
**Put waste in the right place**

2021/2022 - Malta

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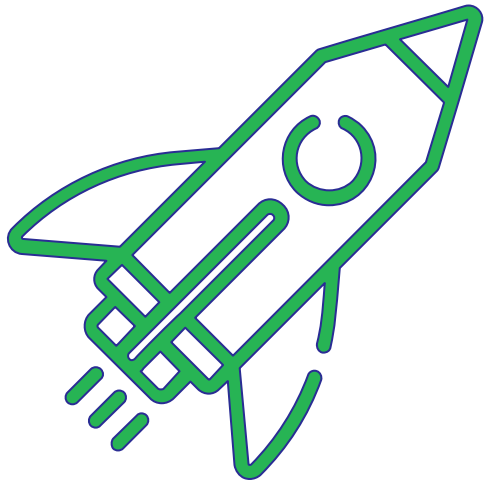
# OUR VISION & MISSION

Our **Vision** is to try and eradicate over **8 million metric tons** of plastic waste that reaches our oceans each year. [1] Not only do we wish to suppress this waste, but be able to re-use it to its full potential.

Our **Mission** is to recycle this material and create a **unique product** that would benefit both the customer as well as the environment.

In order to achieve our **mission** and start working towards our **vision**, we would need to use the 4 **C's**:

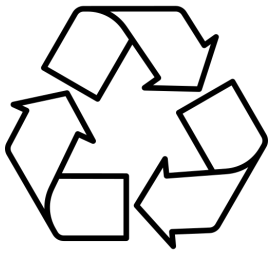
- Communication
- Collaboration
- Critical thinking
- Creativity





1 - https://www.akbizmag.com/industry/environmental/study-8-million-metric-tons-of-plastic-waste-enter-oceans-each-year/#:~:text=According%20to%20the%20report%2C%20an,into%20the%20ocean%20every%20minute.

# THE PROBLEM



Only

**11%**

of Malta's recylable waste is **recycled** .[1]

With people separating their waste, they want to see their spent materials recycled.

This issue can lead to a build-up of public waste, making environmental areas look trashed and unpleasant.

It is forecasted that

**more plastic**

**than fish** will be in the world's ocean by 2050.[2]

The **3D printing industry** is another upcoming contributor towards the planet's plastic waste problem, with failed prints amounting to

**more than 80%**

of wasted finite plastic.[3]

**Our aim** would be to gather, **reduce and reuse** this waste to create our products.

1 - https://lovinmalta.com/news/just-11-of-all-waste-in-malta-is-recycled-with-the-rest-going-to-landfills/

2 - https://www.plasticsoupfoundation.org/en/plastic-problem/plastic-soup/more-plastic-than-fish/#:~:text=Plastic%20production%20will%20increase%20by,life%20will%20be%20irreparably%20destroyed.

3 - https://www.filamentive.com/the-3d-printing-waste-problem/#:~:text=Filamentive%20%E2%80%93%20Recycled%20Filament%20for%203D%20printing&text=Plastic%20is%20a%20global%20problem,plastic%20is%20produced%20each%20year.

# TARGET MARKET & OPPORTUNITY

To date, the 3D printing industry's global market is around **23 billion** euros with **5 billion** allocated in the EU alone. **98%** of 3D printing users believe recycling is crucial with **93%** of them willing to purchase recycled filaments. [1]

We will enter the market locally at first and establish ourselves in the market.

After that, we will start exporting to **Italy** due to them being located quite close to our manufacturing plant in Malta. We would need to overcome their high levels of taxation however due to **limited local competition** we would be able to immediately make an impact.



1 - https://www.filamentive.com/is-recycled-3d-printer-filament-bad-quality/

# THE SOLUTION

Our solution to the plastic waste issue in the 3D printing industry would be to offer the client base with **100% recycled material** unlike other many alternatives. They would also be sold at a cheaper rate compared to the competition in the market. Our product benefits 3D printing along the **environment**.

**Stage 1:** Gather the **waste.**

**Stage 2:** **Shred** the plastic.

**Stage 3:** **Reconstruct** it into 3D filaments made from the recycled plastic

**Stage 4:** Wrap reconstructed 3D filament around a **recycled plastic drum.**

The solution is

**Recycled 3D filaments**

# COMPETITION

## THEM

**Non-Recycled Filaments**

Uses **finite materials** to create filament.

**Quality ranges** depending on the material

Sold on average at around **€20-25 per Kg**

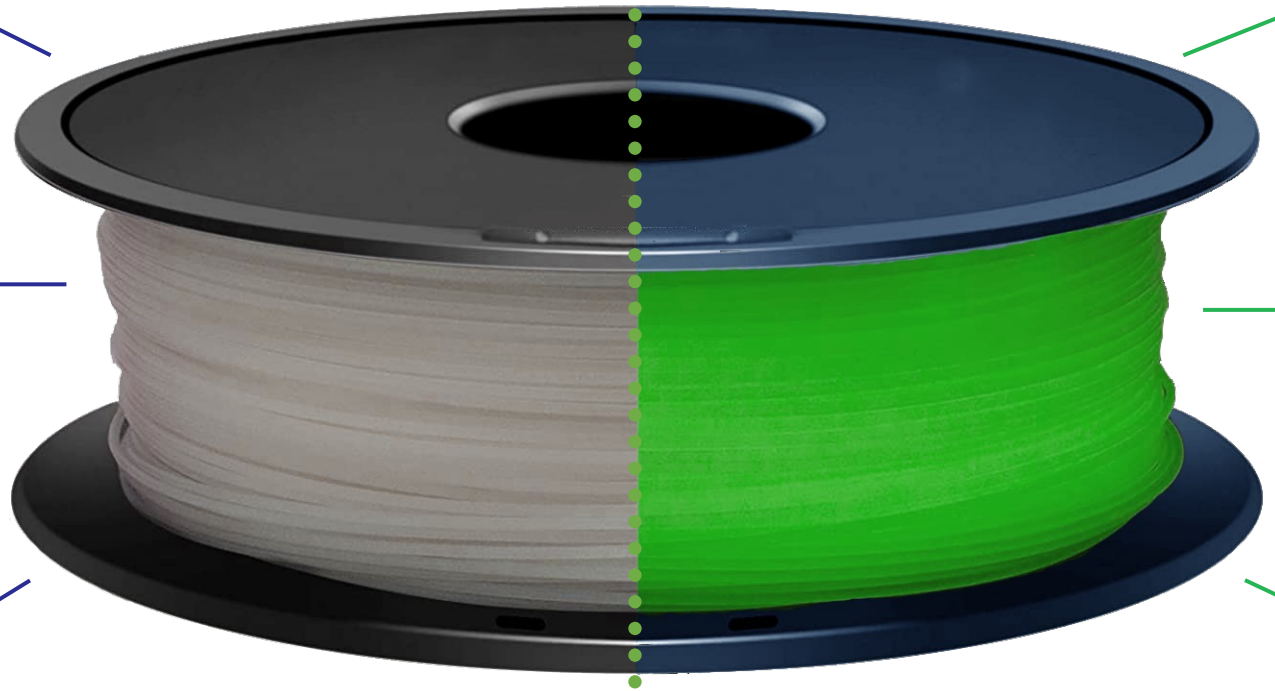
## US

**Recycled Filaments**

Will reduce **50 bottles per kg** from worldwide waste [1]

**Same Quality and Durability** as non-recyled counterparts

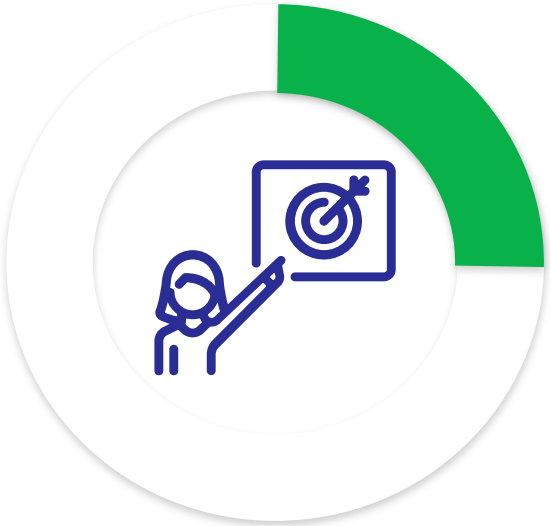
Sold at cheap prices ranging from **€14-€16 per Kg**





1 - https://www.cnckitchen.com/blog/how-strong-is-pet-bottle-filament

# MARKET APPROACH & STRATEGY



## Penetration Pricing

We will be using a penetration strategy by offering our filaments at a cheaper prices in order to enter the market as efficiently as possible.

## Partnerships

We will use partnerships to infiltrate the market. We will link up with local 3D printing companies along with NGO's to raise the benefits of our recycled filaments and introduce them into the market.

## Social Media

Marketing campaigns & efforts with the use of content that is relatable & attractive for our consumers on E-commerce across platforms will be used. These platforms will include a website, social media, SEOs and paid ads.

# MOMENTUM

Plastopex

## 2021

**PROCESS RESEARCH**
Q4 2021

## 2022

**PROTOTYPE & QUALITY TESTING**
Q3 2022

**FUNDING**
Q4 2022

## 2023

**LAUNCH**
Q1 2023

**RECYCLE FAILED 3D PRINTS**
Q3 2023

**INTERNATIONALISE**
Q1 2024

## 2025

**FURTHER FUNDING**
Q2 2025

**INTRODUCE FURTHER FILAMENT MATERIALS**
Q3 2026

# BUSINESS MODEL

Our products would be **manufactored locally** and use 3rd party delivery services to distribute them. Products can be bought through our website. They will be stored in cooled areas to ensure the **2-3 year shelf life**.[1]

Since **quality control** is one of our main targets, we will be offering a **2- year warranty** on our products with a **15 day money back guarantee**.

Our customers can benefit from **testing kits** prior to large orders to test our product's **quality satisfaction**. We will also be offering free local delivery, while foreign buyers would incur a slight charge.

We will mainly be targeting B2B for **recurring sale orders** from **3D printing firms**, however we will also target enthusiasts in the market.



1 - https://3dsolved.com/can-3d-printer-filament-go-bad-problems-and-their-solutions/#:~:text=Typically%2C%20PLA%20Filament%20has%20a,quality%20may%20start%20to%20degrade.

# FINANCIALS

| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|---|---|---|---|---|---|---|
| Revenue | - | €112,000 | €196,000 | €364,000 | €532,000 | €700,000 |
| Expenses | €300,000 | €175,000 | €199,000 | €247,000 | €295,000 | €343,000 |
| Profit/Loss | (€300,000) | (€63,000) | (€3,000) | €117,000 | €237,000 | €357,000 |

Key Assumptions:

Total cost per unit is **€4**

Selling price per unit is **€16 (€14** for 3D farms**)**

**Fifty** 2L bottles produce 1Kg of Recycled 3D filament

Total amount of plastic reused by 2027 would be **285,600Kg**

Finances based on B2B Market

# FUNDING REQUIREMENTS

Up to **€800K** raise

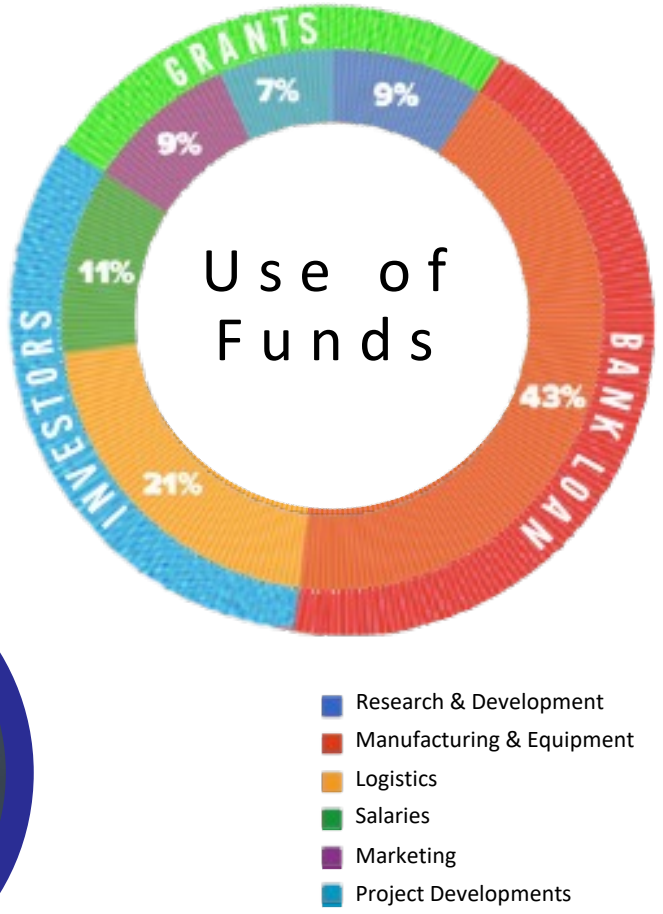
Source of Funding

Investors | Bank Loans | Grants

To Hire **3 staff**

**€300k**

Industrial Machinery costs



# OUR TEAM

**ADAM**

**Co-Founder | CEO**

**BORIS**

**Co-Founder | COO**

**“Our goal is to impact the 3D printing industry & reduce plastic waste.”**

## David Sciberras | Industry Advisor

**“Plastopex is showing both ambition and innovation with regards to their start-up.”**

## Darin Pace | Operations Advisor

**“In my opinion, the idea has value because it offers a plausible solution to a waste problem and the by-product can be used by 3D amateur printers. So essentially waste is being converted to a useful form. One would obviously need to look at further details, but the above is why I think the idea is a valid one.”**