

LEVERAGING CO-BENEFITS FOR HEALTHY NET ZERO TRANSITIONS IN JAPANESE AND OTHER G7 CITIES



Eric Zusman

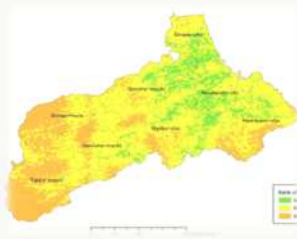
Research Director, IGES
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Leveraging Co-benefits for Healthy Net Zero Transitions in Japanese and Other G7 Cities

- **Start Date:** September 2023
- **Partners:** Nine organizations across Japan, US and France
- **Goal:** Providing Japanese and other G7 cities with the...

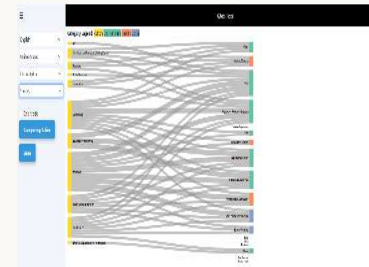
1. Evidence



2. Experience

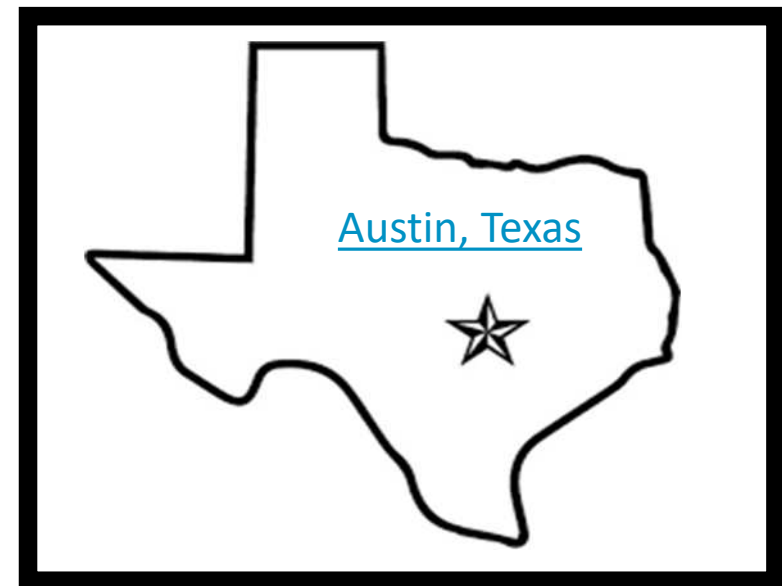


3. Tools



to integrate health co-benefits into climate and other relevant plans.

Project Locations: Five G7 Cities





Unique Features of the Project

Strengthening Interface between Co-benefit Research and Integrated Policies

We are turning scientific and social findings on co-benefits into local government policy, enabling science-based climate action.

Making a real on-the-ground impacts

We collaborate with cities to implement policies that directly improve both residents' health and address the climate crises.

Creating a scalable model

We are developing a flexible framework that can be used by other cities.

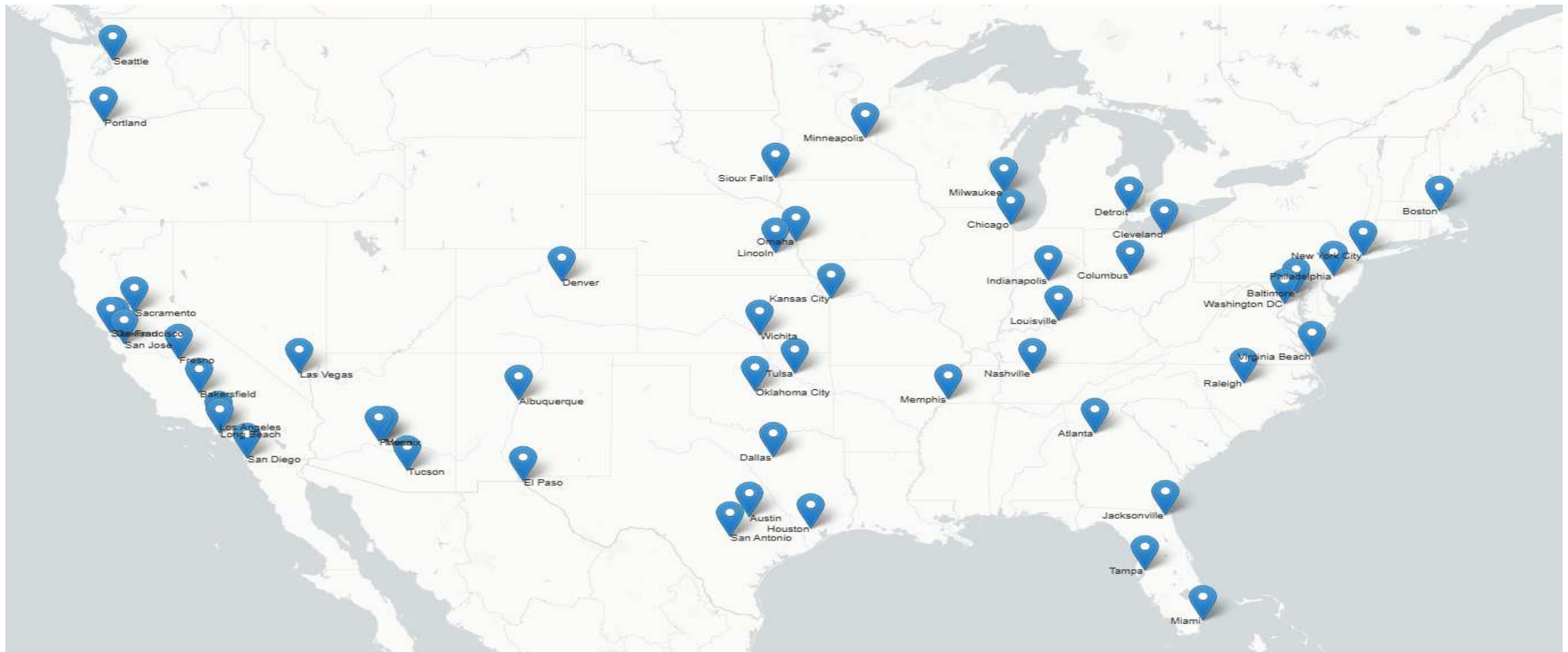
Scenario-based Co-benefit Analysis for Solar Sharing in Hachinohe

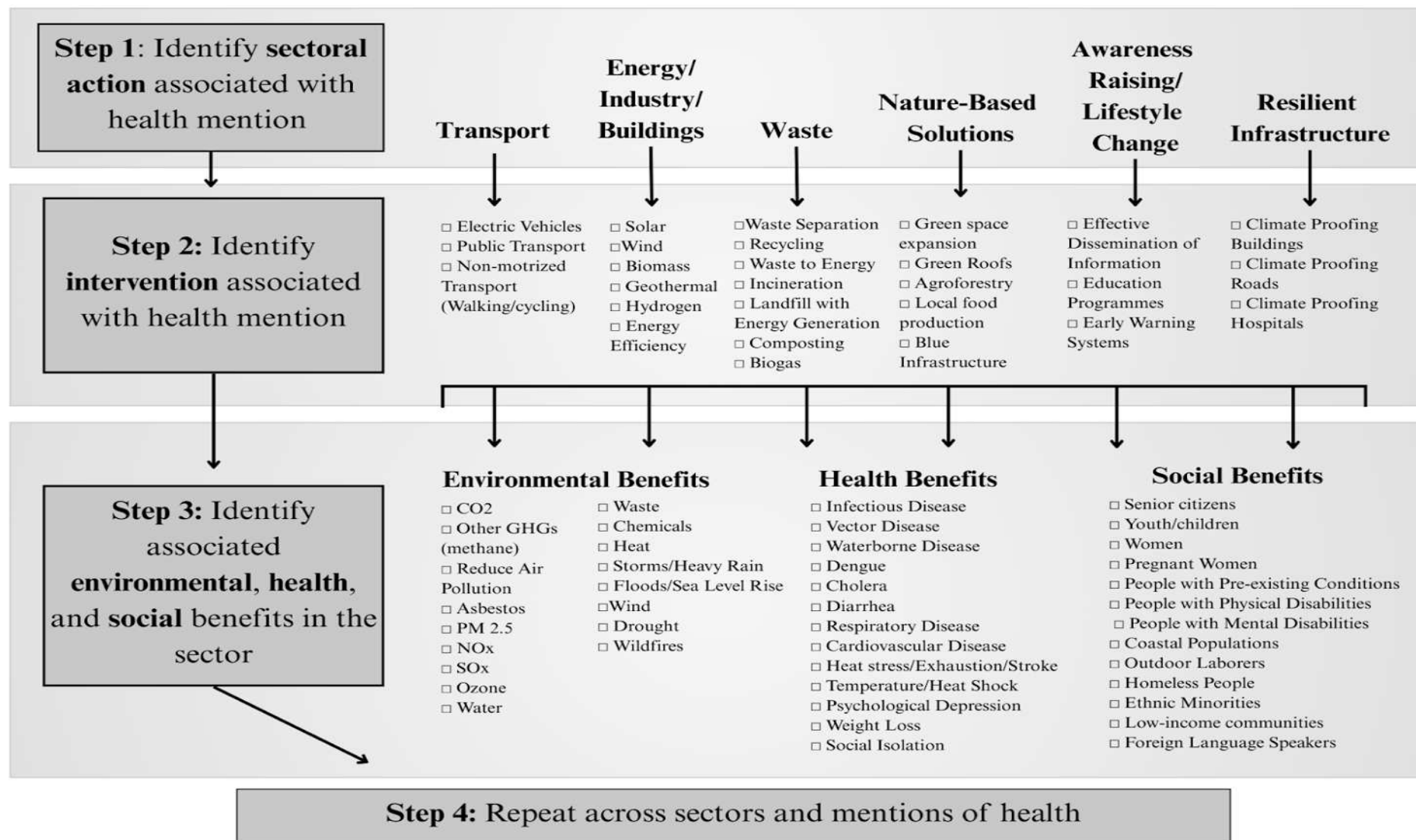
(Based on Kyushu University's Hybrid Renewable Energy Scenario Model)



Scenarios	Ambitious Scenario A	Ambitious Scenario B	Ambitious Scenario C
Proportions of energy mix/ underutilised lands for agrivoltaics	If we use 20% of underutilised lands	If we use 50% of underutilised lands	If we use 100% of underutilised lands
Installation Capacity	≈207.2 MW (207,200 KW)	≈518 MW (518,000 KW)	≈1,036 MW (1036,000 KW)
Environmental Co-benefits: Avoided Emissions	Environmental Co-benefits: Avoided Emissions		
GHG (tonnes/year)	302,957.8	757,394.5	1,514,789.1
PM _{2.5} (kg/year)	13,461.9	33,654.8	67,309.5
CO (kg/year)	593,670.1	1,484,175.3	2,968,350.5
NO _x (kg/year)	84,136.9	210,342.3	420,684.6
Health / Economic Co-benefits	Health / Economic Co-benefits		
Annual healthcare cost savings (k\$/year)	2,709	6,782	13,598
Green Jobs (overall estimate, incl. construction, operation, indirect sectors)	1,491	3,727	7,453

We are also looking at health co-benefits across the United States





Interlinkages and Sankey Diagrams

