

The Success Story of Dow



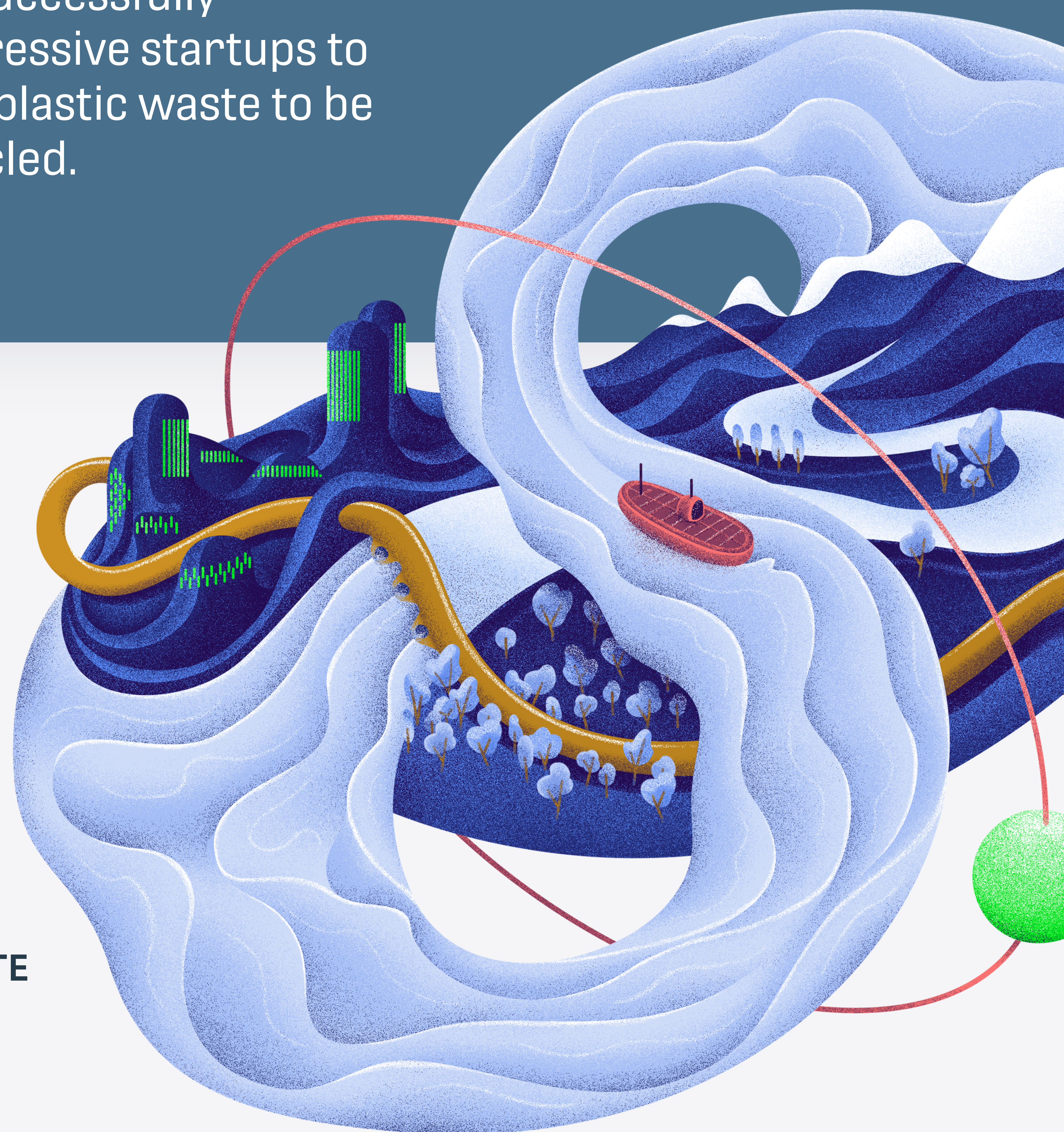
Dow Creates Sustainable Future with Plastics Startups

Continuus Materials, Byfusion, and Empower

Through the Plug and Play End Plastic Waste innovation program, Dow successfully partnered with three progressive startups to divert over 1 million tons of plastic waste to be collected, reused, and recycled.

The Innovation Partnership Success Stories is a series that focuses on key projects that emerged through our End Plastic Waste platform.

[PNPTC.COM/END-PLASTIC-WASTE](https://pnptc.com/end-plastic-waste)



Corporate Partner



Dow combines global breadth, asset integration and scale, focused innovation, and leading business positions to achieve profitable growth. The Company's ambition is to become the most innovative, customer centric, inclusive, and sustainable materials science company.

Hefty® EnergyBag®

Designed to complement current recycling efforts, the Hefty®EnergyBag® program establishes a way to collect otherwise hard-to-recycle plastics at curbside and uses them as valued resources. The program is clearly demonstrating its ability to help divert these resources away from landfills, reduce dependence on fossil fuels, increase efficiency at recycling facilities, and improve the quality of other recycled materials.



The Partnership

Dow's primary goal is to drive systematic change in plastic pollution and recycling by finding ways to stop the waste and close the loop.

Dow believes that plastic is far too valuable to be lost as waste. They want to offer cities a way to collect hard-to-recycle plastics that would have otherwise gone to the landfill. They realized this change is not possible without the help of others. As a larger corporation, Dow benefits from working with technology and innovation from startups to help them succeed.

The Project

By partnering with Plug and Play's End Plastic Waste innovation program, Dow was able to find startups with self-sustaining business models that were successful and long-lasting. Over the past several years, Dow has helped divert over **1 million pounds of waste across four cities** in the United States.

With their new sustainability targets for the decade, Dow is hoping to help stop plastic waste by 2030. Through their direct actions and partnerships, Dow predicts over 1 million tons of plastic waste will be collected, reused, and recycled.

October 2019:

Alliance to End Plastic Waste joins the Plug and Play accelerator program

November 2019:

Dow is introduced to Plug and Play through the Alliance

February 2020:

Introduction of Continuous Materials to Dow

February 2020:

Dow meets ByFusion through Plug and Play End Plastic Waste Selection Day

March 2020:

First meeting between Dow and ByFusion to discuss potential partnership during Plug and Play End Plastic Waste Focus Week

March 2020:

Dow confirms PoCs with Continuous after conversations held during Plug and Play End Plastic Waste Focus Week

April 2020:

Dow meets Empower through Plug and Play Paris Selection Day Batch 2

May 2020:

Continuous performs first lab test with Dow

Startup



Converts unrecyclable plastic waste into construction building material called ByBlock.

THE PROBLEM: Dow needed more markets to process over a million pounds of plastic collected through the Hefty® EnergyBag® program. ByFusion needed more material to support ByBlocks, their proprietary advanced building material.

The Solution

Through the Dow Impact Fund, **Dow invested \$180K in ByFusion** and **confirmed a 6 month pilot** to further develop their technology for plastics processing. The goal of the pilot is to create a permanent installation for the market that can process the required amount of waste from each community.

30 TONS OF PLASTIC REPURPOSED & 5 NEW CONSTRUCTION PROJECTS

By deploying ByFusion's technology in conjunction with the Hefty® EnergyBag® program, Dow projects **30 tons of plastic to be repurposed into ByBlocks every month**. In addition, the partnership will demonstrate up to **5 different construction projects** to prove the immediate value to community efforts in sorting plastic properly.



Our Contribution

Plug and Play provided the most optimal scenario for all parties involved to go to market. We were able to bring it all together by connecting ByFusion with Dow, thus enabling the power of each stakeholder group to solve the problem together.

Startup



Creates roof cover board (EVERBOARD™) from 60% fiber and 40% unrecyclable plastic.

THE PROBLEM: Dow needed an outlet to process over a million pounds of plastic collected from their Hefty® EnergyBag® program. Continuus Materials needed additional sources of plastic to engineer their high-performance roof cover board.

The Solution

Dow identified that Continuus Materials' technology could **compete at scale effectively**, and is currently on their 3rd round of trials in the partnership.

DIVERT 4K TONS OF PLASTIC & BUILD 10M SQ. FT. OF ROOF COVER BOARD BY 2021

The goal of Dow's pilot with Continuus Materials is to create **10 million square feet of roof cover board and divert 4 thousand tons of plastic from the environment**. So far, Continuus Materials has already installed over 5 million square feet of EVERBOARD™ in the United States and Canada.



Our Contribution

The partnership between Dow and Continuus Materials was dependent on Plug and Play's End Plastic Waste accelerator program. The relationships developed between Dow, the Alliance to End Plastic Waste, and Plug and Play proved to be integral in the success of Continuus Materials' pilot project.

Startup

empower

an incentive system for waste collectors in Nigeria and digitized the waste stream by using realtime data.

THE PROBLEM: Dow realized a manufacturing client in Nigeria had extra capacity to make more, but needed more plastic collection and scale enough to bring in enough product to meet customer demand.

The Solution

70% of the population in Nigeria gets drinking water from a flexible all-polyethylene pouch. This material is highly recyclable and extremely valuable for manufacturers.

Empower created a highly successful incentive system for waste collectors in Nigeria but needed more local recycling options. By connecting in a partnership, both companies successfully solve their pain points.

1,000 JOBS CREATED & 200K POUNDS OF PLASTIC WASTE RECYCLED

Through a potential partnership with Dow, Empower estimates 1,000 jobs created for waste pickers in Nigeria. From their efforts, over 200 thousand pounds of plastic waste will be collected and recycled through Dow manufacturing clients.



Our Contribution

Dow met Empower through the Plug and Play Paris Selection Day Batch 2 in July 2020.

Take Aways

Have a Dedicated, Solid Team

Dow was able to start promising partnerships and POCs with 3 separate startups over the span of only a few months. They attribute this success to a solid team - people who are solely responsible for these projects and take ownership. Working on these projects for quite some time (Energy bag around for 5 years) - plugging in startups to help with some gaps they found.

If you try to create something new, that takes a long time. Once they are already going, and plugging in the gaps, things will go a lot faster. Colleagues are great to work with according to startups.

Avoid Burnout

Startups and corporations often feel burnout when a POC extends for a long period of time without any tangible results. Dow has avoided this by having a personable champion and colleagues to work with startups. Empower each team to reach major targets and milestones.

How We Can Help

We are the ultimate innovation platform, bringing together the best startups and the world's largest corporations. Collaborating with startups is a great source of inspiration and innovation ... but can be a challenge. Let us show you how to adopt the concept of open innovation to help your business succeed.

About the Alliance to End Plastic Waste

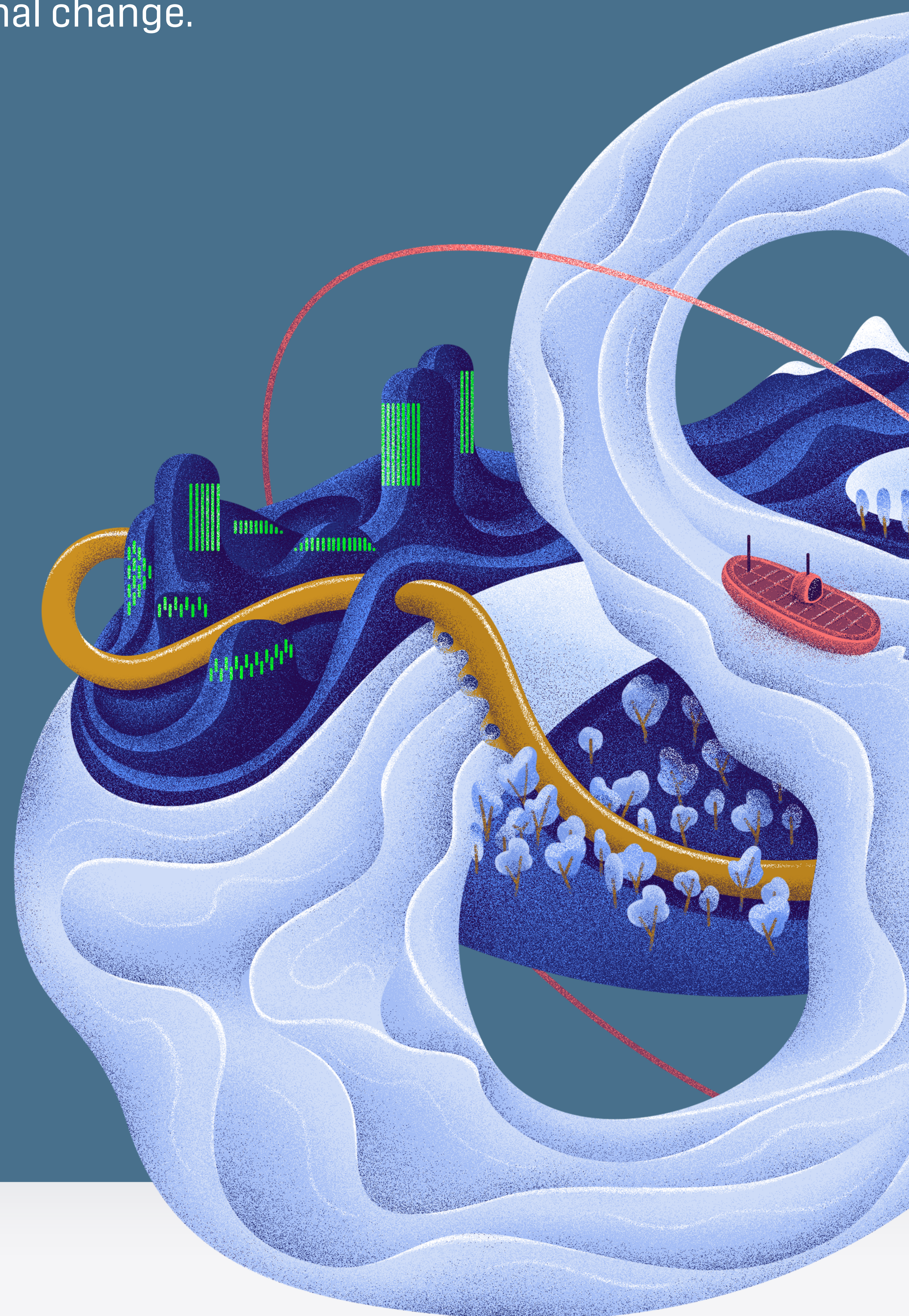
In January 2019, the Alliance to End Plastic Waste was founded as a nonprofit organisation to help solve this serious and complex issue – 8 million tons of plastic waste entering the ocean every year. Nearly 50 companies across the plastics value chain have joined the Alliance and together they have committed to invest US\$1.5 billion towards solutions that will prevent the leakage as well as recover and create value from plastic waste. Ultimately, these solutions prove the investment market of plastic waste to venture capital, private investors, development banks and governments to deliver truly transformational change.

About the Program

In partnership with the Alliance to End Plastic Waste, Plug and Play is running six accelerator programs across three global hubs over the span of two years. Each program will be a 90-day, highly structured curriculum that will accelerate the highest-potential startups tackling plastic waste.

Each of the six programs will have a Selection Day where 10 startups will be selected to join the program and work closely with the Alliance to End Plastic Waste members and help end plastic waste once and for all.

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Plug and Play is a global corporate innovation platform which helps to connect corporate partners to startups in order to help solve their greatest challenges. We also operate as a venture fund and startup ecosystem. With over 30,000 startups and 400 official corporate partners, we have created the ultimate startup ecosystem in many industries.

For additional information, please visit our website.

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