

Supply of wood biomass for energy purpose: global trends and perspectives



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CNR-IVALSA

- Public Research Organization
- Research, Development, Transfer

- IVALSA



- Forest Engineering since 1970

The bioenergy boom

- Worldwide
- 20/20/20 EU engagement
- Chip prices from 30 €/t to >60 €/t !



Resource



Timber harvesting: flat terrain



Timber harvesting: steep terrain



Chipping



Compacting



Stump & Root Harvesting



Pruning residues – small scale



Pruning residues: industrial



SRC – Cut & Collect



SRC – Cut & Chip



Intelligent Chippers



Convertible grinders



Pruning residue harvesting



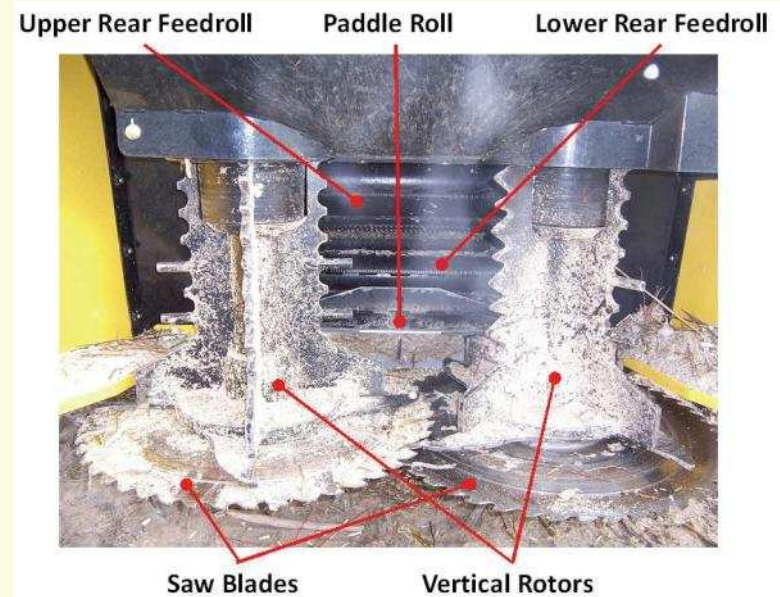
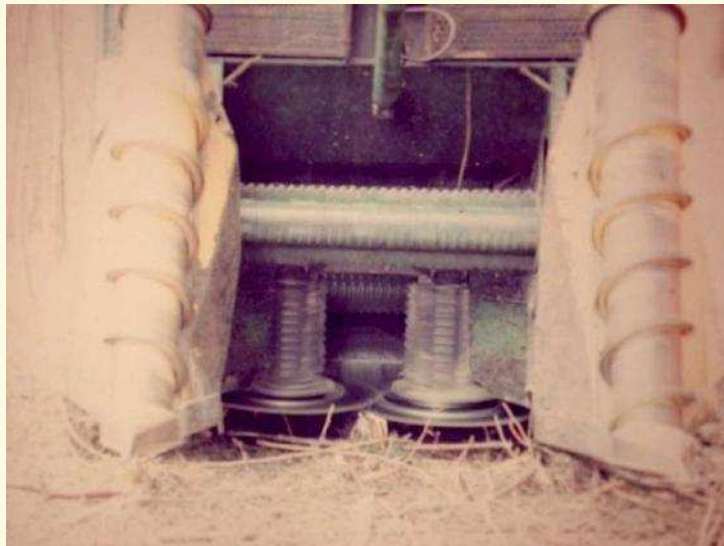
Swathe machines



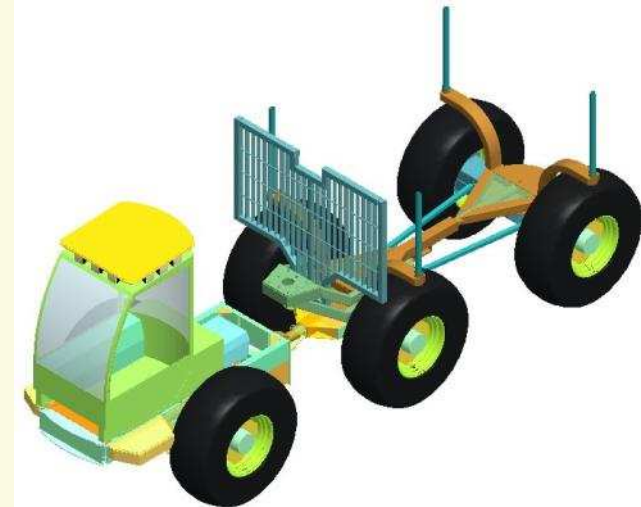
Alpine forwarders



New SRC harvester



Hybrid-electric forwarder



Unmanned machines



Boom automation



Stand-alone bundler



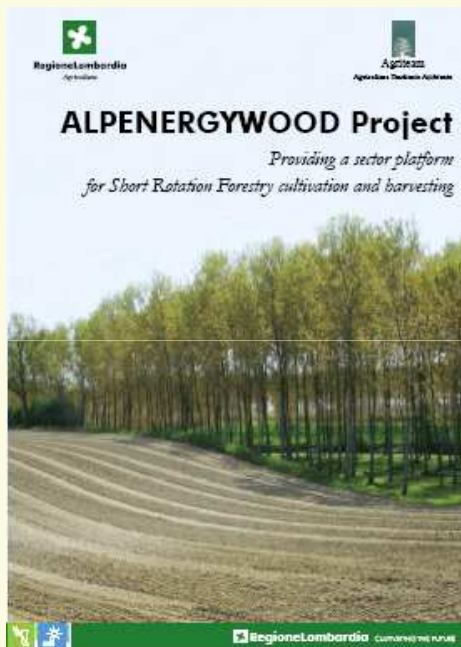
Long-distance booms



OH: Dust, Benzene, APH



www.biomassaforestale.org



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