Modeling and Analysis



Sustainability certification of bioethanol: how is it perceived by Brazilian stakeholders?

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Abstract: This paper investigates whether initiatives for sustainability certification of Brazilian ethanol can be expected to stimulate a change among producers toward more sustainable production - and, if so, what those changes would likely be. Connected to this, several questions are raised including whether producers might prefer to target other markets with less stringent demands, and if certification might lead to structural changes in the sector because producers who lack the capacity to meet the new requirements cannot remain competitive. The analysis of interviews with a diverse group of stakeholders under the guidance of the Technological Innovation Systems framework allowed us identify different actions taken by the Brazilian sugarcane ethanol sector in response to requirements of sustainability. The interviewees agreed that sustainability certification is an important element for the expansion of biofuel production in Brazil. Brazilian stakeholders have created a platform for more competitive sustainable production and have initiated relevant processes in response to the development connected to sustainability certification. Yet, the certification activities have had a limited impact in terms of the number of involved stakeholders. But interview responses indicate that the sector may adapt to new certification requirements rather than leave markets where such requirements become established. Structural changes can be expected if certification requirements as they exist in many initiatives are introduced in unflexible ways. The social importance of the ethanol industry is large in Brazil and some adjustments for certification may be required. The paper concludes by suggesting some actions for the industry. © 2010 Society of Chemical Industry and John Wiley & Sons, Ltd

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