Compilation of Recent Foresight Studies to Support Forest Policy Processes in Finland*

A report for the Ministry of Agriculture and Forestry

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SUMMARY

Forest, energy, and climate policies are under major changes, and pressure for policy development is high at national and international level. Not only policy measures, but also many other factors will modify the operation environment of the forest sector in future. In the present changing environment, the actors of the forest sector have to evaluate their goals, which increases also the importance of the foresight information.

The purpose of the study was to gather, review and make a synthesis of the existing foresight studies on the forest and related sectors published 2008–2011. The literature from the past four years is abundant but scattered, which means that the earlier syntheses would benefit from updating. A synthesis also helps to assess the possible needs for the new and more detailed foresight information. The present review is based on the publicly available literature consisting of 117 reports, of which the majority is written in Finnish, but some studies in English as well as some foreign or international studies are also reviewed. The literature includes various reports such as academic modelling and scenario studies as well as road maps and preparatory studies for national strategies for the forest and other related sectors.

To encourage Finnish stakeholders to use foresight information in practice, a foresight workshop with international lecturers was organized by the Finnish Forest Research Institute, the Ministry of Agriculture and Forestry and the Ministry of Employment and the Economy. The aim was to promote exchange of future-related information, networking and to provide new ways and approaches to utilize foresight information. (Linkki ohjelmaan)

In the review, identification of global drivers of change and assessment of their long-term trends were found to be a common theme in the forest and related sectors. Global trends highlighted in the Finnish and international studies include the emergence of an economically and politically multipolar global system, occurrence of the fastest economic growth and the greatest increase in demand in the developing economies especially in Asia, increase in global demand for energy, intensification of competition for other, diminishing resources driven by the population and economic growth, and changing climate. Particularly for the forest sector, the following trends were identified: decrease in demand for paper products due to the increasing use of electronic media and new materials, increase in demand for packages especially in developing countries in Asia, increase in demand for renewable energy sources, rise in transportation costs, growth in interest for services related to well-being and health such as nature-based tourism, and growing emphasis on client and consumer-oriented business models.

Global trends often have common drivers and multiple interactions, which can make the evaluation of their possible influence on the forest and related sectors difficult. In addition, complexity, uncertainty and risk associated with these trends further complicate assessment of their effects. Many actors express the need for integrated information from several sectors, for instance on the
future development of the economy and environment. In addition, future studies that treat uncertainty and risk are in demand.

Although it is evident, that the demand structures of the present forest industry end-products are changing, the rate of the change differs in different parts of the world. For example, future scenarios on the possible effects of the electronic media in emerging economies, such as Russia and China, are largely missing. The alternative demand scenarios for the end-products would provide important information for the assessment of the future production potential for forest industry products in Finland, for instance.

Moving gradually towards a low-carbon economy or even making visions on how to reach it will greatly change the whole society. Although the present visions of bioeconomy might not materialize as such, our attempts to change our lifestyles towards this vision would require increasing cooperation between different industries and branches of science.

Evaluation of new forest-based products and technological development in forest-based energy production is particularly needed. Also the participants of the foresight workshop organized on the 30th of March 2012 as a part of the review process expressed a desire for more information on the future development of technologies that utilize forest-based resources. They wished for new foresight products and services to compile, filter and analyze the information on different technologies and on the forest sector in general. In their opinion, information was globally available and even abundant but would benefit from the assessment by specialists.

Workshop participants also wished for more foresight work on the future development of forest-related policies at the national, EU and international level. This concurred with the need commonly found in the recent foresight studies for more information on future values and behaviour.

An important question on how to develop foresight cooperation inside the forest sector and between the forest and related sectors was considered in the foresight workshop on the 30th of March 2012. According to a questionnaire to the workshop participants, an idea of a national foresight network for forest sector was widely supported. The participants perceived that the foresight network should cover all the actors in the forest sector, but also actors from the related sectors were important. In general, foresight information on the operation environment of the forest sector was seen more and more important.