

# SENSE-project: environmental assessment for the fruit juice industry (III)

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**Abstract:** The SENSE research project proposes a set of Key Environmental Performance Indicators (KEPI) to measure the environmental impact of the fruit juice production. The Blueprint Roadmap summarizes the policy context for the SENSE-tool and identifies opportunities and synergies between SENSE and other initiatives.

**Keywords:** sustainability, environmental impacts, Life Cycle Assessment (LCA), SMEs, SENSE tool

## **1. INTRODUCTION**

SMEs, including micro-businesses, are the backbone of the European food and beverage sector, accounting for 99% of enterprises, 49% of turnover and 63% of employment. They are very diverse in terms of scales, activity and conduct. In the past, they have found it difficult to take advantage of measures to “green” their operations (by reducing negative environmental and social impacts) (COM, 2007).

The SENSE tool was designed to help meet the need for simple, low-cost to enable SMEs to participate in efforts to improve the environmental and social sustainability of the European food and beverage sector. By enabling SMEs to demonstrate their competence and commitment of measuring environmental and social impacts, it can help them reduce impacts, save costs, boost efficiency and extend their market access and competitiveness. By allowing them to benchmark their sustainability performance internally or within sectors it enables them achieve continuous improvement. It thereby helps them to meet societal, supply-chain and policy expectations for greener products and performance. It also enables their customers, manufacturers, retailer and foodservice to assess SMEs’ credentials and choose greener products.

The purpose of the developed Blueprint Roadmap is to summarize the policy context for the tool, describe the challenges that have emerged, and identify opportunities and synergies between the tool and other initiatives. It draws on research among project participants and external expert stakeholders. The Blueprint has been circulated for consultation.

### **1.1. About the SENSE tool**

The web-based SENSE tool uses a simplified version of environmental and social lifecycle assessment (LCA and S-LCA) methods to enable SMEs to calculate the impacts on their products. It is specifically tailored to the requirements and capabilities of SMEs, and flexible enough to accommodate different products and production processes. The criteria (Table 1) are similar to

those used in many public and private schemes to measure environmental and social performance.

Table 1 Indicators used in the SENSE tool to compile a snapshot of sustainability performance

<b>Environmental</b>	<b>Social</b>
Human toxicity	Labour rights
Terrestrial. Freshwater eutrophication	Working conditions
Land use	Impacts on local communities
Abiotic resource depletion	
Climate change	
Soil acidification	
Freshwater ecotoxicity	
Water resource depletion	

## **2. THE POLICY CONTEXT**

### **2.1. SMEs in the EU food supply chain**

EU food and beverage policy terrain is complex and heterogeneous (EC, 2006). The food and beverage sector is one of the most regulated in the EU, with both national and EU laws and a proliferation of private certification schemes (Junker, 2014). It is important to stress that the SENSE tools is not another regulation or standard with which SMES must comply. Rather it is a tool that enables SMEs to measure and benchmark in the future their performance and demonstrate awareness of and /or compliance with laws and schemes.

#### **2.1. Food policy for sustainability**

It is now beyond argument that to meet Europe’s complex social needs, to mitigate climate impacts, to remain competitive in global markets, and above all to protect the natural resource base on which all productivity and prosperity ultimately depend, the EU’s food supply must become “greener”. Sustainability is therefore a “critical objective” for the EU food industry (DG ENTR, 2009). This has been defined by the EU as:

- The need to ensure adequate supplier of food for human requirements
- The need to ensure that human activities in the food processing industry and in the primary production sector are consistent with the requirement of protecting the environment
- The need to provide employment designed to give a good standard of living and working conditions

The EU’s approach stresses that over the long term, growth, competitiveness, well-being and jobs all depend on the ability of EU business to build sustainability into their core activities. Key to this process has been the development of methods for measuring, comparing and improving performance. These have included indicators, targets, standards, codes, labels, life cycle assessments and footprinting techniques. However, these approaches have often been beyond the means of SMEs. SENSE helps to fill this gap.

Research has found that although a majority of SMEs think that their environmental impacts are negligible compared with the activities of larger companies, SMEs are estimated to be responsible for 60-70% of the environmental impacts of EU business (DG ENV, 2010). The widespread view, for SMEs, from part policy, from the experience of the SENSE project and from expert stakeholders, is that where SMEs are reluctant to take steps to reduce their environmental impacts because:

- They do not see these measures as being relevant to their own businesses
- They lack capacity (time, financial resources, staff) to inform themselves about problems and available solutions
- They lack capacity (time, financial resource, staff) to implement challenges

### **3. ROUTES FORWARD**

The objective of the SENSE project is to help food SMEs and their products to become greener in order to boost their efficiency, productivity and competitiveness; to meet rising demand for green products, and last but not least to further the EU's policy for the food supply of cutting negative environmental impacts, improving resource efficiency, enhancing wellbeing and becoming more sustainable.

A Blueprint Roadmap was developed proposing measures to address the above mentioned challenges. These measures are the following:

#### **3.1. Engagement of SMEs and promotion of “sustainable literacy”**

Promoting and educating for sustainability literacy in order to make clear the relevance of the issues and the benefits of making changes; and providing local, tailored, practical support with implementation, to help SMEs put changes into practice.

#### **3.2. Use of SENSE tool to support the EU policy**

The tool reflects and dovetails with EU policy frameworks on resource efficiency, Sustainable Consumption and Production, industrial development climate, energy, the Simple Market for Green Products, Corporate Social Responsibility (CSR) and the 7<sup>th</sup> Environmental Action Plan. SMEs and the sector as a whole could use it to measure progress against targets in these agendas, or to demonstrate (cross) compliance.

#### **3.3. Work synergistically with other EU policy instruments**

As noted, SENSE is one of the several tools being developed by the EU for measuring and communicating businesses' environmental and social performance. To avoid duplication, it is important that these tools work synergistically and for data collection methods criteria is harmonized.

The existing initiatives to increase SMEs' participation in green markets include actions listed under the Green Action Plan for SMEs, the ENVIFOOD Protocol, the Product Environmental Footprint, the Green EcoNet, the EU Eco-management and audit scheme (EMAS) and EMAS Easy,

the Environmental Compliance Assistance Programme (ECAP), COSME, the Enterprise Europe Network (EEN), and the Executive Agency for Small and Medium Sized Enterprises (EASME).

This emerging policy framework could use the SENSE tool to further its objectives of improving sustainability performance, allow firms to demonstrate compliance or a track record for relevant and systematic data-keeping, or assess eligibility for finance. Many of the initiatives are at a developmental stage and are therefore well placed to integrate the tool and adapt it to suit their needs.

#### **3.4. Use of SENSE tool to support voluntary standards and schemes**

Voluntary certification schemes and standards have become common features of the food supply. SMEs and other stakeholders involved in this project reported that complying with voluntary standards is onerous for SMEs, especially where it involves duplicating work to satisfy different schemes.

Therefore, this is potentially an important use for the SENSE tool, which covers the same criteria as many voluntary schemes and could be used either to demonstrate compliance or to show that firms have appropriate record-keeping systems in place and conducting business responsibly.

One route for policy is to encourage scheme operators, for example Global GAP, SGF Voluntary Control System or the Fruit Juice CSR platform, to recognize SENSE data as cross-compliance or mutual recognition. The Fruit Juice CSR platform and Roadmap is an important initiative that identifies concerns in the supply chain that include: lack of transparency, poor labour conditions, low wages, health and safety issues, agrochemical use and water management. These are covered in the SENSE tool's performance indicators and therefore can be a potentially useful tool to in the implementation of the CSR Roadmap.

One critical issue for uptake of the tool among the fruit sector is retailer acceptance. This reinforces the point that policy promoting uptake needs to be directed at SME's supply chain partners as well as the SMEs themselves.

#### **3.5. Use of SENSE to support national level schemes**

This Roadmap focuses on EU-level policy and schemes that operate internationally. However, much of the regulation encountered by food and beverage SMEs will be national in origin (or national applications of EU law). These could be useful to demonstrate compliance or responsible business conduct.

In Table 2 a summary of the key actions as recommended in the Policy Implementation Roadmap Blueprint is presented:

Table 2 Summary of key actions

Recommendation		Action
1	Engage SMEs, make the business case for change and promote “sustainability literacy”	<ul style="list-style-type: none"> <li>• Make clear the business advantages of adopting green technologies and practices</li> <li>• Promote sustainability literacy</li> <li>• Provide local, tailored practical support for implementation</li> <li>• Identify SMEs trusted partners</li> </ul>
2	Use SENSE to support EU policy in several areas	<ul style="list-style-type: none"> <li>• Overarching policy for food, sustainable growth, competitiveness, resource efficiency</li> <li>• Single Market for Green Products</li> <li>• Green Action Plan for SMEs</li> <li>• Green Public Procurement</li> <li>• CSR</li> <li>• Policy frameworks on the environment, water, packaging, waste, climate and pesticide use</li> </ul>
3	Work synergistically with other EU policy instruments	<ul style="list-style-type: none"> <li>• Actions listed under the Green Action Plan for SMEs</li> <li>• ENVIFOOD Protocol</li> <li>• Product Environmental Footprint (PEF)</li> <li>• Green EcoNet</li> <li>• EU Eco-management and audit scheme (EMAS) and EMAS Easy</li> <li>• Environmental Compliance Assistance Programme (ECAP)</li> <li>• COSME</li> <li>• Enterprise Europe Network (EEN)</li> <li>• Executive Agency for Small and Medium Sized Enterprises (EASME)</li> <li>• Provide local, tailored practical support for implementation</li> </ul>
4	Use of SENSE to support voluntary standards and schemes	<ul style="list-style-type: none"> <li>• Recognise SMEs using SENSE as responsible business partners or use SENSE to demonstrate compliance</li> <li>• Global schemes, e.g. ISO 14000, the FAO Sustainability Assessment of Food and Agriculture systems (SAFA), the United Nations (UN) Global Compact Food and Agriculture Business Principles (FAB)</li> <li>• Global GAP, SGF Voluntary Control System, Fruit Juice CSR Platform</li> </ul>
5	Use SENSE to support national-level schemes and standards	<ul style="list-style-type: none"> <li>• SENSE allows companies to gather data and show responsible business conduct, and may thus be useful to national or local schemes</li> <li>• Example given: Naturane environmental standard for Spanish fruit and vegetable production</li> </ul>

#### **4. CONCLUSION**

The SENSE tool provides a simple tool for food and beverage SMEs in Europe to record and analyse their environmental and social impacts. It uses information that is fairly readily available in most companies, and is designed to be easy and quick to use. As such, it allows SMEs to fulfil requirements for environmental and social reporting, increasingly demanded by buyers, certification schemes, regulators and financiers. Providing a consistent supply of basic data, it can prevent duplication of data-inputting among schemes, and demonstrate that individual SMEs have a track of record of collecting environmental and social impact data and are competent to meet certification or other criteria.

## **5. ACKNOWLEDGEMENTS**

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