Universal Materials Incubator Co.,Ltd.

ESG Report 2025

～UMI's Challenges with a View Toward Practicing Impact Investments ～

July, 2025

Message for Stakeholders

Date July, 2025

Thank you very much for reading Universal Materials Incubator Co., Ltd.'s ESG Report. As the Representative Director, I am pleased to be able to report on the path that we have taken and the challenges we will face, to all of you who believe that we can create the future together.

UMI became a signatory to the UN Principles of Responsible Investment (PRI) and began ESG (environmental, social, and corporate governance) investments in 2021. Since then, we have been actively investing in companies that have innovative technologies and business models, with a particular focus on "sustainable growth through the resolution of environmental issues." In the environmental field in particular, we have achieved results in numerous projects that have realized both social impact and economic returns, for example in areas such as renewable energy, recycling, decarbonization technologies, and green materials.

UMI's investment targets are not only in Japan, but extend to regions throughout the world, including North America, Europe, and Asia. Entrepreneurs and managers overseas who share our approach take on the challenges of global issues with UMI's support, and generate impact that transcends geographical regions. All of the investment targets are actively oriented toward global rollout, and UMI supports that growth from the perspective of technologies, management, and markets.

These types of cross-border collaborations are proof that UMI functions not merely as a provider of capital, but as a partner in value creation. Together with investment target companies, we share a vision for resolving social issues, and work toward the realization of a sustainable future.

Moving forward, we will further expand the scope of our ESG investments, and strengthen our commitment to "impact investments." In the case of impact investments, social and environmental outcomes are clearly measured, and investments are made with the goal of achieving those outcomes. UMI qualitatively and quantitatively evaluates how the businesses targeted for investments contribute to society, and shares value with investors through transparent information disclosure.

In this report, we will introduce the results of UMI's ESG investments, prospects for impact investments, and the future that we are aiming for, along with specific case studies. UMI's goal is to create investment opportunities that resolve social issues and support sustainable growth, and to continue being an attractive partner for institutional investors.

We believe that with the power of investments, we can change society. I am confident that those changes will come back to your portfolios in the form of reliable outcomes.

I hope that you will keep a close eye on the challenges UMI takes on in the future, and that we can build a sustainable future together.

木場祥介

Table of Contents

Our Vision

To strengthen Japan's technological capabilities by fostering outstanding material and chemical companies, and cultivate an industry structure that can compete in the global arena

Our Mission & Value

01

Seek out exceptional technologies and technologists

Draw attention to exceptional technologies and technologists in the material and chemical fields, and actively seek out those technologies and technologists that will contribute to Japanese industry in the future.

02

Provide appropriate equity investment and management support

Contribute to the creation of new business by providing equity investment and appropriate management support to foster promising and technologies and technologists.

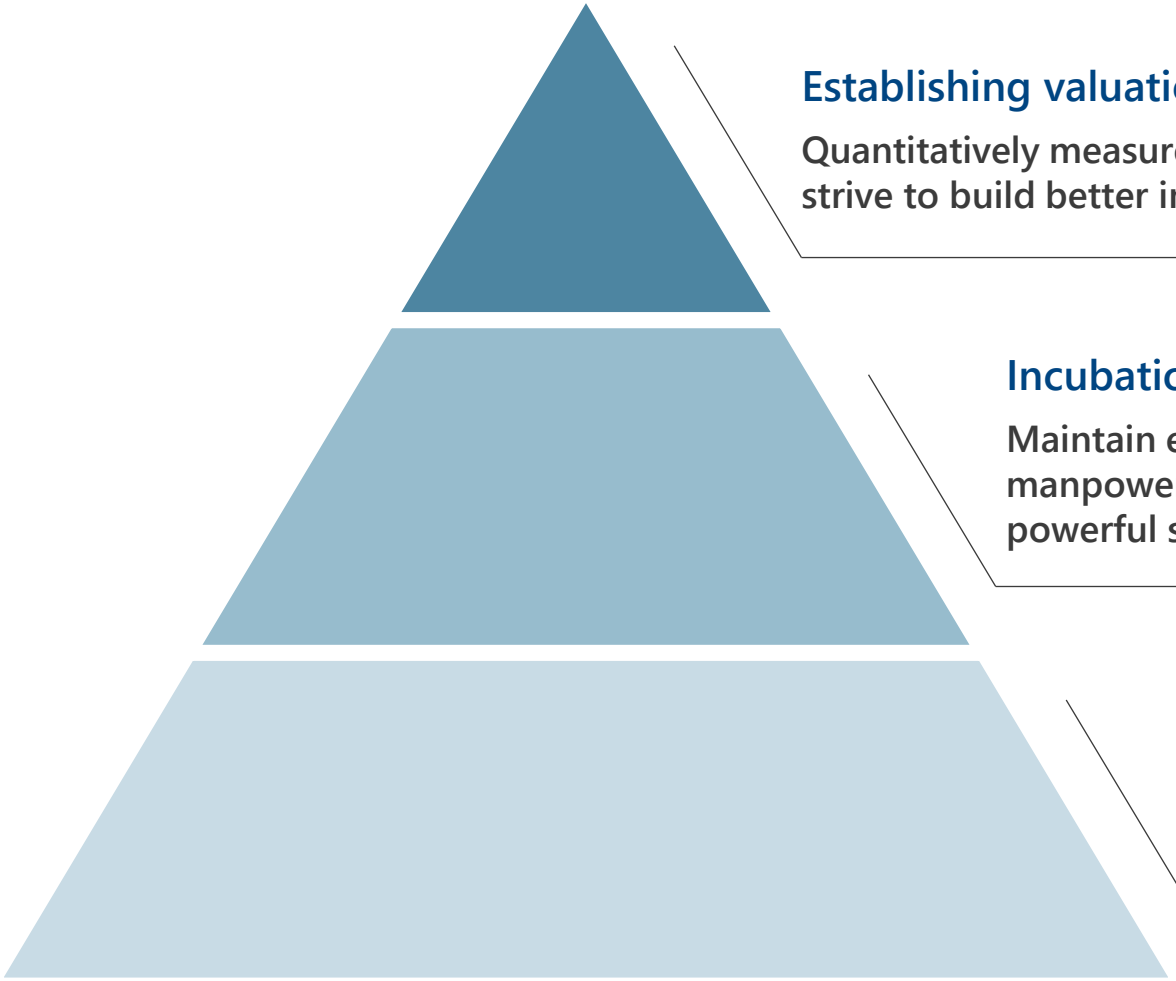
03

Guarantee sustainability for new business

Create new businesses through IPOs and M&As involving existing companies, establish new industry structures, and guarantee sustainability for new business.

UMI's Challenges ～The Practice of Impact Investments～

- We strive to offer various types of support, including capital support, for startups with technologies that bring about positive effects for the environment, and to increase the scale of those startups.
- With the cooperation of investment target companies and other stakeholders, we strive to establish valuation methods in impact investments.



Establishing valuation methods for impact investments

Quantitatively measure positive impact on society and the environment, and strive to build better investment portfolios

Incubation base @Kawasaki City

Maintain environments required to strengthen facilities and manpower that tend to impede increases in scale, and provide powerful support for startups

Establish various funds

Provide capital support through investment activities, which are the core functions of Venture Capital

UMI's Challenges ～The Practice of Impact Investments～ : ①UMI Ⅲ, Decarbonization Fund

Date July, 2025

- The UMI III Fund was established in October 2022, and the UMI Decarbonization Fund, a sister fund to the UMI III Fund, was established in January 2023.
- The Decarbonization Fund, which includes the Decarbonization Tokyo Fund, is specialized in the decarbonization field, and is scheduled to track the results of actual GHG emission reductions.

Total Commitment	UMI Ⅲ 10.01 billion JPY UMI Ⅲ Decarbonization 2,310 million JPY UMI Ⅲ Decarbonization Tokyo 1,010 million JPY
Structure	Investment limited partnership
General Partner (GP)	Universal Materials Incubator Co., Ltd.
Limited Partner (LP)	**UMI Ⅲ** 17 major materials/chemical companies 2 financial institutions **UMI Ⅲ Decarbonization** 5 major materials/chemical companies 2 financial institutions

Established	UMI Ⅲ October7, 2022 UMI Ⅲ Decarbonization January 1, 2023 UMI Ⅲ Decarbonization Tokyo September 15, 2023
Duration	October 6, 2032 (Possible duration would be until October 6, 2034)
Number of Companies for Investment	UMI Ⅲ 10 companies UMI Ⅲ Decarbonization 4 companies
Investment Stage	Mainly early/middle

UMI's Challenges ～The Practice of Impact Investments～ : ①UMI Ⅲ, Decarbonization Fund

Date July, 2025 | 8

- The UMI III Fund promotes investments with a particular focus on three key technologies in the decarbonization field: (1) Reducing GHG emissions on the energy supply side; (2) Reducing GHG emissions on the energy demand side; and (3) Recovering and absorbing GHGs.
- In addition, we promote investment activities aimed at achieving impact to resolve a variety of social issues and issues related to people's lifestyles.

Portfolio	Field	Outline of business	Relevant SDGs
CN Chemetry	Decarboni-zation	High-efficiency chlor-alkali electrolysis technology ((2) Reducing demand GHGs)	
CN EF Polymer	Decarboni-zation	A super absorbent eco-friendly polymer from agriculture residue (EFP) Manufacturing ((2) Reducing demand GHGs)	
Puraffinity	Environment/ Energy	Unique PFAS separation and removal solutions	
CN JEPLAN	Decarboni-zation	World First PET bottle chemical recycling with mass production ((2) Reducing demand GHGs), (3) GHG recovery/ absorption	
CellFiber	Life Science	High density, high-quality cultures for cellular medicines in gel tubes	

Portfolio	Field	Outline of business	Relevant SDGs
CN iPEACE223	Decarboni-zation	Green propylene utilized by New Catalyst Technology	
Ac Planta	Decarboni-zation, Food/ Agriculture	Bio-stimulant agent bringing out the drought/heat toughness of the plants	
LiSTie	Decarboni-zation	Ultra-high purity lithium recovery tech	
Allied Carbon Solutions	Environment/ Energy	Developing and producing sophorolipids—a natural surfactant	
Scimplify / COCREATE GLOBAL TECHNOLOGIES	Industry Platforms	Full-stack platform for specialty chemicals	

Universal Materials Incubator Co.,Ltd.

(Ref.) UMI I Fund

Date July, 2025 | 9

- The UMI I Fund, which has a scale of 10 billion yen, has executed investments in 12 companies.
- As of July 2025, UMI had achieved exits for seven of these companies and is steadily increasing the value of portfolio companies.

Portfolio	Field	Outline of business	Relevant SDGs
五稜化薬株式会社 Goryo Chemical	Life Science	Navigation drugs using functional dyes for cancer	3, 9
EXIT JITSUBO	Life Science	Low-cost peptide synthesis system	3, 9
EXIT Lightnix	Life Science	Plastic intradermal injection devices for vaccination	3, 9, 12
Tsubame BHB	Environment/ Energy	Flexible and eco-friendly ammonia synthesis system	7, 9, 13
Arzeda	Environment/ Energy	Data driven protein design platform	9, 13
EXIT Carbon Fiber Recycle Industry	Mobility	Carbon fiber recycling by traditional Japanese furnace technology	9, 12, 13
EXIT Green Earth Institute	Environment/ Energy	Bio-foundry	7, 9, 12, 13
SoPros	Life Science	Microalgae-based PUFA	3, 9, 14
EXIT Advanced Material Technologies	Electronics/ IT	Monocrystal PZT materials for semiconductor	9
tiem factory	Environment/ Energy	Transparent and designable Aerogel for heat insulation	9, 11, 13
EXIT micro-AMS	Industry Platforms	Microwave thermo-plastic forming	9
EXIT (Undisclosed)	Environment/ Energy	Low environmental impact adhesives	9, 11, 13

Universal Materials Incubator Co.,Ltd.

(Ref.) UMI II Fund

Date July, 2025 | 10

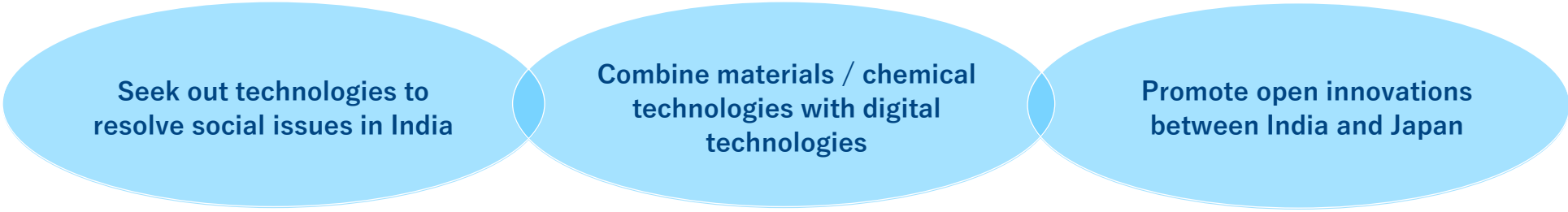
- The UMI II Fund began operations in April 2019, and has executed investments in 17 companies. It focuses on three main fields: CO_2 reductions, water treatment, and food.
- It has also expanded investments to include overseas venture companies demonstrating high value in collaborations with Japanese materials and chemical companies.

Portfolio	Field	Outline of business	Relevant SDGs
bitBiome	Life Science	Microbe single-cell genome analysis platforms	3, 9
Alphatech	Food/ Agriculture	Low-cost α-milling technology for food application	2, 9
Citrine Informatics	Industry Platforms	Materials Informatics	9
EXIT Boost Biomes	Food/ Agriculture	Rapid, highly accurate microbe "swarm" search technology	2, 9
Stera Vision	Mobility	FMCW-based high accuracy LiDAR	9, 11
BMG	Life Science	Innovative medical adhesives	3, 9
Green Culture	Food/ Agriculture	Development of plant-based meats using original database	2, 9
Spiber	Environment/ Energy	Comprehensive structural protein optimization technology	9, 13, 14

Portfolio	Field	Outline of business	Relevant SDGs
Industrial Microbes	Environment/ Energy	Production of C3 chemicals using microorganisms	9, 12, 13
EXIT Aromyx	Food/ Agriculture	Smell/taste quantitative evaluation technology	2, 9
PaMeLa	Life Science	Objective pain quantitative measurement system	3, 9
Aquafortus Technologies	Environment/ Energy	New Zero Liquid Discharge (ZLD) water treatment system	6, 9, 13
EXIT MicroInnovators Laboratory	Electronics/ IT	Lead-free thin film monocrystal platforms	9
Numat	Environment/ Energy	Full stack solutions platforms for MOFs	9, 13
Tsubame BHB	Environment/ Energy	Flexible and eco-friendly ammonia synthesis system	7, 9, 13
Polyuse	Industry Platforms	3D Construction Printing	9, 11
Connexx Systems	Environment/ Energy	Reuse Battery System for Energy Storage System	7, 9, 13

UMI's Challenges ～The Practice of Impact Investments～ ：②The India UTC Fund

- In collaboration with 3one4 Capital, a top VC company in India, we are currently considering a Fund designed to resolve social issues in India by building a comprehensive IT-based supply chain in the rapidly growing Indian market and in the production industry, which is the field of specialization for the Japanese materials industry.
- Its main focus will be on future creation in three fields: Energy conversion, semiconductors and quantum, and the manufacturing industry. We will make targeted investments in fields expected to see substantial growth in India over the next ten years.



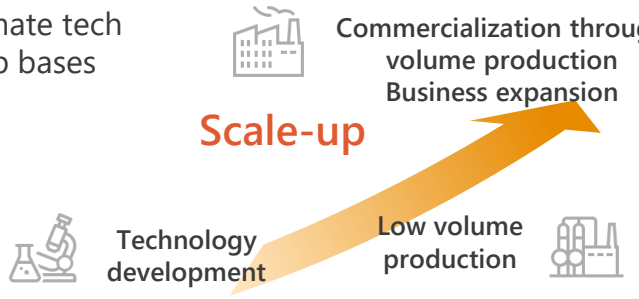
Operating company	3ONE4 CAPITAL / Universal Materials Incubator Co.,Ltd.
Total Commitment	$[40]M
Duration	[10] years (extended [2] years)
First close	October 2025

Investment field	Environment/Energy, Food/ Agriculture, Electronics/ IT
Investment region	India
Investment Stage	Pre Seeds - Series A
Number of investing companies	[13-14] Companies

- In terms of forming an industrial base in Minamiwatarida, Kawasaki City, we have completed an agreement on mutual cooperation targeting the realization of an "Industrial base that will change the world through materials."
- In addition to providing capital support through investment activities, we will offer strong support for startups and maintain environments required to strengthen facilities and manpower that tend to impede increases in scale.

■ Incubation base in Kawasaki City (scheduled to start in 2027)

Equip society with climate tech
Aim to build scaled-up bases



■ Strategic concepts

- ✓ Focus on Climate Tech x Increased Scale
- ✓ Accommodate one-stop operations, from early stages to volume production, to create new business from cutting-edge materials and innovative material manufacturing processes
- ✓ Support data-driven approaches to technology development and business creation

Minamiwatarida (waterfront) offers high affinity with other domains, and holds cross-field potential in terms of industry, manufacturing, and resource management

Mobility/transport field	Energy field	Food/agriculture/ land use field	Industry, manufacturing, resource management	Architecture field	Financial services
• Shift to multi-materials • Develop storage batteries • JFE Steel establishes position in the reduction of vehicle weight	• Aggregate seaboard facilities and lay hydrogen pipelines • Collaborate with regions in Ogishima accepting hydrogen • Develop and store new energy (e.g., sustainable aviation fuel (SAF), synthetic fuels)	• Collaborate with Tonomachi in the use of biotech • Demonstrate affinity with plant factories that do not use agricultural land • Collaborate with Higashi Ogishima, which has many logistics bases and is close to consumption regions	• Develop low-GHG materials as alternatives to existing materials • Research production processes with high energy and resource efficiency • Build cyclical models to enable the recovery and recycling of materials, and collaborate with Mizue recycling base	• Develop new materials to reduce carbon emissions from construction materials and construction processes • E.g., storage batteries that increase the efficiency of power and heat storage in buildings	• Coordinate financing and investments in climate tech

Source: Created by UMI based on Kawasaki City materials

Materiality

- UMI has identified six material issues based on its corporate vision and mission and its responsibilities as a venture capital company.

Our Vision

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Our Mission

Seek out exceptional technologies and technologists

Provide appropriate equity investment and management support

Guarantee sustainability for new business

Our Materiality

Provide venues where diverse talent can be active, and tie this into the discovery of outstanding technologies and engineers

Introduce appropriate evaluation methods to measure the quantitative impact of new technologies on society

Reduce risks and create opportunities by strengthening governance

Provide risk money and appropriate management support to startups that resolve social issues

Build global networks that support continuous growth for startups, and make comprehensive investments through all stages

Create social impact through sustainable investments with Climate Tech as the main target, and build an ecosystem that gives rise to "unicorns"

Climate change	LCA	Improving energy efficiency (reducing energy use)
Pollution prevention	Reducing waste (circular economy)	Resolving water shortages

Materiality

- We will categorize six identified materialities according to 17 SDGs, and increase our commitment by clarifying UMI's key fields.

	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS
Create social impact through sustainable investments with Climate Tech as the main target, and build an ecosystem that gives rise to "unicorns"					●			●		
Climate change								●		
Reducing waste (circular economy)							●			
Pollution prevention							●			
Improving energy efficiency (reducing energy use)			●					●		
LCA (Life Cycle Assessment)							●	●		
Resolving water shortages		●								
Reduce risks and create opportunities by strengthening governance									●	
Provide risk money and appropriate management support to startups that resolve social issues										●
Build global networks that support continuous growth for startups, and make comprehensive investments through all stages					●					
Provide venues where diverse talent can be active, and tie this into the discovery of outstanding technologies and engineers	●			●		●				
Introduce appropriate evaluation methods to measure the quantitative impact of new technologies on society					●					

Impact generated by investment targets (Companies that have achieved notable results from the perspective of achieving SDGs)

Bitbiome

- Contributes to the realization of a bioeconomy by contributing to decarbonization, a recycling-oriented society, and medical innovations using “bit-MAP®,” a single-cell microbe genomics technology, as a core technology. bit-MAP is the world’s first technology that can accurately read the genetic information of microbes, which could not be analyzed in the past.

✓ **The “bit-QED” platform seeks out and improves enzymes that contribute to bio-production, and controls a wide range of energy consumption by increasing the efficiency of enzyme reactions.**

BMG

- Develops and manufactures biomaterials such as bio-absorbable polymers and high-functioning adhesives for medical applications, contributing to next-generation medical technologies and people’s health.

✓ **LYDEX, a medical adhesive characterized by strong adhesiveness and flexibility, enables effective post-surgery management and greater safety than in the past, bringing about innovations to medical technology.**

Polyuse

- As the only venture company in Japan with a team of consultants and a three-pronged development environment that can handle materials, hardware, and software, Polyuse develops technologies and provides services specially designed for the construction industry, with a particular focus on 3D printers for construction applications.

✓ **By using digital technologies and 3D printers, reduces labor, increases operating efficiency, and shortens work time, to respond to serious labor shortages and increasing infrastructure maintenance and construction the construction industry.**

Impact generated by investment targets (Companies that have achieved notable results from the perspective of achieving SDGs)

Allied Carbon Technologies

- Manufactures and sells sophorolipids, a natural surfactant that is 100% plant derived and produced by yeast.
- In addition to high surface activity and biodegradability, it contributes to a human- and environment-friendly society through biofilm removal effects from original technologies.

- ✓ Antibacterial characteristics contribute to promoting human health
- ✓ Participating in reconstruction work in Ukraine

Ac-Planta

- Develops and sells “Skeepon,” an acetic acid biostimulant that strengthens the resistance of various plants to high temperatures and drought.
- Supports sustainable agriculture even amid climate change using epigenetic mechanisms backed up by academic theses.

- ✓ Dramatically reduce water usage volumes in agriculture, and reduce farmers’ labor in watering crops
- ✓ Economic impact of 4x to 20x or more from increased yield with a spraying cost of $100/acre

Arzeda

- Through “Intelligent Protein Design,” which combines AI and physically based design technologies, creates innovative proteins and enzymes that do not exist in the natural world, to provide solutions to diverse industries, including food and healthcare.

- ✓ Reduces environmental burden in the manufacture of food and materials by improving the functions of industrial enzymes, contributing to climate change countermeasures

Impact generated by investment targets (Companies that contribute to reducing GHG reductions)

Tsubame BHB

- Develops production systems and catalysts that enable small-scale ammonia production at lower temperatures and lower pressures than in the past
- Contributes to the proliferation of green ammonia in a variety of fields, including fertilizer and industrial applications, using technologies that overturn common understanding of “concentration and high-volume production"

✓ **By introducing green ammonia fertilizer and replacing conventional fertilizer (gray urea), Tsubame BHB has achieved GHG emission reductions of 10,000t-CO2/yr.**

JEPLAN

- Manufactures/sells recycled PET resins through a chemical recycling process that recycles recovered PET bottles and PET fibers with high purity at the molecular level
- Reduces wasteful consumption of resources and energy through recycled materials with roughly the same quality as virgin materials derived from petroleum, contributing to a sustainable recycling-oriented society.

✓ **The introduction of JEPLAN’s chemical recycling process reduced GHG emission volumes by 26,605t-CO2/yr.**

EF Polymer

- Manufactures an eco-friendly Super Absorbent Polymer (SAP) that is completely biodegradable, created from orange peels and other agricultural residue using original science.
- Resolves global water shortages caused by drought.

✓ **Use of EF Polymer’s SAP reduced GHG emission volumes by 10,807 ton-CO2/yr.**

Impact generated by investment targets (Companies that contribute to reducing GHG reductions)

CONNEXX SYSTEMS

- Develops EnePOND®, a stationary battery that incorporates used EV batteries and applies an original Bind Battery technology.
- By using used EV batteries as is, dramatically reduces ESS (Energy Storage System) manufacturing costs, and contributes to the proliferation of ESS.

✓ **By applying used EFV batteries, strives to dramatically reduce GHG emissions during the manufacturing of lithium-ion batteries in comparison to existing ESS.**

Industrial Microbes

- Has technologies for designing microbes that create products from methane, ethane, CO2, and other GHGs with the same quality as chemicals and materials derived from petroleum.
- Achieves both cost advantages and GHG absorption by replacing regular sugars with less expensive biogases as raw materials for microbial fermentation.

✓ **Using bioethanol as a raw material, strives to dramatically reduce GHGs by replacing petroleum-derived chemicals.**

iPEACE223

- Leveraging zeolite catalysis technologies, manufactures fuel (LP gas) and chemical raw materials from bioethanol, which was considered difficult in the past, to provide green fuel and green chemicals
- The greatest contribution to CO2 reductions comes from eliminating the process of cracking naphtha derived from crude oil.

✓ **Aiming for the proliferation of chemicals and fuels derived from bioethanol, to reduce emissions of GHGs generated through the naphtha cracking process.**

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