

Trust and Legitimacy in Sustainability Governance of Bioenergy Supply Chains

Strategic Inter-Task study,
commissioned by IEA Bioenergy



Maha Mansoor, York University
Inge Stupak, University of Copenhagen
Tat Smith, University of Toronto
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I. Introduction:

- Purpose of this paper
- Current state of bioenergy
- Future of bioenergy

II. Definitions:

- Sustainability Governance, Trust, and Legitimacy

III. Frameworks:

- Types of governance system
- Levels of social trust and legitimacy in governance system
- Trust and legitimacy in the governance system policies, supply chain control systems, monitoring systems, enforcement systems, and communication and transparency

IV. Broader Challenges

V. Conclusions



Purpose

Purpose of O2: Measuring, governing and gaining support for sustainable bioenergy supply chains.



Purpose of this paper: Frameworks to analyse the trust and legitimacy of sustainability governance systems of bioenergy supply chains.

Liquid biofuels: EU-RED and 19 Approved Voluntary Schemes

	RO, RHI, CfDs - UK	GCs - BE	IA - DK	SDE+ - NL
I. Strictness of legislation	Legally binding – to receive support	Legally binding to receive support	Voluntary	Legally binding (when implemented) to receive support
II. Timeline of implementation	End of 2015	Already implemented	2016	To be identified

Mui-Moulin & Junginger, 2016

Solid biofuels: Sustainability criteria in four EU member states



Biofuel Watch, 2016

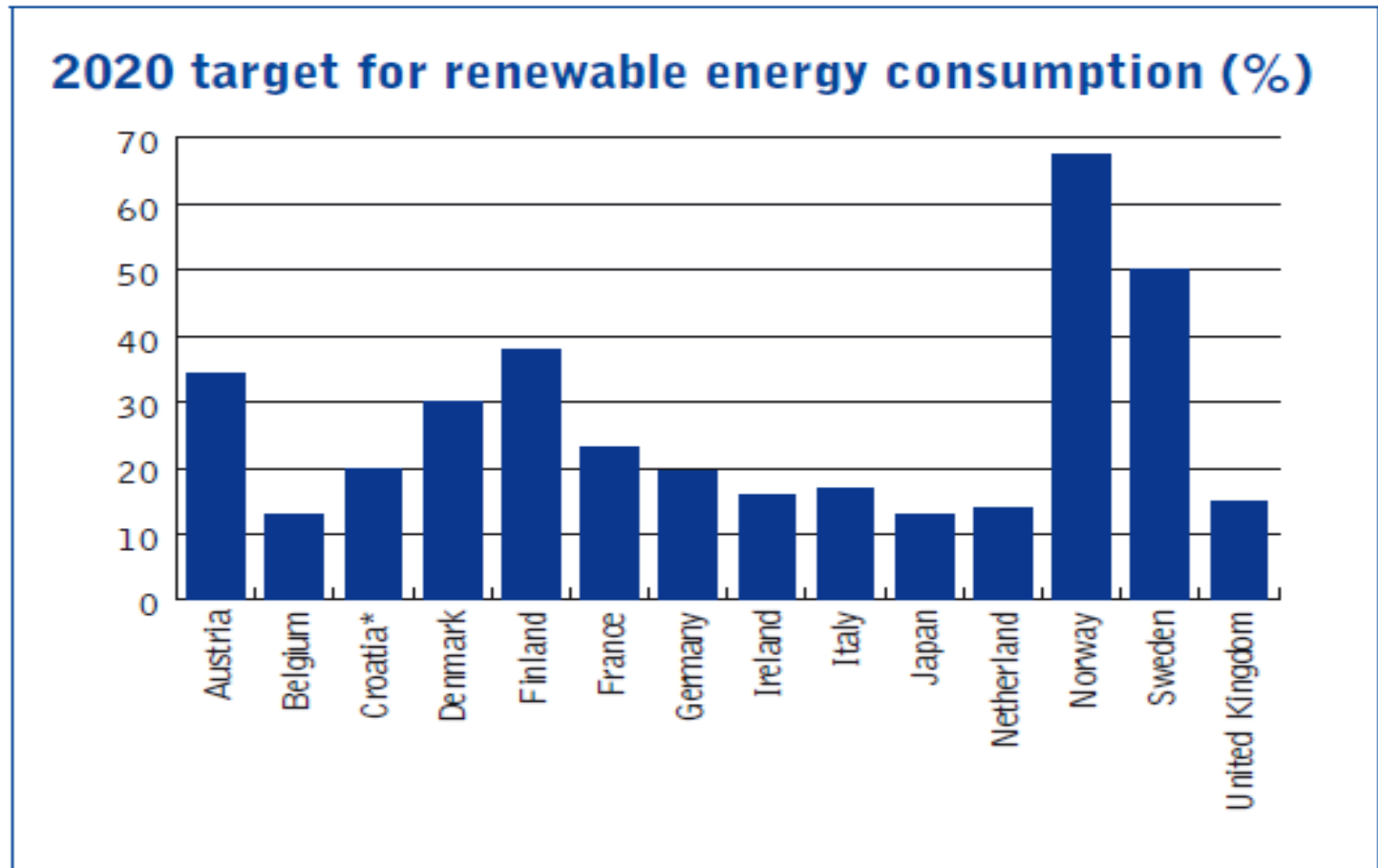


Greenpeace, 2011

But why is there a disconnect?

Renewable energy targets

Bioenergy consumption will increase



Source: IEA Bioenergy Countries' Report Bioenergy policies and status of implementation (2016)

Several sustainability issues

Paris Agreement (2015):

- Lower GHGs in a manner that does not threaten food production and security (Preamble, Article 2)
- Undertake rapid reductions in GHG emissions in accordance with best available science (Preamble, Article 4)
- Reduce emissions from deforestation and degradation of forests; sustainably manage forests (Article 5)
- Ensure environmental integrity and transparency, including in governance (Article 6)
- Promote sustainable development (Preamble, Articles 2, 6, 7, 8, 10)

UN Sustainable Development Goals (2015):

- Achieve food security (2); Ensure affordable, reliable, sustainable and modern energy for all (7); Make cities sustainable (11); Take urgent action to combat climate change (13); Protect sustainable use of terrestrial ecosystems (15)

Transforming our world: the 2030 Agenda for Sustainable Development

Part II: Definitions

- Sustainability Governance
- Trust
- Legitimacy

Sustainability Governance

Governance refers to:

- State action (governmental regulation, government best management practices, international agreements, conventions)
- Non-state action (certification systems, standardization, company policies and Corporate Social Responsibility, private best management practices, education programs)
- Hybrid systems (co-regulation, public/private initiatives)

Sustainability Governance refers to the set of regulatory processes, mechanisms, and organizations that seek to influence sustainable actions and outcomes. Sustainable outcomes look to *environmental, economic, and social concerns*.

Trust

- Trust: Attitude or the belief of the community that a given governance institution and its conduct are appropriate
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- Principal – Society: Social trust is based on shared values and identities
 - Agent – Governance institution: Who must perform the expectations of the agent, society

Legitimacy

Legitimacy granted to a governance institution means that society sees the actions of the governance institution as desirable, proper, and legitimacy (Suchman, 1985).

Legitimacy		
Input	Output	Throughout
Gaining consent of actors through their participation and involvement in the governance system. Such as: <ul style="list-style-type: none">- Actor involvement	Gaining the approval of actors through success of the governance system in what it attempts to achieve. Look to effectiveness and implementation of the rules. Such as: <ul style="list-style-type: none">- Monitoring Systems- Enforcement regimes	Effectiveness of the administrative aspects that compose governance institutions. Such as: <ul style="list-style-type: none">- Quality concerns- Accountability of decision-makers- Transparency in the decision-making process



Part III: Frameworks



1. Classifying the Governance System

- Private, Public, Hybrid?

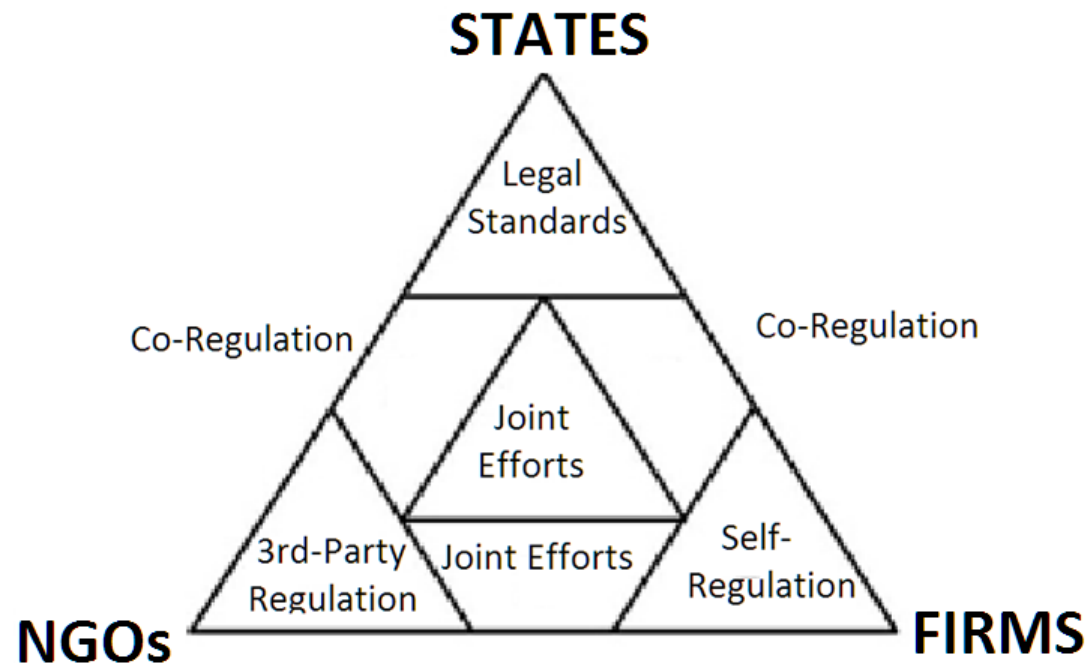
2. Identifying Levels of Trust and Legitimacy

- Four Phase Approach: Initiation, Widespread Use, Strategic Progress, and Legitimacy Granted

3. Identifying Gaps of Trust and Legitimacy in the Governance System

- Governance policies
- Supply Chain Control Systems
- Monitoring Systems
- Enforcement Systems
- Transparency and Communication

Framework 1: Classifying the Governance System



Abbott and Snidal (2009)
c.f. Mansoor et al (2016).

Framework 2: Identifying the Level of Trust and Legitimacy

	Description	Input	Throughput	Output
Phase I: Initiation	Creation of the first few sustainability governance systems	Low - Limited participation from all relevant stakeholders in the creation of the first governance system	Low - No standards in place to determine the adequacy of the processes	Low - firms closest to standards meeting them
Phase II: Widespread Use	Proliferation and governance systems available; broader use of the governance systems	Low - The total increased number of governance systems leads to increased participation from different Sectors although not from all actors	Low/Medium - The proliferation and widespread use is leading to some systems to have better processes than others	Low - creation of standards intended to capture firms farthest from the initial standards. Not much change in action.
Phase III: Strategic Progress	Consolidation or reconfiguration of governance systems to increase uptake and legitimacy of system	Medium - Intentional increased levels of participation from all actors to increase legitimacy and use	Medium - Intentional reconfiguration of system, such as by meeting international standards, in order to better processes	Medium - Consolidation of governance systems or reconfiguration of systems to effect real change
Phase IV: Accepted Legitimacy	Trust in and legitimacy granted to governance systems as authorities over sustainability of governance systems	High - All actors feel adequately represented in the governance institutions	High - All actors trust the governance processes	High - All actors feel that rules are adequately ensuring the sustainability of bioenergy

Framework 3 – Gaining trust and legitimacy in a governance system

Five Parts:

- Policy Settings
- Supply Chain Control Systems
- Monitoring Systems
- Enforcement Systems
- Transparency and communication

Framework 3, Part 1: Analysing policy settings

		Stringency		
		<u>Voluntary</u> Optional or recommended policies encouraging action	<u>Elective</u> Choose method of compliance to a general mandatory policy goal	<u>Mandatory</u> Specific action required
Precision	<u>Managerial</u> Managerial, procedural systems	System or plan based. Flexible	System or plan based. Semi-flexible	System or plan based. Semi-flexible.
	<u>Compliance</u> Compliance with BMPs	BMP based. Flexible.	BMP based. Semi-flexible	BMP based. Inflexible
	<u>Measured</u> Measurement, monitoring, inventory to record data	Measurement based. Flexible.	Measurement based. Semi-flexible.	Measurement based. Inflexible.
	<u>Substantive</u> Explicit on-the-ground targets and thresholds	Specific requirements listed. Flexible.	Specific requirements shown through several methods. Semi-flexible.	Policy specifications defined. Inflexible.

Measure using 2 factors:
Stringency – How strictly a specific action is imposed

Precision – The way in which the policy is imposed

Driving question

Which policies drive trust and legitimacy?

Questions for you::

- Is there is a continuum of low to medium legitimacy?
- Do these sub-categories capture all policies?

Framework 3, Part 2: Supply Chain Control Systems

What is it?

Levels or volumes that certified products can mix with non-certified products.

Driving question:

How to balance increasing trust and legitimacy of the supply chain control systems with realistic constraints of the supply chain?

	Output legitimacy increases →			
Type of Supply Chain Control System	Book and Claim	Mass Balance	Segregation	Full Segregation

Questions:

- What systems are most widely used in your supply chains?
- Is there opportunity for change? Why or why not?
- Do you think output legitimacy increases in the above order?

Framework 3, Part 3: Supply Chain Monitoring Systems

What is it?

Systems that ensure compliance and documentation of sustainability requirements.

Driving Question:

Which monitoring systems drive trust and legitimacy of the monitoring systems while balancing the realistic constraints of the supply chain?

Questions for you:

- Which types of monitoring systems does your governance system use?
- How do these systems differ between supply chain operator?
- Which systems increase legitimacy?

Framework 3, Part 4: Enforcement

What is it and categories of focus:

Ensuring compliance with standards; does not include consequences of non-compliance.

Type of Audit: First-party, Second-party, Third-party

Frequency: Annual, Bi-annual, Quarterly

Sampling Type: Stratified, Random, Full

Sampling Intensity: Majority, Minority, All

Driving Question:

Which enforcement systems drive trust and legitimacy while keeping in mind the realistic constraints of the supply chain?

Questions for you:

- Do you think there is a pattern of increased trust and legitimacy within the enforcement systems?
- Are we missing categories?
- What is the most widely used in your governance systems?

Framework 3, Part 5: Transparency and communication

Data types

- Public aggregated data at the international, jurisdictional or regional level
- Public geographically explicit data at the international, jurisdictional or regional level
- Company aggregated data for its supply base
- Company geographically explicit data for its supply base
- Data on on-site company practices
- Audit documentation files

Availability of information

- Confidentiality, Accessibility
- Summary report on sustainability issues available
- Data interpretation/data documentation available

IV. Broader Context & Challenges

1. Bioenergy as part of larger industry

- Bioenergy as minor part of broader industry
- Bioenergy systems add another layer of governance for existing industries (i.e. FSC)
- Feedstocks susceptible to the challenges facing broader industry

2. Building Capacity

- Supply chains must build the capacity to make well-informed and science-based decisions. But who should do it? How to approach it?
- Building better capacity for small-holder certification
- Building better enforcement of governance

3. Uncertainty of legality at the global trade level

- Limited clarity on whether co-regulation systems or mandatory sustainability criteria are legal under international trade standards

V. Conclusions

- Currently, plenty governance systems exist but they are not equally nor fully trusted, or granted legitimacy, as authorities of sustainability of bioenergy supply chains (Phase II or III)

In order to be trusted and granted legitimacy (Phase IV), bioenergy governance systems need to...

- Understand the gaps where trust and legitimacy are lagging in current governance systems (Part 3 of the frameworks and case studies)
- Support strategic efforts by actors to reduce these gaps within or among governance systems
- Support on-the-ground research to improve governance systems

Questions, Comments, Input?

Contact:

maha.mansoor@mail.utoronto.ca

ism@ign.ku.dk

tat.smith@utoronto.ca