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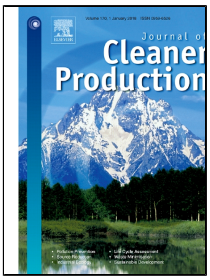

Forest biomass chain of production: challenges of small-scale forest production in southern Brazil

Flávio José Simioni, Claudio Cesar de Almeida Buschinelli, José Mauro Magalhães Ávila Paz Moreira, Bruna Mariá dos Passos, Sandy Bernardi Falcadi Tedesco Girotto

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**Final Version**

# Forest biomass chain of production: challenges of small-scale forest production in southern Brazil

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## ABSTRACT

Renewable resources have substantial participation in the energy network of Brazil. With regard to forest biomass, efforts are being made to increase the participation of firewood from cultivated groves to replace wood from native forests. The aim of the present study was to characterize the chain of production of firewood from cultivated eucalyptus in the region of Santa Cruz do Sul in southern Brazil, focusing on an analysis of the challenges of small-scale firewood production for energy needs and energy self-sufficiency on rural family farms. The research strategy involved data collection through visits and interviews performed in two phases (October 2014 and June 2015) with a sample of 36 agents who represent different segments of the chain of production. A board of forestry experts was united in 2016 for the validation of the data. The results indicated that farmers produce eucalyptus wood to meet their energy demands with low production costs. The main challenges for energy self-sufficiency are related to the scarcity of capital and labor. This study offers important information that can assist in the establishment of public policies and actions to promote the sustainable use of eucalyptus groves to provide energy to small-scale farming operations.

**Keywords**: Eucalyptus firewood; Forest policy; Family farming; Forest costs; Energy self-sufficiency

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