

# Chipping and delivery of forest fuels

The story of a local entrepreneur from North Karelia



**Nowadays** about 40 mobile chippers operate actively in the Finnish forest energy business. Approximately 90% of them are owned by private entrepreneurs. In 2010, the requirement for mobile chippers in Finland is estimated to be about 70. These produce 2.1 Mm<sup>3</sup> of forest chips which amounts to 42% of the estimated domestic demand. One of those private entrepreneurs is introduced in this Infocard.

His company is a good example of how private entrepreneurs operate in the forest energy business.

Chipping and transportation of the fuel is carried out by the entrepreneur himself. Additional help is only needed for commuting to and from the place of operation.



**The operating radius is about 50 km around Eno**

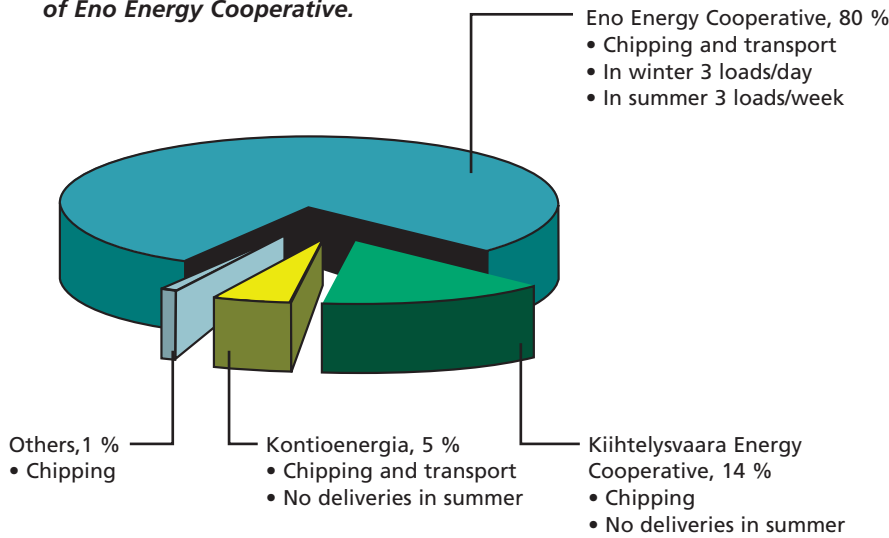
**Processed raw material totals 30 000 loose-m<sup>3</sup> annually**



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# Shares of deliveries

Annual delivery of 30 000 loose-m<sup>3</sup> is distributed to 4 customers. Tero Liimatta himself is a member of Eno Energy Cooperative.



# Company background

This entrepreneur first experienced chipping of forest fuels as an employee in the mid-80s around Eastern Finland. When the district heating plant in Eno was established he decided to live on his farm in Eno and began to operate his own business around Eno. Today, the chipping and transportation of forest fuels are one branch of his farming business. In the summertime, when demand for chips is low, farming and forest work are at the top of the agenda, whilst in the winter forest fuel supply dominates.



# Business details

## Payment

- according to chipped and delivered chips
- about 5€/delivered loose-m<sup>3</sup> + VAT
- Moisture content doesn't have an effect on the price

## Expenditures:

- Machine purchase
- Fuel and blades
- Repair and maintenance (by entrepreneur)

## Plans for the next 5 years

- The use of forest chips will increase
- Purchase of a new chipper, old chipper will be used as a reserve
- Employment of 1 employee
- Storage in case of unexpected situations (there are reserve chip suppliers)
- The company form will most likely change from farm business to an enterprise

# Machinery

## Truck-based chipper, model -2003 (picture)

- Truck: Sisu 11E385 (Sisu Trucks/Finland)
- 283 kW / 385 hv 1900 rpm
- Multipurpose cabin with a rear windows for the chipping

## Chipper: KESLA Foresteri C4560LF (Kesla/Finland)

- Feed orifice 600 mm x 450 mm
- Max diameter of raw-material 45 cm
- Max. chip output 150 loose-m<sup>3</sup>/h
- Power requirement 100-200 kW
- Available also as several tractor-driven versions

## Loader: KESLA Foresteri 700 (Kesla/Finland)

- Machine loader
- Lift capacity, net 70/64 kNm
- Oil flow 70-100 l/min
- Power requirement 22-44 kW

## Chip truck, 2001 (picture)

- Truck: Volvo FH12
- Container 47 m<sup>3</sup>

## 2nd truck-based chipper as a reserve

- Truck: Scania, model -1972
- Chipper: Bruks, model -1986

Idealmainos 4/06, Galerie Art Silk 2009



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