



Designing for a Higher Purpose

Edmire Design, a small Belgian studio, has chosen to take a more sustainable path

By Robert Grace

Industrial designers, by nature, tend to have a strong social conscience. They aim to make inclusive products that are accessible to all, improve the lives and wellbeing of their users, and have minimal impact on the environment. But that desire often clashes with the aims of their paying clients, who frequently are more focused on sales and growth, which leads to churning out more and more products—many of which have a limited lifespan and may end up in the trash bin or the landfill. Sustainability be damned.

This tension is nothing new. Designers have long wrestled with the sometimes divergent goals of doing good versus making a living. Fortunately, times are changing.

Certainly many major brands today are taking sustainability seriously, with some taking a leadership role in attempting to advance a more circular economy. There is more discussion now about topics such as biomaterials, compostability, recyclability, reusability, and Cradle to Cradle™ or regenerative design. Single-use plastic applications that favor convenience over responsibility are rightly under fire. And many smart and motivated minds are working now to curb the ocean plastics epidemic.

Vincent De Smedt is just one designer from a small, 10-person firm in Belgium, but he has made a calculation



Belgian designer Vincent De Smedt reassessed his “reason for existing” a couple years ago, and decided to refocus all of his firm’s work on sustainability-driven projects. Courtesy of Edmire Design

that change starts at home.

After earning his master’s degree in product development from the University of Antwerp in 2008, De Smedt interned at Smart Design in Barcelona and worked briefly in retail strategy and branding before founding his own firm, Edmire Design, with a partner in Antwerp in 2010. His partner left the company in 2015 and De Smedt began to do some serious self-reflection.



De Smedt launched the Edmire Club to bring together like-minded professionals to network and learn about the circular economy, such as with this gathering in June at popular sustainability space in Antwerp. Courtesy of Edmire Design

For the Greater Good

"In 2017 to 18, I was looking for my reason for existing," he said in a June 28 interview in the offices of European Marketing Group in Bergen-op-Zoom, The Netherlands. He had participated the day before as a speaker at a pre-K Show media day organized by EMG for a number of its clients.

"I asked myself why are people working with us? Of course, as a designer, you're always looking at sustainability, at reducing energy usage, reducing water usage, plastics reduction, because it's what you've been taught. So we were always thinking in that direction, but we were not convincing our clients to also think in that direction." Some of his clients were environmentally conscious, but for many it was not a priority.

"We decided it was our job to promote sustainability," De Smedt said. "If this is the goal, this is what we're here to do, we need to promote it. We have to choose not to do anything else. We finished all the projects that were ongoing from that point. Then we said, 'From now on, only sustainability'."

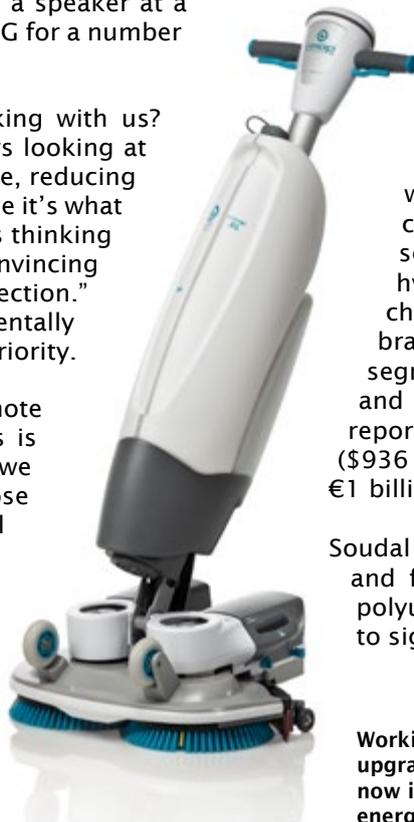
It's never easy to fire paying clients. But in his mind, it had to be done. Edmire Design had a new purpose, and those who didn't buy into it would no longer be a good fit for them.

If Not Onboard, Get Off the Train

"We could just tell that some clients weren't committed. So we finished our project with them and just didn't call them anymore. We lost some bigger clients, because we were totally focused on [sustainability], when they were expecting other things. That was kind of a struggle."

One client that did "get it," De Smedt said, was Soudal Group, a large Belgian chemical company that makes silicones and other sealants, polyurethane foams, adhesives, hybrid polymers, technical aerosols and chemical building products. With its own brands Soudal focuses on three market segments—the construction, industrial and retail sectors. The 3,100-employee firm reported consolidated sales of €835 million (\$936 million) in 2018 and is aiming to break €1 billion this year.

Soudal always had an open mind, De Smedt said, and focused on how its products, especially polyurethane foam and adhesive foam, help to significantly reduce energy use and prevent



Working with i-Team Global, Edmire has helped to upgrade their commercial i-mop scrubber/dryer, which now is more user-friendly, aesthetically pleasing, and energy-efficient. Courtesy of Edmire Design



energy loss. Soudal says its SMX foam also was the first isocyanate-free PU foam on the market and the company says it pioneered the development of solvent-free, water-based structural adhesives with exceptional green strength.

“We told them,” De Smedt explained, “that to continue working together, then it needs to be only sustainable projects. We must always choose the sustainable option—and if that’s not the best option, then we’ll make it the best option. They said, ‘OK, let’s try that’.”



De Smedt (left) and 72P’s Pieter Dondeyne teamed up for a joint presentation about their collaboration on bio-based materials at a pre-K media event in Antwerp. Photo by Robert Grace

De Smedt also realized that, like many such small firms, they had been so focused on doing design and product development that they had never made an effort to market themselves. So, to spread the gospel of sustainable design, they had to raise their profile.

“We created the Edmire Club, which is an in-person event that we host once a quarter.” De Smedt invites a speaker and encourages idea sharing and networking. The first such gathering, last March, attracted 40 people to Edmire’s offices. The second club event, held in June in a popular circular-economy space in Antwerp, drew 65 attendees and featured the R&D director from Soudal as the speaker, talking about sustainability and product development.

Seeking B Corp Status

In addition to boosting its social media presence,

Edmire also is pursuing B Corp certification (<https://bcorporation.net>). B Corp certification is a private certification issued to for-profit companies by B Lab, a global nonprofit organization. B Corps describe themselves as “a new kind of business that balances purpose and profit. They are legally required to consider the impact of their decisions on their workers, customers, suppliers, community, and the environment. This is a community of leaders, driving a global movement of people using business as a force for good.” As of June 2019, there are more than 2,750 certified B Corporations across 150 industries in 64 countries.

Edmire earned a 75 rating in its initial B Corp submission but needs to get the score up to 80 to qualify. “We have to work on some things,” De Smedt said. “It might take us six months to a year,” but they definitely intend to gain the desired certification.

About Projects and Clients

De Smedt outlined some of Edmire’s projects, many of which involve products for the commercial cleaning industry.

Boma NV, a 40 year-old Belgian cleaning products company, is one of the firm’s regular clients. Edmire recently redesigned a 1 liter, 100 percent recycled polyethylene bottle for Boma’s professional cleaning solution, to make it more attractive. Boma is currently working to renew the Cradle to Cradle (C2C) certification for this mono-material bottle and label. De Smedt’s studio also is in the process of designing a new dosing grip for the bottle, to allow it to be more recycling-friendly due to it being ultrasonic welded rather than glued.

Another client is the Rotterdam, Netherlands-based Greenspeed BV, which specializes in providing sustainable cleaning solutions. In January 2016, Greenspeed acquired the professional product range from Belgium’s Ecover and rebranded it as part of its own portfolio. Greenspeed has earned an EU Ecolabel, as well as C2C Gold certification for its probiotic cleaning products.

De Smedt notes that commercial cleaning services rely heavily on polymer-based microfiber mops and cloths, as opposed to cotton, but the traditional process of wringing water from such materials does not work as effectively as it does for cotton. To get dirty liquid out of microfiber mop head one needs to apply mechanical friction, “so we’re developing a new mopping system that uses a lot less water.”

Edmire also has been working for years for a Dutch company called i-Team Global, which has a broad portfolio of commercial cleaning products. In 2014, i-Team introduced an Edmire-designed walk-behind scrubber/dryer machine called the i-mop. For that, Edmire did some key market research that revealed nearly all the users of such commercial cleaning machines were women but nearly all the decision makers in the purchasing supply chain for such products were men.

So, Edmire convened focus groups with female users of such devices to learn their priorities. This led them to completely redesign the i-mop, adjusting its height and ergonomic features. They adopted a more friendly shape to the machine's components and made it white rather than grey. They designed textured, blow-molded water tanks that were clear to show the dirt in the water easily.

The i-Team engineered the i-mop—which features twin, counter-rotating, circular brushes—and cleans up to 70 percent faster than conventional wet mopping and up to 30 percent faster than conventional auto scrubbing. The firm currently is working to make it less water- and energy-intensive.

Helping Startups Get Traction

De Smedt says Edmire also is partnering with Start-It (www.startit.be), a Belgian accelerator, helping startup companies to define their brand strategy or to develop new, sustainable products. It was through that group earlier this year that he met Pieter Dondeyne, founder of a technology startup called 72P that develops and licenses bio-based binders for materials. The two are

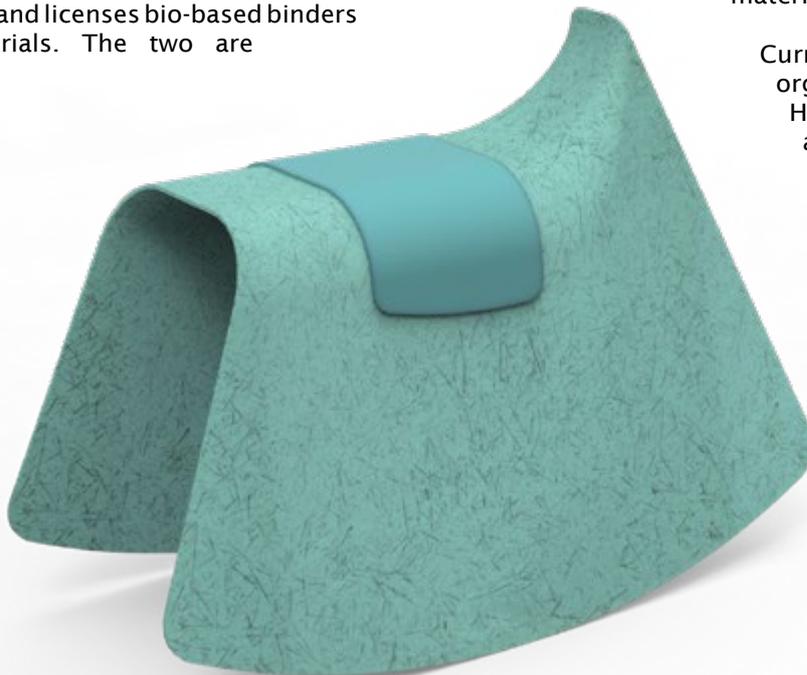


Another concept product, Edmire designed this wine packaging using 72P's bio-based, food-waste material. Courtesy of Edmire Design

partnering now on some concept projects.

At EMG's pre-K event in Antwerp, De Smedt co-presented with Dondeyne, whose company aims to take organic (e.g., food) waste and, by applying new types of binders, and turn that waste into a moldable, board-like material. The resulting material, when processed under pressure, can yield stiff (and bendable) sheets that Dondeyne believes could be used as an alternative to medium-density fiberboard (MDF) in furniture products. One can add natural fibers such as bamboo or pine needles for strength, or colors for aesthetics. To demonstrate the concept, 72P—named after an asteroid—has formed a simple rocking horse made of the material.

Currently, De Smedt said, nearly all organic waste in Belgium is incinerated. His interest in the project is to try to find a way to create small-scale production



Dondeyne's 72P Belgian startup is creating bio-based polymers from locally sourced "food processing residue." Working with Edmire Design, he has found a way to create, under pressure, bendable board-like materials. The current product looks like wood but can be shaped like plastic. The partners made this rocking horse to demonstrate the concept. Dondeyne says he is focusing on bio-composites, since adding natural fiber can enhance properties and add value. "Our mission," he says, "is to be fully circular, both in the technical and the biological loop." Courtesy of Edmire Design



In another example of thinking sustainably, Edmire designed this sleek, minimalistic birdhouse for a Swedish brand. Featuring a recycled-plastic body, it has just three primary parts, with the metal bracket holding it all together, avoiding the need to use glue. Courtesy of Edmire Design

lines that could be housed in, say, a small structure next to a restaurant or food market, and provide an onsite solution to that food waste to yield usable, biopolymer-based end products with commercial value.

De Smedt says he plans to attend the K 2019 trade show in Dusseldorf, Germany, in October, and hopes to meet with major resin producers to discuss what can possibly be done with the material.

Taking a Holistic Approach

Last December, De Smedt wrote a sponsored article for a U.K.-based publication in which he stated: "A lot of people still think of sustainability in waste and recycling terms, but there is a whole picture of what is needed. A full approach to sustainability involves those aspects, but also careful design, choice of materials, selection of manufacturing destinations, environmentally friendly transport, energy-saving usage, and human aspects, such as suitable working conditions and pay. It is a complex challenge.

"As designers," he continued, "we all have a responsibility around natural resources, energy consumption, transport, conditions, and all aspects of sustainability."

Edmire Design chooses to work with many small to medium-sized enterprises (SMEs) and startups, a group for which he notes that achieving affordable sustainability is challenging given lower volumes of production.

"To help businesses succeed with sustainability, we have a very different business model from other design companies," he said. Edmire provides startups with extensive design consulting to launch products, in return for a small stake in their business. For SMEs, too, Edmire removes all risk, through a shared royalty model that allows for payment to the design firm only as the product's sales grow.

"We've created a model that allows businesses, which we share values with, to become more sustainable in this way, without the risk and the high cost normally associated with research and design. Typically," De Smedt said, "they learn as they grow their sustainability and are able to create excellent, successful goods that no longer have a big detrimental impact."

ABOUT THE AUTHOR

Robert Grace is a writer, editor and marketing communications professional who has been active in B2B journalism since 1980. He was founding editor of and worked for 25 years at *Plastics News*, serving as editorial director, associate publisher and conference director. He was managing editor of *Plastics Engineering* from July 2016 through October 2017, and is now both editor of SPE's *Journal of Blow Molding* and directing content strategy for SPE. He runs his own firm, RC Grace LLC, in Daytona Beach, FL., and can be contacted at bob@rcgrace.com.

