stakeholder of the supply chain, outside of sustainability considerations. Something so beneficial that all stakeholders would adopt it even if it did not benefit the planet

We are eliminating single use bottles by decentralizing packaging. Moving it to the last mile, or even the point of sale, and making it smart, utilizing proprietary reusable smart bottles.

The Hermet is a hermetically sealed, IoT enabled and tamper proof bottle that provides real-time level, temperature and location data. This data is utilized in Hermet’s Softshell software and app to provide users with unprecedented benefits

The benefit to the planet is an approximately 80-90% reduction in greenhouse gases compared to the single use supply chain, and virtually eliminating food and packaging waste



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BENEFITS TO STAKEHOLDERS

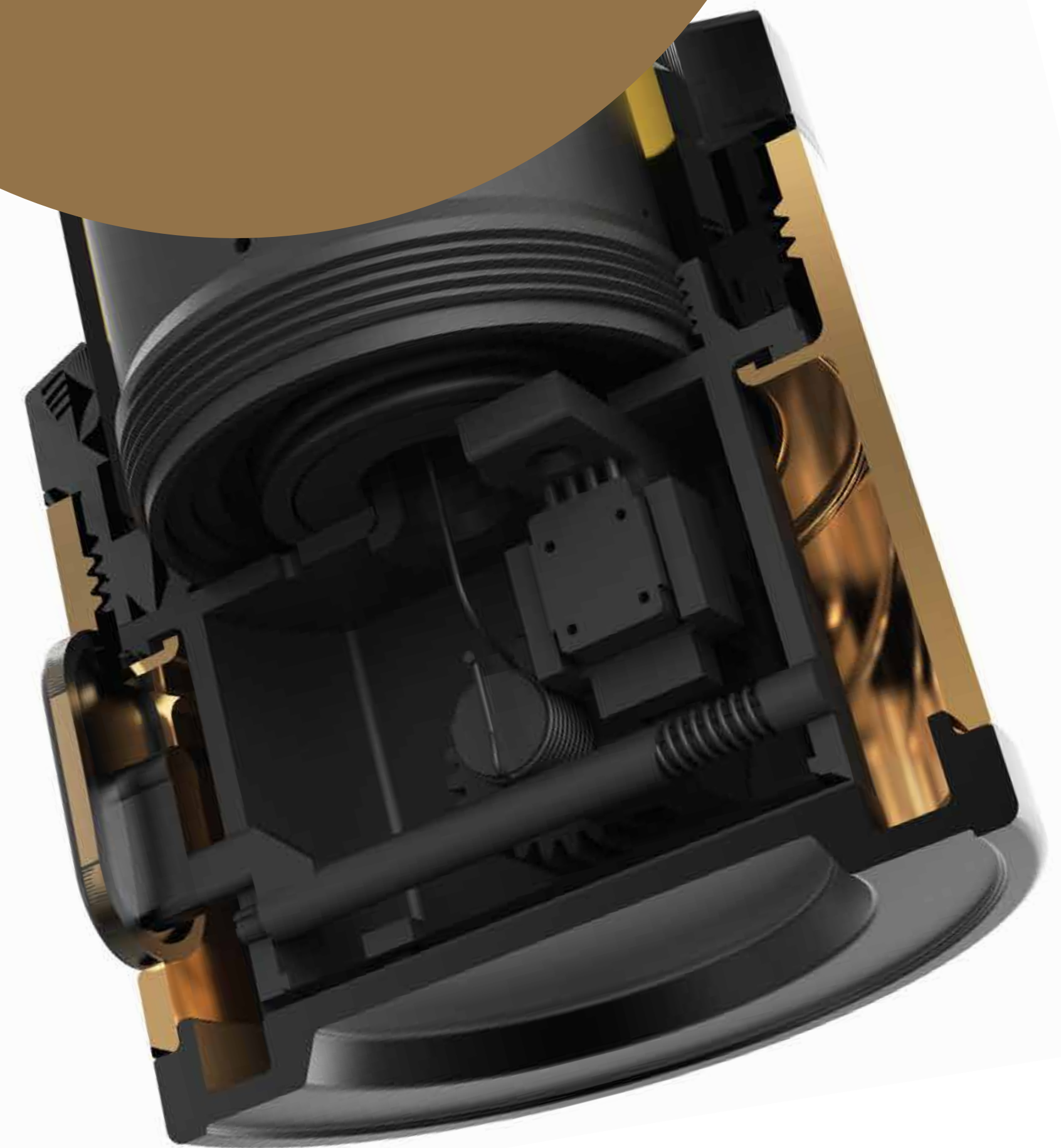
- Virtually eliminate counterfeiting
- Dramatically enhanced branding potential. Much more can be feasibly invested in packaging when it is reusable.
- Eliminate taking physical inventory
- Eliminate over pouring and theft
- Exponentially increase life of product (the Hermet essentially remains “unopened” even as you are dispensing it)
- Eliminate wasted product
- Full product traceability all the way back to batch at plant. Easily locate and recall any bottles that might be contaminated
- Real time levels/inventory data
- AI-assisted inventory/production planning and automated ordering
- Alerts for temperature sensitive products to ensure safety
- Nutritional data per serving, regardless of size
- Real time customer engagement and hyper-targeted marketing and promotions
- Reduction in transportation costs by at least 50%
- Enable off-premises sales of raw and highly perishable foods/beverages or minimize their preservatives
- Eliminate single use bottles from supply chain
- Dramatic improvement of “by the glass” economics



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SOFTSHELL SOFTWARE

- Real-time visibility of consumption (static and dynamic i.e rate of consumption)
- Instant and precise traceability using immutable blockchain
- Powerful food safety monitoring tools include food-specific pathogen growth prediction algorithms and temperature alerts.
- Unprecedented customer engagement with real-time feedback and promotion options
- Integrates with POS systems to eliminate theft, overpouring and shrinkage
- Integrates with hotel billing system for instant billing of in-room pours
- Trusted blockchain data sharing, leveraging anti-tampering features, opens brand new revenue models (consignment, pay as you drink, revenue splits with suppliers, etc)
- Eliminates need for taking physical inventory
- AI assisted inventory and production planning with optional automated ordering
- Precise nutritional information per pour with alerts for allergies or unwanted ingredients
- AI assisted marketing and purchasing tools



MARKETS & ROADMAP

Phase 1

- Wine, spirits and high-value beverages - B2B (restaurants, airlines, hotels)
- Global wine: \$417 billion, 42% on premises
- Global spirits: \$780 billion, 22% on premises
- Global luxury wine & spirits: \$970 billion
- Hardware & stage: Original glass Hermet - Prototyping completed. Testing ongoing
- Software stage: Softshell - Back-end complete. Front-end Q2, Testnet Q3, 2023
- Pilot: Q3, 2023
- Production: Q1, 2024



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BASIC
regular



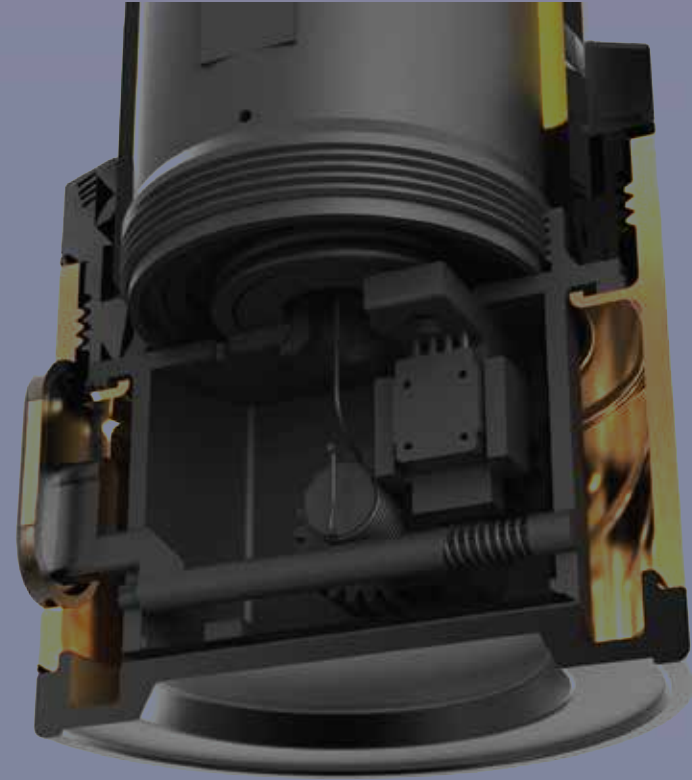
SLIDE
premium



SLIDE
regular



BASIC
premium



HERMET



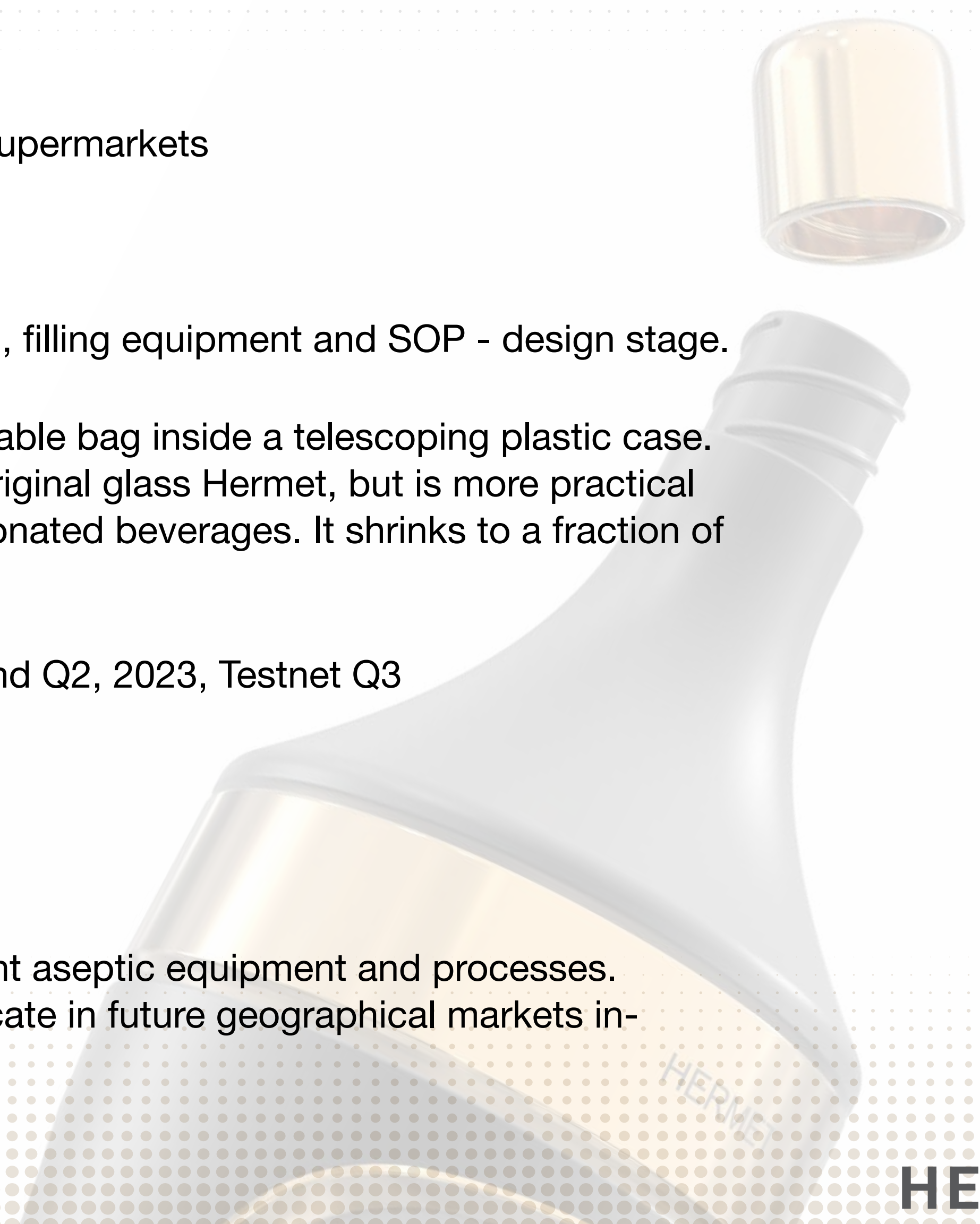
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MARKETS & ROADMAP

Phase 2

- Non-Alcoholic Beverages: B2B2C - via online & offline supermarkets
- Global NAB: \$1.45 trillion
- Hardware & stage: Hermet Oyster - Prototyping ongoing, filling equipment and SOP - design stage.
- Hermet Oyster is composed of a 2L reusable and recyclable bag inside a telescoping plastic case. It utilizes the same sensors and PCB designed for the original glass Hermet, but is more practical for lower value non-alcoholic beverages. including carbonated beverages. It shrinks to a fraction of its full size when empty.
- Software stage: Softshell - Back-end complete. Front-end Q2, 2023, Testnet Q3
- Pilot: Q2, 2024
- Production: Q3, 2024
- NAB filling, unlike alcoholic beverages, requires stringent aseptic equipment and processes. Hermet is developing a turnkey solution that it can replicate in future geographical markets in-house or through partners or franchisees.



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EMPTY



FULL



FULL



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HOW DOES IT WORK?

Phase 1 -Wine, spirits and high-value beverages

- There is no motor in the Hermet. The actuator is energized during filling.
- Restaurant, airline or hotel can receive bulk 3L bladder tank from distributor or directly from manufacturer. Hermet Spider filling station can fill four 750ml Hermets at a time, quickly and easily.
- Distributor/resellers can use Spider until volumes justify larger more standard automated compact filling line. They can also choose to receive much larger bulk containers from manufacturer.
- Labels are magnetically attached, durable and reusable. Manufacturer can also choose to customize the entire shell instead, and provide that to distributor or end user. Luxury brands don't want to serve their products in cardboard boxes. Now they can serve them in a work of art if they so choose.
- IoT within the Hermet is programmed to immediately connect to user's wifi router upon arrival. Sensor data is saved when offline and immediately sent to cloud when connected
- Hermet Softshell software is integrated with users' POS system through API's prior to use.
- Level and temperature data is sent to cloud based blockchain every 20 minutes or whenever Hermet is dispensed
- Hermet cannot be opened again until it is empty. If Hermet is breached an alarm is sent to all levels of supply chain
- Hermet will have an optional attachment that will dispense an exact pre-specified dose with one push of a button



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HOW DOES IT WORK?

Phase 2 - NAB Hermet Oyster

- There is no motor in the Hermet Oyster. The actuator is energized during filling.
- Supermarket will offer suppliers/producers the option to utilize Hermet's. green, circular and reusable solution. Suppliers then download app and register with Hermet.
- Hermet or our partner would locate a facility near retailer's distribution center, where bulk bladder tank would be received. Depending on supplier and retailer preference, Hermet would transfer all or portion of bladder tank contents to Hermet Oyster container.
- Importantly, Hermet would have the capability to receive concentrate or syrup and reconstitute it (and carbonate it if required) prior to filling Oyster. This would further reduce carbon emissions and shipping costs by an additional 80%, as the typical concentrate to water ratio is at least 1:5.
- Hermet would offer a very low friction model for adding new products, for both the supermarkets and the producers, as inventory can be delivered to supermarkets after receiving the order (when just introducing a new product) or well in advance (if volumes justify or to stock on shelves in-store).
- Empty Hermets are picked up by retailer at next delivery. These are then picked up by Hermet at next delivery to retailer, washed, sterilized and redeployed. Bags intended to be reused between 50-100 times before sending to recycler.
- Like the original glass Hermet, the Oyster remains hermetically sealed throughout dispensing, exponentially increasing the life of the contents compared to standard bottles.
- Labels can be in the form of customized telescoping outer case, or a highly elastic printable silicone cover that slides over the case.
- Large conglomerates can bring our solution into their local bottlers' facilities after concept is proven



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REVENUE MODEL

- Sale or lease of Hermet and Hermet Oyster
- Sale or lease of Spider filling station
- Sale of dosing accessory
- Production or design assistance for reusable labels
- Production or design assistance for custom shell
- Commission on shells by artists and other third parties (e.g. Montblanc Hermet, Cartier Hermet, etc.)
- Commission on automated filling lines to producers
- Software license for each major stakeholder (producer, distributor, retailer, municipality/health agency, business user).
- License upgrades or one off fees for use of AI and big Data tools and automated ordering
- Targeted advertising/promotions
- Commission on beverages sold through app



WHY NOW?

- Shifting priorities and willingness to try new things by younger generations. Sustainability, freshness, nutrition, traceability are now trumping tradition
- Miniaturization of communications components
- Maturity and accessibility of AI and Big Data tools
- Maturity, accessibility and acceptance of blockchain technology
- Advancements in plastics for food and beverage
- A growing appreciation of the benefits of decentralization
- Growing desire for small, local producers vs growing distrust of giants



INTELLECTUAL PROPERTY

- Mechanical mechanism for dispensing fluid in a hermetic environment (Utility)
- Anti-counterfeiting closure (Utility)
- Dose modulator (Utility)
- Rotational sensors for measuring container level (Utility)
- Solution for packaging carbonated beverages in plastic bags (Utility)
- Pathogen growth prediction algorithms (Copyright)
- AI assisted inventory optimization algorithms based on consumption rate dynamics (Copyright)
- AI assisted inventory optimization algorithms based on flight plans and passenger variables (Copyright)



COMPETING SOLUTIONS



Kegged wine

- Large footprint
- High cost (\$2,000+)
- High maintenance
- Not smart
- Electric
- Minimal branding
- No over-pouring, counterfeiting or theft prevention



Oxygen Displacement System

- Large footprint
- High cost (\$1-20,000)
- Single use glass bottles
- Not smart
- Electric



BIB Dispensers

- Low mobility
- Cost \$100 +
- Electric
- Not smart
- No theft control
- Minimal branding



Eto

- No branding
- Cost starting \$120
- 600ml max capacity
- 1 week preservation
- Not smart



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TEAM

John Hagher - Founder & CEO

A lifelong surfer with a deep concern for the oceans and the environment. John has been involved in risk management and technology financing and sales for over two decades. He gained substantial F&B experience not only as a restaurateur but also as a senior risk manager for GE Capital Franchise Finance, where he was instrumental in writing the well respected annual GECFF Chain Restaurant Industry Review. Having studied Economics at University of California, Irvine and University of London, SOAS, John is adept at building creative incentive systems to solve difficult and complex problems.

Murad Qabajeh - Cofounder & CFO

Murad is a seasoned finance and accounting professional. As Director of Finance and Administration for health and food safety software startup Science Tribune in Dubai, he helped grow and manage key contracts with various government agencies in Dubai and UAE. He is also a Doctoral Candidate in Business Administration at the University of Central Lancashire.

Mert Sezer - Cofounder & Chief Design Officer

Mert is the award winning founder and Director of Formeta Design, one of the most respected industrial design companies in Turkey. Since 2016, Mert has been a mentor to startups through ITU Seed, one of the top five university incubators in the world. He serves on the advisory board of Marmara University's Industrial Design School and has served as the President of the Istanbul Branch of the Industrial Designer's Society of Turkey since 2020.

Hamza Alnajjar - CTO

A software engineer with a Masters Degree in Computer Science focusing on Big Data, Hamza's breadth of knowledge was essential in building Hermet's inventory management, AI and Big Data tools.

Heba Qabajah - Director of Food Safety and Planning

Heba has over ten years experience in plant design and management and product development in the food and beverage industry. She has worked with large multinationals to startups. She holds a degree in Chemical Engineering and an MBA. Heba creates the SOP's that will allow Hermet to revolutionize the beverage industry.