

December 2015

Biofuel

Making use of branches and tops etc. after felling to produce electricity and heating is a considerate and sustainable way of maximising the area of use of the forests. By not letting anything go to waste, the forests provide greater benefit.

Biofuel is a renewable energy source and does not have any impact on the greenhouse effect. There is great potential in its area of use, there are numerous benefits. In Sweden alone the use of biofuel has quadrupled in recent decades. Tax relief and more efficient production and transport of the biofuel from the forests have made extraction of biofuel more financially attractive for forestry.

In practice, the extraction of forest fuel entails branches that have been delimbed and tops that have been cut being collected when felling takes place, as well as complete smaller-diameter trees in thinning (wood damaged by rot and split wood, as well as stumps, may also be used for forest fuel). The forest fuel is then stacked in piles for drying and can then be transported whole or chipped to power and district heating plants.

The practical and technical management of biofuel extraction is being developed in several ways and for various purposes.

One area of development is to make the biofuel harvesting itself more efficient. This is done partly by using what is known as the multi-tree technique, where harvesters with special multi-tree handling units can pick and gather whole bunches of smaller-diameter trees which are then processed.

Another area of development is quality enhancement of forest fuel – developing and improving various methods for example to optimise drying and chipping and to minimise contaminants in the fuel, the reason being that what is eventually paid for in forest biofuel is its energy value. Logistics and transport are further areas being developed to make the use of forest fuel even more attractive and profitable.

