

Creating a sustainable community through recycle-based forest management and forest biomass

Shimokawa Town, Hokkaido



Forest owned by Shimokawa



Woody biomass boiler



Ichinohashi Bio-Village

Situation (background, aims, etc.)

Shimokawa is a town located in northern Hokkaido with a population of about 3,000 with 88% of its area covered by forests. To fully utilise this abundant resource, Shimokawa is working to combat global warming and revitalise the local economy through sustainable forest management, adding value to its unused resources, and expanding the use of forest biomass as thermal energy.

Details (project outline, etc.)

Recycle-based Forest Management

- Implementation of 'recycle-based forest management' through continuous logging and reforestation
- Cost reduction and increased value of forest maintenance by implementing measures such as adopting high-performance forestry machinery and acquiring the FSC (Forest Stewardship Council) forest certification

Utilising Forest Biomass

- Installed woody biomass boilers in public facilities to supply heat as a new way to utilise the forest and its lumber
- Use of wood chips from leftover wood left at logging sites for fuel
- 10 woody biomass boilers provide heat to approximately 30 facilities

Ichinohashi Bio-Village Initiative

- Construction of the 'Ichinohashi Area Heat Supply System' to supply heat to the entire region using woody biomass boilers
- Establishment of high-performance housing and non-timber forest products (NTFPs), such as through cultivation laboratories for shiitake mushrooms

Results (features and innovations, future developments, etc.)

- There is now a stable supply of local jobs and lumber to local lumber processing factories
- 56% of Ichinohashi village's total thermal energy is provided via its own biomass boilers
- As of April 2022, compared to 2009 before the village rehabilitation project was initiated, the Ichinohashi area population has slightly increased to 111 (versus 95 in 2009), and the ratio of elderly residents has decreased to 28.8% (versus 51.6% in 2009)