Maniwa: The Wooded City

Forests cover about 80 percent of the land in Maniwa, making timber and lumber key industries. Tree species used for commercial timber—including Japanese cedar, hinoki cypress, and pine—were planted beginning in the late nineteenth century. By the late 1930s, Maniwa had become a major timber supply base for central Japan.

Much of this wood is used in construction. Both traditional and modern Japanese architecture tend toward minimalist design, lightweight materials, and porous boundaries between indoor and outdoor spaces, so wood has always been a key element. In addition to its visual appeal, wood is flexible, provides good tensile strength at a light weight, and offers electrical and heat resistance.

In the 1970s, the national forestry industry began to decline due to lower-priced imported wood and changing consumer preferences. To preserve the local industry, Maniwa began exploring new ways of making efficient, eco-conscious use of the lumber it produces—such as promoting the use of cross-laminated timber (CLT). This building was designed to showcase the attractiveness and versatility of CLT, which was developed in Europe during the mid-1990s.

The CLT production process involves forming large wooden panels by gluing sawn lumber planks together in perpendicular layers. The resulting material offers more stability, better fire resistance, and better insulation than standard wood paneling, and also retains the wood's natural color and grain. Because CLT is made from a renewable resource, it provides an environmentally friendly alternative to concrete.