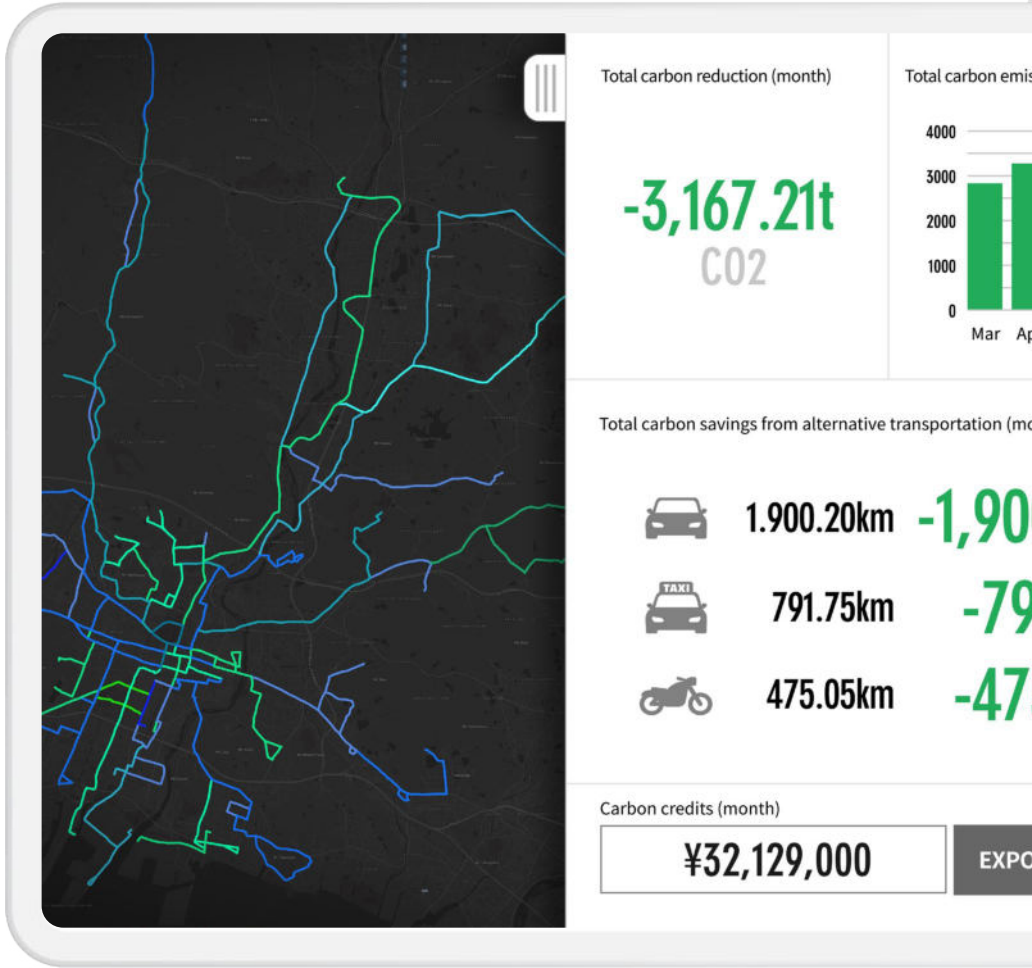
Spatial Pleasure

Data platform for Decarbonizing the transportation sector in City.



Core Members

Spatial Pleasure is a group of professionals
with backgrounds in urban planning, finance, and carbon credit.

CEO

Soma Suzuki

He graduated from Kyoto University with a bachelor's degree in physical engineering and a master's degree in urban spatial analysis from the Institute of Spatial Analysis, University of London, and is the author of the "Cultivating The CityOS" series for Wired Japan.

CTO

Kazuyuki Morishita

After graduating from the University of Melbourne with a degree in Mathematics, Kazuyuki worked in the business analysis department of a U.S. insurance company. He has expertise in MLOps and GIS analysis. Currently, Kazuyuki is responsible for research and development at Spatial Pleasure.

COO

Kotaro Takekata

He joined ITOCHU Corporation which is one of the biggest conglomerates in Japan. Engaged in business development and startup investment in IT and communication related fields. In 2023, joined Spatial Pleasure and lead Business Development and General Corporate Planning.

Data Scientist

Alex Van-brunt

Doctor in Mathematics from Oxford University passionate about sustainability. He is currently working on fuel cells in Silicon Valley. While studying abroad at Kyoto University, Suzuki and he shared a dorm room next to each other.

VP of Carbon Development

Santonu Kashyap

Santonu has worked as an external CDM registration and issuance expert for the UNFCCC (UN) and is currently a methodology expert for the UNFCCC Article 6.4 mechanism. He advised the Government of Maldives on the preparation of the INDC submitted to the Paris Agreement negotiations.

Advisory

Osamu Koyanagi

After joining Development Bank of Japan, he was involved in the management of Japan's first carbon credit investment fund, Japan Carbon Finance(JCF), as the main investor. And later became a board member of Development Bank of Japan.

Advisory

Takashi Oguchi

He is engaged as a professor at the University of Tokyo, where he is the Director of the Advanced Mobility Research Center. He has received Minister of Land, Infrastructure, Transport and Tourism Award of the Industry, Academia and Government Cooperation Contribution.

Sales

Kazuki Fukumoto

Specialized in new proposals, implementation support, operation, and maintenance of systems for local governments. Currently he engaged in the operation and planning of public transport services such as taxies, local buses, and demand limo taxies.

PR Manager

Ikumi Juliana Shiba

She worked as a public relations and cultural officer at the Embassy of Japan in Lithuania, head of PR, marketing and HR/CCO executive officer at Monster Labs Inc, and head of PR and organizational culture at IDOM Corporation's Overseas Corporate Strategy Office.

Writer

Shunta Ishigami

He worked at an advertising production company before joining the editorial department of the Japanese edition of WIRED.In 2017, he became independent and has been involved in editing various magazines and web media, as well as producing corporate content and research.

Business Overview

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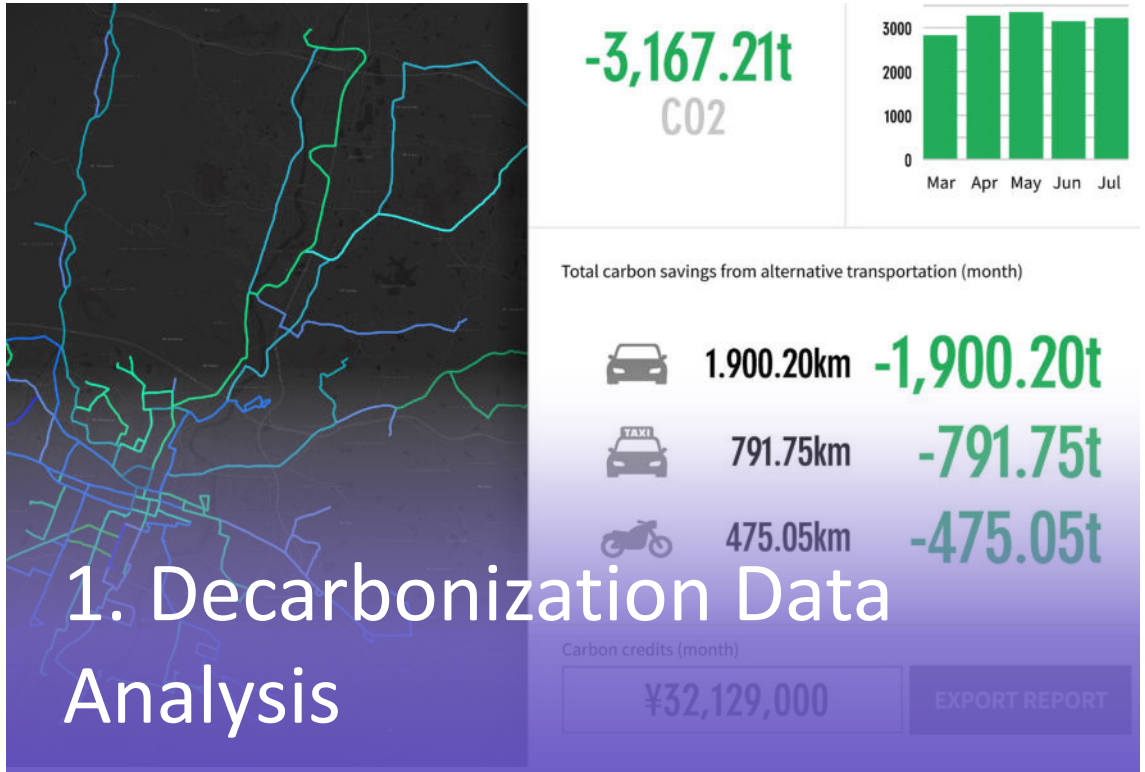
Through the products we are developing, we mainly provide the following value.



1. Decarbonization Data Analysis

In formulating a decarbonization plan, we provide a full range of services, from visualizing current emissions to simulating the effects of measures and developing monitoring dashboards.

2. Carbon Credit Certification Support

Quantify the environmental value of your bus business and support the carbon credit certification process. In addition to revenue from passenger numbers, there is the possibility of generating new revenue streams based on environmental value.

About Carbon Credit

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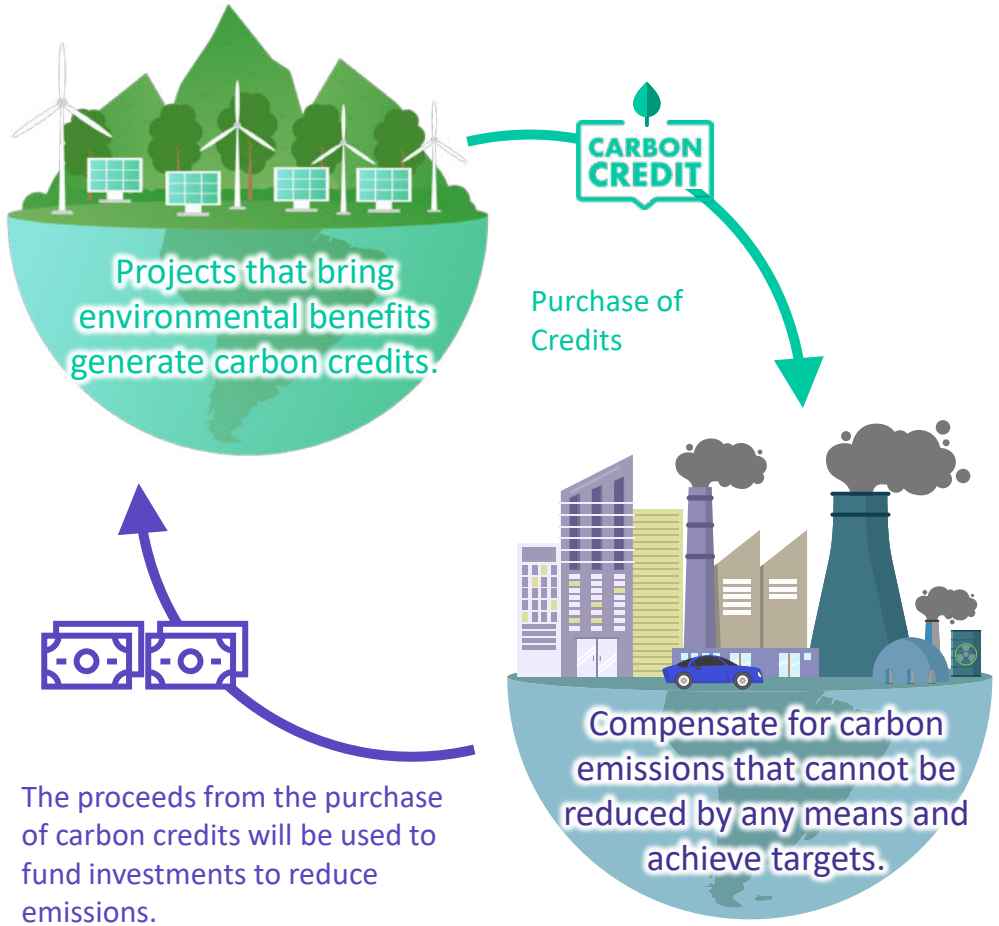
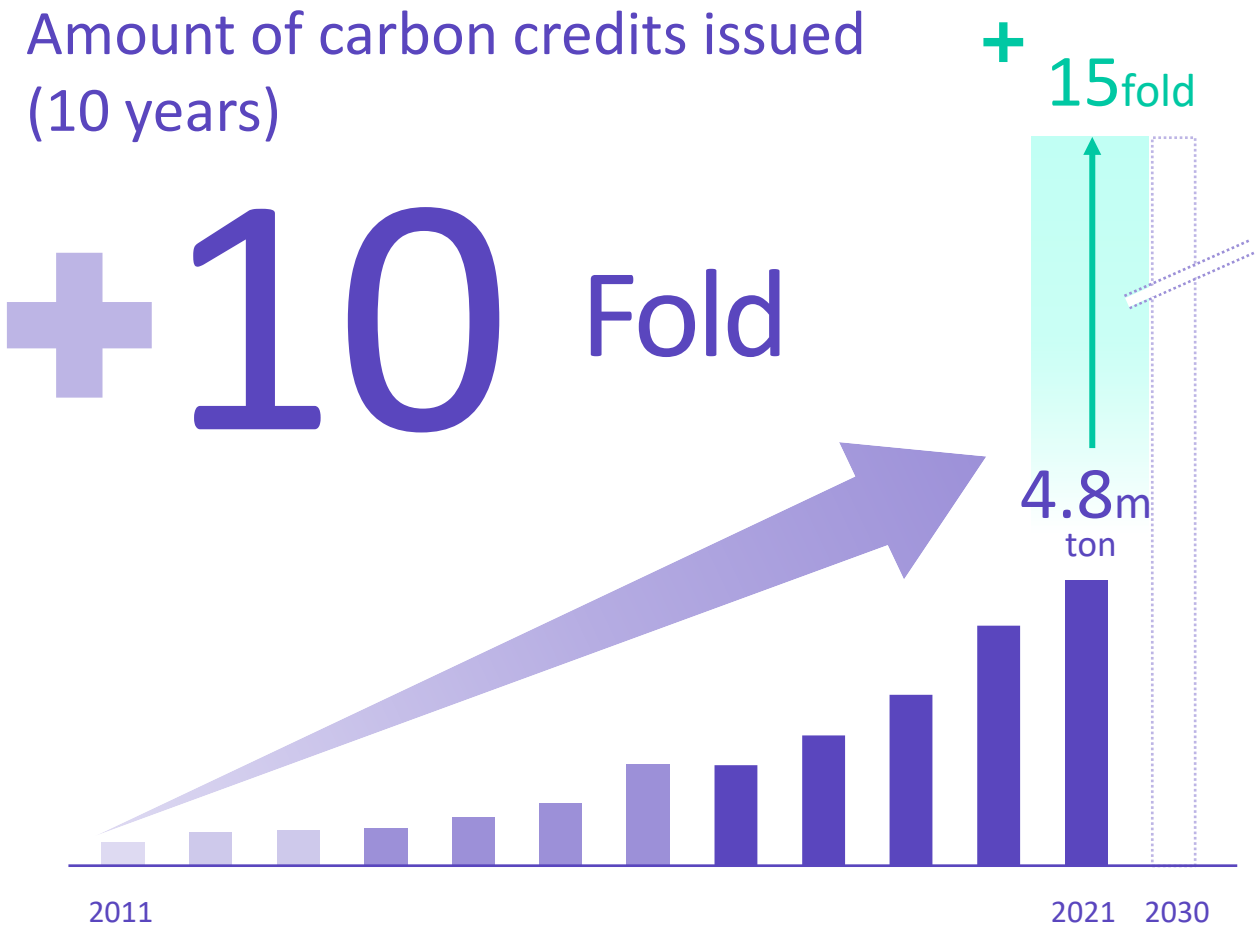
Carbon credits are measurable and verifiable emissions reductions from certified climate projects. These projects reduce, remove, and avoid greenhouse gas (GHG) emissions. That amount has increased tenfold over the past decade and is expected to increase another 15 times by 2030.





Two Types of Shift in Transportation Domain

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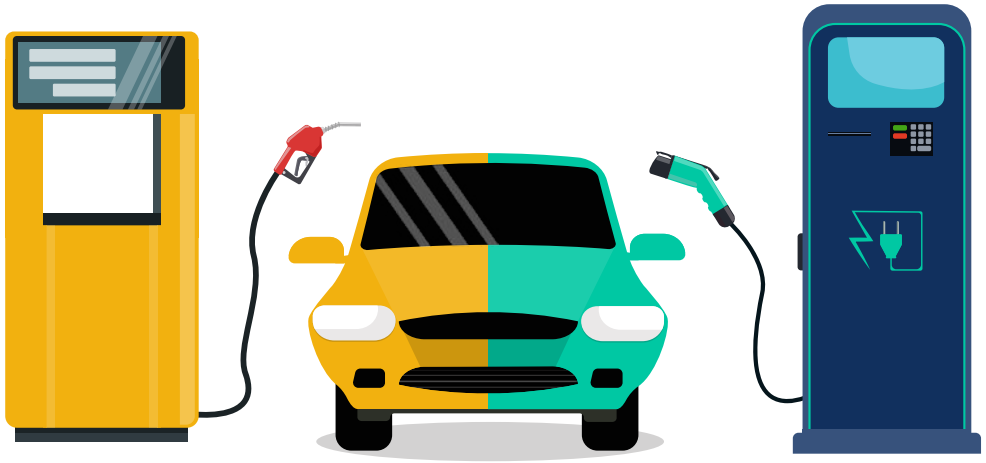
To reduce carbon dioxide emissions in the transport domain, both Energy Shift and Modal Shift need to take place. Energy Shift has received a lot of attention recently, but there has not been much focus on Modal Shift. We focus on the latter.

Energy Shift



Tesla's Carbon Credit Sales

$1.78 Billion

(year 2022)

Modal Shift

World economic forums target 75% global reduction of cars by 2050 but not much effort has put in the area.


MẮT KÍNH
ÁO VIỆT
OPTICALS
THÔNG
CỬA HÀNG CẦM ĐỒ
BÁNH CANH
GIANG CHẸ 2
Hoa Tươi
PHƯƠNG NAM
NHẬN ĐẶT HÀNG QUA ĐIỆN
THUẬN ĐẠO
PHÚ LỘC
53N - 3403
53S - 3865
BX. MIỀN ĐÔNG - PHÀ CÁT LÁI
43
53M-8902
18

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The number of cars are going to double by 2040!

Big Picture

- In Asia, limited public transportation and ineffective policies lead to 3 gigatons of carbon emissions from the transport sector.
- This results in worsening air quality and reduced lifespans due to pollution.
- The anticipated doubling of vehicles further exacerbates these issues, presenting a significant sustainability challenge.

How it Works

- Spatial Pleasure offers data optimization solutions within the transportation sector, aiming to reduce carbon emissions.
- The company aids in certifying carbon credits by leveraging dMRV (digital, Measurement, Reporting, Verification) to validate the carbon reduction achieved through optimization efforts.

Unfair Advantage

- Through data optimization, transport operators and local authorities can enhance efficiencies, while also monetizing the resulting decarbonization benefits as carbon credits.
- Spatial Pleasure is in collaboration with Indonesia's largest urban development project and has an established MoU with the Jakarta Smart City government sector.

Previous Carbon Credit Project

Several transport modal shift projects have been already registerd in the past.

375M USD Estimate
Guatemala City
2012

143M USD Carbon Credit
Zhengzhou, China 2011

172M USD Carbon Credit
Bogota, Colombia
2008

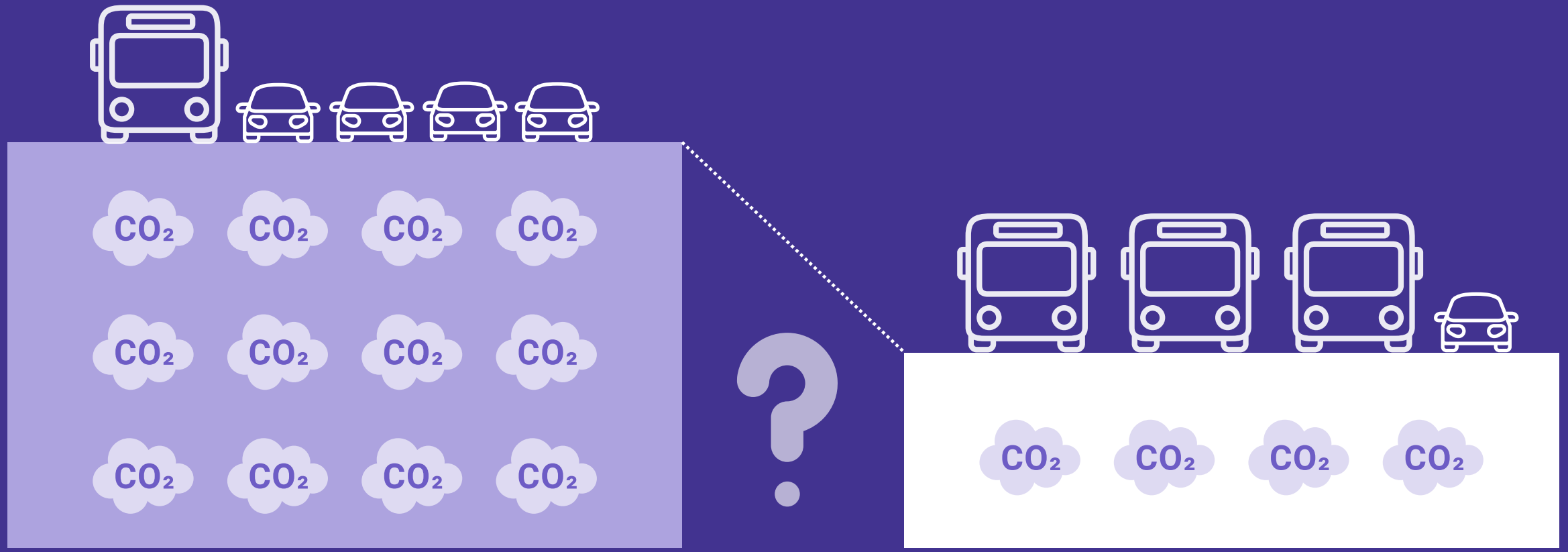
Percentage of transport carbon credit projects

0.2%

Number of certified transport modal shift-based projects, since 2006.

Challenges

Difficult to quantify the benefits of transporta projects.



Our Technology

Combining various data held by transportation operators, public data, proprietary procurement data, etc.,
We have developed a logic for calculating carbon emissions and have a unique technology to analyze it.

Publish or Proprietary Procurement Data

- traffic
- Road Information
- Traveling speed speed limit

Owned by a business operator data

- Vehicle type information
- GPS Info
- IC Cards Usage results
- Lineage Routes
- timetable
- Stop Information

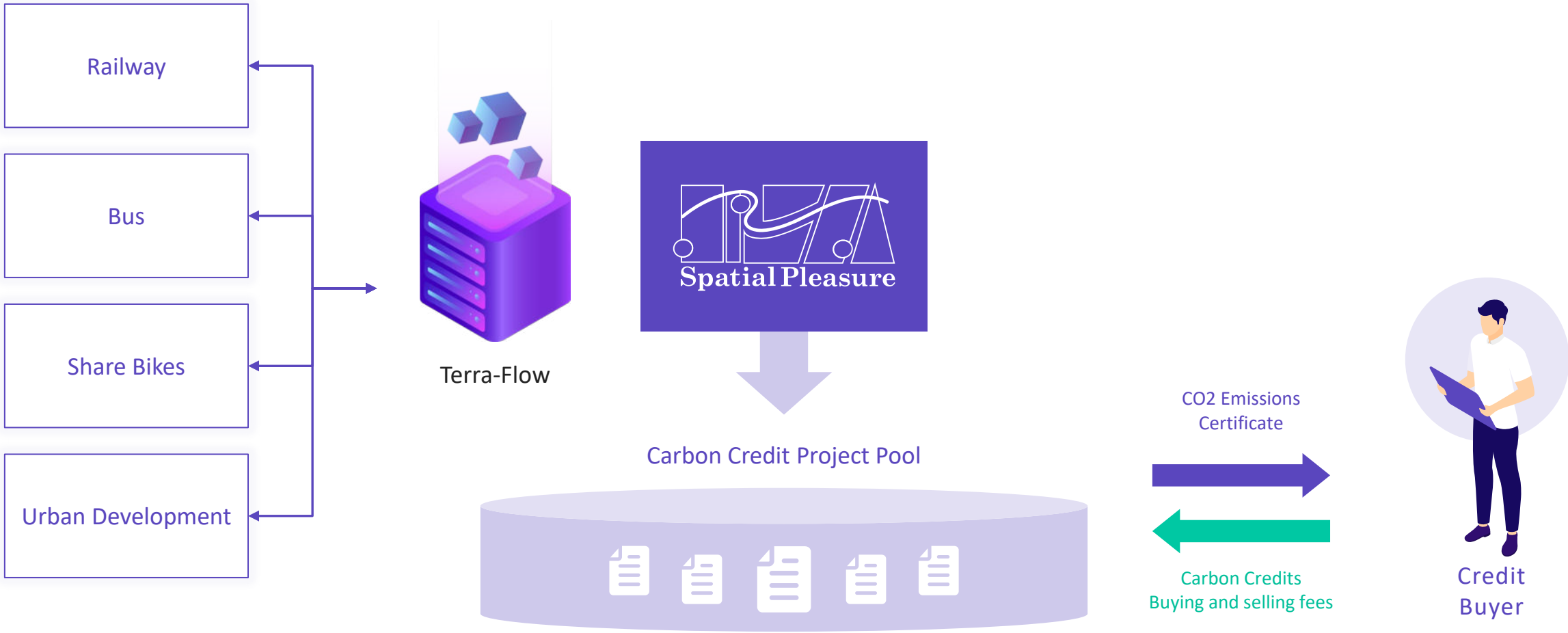
Terra-flow Analysis

Emission Reduction Impact

※データ例はバスのケース

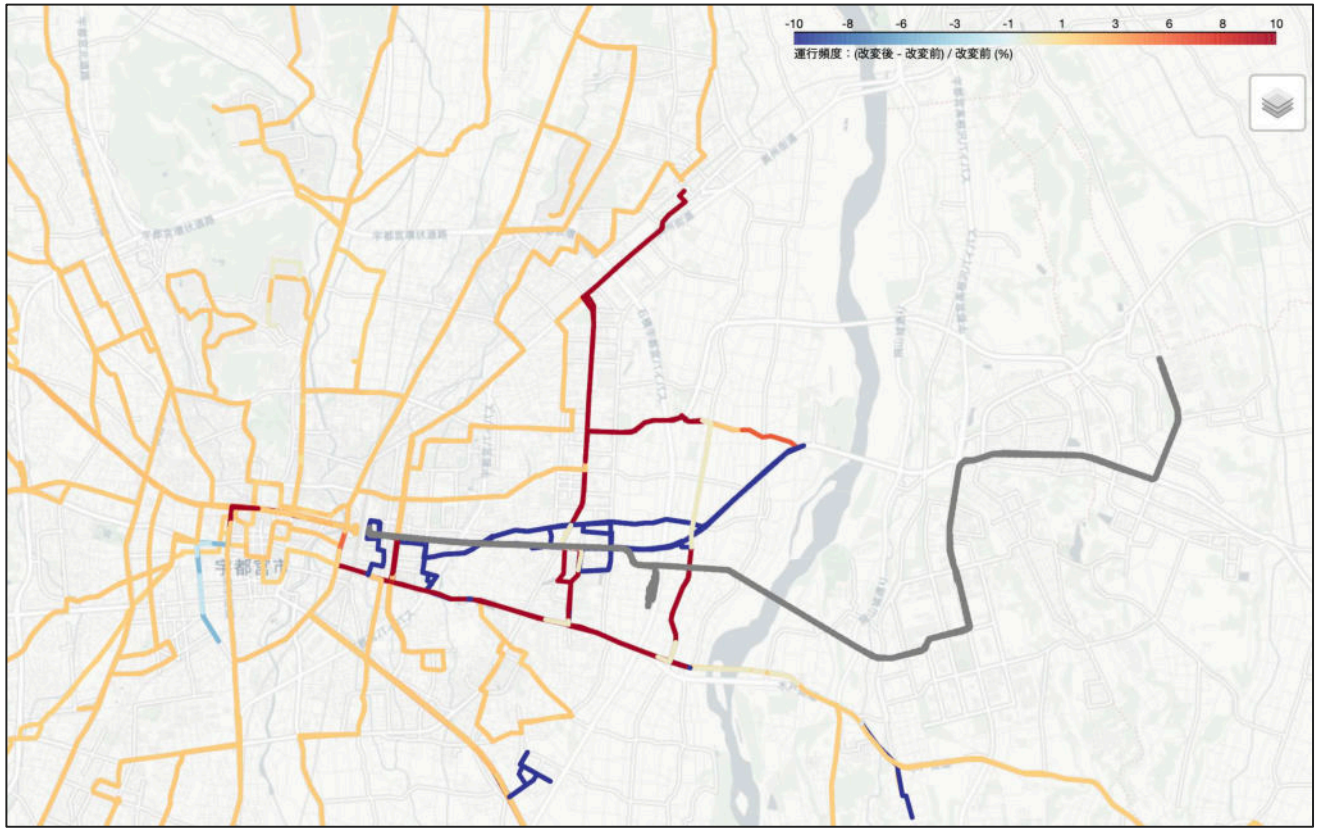
Business Overview

Spatial Pleasure provides analysis solutions to decarbonise the transport domain. We also support the certification process of the carbon credits for the emission reduction impact.



Relevant Achievements

Collaborate with Waseda University to analyze data for the simulation of environmental benefits at the time of the introduction of electric vehicles in Utsunomiya City.



(1) Organizing data for quantitative evaluation of CO2 reduction effects: Organizing data necessary to quantify the environmental benefits related to the introduction of LRT and the reorganization of route buses

(2) Organizing data for optimal route calculation: Organizing data necessary to consider optimal route calculation and schedule assuming demand operation from each LRT station

Relevant Achievements

* The results of this analysis are based on theoretical values.

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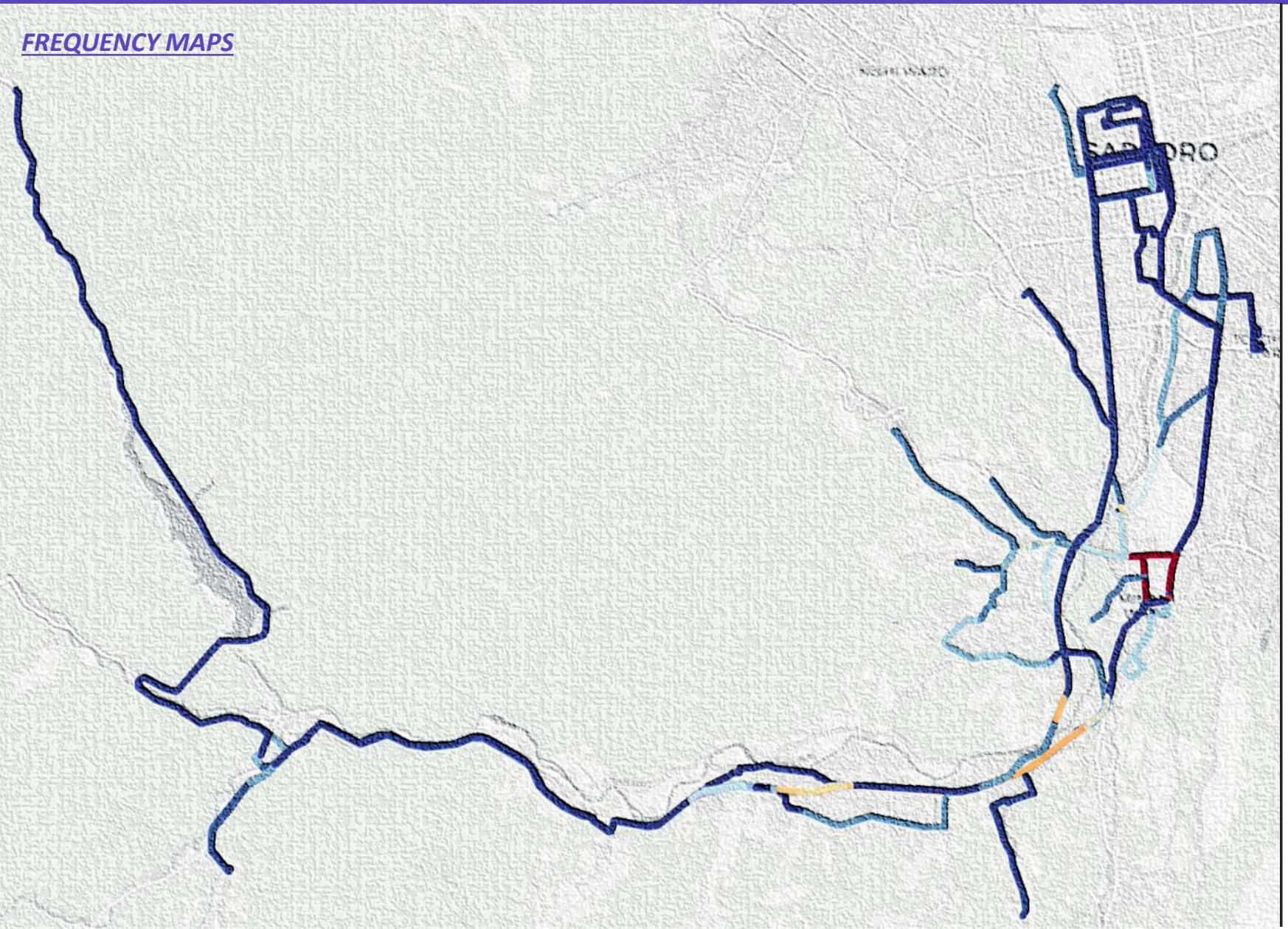
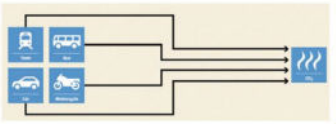
FREQUENCY MAPS

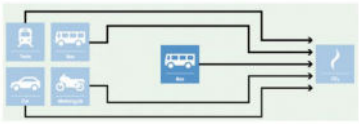


PROJECT OVERVIEW

自家用車やタクシーによる移動が行われる（ベースライン）。



バスによる移動が行われる（プロジェクト後）。



PERIOD

2023年1月1日 ~ 2023年12月31日

TOTAL TRAVEL DISTANCE

4,465,110.14 km

TOTAL BUS CO2 EMISSION

4,552.31 tonnes

ESTIMATED CO2 BASELINE

5,338.70 tonnes

786.38 ton

Relevant Achievements

We are currently developing our business in Jakarta, Jakarta Smart City, Sinarmas Group,
We have agreed to cooperate on the analysis of environmental value.

Jakarta Smart CityとのMOU締結

In May 2023, we signed a Memorandum of Understanding (MOU) with Jakarta Smart City on traffic analysis. Jakarta Smart City is a government-led agency introduced in 2015 and established in 2015 under the Department of Communication, Information, and Statistics of the Jakarta Provincial Government, which aims to solve urban problems by overseeing data across multiple administrative departments. Based on this MOU, we are promoting environmental value analysis in cooperation with various business operators.

環境価値の売買による事業者の支援

In September 2023, we signed a partnership agreement with sinarmas land, a real estate developer of the Sinarmas Group, a major Indonesian conglomerate, and Living Lab Ventures (CVC) to promote decarbonization in urban transportation.
This initiative is a partnership for environmental value analysis and sales of greenhouse gas reduction measures centered on BSD City, an urban development project by the company.

Collaboration with Sinar Mas Land

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Summary

- With BSD Link, for which a methodology already exists in CDM, we aim to build a track record of generating carbon credits and accumulate know-how. Meanwhile, in the future, we will develop new methodologies and pursue large-scale credit generation through optimizing transportation across the entire area.

Phase	Phase 1 : BSD Link	Phase 2 : BSD City	Phase 3 : Other TOD City
Environment Value	Tmodal shift effect of BSD Link.	Congestion mitigation through a traffic monitoring system.	Extending the know-how of BSD City to other TOD cities.
Credit Volume	Small. With only 10 bus vehicles, the scale of credits that can be generated is limited.	Expected to be large.	Expected to be large.
Methodology	CDM: ACM0016 Mass Rapid Transit Projects.	Does not exist.	Does not exist.

Environmental Value of Modal Shift

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Overview

- Although the decarbonization effects of the use of public transportation are generally recognized as an eco-friendly image, efforts to quantitatively evaluate the effects are not sufficient.
- By quantitatively grasping the decarbonization effects of modal shifts, it is possible to create carbon credits according to the amount of contribution, and to persuasively promote the positive impact of the use of public transportation on the environment.
- In this way, we hope to effectively promote the importance and environmental benefits of public transportation, further promote its use, and contribute to the sustainable development of the region.

Image of bus transportation efficiency

Ministry of Environment Smart Drive

Positioning

Carbon credit certification startups concentrate on forests

Pachama

NCX

sustainacraft

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Advantage of Japanese Company

Huge potential to generate Carbon Credit.

Biggest Investor in Asia Transportation sector.

Credit Price is expensive

Description of JCM

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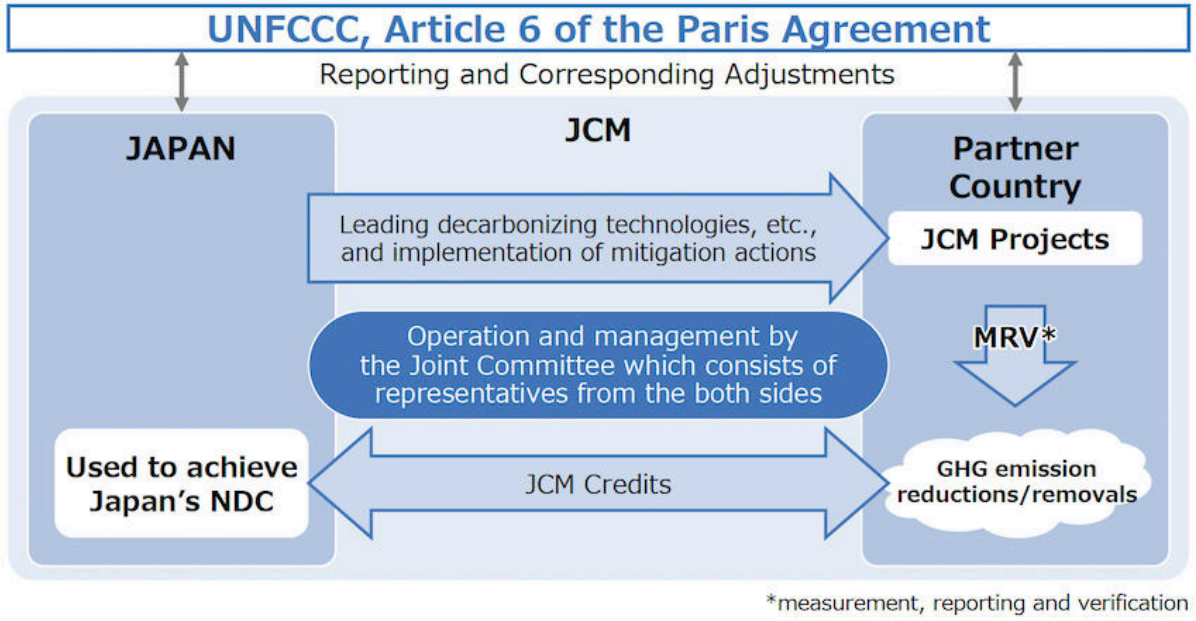
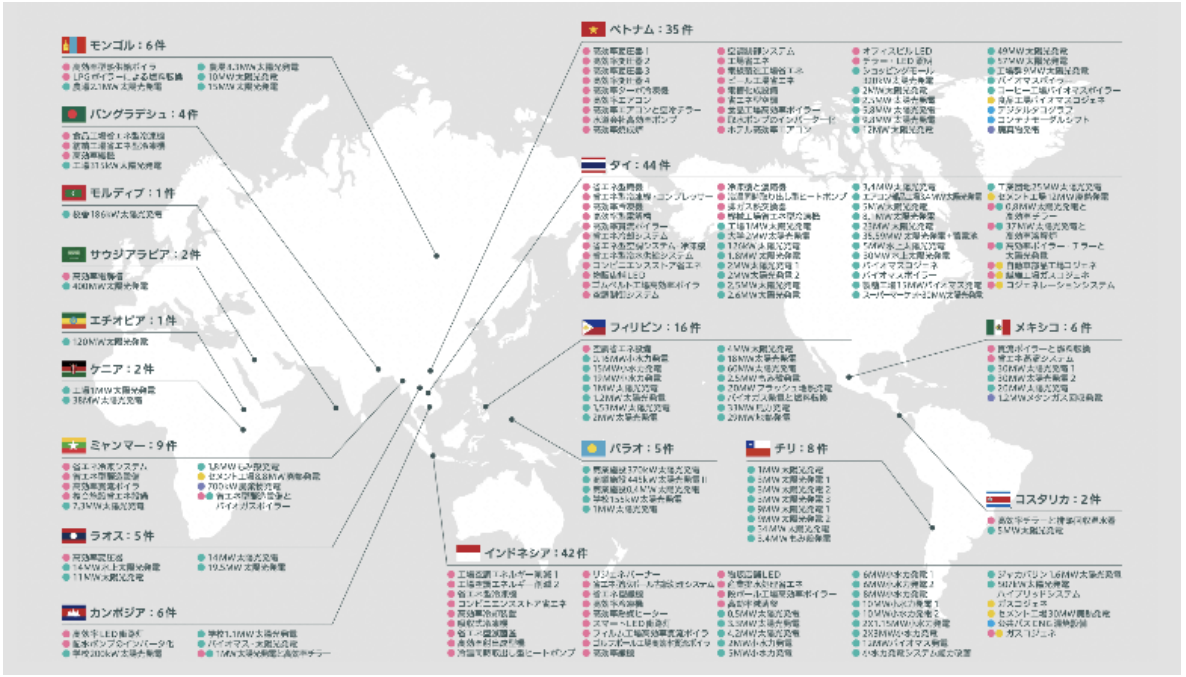
Overview

- The JCM is a system to cooperate with developing countries to reduce greenhouse gas emissions, under which the amount of emission reduction is assessed as a contribution by both partner countries and Japan.
- While the certification process takes a long time (1.5 ~ 2 years), the advantage is that a portion of the credits can be allocated to Japan and sold at higher prices.
- **It is important to note that only the credits allocated to Japan could be traded for Japanese company.**

The JCM scheme between Japan and host country

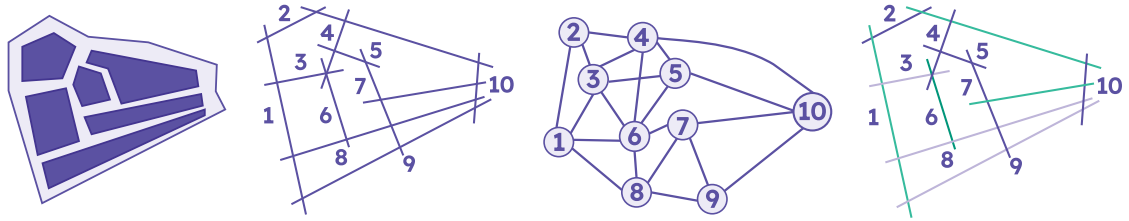


JCM partner country and previous projects



Generate carbon credits from the entire urban structure.

Representing cities as networks and assessing connectivity.



Assess walkability based on proximity to urban facilities.