

# The Shredders Suite

We can't blame ourselves for the condition of our planet, but we will be responsible if we don't change anything.  
We want to play our part



# The history

- **Life Breath** is a team composed by people that have the goal to participate in the fight for the environment by developing new green technologies.
- The problem of pollution due to waste dispersion and mismanagement has many negative effects on the environment and people's lives. The main environmental consequences are an uncontrolled increase in the amount of plastic in the oceans and the emission of GHG due to logistics and degradation of materials in landfills. Even in everyday life, waste can have a negative impact by increasing urban decay and local pollution.
- The solutions to this problem are many and start from the choices of individuals up to those of institutions. We are all called to give our contribution to make the life cycle of the objects we use every day sustainable.
- The right approach when it comes to waste is to apply a series of solutions which, in order of priority, should be: prevention, reuse, recycling, waste-to-value and, only when other solutions are not possible, landfill. The Life Breath team is working to find different technological solutions to help all parties involved support this challenge.
- During 2020 **Sharky** was born. The first and smallest of the family of shredders designed by our team. These shredders have as main objective to allow individuals, companies and public administrations to be of help in optimizing the process of waste collection through the reduction of its volume.



# Why support our project?



- We are an Italian and innovative start-up
- The market related to circular economy is growing rapidly
- High exit probability
- Versatility
- Our products contribute to limit CO<sub>2</sub> emissions
- Economic saving
- Urban decoration and space optimization

# Shredders Suite and awareness

- One of the most pressing environmental issues of our time is definitely the management of municipal waste that is produced every day and that is constantly increasing. Every year 8 million tons of plastic end up in the ocean. If this trend continues in 2050 in the oceans the mass of plastic materials will exceed the mass of the fish that inhabit them.
- 225.7 million tons of municipal waste were generated just in Europe, and only 66 million tons of this was recycled (about 30% of the total). European Union circular economy targets call for 65% of municipal waste to be recycled by 2035.
- One of the objectives of our **Shredders Suite** is to help and raise the awareness of end-users to recycling by reducing the volume of their waste, especially for plastic, aluminum and organic material..
- Thanks to the different sizes of our products, it will be possible to reach different types of final users. From the domestic use to large events and public administration.



Sharky



Sharky-K



Shark



Tarrabah

# Adaptability and versatility

Sharky

Sharky-K



The variety of our **Shredders Suite** allows them to be suitable for different types of users. **Sharky** and **Sharky-K** are designed for domestic use. **Shark** is well suited for condominium waste collection and commercial services such as bar and restaurants, **Tarrabah**, instead, for large events, supermarkets and public administrations.

Shark

Tarrabah

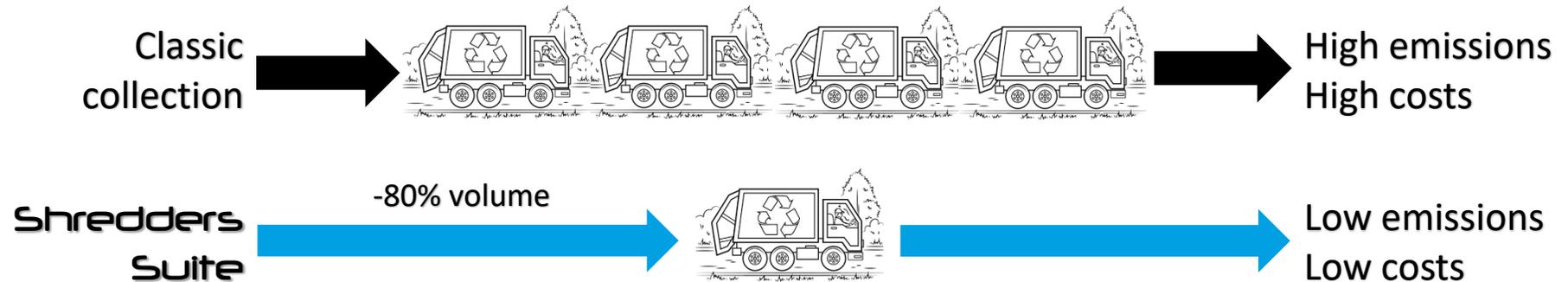


# Revaluation of the spaces

- Balconies, terraces and courtyard, both private and public, are often use as waste collection sites.
- The space involved due to the large volume of waste produced daily, especially plastic waste, makes these spaces less livable..
- Our **Shredders Suite** allows to considerably reduce the space dedicated to waste storage, so that the community can have its spaces back.



# Waste collection optimization



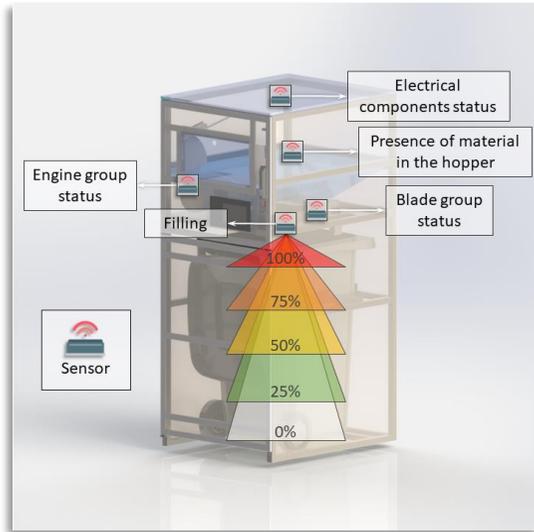
- Through an 80% reduction in the volume of waste processed, our products will allow companies responsible for municipal waste to reduce their collection work. This will allow the collectors to focus better training to optimize logistics.
- The advantages of these good practices will be appreciated by all citizens such as a reduction in CO<sub>2</sub> emissions, local pollution and a general road traffic improvement. While for the waste collection companies, the advantages will be also a cost reduction, due to the lower use of fuels as a result of optimization.
- This improvement in logistics fits squarely into the national goal of reducing local CO<sub>2</sub> emissions by 25% by 2025 through improved municipal waste management.

# Smart waste logistics

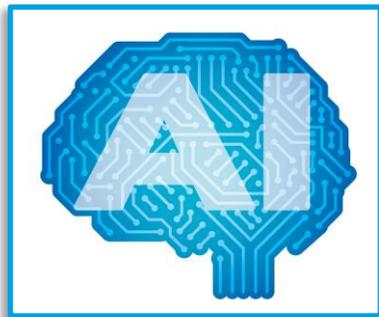


- The possibilities of helping waste collectors are not limited only to reducing the volume of waste.
- Building entire neighborhood smart eco-islands could be a winning choice for logistics optimization.
- Our shredders automatically detect the level of processed waste in the collection bins. Thanks to an integrated cloud data transmission system, it will be possible to provide a live service to optimize the logistics of emptying the bins.
- Thanks to this information, the company will be able to better optimize its work, with further environmental and economic savings.

# Smart waste logistics



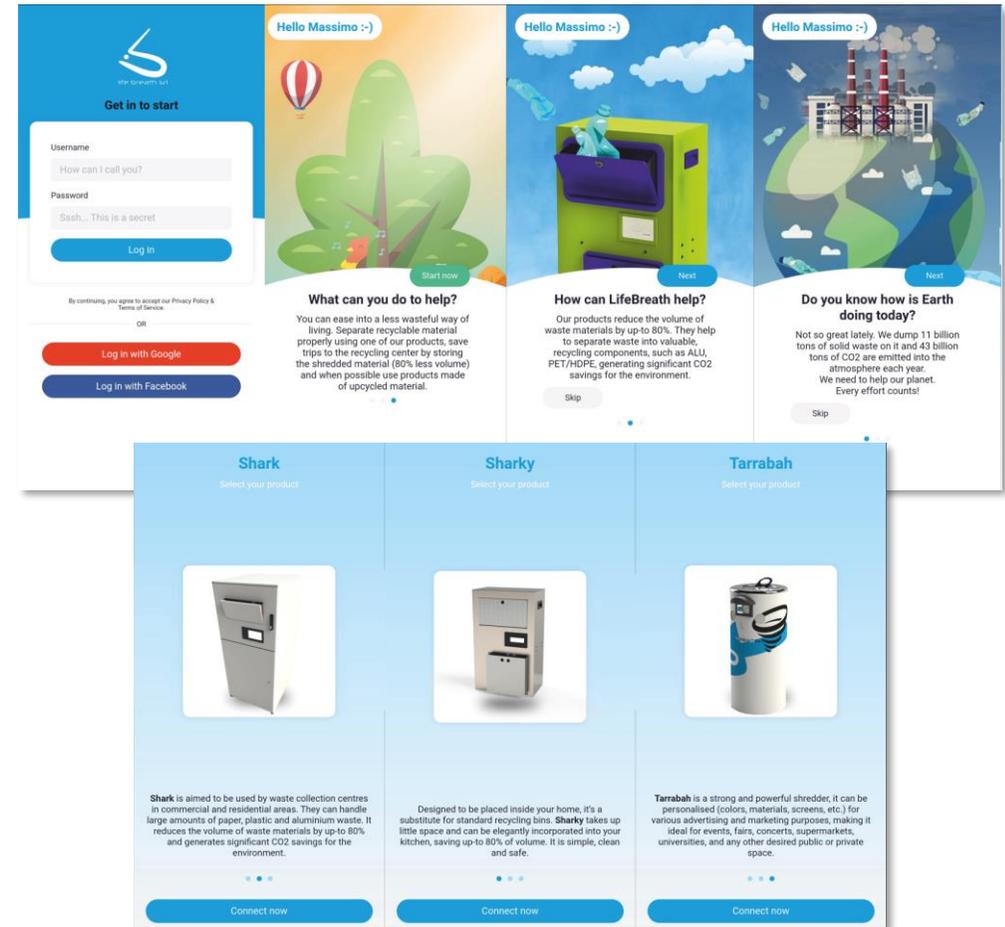
- On the software side our shredders are equipped with several sensors that will update data regarding the machine status: from the degree of filling, to the motor temperature.
- The harvested data will help to achieve two main goals :
- The first will be real time awareness of both the need for emptying and maintenance



- The data will be use to train an artificial intelligence (AI) able to provide predictions on when they will need to be emptied

# Users' awareness

- Together with our products, an app will be offered for download that will track the positive effect each user has on the environment through the use of our line of shredders.
- After the installation it will be possible to connect the application to your shredder. Through an algorithm will be calculated and shown the reduction of CO<sub>2</sub> emissions and the reduction of costs for the community due to the better management of waste collection..
- The application will also provide advice on good habits for waste management and reduction, some information on the health of the environment and the latest news and environmental goals of our company.



# Sharky

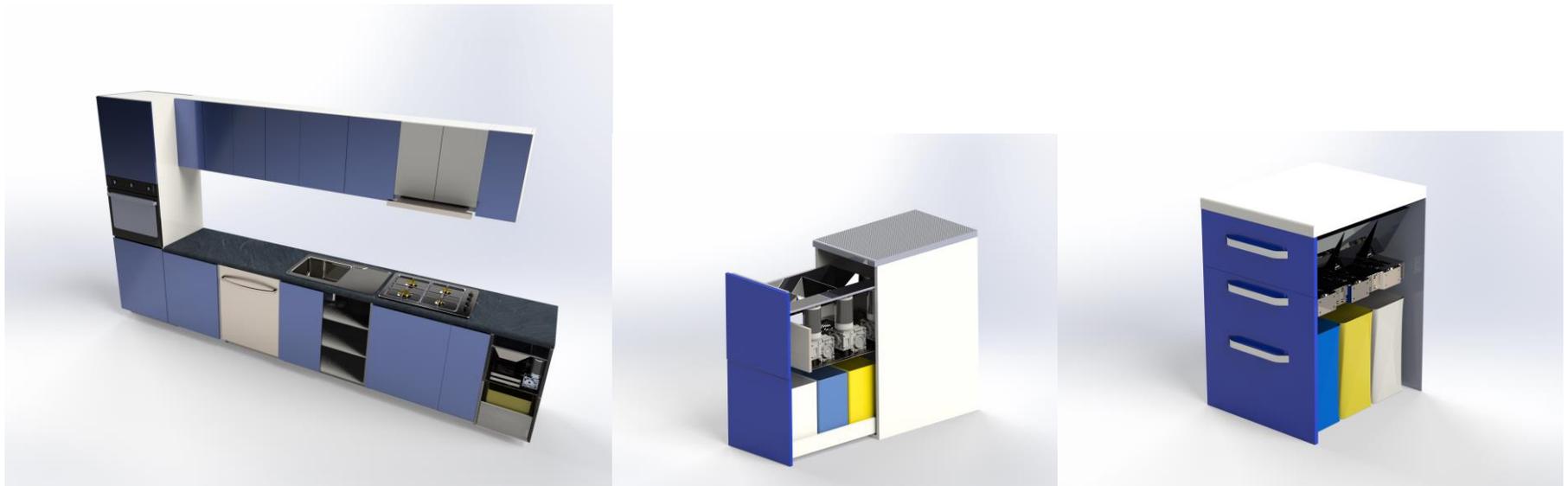


**Sharky** is the smallest of our family of shredders. It was designed to be used by citizens inside their homes or outside on balconies or under a porch. Thanks to the comfortable handles it can be easily moved where it better fits the user needs. It uses the domestic electricity and can reduce the waste volume up to 80%. The removable container also makes it easy to empty the treated materials.



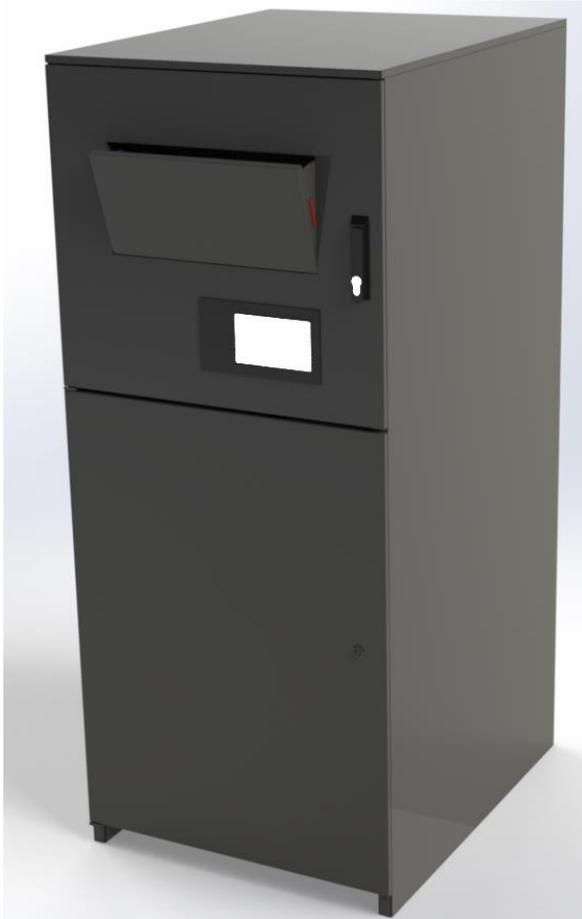
# Sharky-K

**Sharky-K** is the solution that better suits the domestic needs. It takes up little space and can be elegantly built-in your kitchen. It works in a safe, simple and clean way. The different wastes enter the upper part, and the treated material is collected in the lower part, in an easily removable container. The security of the cutting unit is guaranteed by a system that, connected to the door/drawer, disconnects the power when it is open, ensuring the security of the users.



# Shark

**Shark** is our shredder designed for condominium use, but also for commercial services, such as bars or restaurants. The collection compartment has been sized to perfectly fit the recycling bins that are already present in the courtyards of many apartment buildings. Thanks to a volume reduction up to 80% of waste, **shark** is perfectly suited to the needs of decorum of the common areas and the optimization of waste separation by the authorities.



# Tarrabah



**Tarrabah** takes its name from the Tasmanian devil in the Aboriginal language. Thanks to its power it is able to fragment aluminum cans and plastic bottles, separating them into their different plastic components (PET/HDPE).

Due to its attractive can design, it is perfect for exhibitions, fairs, concerts and big events, but also for supermarkets, shopping malls and universities.

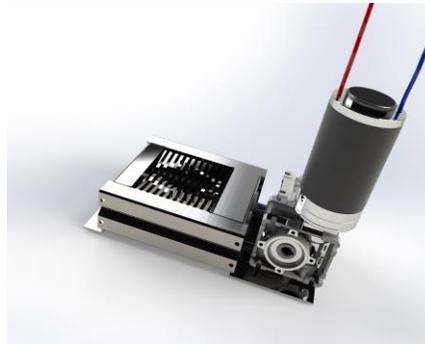
The possibility to customize its appearance with slogan or advertising marketing is also offered, making it suitable for every events.

Thanks to a sensor, it is also able to distinguish the type of material through the product barcode. It will only open the correct door to dispose of that waste, making sorting and dividing always correct.



# Data sheet: Sharky and Sharky-K

<b>PRODUCT</b>	<b>Sharky</b>
WEIGHT Kg	25
POWER SUPPLY VOLTAGE	230V/24V
HZ	50
DIMENSIONS X-Y-Z in mm	400-230-653
LOADING BOWL DIMENSIONS in mm	300x160
BLADE GROUP LENGTH in mm	122,5
BLADE THICKNESS in mm	5
N° OF CUTTING SECTORS	1
PRODUCTIVITY Kg/H	10
VOLUME DECREASE IN %	80
BLADE DIAMETER in mm	70
N° BLADE	30
OUTPUT GRANULOMETRY in mm	15-25
RPM MOTOR	3000
RPM TO BLADE GROUP	15
LOAD CAPACITY IN l	25
NOMINAL ABSORPTION/WORKING	6A
MATERIALS	PLA/PAP/CRT



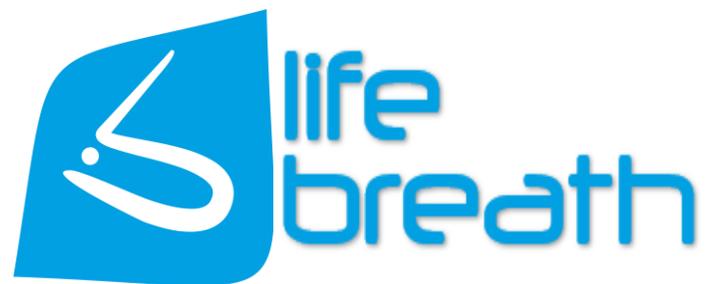
<b>PRODUCT</b>	<b>Sharky-K</b>
WEIGHT Kg	70
POWER SUPPLY VOLTAGE	230V/24V
HZ	50
DIMENSIONS X-Y-Z in mm	400-600-653
LOADING BOWL DIMENSIONS in mm	300x160
BLADE GROUP LENGTH in mm	122,5x3
BLADE THICKNESS in mm	5
N° OF CUTTING SECTORS	1
PRODUCTIVITY Kg/H	10
VOLUME DECREASE IN %	80
BLADE DIAMETER in mm	70
N° BLADE	30
OUTPUT GRANULOMETRY in mm	15-25
RPM MOTOR	3000
RPM TO BLADE GROUP	15
LOAD CAPACITY IN l	7x3
NOMINAL ABSORPTION/WORKING	18A
MATERIALS	PLA/PAP/CRT

# Data sheet: Shark and Tarrabah

PRODUCT	Shark
WEIGHT Kg	187
POWER SUPPLY VOLTAGE	380V/220V
HZ	50
DIMENSIONS X-Y-Z in mm	715-870-1700
LOADING BOWL DIMENSIONS in mm	450x220
BLADE GROUP LENGTH in mm	205
BLADE THICKNESS in mm	5
N° OF CUTTING SECTORS	1
PRODUCTIVITY Kg/H	50
VOLUME DECREASE IN %	80
BLADE DIAMETER in mm	100
N° BLADE	38
OUTPUT GRANULOMETRY in mm	20/30
RPM MOTOR	1740
RPM TO BLADE GROUP	15
LOAD CAPACITY IN l	65
NOMINAL ABSORPTION/WORKING MATERIALS	2,3A PLA/PAP/CRT



PRODUCT	Tarrabah		
WEIGHT Kg	156		
POWER SUPPLY VOLTAGE	400V/230V		
HZ	50		
DIMENSIONS X-Y-Z in mm	Ø 700 x H1500		
LOADING BOWL DIMENSIONS in mm	Ø 120	Ø 80	Ø 120
BLADE GROUP LENGTH in mm	110	45	100
BLADE THICKNESS in mm	5		
N° OF CUTTING SECTORS	3		
PRODUCTIVITY Kg/H	AL-10,8	PET-31,2	HDPE-0,6
VOLUME DECREASE IN %	80		
BLADE DIAMETER in mm	100		
N° BLADE	16	8	22
OUTPUT GRANULOMETRY in mm	20/30		
RPM MOTOR	1740		
RPM TO BLADE GROUP	15		
NOMINAL ABSORPTION/WORKING MATERIALS	2,3A ALU/PET/HDPE		



## Contacts:

[www.lifebreath.it](http://www.lifebreath.it)

Via Acqui, 67 – 10098 Rivoli (TO), Italy  
+39 011 6185921  
[info@lifebreath.it](mailto:info@lifebreath.it)