Cleaning up our oceans By Mhairi McAleer

Annually 4.8 to 12.7 million tonnes of plastic enter our oceans (Journal Science,2015) with catastrophic environmental consequences upon marine life (The Centre for Biological Diversity,2019); plastic causes the death of thousands od sea birds, sea turtles marine mammals every year as they consume or get trapped in it.
How does plastic, a material utilised in daily life, cause an environmental crisis? The answer is simple, plastic isn't bio-degradable so once it enters our oceans it doesn't decompose. In fact it is predicted that by 2050 the amount of plastic in the ocean will be higher than the fish population (The Centre for Biological Diversity,2019).The result of plastic in our ocean is also detrimental societally (Plastic Pollution Facts, 2019) plastic attracts chemicals attributable to severe health problems -cancer, birth defects, child developmental problems- which it ships and distributes throughout its timeless ocean voyages.

Green innovation is the creation of a product or service or a process that contributes to reducing environmental damage and promotes the utilisation of natural resources.
The Seabin Project is a green innovative creation contributing to combating the lethal environmental issue and deadly repercussions generated by the existence of plastic in the oceans. The Seabin Project (The Seabin Project,2019)aims to actualize the reduction of plastic waste in the oceans which is a global environmental issue. A 'Seabin', as the name implies is a floating bin that collects plastic which has accumulated in the oceans. To date there has been 860 Seabin's deployed and they have captured 311400kg of plastic (The Seabin Project,2019). How does a Seabin work? A Seabin moves in correlation with the tide, retrieving plastic rubbish and debris through the utilisation of a submersible water pump -the executioner in this innovation. The pump extracts sea water from the ocean's surface- carrying plastic and debris- and is then flushed through a catchbag which amasses all the plastic and debris bigger than 2mm prior returning to the water to the sea.

In 2016 The Seabin project received confirmation of society's approval of its environmental innovative product as it received the '2016 social impact award' (The Seabin Project,2019). In the consecutive years that have followed The Seabin project has continued to receive recognition and has been presented with the following awards: 2017 Green Company or Initiative Award Winner, 2017 Best Initiative in Corporate Social Responsibility Award, The 2017 Dame Dame Design category Award, The 2018 Platinum in Design for society/Environmental Award, The 2018 award for Social Impact, The 208 Innovation Award and The 2018 Sustainability Award (The Seabin Project,2019). Such prestigious achievements not only grant the Seabin Project increased status within society raising environmental awareness but it verifies the magnitude of the positive environmental effect its innovative product is generating.

As the result of the deployment of Seabins 3612.8kg of marine litter -mainly comprising of plastic- is extracted from the Oceans daily (The Seabin Project,2019). In the future The Seabin Project aims to provide a recycling service for the oceans waste however currently implores its customers to diligently recycle the collected waste where feasible.
The Seabin Projects dedication to resolving environmental issues is unequivocal this is evidenced by its penultimate aim, its mission statement: *'to live in a world without the need for Seabins'* (The Seabin Project,2019). Perhaps for future generations this aim will one day be actualised and green innovative action will be the resource utilised in daily life as opposed to lethal plastic.

References:

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4: https://seabinproject.com/