

Q&A

with Gaspard Bos

What was your prime motivation behind the project?

We started with the idea of giving people something back in exchange for their waste, incentivizing people with a custom product. As we all studied technical design, we became aware of the negative impact of waste on the environment, and of our responsibility to clean this up for the next generation. The goal is get plastic out of the environment, diversifying as a design company, even looking in the future to reducing food waste.

Does the process work with any kind of plastic and any 3D printer? And how many generations of plastic can be used?

Almost all types of plastic can be recycled for 3D printing, except for PET bottles. Our focus is on the plastic waste used in packaging material, getting that back into the recycling process, as this is the type of plastic that is seen as having no value now. As long as the

process is properly controlled, and the plastic is not heated up too much so that it degrades too quickly, we can recycle plastic for up to 6 or 7 generations, after which it has to be chemically disposed of. We can use any brand or type of 3D printer that works with spools.

What specific applications are you and your team looking at?

We're working on the design of a surfboard fin to show that we can make really technical products that also have structural integrity – with a bigger printer, it would be possible to produce the complete surfboard, printing hollow structures which are strong yet light. We are also looking at how to scale the process through moulding technologies, which would be more appropriate for larger volumes of plastic, especially in developing markets. The technology is open to other applications outside our own team – we've been approached by another group looking to print personalized shoes for people who have lost feet or toes to diseases such as leprosy or to war wounds.

What do you hope to achieve by participating in ITU Telecom World 2014?

The location of ITU Telecom World is of particular interest as Qatar has several ongoing projects focused on sustainability and building the self-reliant city. So we're keen to show people the technology and just how easily

plastic can be recycled, as well as to inspire other teams, consumers and leaders. We'd like to find business partners ready to take up the challenge at a higher level, and to bring an installation to Qatar. The idea is to open eyes, to get as many people as possible thinking in a different way about plastic.

What's the future for recycled plastics?

Virgin plastics are so cheap and easy to get hold of that there is no incentive to make the move to recycled plastics at scale. There needs to be a solid business case for using recycled plastics, which is where governments have a role. At the moment, manufacturers are not responsible or accountable for the damage to the environment caused by their plastic products. Government needs to step in to regulate for this, and account for the cost of clean-up and recycling.