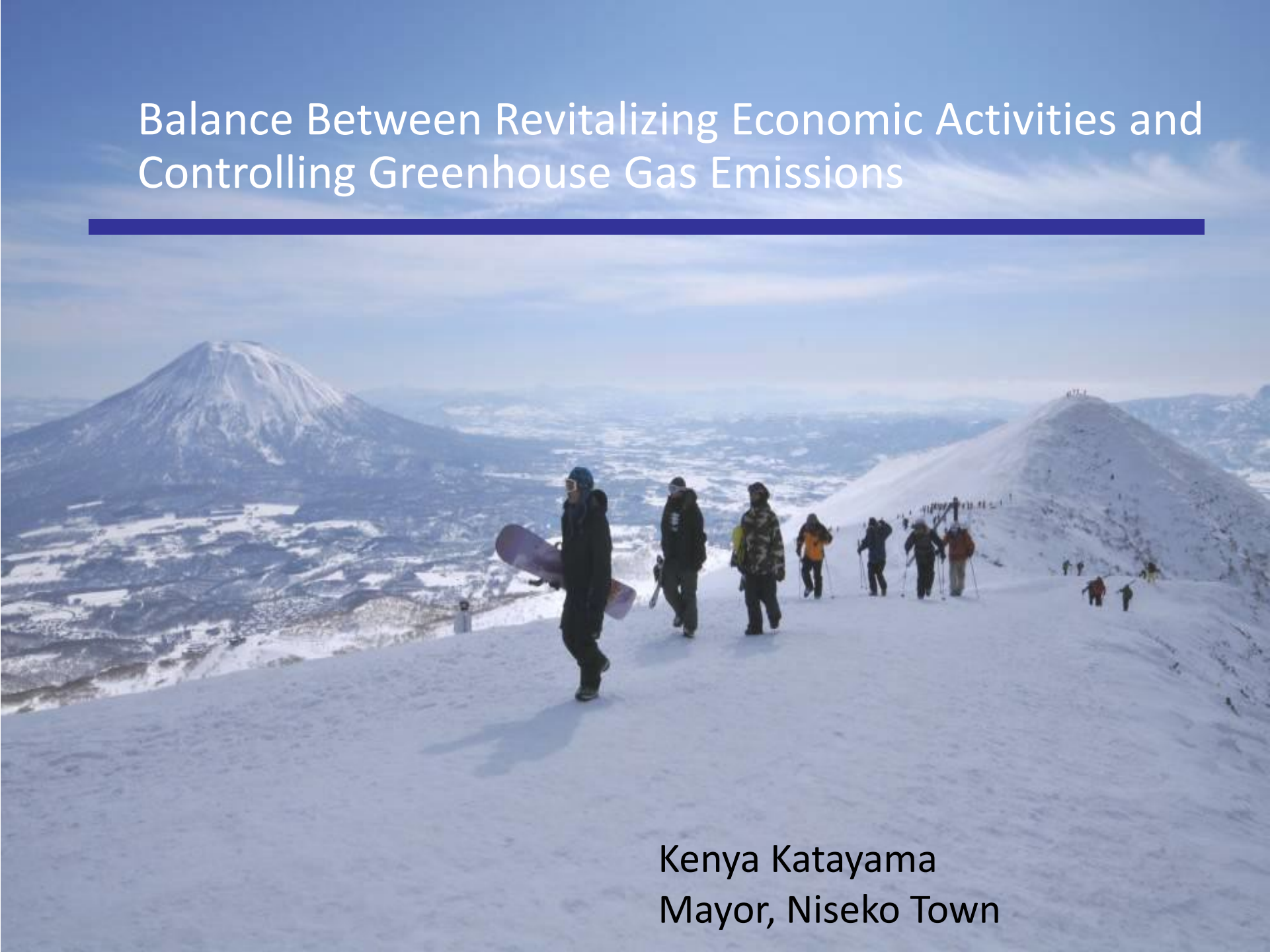


Balance Between Revitalizing Economic Activities and Controlling Greenhouse Gas Emissions



Kenya Katayama
Mayor, Niseko Town

Introduction to Niseko Town

Population: 5,295 (includes **499** foreign residents)

Households: 2,769 * Basic resident register at end of December 2018

Area: 197.13km² (roughly three times the area within the inner ring of the Yamanote Train line)

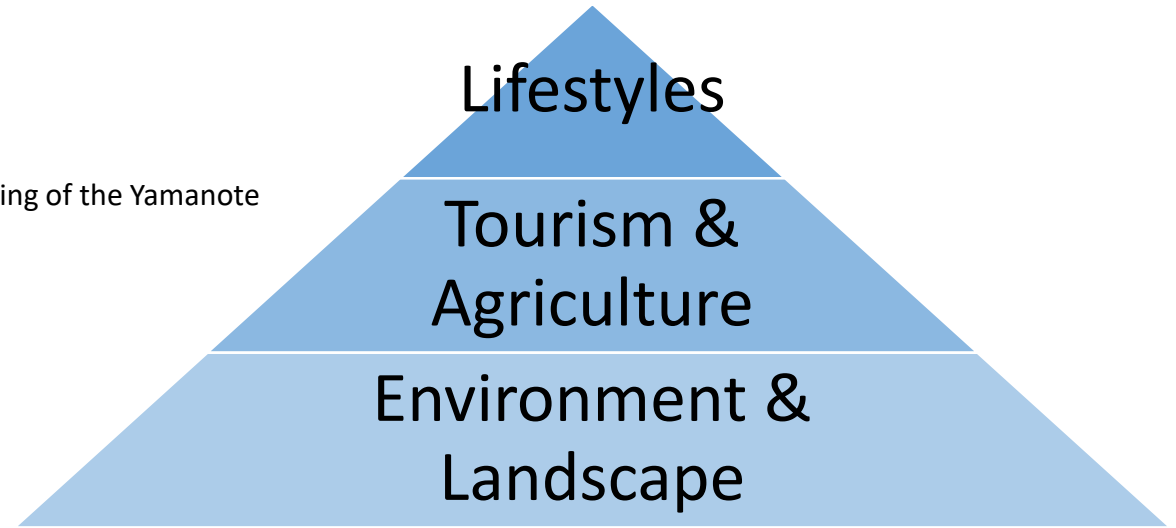
Aging rate: 26.2%

Fiscal scale: JPY 5.3985 billion (total fiscal budget for FY 2018)

Financial capability index: 0.3

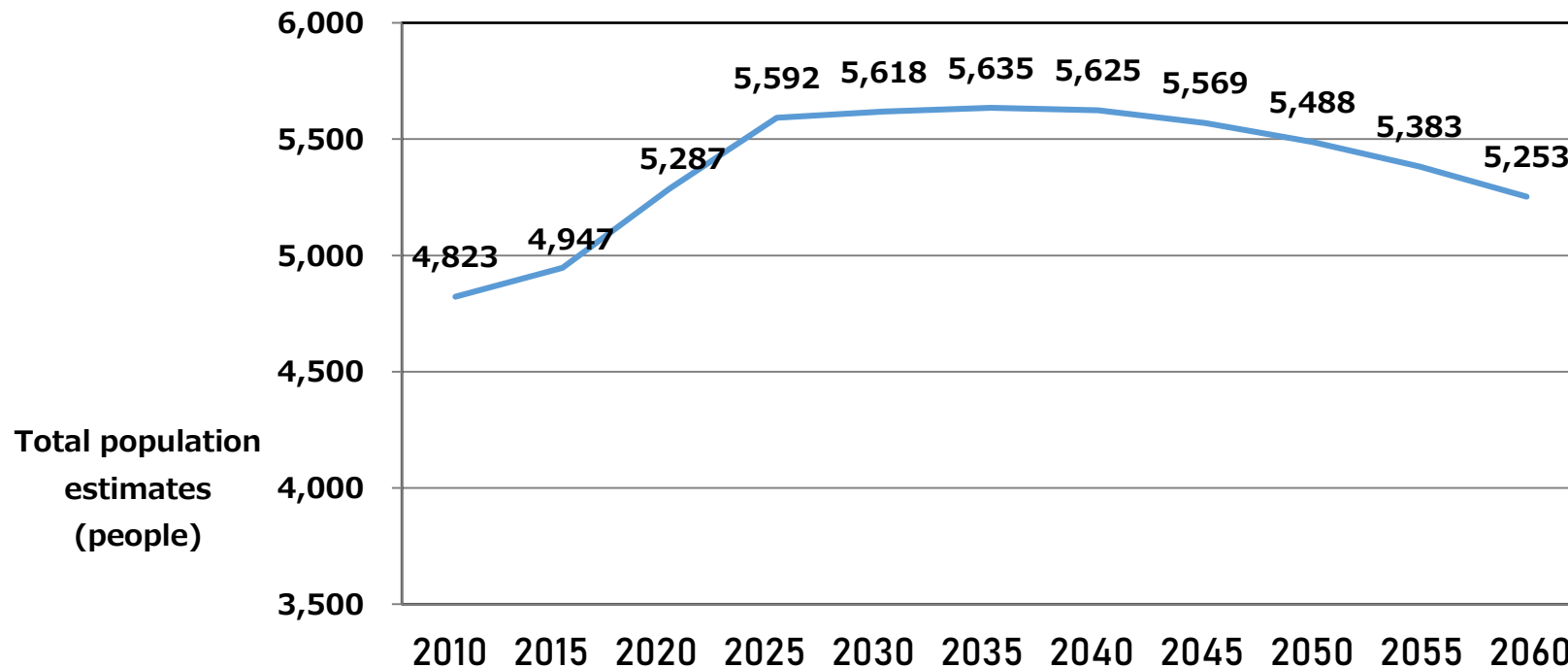
Number of assembly members: 10

Number of employees: 93 (excluding special positions)



Population Estimates in Niseko Town

• The Niseko Town Self-governmental Innovation Comprehensive Strategy (Local Governmental Innovation Comprehensive Strategy) draws a strategic vision for the population based on the current state of housing and worker shortages and rising trends in total fertility rates.



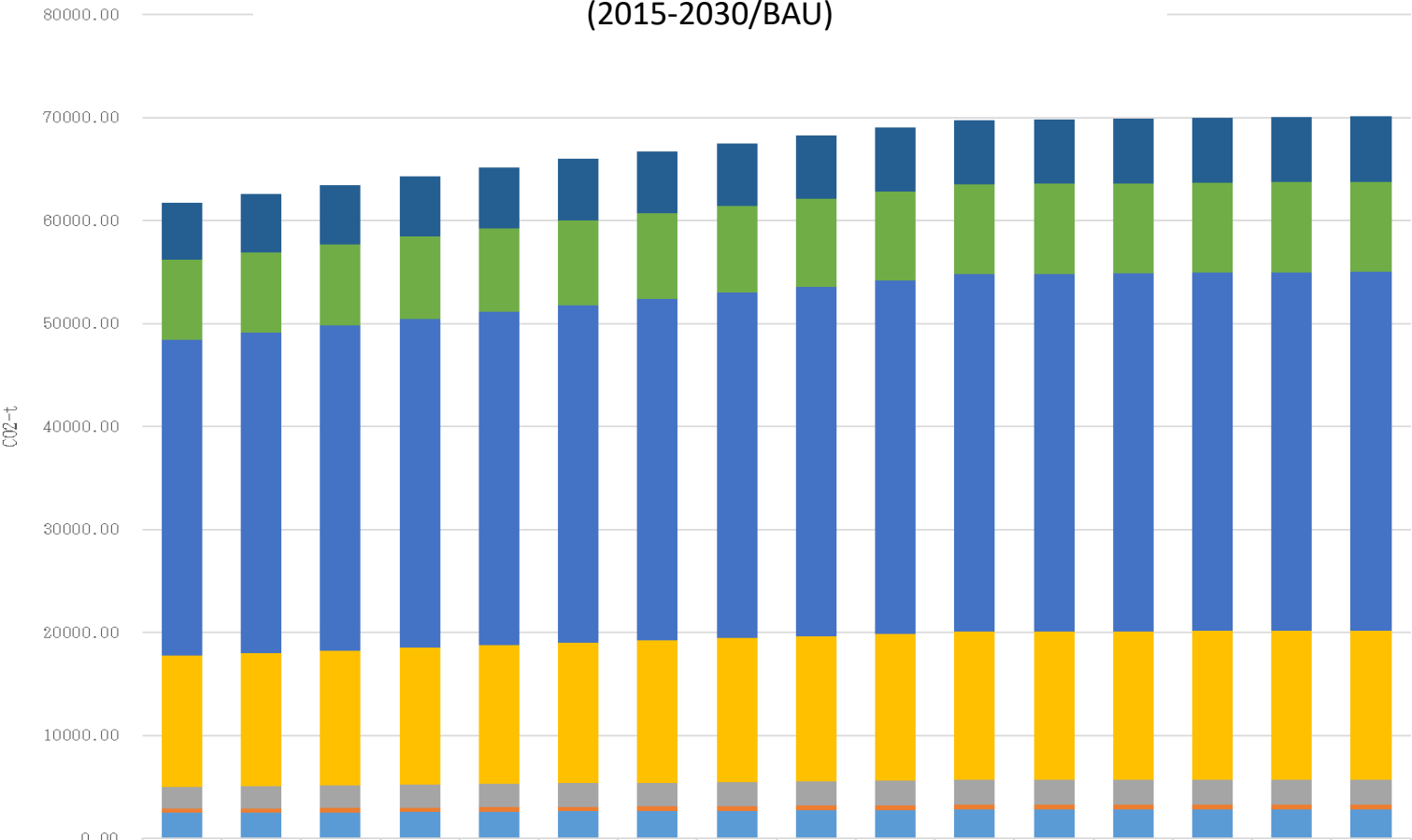
• From Niseko Town's Self-governmental Innovation Comprehensive Strategy

Assumed conditions

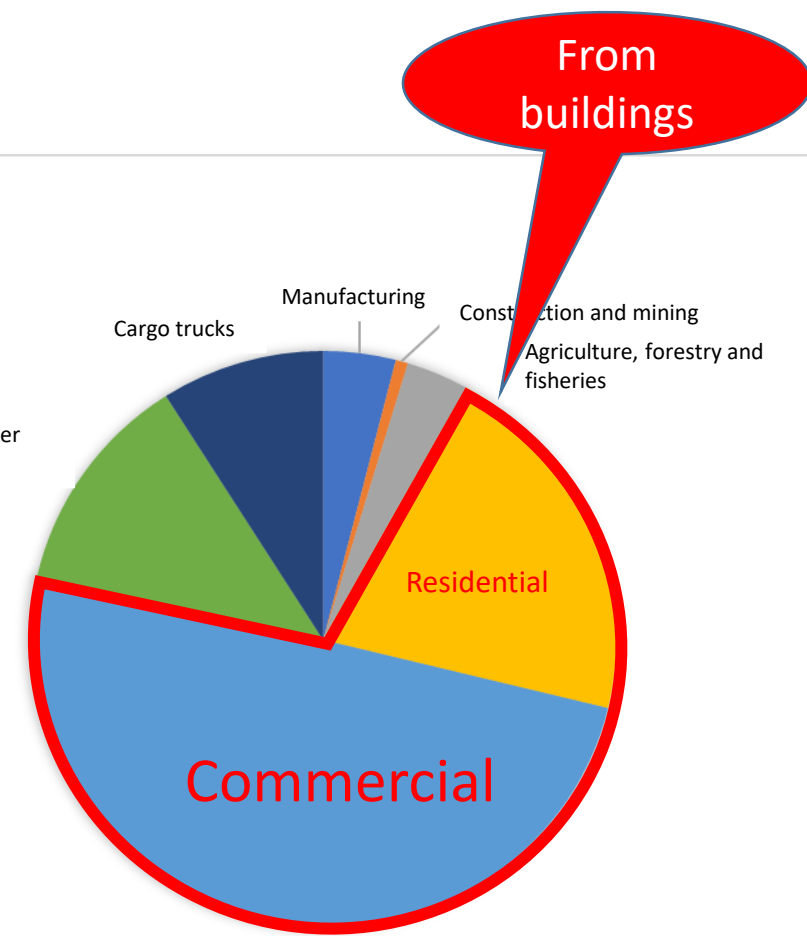
- Total fertility rate: Desired birth rate rises to 1.80 through 2040 and is maintained at a level of 1.80 thereafter.
- Net migration rate: Halved by 2060.
- Housing construction plans: Assumption that housing for 500 people will be built by 2025 and all housing will be occupied. Assumption that 250 people will move into housing between 2015 and 2020 and an additional 250 between 2020 and 2025, for a total of 500 people in residence.

Estimates of Greenhouse Gas Emissions in Niseko Town

Estimates of Greenhouse Gas Emissions in Niseko Town
(2015-2030/BAU)




	2015年	2016年	2017年	2018年	2019年	2020年	2021年	2022年	2023年	2024年	2025年	2026年	2027年	2028年	2029年	2030年
Cargo trucks	5563.28	5639.50	5716.20	5792.79	5869.26	5945.56	6013.93	6082.49	6151.23	6220.12	6288.54	6295.46	6301.12	6306.79	6312.47	6318.15
Passenger cars	7713.88	7819.56	7925.91	8032.12	8138.14	8243.93	8338.74	8433.80	8529.10	8624.63	8719.50	8729.09	8736.95	8744.81	8752.68	8760.56
Commercial	30676.27	31096.54	31519.45	31941.81	32363.45	32784.17	33161.19	33539.23	33918.22	34298.10	34675.38	34713.52	34744.77	34776.04	34807.34	34838.66
Residential	12761.97	12936.81	13112.75	13288.46	13463.86	13638.89	13795.74	13953.01	14110.68	14268.72	14425.68	14441.55	14454.54	14467.55	14480.57	14493.61
Agriculture, forestry and fisheries	2123.84	2152.93	2182.21	2211.46	2240.65	2269.78	2295.88	2322.05	2348.29	2374.59	2400.71	2403.35	2405.52	2407.68	2409.85	2412.02
Construction and mining	418.73	424.46	430.24	436.00	441.76	447.50	452.64	457.80	462.98	468.16	473.31	473.83	474.26	474.69	475.11	475.54
Manufacturing	2464.55	2498.31	2532.29	2566.22	2600.10	2633.90	2664.19	2694.56	2725.01	2755.53	2785.84	2788.90	2791.41	2793.92	2796.44	2798.96



Breakdown of CO2 emissions in Niseko Town in 2015 by sector

Our Goals

- Balance between revitalizing economic activity and controlling greenhouse gas emissions per capita
- Below that, reduce greenhouse gas emissions by 44% by 2030 and 86% by 2050 from 2015 levels



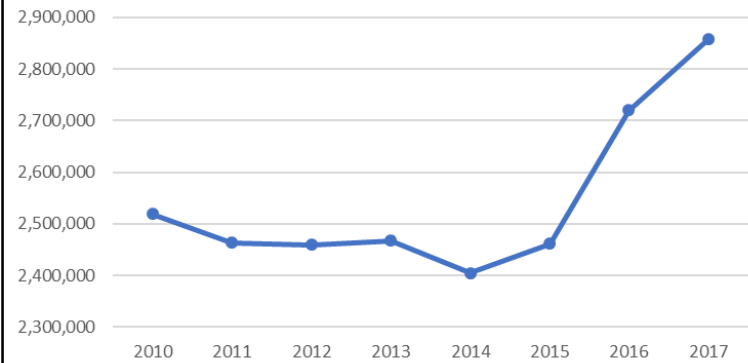
At the heart
of this

- The money used to pay for fossil fuels that have flowed out of the region will be retained within the region to revitalize the local economy.
- Niseko wants to innovate the creation of a "good quality" town with a "better quality of life for its residents".

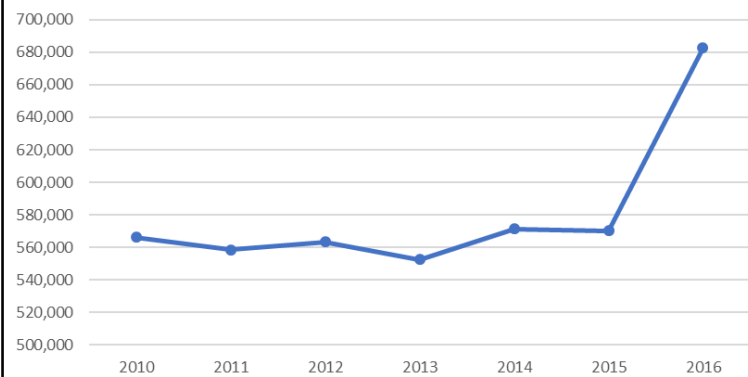
Balance Between Revitalizing Economic Activity and Controlling Greenhouse Gas Emissions Per Capita

Regional economic indicators

Taxable income per taxpayer (yen/person)

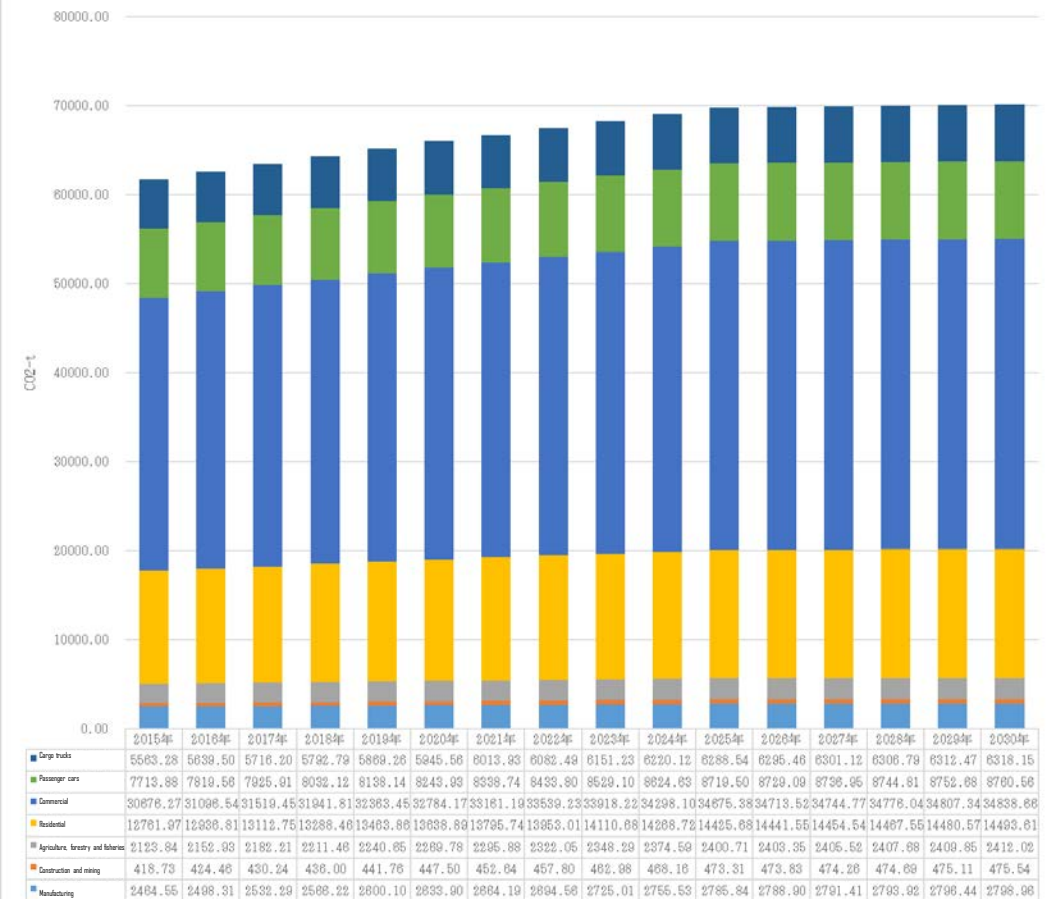


Amount of taxes in Niseko (including property tax) (thousand yen)



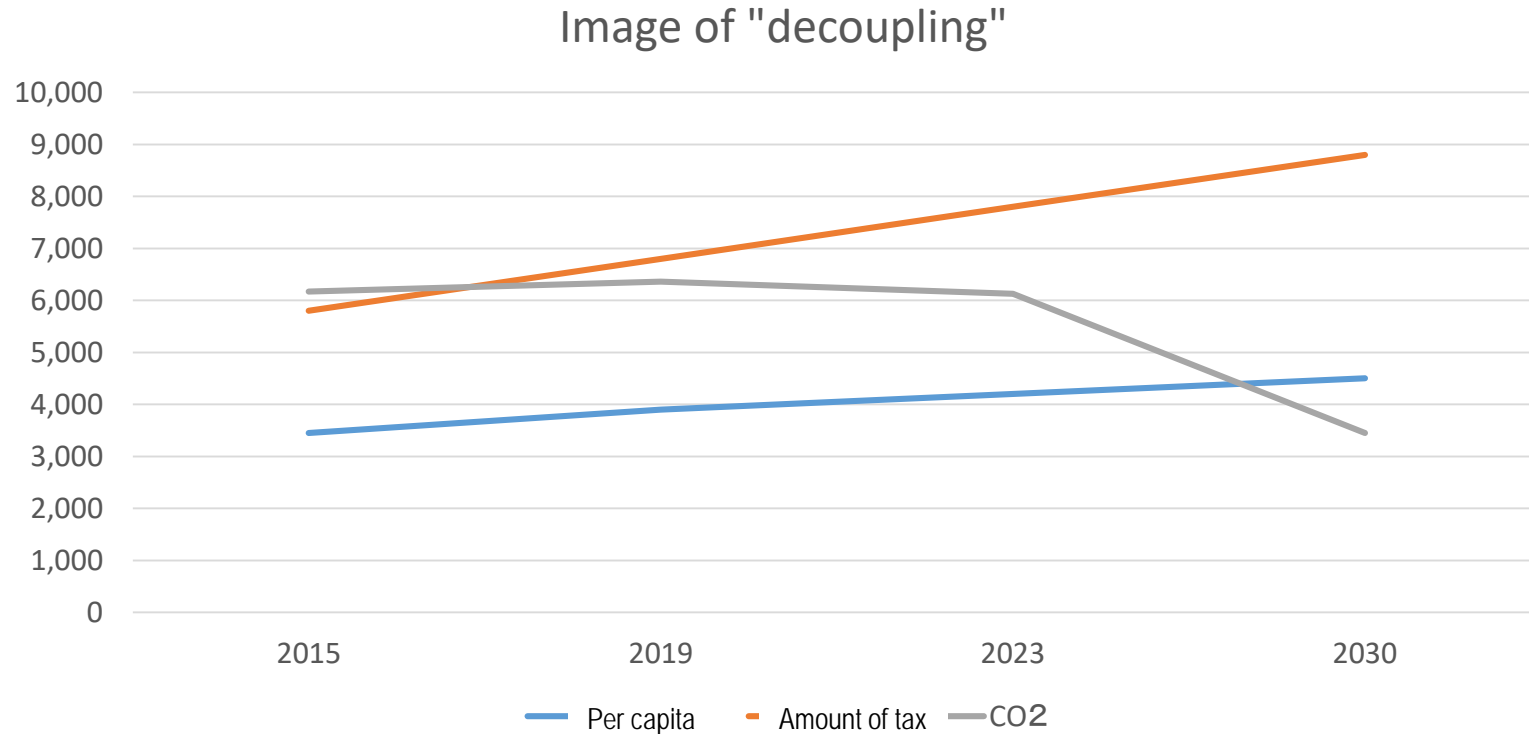
Greenhouse gas emissions

Estimates of greenhouse gas emissions in Niseko (2015-2030/BAU)



Balance Between Revitalizing Economic Activity and Controlling Greenhouse Gas Emissions Per Capita

"Sustainable" is defined as a state where economic activity is dynamic while curtailing energy consumption of fossil fuels and other resources.



Actions in Second Planning Period (2019-2023)

- Formulation of an Eco-Model City ordinance (provisional) and introduction of accommodation tax
- Establishment of local energy company
- Start of investigation into compact urban development (with short travel distances)
- Elimination of mismatches between housing infrastructure and residents through the formation of high-density and high-performance housing stock (highly insulated and highly airtight)
etc., etc....37 comprehensive actions will be implemented.

- Over this five-year period, Niseko Town will achieve its 2050 CO₂ emission reduction targets and build the **foundation** for hard and soft infrastructure needed to create a sustainable town.

Considering the Formulation of Group of Ordinances

Niseko is promoting the formulation of general regulations, such as the Eco-model City ordinance (provisional).

1. Ordinance promoting the development of low-carbon buildings
2. Ordinances promoting the appropriate use of bicycles
3. Ordinances promoting the low-carbon development of business activities
4. Ordinances to promote the proper introduction of renewable energy
5. Ordinances requiring the provision of energy information

The introduction of the following will be promoted along with general regulations:

6. Introduction of accommodation tax

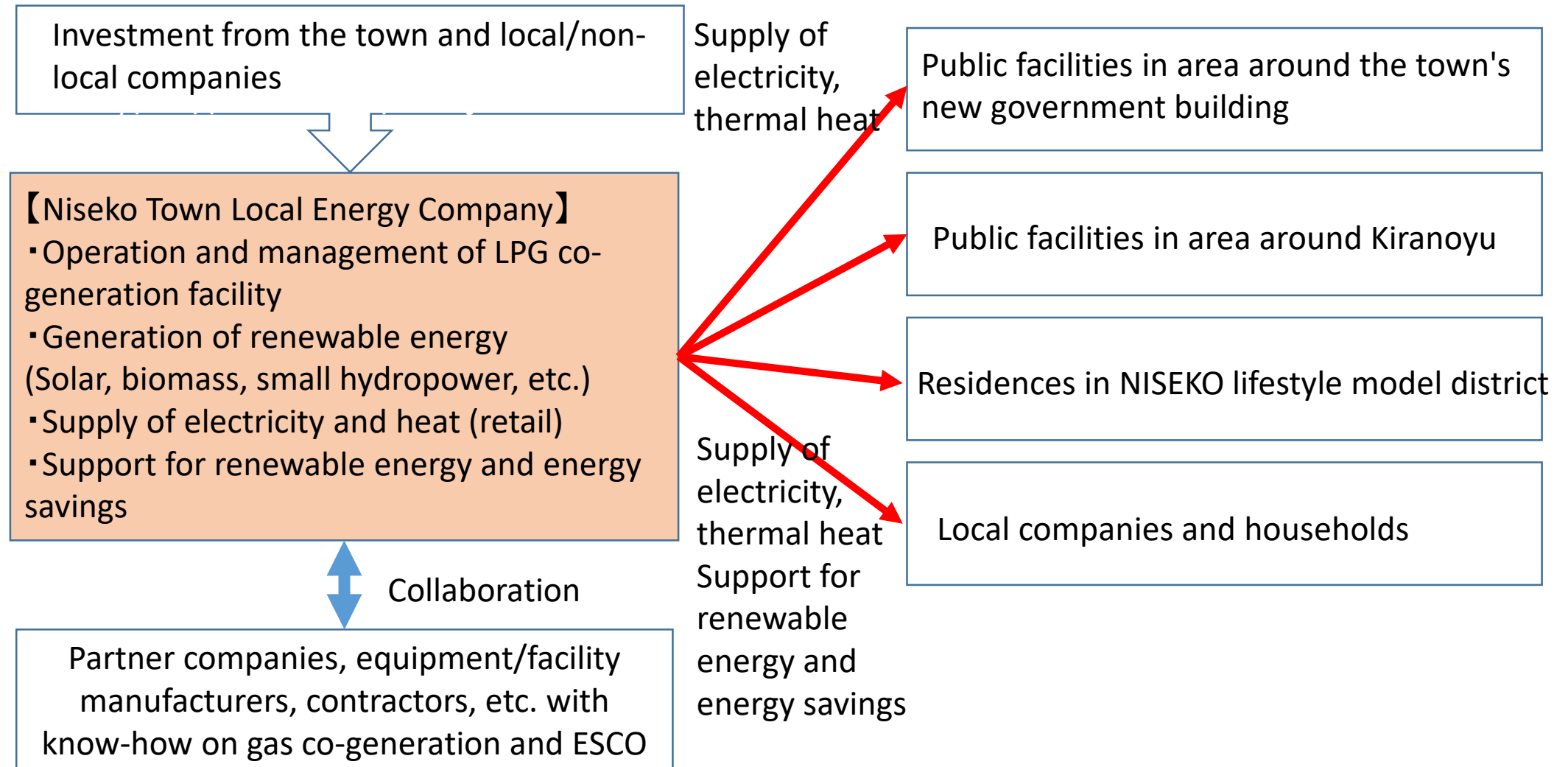
Taking on the Challenge for the Creation of a Next-generation, Super Energy-saving Facility (New government building)

1. Minimize demand for thermal energy by thoroughly improving thermal insulation performance (UA value $0.18\text{w}\cdot\text{k}/\text{m}^2$) (This will minimize requirements for heat supply equipment = minimize the cost of updating equipment)
2. Highly-efficient supply of energy through the introduction of a 9.9-kW co-generation system using LPG as fuel (In the future, Niseko is considering replacing this with a device that uses renewable energy as fuel at stages when equipment will be updated.)
3. Niseko will install solar power generation systems by renting roofs for power generation projects using public funds in the future.

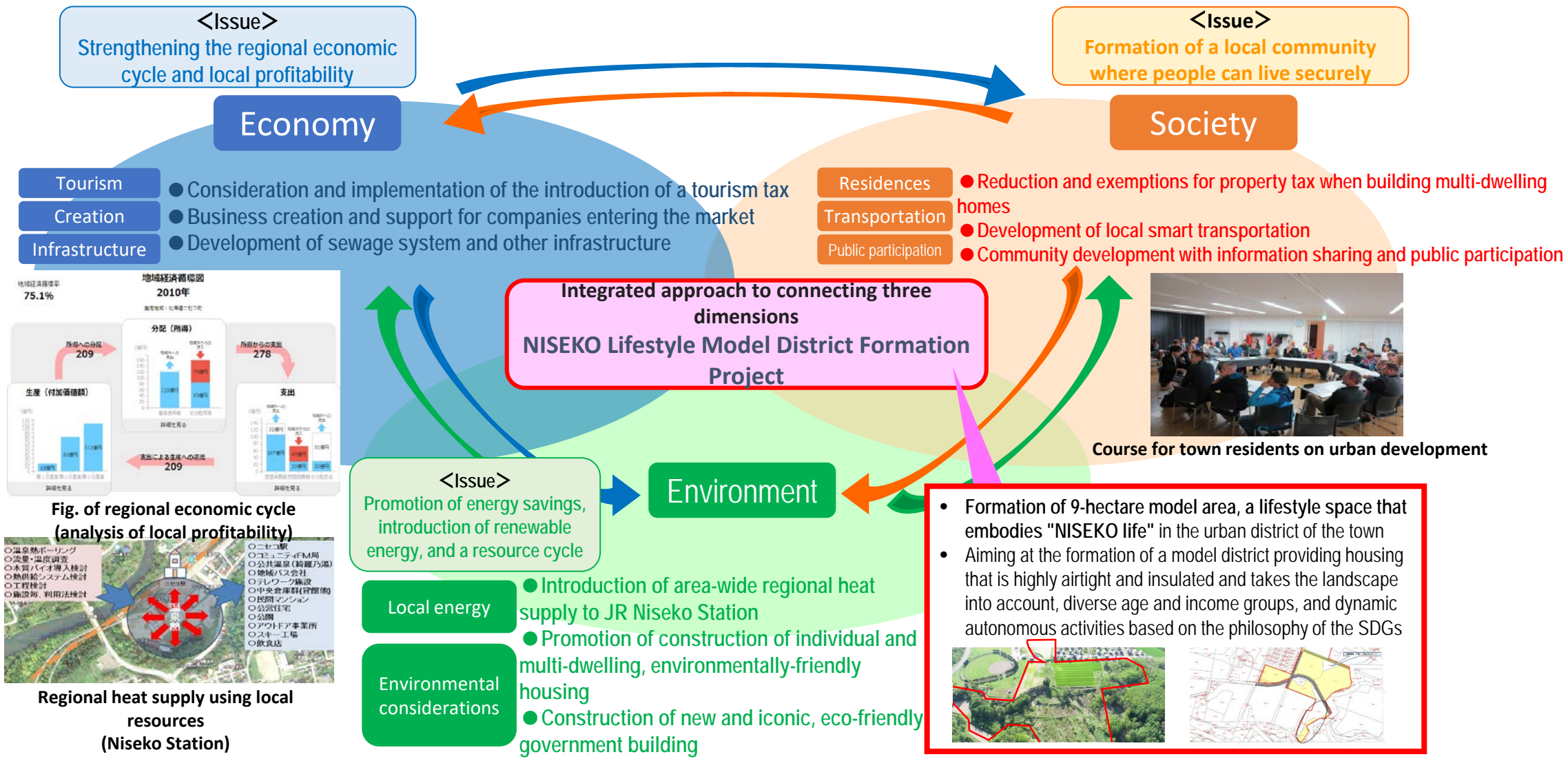
→ The reason Niseko is considering this order of priority is because it is the most economically-rational. We are aiming to create a CO₂-free government building in the long run, rather than aiming at a ZEB where equipment costs can be excessive at the construction stage.



Establishment of a Local Energy Company

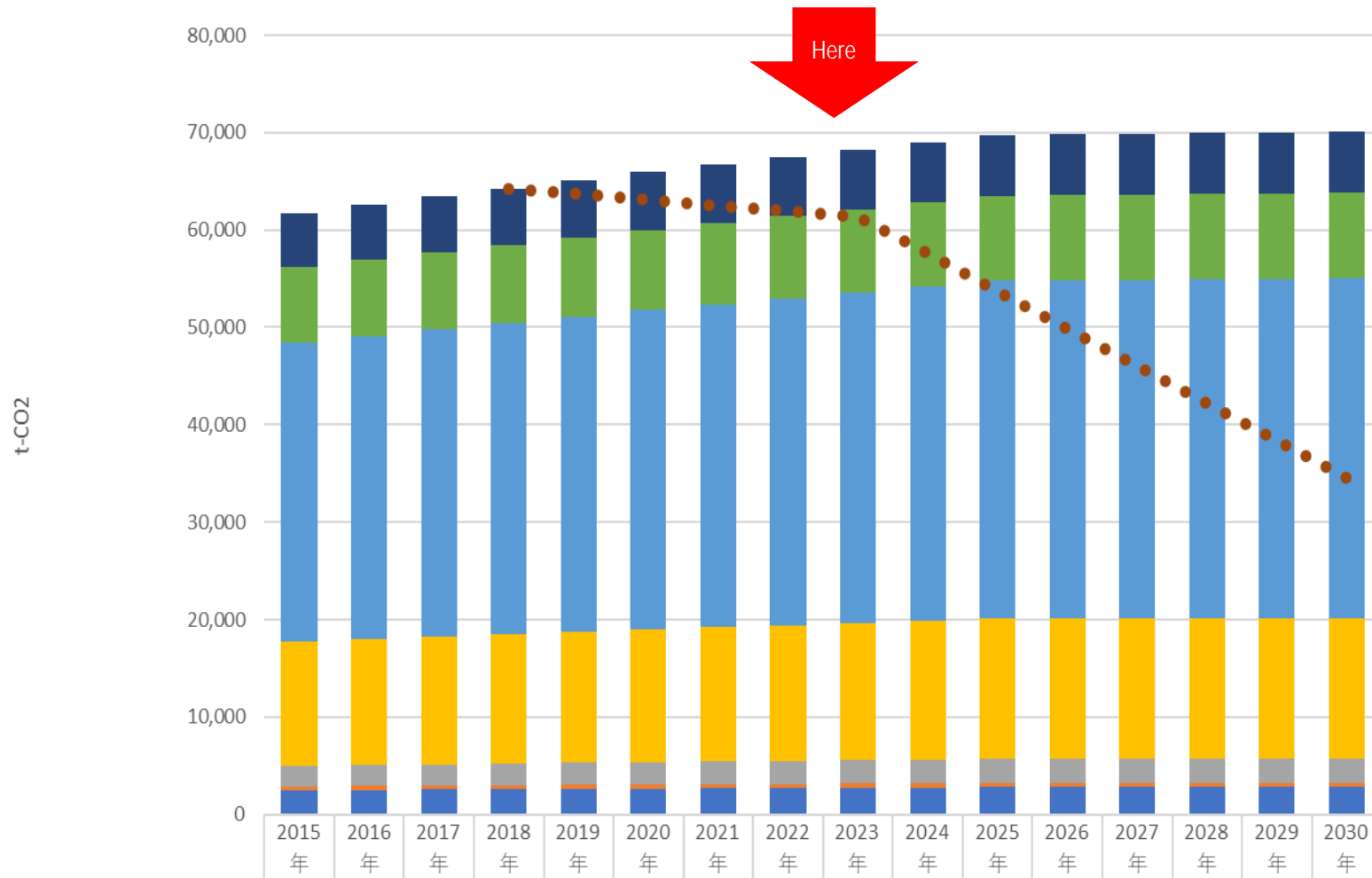


- Construction of eco-friendly groups of housing that will contribute to the revitalization of the local economy, elimination of housing shortages due to population growth, prevention of heat shock and reductions in energy costs, and promotion of dynamic autonomous activities by local management bodies and others to improve the value of the Niseko brand.



Even if we take all these actions...

Estimates of greenhouse gas emissions in Niseko (2015-2030)



Niseko Town will implement 37 comprehensive actions. However, there are limits to how much GHG emissions can be brought down over this five-year period.

Over the five years during the second plan:

- ① Prioritize lowering GHG emissions
- ② Establish necessary infrastructure by 2050 (hard, soft aspects)
- ③ And, take initiatives to develop the third action plan



SDGs FutureCity and Eco-Model City
-- Niseko Town