Upcycling Waste Plastic Bottles

Nottingham, United Kingdom
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Elevator Pitch

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

I design and make beautiful products from waste plastic bottles. People donate their bottles for me to transform into lighting & decorations. It's almost impossible to tell that the products are recycled. I handmake the products myself, I would like to scale up my production to communities in Panama.

Problem: What problem is this project trying to address?

The problem is the amount of waste plastic bottles which are thrown away in the UK and around the world. Some are of course recycled but many are left in landfill sites, litter the streets or pollute the seas. We need to recycle (or upcycle as I prefer to call it) as much waste plastic as we can & try to change people’s view of the material. People need to see it as a usable material rather than something which is useless & should be thrown away.

Solution: What is the proposed solution? Please be specific!

I am targeting both the symptom & the root cause. By reusing the bottles I am curing the symptom whilst also showing people what can be achieved through creative upcycling. This will hopefully reduce the root cause in making people think twice about throwing things away, rethinking their consumer habits. After being collected the bottles are cleaned then sandblasted to make the surface opaque. I then dye the bottles vibrant colours. Then with just a pair of scissors I hand cut and sculpt them into intricate, high end products. In my business at the moment I collect the plastic bottles from cafes and households & then I make everything myself. I plan to scale up the business by starting production in impoverished communities in Panama.

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

An example of how my products make a difference is simply the reactions people have to the products. When they see them in an exhibition or shop, most people can’t tell what they are made from. Their surprised reaction when they are told they are plastic bottles is incredible. It makes people think about how they can make a difference & inspires them to recycle. My plans of scaling up by starting production in Panama will make a big difference to the people there. Of course they will benefit financially from making my work but also we plan to use a portion of the profits to provide solar powered lighting. Most of the communities don’t have electricity in their shanty towns. The solar powered lights will make a big difference to their lives.

Sustainability
Marketplace: Who else is addressing the problem outlined here? How does the proposed project differ from these approaches?

There are some products which recycle plastic bottles into other products such as fleeces. With the production of these products, bottles are completely changed by processes which use energy and resources. With my products the material isn’t changed it’s still essentially a plastic bottle. This is much more sustainable. Little power or resources are used to create my products, just a pair of scissors & lots of time! My products are also more engaging, once you are told what they are made from you can see how they are made from bottles. This will inspire & ignite people’s imaginations far more.

About You

Organization:
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About Your Project

Organization Name
Sarah Turner - Eco Art & Design

Organization Country
, NTT, Nottingham

Country where this project is creating social impact

How long has your organization been operating?
15 years

The information you provide here will be used to fill in any parts of your profile that have been left blank, such as interests, organization information, and website. No contact information will be made public. Please uncheck here if you do not want this to happen.

Your Solution

Founding Story: Share a story about the “Aha!” moment that led you to get started and/or to see the potential for this to succeed.

When I was at university I worked part time at a café. I noticed that a huge amount of plastic bottles were thrown into the rubbish bins. I thought that it was such a waste so I decided to collect the bottles instead and see what I could make from them. I used to come home with a bin liner full of them each day! I experimented with the material, trying to see how I could change it into something useful and beautiful. I cut, sawed, melted, burnt, crushed, scratched and sanded the bottles to find out what worked. It took lots of time developing the ideas and refining them so they looked professional. Since then I have developed many different techniques of upcycling the bottles and many different products, it has become quite of an obsession!

Select Sector(s): To which of Unilever's categories of sustainability does your solution apply?
Waste.

Measurable Impact

Audience: Who have you identified as your customers/acceptees and why? How will you get your solution to them or engage them in your initiative?

My customers are interested in contemporary design. They are often into eco design but I do have customers buy the products because they look nice not even realizing they’re made of bottles. I sell to both individuals & businesses such as restaurants.

I intend to expand into the US market with my plans of scaling up. I am in partnership with a company called The Lighting Power, we are working together on our plans to produce the products in Panama. They have a lot of contacts in the US market.

Impact: What is the impact of the work to date and expected impact in the future?

My work has had a lot of impact in the press including magazines, newspapers, TV and online. My work has featured in Vogue, Wired and Craft & Design Magazine.

The environmental impact has been that many plastic bottles have been saved from the landfill sites. I do not know exactly but I estimate I've reused hundreds of thousands over the years. In the future we will be able to tell exactly how many bottles have been reused due to sales records & calculating how many bottles are reused in each products.

I expect retail sales to increase a lot with my plans to scale up. The price of the products can be quite high due to the time it takes for me to make
The labour costs will decrease when production starts in Panama and therefore the cost of the products will be more affordable. This will therefore increase the impact as more people will be able to buy the products.

Growth, Finance & Leadership

**Scaling the Solution: How do you intend to scale your activities over the next two years (e.g., reach new markets, diversify solutions, etc.)? What will make this possible?**

Myself & my partner, The Lighting Power have been planning to produce my products in Panama for the past 2 years. The Lighting Power already does community work in Panama, distributing free solar powered lighting to help the communities. They therefore have knowledge of the communities & have contacts. The founder of The Lighting Power, Ron Saccomano has vast experience in the US lighting industry. He is the Vice-President of Global Business Development at Westinghouse Lighting Corporation, one of the largest lighting companies in the US. The prize money would enable us to fund our plans to produce the products in Panama. It can help pay for my travel to Panama to train people in making my lights. It can help pay for tools and equipment.

**Financial Sustainability: What is your business model to ensure financial sustainability?**

Sales of the products will mostly be put back into the business to help develop and grow the business further. We hope to expand this into other countries after succeeding in Panama. The running costs are relatively low due to the main material being free and most of the tools are just simple hand tools. The start up costs are being contributed mainly by my business partner, The Lighting Power and some of my earnings.

**Experience: Please provide examples of any previous entrepreneurial initiatives you have pioneered.**

I started trading in my business about 4 years ago. I started the business from scratch working from just my spare bedroom. I now have my own studio with my work sold in shops & galleries and I have also taken on large projects. One of which was making 5 huge chandeliers for the Coca Cola Hospitality Centre at the London 2012 Olympic Park. I believe that my contacts with Coca Cola will help with the promotion of the business in the future.

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