

# Task 4.7 Analysis and development of social sustainability criteria

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## Abstract

While mandated sustainability criteria of EU RED have a strong environmental focus, a number of voluntary schemes have social sustainability as a significant component of their requirements for achieving certification. The degree to which the current systems for the sustainability of the biofuels include the social dimension varies greatly. Some systems do not contain any social indicators, while others include a broad range of criteria for the evaluation of the social impacts, and methods to mitigate the negative effects of the production of biofuels.

Attempts to evaluate and mitigate the environmental impacts of the production of biofuels have been made for a long time. Lately, more attention has been given to the social implications of the production of biofuels. Current standards assess mainly the impacts of the production of the feedstock for biofuels, while the production of the biofuels has social impacts in all stages of the production chain.

A problem in the assessment of social sustainability also is that social and environmental impacts of bioenergy systems are considerably higher upstream, whilst the economic value added happens at the last stages of the value chain.

In addition to the problem of impacts up- and downstream, also the costs borne by the community are not adequately taken into account. A suggestion is to look at the regional/national well-being impacts of bioenergy business. In case of domestic sources, there is a need to look at potential conflicts arising from competing resource needs. Companies need communication tools to effectively deal with these conflicts.

## Research issues:

1. Assessing the current social sustainability criteria and suggest a “necessary and sufficient” set of social sustainability criteria for industry
2. Assessing the critical social sustainability impacts on all stages of the bioenergy supply chain (requires input from other tasks describing the supply chain of the selected bioenergy systems)
3. Assessing which critical social criteria should be taken into account at the planning stage. Developing an assessment tool that can be used at the company level that would advise to look after potential social impacts across the supply chain.
4. What are the factors affecting the well-being of the region affected by bioenergy business? Legitimation, justification & integration of multiple resource uses. Socio-effectiveness – assessment of absolute positive social impacts of bioenergy business.

## Deliverables:

4.7.1: Set of social sustainability criteria (M9)

4.7.2: Qualitative and quantitative assessment measures for social sustainability (M18)

4.7.3: Communication tool to manufacturers (M24)

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# I Overview of Sustainability Reporting

Sustainability reporting is the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development. ‘Sustainability reporting’ is a broad term considered synonymous with others used to describe reporting on economic, environmental, and social impacts (e.g., triple bottom line, corporate responsibility reporting, etc.) A sustainability report should provide a balanced and reasonable representation of the sustainability performance of a reporting organization – including both positive and negative contributions.

## 1.1 Reporting Guidance for Boundary Setting

A sustainability report should include in its boundary all entities that generate significant sustainability impacts (actual and potential) and/or all entities over which the reporting organization exercises control or significant influence with regard to financial and operating policies and practices. These entities can be included using either Indicators of operational performance, Indicators of management performance, or narrative descriptions.

The Report Boundary guidance is based on the recognition that different relationships involve differing degrees of access to information and the ability to affect outcomes. Determining the significance of an entity when collecting information or considering the extension of a boundary depends on the scale of its sustainability impacts. Entities with significant impacts typically generate the greatest risk or opportunity for an organization and its stakeholders, and therefore are the entities for which the organization is most likely to be perceived as being accountable or responsible.

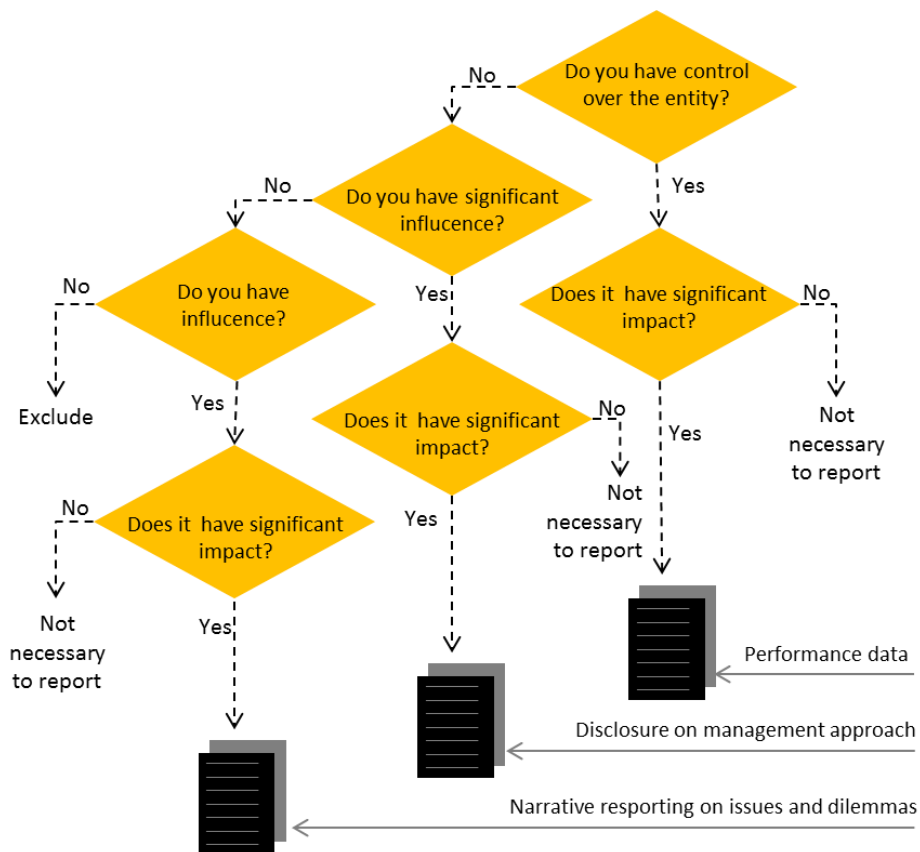


Figure 1: Decision Tree for Boundary Setting

## 2 Corporate Social Responsibility

No organisation operates in isolation; they interact with employees, customers, suppliers and stakeholders. Corporate Social Responsibility (CSR) is about these interactions, how companies can manage them, in order to produce a positive impact on society while creating revenue at the same time. (Fenn 2013) It should be noted that CSR is a concept which evolves and, therefore, there is no one way to describe it (Hohnen 2007). IISD (International Institute for Sustainable Development) gives the following definition:

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*“Generally, CSR is understood to be the way firms integrate social, environmental and economic concerns into their values, culture, decision making, strategy and operations in a transparent and accountable manner and thereby establish better practices within the firm, create wealth and improve society.” (Hohnen 2007)*

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Responsibility and accountability are important concepts of CSR; “CSR means that companies take responsibility and are held accountable for any negative effects caused by them on the environment, on people and society” (Moratis & Cochius 2011).

How a company approaches CSR should start by ensuring that it fully complies with legislation; laws on customers, workers, health and safety, human rights and environmental protection, bribery and corruption, corporate governance and taxation are a base on which other commitment and activities can be built on. There is not a single method how to implement CSR as all firms are different and this changes how they define social responsibility. (Hohnen 2007) Some general practical CSR initiatives are listed below:

- ✓ Develop new environmental and social products and services; innovation brings competitive advantage.
- ✓ Share CSR lessons learned with business customers, business neighbours and fellow members of a trade association or business organization.
- ✓ Explain the environmental, social and economic performance of the business to stakeholders and consider their ideas and views as the business develops.
- ✓ Commit to an external code or standard or a set of business principles that provides a framework to measure progress on environmental, and social and community issues.

Source: Hohnen 2007

What is important in all cases is that CSR needs to be integrated into the heart of the operations such as management and strategy. The progress can be assessed through regular evaluation - what needs to be changed and what should be kept the same – thus continuously improving the CSR performance. The benefits of implementing CSR include for example improved innovation, competitiveness, and reputation, operational efficiency and cost savings, community and customer satisfaction as well as an enhanced ability to react to changes through regular discussions with stakeholders. (Hohnen 2007)

More information can be found, for example, from “Corporate Social Responsibility - An Implementation Guide for Business” by the International Institute for Sustainable Development (IISD 2007).

Originally Corporate social responsibility has been developed as voluntary efforts by companies to address their broader impacts on society, but on April 15, 2014, the European Council and the European Commission reached an agreement that “all but guarantees that the forthcoming European directive on CSR will require all publicly traded companies with more than 500 employees to report their performance on a number of non-financial metrics every year” (EC, 2014). Soon for all large European companies issuing annual social and environmental performance reports showing their performance on a number of non-financial metrics on basis will become mandatory.

Specific requirements will obligate companies to provide related and useful information on aspects of risks they pose to human and labor rights and to the environment, product responsibility, corruption aspects, and diversity programs including entire supply chain in CSR reports every year. By doing this they will be making themselves responsible not just to their shareholders but to all stakeholders too. These reports should be performed based on CSR frameworks such as the U.N. Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises and following principals and guidelines of Global Reporting Initiative. (Krishnamurthy, 2014)

The new European Union reporting requirements has intention to show a significant effort to mandate non-financial reporting on companies across all sectors of EU economy. They should be accepted and followed by all the countries and industries within EU.

There are at least three related reasons why mandatory CSR reporting is an important and significant development:

- ✓ First, the reporting requirement will force companies that haven't already done so to start paying close attention to the social and environmental impacts of their business — if only because they will soon have to quantify and disclose such impacts.
- ✓ Second, once companies are aware of their relatively poor performance, the new reporting rules provide a powerful incentive to improve such performance to avoid the negative publicity associated with publicly disclosing such facts.
- ✓ Third, the wealth of information provided by the new reports will allow socially responsible investors and activist groups to bring various forms of pressure to bear on companies whose reports show them to be laggards rather than leaders

Source: Krishnamurthy, 2014

However, the rules are not perfect yet and contain some hidden issues that will require further development. For example according to signed documents companies will be still free to choose which indicators and standards they use in CSR report that will making comparisons between companies within one industry pointless. Even more, filed reports will be audited, but not verified. That means that if company fails to comply with chosen standards no sanction could be placed on.

### 3 Global Reporting Initiative

The Global Reporting Initiative (GRI) is a non-profit organization which provides a Sustainability Reporting Framework to be used by all companies and organisations (GRI 2013a). The Framework is intended to be a generally used framework for reporting on the economic, environmental, and social performance of a company (GRI 2006). The GRI reporting process has been designed so that all companies, regardless of the size, can use and benefit from it (GRI 2011).

The report should give information on both positive and negative sustainability performance of the company/organisation in question. (GRI 2006) These transparent reports can increase the trust of stakeholders towards the company and towards global economy (GRI 2013a). Around the world companies, public agencies and non-profit organisations use GRI for preparing their CSR reports (Hohnen 2007).

The Sustainability Reporting Guidelines give information on what a report should include and ensure the quality of the reported information (GRI 2006). The current generation of guidelines, G4, is the fourth update (GRI 2013c). There are three categories in the Guidelines: Economic, Environmental and Social. 'Social' category is further divided into subcategories: Labour Practices and Decent Work, Human Rights, Society, and Product Responsibility. (GRI 2013c) The Guidelines are presented in two documents:

#### 1 Reporting Principles and Standard Disclosures

Contains Reporting Principles, Standard Disclosures, and the criteria to be applied by an organisation to prepare its sustainability report 'in accordance' with the Guidelines. Definitions of key terms are also included.

#### 2 Implementation manual

Contains explanation of how to apply the Reporting Principles, how to prepare the information to be disclosed, and how to interpret the various concepts in the Guidelines. References to other sources, a glossary and general reporting notes are also included.

Source: GRI 2013c

The GRI reporting process can be presented in five steps: (1) prepare, (2) connect, (3) define, (4) monitor, and (5) report. In these steps the organisation:

- ✓ comes to understand the economic, social, and environmental impacts of its activities;
- ✓ enters into dialogue with stakeholders about these impacts;
- ✓ defines the aspects and indicators that are the most important for reflecting its economic, environmental and social contributions;
- ✓ sets goals;
- ✓ monitors (or prepares to monitor) its results; and
- ✓ communicates all of these steps.

Source: GRI 2011

## 4 GRI Social Performance Indicators

The social dimension of sustainability concerns the impacts an organization has on the social systems within which it operates. The GRI Social Performance Indicators identify key performance aspects surrounding:

1. Labour practices
2. Human rights
3. Society and
4. Product responsibility

In order to ensure a balanced and reasonable presentation of the organization’s performance, a determination must be made about what content the report should cover. This determination should be made by considering both the organization’s purpose and experience, and the reasonable expectations and interests of the organization’s stakeholders. Both are important reference points when deciding what to include in the report.

### 4.1 Labour Practices and Decent Work Performance Indicators

Employment		Occupational Health and Safety		Training and Education	
CORE	LA1 Total workforce by employment type, employment contract, and region, broken down by gender	ADD	LA6 Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs	CORE	LA10 Average hours of training per year per employee by gender, and by employee category
CORE	LA2 Total number and rate of new employee hires and employee turnover by age group, gender, and region	CORE	LA7 Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	ADD	LA11 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings
ADD	LA3 Benefits provided to full-time employees that are not provided to temporary or part time employees, by significant locations of operation.	CORE	LA8 Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	ADD	LA12 Percentage of employees receiving regular performance and career development reviews, by gender
CORE	LA15 Return to work and retention rates after parental leave, by gender	ADD	LA9 Health and safety topics covered in formal agreements with trade unions	<b>Equal Remuneration for Women and Men</b>	
<b>Labour/Management Relations</b>		<b>Diversity and Equal Opportunity</b>		CORE	LA14 Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation
CORE	LA4 Percentage of employees covered by collective bargaining agreements	CORE	LA13 Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity		
CORE	LA5 Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements				

Difference between Core and Additional Indicators:

- ‘Core’ are generally applicable Indicators and are assumed to be material for most organizations. An organization should report on these unless they are deemed not material on the basis of the Reporting Principles.
- ‘Additional’ Indicators may also be determined to be material

### 4.2 Human Rights Performance Indicators

There is growing global consensus that organizations have the responsibility to respect human rights. Human rights Performance Indicators require organizations to report on the extent to which processes have been implemented, on incidents of human rights violations and on changes in the stakeholders’ ability to enjoy and exercise their human rights, occurring during the reporting period. Among the human rights issues included are non-discrimination, gender equality, freedom of association, collective bargaining, child labour, forced and compulsory labour, and indigenous rights.

Investment and Procurement Practices		Freedom of Association and Collective Bargaining		Security Practices	
CORE	HR1 Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	CORE	HR5 Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	ADD	HR8 Percentage of security personnel trained in the organization’s policies or procedures concerning aspects of human rights that are relevant to operations
CORE	HR2 Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and actions taken	<b>Child Labour</b>		<b>Indigenous Rights</b>	
CORE	HR3 Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	CORE	HR6 Operations and significant suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour	ADD	HR9 Total number of incidents of violations involving rights of indigenous people and actions taken
<b>Non-discrimination</b>		<b>Forced and Compulsory Labour</b>		<b>Assessment</b>	
CORE	HR4 Total number of incidents of discrimination and corrective actions taken	CORE	HR7 Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour	CORE	HR10 Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments
				<b>Remediation</b>	
				CORE	HR11 Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms

### 4.3 Society Performance Indicators

Society Performance Indicators focus attention on the impacts organizations have on the local communities in which they operate, and disclosing how the risks that may arise from interactions with other social



institutions are managed and mediated. In particular, information is sought on the risks associated with bribery and corruption, undue influence in public policy-making and monopoly practices.

Local Communities		Corruption		Public Policy	
CORE	SO1 Percentage of operations with implemented local community engagement, impact assessments, and development programs	CORE	SO2 Percentage and total number of business units analyzed for risks related to corruption	CORE	SO5 Public policy positions and participation in public policy development and lobbying
CORE	SO9 Operations with significant potential or actual negative impacts on local communities	CORE	SO3 Percentage of employees trained in organization's anti-corruption policies and procedures	ADD	SO6 Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country
CORE	SO10 Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities	CORE	SO4 Actions taken in response to incidents of corruption.		
		<b>Anti-Competitive Behaviour</b>		<b>Compliance</b>	
		ADD	SO7 Total number of legal actions for anticompetitive behaviour, anti-trust, and monopoly practices and their outcomes	CORE	SO8 Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations

#### 4.4 Product Responsibility Performance Indicators

Product Responsibility Performance Indicators address the aspects of a reporting organization's products and services that directly affect customers, namely, health and safety, information and labelling, marketing, and privacy.

Customer Health and Safety		Product and Service Labelling		Marketing Communications	
CORE	PR1 Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	CORE	PR3 Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	CORE	PR6 Programs for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship
ADD	PR2 Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	ADD	PR4 Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes	ADD	PR7 Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes
		ADD	PR5 Practices related to customer satisfaction, including results of surveys measuring customer satisfaction		
<b>Customer Privacy</b>				<b>Compliance</b>	
ADD	PR8 Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data			CORE	PR9 Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services

#### **4.5 Other documents provided by GRI; Sustainability Topics for Sectors**

In addition to the documents concerning the Guidelines, GRI also provides other documents which can be helpful when reporting on the social issues of a company. For example, GRI has published a document 'Sustainability Topics for Sectors: What do stakeholders want to know?' In this document they present what stakeholders would like to know about different sectors. As stated in the report, the topics presented "can be considered as stakeholders' suggestions or requests for topics to be monitored or disclosed by organizations." (GRI 2013d) This list is good to keep in mind when thinking about what stakeholders find important in order to be able to address their possible concerns upfront.

#### **4.6 Other documents provided by GRI; Reporting on Community Impacts**

GRI has also conducted a study 'Reporting on Community Impacts' where they have examined how companies have succeeded in reporting their impacts according to the G4 Guidelines. The document provides useful information about the pitfalls of reporting community impacts; it is a good source to see what should be avoided and what the goal is one should strive towards. Listed below are some tips collected from the report:

- ✓ Remember to report both positive and negative contributions.
- ✓ Focus on reporting the changes or benefits occurring for people and the environment as a result of your company's activities - not the performance of the company in relation to community initiatives.
- ✓ Concentrate on performance indicators (see G4 Guidelines) which are most meaningful when it comes to understanding community impact in terms of changes in external conditions - do not only concentrate on the indicators which are easier to measure.
- ✓ Build an understanding of community impact by looking at both social and environmental impacts.

Source: adapted from GRI 2008

## 5 ISO 26000

ISO 26000 is a standard which gives information on how companies and organisations can work in a socially responsible manner (ISO 2013). Unlike some other ISO standards, ISO 26000:2010 is not a management system standard; it cannot be used for certification purposes, regulatory or contractual use. ISO 26000 provides guidance for all types of organisations and encourages them to go beyond legal compliance. It is intended to be used side by side with other instruments and initiatives for social responsibility, complementing, not replacing them. (ISO 2010)

ISO 26000 helps to explain what social responsibility means, how an organisation can work in a socially responsible manner and what best practice in implementing social responsibility is. With its guidance, organisations can transform good intentions into good action. (Frost 2011) In the standard there are seven core subjects addressing social responsibility described (ISO 2010). Each of these core subjects includes an explanation of the contents, the subject, the scope and the grounding principles. They also specify the related actions and expectations of organisations. (Moratis & Cochiuș 2011) The subjects are listed below.

Social responsibility: 7 core subjects

- ✓ Organisational governance
- ✓ Human rights
- ✓ Labour practices
- ✓ The environment
- ✓ Fair operating practices
- ✓ Consumer issues
- ✓ Community involvement and development

Source: ISO 2010

### 5.1 Core subjects and issues of social responsibility in ISO 26 000

Core subject	Organizational governance		Core subject	Fair operating practices
Core subject	Human rights		Issue 1:	Anti-corruption
Issue 1:	Due diligence		Issue 2:	Responsible political involvement
Issue 2:	Human rights risk situations		Issue 3:	Fair competition
Issue 3:	Avoidance of complicity		Issue 4:	Promoting social responsibility in the value chain
Issue 4:	Resolving grievances		Issue 5:	Respect for property rights
Issue 5:	Discrimination and vulnerable groups			
Issue 6:	Civil and political rights		Core subject	Consumer issues
Issue 7:	Economic, social and cultural rights		Issue 1:	Fair marketing, factual unbiased information and fair contractual practice
Issue 8:	Fundamental principles and rights at work		Issue 2:	Protecting consumers health and safety
Core subject	Labour practices		Issue 3:	Sustainable consumption
Issue 1:	Employment and employment relationships		Issue 4:	Consumer services, support, and complaint, and dispute resolution
Issue 2:	Conditions of work and social protection		Issue 5:	Consumer data protection and privacy
Issue 3:	Social dialogue		Issue 6:	Access to essential services
Issue 4:	Health and safety at work		Issue 7:	Education and awareness
Issue 5:	Human development and training in the workplace			

Core subject	The environment	Core subject	Community involvement and development
Issue 1:	Prevention of pollution	Issue 1:	Community involvement
Issue 2:	Sustainable resource use	Issue 2:	Education and culture
Issue 3:	Climate change mitigation and adaptation	Issue 3:	Employment creation and skills development
Issue 4:	Protection of the environment, biodiversity and restoration of natural habitats	Issue 4:	Technology development and access
		Issue 5:	Wealth and income creation
		Issue 6:	Health
		Issue 7:	Social investment

## 5.2 Connection between GRI and ISO 26000

GRI Reporting Guidelines and ISO 26000 cover similar lists of topics. The overlap of GRI and ISO 26000 is presented in Figure 2.



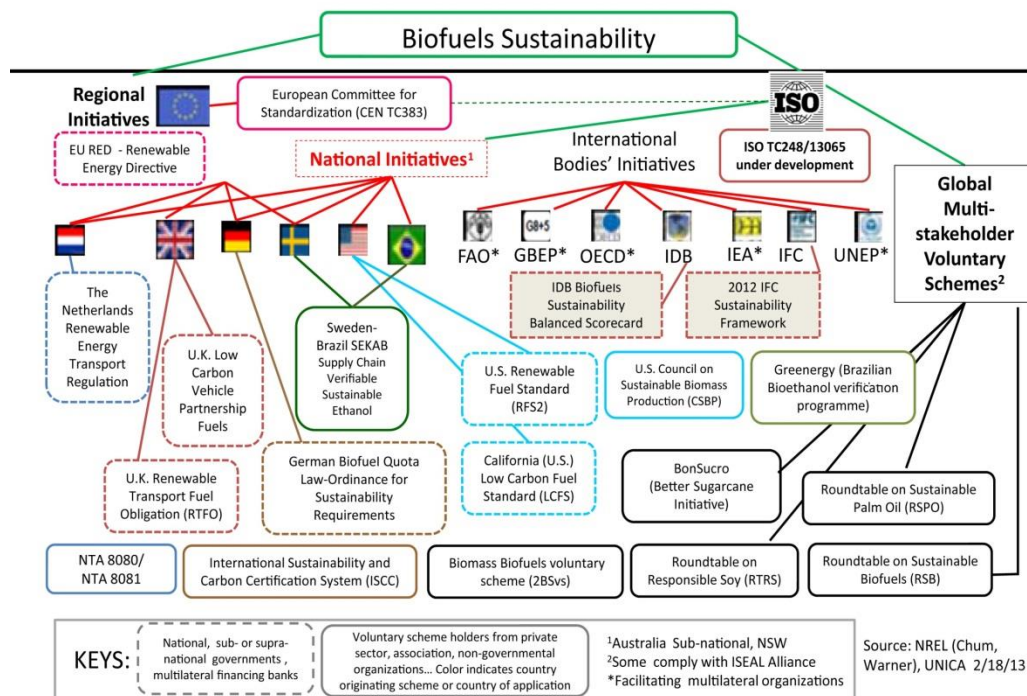
**Figure 2: GRI vs. ISO 26 000**

Nearly all the topics have a match in the other framework, with two exceptions; Fair Operating Practices in ISO 26000 is broken down into four categories in GRI (green line) and GRI’s Economic –category is suggested to be covered in all the categories in ISO 26000 (orange line) even though they are not directly addressed. (Sustainserv 2011)

ISO 26000 helps companies to develop a corporate sustainability program by providing them topics and GRI provides specific performance indicators which companies can use to prepare a transparent, comparable, and consistent sustainability program (Sustainserv 2011). The report “GRI and ISO 26000: How to use the GRI Guidelines in conjunction with ISO 26000” published by the Global Reporting Initiative explains how these two can be used side by side in order for companies to report their environmental, economic, and social performance (GRI 2013e).

## 6 Bioenergy Sustainability Criteria - EU-approved schemes

At the moment there are many biomass and biofuel sustainability certification schemes are being developed in EU and globally. Most of those schemes are voluntary and applicable to different feedstock production sectors, for example forests, agricultural crops or sugarcane, different bioenergy products (wood chips, pellets, ethanol, biodiesel, electricity), and whole or segments of supply chains They carry different objectives and specific purposes such as fair-trade, environmentally sound cultivation, cross-cutting or indirect effects. The illustration below is that of some government led initiatives at various levels (in dashed boxes) and of sustainability standards that were developed over time by a variety of entities (full boxes).



Most of above schemes are organized through voluntary schemes by multiple stakeholders where communication and transparency are the keys for successful development. Others, not displayed, exist for forestry and agriculture specifically. Scorecards are also used to provide check lists of project submissions to financing by multilateral organizations.

Voluntary schemes and regulations can be used by biofuel production company as complementary tools. It can be used as a tool for implementing higher-level legislative sustainability requirements. Since these schemes are voluntary they could be adapted and applied in practice much faster than legislation and may serve as an example and comparative template to explore of how continuous improvement of sustainability performance could be achieved or improved, based on management practices and multi-stakeholders approach.

On the other hand these schemes can serve as alternative tools for ensuring the sustainability of biomass. It is particularly applicable to countries where policies and governance structures are still in development or very weak. In such countries the need of voluntary certification in addition to existent legislation could be determined through risk evaluation systems. (IEA Bioenergy, 2013)

## 6.1 ISO 13065

The International Standardization Organization (ISO) is currently developing ISO 13065 for sustainable bioenergy. Currently involving 33 participants and 12 observing countries, the ISO aims to “*create globally harmonized sustainability criteria*” and to provide “*a level playing field for all countries and stakeholders*” (ISO 2011).

The ISO/PC 248 consists of four working groups:

- ✓ Crosscutting issues;
- ✓ GHG;
- ✓ Environmental, economic and social aspects;
- ✓ Indirect effects

The ISO/TC 248 Project committee on Sustainability criteria for bioenergy will address the social, economic and environmental aspects of the production, supply chain, and use of bioenergy and develop globally harmonized sustainability criteria. ISO/PC 248 will develop a global standard (ISO 13065) on sustainability of biomass and conformity assessment including the chain of custody. This will include terminology and environmental, social and economic aspects related to the sustainability of bioenergy. The standard shall contribute to tackling social and environmental issues and to helping avoid technical barriers to trade on bioenergy and making bioenergy more competitive (ISO, 2009)

### Projected rules and guidance for ISO 13065:

- ✓ Principles, criteria and indicators (PCI) shall be relevant to all economic operators;
- ✓ Principles, criteria and indicators should be applicable across all forms of bioenergy;
- ✓ Use a science-based approach which translates in measurable results;
- ✓ Identify, where necessary develop, criteria and methodologies, not set threshold values or limits;
- ✓ Principles, criteria and indicators should facilitate comparison among energy options, whenever possible;
- ✓ The standard development process shall ensure that flexibility and transparency are built into all sections of the standard;
- ✓ Showing compliance with principles, criteria and indicators shall not be an undue administrative burden for society or the economic operator

Source: ISO 2011

### 6.1 Social Sustainability in ISO 13065

In regards with *social sustainability* following principles are included in ISO/PC 248/WG 3 as for May 2013:

#### **Social principles:**

- Human rights
- Labour rights
- Land use rights, Land use change
- Water use rights, Water scarce regions

## 6.1 GBEP-The Global Bioenergy Partnership

**The Global Bioenergy Partnership(GBEP)** was launched, following an agreement by the G8 +5 (Brazil, China, India, Mexico and South Africa) at the 2005 Gleneagles Summit, to support wider, cost effective, biomass and biofuels deployment, particularly in developing countries. (UNEP, 2005)

**The Global Bioenergy Partnership** promotes the sustainable development of biomass and biofuels on the national level and develops a respective voluntary international sustainability framework for bioenergy. GBEP has worked in a Task Force on Sustainability on developing criteria, or themes, and indicators regarding the sustainability of bioenergy. As a result sustainability indicators were developed under the following three pillars, noting interconnections between them: Environmental, Social and Economic.

For all three pillars 24 indicators have been developed by GBEP. These indicators provide policy-makers and stakeholders with the set of analytical tools that can be used for national bioenergy policies and programs development and help in monitoring of policies impact. They also provide a framework for assessing the relationship between production and use of modern bioenergy and sustainable improvement.

The uniqueness of indicators created by GBEP is that they have been identified through multistage process using multilateral initiative. The initiative has built the agreement on the sustainable biofuels production and use of bioenergy among global national governments and international organizations. The main purpose of GBEP indicators is to provide guidance for sustainability analysis on domestic level and to inform stakeholders and decision makers about developments that will encourage sustainable biofuel production and use of bioenergy as a means towards meeting national goals of sustainable improvement (GBEP 2011)

Each pillar has its own themes and indicators. Social pillar themes and indicators are presented below.

### Social pillar themes:

- ✓ Price and supply of a national food basket
- ✓ Access to land
- ✓ Access to water
- ✓ Access to natural resources
- ✓ Labor conditions
- ✓ Rural and social development
- ✓ Access to energy
- ✓ Human health and safety

Source: GBEP 2011

### Social Sustainability Indicators

- ✓ Allocation and tenure of land for new bioenergy production
- ✓ Price and supply of a national food basket
- ✓ Change in income
- ✓ Jobs in the bioenergy sector
- ✓ Incidence of occupational injury, illness and fatalities

### Social Sustainability Indicators

- ✓ Change in unpaid time spent by women and children collecting biomass new bioenergy production
- ✓ Bioenergy used to expand access to modern energy services
- ✓ Change in mortality and burden of disease attributable to indoor smoke

## 6.2 RSB- RoundTable on Sustainable Biofuel

The Roundtable on Sustainable Biomaterials (RSB) is an international multi-stakeholder initiative. It is been created in 2006 and brings together farmers, companies, non-governmental organizations, experts, governments, and inter-governmental agencies that are involved into biofuel production and have high concern about future development of biomass sustainability. It covers all types of feedstock and production, processing and biofuel transportation/distribution stages of supply chain

The RSB is a respected authority on biomaterial sustainability. RSB works with hundreds of organizations and individuals throughout the world. The main goal of RBS is to develop a global biomaterial standard with widespread recognition.

RSB Standard includes principles and criteria for sustainable biofuels production, associated guidance and compliance indicators. RSB developed several documents to provide guidance for conducting the Environmental and Social Impact Assessment (ESIA), including social guidelines, ecosystem and conservation values, soil and water guidelines.

The RSB standard includes 12 principles and criteria and requirements differentiated in minimum and progress requirements:



The RSB addresses a diverse array of social aspects but they are mostly applicable for developing nations. The issues covered by RBS are: large feedstock plantations that might ignore not legalized land and water rights, impacts on rural development, unsafe labor conditions, child labor, gender discrimination, and food and energy security.

It is also include guidelines on best practices in the production, processing and use of biofuels for transport. A methodology will be developed to address indirect impacts, including land use change and food security issues. Two approaches are being examined to address indirect impacts: 1) the use of an indirect land use (ILUC) factor and 2) promoting practices and feedstock that lower the risk for negative indirect impacts (RSB, 2011).



## 7 The list of indicators from bioenergy social sustainability perspective in compliance with GRI, GBEP, RSB standards

### Labour Practices

- **Employment:**

1. Total workforce by employment type
2. Number and rate of new employee hires and employee turnover

- **Human Resources Policies**

3. Minimum wage level
4. Working hours

***Minimum requirements***

- ✓ *Wages shall be provided in cash or in another form acceptable to workers.*
- ✓ *For piecework (pay based on production rather than hours), the pay rate must allow workers to earn at least the legal minimum wage or comparable regional wage, whichever is higher, based on an eight-hour workday under average conditions.*
- ✓ *The maximum number of regular hours worked per week must not exceed 48. Workers may work overtime which shall be voluntary, but total working hours shall not exceed 80 per week. (RSB 2010)*

- **Occupational Health and Safety**

5. Rates of injury, occupational diseases, and total number of work-related fatalities
6. Change in mortality and burden of disease due to specifics of biomass production
7. Education, training, prevention, and risk-control programs
8. Training and re-qualification of the workforce

***Minimum requirements***

- ✓ *Workers shall not be exposed to any occupational health or safety hazards without adequate protection and training as defined in national law and international standards. (RSB 2010)*

- **Training and Education**

9. Average hours of training per year per employee
10. Innovation and knowledge potential

***Minimum requirements***

- ✓ *Career development shall be encouraged for all workers*
- ✓ *Skills training shall be provided by the operator if necessary to ensure the implementation of this criterion. Cultural sensitivity and respect for existing social structures shall be applied in the development of options for compliance with this criterion(RSB 2010)*

- **Diversity and Equal Opportunity**

11. Breakdown of employees according to gender, age group, minority, and other diversity
12. Equal Remuneration for Women and Men

***Minimum requirements***

- ✓ *Men and women shall receive equal remuneration for work of equal value*
- ✓ *Work sites shall be safe for women; free from sexual harassment and other discrimination and abuse; and promote access to jobs, skills training, recruitment and career development for women to ensure more gender balance in work and career development (RSB 2010)*

## Human Rights

- **Investment and Procurement Practices**

13. Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns
14. Percentage of suppliers and business partners that have undergone human rights screening
15. Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations

***Minimum requirements***

- ✓ *In countries where the law prevents collective bargaining or unionization, operators shall not interfere with workers' own efforts to set up representational mechanisms in such cases, and shall provide a mechanism for workers to engage with employers without breaking the law*
- ✓ *Participating Operators shall identify instances where those working within the scope of their operational function (feedstock producer, feedstock processor, or biofuel producer) are contracted outside of the direct influence of the operation by external parties and shall implement a mechanism to ensure that such contracted workers are afforded the same rights as described in this principle as employed staff within the process. (RSB 2010)*

- **Indigenous Rights**

16. Recognition of vulnerable groups
17. Total number of incidents of violations involving rights of indigenous people
18. Actions taken to secure indigenous rights

***Minimum requirements***

- ✓ *Employees, contracted labour, indigenous people, small out growers, and employees of out growers shall all be free of discrimination as per ILO Convention 111*
- ✓ *Data for rural youth, poor women and indigenous people in regions of poverty shall be disaggregated in the baseline social surveys to assist with the design of special programs for the targeted people(RSB 2010)*

- **Child & forced labour**

19. Suppliers identified as having significant risk for incidents of child labour
20. Measures taken to abolition of child labour
21. Management of foreign and migrant workers
22. Human trafficking risks

***Minimum requirements***

- ✓ *Schooling age limit is that defined in the national legislation or 14, whichever is higher.*
- ✓ *Hazardous child labour as defined by ILO Convention 138 is not allowed.*
- ✓ *Work by children on family small holdings is only acceptable under adult supervision and when work does not interfere with the child's schooling nor puts at risk his or her health(RSB 2010)*

## Society

- **Local Communities**

23. Percentage of operations with implemented local community engagement
24. Impact assessments and development programs
25. Operations with significant potential or actual negative impacts on local communities
26. Prevention and mitigation measures implemented
27. Acceptability and social dialogue

**Minimum requirements**

- ✓ *The Participating Operator shall assess ways in which the use of permanent and local labor can be promoted and introduced over the use of migrant, seasonal and casual labour.*
- ✓ *Measured improvements in the social and economic indicators as set against the baseline survey carried out under the social impact assessment process shall be targeted for review every three years. (RSB 2010)*

- **Rural Development**

28. New jobs and social infrastructure creation by bioenergy sector
29. Change in income for rural community
30. National food basket price

**Minimum requirements**

- ✓ *At least one measure to significantly optimize the benefits to local stakeholders shall be implemented within a three year period of the start of the operations, for instance:*
  - a. Creation of year round and/or long term jobs*
  - b. The establishment of governance structures that support empowerment of small scale farmers and rural communities such as co-operatives and micro credit schemes*
  - c. Use of the locally produced bio-energy to provide modern energy services to local poor communities*
  - d. Shareholding options, local ownership, joint ventures and partnerships with the local communities*
  - e. Social benefits for the local community such as the building or servicing of clinics, homes, hospitals and schools (RSB 2010)*

- **Land Rights**

31. Allocation of tenure of land for new bioenergy production
32. Land use and land use change related to bioenergy feedstock production

**Minimum requirements**

- ✓ *No involuntary resettlement shall be allowed for biofuel operations*
- ✓ *Where land rights and land use rights are voluntarily relinquished and/or acquired on a willing seller-willing buyer basis, local people shall be fairly, equitably and timely compensated*
- ✓ *Coercion to alter existing land rights or land use rights shall not be allowed in biofuel operations (RSB 2010)*

- **Compliance**

- 33. Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations**

**Minimum requirements**

- ✓ *Compensation for voluntary relinquishment and/or acquisition shall include appropriate balancing measures needed to preserve the ability of the persons concerned to sustain their livelihoods in an autonomous and dignified manner.*
- ✓ *Independent, qualified land valuation specialists shall be used for valuing all land, water and natural resources and asset values(RSB 2010)*

✓

## **Environmental and economic indicators significant for social impacts**

We included in particular those that are non-core indicators from economic and environmental perspectives, but could have significant social implications for people and communities:

### **Economic indicators**

- **Energy Security status**

34. Bioenergy used to extend access to modern energy sources
35. Net energy balance
36. The diversity of energy sources used in the area
37. Productivity (of feedstock, technology efficiency, by product's mass, hectare, cost per unit)

***Minimum requirements***

- ✓ *Use of the locally produced bio-energy to provide modern energy services to local poor communities*
- ✓ *For small-scale operators, by-products or wastes shall also be reused by the processing/production unit or transferred to other sectors whenever their use may improve the overall system's energy balance in the area(RSB 2010)*

- **Crops and Food Security Balance**

38. Fluctuations of food basket price since bioenergy production started in the area
39. Food demand and supply ratio change
40. Food export/import ratio change

***Minimum requirements***

- ✓ *The scope of the food security assessment shall include additional impacts that the biofuel operations may have on cross-cutting requirements for food security including land, water, labour, and infrastructure*
- ✓ *If the food security assessment indicates a food security risk as a result of biofuel operations, a mitigation plan shall be developed and implemented*
- ✓ *In regions where food security is an on-going risk and concern, operations shall enhance food security of the locally affected community by, for instance, setting aside land for food growing, increasing yields, providing opportunities for workers to carry out household-level food production, sponsoring agricultural support programs and activities, and/or making value-added food by-products available to the local market(RSB 2010)*

- **Economic Performance**

41. Risks and opportunities for the organization's activities due to climate change

- **Market Presence**

42. Policy and practices of spending on locally-based suppliers at significant locations of operation

- **Indirect Economic Impacts**

43. Investments and services provided primarily for public benefit (commercial, in-kind, pro bono)

## Product responsibility

- **Customer Health and Safety**
  44. Life cycle stages in which health and safety impacts of products and services are assessed for improvement
- **Product labelling**
  45. Product information required by procedures – percentage of such products
- **Marketing Communications**
  46. Programs for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship
- **Fair operating practices**
  47. Promoting social sustainability in the value chain
  48. Respect for property rights

## Environmental indicators

- **Energy**
  49. Initiatives to provide energy-efficient or renewable energy based products and services
- **Water Access and Natural Resources**
  50. The effect of water withdrawal from traditional water source
  51. Status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff

***Minimum requirements***

✓ *The use of water for biofuel operations shall not be at the expense of the water needed by the communities that rely on the same water source(s) for subsistence (RSB 2010)*
- **Biodiversity**
  52. Strategies, current actions, and future plans for managing impacts on biodiversity
  53. Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations
  54. Habitats protected or restored
- **Emissions**
  55. Initiatives to reduce greenhouse gas emissions and reductions achieved
- **Products**
  56. Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation

## 8 Conclusion

It is expected that all large European companies will be obligated to issue annual socio-economic and environmental performance reports showing their performance on a number of non-financial metrics. In addition, they will need to provide stakeholders and decision-makers with relevant and useful information on aspects related to social sustainability improvement and development.

Specific requirements will obligate companies to provide detailed information on aspects of risks they pose to human and labour rights and to the environment, product responsibility, corruption aspects, and diversity programs including entire supply chain in CSR reports every year. A number of measurements including specific aspects, indicators and criteria for bioenergy social sustainability assessment in compliance with GRI, GBEP, RSB standards have been created during the last decade. However, due to complexity and diversity of bioenergy sector, the guidance for bioenergy industry on how to assess non-financial issues and integrate them into CSR is not clear yet. Globally, investors and stakeholder do recognize the importance of non-financial factors and, currently, many biofuel production companies are put under the pressure to provide decision-makers with explicit information.

Global Reporting Initiative (GRI) does provide a general framework against which company can evaluate and report its economic, environmental and social performance. This general standardized approach creates transparency and accountability for many industries and also allows performing benchmarking against previous years and against competitors' performance within the industry and it is already used by some biofuel production companies. However GRI does not reflect on bioenergy sector much. Bioenergy sector specific standards should be developed within GRI framework.

At this stage of the research, the most relevant social sustainability indicators have been selected and minimum requirements have been defined.

In this paper, a need for developing bioenergy sector-specific communication tool to manufactures and stakeholders involved in the bioenergy business have been identified. This tool will provide them with guidance on how to assess and report on non-financial issues related to biofuel production.

Further, the research will assess critical social sustainability impacts on all stages of the bioenergy value chain, and will assess the qualitative and quantitative measures for social sustainability. The results of this assessment will be used for creating an instrument that at the company level would advise to look after potential social impacts across the entire bioenergy value chain.

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