

## Impact Hub Global Network

All big ideas start small. Impact Hub was founded in London in 2005. Today, we are a global network of 15,500 members - impactdriven entrepreneurs, creators, innovators and intrapreneurs taking action to create a better tomorrow for people and planet.

Every Impact Hub is established and operated by a local team and deeply rooted in the local community.



## Impact Hub Shanghai

In 2017, Impact Hub Shanghai broke ground in China. Like our worldwide counterparts, we support entrepreneurs with incubation programs and community events, address innovational needs of corporates, institutions, and governments, and incubate solutions to systemic challenges - all towards the United Nations' Sustainable Development Goals.


Focus


## We Offer

## Startup Support

We empower startups to grow and succeed through incubation programs and trainings, collaboration with industry partners, colorful community events, and our resourceful global network.

## Industry Innovation

We boost the innovation journeys of corporates, governments, industrial parks, and investors towards their sustainable development goals, together with our vibrant entrepreneur ecosystem.

## Systemic Innovation Lab

We initiate and incubate our own innovative solutions to tackle systemic challenges through system analysis and cocreation with multiple stakeholders.

## Budweiser Innovation Hub China (2021-2023)

\#SustainableConsumption \#CleanEnergy \#SmartFactory \#InnovativeMaterial

## Background

We launched the Innovation Hub challenge for Budweiser China to support the transformation of Budweiser's entire value chain in China. With the support of Impact Hub Shanghai, Innovation Hub has announced six challenge topics, with the goal to provide pilot opportunities for innovative startups to test and refine solutions. Startups who successfully complete the pilot phase will win the chance to receive supplier contract with Budweiser.

## Services Provided

Needs Identification

Innovative Solution
Scouting
Piloting


## In Numbers

6 major challenges
80 entrepreneurial teams
41 -on-1 interviews
7 teams in the pilot program


## Participation Year 2019

## Climate Action

Recycling Retired Batteries


## Technology／Product／Service

With 50 software copyrights and 13 patents， Yushuo Energy is committed to becoming the world＇s leading smart energy solutions provider． The company works with a variety of core system connectivity technologies，such as hardware control systems，edge computing，algorithm strategies，mobile applications，IoT cloud platforms，and remote component upgrades．

## Pilot Introduction

Budweiser China and Yushuo Energy jointly conducted a pilot building a 2 MW storage unit at the Budweiser brewery in Suqian with retired batteries from electric vehicles．The system is used for on－site renewable energy storage to power production and charge EV trucks．The technology was subsequently scaled up to a 6 MW pilot at the Suqian brewery and a 20 MW energy storage system at the Foshan brewery．

## Highlights

- In 2019, Yushuo Energy was selected to join AB InBev's 100+ Accelerator program and conducted a pilot with Budweiser China. This project was an example of the successful localized implementation of the $100+$ Accelerator Program.

The energy storage system that stores clean energy is used to charge EV trucks for green logistics. EV truck batteries that reach their end of life can be reused as new materials for the storage system, thus creating a closed-loop renewable electricity recycling model.

- The pilot reduced the brewery's electricity bill by about $\mathbf{1 0 \%}$, saving approximately $\mathbf{\$ 1 1 , 0 0 0}$ per year. It also relieved the pressure of regulating the brewery's electricity usage during peak hours, ensuring energy reliability by providing an uninterrupted power supply to key equipment.
- The collaboration with Budweiser China helped Yushuo Energy receive its first loan from the World Bank for the energy storage project. This was the first loan the World Bank had made to invest in China's new energy industry


Renewable and clean
energy resources

Energy storage power station

H4 $100 \%$ renewable energy


EV trucks

Second-generation EV truck batteries


## Participation Year 2020



Upcycling of By-products


## Technology / Product / Service

Shianco focuses on the design, development, production, and sale of high-end leisure furniture and outdoor leisure products. Using German Resysta technology, Shianco develops an innovative green material, agiowood®, which can be used as a substitute for logs in the production of wood products.

## Pilot Introduction

Shianco provided Budweiser China with a closed-loop solution that recycled rice husks from ABl's supplier and used them as the raw material for agiowood ${ }^{\circledR}$. This sustainable material was used in both

Wenzhou brewery and Shanghai office.

## Highlights

－Shianco designed a Sustainable Meeting Room for Budweiser APAC＇s Shanghai Headquarter using agiowood for the floor，walls，ceiling，tables，and chairs， effectively reducing the actual amount of wood used．
－Shianco is currently involved in the construction of sustainable offices at Wenzhou brewery and has completed $400 \mathrm{~m}^{2}$ of flooring and $800 \mathrm{~m}^{2}$ of wall renovations during the first phase of the pilot．
－By reusing waste rice husks from ABl＇s supplier Wilmar， Shianco created a closed－loop recycling solution and helped the supplier save $\mathbf{2 1 6 0} \mathbf{g}$ ，of carbon dioxide emissions that would otherwise be produced from burning the husks．

100＋创新中仙 innovation lab


## Participation Year 2021



## Technology / Product / Service

Givingback is a social enterprise that is
dedicated to recycling abandoned advertising
cloth. It aims to reduce waste material
pollution in the advertising industry by
creating fashionable recycled products.

## Pilot Introduction

Givingback piloted an environmental art installation with Corona, settled by the beach in Xiamen in 2022. The installation was made out of recycled plastic bottles, with a focused theme of ocean protection and sustainable lifestyles.

## Highlights

- More than $80 \%$ of the production material were sustainable. More than $\mathbf{8 0 \%}$ of the materials used were reused after the event. The rest of the production materials were collected again for further design ideas.
- Interactive activities were designed to engage with the public, inspiring them to act towards saving the ocean. Around 100 k visitors came to the beach in three weeks.
- GIVINGBACK has cooperated with Budweiser China, upcycling Budweiser China's truck tarp, and making them into fashionable and eco-friendly items.



## Snail Mom

Participation Year 2021


## Technology / Product / Service

Snail Mom is committed to the research, development, and industrialization of biobased, environmentally friendly materials that can replace plastics. Snail Mom uses polymerization technology to process agricultural by-products such as straw, grain husks, and corn into a new generation of 100\% biodegradable bio-based materials.

## Pilot Introduction

Snail Mom recycled waste straw from
Budweiser China's beer production process and processed it into nanoscale powder. The powder was then blended with other bio-based polymer materials to form pellets, which are bio-based, environmentally friendly, 100\% biodegradable, and free of petroleum-based components. This became the base material used to produce disposable packaging which has been applied in the plasticization-free packaging of Budweiser China canned beer.

## Highlights

- The pilot packaging made of this bio-based material passed the SGS TEST, becoming the second product from a Chinese company to do so.
- At present, the biggest obstacle to the widespread use of environmentally friendly materials is their high cost. Snail Mom's core patent is the formula and preparation process of an efficient nucleating agent for polylactic acid that can increase the number of effective molecules and make them crystallize more quickly during the production process. The raw materials can be derived from agricultural by-products, such as straw and sugarcane bagasse, thereby greatly reducing the cost.
- With its cooperation with Budweiser China on takeaway box supplies, Snail Mom won a contract from the Shenzhen government to help build a demonstration of plastic-free restaurant.
- Snail Mom is currently developing and testing materials and processes for logistic cushioning protection for bottled beer, which is expected to be completed in March 2023.
- Snail Mom has obtained three utility model patents and applied for two design patents.


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## VEGATEX ${ }^{\circledR}$

## Participation Year 2021



## Technology / Product / Service

Vegatex upcycles food waste and byproducts, such as fruit waste and spent grain, with its patented technology. Vegatex extracts food-grade protein powder and applies the leftovers to making vegan leather that can be used in a variety of industries, including textiles, leather, and chemical.

## Pilot Introduction

Based on their fruit waste treatment technology, Vegatex developed the technology to produce barley-based waterborne leather, greatly enhancing the market value of spent grain.

## Highlights

－During the three－month pilot period，Vegatex successfully cooperated with Budweiser China to purchase its by－ products spent grain to produce vegan leather．It is then used to make bags and other products of Bud．
－Budweiser APAC，together with DOW and Vegatex，jointly developed and launched the world＇s first Barley－based Waterborne Garment Leather．Spent grain provided by Budweiser China was the main source of bio－based raw materials for this product，accounting for $30 \%$ of the ingredients and replacing traditional petroleum－based chemicals．The product is completely pollution－free， odorless，free of harmful substances，and environmentally friendly．
－In September 2022，Mind the Gap（MTG），a sustainable fashion brand，presented its fashion products made of the Barley－based Waterborne Garment Leather at its 2023 Spring／Summer fashion show，representing the ＂laboratory to market＂closed loop for the innovative material．Accessories made of this material were also displayed in 2022 RISE UP Sustainable Fashion Challenge

## $100+$ 飤棩ゆ！

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## BOTT LのOP

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抱樸再生

Participation Year 2022


## Technology／Product／Service

As a sustainable lifestyle brand，BOTTLOOP
is committed to using innovative methods
to upcycle waste into everyday goods that combine traditional culture，environmental technology，and eco－aesthetics．BOTTLOOP also offers one－stop，zero－waste total solutions to businesses，organizations，and brands across a wide range of industries

## Pilot Introduction

BOTTLOOP planned a one－stop，zero－ waste solution for Corona World Ocean Day Campaign，which included brand communication，product design，and marketing activities．

## Highlights

－BOTTLOOP provided a zero－waste total solution to support Corona＇s Ocean Conservation Program，creating a＂Guarding the Deep Blue with Care＂marketing campaign，which is expected to be officially launched in March 2023.
－The company also provided environmental friendly souvenirs for the offline marketing campaign，such as customized travel mugs and biodegradable masks．The travel mugs containing extract from barley waste is yet another example of by－product upcycling．
－BOTTLOOP used social media and offline activities to help Corona share its innovative ocean conservation solutions with more sustainability－minded partners and lead its upstream and downstream partners to form a sustainable ecosystem

100＋创軗ゆIU
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## Participation Year 2022



## Technology／Product／Service

MZPACK is a low－carbon and environmental protection material packaging supplier，focusing on degradable and inorganic or biobased materials，such as PLA，PMU，PBS，PGA，etc． The company also develops unique packaging for customers by altering the materials＇ properties，thus helping its customers reuse the plant waste generated in the production of their products

## Pilot Introduction

Through technology optimization and innovation，MZPACK replaced existing plastic materials with bio－based materials or plastic－free materials，and expanded the use of such products to all Budweiser China brands and other products．

## Highlights

－MZPACK optimized the bio－based materials by blending biodegradable materials such as PBAT，PPC，and PLA， and altering the properties，significantly increasing the ductility，adhesion，and strength of the modified material．
－Through technological optimization and innovation， MZPACK developed a bio－based wrap film that could degrade by up to $\mathbf{9 5 \%} \%$ in 180 days and had a carbon footprint $\mathbf{7 6 \%}$ lower than that of conventional PP plastic．
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## PROTAIN

普诺汀

Participation Year 2022


## Technology／Product／Service

Protain＇s upcycles the by－products in traditional food processing by turning them into new raw materials for healthy foods，plant－based foods and functional foods．Protain produces a variety of plant－based raw materials for foods and offers personalized design and customized services according to user needs，as well as solutions for different application scenarios．

## Pilot Introduction

Based on Budweiser China＇s highly stable raw materials and application scenarios， the pilot aimed to optimize the extraction of protein from spent grain in a laboratory environment to investigate the effects of raw materials and different fractions on protein yield．The project validated the optimized formula for making mayonnaise from protein extracted from spent grain，and eventually obtained a mature scheme．

## Highlights

－Protain optimized its protein extraction technology for spent grains，which increased the protein yield from $40 \%$ to $56 \%$ and reduced the production cost by $50 \%$ ．Eventually，the company got a mature scheme for an optimized formula of mayonnaise made from spent grain，and planned to apply for 2 patents
－Unlike other similar products，Protain＇s formula used plant－ based ingredients with higher protein content and lower cholesterol，making it more popular with the health－conscious youth and more suitable for the elderly．
－The upcycling of spent grains also increased economic value
for tens of times．According to preliminary estimates based on market prices，if 1 kg of spent grains is made into chips，it can return a revenue of about $\$ 100$ ，while the revenue would be about $\mathbf{\$ 5 1 . 4}$ if it is made into mayonnaise．
－Working with Budweiser China on the pilot，Protain optimized its mayonnaise formula and accelerated the process from the lab to the pilot stage．The collaboration also helped Protain broaden its proft model from its original B2B model to a B2B＋B2C model，increasing the sale and brand partnership for Protain chips and mayonnaise，with revenue estimated to reach $\$ 2$ million in 2023.


## III. Systemic Innovation Lab

- Systemic Innovation Methodology
- R.I.S.E. Sustainable Fashion Lab
- Plastic Reduction Innovation Lab



## Our Services

## III. Systemic Innovation Lab

- System Innovation Methodology
- R.I.S.E. Sustainable Fashion Lab
- Plastic Reduction Innovation Lab

To drive changes for sustainability in the fashion industry, Impact Hub Shanghai launched the R.I.S.E. Sustainable Fashion Lab, aiming to co-create with brands, manufacturers, and retailers through "Insight" , "Connection" and "Advocacy" to help the industry transition into its sustainable future. To promote a positive and interactive experience between brands and consumers, we established the RERISE Sustainable Fashion Consumption Guidance Platform, making the fashion industry more Rational, Inclusive, Smart and Eco-friendly.


## Our Services

## III. Systemic Innovation Lab

- System Innovation Methodology
- R.I.S.E. Sustainable Fashion Lab
- Plastic Reduction Innovation Lab

To reduce plastic waste, improve its recycling efficiency and increase the valuecreation from recycling, Impact Hub Shanghai launched the Plastic Reduction Innovation Lab, aiming to provide systemic innovative solutions to plastic pollution problems through value chain co-creation.


The process of value co-creation for retrieving plastic in the nature

## Systemic Solution

## Budweiser China x Vegatex



# IMPACT 

 HUBShanghai


