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Rita Ehrig · Frank Behrendt · Manfred Wörgetter
Christoph Strasser

Economics and Price Risks in International Pellet Supply Chains

 Springer

Rita Ehrig
Christoph Strasser
Unit Resources and Technical Logistics
BIOENERGY 2020+ GmbH
Wieselburg-Land
Austria

Manfred Wörgetter
BIOENERGY 2020+ GmbH
Wieselburg-Land
Austria

Frank Behrendt
Chair Energy Process Engineering and
Conversion Technologies for Renewable
Energies
Berlin Institute of Technology (TU Berlin)
Berlin
Germany

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Abstract

Purpose

This work investigates critical economic aspects and price risks along international pellet supply chains. This allows an estimation of risk margins in pellet trade and gives insight into crucial mechanisms, which drive pellet prices and worldwide trade.

Methodology/Approach

Supply costs for three real case studies are assessed with Canada, Australia and Russia as exporting countries and the EU as target market. Based on these, most significant economics and price indicators along the supply chain are identified and analysed. With these, the impact of several risks like raw material prices, exchange and freight rates on total prices is investigated.

Findings

Coincidentally occurring price fluctuations within the supply chain can effect a 34–57 % variation of import prices. So, exchange rate volatility with more than 30 % variation between 2008 and 2011 has strongly hit individual pellet exporters to the EU. Nevertheless, the pellet price bears lesser risk than hard coal prices.

Research and Practical Implications

The assessment of various price data along the supply chain as well as interviews with pellets market actors allow to conclude how the pellet supply chain can be de-risked and how price risks are hedged to avoid project defaults and achieve consumers' renewable energy targets.

Originality/Value

A comprehensive review and analysis of pellet price risks has not been accomplished before and thus this work allows new insight into the interconnections between the sector, the various supply risks on the market and related de-risk strategies.