

Maximisation of Wood in Utilisation of Biomass Resources

Maniwa City,
Okayama Prefecture



Situation After the period of rapid economic growth passed, the lumber industry saw a decline and it was there that the idea of promoting industry through maximum use of wood biomass came about. After several study meetings with outside experts, they proceeded with the concept of effectively utilising woody waste products (left-over wood, sawed remnants, wood shavings, bark, etc.) that is produced in large amounts by the forestry and lumber industry.

Action

- ◆ Biomass energy regional systemisation trial project
The Maniwa Biomass Collection Centre was established as a base to ensure the steady supply of woody raw materials. This efficiently transports and collects wood biomass fuel from the local area, as well as using it as raw materials to manufacture wood chips.
- ◆ Construction of the Maniwa system
In order to identify the origin of the wood, a council for the steady supply of wood resources was set up by the parties involved, and an IT system to certify the production area of the wood was constructed, called the “Maniwa system”.
- ◆ Maniwa biomass power generation project
In order to create a revenue earning model from the manufactured biomass fuel, people from the forestry and timber industry coordinated with government and local affiliated organisations to establish the Maniwa Biomass Power Corporation and the Maniwa Biomass Power Station started operating in 2015, generating 10,000 kW/h.

Impact

1. By transforming traditionally useless materials like unused wood and sawed remnants into valuable materials, around 1.4 billion yen in annual fuel costs was returned to local individuals and corporations
2. Wood byproducts making a profit led to an increase in profitability for producers of raw materials and sawmills, and also contributed to reviving the local economy
3. New jobs were created from the projects related to power generation, fuel manufacturing, etc.
4. A model of local production for local consumption was constructed for electric power, as part of the power generated by the power station was supplied to public facilities like primary and middle schools as well as City Hal
