

Newsletter

2/2009

Growth at the interface of the wood products industry and energy sector

Growth in the demand for bioenergy, possibility to use all of the purchased raw material and cost savings in production improve the opportunities for successful cooperation between the wood products and energy production industries. By joining forces in raw material procurement and integrating the production processes, Finland could see the emergence of clusters which use wood as raw material – wood-energy valleys, so to speak.

Cooperation has potential

Lack of confidence can be overcome through collaboration

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Cooperation has potential

The Forest Foresight Unit has completed a survey which sought to find new possibilities and models for corporate collaboration at the interface of the wood products and energy production industries and to find ways of implementing them.

According to surveyed experts representing the wood products, energy and component manufacturing industries, Finland would do wisely in starting to develop shared raw material procurement practices for the wood products and energy production industries and in enhancing the integration of their production processes.

This cooperation could be taken the furthest in mechanical wood processing and energy industry clusters – in wood-energy valleys, so to speak. In the early stage, the core of these valleys would be formed by sawmills and combined heat and power (CHP) plants, which would benefit from each others' production and by-product flows.

Sawmills and CHP plants would share a raw material procurement company, either amongst themselves or together with forestry contractors. Forest owners, on the other hand, could be offered harvesting services in which not only roundwood

but also wood waste and stumps suitable for energy production. Timber would be sawn and other parts of the wood used in energy production.

As the operations become more established, the clusters could also encompass pellet production and the construction carpentry industry ranging from component production to house production factories and furniture manufacturing. The production units could operate as independent companies, as part of their parent company or be cross-owned partners.

The coming into existence of the wood-energy valley model may seem distant now, but its potential for success is good. This is further enhanced by the anticipated heavy increase in the demand for bioenergy, the pulp and paper industry -independent procurement of raw material, and the cost savings brought on by the integration of production processes.

Lack of confidence can be overcome through collaboration

The survey highlighted several obstacles to collaboration between wood products and energy sector companies. A lack of confidence

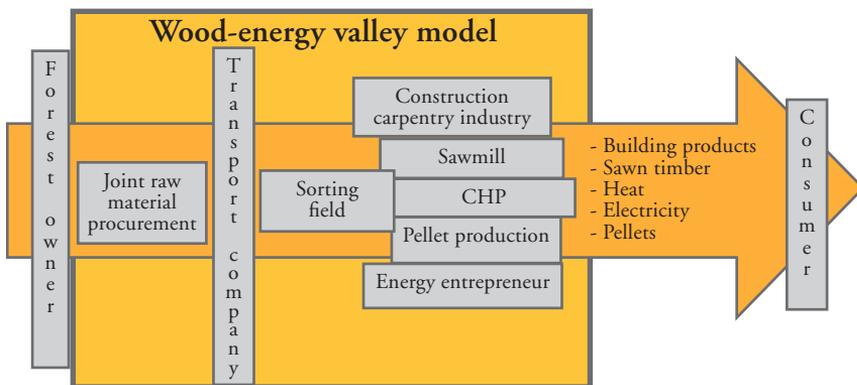


Figure 1. The wood-energy valley combines the benefits of joint wood procurement and centralised production.

and a lack of collaborative tradition between these industries were identified as the most important obstacles to collaboration.

It is possible to overcome the lack of confidence through joint activities. Development organisations and sector-specific interest groups should highlight the positive experiences received from collaborative projects undertaken between the wood products industry and energy production industry. Furthermore, the interest groups should draft guidelines for cooperation agreements between companies. Centres for Business and Industry, Transport and the Environment and Forestry Centres could help in overcoming the lack of confidence through corporate projects and by organising training aimed at entrepreneurs and corporate management. Funding from development organisations would serve as a stimulus for pilot projects undertaken in collaboration between companies.

Call for State action

According to experts in energy production, the State has not been able to set clear and sufficiently strong long-term goals to promote the production and use of renewable energy. The discussion on the feed-in tariff was seen as an example of the State's careful attitude. The State is avoiding taking a decision in the feed-in tariff matter, although there is a risk that raw wood material will be exported from Finland to countries which use a guaranteed price for electricity produced on biomass.

For sawmills the feed-in tariff would mean an increase in the use of sawmill by-products and smallwood for electricity production. This would decrease sawmills' dependence on the sales of sawlog surfaces and marked timber to the pulp and paper industries.

The State has several ways in which it could increase the use of renewable energy, i.e. it could tighten the taxation on fossil fuels or it could support heating investments which promote the use of renewable energy. Moreover, legislative changes could be made to open the municipal heating networks to competition between heat suppliers.

Innovation workshops efficient in expertise transfer

The working method adopted at the innovation workshops organised by the Forest Foresight Unit has proven to be a very efficient way of bringing together the expertise of entrepreneurs, researchers, consultants, etc. in solving a particular common problem. A common problem may concern, e.g., the creation of a new business operation, finding a focus for a research project or the development of inter-organisational collaboration.

The innovation workshops let each participant to throw in ideas and prioritise the possible solutions to the problem. The ideas created through collaboration, consensus and reflection are widely accepted and feasible. The innovation workshops make use of research data to support the development of business operations and decision-making alike. These innovative methods have been used, for instance, when brainstorming for the possibilities of the wood products industry in the Kainuu area and charting the possibilities of the North Karelia Centre for Business and Industry, Transport and the Environment to engage in collaboration with other local administration authorities. In addition, the working method is well-suited for planning the future operations of research organisations.

Residents' view on bio-energy and wood as a building material

The Forest Foresight Unit has launched a one-year survey which seeks to assess the images relating to bio-energy and wood as a building material and to evaluate consumer choices from the viewpoint of housing. The research data is comprised of the reports made when planning the densely-populated small house area of Nupurinkartano in Espoo and the assumptions made of its residents' preferences, the housing-related consumer descriptions on the Kuningaskuluttaja website and the expert interviews addressing non-conventional housing (ecological housing, traditional housing and communes).



Forest Foresight Unit's Newsletter

Publisher:
Forest Foresight Unit
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