

Special Feature

New Application and Deployment of Domestic Timber in Cooperation with Local Communities

The Daiken Group has positioned the pursuit of sustainable use of wood resources as an important theme (materiality). While deepening the cooperation with those in local communities having appropriately managed abundant forest resources following the long-term vision GP25 to aim for business expansion into new fields without being bound by conventional ideas, we challenge the new application deployment to use up domestic timber for which the time for cutting has arrived and that requires the promotion of use.

Technologies cultivated since the foundation of the company to effectively use timber

- (1) Technology to overcome the weaknesses of and extract the beauty of timber
- (2) Technology to use timber with zero waste

Developed industrial and building materials using wood fibers

2016 Started to comprehensively use timber by cooperating with local communities

We established the Nichinan Total Cascading Use of Wood commercialization study project in November 2016 with Nichinan, Tottori Prefecture, Nichinan Forestry Cooperative, and Orochi Co., Ltd., which is a local LVL manufacturer. We comprehensively use abundant forest resources in Nichinan without waste by using our wood processing technology and work to revitalize the forestry industry and local industries through the maintenance and management of forests.

Development image of the total use of wood through regional cooperation.

Regional precious wood resources will create value in various scenes by fresh ideas, technologies, and partnerships.



Conservation of Forests

Appropriate management and operation of forest resources will grow healthy forests and contribute to ecosystem conservation



Greening Promotion

DW fiber's excellent water-holding property and water permeability will improve plant growing environment and promote greening

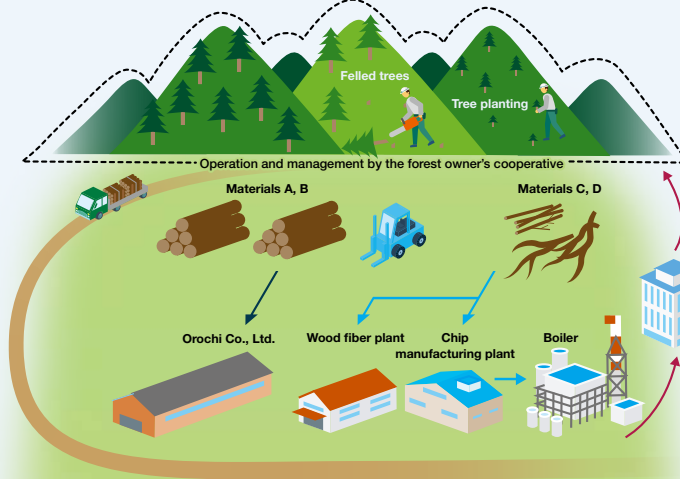


Promotion of Crop Growth

DW fiber will promote soil aggregation, help roots grow, and promote crop growth



Business Base for Total Cascading of Wood



Use of Renewable Energy

Use residual wood offcuts of lumber manufacturing as the fuel for the biomass boiler and fully and effectively use the resource



Research Institute

- Development of tree trimming and planting techniques and human resources
- Utilization development
- Development of products with highly added value

Promotion of the use of domestic timber

By developing wood products to which new value is added, promote the use of domestic timber



Disaster Restoration

DW fiber's soil buffering action will transform soil to the environment appropriate for plant growth and improve salt balance



Regional Development

Revitalization of the forest products industry using local resources will contribute to the development of local economy and employment creation



Participated in the Awaji Bamboo Resource Utilization Project

In October 2020, we participated in the Awaji Bamboo Resource Utilization Project for the purpose of promoting the utilization of bamboo resources on Awaji Island, Hyogo Prefecture. We aim to develop and commercialize fibers using bamboo resources on Awaji Island through the industry-government-academia cooperation involving five parties participated in the project. By not only deploying DW fiber's tree species but also expanding the use of bamboo-mixed fibers, our group will contribute to building the bamboo resource circulating system from supply to consumption of bamboo resources and regional revitalization.

Disseminate the initiatives for the comprehensive use of timber in other regions

Deliver the potential of wood fibers and disseminate use applications in the new field



(1) Soil improvement additive DW fiber

As the first case of the Total Cascading Use of Wood commercialization study project, we started proposing the soil improvement additive DW fiber in May 2017. DW fiber is a soil improvement additive with the point of view to utilize timber without being wasted and made of timber offcuts that are generated in manufacturing LVL by Orochi Co., Ltd., using wood that the Nichinan Forestry Cooperative hewed out and fibrillated and to which fulvic acid with plant growth-promoting effects is added. With DW fiber, we expanded into the fields of civil engineering and landscaping for the first time, and it contributes to the greening of soil and crop growth promotion, as well as post-disaster reconstruction, such as regeneration of protective forest from salty winds.



Case of greening by DW fiber



After about six months



Soil improvement additive DW fiber

*DW fiber has been registered in the New Technology Information System (NETIS) by the Ministry of Land, Infrastructure, Transport and Tourism.
Registration number: KT-170110-A

(2) Wood culture medium GLOW EARTH

As the second case in which our wood processing technology cultivated in DW fiber was applied, we started proposing the wood medium culture GLOW EARTH in January 2021. GLOW EARTH for which we established the technology with an approach different from DW fiber that has plant growth promotion action is a wood medium culture that can create an optimal cultural environment by making factor substances that inhibit the growth of plants harmless. We have realized the resource circulation that wood harvested in a forest becomes the culture medium, helps the growth of the next plants as the agricultural and horticultural material, and returns to the soil again. Regarding our first entry into the field of agricultural and horticultural materials with GLOW EARTH, we will foster this as a bud leading to the expansion of the business domain.



Wood culture medium GLOW EARTH **GLOW EARTH**

Traceability has been secured by actively using domestic timber

While the active use of domestic timber for the purpose of soundly protecting forest resources in Japan has been requested, it has secured the features, such as quality stability and lightweight structure that are unique to domestic wood chip materials, and traceability, such as where timber comes from and the processing route.

Cases of Adoption

In the miniature Phalaenopsis orchid COCOLAN* business that Daiwa House Industry Co., Ltd., has been deploying, GLOW EARTH was adopted as the culture medium based on the points, such as its high quality, stability, lightweight, good touch feeling, and manageability unique to domestic materials.



The Daiwa House Industry Co., Ltd., miniature Phalaenopsis orchid COCOLAN

*COCOLAN culture business: Daiwa House Industry Co., Ltd., constructed a cultural facility using their unique technology in their company housing complex in Miki City, Hyogo Prefecture, for the purpose of building a new relationship with the local community, such as local employment creation, through cultivation of miniature Phalaenopsis orchid COCOLAN.

GLOW EARTH that partially used Timber from the Cultivated Forest* originated from the Natural Water Sanctuary activities across Japan conducted by Suntory Group was adopted as the culture medium for the Suntory Flowers Ltd. vegetable seedling product Honki Yasai Ready To Harvest.



The Suntory Flowers Ltd. vegetable seedling product Honki Yasai Ready To Harvest

*Timber from the Cultivated Forest: Suntory Group refers to timber originated from the activities to cultivate sustainable water and forests as Timber from the Cultivated Forest.