# 添付資料

#### 現地ワークショップ発表資料

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- 2. 日本工営発表資料
- 3. リョーシン発表資料

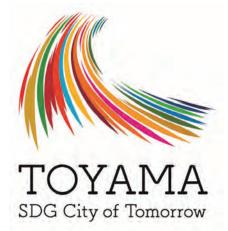
#### 脱炭素・SDGsドミノ会議発表資料

4. 日本工営発表資料

# 現地ワークショップ発表資料

1. 富山市発表資料

# Sustainable Development as an "SDGs Future City"



Nov. 21, 2024 Keiichi KOBAYASHI Deputy Director of Environmental Div.

**TOYAMA CITY** 

What's "SDGs Future City"?

SDGs Future City (2018)

**\*29 cities in Japan** 

"SDGs" was adopted in UN(2015)

Eco-Future City (2011)

**\*11** cities in Japan

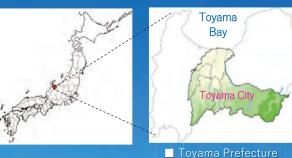
\*Cities that creates new value in the three aspects of economy, society, and environment to solve super-aging, and other issues.

Eco-Model City (2008)

**%23** cities in Japan

\*Cities ambitious working to significantly reduce GHG emissions

# **Outline of Toyama City**



- Population: 404,929 people (7/31/2024)
- Area: 1,241 km²
- Diverse topography ranging from a sea level of -1000m (Toyama Bay) to 2,986m (Mt. Suisho)
- Industries: pharmaceutical, high-tech, robotics, electronic parts, banking



# Toyama's "Compact City" development approach centered on public transportation"

# Conceptual diagram> Toyama's "skewers & dumplings" urban structure

Skewers: Public transportation with a certain

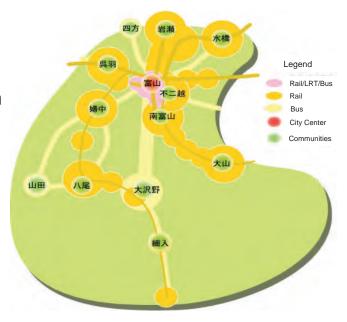
level of service

Dumplings: Walking zones connected by the

sticks

#### <Three pillars for realization>

- 1. Revitalization of public transportation
- 2. Promotion of residential living in areas along public transport infrastructure
  - 3. Revitalization of central urban area

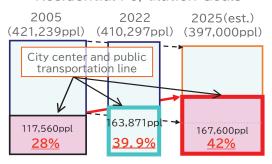


#### 5

#### Promote residents in areas along public transportation lines

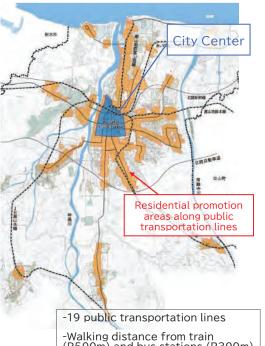


#### <Residential Population Goals>



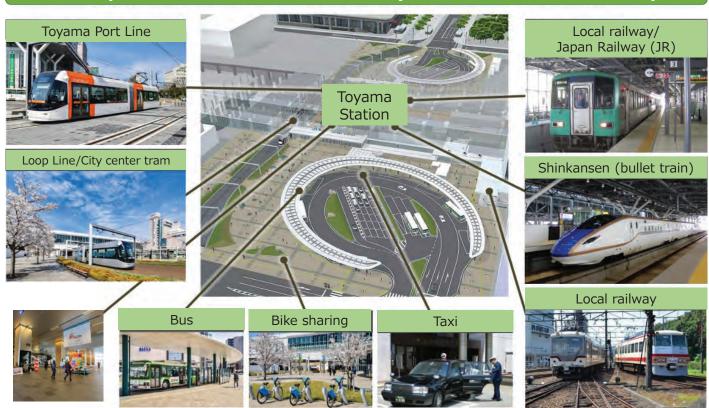
(How to proceed with the promotion)

- 1)58% of the population is assumed to reside outside the designated area
- 2) Based on guidance, not regulation
- 3 Allow people to choose whether to live in the city center or the suburbs
- residential centers

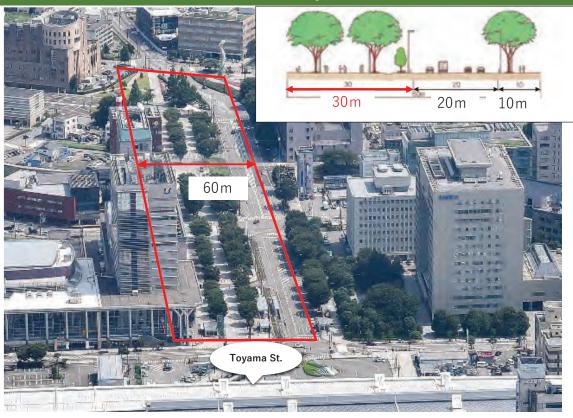


-Walking distance from train (R500m) and bus stations (R300m)

# Transportation terminal that everyone can use comfortably

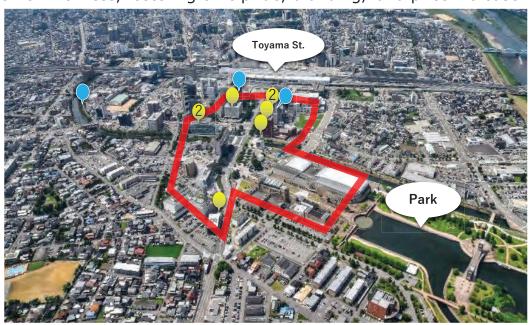


# North area of the Toyama Station



# Collaboration with neighboring companies (2020-)

- ➤ "Boulevard Area Management Toyama" was established in 2020, consisting of 6 companies in the area and the city, for the purpose of creating liveliness and enhancing the value of the area. (5 more companies joined the organization by 2023)
- > Goals: Creation of liveliness, fostering civic pride, branding, land price increase



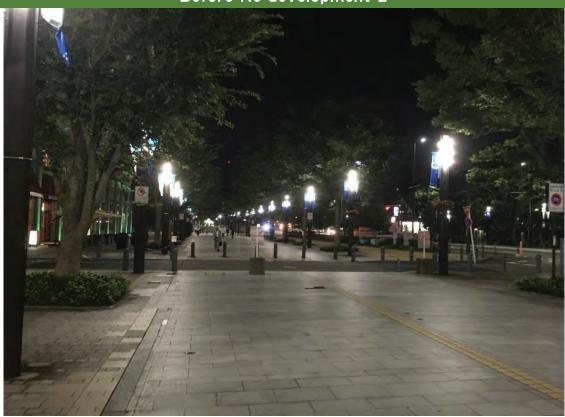
# Before Re-development 1



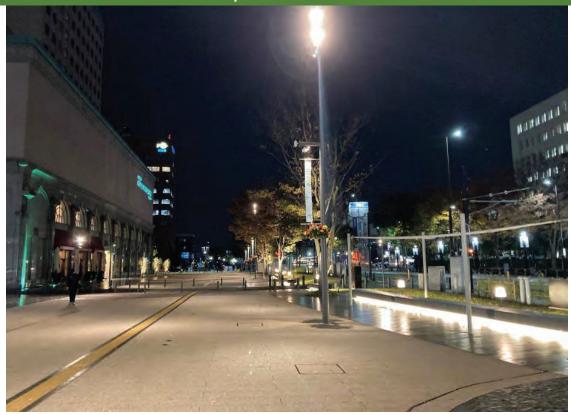
Completion of Zone A



# Before Re-development 2



Completion of Zone A



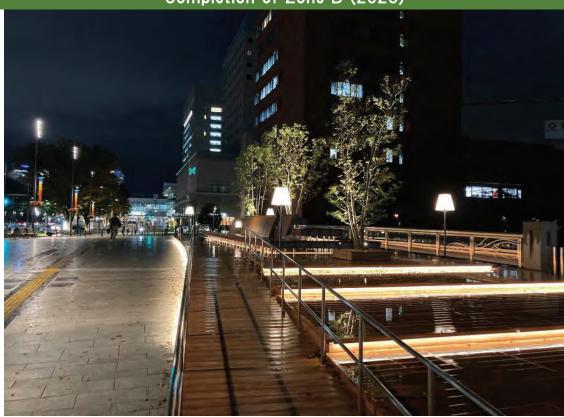
Completion of Zone B (2023)



Completion of Zone B (2023)



Completion of Zone B (2023)



# SDGs Week and Forum(Public Awareness)

("SDGs week" last fiscal year) Period: Jan. 27~Feb. 4 (9 days)

Number of projects: 25(18 city-sponsored, 7 SDGs Supporter-sponsored) \*\*Record high

Contents: Health, education, agriculture, and city development etc.

·At the previous forum, former professional baseball player was invited as a guest to talk with the mayor on the theme of "Sports × SDGs"





#### Spreading SDGs ∼Hands on workshop∼



Making eco-friendly bags by high school students



Vegetable intake check



SDGs board game with Univ. students



Drawing on eco-tumbler



Growing flower by eco-friendly planter



Experiencing boccia

# Human Resource Development (SDG s supporter/communicator)

·SDGs supporter: take the SDGs as their own matter and put them into practice together with the city government





·SDGs Promotion Communicator: spread the SDGs in their community, workplace, etc.





64	109	147	191
64			
2020	2021	2022	2023

# Developing SDGs Board Game









[Sustainable card]

[Crisis card]

[Item card]

The board game will be officially released during the next "SDGs Week"



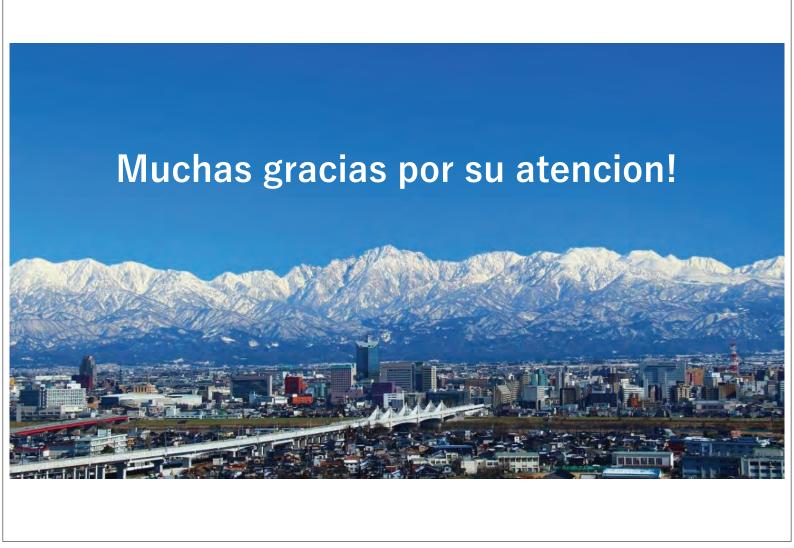
19

Introduction of a Compost Plant in Bali, Indonesia.
Oct. 22, 2024









# 現地ワークショップ発表資料

2. 日本工営発表資料



# **JCM Model Project**

#### Toward Race to Zero of Renca

through collaboration between [Chile and Japan] and [Renca and Toyama]

2024.11.21 SAITO Tetsuya

日本工営株式会社

# 1. Nippon Koei

NIPPON KOEI

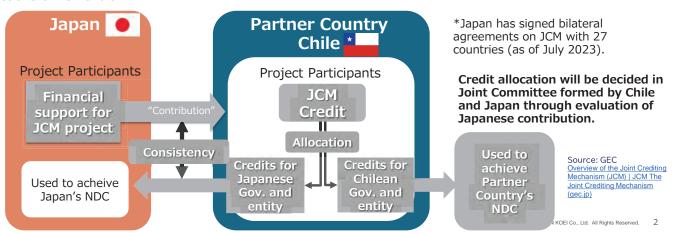


 During 70 years, Nippon Koei has worked on over 5000 multi-disciplinary infrastructure projects in 160 countries all over the world.



#### 2. JCM: Joint Crediting Mechanism

- 1) Facilitating diffusion of leading decarbonizing technologies, products, systems, services and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing and other countries;
- 2) Appropriately evaluating contributions from Japan to GHG emission reductions or removals in a quantitative manner, and use them to achieve Japan's emission reduction target (in accordance with Article 6.4 of Paris Agreement;
- 3) Contributing to the ultimate objective of the UNFCCC by facilitating global actions for GHG emission reductions or removals.



#### 2. JCM: Joint Crediting Mechanism

NIPPON KOEI

	Programme	Type of support		
	Finance Programme for JCM Model Projects*	Subsidy		
	Finance Programme for F-gas Recovery and Destruction Model Projects*	Subsidy		
Ministry of the Environment	Japan Fund for the JCM (JF JCM) - managed by ADB	Grant		
	JCM support programme by UNIDO*	Grant for projects, technical cooperation		
	Project development/capacity building/MRV support	Technical cooperation		
Ministry of Economy,	JCM Feasibility Study	Technical cooperation		
Trade and Industry	JCM Demonstration Programme	Government-commissioned project		
Ministry of	Development of MRV for JCM projects in Agriculture –implemented by ADB	Technical cooperation		
Agriculture, Forestry and Fisheries	Field studies for JCM REDD+	Government-commissioned project		



Ministry of the Environment also finances:

- City-to-city collaboration project to develop JCM projects and share knowledge and experiences
- **Demonstration Project** for Application of New Decarbonizing **Technology**

https://gec.jp/jcm/jp/kobo/r06/mp/20240 2\_JCM\_goj\_en.pdf

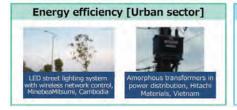
# 2. JCM: Joint Crediting Mechanism

#### NIPPON KOEI













Source: Government of Japan https://gec.jp/jcm/jp/ko bo/r05/mp/20230421\_J CM\_goj\_eng.pdf

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# 3. Important experiences of Nippon Koei especially in Latam

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Coun	Project	Technology	Planned Emission Reduction tCO2- eq./year	Note
Chile	3.4MW Rice Husk Power Generation Project in Maule	Biomass power plant (Organic Rankin Cycle)	8,567	First ORC technology project in Chile
Chile	Energy Supply Project by 2.0MW Rooftop Solar Power System to Industrial Plastic Plant in Renca, Santiago Metropolitan Region	Solar PV	1,180	With <b>Renca</b> support, ESCO model
Mexi co	Introduction of Once-through Boiler and Fuel Switching to Tequila Plant	Once through boiler	3,435	First boiler project in Latam
Mexi co	Introduction of 0.5MW Rooftop Solar Power System to Automotive Parts Factory	Solar PV	392	First JCM eco-lease project in Latam
Indo nesia	Energy Saving for Air-conditioning and Process Cooling at Textile Factory 1	Centrifugal Chiller	117	World first JCM project in 2013
Asia	Geothermal project in Asia	Geothermal	Over 70,000	Largest project

#### 3. Important experiences of Nippon Koei especially in Latam

NIPPON KOEI

3.4MW Rice Husk Power Generation Project in Maule

PP (Japan): Asian Gateway Corporation / PP (Chile): La Gloria S.A

#### Outline of GHG Mitigation Activity

**3.4 MW biomass power plant** is installed in the region of Maule in Chile, which **utilizes the agricultural residue such as rice husk**. The generated power is supplied to an electric company and reduces greenhouse gas (GHG) emissions by replacing the grid power.

In addition, this project prevents air pollution caused by open burning of agricultural residue. By adopting **Organic Rankin Cycle technology**, which requires **less water consumption**, it also contributes to the climate change adaptation regarding low rainfall expected in Chile.

#### **Expected GHG Emission Reductions**

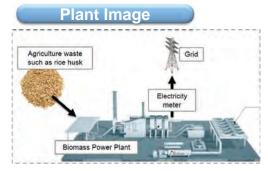
8,567 tCO2-eq./year

#### Sites of JCM Model Project

The project site is located at 347km southwest from Santiago international airport, or 127km northeast from Concepcion international airport.

Map Data @2019 Google





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# 3. Important experiences of Nippon Koei especially in Latam

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Energy Supply Project by 2.0MW Rooftop Solar Power System to Industrial Plastic Plant in Renca, Santiago Metropolitan Region

PP (Japan): Asian Gateway Corporation / PP (Chile): SOLARITY SPA

#### Outline of GHG Mitigation Activity

A 2.0 MW Rooftop Solar Power System is installed at a plastics factory owned by a major company located in Renca, Santiago Metropolitan Region, which has been implementing projects under City-to-City Collaboration with Toyama City since 2020. This project provides the factory with low-cost, clean energy from solar power generation and reduces greenhouse gas (GHG) emissions. Furthermore, this project contributes to Renca's commitment to Race-to-zero.

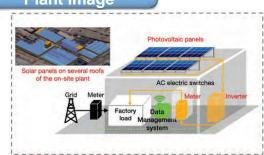
#### Expected GHG Emission Reductions

1,180 tCO2-eq./year

#### Sites of JCM Model Project



#### Plant Image



#### 3. Important experiences of Nippon Koei especially in Latam

NIPPON KOEI

Introduction of Once-through Boiler and Fuel Switching to Tequila Plant
PP (Japan): Suntory Sprits Limited / PP(Mexico): Tequila Sauza S. de R.L. de C.V.

#### Outline of GHG Mitigation Activity

In this project, **Once-through boilers** will be installed instead of the existing fire tube boilers at Tequila Plant in Mexico. This project aims to improve boiler efficiency itself and to reduce the loss when the boilers startup and are low loading.

This project also aims to reduce about 30% CO2 emission by fuel switching from oil to natural gas.



#### **Expected GHG Emission Reductions**

#### 3,435 tCO2/year

by efficiency improvement of boiler and fuel switch

#### Sites of JCM Model Project



#### **Products**



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#### 4. Financial support by JCM Model Project

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## Big changes in JCM Model Project and Article 6 from 2024

- ✓ Over 10 project with similar technology will not be adopted in one country → Solar PV installation project in Chile
- ✓ More time is needed for selection, including process to confirm no-objection from partner countries
- ✓ JCM guidelines will be updated
- ✓ The project durations will be changed
- ✓ More emphasis on SDGs
- ✓ New scheme, Private JCM may enable more types of projects, such as waste, agriculture, blue carbon, etc.

#### 4. Financial support by JCM Model Project

NIPPON KOEI

#### **Maximum Percentage of Financial Support**

Number of previously selected project(s) using a similar technology in each partner country	None (0)		Up to 3 (1-3)		<b>Up t</b> (4-)		<b>Up to 9</b> (8-9)	10 or More
Percentage of	Up to 50%	L	Jp to 40%		Up to	30%	Up to 20%	Not applicable
financial support		Biomass	Solar PV	Ba	ttery			Solar PV
		Power	+ Battery	0	nly			Joial I V

Cost-effectiveness of Emission Reductions of GHGs

Maximum for one project

In principle, JPY4,000/tCO2eq or lower (if 5 to 9 projects using similar technology, JPY3,000/tCO2eq or lower, Hydropower project JPY500/tCO2eq or lower)

Cost-effectiveness of emission reductions of GHG[JPY/tCO2eq]

= Amount of financial support [JPY] ÷ Total emission reductions of GHG(tCO2eq)\*

\*Total emission reductions of GHG = Emission reductions of GHG per year (tCO2eq/y) × legal durable years (y)

\*Amount of financial support(JPY) = Costs eligible(JPY) × Percentage of financial support(%)

#### Budget

JPY 2 billion /project (approx. USD 13 million)

JPY 13 billion (approx. USD 85 million) for projects starting in FY2024

The budget is allocated every year for three years term

#### **Costs Covered by Financial Support**

- Facilities/equipment (including monitoring equipment )
- Main construction work
- Ancillary work
- Machinery and appliances
- Surveying and testing
- Administrative work etc.

Source: Introduction of the Joint Crediting Mechanism (JCM) & Financing Programme for JCM Model Projects (Sept 2024)

#### **Costs Not-Covered by Financial Support**

- Civil engineering work and construction of buildings
- Consumable and maintenance cost
- Facility/equipment which does not contribute directly to emission reduction including back-up, emergency
- Land acquisition

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## 4. Financial support by JCM Model Project

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## Schedule (for 2025):

- Next call for proposal: Apr-Nov 2025 (tentative)
- ✓ Selection: 1-2 months after submission of the proposal
- ✓ Official contract: 2-4 months after the selection (procurement can be started only after this contract), earliest Sep/Oct 2025 (practically, it could be later).
- Commissioning: At latest by the end of Jan 2028

#### Tips:

- ✓ Scale of emission reduction is important
- ✓ Cooperation with Renca will support the selection
- ✓ Positive list for ITMOs by Chilean government needs to be checked
- ✓ No-objection from Chilean Government needs to be confirmed
- New aspect and tech is preferred: such as waste / transport / biogas / hydrogen / carbon capture, etc.

#### **Maximum Percentage of Financial Support**

Number of previously selected project(s) using a similar technology in each partner country	None (0)		Up to 3 (1-3)		<b>Up to</b> (4-7)		<b>Up to 9</b> (8-9)	10 or More
Percentage of financial support	Up to 50%	Biomass	Jp to 40% Solar PV	Bat	Up to 3	80%	Up to 20%	Not applicable
Cost-effectivenes	ss of Emission Rec	Power ductions of	+ Battery GHGs	0	nly	M	aximum for o	0010

In principle, JPY4,000/tCO2eq or lower (if 5 to 9 projects using similar technology, JPY3,000/tCO2eq or lower, Hydropower project JPY500/tCO2eq or lower)

Cost-effectiveness of emission reductions of GHG[JPY/tCO2eq]

- = Amount of financial support(JPY) ÷ Total emission reductions of GHG(tCO2eq)\*
- $* Total\ emission\ reductions\ of\ GHG\ =\ Emission\ reductions\ of\ GHG\ per\ year \ (tCO2eq/y) \times \ legal\ durable\ years \ (y)$
- \*Amount of financial support(JPY) = Costs eligible(JPY) × Percentage of financial support(%)

#### **Costs Covered by Financial Support**

- √ Facilities/equipment (including monitoring equipment )
- ✓ Main construction work
- ✓ Ancillary work
- ✓ Machinery and appliances
- ✓ Surveying and testing
- ✓ Administrative work etc.

Source: Introduction of the Joint Crediting Mechanism (JCM) & Financing Programme for JCM Model Projects (Oct 2022) JPY 2 billion /project (approx. USD 13 million)

#### Budget

**JPY 13 billion** (approx. USD 85 million) for projects starting in FY2024

The budget is allocated every year for three years term

#### **Costs Not-Covered by Financial Support**

- ✓ Civil engineering work and construction of buildings
- ✓ Consumable and maintenance cost
- Facility/equipment which does not contribute directly to emission reduction including back-up, emergency
- ✓ Land acquisition

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#### 5. New potential scheme: Private JCM

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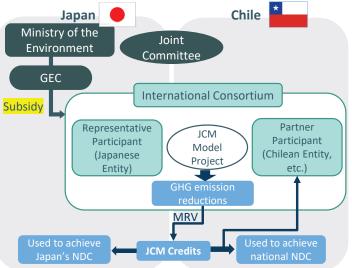
Private sector JCM has been promoted, while further discussion between Chile-Japan is needed.

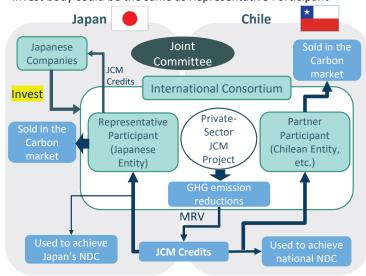
#### 1) Financing Programme for JCM Model Projects

> CAPEX can be reduced by subsidies

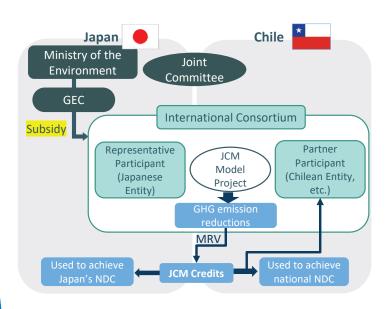
#### 2) Private-Sector JCM Projects

- > Entities can acquire more JCM credits and sell them in carbon markets
- > Japanese side financially contribute to the project
- Invest body could be the same as Representative Participant





#### 1) Financing Programme for JCM Model Projects



Points	Description
Subsidy	Yes, for the CAPEX
Credit (Japan)	Japanese Government (subsidized %)
Credit (Chile)	Chilean participants
Applicable project	Only related to energy related GHGs reduction
Year	Based on Japanese law 3-4 yrs: vehicles 17 yrs: Energy business (PV / heat)
Schedule	Procurement only possible after the official contract

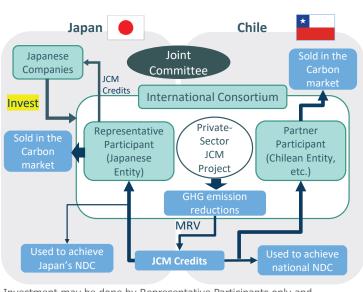
GEC: Global Environment Centre Foundation, MRV: Measurement, reporting and Verification, NDC: Nationally Determined Contribution

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# 5. New potential scheme: Private JCM

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#### 2) Private-Sector JCM Projects



Investment may be done by Representative Participants only and Investment is not required from other Japanese companies

Points	Description	
Subsidy	No, but Japanese Government pays for management of JCM system	
Credit (Japan)	Representative participant (financial contribution%)	
Credit (Chile)	Chilean participants	
Applicable project	Not only energy, but agriculture, waste, blue carbon can be included	
Year	10 yrs (or 5 yrs x 2)	
Schedule	More flexible (to be negotiated)	

# Please provide following information to consult with us

#### 1. Project information

- ✓ Project duration (yr) will be set by Japanese law based on the project type, implementation structure with applied technology
- ✓ Project cost with economic analysis (pay-back and/or IRR)

#### 2. Type of GHG reduction

- ✓ A) Energy saving: The original power source is from the grid or the power generated by the project owner
- ✓ B) Renewable energy: power is injected to the grid, or is solely used for self consumption
- √ C) Others: private JCM allows agriculture, waste, blue carbon

#### 3. Calculation of CO<sub>2</sub>(GHG) reduction

- ✓ Annually saved energy (MWh or fossil fuel amount), or
- ✓ Annually generated renewable energy (MWh)

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## 6. Consultation for project development

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# Please provide following information to consult with us

#### 4. Project process

- ✓ Necessary permissions and the status and plan to obtain them
- ✓ Progress of financial arrangement with internal decision on investment for the project

# 5. Relationship with Japanese companies

- Potential Japanese partner (Nippon Koei may support finding one)
- ✓ Provider for leading low carbon technologies

## 6. Project schedule

- ✓ Procurement can be done only after the official contract
- ✓ Projects needs to be completed (start CO2 reduction) in three financial years of Japan

# 現地ワークショップ発表資料

3. リョーシン発表資料













# Waste-related Recycling Technology in Toyama, JAPAN

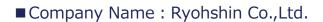
# **Ryohshin Company Introduction**

全点型**コージ** Recycling Plant manufacturer creates

November 21, 2024

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# **Company Profile**



■ Founded: December, 2001

■ Paid-in Capital: JPY 50 million

■ Head Office : <u>Toyama city</u>, Toyama prefecture, JAPAN

■ CEO: Mr. Akira Kono

■ Turnover: Approx. USD 40 million (November, 2024)

■ Number of Employees: 70 (As November 20, 2024)

■ Main Business: Engineering recycling plants

■ Home Page Address: <a href="https://www.ryohshin.co.jp/">https://www.ryohshin.co.jp/</a>











# **5 Core Business As Ryohshin**







- 1. RDF Production plant (Waste to Energy Recovery)
- 2. Gypsum Board Recycling Plant (Material Recycling)
- 3. Glass Bottle Recycling Plant (<u>Material Recycling</u>)
- 4. Plastic Material Recycling Plant (Material Recycling)
- 5. Scrap Metal Recycling Plant (Material Recycling)









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# 1. RDF Production plant (Max 50 ton/h)

For achieving the goal of "Carbon Neutrality in 2050". All around the world, people want to reduce CO2 emission. Cement industry: Approx. 5% of CO2 was discharged from cement production process for burning coals.

For reduction of CO2, cement companies are switching to burn from "Coal" to "RDF (Refuse-derived fuel)". It is called "Energy Recovery". This demand is getting higher and higher in not only Japan but also all around the world.

Ryohshin is well-known about engineering and installing this kind of recycling plant in Japan.



"RDF (Refuse-derived fuel)"



Recycling Plant

#### 1. RDF Production plant

■ Our Customer : Marugenkigyo

■ Founded: 1973

■ Plant name: Hikari Eco Station

■ Location: Chiba, JAPAN

■ Their Goal: 100% Recycling

■ New RDF Plant Capacity: 16 ton/h

\*The biggest RDF production plant in Japan.

■ Output size: 90%<20mm

■ Purpose for production of RDF: Providing RDF to cement companies all around Japan

■ Keywords:

Easy Maintenance, No need manual hand pickers, Shortest downtime, Zero Emission

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# 1. RDF Production plant (Max 50 ton/h)







#### 1. RDF Production plant (Max 50 ton/h)





# [Input]





# [Output]















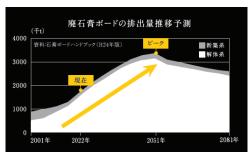
# 2. Gypsum Board Recycling Plant (Max 16 ton/h)

Before, "Gypsum board" was not common to be recycled in Japan. Only edge of new gypsum boards were recycled when new houses were built.

These days, gypsum board manufacturers start to use secondary material (Which were used for old buildings).

Gypsum board waste is getting higher and higher until 2051 in Japan. It would reach 4 million ton per year at maximum.

Ryohshin is well-known about engineering and installing this kind of recycling plant in Japan.





Input Material: Gypsum boards



Recycling Plant



Gypsum Powder



Gypsum Paper

#### 2. Gypsum Board Recycling Plant (Max 16 ton/h)



# [Output]

# [Input]



















0

# 株式 4月 三月 1

# 3. Glass Bottle Recycling Plant (Max 50 ton/h)

For considering "Circular Economy", glass is called one of the best materials in the world. When it is washed, we are able to use as "Returnable glass bottle" and in Europe, the glass demand is getting higher and higher year by year.

However, after collecting glass bottles, it would include contaminations like CSP (Ceramic, Stone, Porcelain). These contaminations causes glass bottle cracks and leaks, etc.

"Clarity (Optical Sorter)" has been sold more than 5,000 machines all around the world.

Ryohshin is well-known about engineering and installing this kind of recycling plant in Japan.



Input Material: Glass Bottle







Amber



Ceramic, Stone, Porcelain)



You can see our "Clarity (Optical Sorter)" videos. https://www.youtube.com/playlist?list=PLq06Gy6HcjmyfdhNTnF vVGTaTrg9slok

#### 3. Glass Bottle Recycling Plant (Max 50 ton/h)



# [Output]











[For producing Bottle Glass]







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#### 4. Plastic Material Recycling Plant (Max 5 ton/h)



Especially in Europe, there is an advanced technology for achieving "Sustainable Society".

For this technology, it will get more and more common in near future. In Japan, there is enough demand of "Energy Recovery". For advanced next step, "Plastic Material Recycling" becomes more and more common. It means that "Landfill", "Incinerator" purpose will be less and less as "Circular Economy".

Ryohshin is preparing for the next stage of recycling





Before washing After washing Final Product

#### 4. Plastic Material Recycling Plant (Max 5 ton/h)



# [Output]

#### [Input]















[For producing Plastic bag]



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# 5. Scrap Metal Recycling Plant (Max 50ton/h)



We have an advanced technology to separate different types of metals with one input hopper. For example, steel, aluminum, stainless steel, copper, brass, zinc, copper wire, printed circuit board, etc. are separated.



Also, these days, electric furnace is more and more popular for reducing CO2 emission. In this case, steel manufacturers have higher demand of steel scraps. However, they face secondary material including copper issue. There is the advanced technology machine "TA-PO separator" which is able to separate "Clean FE" +"Mixed metal".





You can see our "TA-PO separator" video. <a href="https://www.youtube.com/playlist?list=P">https://www.youtube.com/playlist?list=P</a> Lq06Gy6HcjmyxcRo4hepZVXIkZJqqx8A2

# 5. Scrap Metal Recycling Plant (Max 50ton/h)



# Scrap Metal Recycling (Material Recycling)



Brass, Copper, Stainless Steel, Aluminum, Zinc, Copper wire, Circuit board

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# 脱炭素・SDGs ドミノ会議発表資料

4. 日本工営発表資料

Supporting local governments to accelerate their efforts to achieve the SDGs

Introduction of SDGs Assessment Tool for local-government "TSUMUGI@"



# **Today's Contents**

- ◆ Introduction of TSUMUGI@
- ◆ Update work on the Chile version of TSUMUGI@ in collaboration with Global Compact Chile
- ◆ Future application of TSUMUGI@ in Chile

# Introduction of TSUMUGI@



Online assessment tool of SDGs initiatives for local governments - Supporting to accelerate their efforts to achieve the SDGs

#### Easy operation on website



The respondents selected online answer multiple-choice questions by clicking.

Visualization of the results
- Strengthens and Weakness -



The results are visualized online with easy-to-understand charts and scores.

By visualization, local government can analyze its strengths and weakness that should be more focused on.

#### Assessment from two perspectives

Framework Check Assessment of the maturity of implementation structure for local governments to promote SDGs

Action-phase Check Assessment of the status of local government's initiatives for 17 goals



About 50-60 questions

About 174 questions

#### Monitoring of your initiatives



This tool can be used as monitoring tool and progress of the implementation status can be compared.

## Assessment by "TSUMUGI@"



#### Framework check

Assessment of the maturity of implementation structure for local governments to promote SDGs

- Understanding SDGs
- 2. Arrangement of the implementation structure
- 3. Implementation of action plans and setting of targets
- 4. Proceeding of plans/projects/actions
- 5. Implementation of follow-up

Question X: Does your local government promote SDGs initiatives by declarations on SDGs under the leadership of the mayor?

Question Y: Is there a follow-up system in place in preparation for a change in staff in the department?

Question Z: Does your local government inform residents, local businesses, other local governments, etc. about the status of SDGs initiatives?

#### Action-phase Check

Assessment of the implementation status of what local government has been conducted by 17 goals

























Question A: In order to reduce food waste, do your local government implement specific activities to promote awareness-raising and behavioral transformation among citizens and local businesses?

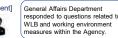
Question B: Do you have measures and targets to promote women's participation in the decision-making process within the Agency?

Question C: Do you provide support for securing and continuing opportunities for education and vocational training for people with disabilities and other socially vulnerable positions?

[Section in charge of the SDGs] Assign the questions to the department in charge of answering them







Living Environment Department answ questions related to water and waste environmental conservation decarbonization, etc



Urban Planning Section answers questions related to public transportation, urban planning, city planning, etc.

#### **Results of the Assessment**

In addition to the assessment results for the municipality, the check assessment results by each department and goal are visualized in an easy-to-understand chart or another format.



②Action-phase check





TSUMUGI@

**Information** 

Issuance of the account for local municipality

Issuance of the account for department

Question distribution

Framework Check

Action-phase Check

Results

Setting of basic information

Understanding **SDGs** 

2. Arrangement of the implementation structure

3. Implementation of action plans and setting of targets

4. Proceeding of plans/projects/ actions

5. Follow-up Implementation

2.1 Leadership of the leader and Governance

F2-1: Does your local government promote SDGs initiatives by declarations on SDGs under the leadership of the

O Working on well O Working on but need to improve O In the planning O Under consideration O No plans to implement

F2-2: Does your local government have been building a collaborative relation with the Congress to promote SDGs?

○ Working on well ○ Working on but need to improve ○ In the planning ○ Under consideration ○ No plans to implement

F2-3: Do the mayor and managers of the relevant departments share necessary information on SDGs, and decide the policy of each department for SDGs action?

O Working on well O Working on but need to improve O In the planning O Under consideration O No plans to implement

F2-4: Is information on the SDGs shared among multiple departments within the local municipality?

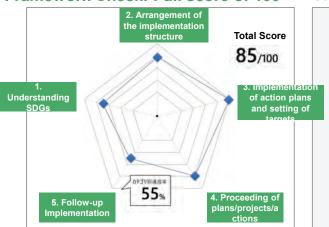
O Working on well O Working on but need to improve O In the planning O Under consideration O No plans to implement

4/8

#### Results of the Assessment



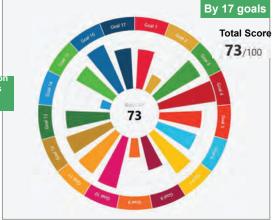
#### Framework Check: Full score of 100 Action-phase Check: Full score of 100



- Scoring in each question to calculate the total score (out of 100 points).
- In addition to the municipality's overall score, more detailed scores can be found below.

Scores by Scores by Department

Secular
Variation



- Scoring in each question to calculate the total score (out of 100 points).
- Display in a single bar for each goal
- In addition to the municipality's overall score, more detailed scores can be found below.

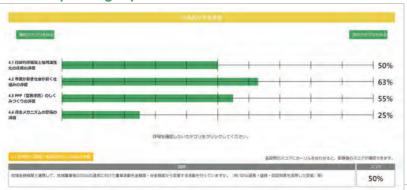


# Results of the Assessment

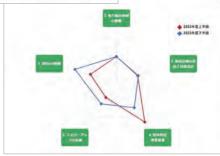


#### Framework Check

(Score by category)



[two-point Comparison score]



MICHAEL MICH	<ul> <li>362548TAM</li> </ul>	<b>♦ 2022-1/EF TIE</b>	**
M#237	51	60	- #
SDGsc/ENR	52	83	- 4
2. 16/10/04/04/05/05/05	50	50	-
L BOOK STATE OF THE PARTY OF TH	43	44	- 31
a manusum	92	58	91
1.240-7s7098	34	49	



# Results of the Assessment

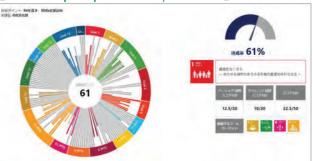


#### **Action-phase Check**

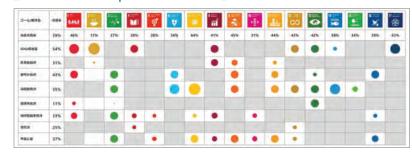
#### [Score by goal]



#### [Score by department/section]



#### [Internal Comparison Score]



## **Utilization of TSUMUGI@**



#### Accelerate your efforts toward SDGs taken in DECADE OF>>> ACTION

(Cost reduction in manpower and time)

# Short-time/easy assessment To fulfill as

Assessing your progress toward SDGs requires a lot of time and effort while there is no specific methods on that. By using TSUMUGI@, you can easily get its result by simply selecting the multiple-choice answers to the questions on the website.

#### To fulfill accountability to your citizens

In addition, the status of SDGs initiatives by local governments can be visualized in an easy-to-understand chart, which can be used to disseminate information to citizens and businesses and promote understanding.



# To consider the strengthen and weakness of your city, and next actions

TSUMUGI@ shows a series of assessment results that can lead you to consider the strengthen and weakness of your city, and next actions to be taken for acceleration of your efforts toward SDGs.

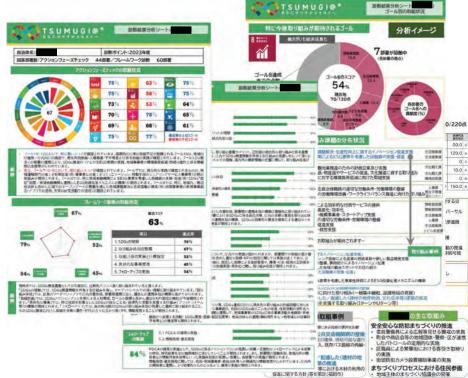
#### Capacity development of your staff

TSUMUGI@ can break down the assessment results of each department and show related goals/targets of each question. It enables to provide learning opportunity on SDGs to your staff through using TSUMUGI@.

# Provision of Diagnostic Results Sheet



- Analysis of the results from TSUMUGI@, summarizing each local government's strengths, challenges, and recommendations for improvement.
- Some local governments use this report in internal council meetings or City Council sessions, or publish it on their websites.

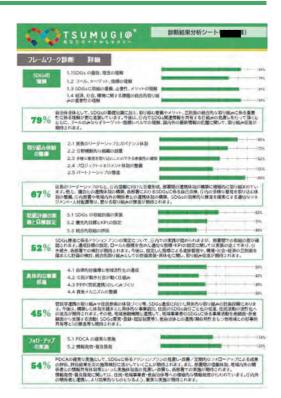




# **Provision of Diagnostic Results Sheet**









# **Provision of Diagnostic Results Sheet**







# Update work on the Chile version of TSUMUGI@ in collaboration with Global Compact Chile

# Update work on the Chile version of TSUMUGI@



#### <Objective>

To review the TSUMUGI@ questionnaires to ensure it can be applied effectively within the context of Chilean local governments, in accordance with current regulations

- a. Analyze the "Framework Check" and "Action-Phase Check" section for application in local governments, from a regulatory and practical perspective of the Chilean context, to determine which questions are best suited to the Chilean reality.
- b. Provide suggestions and recommendations on the questionnaire TSUMUGI@ will apply in Chile.

#### <Implementation Agency>

- Pacto Global Chile
- Universidad Andrés Bello
  - **UNAB Institute of Public Policies**







# Update work on the Chile version of TSUMUGI@



#### <Methodological Approach>

STUDY STAGES	ACTIVITY TO BE DEVELOPED	REPORTS		
Stage 0. Planning	Activity 0: Initial Meeting	Detailed work plan with the proposed methodology and activities validated for the		
	Activity 1: Work Plan design	development of the consultancy, according to Deliverable 1.		
Stage 1. Gathering Institutional and Municipal Regulatory Information	Activity 2: Review of municipal regulations and norms based on the identified indicators	Submission of the results report according to Deliverable 2.		
Stage 2. Applicability Analysis of	Activity 3: Using the municipal regulation matrix, conduct an exhaustive review and applicability analysis for each question	Submission of the results report according to Deliverable 2.		
the TSUMUGI@ Questionnaire	Activity 4: Preparation of results report			



# Update work on the Chile version of TSUMUGI@



#### <Review results>

#### Framework Check

✓ No significant changes were made, as the assessment questionnaires for evaluating the maturity of the implementation structure for promoting SDGs remain the same.

#### Action-Phase Check

- ✓ Slight adjustments were done to the phrasing of the question to better align with the context of Chile.
- ✓ Goal 4 focuses on education. The reform of the Chilean public education system
  establishes that municipalities will no longer administer public educational
  establishments; instead, the Local Educational Services (SLEP) will take on this role. (As
  the majority of municipalities have not yet made the transition, those that have
  completed the transfer should mark the relevant sections as "Not Applicable.")



# Update work on the Chile version of TSUMUGI@



- Currently, we are negotiating with IoT company to develop TSUMUGI@
   Chilean (Spanish) version.
- Based on the suggestion from the Global Compact Chile. we are examining to incorporate a "comments" column in each questionnaire, so that municipalities can create comments to the extent that they have particular cases that they want to address by question according to their communal reality.
- It will be completed in February 2025 or later





# Future application of TSUMUGI@ in Chile

# Future application of TSUMUGI@ in Chile

Would you like to try the Chilean version of TSUMUGI@ to assess your initiatives for SDGs?



- 1) Online kickoff meeting
- 2) Explanation of tools (with instruction materials)
- 3) Support for distribution of questions to each department
- 4) Assessment of the results (provision of diagnostic result sheet)
- 5) Feedback meeting





# Future application of TSUMUGI@ in Chile



Would you like to try the Chilean version of TSUMUGI@ to assess your initiatives for SDGs?



Pacto Global

Red Chile

#### <Benefit>

- 1) Municipality's effort and achievement on SDGs can be visualized
- 2) Annual update and comparison of progress can be possible
- 3) UN Global Compact reviewed the contents
- 4) Assessment of the results and feedback meeting for future policy making

#### <Cost>

- Recovery of initial development cost of TSUMUGI@ Chilean version (quoted)
- · Server usage fees
- Hosting server cost
- Consultants cost for 2-3 days per year (review/assessment of the results, feedback)



