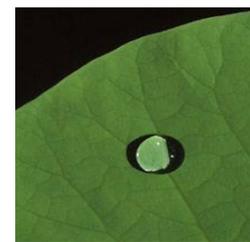


The Market Value of Sustainability and Certification

Joint Forum on Bioenergy
Sustainability and Lifecycle
Analysis

May 30, 2008



Value of Sustainability

○ Inherent Value of Sustainability

- Certain sustainable practices have inherent value because they make economic sense,
i.e. energy efficiency, reprocessing or recovering waste streams, regionalization / localization
- Marketing value of self-proclaimed sustainability is limited
 - consumers don't know the difference

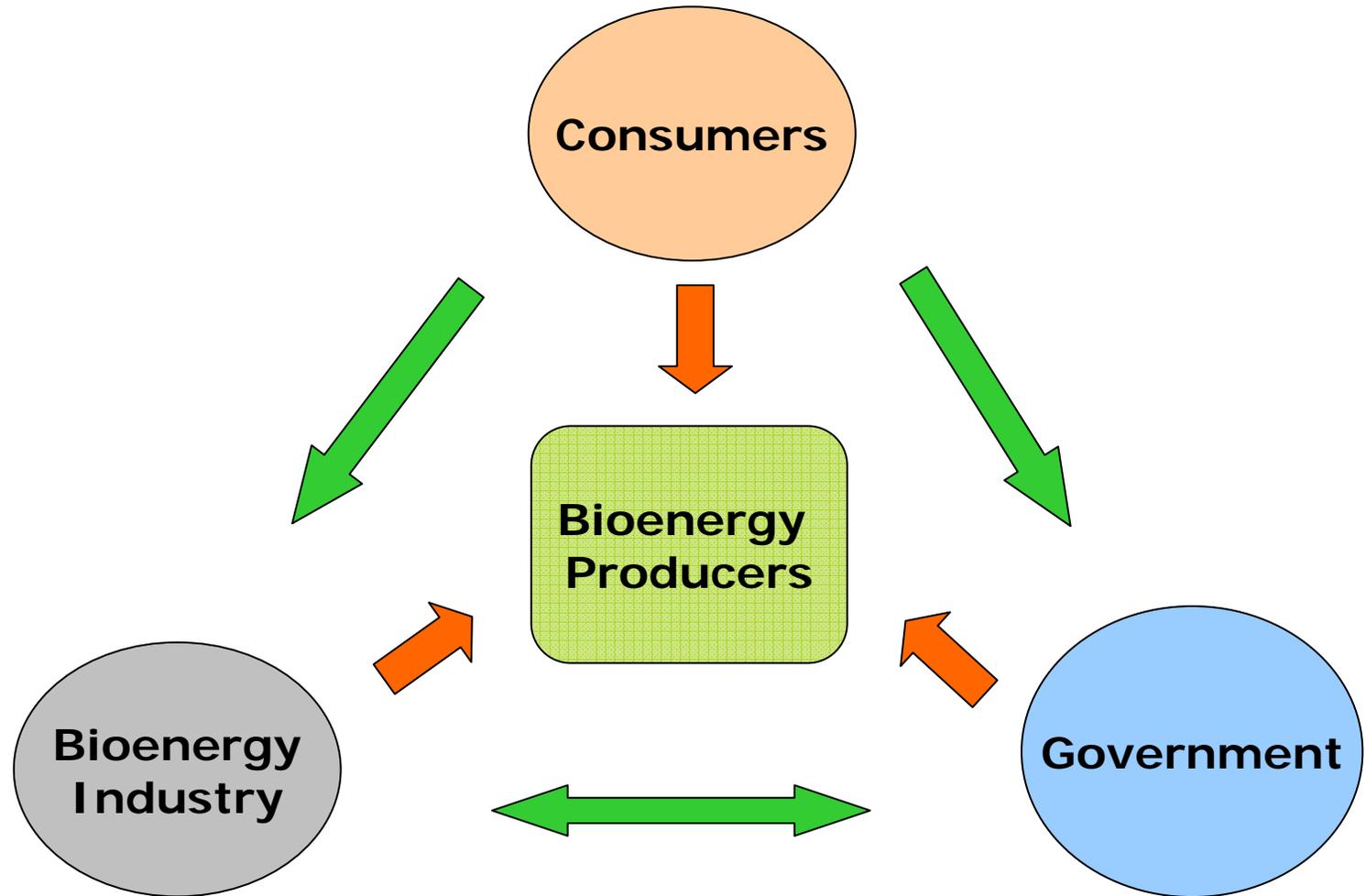
○ There is no 'market' for sustainability

- No clear distinction in the market for sustainable versus non-sustainable products
- Government policy does not currently drive sustainability
- Thus there is no 'market' for sustainability today





Sustainability Market Drivers





Sustainability Market Drivers



- Producers
 - Driven by economics
- Consumers
 - Growing awareness of and demand for sustainability but this is not pervasive in the value chain
 - End consumers vs blenders/distributors/refiners
 - Absent sustainability certification, how do consumers choose and influence the market
- Bioenergy Industry
 - Development of sustainability standards and certification programs should be industry driven
 - Industry groups are well positioned to do this but will they?
- Government
 - Move towards carbon / GHG emission limitations will drive the adoption of sustainable bioenergy production practices
 - Lifecycle carbon accounting factoring in sustainability metrics combined with an active carbon trading market will drive bioenergy producer behavior



Creating a Market for Sustainability



- A market for sustainability requires:
 - clear and consistent definitions and metrics
 - Non-competing mechanisms to measure and certify sustainability
 - Consumers using the above to exercise choice and thus drive market value
- Mechanisms to comparatively measure the value of sustainability are critical
 - Lifecycle carbon accounting provides a mechanism to measure sustainability
 - 'carbon adjusted' market pricing
 - Industry driven sustainability certification enables clear differentiation and choice
- Consumers are the 'deciders'
- Differentiated pricing for varying levels of sustainability



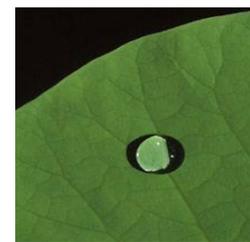
Value of Sustainability Certification



- Provides consumers with a clear and simple choice between sustainable versus unsustainable bioenergy products
- Creates a market for sustainability
- Producers will be forced to 'rethink' their business
 - Feedstock selection and sourcing
 - Energy consumption
 - Waste / byproduct processing
 - Marketing
- Stimulate increased efficiency in producer operations
- Promote sustainable feedstock production

THANK YOU

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Who is Crimson Renewable Energy?



- Part of Crimson Resource Management Corp., a leading independent California upstream and midstream oil/gas company
- Crimson Renewable Energy combines strong energy industry production, engineering and logistics experience with financial strength
- Currently focused on Biodiesel production and distribution
- Building the largest biodiesel plants in CA
- Proprietary closed-loop, continuous system for multi-feedstock biodiesel production