

LIMEX & Material Circulation

Global Sales

Tom Nunomura

2023.02

T B M

Company Overview

Company Name	TBM Co., Ltd.
Established	August 2011
Address	15F Toho Hibiya Building, 1-2-2, Yurakucho, Chiyoda-ku, Tokyo, JAPAN
CEO	Nobuyoshi Yamasaki
# of employees	286 (as of December 2022)
Capital Stock	Approx. \$200 million (Including legal capital surplus)
Business	Develop, manufacture, and deliver ecological materials, and material circulation business

Major Shareholders

- Aderans Company Limited
- ITOCHU Corporation
- Goldman Sachs
- SK Japan Investment Inc.
- SBI Holdings, Inc.
- Sanyo Chemical Industries, Ltd.
- JR East Start Up Co., Ltd.
- SHIMA SEIKI MFG., LTD.
- Shinsei Corporate Investment Ltd.
- Spotlight 1
- SETTSU WAREHOUSE Co., Ltd.
- Dai Nippon Printing Co., Ltd.
- DCM Holdings Co., Ltd.
- DIP Corporation
- Dentsu Group Inc.
- Toppan Inc.
- Nihon Kolmar Co., Ltd.
- FRANCE BED HOLDINGS CO.,LTD.
- MITSUBISHI PENCIL CO., LTD.
- Musashi Paint Holdings Co., Ltd.
- YAKUODO Co. Ltd.
- Yodobashi Holdings Co.,Ltd.

Awards

- Plug and Play 2016 “New materials and package” (US)
- Stevie Awards Asia Pacific 2017 (ASIA REGION)
- COOL JAPAN AWARD 2017 (JAPAN)
- US Japan Innovation Award 2017 ” Innovation Showcase company “ (US)
- Red Dot Design Award 2018 (GERMANY)
- EY Entrepreneur Of The Year 2019 Japan (JAPAN)
- 100 Best Industrial Innovations for International Technology Transfer (CHINA)
- Golden Pin Design Award 金點設計獎 2021 (TAIWAN)

What we do

TBM is developing a sustainable circular business model with ecological new materials “LIMEX”.
We aim to reduce virgin material usage and accelerate material circulation.



An aerial view of a city skyline at dusk, featuring several modern skyscrapers with illuminated windows and balconies. The sky is a deep blue, and the city lights are visible in the background.

World population expected to reach
9.7 billion by 2050



51 % of the world's population
could be at high water risk by 2050



Plastic production to increase

3.1 - times by 2050

compared to 2018



LIMEX

What is LIMEX?

LIMEX is an inorganic filler composite material mainly made of limestone. It can be used as **plastic and paper alternatives**.



Limestone
(Inorganic Materials)



Plastic Resin



LIMEX is patented in over 40 countries

Why limestone?

Abundant natural
resource worldwide

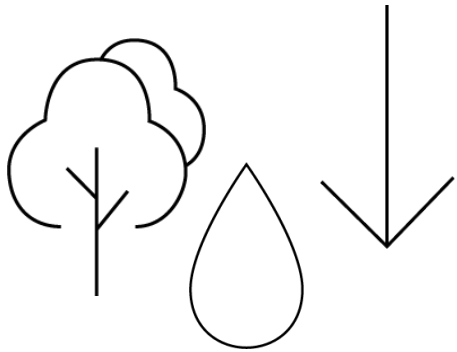


Advantages in
CO₂ emissions

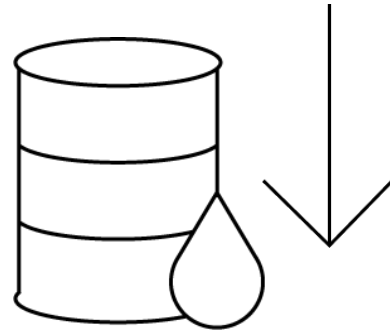
Economical and low
volatility

Limestone

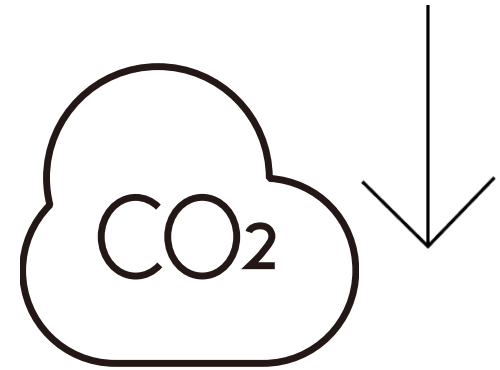
Benefit of LIMEX



**Save forest
and water**



**Reduce
Plastic**



**Reduce
Greenhouse Gas**

LIMEX is delivered to over 10,000 companies



Shopping bag
(Haneda Airport)



Plastic Toy model
(BANDAI SPIRITS)



Hanger
(Mainetti)



Secondary Packaging
(ISDG)



Backlit Signage
(MOS Burger)



Flexible Packaging
(AST Corporation)



Hotel Amenity
(JTB Trading)



Cosmetic Packaging
(Kemas)



Drink Cup
(Wakayama Adventure World)

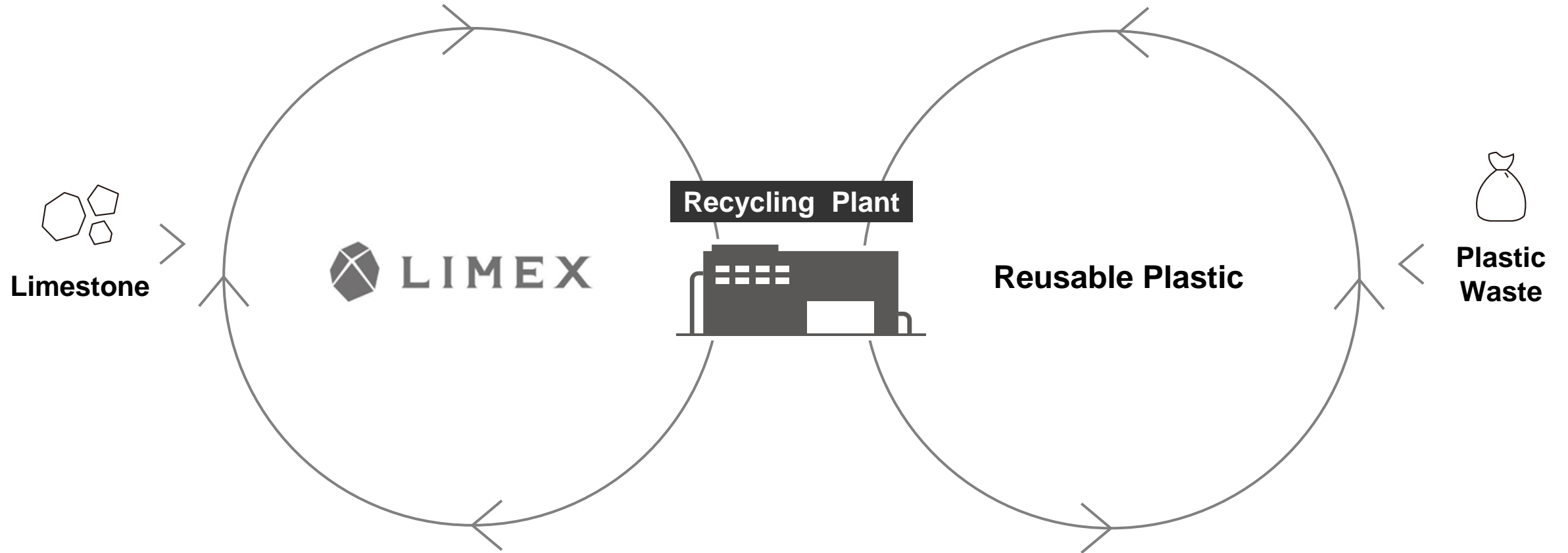


Flower Label
(Watahan)

The logo features the words "MATERIAL" and "CIRCULAR" in a bold, white, sans-serif font, separated by a large, stylized, light gray "X". The "X" is formed by two overlapping, slightly curved shapes. The entire logo is centered within two thin, light gray circles that overlap each other, creating a central intersection where the "X" is placed. The background is a dark, textured blue with a subtle pattern of small white specks, resembling a starry sky or a fine-grained material.

MATERIAL X CIRCULAR

TBM's Circular Business Model



Recycling Plant for LIMEX & Plastics

TBM launched a LIMEX & plastic recycling plant in Yokosuka City, Japan, to meet the growing demand of recycling.



Annual processing capacity:

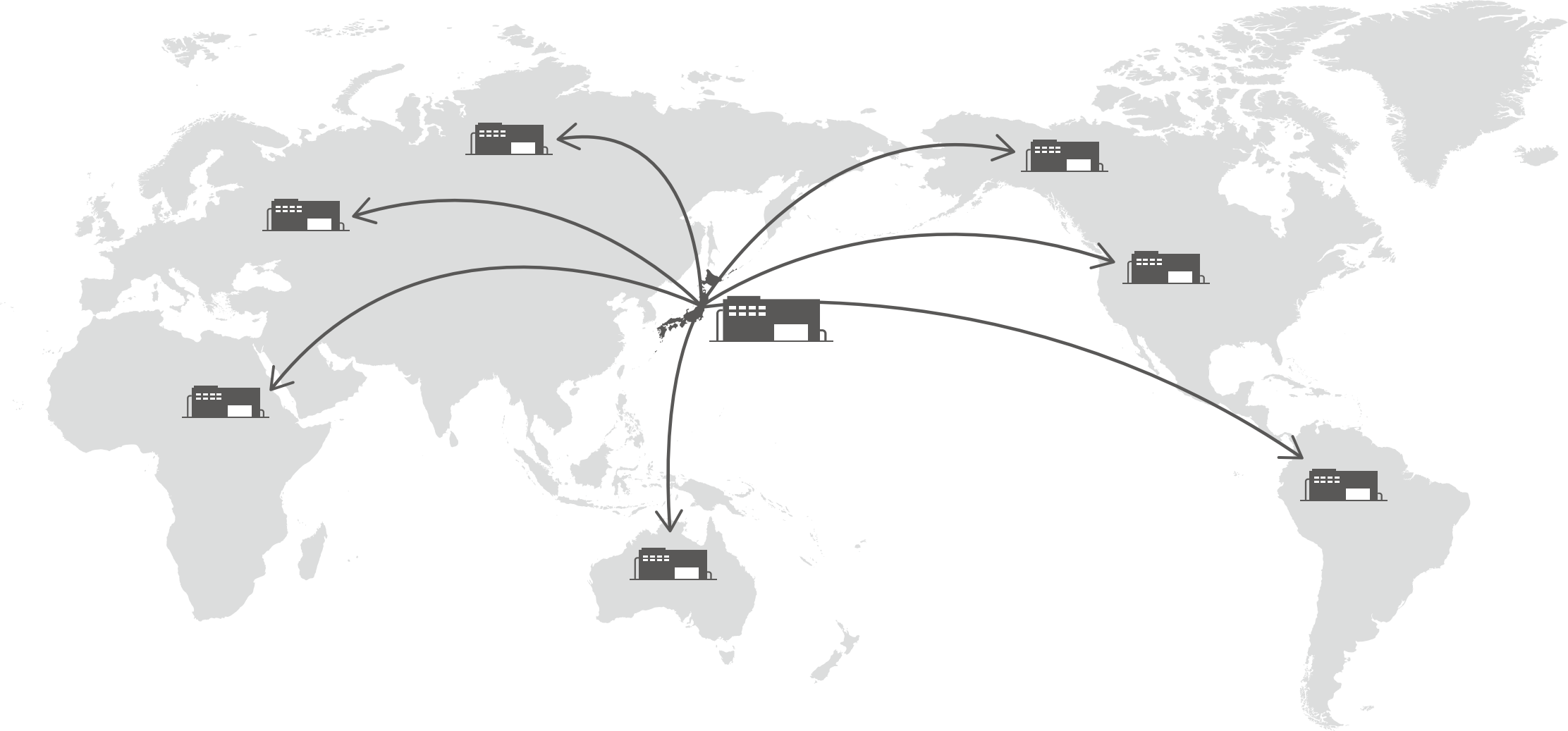
approx. **40,000** tons

Production capacity:

approx. **24,000** tons of recycled pellets



We will expand our circular business model globally



We want to connect with....

- **Companies interested in using LIMEX for their products in African and European countries.**
- **Companies that we can collaborate to build a material circulation system in African and European countries**

T B M

Times Bridge Management

We will realize the “Sustainability Revolution”

Our future we want doesn't just come.
No matter how we predict the future, the future we want will not come.
Only when we take on a challenge with strong will to create the future, we can reach the future we want.

We have experienced the agricultural revolution, industrial revolution, and digital information revolution. The AI revolution is coming next. So, what is coming after these?
We believe, the “Sustainability Revolution” is coming ... moreover, we have to make it happen. It is our mission to lead the next coming revolution.

Nobuyoshi Yamasaki,
Representative director, CEO

Thank you for listening

Visit our corporate site for more information!



<https://global.tb-m.com/>

My e-mail: t-nunomura@tb-m.com



Countries not producing paper

75 countries

Track Record of LIMEX Closed-loop recycling

Used LIMEX products (park guides and cups) were collected and recycled into trays for use in the park's bakery and employee cafeteria



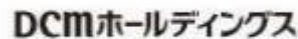
Our History

- 2008 ○ Yamasaki started importing stone paper made in Taiwan
- 2010 ○ Started developing a unique technology that is different from the stone paper
- 2011 ○ Established TBM Co., Ltd.**
- 2014 ○ Registered the basic patent for LIMEX
- 2015 ○ 1st plant started operation in Shiroishi-city, Miyagi prefecture
- 2016 ○ Launched LIMEX as a paper alternative**
- 2018 ○ Launched LIMEX as a plastic alternative**
- 2019 ○ Started overseas business development**
- 2020 ○ Launched CirculeX (recycled plastic)
- 2021 ○ 2nd plant started operation in Tagajo-city, Miyagi prefecture
- 2021 ○ Established TBM VN Co., Ltd. in Hanoi, Vietnam**
- 2022 ○ 1st recycling plant started operation in Yokosuka-city, Kanagawa prefecture



Fund Development

More than \$200 million from public ministry and private companies.



Korean Conglomerate SK Group

TBM and SK Group agreed on a \$123 million capital and business alliance to accelerate the global expansion of LIMEX.



World-class recognition

LIMEX is patented in over **40 countries worldwide.**



Registered in “STePP”
the sustainable technology
dissemination platform by UNIDO



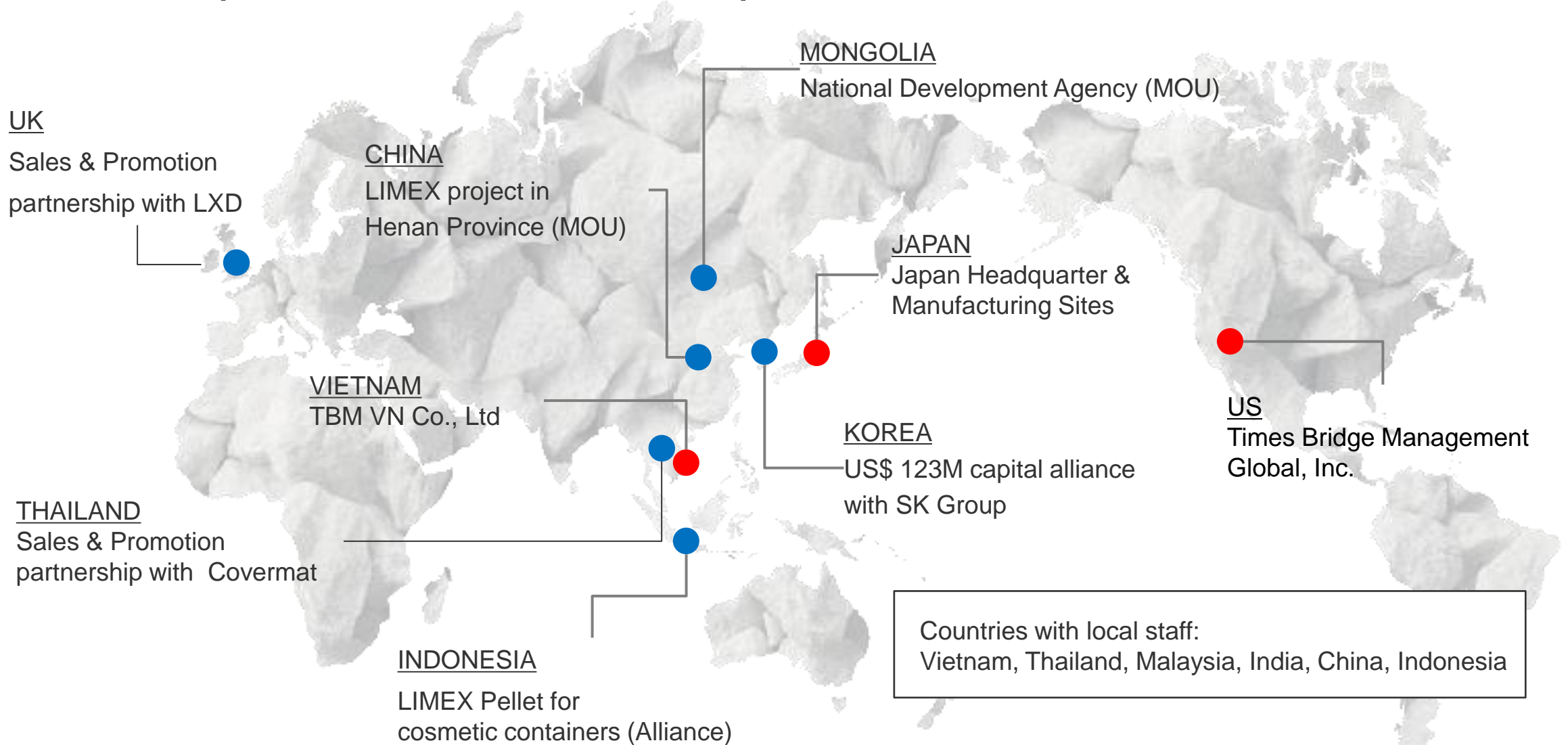
Introduced at COP
as a member of the Japanese
government delegation




Participated at
the G20 Innovation Exhibition

Global Expansion and Partnership

- Office
- Partner / Project



Ambitious mid-term goal “TBM Pledge 2030”



Go Carbon Negative by 2030

We aim for more greenhouse gas emissions reduction than the amount we emit throughout our value chain.



Go Circular

We aim to circulate 1 million tons of LIMEX and plastic in 50 countries.

Development for wider applications

Under Development

Available Application



Construction wall



Toy



Tray



Shopping bag



Menu



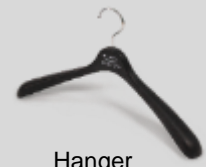
Flower label



Fabric



Pipe



Hanger



Hotel amenity



Flexible package



Bottle



Calendar



Label/Sticker



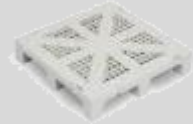
Automotive parts



Logistic



Cosmetic package



construction material



Drink cup / Food tray



Package



Backlit signage



Document folder

Case Study: Food tray

@Rock Field, a major Japanese deli brand



A-PET → LIMEX

- Reduce plastic by approx. **38%** per year
- Reduce CO₂ emissions by approx. **22%** per year
- Can be microwaved

Case Study: Cosmetic packaging

@KEMAS, an Indonesian cosmetic packaging manufacturer



ABS → LIMEX

- Reduce CO₂ emission by **28%**
- Reduce resin usage reduction by **37%**
- Cool and luxurious feeling
- Effective branding story with cosmetic containers made from limestone

Products made with recycled material “CirculeX”

Umbrella

Umbrellas made from CirculeX are delivered nationwide with cross-industry collaboration.



Waste Bag

LAWSON switched waste bags from virgin plastic to CirculeX waste bags made from plastic waste collected from Southeast Asia.

