

# JELLYPINE ORBS

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# ABOUT US

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**Hello everyone !!, I'm Pine, a second-year Biomedical Science student passionate about the intersection of technology and science. I am particularly interested in how Artificial Intelligence and innovations in Blue Tech can drive sustainable development and revolutionize industries like healthcare and environmental conservation. My goal is to explore how these technologies can be leveraged to improve public service delivery and scientific research for a better future.**



# ABOUT US

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**Hello everyone! I'm Jelly, a passionate biomedical science student with a mission. Driven by curiosity and an unwavering work ethic, I'm constantly on the lookout for innovative solutions that can transform our world for the better. From the lab to the ocean, I believe in harnessing science to make a tangible impact on our environment and our future. Join me as we embark on this journey of discovery and change!**



# INTRODUCTION TO JELLYPINE ORBS

*We are thrilled to introduce **JELLYPINE ORBS**—our revolutionary solution to ocean plastic pollution. Picture tiny warriors made from biodegradable and recycled materials, floating effortlessly and capturing plastic debris while keeping marine life safe. These Eco-Spheres naturally break down over time, leaving no harmful residues—sustainable heroes in action!*



***Not only do they cleanse our oceans, but they also create jobs in manufacturing, deployment, and maintenance, empowering local communities. With a cost of just ZAR 225,000 for 10,000 units, JELLYPINE ORBS offer an affordable and scalable approach to a cleaner, greener future.***



# APPEARANCE :

- **Shape and Structure**

- **Shape:** Spherical, as the name suggests, to allow for smooth and uniform distribution in the water. The spherical shape minimizes drag and maximizes buoyancy.
- **Size:** Small enough to fit in the palm of your hand, approximately 10-15 cm in diameter.
- **Material:** Biodegradable bioplastics combined with recycled plastics. This ensures they break down naturally without harming the environment.



- **Passive Filtering System**

- **Mesh Structure:** The sphere features a fine mesh on its surface to capture plastic particles of various sizes, from microplastics to larger debris.
- **Buoyancy Mechanism:** The interior of the sphere has buoyant chambers that keep it afloat without needing any external power source.

- **Biodegradability**

- **Time-controlled Decomposition:** The material is designed to begin breaking down after a specific period (e.g., 1 year), ensuring that the Eco-Spheres do not contribute to long-term pollution.
- **Eco-friendly Residues:** Once decomposed, the materials leave behind harmless organic compounds.





# PROBLEMS THAT ARE FACED BY THE WORLD

## Customers

Many consumers and businesses are not fully aware of the extent of plastic pollution and its devastating effects on the environment. Consumers often struggle to find and afford sustainable alternatives to conventional plastic products.

## Market gap

The current waste management solutions are often inadequate, failing to address the large-scale problem of ocean plastic pollution effectively. There is a significant market gap for sustainable solutions that can be deployed on a large scale to combat plastic pollution.



# PROBLEMS THAT ARE FACED BY THE WORLD

## Costs

The current waste management solutions are often inadequate, failing to address the large-scale problem of ocean plastic pollution effectively. There is a significant market gap for sustainable solutions that can be deployed on a large scale to combat plastic pollution.

## Financials

Securing funding for environmental projects can be difficult, with many initiatives struggling to demonstrate financial viability. Ensuring the long-term sustainability of waste management projects is crucial for their success, but often challenging due to fluctuating resources and support





# SOLUTION



## Close the gap

*Jellypine orbs* fill the significant market gap for sustainable and scalable waste management solutions. Traditional methods fall short in effectively addressing large-scale plastic pollution.



## Target audience

- Coastal communities and local governments can implement *Jellypine orbs* to clean up their waters, creating jobs and boosting local economies. Schools and universities can use *Jellypine orbs* as educational tools to raise awareness about plastic pollution and sustainability.



## Cost savings

- Using biodegradable and recycled materials keeps production costs low, making *Jellypine orbs* a cost-effective solution. Creating jobs in manufacturing, deployment, and maintenance not only alleviates economic barriers but also provides financial benefits to local communities.



## Easy to use

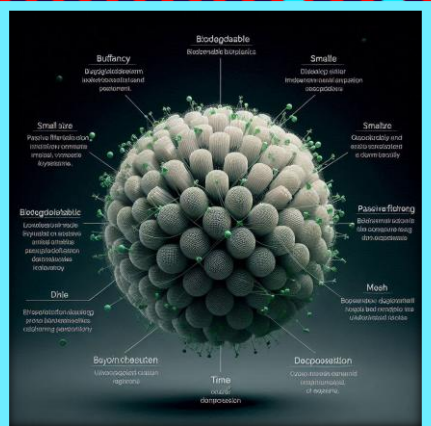
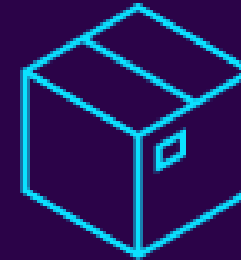
- The *Jellypine orbs* can be easily deployed in strategic locations along coastlines and oceans without the need for complex machinery or extensive infrastructure. Once deployed, *Jellypine orbs* require minimal maintenance due to their self-sustaining buoyancy

and passive filtering system

# PRODUCT OVERVIEW

## MATERIAL AND DESIGN

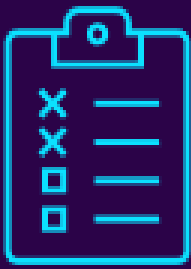
- **Biodegradable Plastics:** Made from plant-based materials such as corn starch or sugarcane, ensuring they break down naturally over time without leaving harmful residues.
- **Recycled Materials:** Incorporating recycled plastics reduces waste and gives existing plastics a second life.
- **Passive Filtering System:** Featuring a mesh-like structure, Eco-Spheres capture plastic debris of various sizes while allowing marine life to pass through safely.
- **Self-Sustaining Buoyancy:** Designed to float and maintain buoyancy without external power sources, relying on their structure and materials.



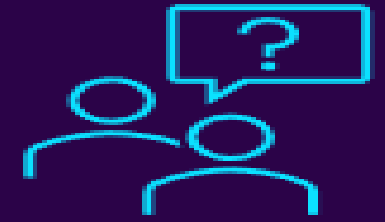
## FUNCTIONALITY

- **Plastic Waste**  
**Collection:** *JellyPine orbs* capture a range of plastic debris, from microplastics to larger items, effectively reducing ocean plastic pollution.
- **Natural Biodegradation:** After a set period, the *Jellypine orbs* begin to break down naturally, leaving behind no harmful residues and ensuring they do not contribute to long-term waste.





# PRODUCT OVERVIEW



## Cost Efficiency

- **Affordable Production:** Utilizing biodegradable and recycled materials ensures low production costs.
- **Minimal Maintenance:** The passive system and self-sustaining design require minimal upkeep, reducing long-term expenses.

## Deployment and Impact

- **Strategic Deployment:** Positioned in high-concentration plastic waste areas, such as near river mouths and coastlines for maximum efficiency in waste capture.
- **Community Engagement:** Involving local communities in deployment and maintenance creates job opportunities and fosters a sense of responsibility for ocean conservation.
- **Environmental Benefits:** Significantly reduces plastic pollution, protecting marine life and ecosystems, leading to healthier oceans.
- **Economic Benefits:** Generates jobs in manufacturing, deployment, and maintenance, supporting local economies and sustainable development.



# PRODUCT BENEFITS

***JELLYPINE ORBS* provide an innovative solution to ocean plastic pollution by utilizing biodegradable and recycled materials in a passive filtering system. These orbs effectively capture and remove plastic debris, protecting marine life and ecosystems. By creating job opportunities in manufacturing, deployment, and maintenance, *Jellypine orbs* also stimulate local economies and foster community engagement. Their low-cost production and minimal maintenance make them a sustainable and scalable solution. Ultimately, *Jellypine orbs* contribute to a cleaner ocean, healthier marine environments, and a brighter future for both current and future generations.**



# COMPANY OVERVIEW





## Research

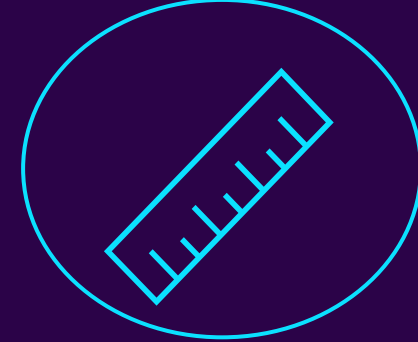
Our research focused on understanding the scope and impact of ocean plastic pollution. We examined current waste management solutions, identified high-pollution areas, and explored biodegradable and recycled materials. Collaborating with environmental scientists and materials engineers, we developed *Jellypine orbs* to be both effective and sustainable. Field studies and expert input ensured our product is tailored to the real-world needs of marine conservation.

# BUSINESS MODEL



## Abstract

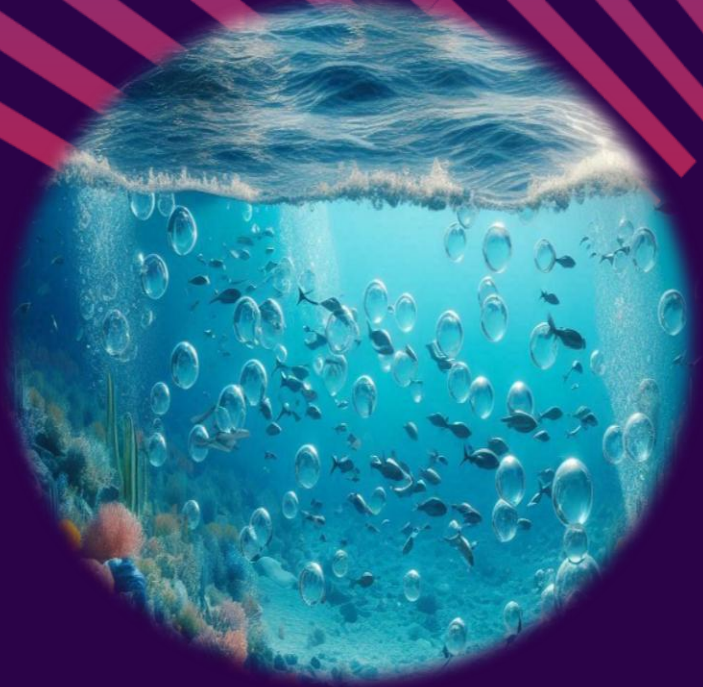
*Jellypine orbs* are an innovative solution to ocean plastic pollution, combining biodegradable and recycled materials with a passive filtering system. Designed to float and capture plastic debris, they naturally break down after their useful life, leaving no harmful residues. *Jellypine orbs* protect marine ecosystems, create jobs, and foster community engagement. This sustainable and scalable approach addresses environmental and economic challenges, promising cleaner oceans and a brighter future.



## Design

*Jellypine orbs* feature a mesh-like structure made from biodegradable and recycled materials, ensuring minimal environmental impact. The passive filtering system captures plastic debris while allowing marine life to pass safely. Designed for self-sustaining buoyancy, they require no external power sources. Strategic deployment in high-pollution areas maximizes waste collection. After use, the spheres naturally biodegrade, contributing to long-term sustainability and cleaner oceans.





# MARKET OPPORTUNITY OVERVIEW

## R1B

Opportunity to build  
Fully inclusive market  
Total addressable  
market

## R200M

Freedom to invent  
Selectively inclusive  
market  
Serviceable available  
market

## R50M

Few competitors  
Specifically targeted  
market  
Serviceable obtainable  
market

# MARKET OPPORTUNITY COMPARISON



**R644B**

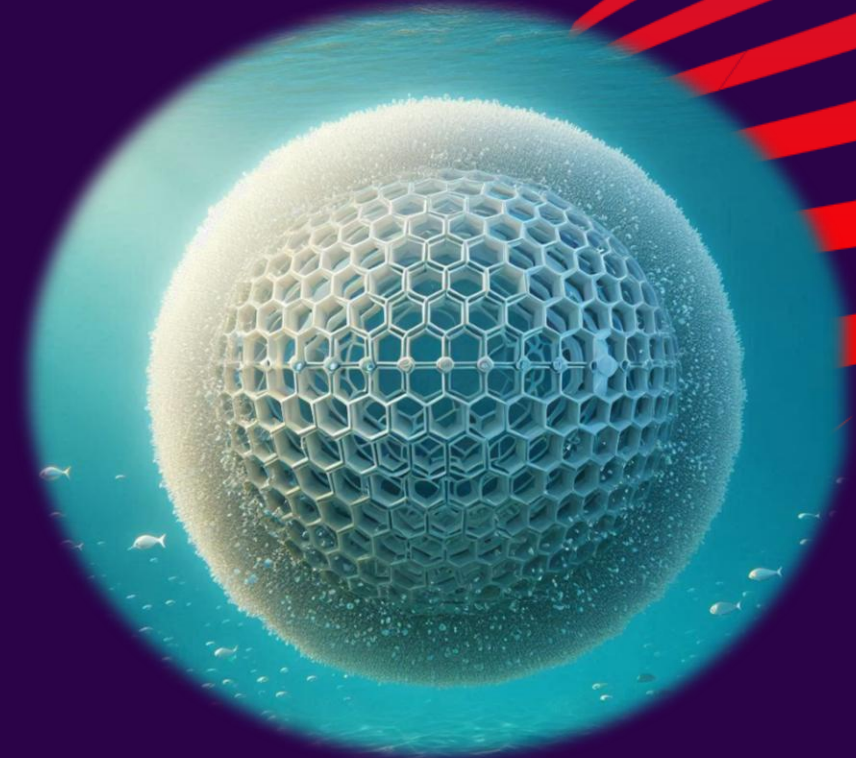
Opportunity to Build  
Revenue over 12 months

**R185B**

Freedom to Invent  
Market share

**R37B**

Few Competitors  
Obtainable market







# OUR COMPETITION

## JELLYPINE ORBS

Our company offers Jellypine orbs at a competitive price of ZAR 8,000, making it more affordable than all the listed competitors. Additionally, our product is not only cost-effective but also highly innovative, combining biodegradable and recycled materials with a passive filtering system to address ocean plastic pollution effectively. This unique approach ensures minimal environmental impact and long-term sustainability, setting us apart from the competition.

## COMPETITORS

SIVOXI

PRODUCT VALUED AT R 25 000 AND MORE

MELIO AI AND GREENORE.AI

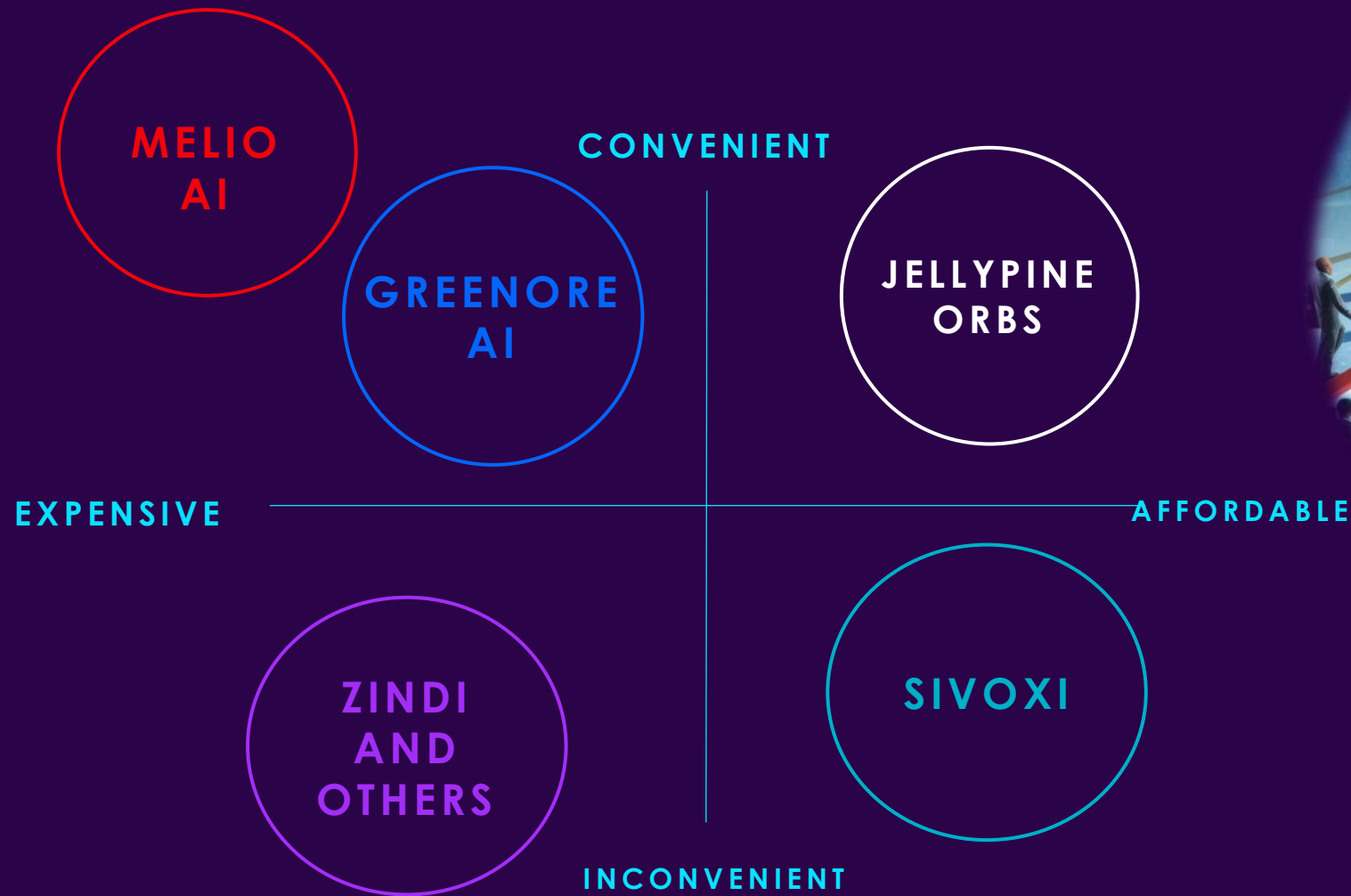
PRODUCT IS VALUED WITH CHARGES MORE THAN

R 300 000

CONVERSION SCIENCE AND MELSOFT OFFERS IT CHEAPER BUT THERE IS A HUGE INCONVIENCE AND NOT

EXCELLENT QUALITY

# OUR COMPETITION GRAPHIC





# GROWTH STRATEGY

How we'll scale in the future

JAN 2025

- Launch and deploy 10,000 Eco-Spheres along the South African coastline.
- Kick off a marketing campaign and establish partnerships with local NGOs and educational institutions.

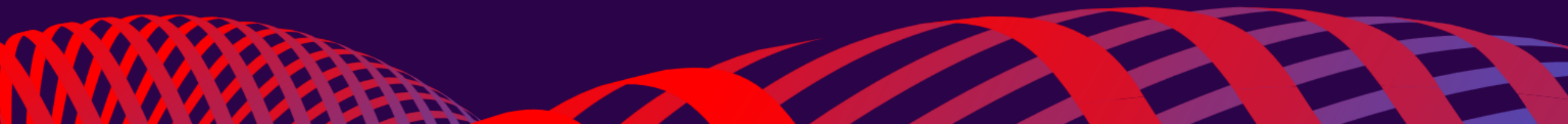
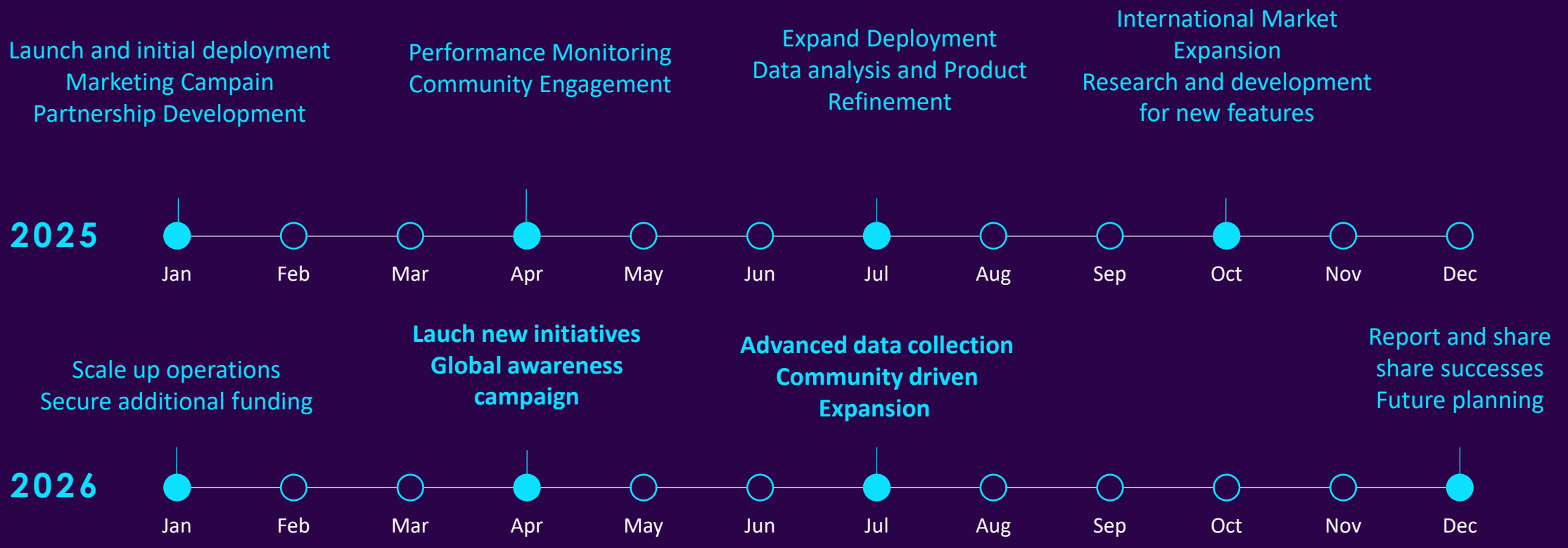
JULY 2025

- Expand Eco-Sphere deployment to more high-pollution areas.
- Collect and analyze data to refine the product.
- Engage communities through workshops and training sessions.

JAN 2026

- Scale up production and market reach internationally.
- Secure additional funding for large-scale deployment and R&D.
- Launch sustainability initiatives to promote responsible behavior.

# TWO-YEAR ACTION PLAN





# FINANCIALS

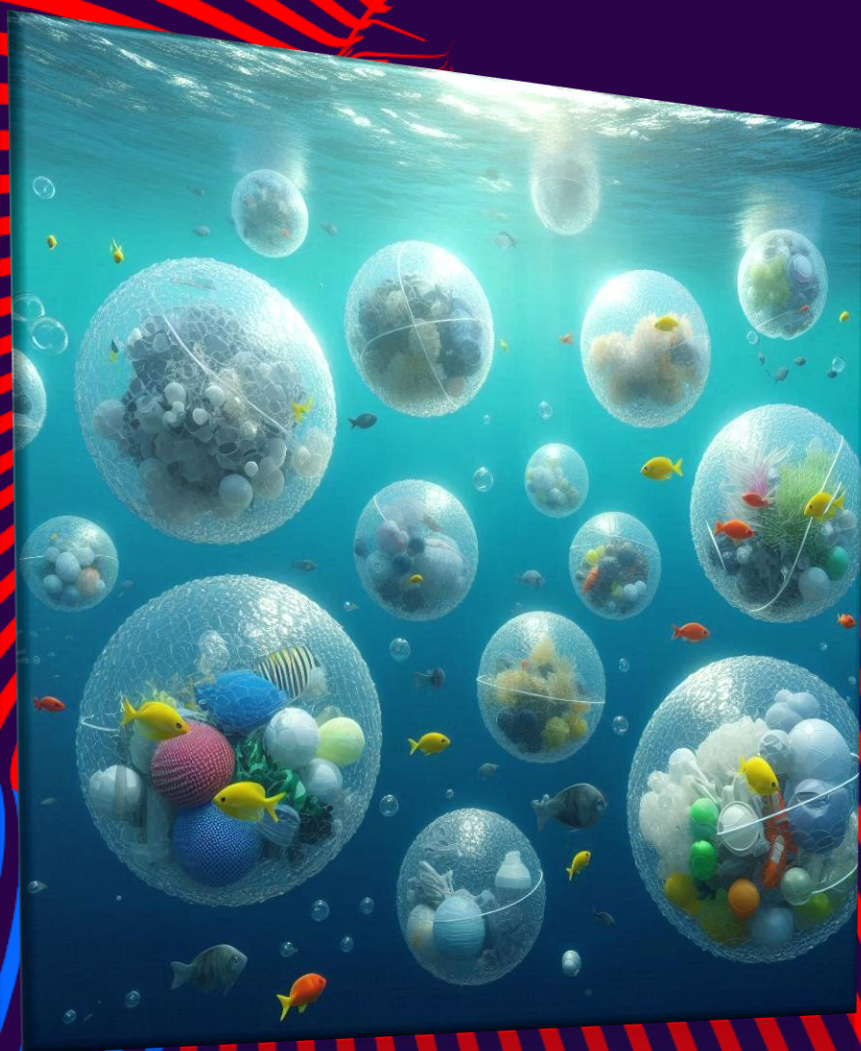
COSTS	YEAR 1
MATERIAL COSTS	2,000,000
MANUFACTURING COSTS	1,500,000
DEPLOYMENT COSTS	500,000
MARKETING AND AWARENESS CAMPAIGN	300,000
PARTNERSHIP DEVELOPMENT	200,000
INITIAL DATA COLLECTION AND ANALYSIS	100,000
WORKSHOPS AND TRAINING SESSIONS	150,000
<b>TOTAL EXPENSES</b>	<b>4,750,000</b>

- To manufacture and deploy 10,000 JELLYPINE ORBS , the total cost would be approximately R225,000. This includes R50,000 for research and development, R50,000 for materials, R100,000 for manufacturing, R20,000 for distribution, and R5,000 for deployment. Each EJELLYPINE ORBS cost is broken down into R5 for materials, R10 for manufacturing, and R2 for distribution. The initial setup and training for deployment would cost an additional R5,000. This comprehensive cost ensures the product is ready to effectively reduce ocean plastic pollution while being economically viable.

# SUMMARY

JELLYPINE ORBS are innovative devices designed to combat ocean plastic pollution using biodegradable and recycled materials. They feature a passive filtering system that captures plastic debris while allowing marine life to pass through safely. Each JELLYPINE ORB is cost-effective, with a total production and deployment cost of ZAR 225,000 for 10,000 units.

This solution not only reduces plastic waste but also creates job opportunities in manufacturing, deployment, and maintenance. JELLYPINE ORBS offer a sustainable, scalable approach to cleaner oceans and a brighter future for all.





The background of the image is an underwater scene with various sized bubbles and a large, colorful ribbon graphic on the right side. The ribbon is composed of multiple parallel lines in shades of red and purple, curving across the frame. The water is a clear, light blue-green color.

THANK YOU

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