

Ordinance on Renewable Energy Tax for Regional Coexistence



Yasuhiro Nagasawa

Institute of Science Tokyo

Japan

Shigeo Nishikizawa*, Kiichiro Hayashi**

Institute of Science Tokyo, Nagoya University***

Japan



Contents

1. Introduction
2. Method
3. Results and Discussion
 - 3.1 Imposing Regional Coexistence Tax under Ordinance
 - 3.2 Functions of the Consultation under Ordinance
4. Conclusions

1. Introduction

Background

Decarbonized Society in Japan

National
government

A large-scale introduction and a main
power source of **renewable energy**

Some local areas

Local
residents



**Environmental
conflicts**



Proponents



Until 2022, Wind power 148 projects
Solar power 89 projects
(Nagasawa and Nishikizawa, 2023)

Transition of renewable energy ordinances in Japan

2000s-

Promoting as a measure to global warming

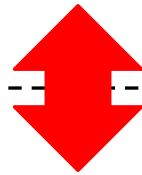
2012-

FIT (Feed-in Tariff System) has started

2013-

Guidance provided by local communities

(Kawashima,2015)



In recent
years

Regulation ordinances had been rapidly increasing
(Kamikawara and Maeda,2020)

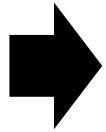
Ordinance on Renewable Energy Tax

2024

Miyagi Prefecture enacted the first ordinance

Conflict-avoidance type among the regulations

Targeting for coexistence with the local community



No previous studies on the ordinance
in terms of consensus building

Research purpose

To consider the functions in consensus building under the ordinance on renewable energy tax for regional coexistence through document research and stakeholder interviews

2. Method

Research targets

- Main discussions and opinions during the process of imposing the ordinance in Miyagi prefecture
- Consultations of the plan designated as the first proponent under the ordinance at Shiroishi-city

Research framework

Imposing regional coexistence tax under ordinance

- Organizations for considering the introduction of the tax
- Discussions and opinions during the process

Functions of the consultation under ordinance

- Consultation implementation structure
- Contents confirmed and discussed there

Document
research

+

Stakeholder
interviews

↓

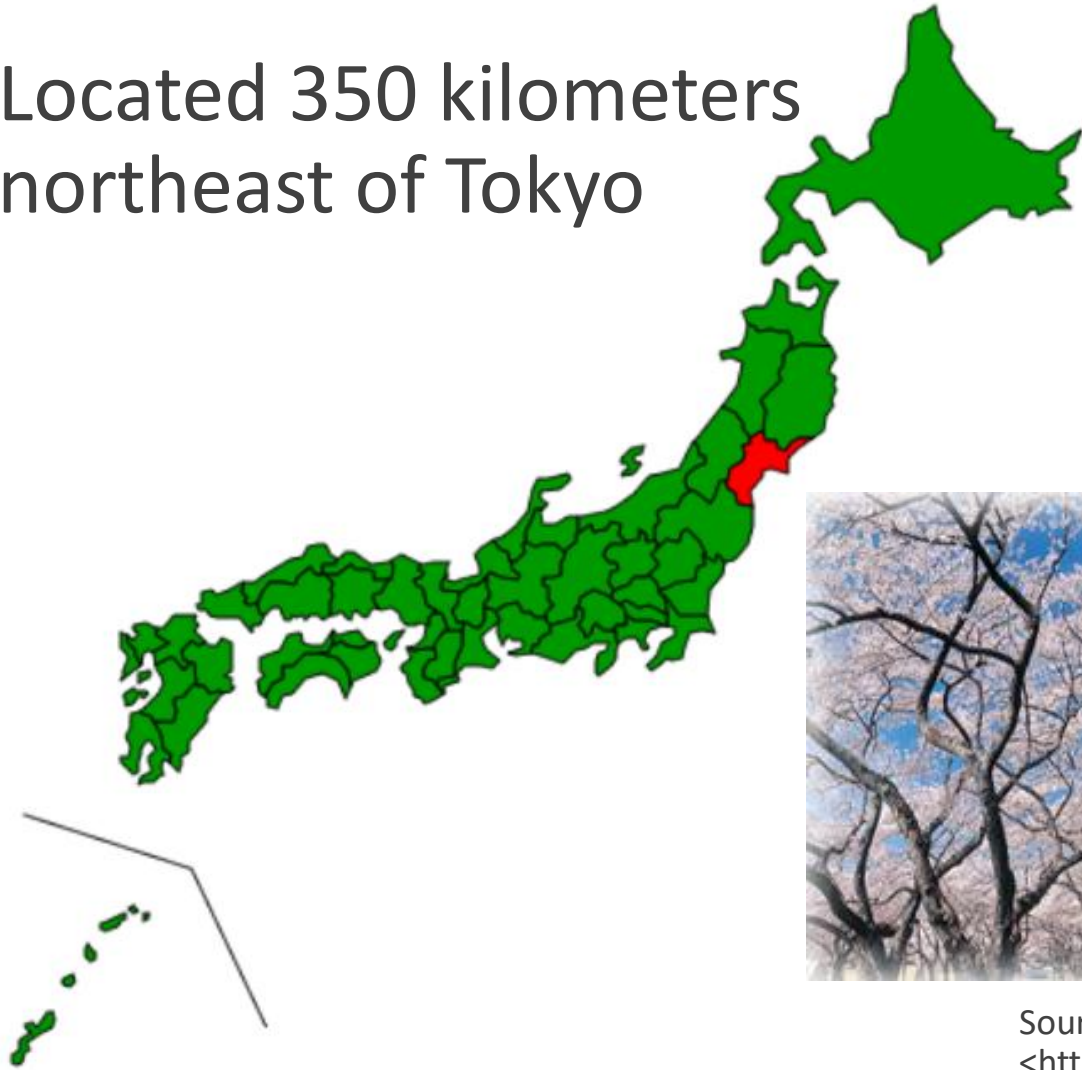
To consider the functions in consensus building
under the ordinance on renewable energy

3. Results and Discussion

3.1 Imposing Regional Coexistence Tax under Ordinance

Basic information of Miyagi prefecture

Located 350 kilometers
northeast of Tokyo



Sendai-city is famous for
the "City of Trees."

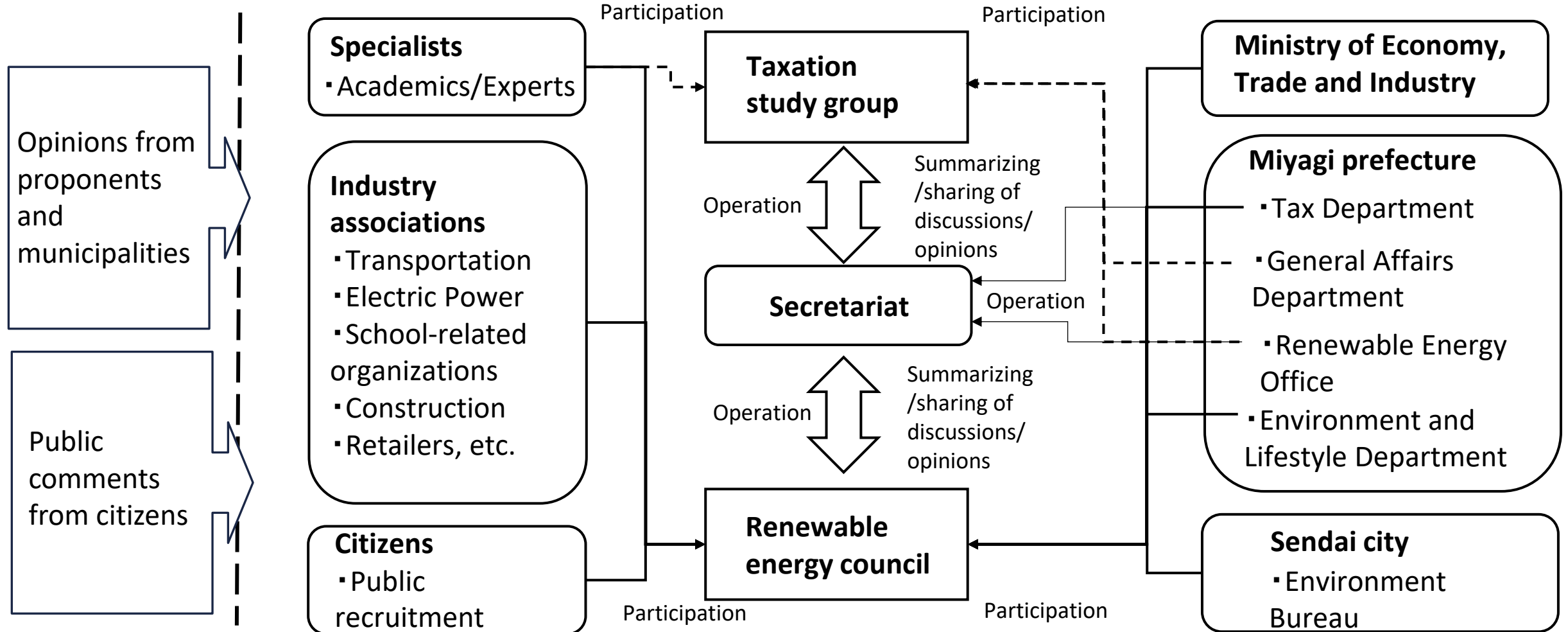


Source: SENDAI CITY WEB SITE
<<https://www.city.sendai.jp/koryu/foreignlanguage/en/index.html>>

Background of the taxation

- Many local residents have expressed concerns and opposition to renewable energy projects regarding their impact on landslides, landscapes, and the natural environment.
- ➔ Since June 2022, discussions had been more effective methods for introducing renewable energy and the possibility of strengthening regulations

Organizations for considering the introduction of the tax



Positioning of the new tax

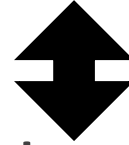
- To guide **renewable energy projects** involving large-scale forest development to **suitable locations**
 - **General tax**, not special-purpose tax
-  **Tax revenue** will be used for those activities and local environmental conservation

Subjects to taxation

- Target projects covering 0.5 hectares or more
 - Regarding cumulative effects, the integrity of the development activities will be appropriately assessed
- ➡ It is difficult to establish a single standard of cumulative effects across all cases, so they will be addressed each case individually

Discussions of tax base and rate

- The tax rate will be set at 30% of operating profit to curb development



- Taking into consideration the profitability of the business will be set it at 20%

➡ Ultimately, the setting was designed to accommodate the latter opinion

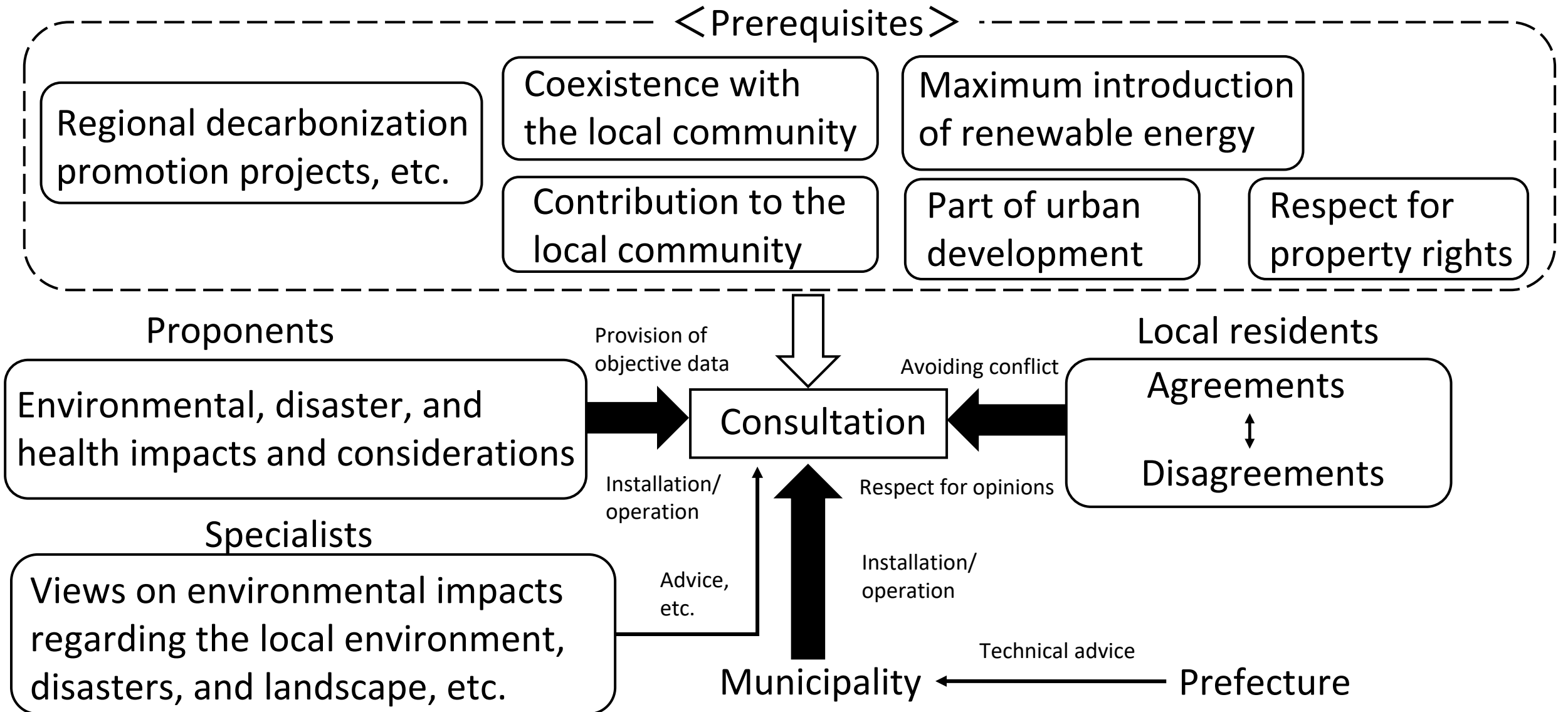
Consensus building in the community

- Projects for which **local consensus** has been reached will be **exempt from taxation**



To provide **guidance for consensus building** by the prefecture, it will create its own guidelines.

Basic principles of consensus building in guidelines



3. Results and Discussion

3.2 Functions of the Consultation under Ordinance

Basic information of Shiroichi-city

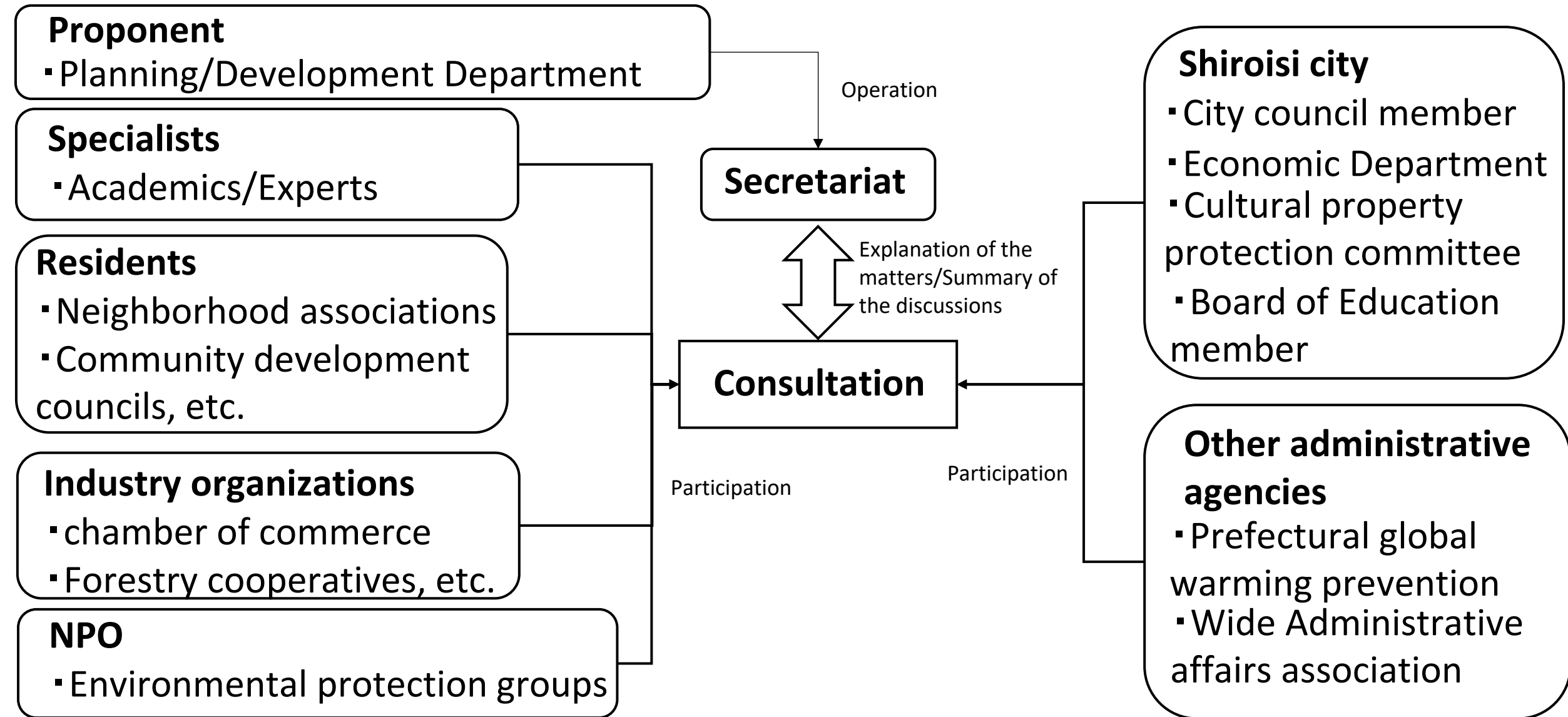


Source: SHIROISHI CITY WEB SITE
<<https://www.city.shiroishi.miyagi.jp/youran/overview.html>>

Background on the introduction of renewable energy in Shiroishi City

- In March 2023, the city enacted its own ordinance with the aim of harmonizing renewable energy power installation
 - Wind power project had progressed to the stage of Final Environmental Impact Statement
- ➡ The consultation had been established in March 2024 based on the prefecture ordinance

The consultation implementation structure



Contents confirmed and discussed

	Environmental Impact Assessment Regional System	Shiraishi City Renewable Energy Ordinance	Regional Coexistence Ordinance	
			Certification Decision Sheet Contents	Community contribution measures
1st Consultation	- Methods for reviewing environmental impact assessments - The process reflected the content of the deliberations	The city approves the project because it is being properly environmentally conscious.	Examination of each evaluation item	- Financial contributions to the town development council, etc. - Investment through cooperation funds
2nd Consultation	(Nothing in particular)	(Nothing in particular)	Examination of each evaluation item	- The cooperation fee is being considered at 8.4 million to 10 million yen per year. - The allocation amount will be discussed outside of this council
3rd Consultation	(Nothing in particular)	(Nothing in particular)	Regarding the certified project, the overall assessment was "suitable".	- The cooperation fee to the city and the town development council will be 10 million yen - In addition, 5 million yen in support funds to the city

Comparison of the functions of the systems

	Advantage	Problem
Environmental Impact Assessment Regional System	• The Plans can be modified to take environmental impacts into consideration	• Each stage requires a reasonable amount of time(In this case, 6 years)
Shiraishi City Renewable Energy Ordinance	• The mayor's consent is required	• Understanding of local residents is not essential
Regional Coexistence Ordinance	• Comprehensive evaluation of the plan • Specific implementation of community contribution measures	• Overlap with the content of considerations in other systems • Balancing contributions to the local community with investment returns

- And then differences among stakeholders regarding who should have established the consultation was observed

4. Conclusions

Imposing Regional Coexistence Tax under Ordinance

- In the process of drafting the ordinance, in addition to the two committees, external opinions were also incorporated.
- The purpose of introducing the new tax is to guide renewable energy projects to suitable locations.
- Plans for which a consensus has been reached are exempt from taxation, and related guidelines have been created.

Functions of the Consultation under Ordinance

- The consultation was operated by the proponent, and included representatives of residents and city officials, etc..
- The plan was comprehensively evaluated, including a review of the environmental assessment and the city ordinance.
- The notable feature was the concrete implementation of measures to contribute to the local community.

Future plan

- Optimization of overlapping policies regarding renewable energy.
- Verification of the appropriateness of community contribution measures
- Reconsideration who should operate the consultation

References (in Japanese)

- 長澤康弘・錦澤滋雄(2023) 再生可能エネルギー事業による環境紛争の発生状況とその要因. 環境アセスメント学会2023年度 第22回大会発表要旨集, 環境アセスメント学会, 51～56
- 川島悟一(2015) 再生可能エネルギーの導入促進と規制対策. 田中充 (編著) 環境条例の制度と運用. 171～196, 東京, 信山社
- 上河原献二・前田悠一郎 (2020) 再生可能エネルギー発電施設立地規制条約による太陽光発電施設立地規制について. 環境情報科学学術論文集, 34, 323～328

Acknowledgements

We would like to thank the representatives from Miyagi Prefecture, Shiroishi City, and the proponent involved for their cooperation in this study.

And this work was performed by the Environment Research and Technology Development Fund (JPMEEERF20251M01) of the Environmental Restoration and Conservation Agency provided by Ministry of the Environment of Japan.

In addition, this presentation was supported by JSPS KAKENHI Grant Number JP25K21427 from the Japanese Ministry of Education, Culture, Sports, Science and Technology.



Thank you for your attention !



Let's continue the conversation!

Message me your questions or comments in the IAIA26 app.

Yasuhiro Nagasawa

Institute of Science Tokyo

Japan

#iaia26