



REDUCE COST, SAVE SPACE & LOWER YOUR CARBON EMISSIONS

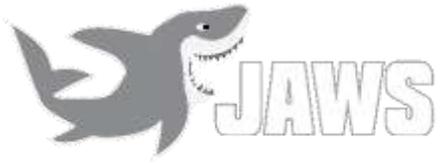
## About Us

PEL was founded 2005. PEL an award winning leading Irish manufacturer of innovative waste handling solutions. Initial product ranges consisted of:

- Patented JAWS range of Bottle Crushers
- PEL Cardboard and Plastic Balers
- Big and Little Foot range of Bin Compactors

Latest innovative solutions developed by PEL are aimed at sustainably reducing carbon emissions and single use plastic across litter management.





## Glass Bottle Crusher Range



- Reduce glass disposal cost and lower bottle volume by up to 80%.
- Reduce carbon emissions.
- Enhance staff work rate.
- Created a more spacious working environment.
- Eliminates waste glass segregation and associated noise pollution.



## PEL Bin Compactor Range

PEL Bin Compactors reduce the volume of 3 bins into 1. There is a full range available, suitable for both indoor and outdoor use. Reduce your waste disposal cost by up to 66%.

The PEL Bin Compactor range provides the ideal solution to reduce waste volumes and disposal cost for businesses managing waste into 240, 360, 660 or 1100 litre bins.



## PEL Cardboard and Plastic Baler Range

Our range of cardboard and plastic balers help reduce overall waste disposal cost and create space by eliminating the need for additional waste bins or skips.

The PEL Baler range provides a compact solution to reducing waste by producing easy to manage bales. There are 3 models in the range the PEL 200, PEL700 and PEL1500A.

\*Automatic compaction options are available.



## Case Study – The Porter House

**Problem:** Porter House Central was generating 6, 240ltr. bins of waste glass bottle 3, 240 ltr. bins of general waste and 1 240 ltr. bin of cardboard and plastic waste per day at its Nassau St location.

After the installation of two PEL JAWS Glass Bottle Crushers the number of was glass bins produced was **reduced from 36 to 12 per week!** The PEL 240litre Bin Compactor reduced the 18 weekly waste collections to 6 collections per week. In addition to this, a PEL700 Baler has **eliminated all recycling bins previously situated onsite.** The introduction of these machines has dramatically increased storage space in the back of house area.

### PEL Conclusion

The PEL Glass Bottle Crusher, Bin Compactor, and baler **generated significant waste reductions along with disposal cost savings.** Customer service has improved as staff are able to focus on serving visitors rather than waste disposal tasks.





01

Increasing quantities of waste

02

Tight budgets and increasing costs

03

Nuisance Complaints ever-present

Litter Management Challenges

## COMPACTOR & NON-COMPACTOR VARIANTS AVAILABLE

- 120 Litre / 240 Litre / 360 Litre
- Customisable Litter Flap or Hopper
- Service Door, Side, Rear or Front
- UV Protected Polycarbonate Top
- Heavy Duty Powder Coat Finish
- Foot Pedal Operation



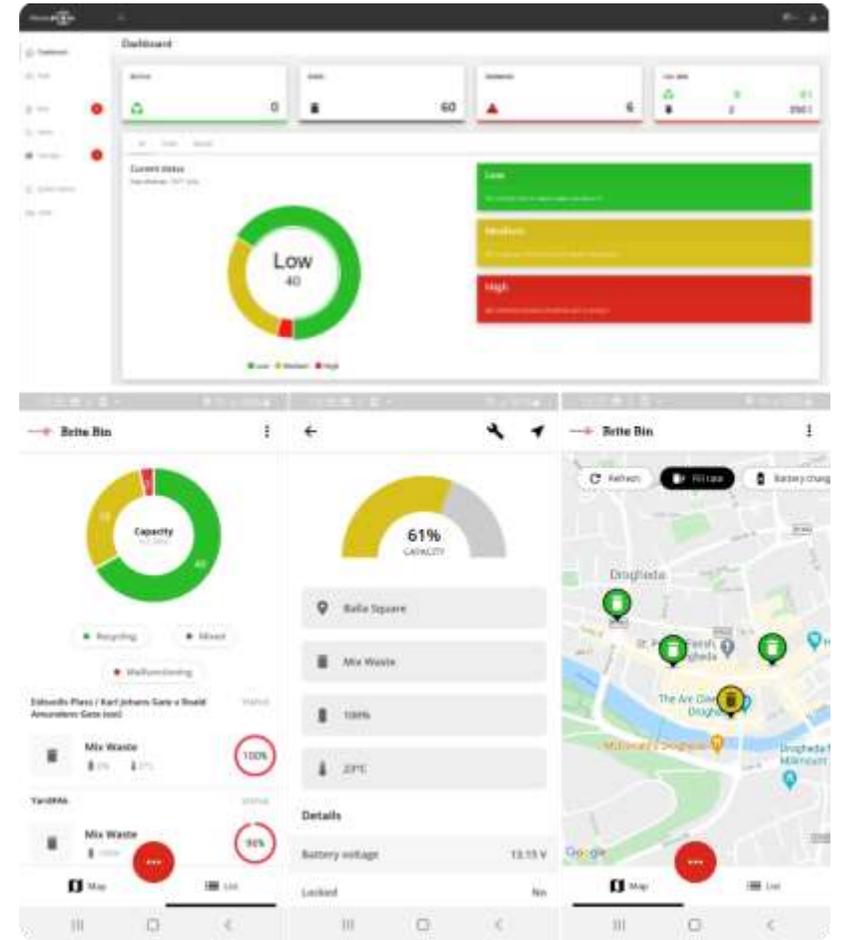
## Benefits to the



- Reduces number of bins required to manage litter
- Reduces collections traffic & associated emissions
- Reduces public disturbance related to collections
- Zero litter bin running costs
- Reduces overall cost of litter collection service
- Removes litter bins as source of food for vermin
- Creates advertising revenue channel for Councils
- Reduces unsightly overflowing litter receptacles

**REDUCE**  
**Street Litter**  
**Collections**  
BY UP TO  
**90%**

# Our Solution is **BriteBIN**



## Connectivity of the **BriteBIN**



- On-board sensor reporting real time data
- Communicates route directly to drivers
- Detailed KPI reporting capability
- Sig-Fox / NBloT / GSM Network
- SMS/ Email Alerts/ Push Notifications
- Allows optimum route planning
- Accurate bin fill status traffic light system



# The BriteBIN™ ecosystem



The BriteBin™ compacts waste until full. The unit takes a real-time fill-level reading every 3 seconds.

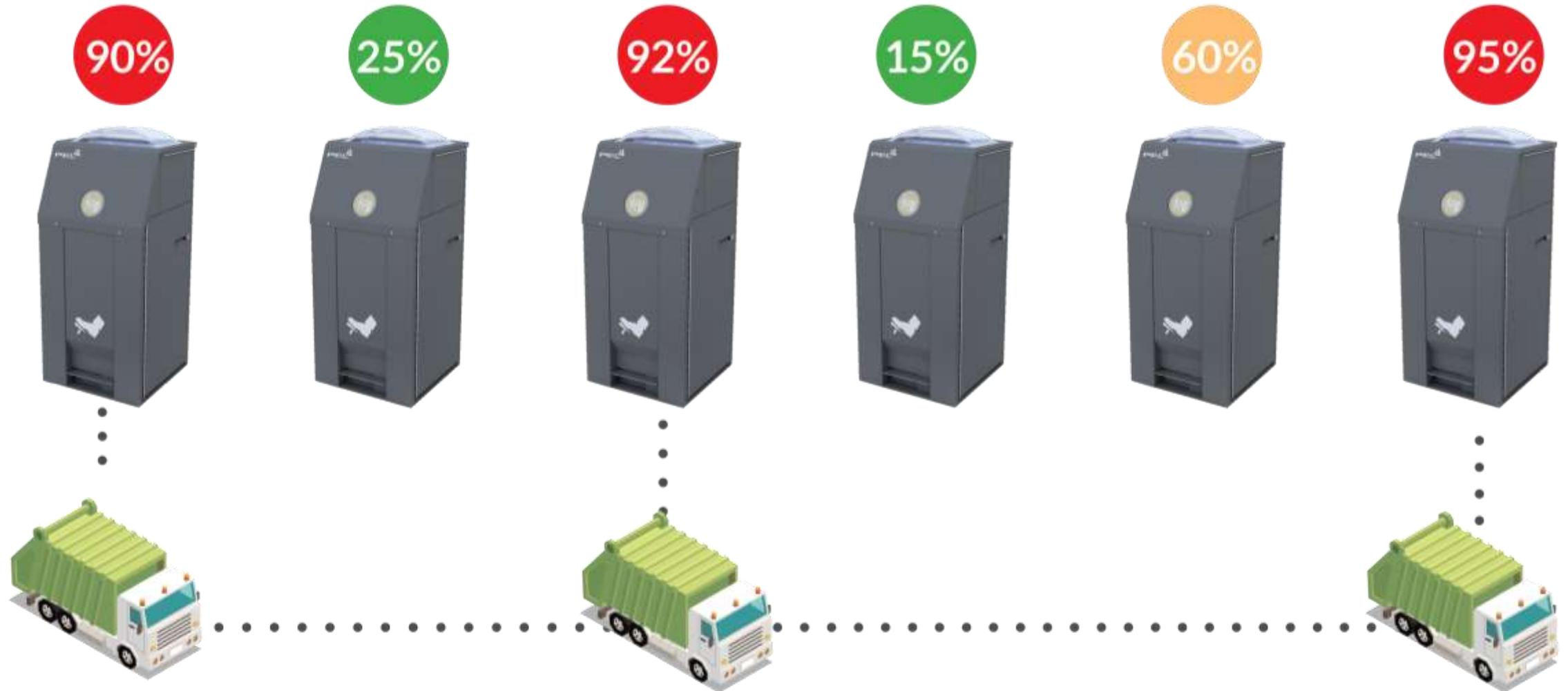


The commanding authority then deploys resources to only those units requiring service. This creates efficiency and saves money.



Once full, the BriteBin™ generates an alert to the BriteBin™ data management platform to notify the commanding authority.

# The **BriteBIN**™ ecosystem



# Installations of the **BriteBIN**



# BriteBIN™ Galway City Case Study



**Problem:** Galway City installed the BriteBin Solar™ as part of a project investigating the potential of IoT Technologies to impact the efficiency of litter collections in the city.

## PEL BBS120 & PEL BBS240 EVALUATION (June 2018)

Galway city is a busy pedestrian tourist destination - A fleet of BriteBin™ Solar were installed in high footfall areas across the city to determine if products could manage litter demand and reduce collection demands.

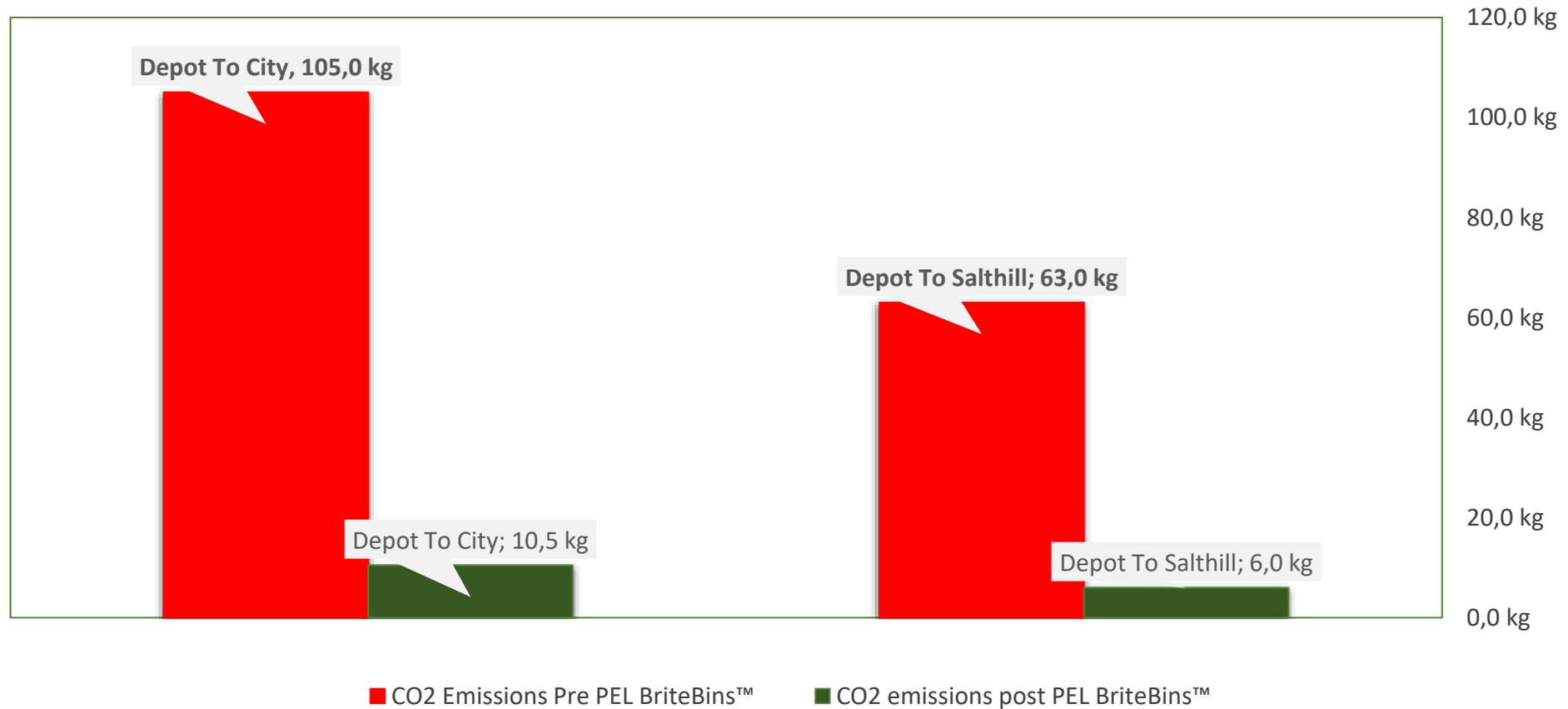
## Post-Installation of BriteBin™

Alerts service allowing Galway City Council to reduce collections by 80% (emptied 4-5 times per day to once every second day) in busy pedestrian areas along with significant reductions in traffic complaints, pollution & litter from overflowing unsightly bins especially in busy seasonal holiday times.



# Results of Carbon Emissions Reduction

## Carbon Emissions – Impact of PEL BriteBin™



## The **BriteBIN**™ effect



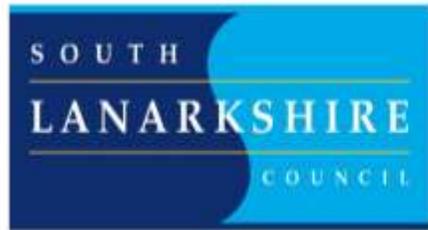
On average a vehicle omits one tonne of carbon emissions for every 4,000km travelled.

The PEL BriteBin™ can reduce a Councils carbon emissions by 1 tonne per annum, for every 11kms a day that can be eliminated through the optimisation of route planning with the BriteBin™.

One tonne of carbon can also be offset by planting of 150 trees.



Tenders won in Britain 

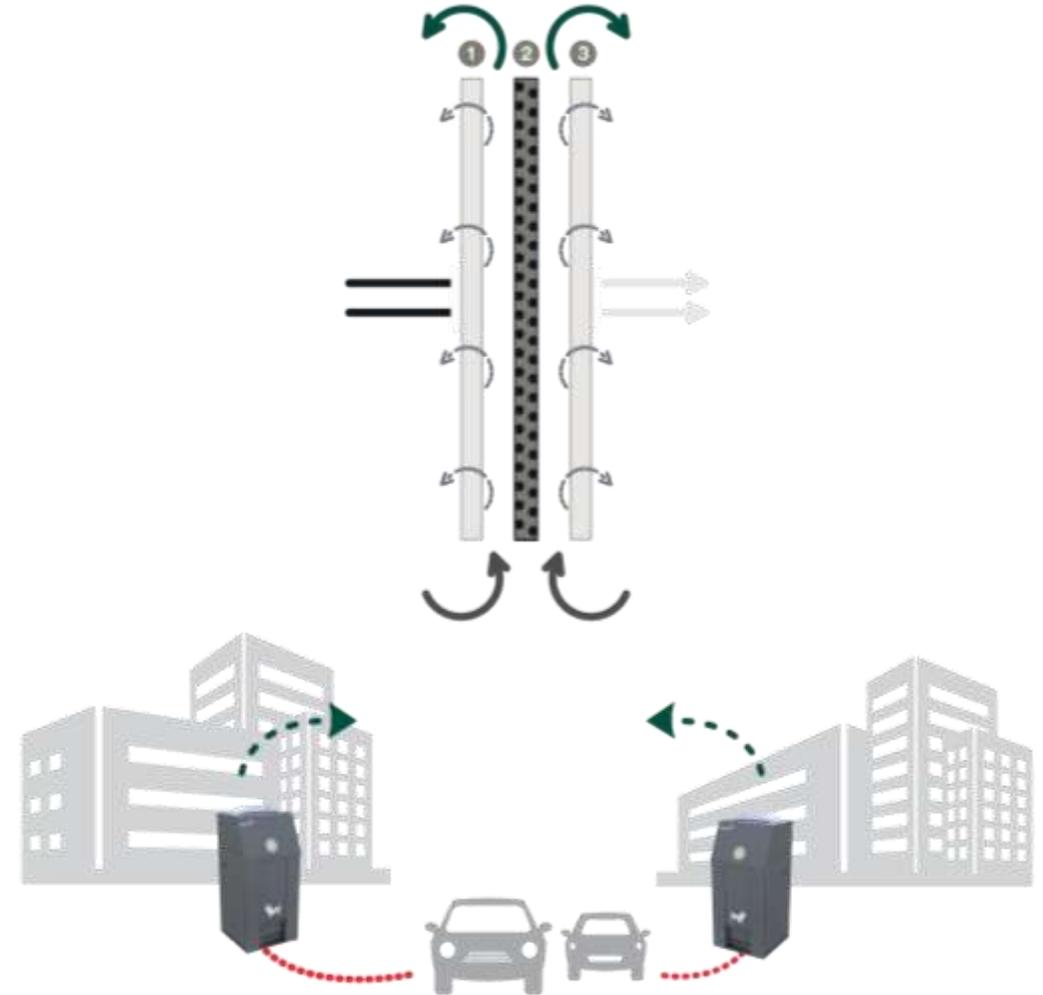


## Introducing PEL Pollutant Capture Filters

This simple but revolutionary technology traps and purifies the air.

The purification process uses the natural flow of the air across the three layers. These layers work in synergy to create cleaner more breathable air.

The Pollutant Capture Filters are mounted to the BriteBins™ which creates pockets of filtered air at ground level.



# Proven results of Pollutant Capture Filters

POLLUTANT		ABSORPTION
VOLATILE ORGANIC COMPOUNDS (VOC)	Toluene (C <sub>7</sub> H <sub>8</sub> )	Up to 97,2%
	Heptane (C <sub>7</sub> H <sub>16</sub> )	Up to 96,8%
FORMALDEHYDE (CH <sub>2</sub> O)		Up to 92,2%
SULPHUR OXIDE (SO <sub>2</sub> )		Up to 91,5%
NITRIC OXIDE (NO <sub>x</sub> )		Up to 86,8%
BENZENE (C <sub>6</sub> H <sub>6</sub> )		Up to 62 %
OZONE (OX)		Continous reaction in the atmosphere

# Future developments of **BriteBIN**



## Additional Features

- Wifi Hotspot
- Environmental Sensors
- Fire Extinguisher
- Security Bins
- Rodent Control
- Phone Charging



# Awards



STREET SMART  
SOLARSTREETBIN™



 **EY Entrepreneur  
Of The Year™**  
*2009 Finalist*



**IRISH**  
**exporters** |  **association**



 **CHAMBERS  
IRELAND**  
IN BUSINESS FOR BUSINESS

**Excellence**  
IN BUSINESS

# Thank You!

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Station Road, Ballindine, Co. Mayo, F12 E0Y5 Ireland.  
T: +353 (0)94 936 6923 • UK: +44 (0)20 8340 0436 [www.pelmfg.com](http://www.pelmfg.com)