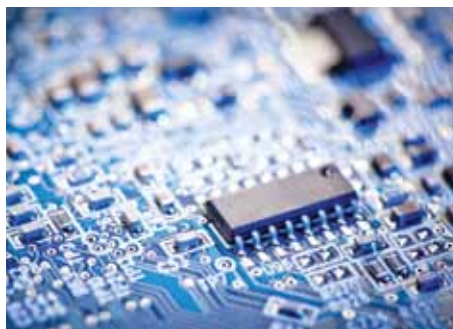


A GUIDE TO TRACEABILITY

A Practical Approach to Advance Sustainability in Global Supply Chains



United Nations Global Compact



About the United Nations Global Compact

Launched in 2000, the United Nations Global Compact is both a policy platform and a practical framework for companies that are committed to sustainability and responsible business practices. As a multi-stakeholder leadership initiative, it seeks to align business operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption, and to catalyze actions in support of broader UN goals. With 8,000 corporate signatories in 145 countries, it is the world's largest voluntary corporate sustainability initiative.

www.unglobalcompact.org

About BSR

BSR works with its global network of more than 250 member companies to build a just and sustainable world. From its offices in Asia, Europe, and North and South America, BSR develops sustainable business strategies and solutions through consulting, research, and cross-sector collaboration. Visit www.bsr.org for more information about BSR's more than 20 years of leadership in sustainability.

Disclaimer

This publication is intended strictly for learning purposes. The inclusion of company or organization names and/or examples does not constitute an endorsement of the individual companies by the United Nations Global Compact Office or BSR. The material in this publication may be quoted and used provided there is proper attribution. The views expressed in this publication are those of its authors and do not reflect those of BSR members or UN Global Compact participants. The UN Global Compact encourages the dissemination of the content for education purposes.

About this Guide

The findings in this report are based on the following: interviews with company, traceability scheme and Non-Governmental Organization representatives; a survey of UN Global Compact Supply Chain Advisory Group members; and a desktop review of literature, case studies and analysis of traceability information. Extensive consultation was also conducted to ensure the usefulness and content of this guide. The UN Global Compact and BSR express their deep appreciation to all those who have contributed to this project.

BSR developed this report with the support of the UN Global Compact. Members of the UN Global Compact Advisory Group on Supply Chain Sustainability provided significant editorial input. The Office of the High Commissioner for Human Rights provided input on how to align the guide with the Guiding Principles on Business and Human Rights endorsed by the UN Human Rights Council. Any errors that remain are those of the authors.

BSR team: Tara Norton, Julia Beier, Lauren Shields

UN Global Compact team: Anita Househam, Elena Bombis, Daniella Liew

Designers: Nilou Safavieh, Tannaz Fassihi

© Copyright 2014

United Nations Global Compact Office

Two United Nations Plaza, New York, NY 10017, USA

Email: globalcompact@un.org

Table of Contents

Introduction	4
Part 1: Global Alignment on Traceability	6
1. Definition: Traceability	6
2. The Evolution of Traceability	6
3. The Impact of Traceability	7
Part 2: Traceability in Practice	10
1. Traceability Models	10
2. The Landscape of Global Collaborative Traceability-Focused Organizations	15
3. Best Practice in Traceability	18
Part 3: Practical Guide for Companies to Pursue Traceability	20
1. Drivers and Benefits	20
2. The Practicalities of Traceability: Implementation in Seven Steps	24
3. Alternatives to Traceability	26
4. Keys to Successful Implementation: Helpful Advice from Peers	29
Conclusion and Outlook for the Future	31
Annex: Traceability by Commodity: Gaps and opportunities for collaboration	32
End Note	44

Introduction

The UN Global Compact and BSR are pleased to issue this guide to help companies and stakeholders understand and advance supply chain traceability, which is the process of identifying and tracking a product or component's path from raw material to finished good.

This guide represents more than a year of work in preparation, research and interviews.

Purpose

The purpose of this guide is to provide an overview of the importance of traceability for sustainability purposes, outline the global opportunities and challenges it represents and summarize practical steps for implementing traceability programmes within companies.

Research for this guide revealed that traceability is a tremendously impactful tool for advancing sustainability objectives, but it still has a long way to go before it is an integral part of sustainable supply chain management and is used widely by companies. At present, only a very small percentage of commodities are traceable on sustainability attributes.

Traceability must be a collaborative effort. This guide aims to show companies and

stakeholders the benefits of working together to implement a common approach to traceability across commodities.

Summary of the Guide

This guide is divided into three sections:

- **In Part 1**, the guide defines traceability and explores its history, benefits and challenges, including an overview of current collaborative schemes on traceability.
- **In Part 2**, the guide demonstrates a model for best practice in traceability, and provides an overview of the different models of traceability and the global initiatives operating in the arena.
- **In Part 3**, the guide provides guidance to companies around the world, large and small, on how to effectively engage in traceability.

Target Audience

This guide is primarily aimed at supply chain, procurement, sourcing and sustainability professionals who seek to improve the sustainability of their companies' supply chains, and

ABOUT SUPPLY CHAIN SUSTAINABILITY & THE UNITED NATIONS GLOBAL COMPACT

The UN Global Compact encourages participants to develop more sustainable supply chain practices, including by engaging with their suppliers around the UN Global Compact Ten Principles. To assist companies in improving the sustainability of their sourcing policies and practices, the UN Global Compact promotes material initiatives and good business practices that explore critical issues and has developed guidance on how to integrate the Ten Principles into supply chain management systems.

To guide its work on supply chain sustainability, the UN Global Compact has established an Advisory Group of Global Compact participants and stakeholders. The role of the Advisory Group is to provide input to the overall strategy and work of the UN Global Compact on the issue of supply chain sustainability, and to ensure that the guidance material developed is robust and addresses the needs of businesses.

The Advisory Group has established task forces to develop various tools and resources to help businesses integrate the UN Global Compact principles into supply chain relationships. This guidance is the result of the work of the Traceability Task Force.

who are considering traceability. Individuals already engaged in traceability in some way and those who are new to the topic will gain value from this guide.

Our aim is to provide lessons that are applicable across industries, geographies, in reference to a vast range of commodities, and to large multinationals as well as small businesses. The real-life case studies and interviews with practitioners provide companies with concrete examples and clear ways to implement traceability standards.

For organizations involved in traceability, such as traceability schemes and Non-Governmental Organizations (NGOs), this guide provides a comprehensive overview of the traceability landscape and the benefits that these organizations are providing to ensure the sustainability of products. This guide also calls out key areas where traceability schemes

need global support, and points companies in the direction of offering the right kind of guidance.

Research Methodology

The findings and recommendations in this guide are based on the following: a review of publically available information, literature and case studies about supply chain traceability; an analysis of existing traceability schemes; and interviews with individuals at companies, traceability schemes and NGOs who have significant experience in traceability.

Interviews were conducted with 12 companies (multinationals), 4 companies (suppliers), 9 traceability schemes, and 4 relevant NGOs, using a standard interview template that was then coded and analyzed for trends. UN Global Compact and BSR wish to acknowledge and thank all participants.



PART 1

Global Alignment on Traceability

1. DEFINITION OF TRACEABILITY

This guide will use a hybrid of the widely accepted definition of traceability from the International Organization for Standardization (ISO), with the added key component of a sustainability focus:

Traceability: *The ability to identify and trace the history, distribution, location and application of products, parts and materials, to ensure the reliability of sustainability claims, in the areas of human rights, labour (including health and safety), the environment and anti-corruption.*

Background on the definition

Although traceability schemes have slightly different definitions for traceability, they all reference a process by which a product moves from its original raw material extraction and production phase to the final customer. The original ISO definition of traceability is “the ability to identify and trace the history, distribution, location, and application of products, parts, and materials”.¹

In order to ensure traceability along the supply chain, a system is needed that “records and follows the trail as products, parts, and materials come from suppliers and are processed and ultimately distributed as end products”.² Such traceability systems provide information on the components of products, parts, and materials as well as information on transformations throughout the value chain. At the end, traceability ensures the accuracy of this information, such as product quality, safety and labeling.

In the context of sustainability, traceability is a tool to assure and verify sustainability claims associated with commodities and products, ensuring good practice and respect for people and the environment all along the supply chain.

For example, schemes ensuring that minerals are not sourced from conditions of armed conflict (known as “conflict minerals”) aim to address the human rights abuses in

conflict areas and avoid purchasing materials that can directly or indirectly finance and increase the intensity of those conflicts. Programmes that certify the use of products that are grown in sustainable cultivations, whether they relate to food (e.g. cocoa, nuts or coffee) or to other commodities (e.g. cotton or wood), can have numerous effects on the environment, from the reduction of carbon footprint to the prevention of deforestation.

Definition of Traceability Schemes

When we refer to “traceability schemes” throughout this document, we are referring to organizations whose purpose is ensuring the sustainability of raw materials, for whom traceability plays some role. These organizations are generally labeling or certification organizations, and industry or commodity roundtables. It is important to note that these organizations are at different levels of advancement in terms of implementing traceability.

2. THE EVOLUTION OF TRACEABILITY

The History of Traceability

Traceability dates back to as early as the 1930s when some European countries wanted to prove the origin of high-quality food such as French champagne.³

Over the past two decades, food safety related issues and various food scandals in the agribusiness sector, such as mad cow disease or the Asian bird influenza, have highlighted the importance of traceability. The need for traceability has also extended to other industries, due to issues of product quality, safety and security.

In 2005, the European Commission implemented several directives and regulations on food safety, which increased the focus on traceability in agricultural commodities. These food law guidelines address “traceability of food and feed products, responsibility of operators, withdrawal of unsafe food or feed from the market and notification to the competent Authorities”.⁴

Beyond food safety, consumers, NGOs, governments, suppliers and buyers increasingly demand more information about the origins of their products and materials and the conditions under which they were produced and transported along the value chain. With the increase in demand for organic, fair trade and environmentally friendly products and materials, well-functioning traceability systems and new technologies have been developed to meet stakeholder needs.

Traceability for Sustainability Claims

Today, traceability is a useful tool for companies to advance sustainability and prove claims and attributes of sustainable products. Companies undertake traceability programmes to improve their supply chain management in various ways.

Some companies who have a strong understanding of their supply chain and know their main suppliers well have instituted their own traceability programmes and schemes for certain commodities, often when those commodities are a critical resource for their products.

Companies and stakeholders in industries with complex supply chains, such as the agricultural and retail industry, have come together to build global multi-stakeholder initiatives in order to trace commodities collaboratively. These global traceability schemes, such as the Forest Stewardship Council (FSC), the Marine Stewardship Council (MSC) or UTZ Certified, have engaged with stakeholders along the entire value chain in order to develop credible and robust chain of custody standards and certification for products from the raw material to the final use phase.

Traceability is not a substitute for due diligence or the broader scope of the corporate responsibility to respect human rights⁵. Readers of this guide should be mindful that traceability schemes may only uncover one set of risks and not all potential adverse impacts, depending on the specific nature of the traceability scheme and the issues that it covers.

3. THE IMPACT OF TRACEABILITY

3.1. TRACEABILITY'S POSITIVE IMPACT

There is no doubt that traceability schemes have become an important part of the sustainability landscape and are growing in impact and credibility.

Traceability's Impact on the Sustainability of Raw Materials

Traceability has been an invaluable tool for driving tremendous progress to improve the sustainability of raw materials, and a significant number of promising statistics are available to support this.

One clear example is in timber. The UN reported in its annual review of "Forest Products" that by May 2013 the global area of forest certified by FSC and the Programme for the Endorsement of Forest Certification (PEFC) amounted to 10 per cent. This reflects an annual relative growth rate of 11.8 per cent in forest certification, a trend that shows no sign of slowing.⁶ Certifications visible on finished timber-based products indicate an ability to trace back to the source of one of these certified forests.

Moreover, in sustainable fishing, MSC has certified annual catches of around 10 million metric tons of seafood, which represents more than 10 per cent of annual global wild capture fisheries. For consumers, achievements in traceability are visible through the 20,000 seafood products that are traceable back to certified fisheries.⁷

There are now 13 countries globally that are able to supply Better Cotton, and the Better Cotton Initiative (BCI) Retailer and Brand members represent almost 8 per cent of the cotton consumption worldwide.⁸

Even newer initiatives, such as Bonsucro's sustainable sugarcane and ethanol, are showing results. Bonsucro only issued its first certificate in 2011. Today it certifies 3.66 per cent of the global sugarcane surface with 38 certificates, which amounts to 871,229.59 hectares. A preliminary outcome report from 2013 shows that first Bonsucro certifications reduced GHG emission by 323 thousand tons of CO₂.

In general, the most recent UTZ certified impact report on coffee, cocoa and tea, released in January 2014, indicates that the implementation of certifications results in higher yields for farmers. As one country study shows, certified farmers in Colombia were able to maintain higher levels of production compared to conventional farmers. The impact of the traceability scheme is shown by an increase from 52 per cent in the first year to 169 per cent by the fourth year in terms of production between UTZ certified farmers and the control group.⁹

Traceability as Evidence of Good Business Practice

Traceability is becoming more of an accepted practice, and one that companies increasingly embrace as part of their sustainability activities. The Forest Stewardship Council describes FSC certification as a “license to trade” for businesses.

In addition, traceability certifications are becoming validated as proof of sustainability requirements. One significant recent development is that “the EU voted [in January 2014] for a set of revised public procurement directives that refer to robust certification programmes as proof that a company meets sustainability requirements set out in calls for tenders”.¹⁰ As more governments and companies adopt this stance, traceability becomes a viable and appealing way for businesses to meet the sustainability requirements and expectations of their customers.

There is also increasing evidence that consumers are demanding certified and traceable products, which is a main driver for traceability. For example, “in the United States, 39 per cent of those surveyed in 2012 recognize the Rainforest Alliance Certified™ green frog seal, 30 per cent understand what the certification means and 23 per cent indicated they are more likely to buy a product that carries the Rainforest Alliance Certified seal”.¹¹

Beyond organic and fair trade labels, among others, there are various tools and resources available for consumers to obtain more information on the origin and manufacturing process of their products along the supply chain. Various online consumer guides and websites, such as GoodGuide, GreenerChoices.org, Ethical Consumer and

HarvestMark, provide consumers with detailed information on the environmental and social impacts of their products with the aim of helping consumers make more informed buying decisions.

In addition, there are currently a variety of smartphone applications available that allow consumers to scan bar codes in order to acquire more information about their product’s origins and impacts.

Traceability Unites Companies and Stakeholders Around a Common Purpose

The most successful traceability schemes are multi-stakeholder, involving business, government, and other stakeholders and civil society organizations who have an interest in the sustainability of the said commodity¹². Multi-stakeholder initiatives are complex and require careful governance to manage often very divergent points of view. Traceability schemes are proving able to bring — and keep — these players together. The focused purpose of making a specific commodity more sustainable is a powerful and uniting force for the participating companies and stakeholders.

3.2. OPPORTUNITIES TO STRENGTHEN TRACEABILITY

There are current limitations to achieving full supply chain traceability, which will need to be addressed to increase the impact of traceability.

Supply Chain Complexity

It is often difficult for companies to trace each and every step in the journey of a given product. Multiple actors with different systems and requirements may contribute to production across international borders, and some areas in a supply chain may be especially opaque. This is a complex issue as traceability requires the engagement and collaboration of actors along the entire supply chain to trace a product’s history. Developments in technology and demands for greater transparency from both business and government sectors are making this increasingly more manageable.



Availability and Scale of Certified, Traceable Products

The number of traceable products in any given category is limited due to the complexity of traceability. Obtaining fully traceable materials or components is not possible in many cases, particularly for large companies. To address these challenges, companies need to push for and support the continued expansion of traceability schemes. This will gradually ensure a greater quantity of the certified commodities a company's products require, as well as increase the sustainability of overall product lines.

The challenge of full traceability is particularly acute for companies manufacturing complex products with multiple tiers of suppliers or numerous sources at any given tier.

Costs for All Supply Chain Actors

Traceability requires substantial investment in technology and processes aimed at tracking goods along the supply chain. In addition, coordination between different supply chain actors requires time and willingness on all sides. These costs are a concern for many actors pursuing traceability.

Alignment around tools helps reduce costs to individual actors. When collaboration is widespread, there is greater incentive for actors to work together, which lowers cost overall.

Further Developments in Technology Needed to Support Traceability Schemes

In order to achieve full traceability, various levels of verification are needed at all stages throughout the supply chain. This means that supply chain actors need to collect and validate data and commit to chain of custody standards. Technological platforms, bar codes, and chips represent some technological advances; however, mastering these technologies for traceability purposes is a challenge. Since suppliers are located throughout the world and sometimes in remote areas, there are language, skill and access barriers to fully using technology. In addition, there are also challenges around ensuring that data systems are secure for all users.

While technology and tools are developing, the pace of these innovations needs to increase significantly. For providers of these technologies, cost is still proving a difficult and related barrier.

PART 2

Traceability in Practice

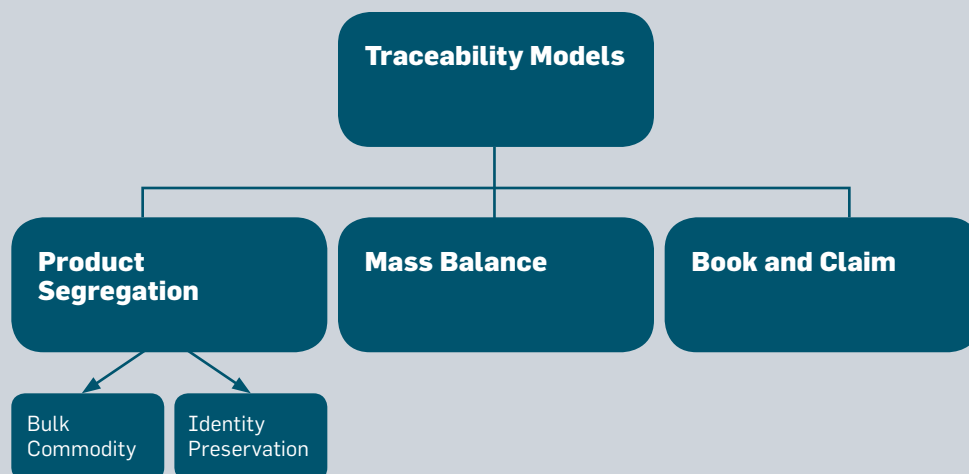
1. TRACEABILITY MODELS

There are three main models in terms of how traceability schemes trace sustainability claims. These models offer different approaches to tracking a claim and assuring it at each point in the supply chain.

The three models are Product Segregation, Mass Balance, and Book and Claim (see image below). They are differentiated by the extent to which certified and non-certified materials are permitted to mix, as well as by claims that can be attached to the final product.

Models with less stringent controls around the handling of certified and non-certified materials are less complex and thus less expensive. However, wherever possible, the type of certification and the model of traceability used should depend on the sustainability claims and the materials being traced rather than the cost of implementing the model. Product segregation is best suited and should be prioritized, when possible, if there is a risk of being involved in human rights or labor abuses when sourcing a certain commodity. The Mass Balance and Book and Claim models are open to criticism for commodities where Product Segregation is available.

Supply Chain Traceability Types



1.1 Product Segregation

The Product Segregation model implies that certified materials and products are physically separated from non-certified materials and products at each stage along the value chain. This ensures that certified and non-certified materials and products are not mixed and that the end product comes from a certified source. At the end, consumers know that 100 per cent of their products consist of certified materials.

There are two segregation models to traceability: Bulk Commodity and Identity Preserved (IP).

Bulk Commodity

The segregation model of Bulk Commodity separates certified from non-certified materials but allows mixing of certified materials from different producers. All producers must comply with the certification standards.

ORGANIC PRODUCE

The Segregation model is important to the organic produce sector, where organic and non-organic fruits and vegetables are strictly separated. However, organic items from different farms and producers are regularly combined in order to achieve supply on a large scale. Despite the bulking from different regions, all producers and farmers must commit to growing organic food and comply with organic certification standards.

Identity Preservation

The Segregation model of Identity Preservation (IP) requires segregation of the certified material from the non-certified material and doesn't allow mixing of certified materials throughout the value chain to provide traceability from a specific plantation or primary processor to the final users. The IP model enables the traceability of products back to the originating farm, forest or production site.

BANANAS

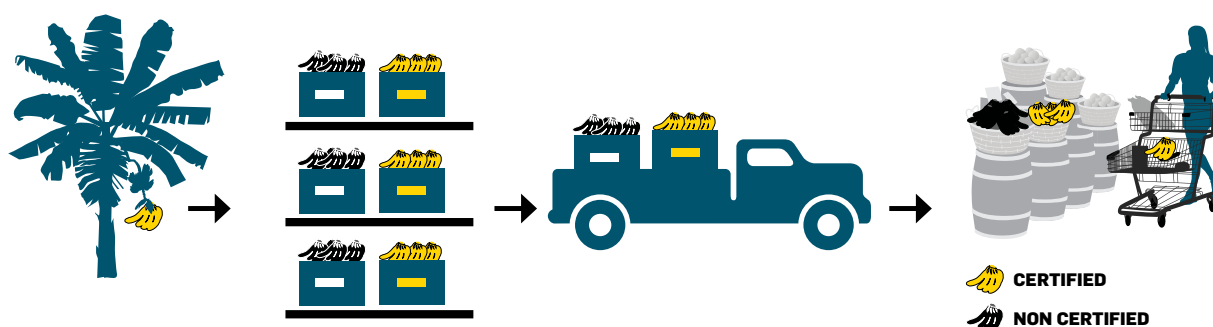
Identity preservation has been possible in the case of Fairtrade bananas, where a physical link between smallholder producers and consumers has been achieved.¹³

The IP model is sometimes criticized for being cost and resource intensive and requiring advanced technology since all material sources must be strictly separated, controlled and monitored at each stage of the supply chain. Companies must know all their suppliers and collect and verify data at all levels throughout the supply chain.

EXAMPLE IDENTITY PRESERVATION: ORGANIC FOOD

In the case of organic food, the end consumer would know the exact farm where the organic food was grown.

Product Segregation



1.2 Mass Balance

With the Mass Balance model, certified and non-certified materials can be mixed. However, the exact volume of certified material entering the value chain must be controlled and an equivalent volume of the certified product leaving the value chain can be sold as certified.

This is common for products and commodities where segregation is very difficult or impossible to achieve, such as for cocoa, cotton, sugar and tea.

Customers may not know whether their specific share of the product contains certified or non-certified materials or a mixture of both. Claims of “product contains x per cent of certified ingredients” can be made.

Timber

The Forest Stewardship Council (FSC) aims to have all forest products sourced from certified forests. However, the complex nature of the production processes of paper mills and similar forest products manufactured make segregation difficult. FSC allows a Mass Balance model a set of certified products to contain a mixture of certified and uncertified material and sell FSC products on a larger scale.

Cocoa¹⁴

The cocoa supply chain is very complex and makes the process of complete segregation expensive to implement for most companies. UTZ Certified offers the Mass Balance system to boost sustainable production through less cost, allowing more farmers to benefit from it.

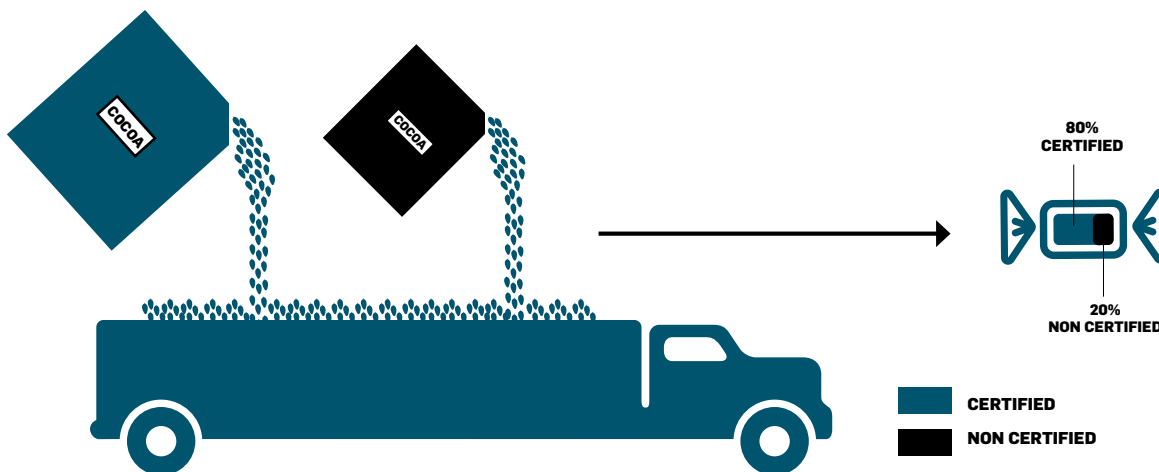
1.3 Book and Claim

The Book and Claim model is very different from the two models discussed above and does not seek to have traceability at each stage in the supply chain. Instead, this model relies on the link between the volumes of the certified material produced at the beginning of the supply chain and the amount of certified product purchased at the end of the value chain.

In the Book and Claim model, a company can obtain sustainability certificates for the volume of certified materials that it puts into the supply chain. Certified and non-certified materials flow freely throughout the supply chain. Sustainability certificates are bought via a trading platform and can be issued by an independent body.

Companies that want to make sustainability claims can purchase such certificates. Even though it is not certain that their products contain certified material, their production

MASS BALANCE





has supported sustainable sourcing. Therefore, claims of “product supports the sustainable sourcing and production of essential commodities” can be made.

Book and Claim Trading Platform

The company Book & Claim Limited, located in the United Kingdom, is an example of a Book and Claim trading platform and issuing body. This trading platform aims to overcome the logistical complexities of implementing traceability programmes in global supply chains and is based on the principle that “the best way to encourage producers to operate sustainably is to reward them for doing so”.¹⁵

Producers who prove through assessment that they operate sustainably can register the quantity of their sustainable products via an online trading platform and receive certificates in return. These sustainability certificates are offered for sale on the online trading platform. Manufacturers and retailers of products containing that commodity can bid for and purchase these sustainability certificates online. In doing so, they automatically pay a voluntary premium to producers who operate responsibly and sustainably.

The Book and Claim system enables the purchase and selling of sustainable commodities without the need for costly segregation and tracing throughout the supply chain. At

RENEWABLE ENERGY CERTIFICATES ¹⁶

Companies producing power from renewable energy projects (e.g. solar panels, windmills) can feed their green energy into the electrical grid and receive Renewable Energy Certificates (REC) in return. Once in the grid, renewable energy is impossible to separate from the conventionally generated energy.

RECs can be exchanged, sold and traded, and the owner of the REC can claim to have purchased renewable energy. RECs incentivize carbon-neutral renewable energy by supporting electricity generated from renewable sources.

The purchase of RECs allows its owners to claim that their purchased energy was generated from an eligible renewable energy resource.

the end, products do not necessarily contain certified material but have contributed to sustainable sourcing and production of certified material. This enables companies to demonstrate their support of sustainable production upstream at grassroots levels.

For further examples, please see the table at pg. 15 which lists some of the existing traceability schemes by model. Additional traceability schemes are provided in the next section.



EXAMPLES OF EXISTING TRACEABILITY SCHEMES BY MODEL¹⁷

PRODUCT SEGREGATION MODEL	MASS BALANCE MODEL	BOOK AND CLAIM MODEL
• Better Cotton Initiative – Physical segregation until the bale of cotton is formed • Fairtrade Labelling Organizations International (FLO) – Product segregation for bananas, other fresh fruits, coffee, flowers, nuts, rice and spices • Forest Stewardship Council (FSC) – "FSC Pure Products" • Organic Food Labels • Responsible Jewelry Council Chain-of-Custody standard • Roundtable for Sustainable Palm Oil (RSPO) – RSPO Segregated System • Textile Exchange standards • UTZ Certified – Traceability Programme "Segregation Physical Link" • Marine Stewardship Council (MSC)	• Better Cotton Initiative – Mass Balance model once the bale of cotton is broken and split into yarn • Bonsucro – Mass Balance Chain of Custody Standard • Fairtrade Labeling Organization (FLO) – Mass balance model for cocoa, sugar, tea and juice • Forest Stewardship Council (FSC) – FSC volume based system • Roundtable for Sustainable Palm Oil (RSPO) – RSPO Mass Balance System • UTZ Certified – Mass Balance Traceability Programme	• Bonsucro – Credit trading system (Book and Claim) • RSPO – Book and Claim system • UTZ Certified – Trading & Traceability Programme used in collaboration with RSPO

2. THE LANDSCAPE OF GLOBAL COLLABORATIVE TRACEABILITY-FOCUSED ORGANIZATIONS

This section offers an overview of existing traceability initiatives that address sustainability issues. Although this landscape is not intended to provide an exhaustive list of all actors working on traceability, it highlights major collaborative traceability schemes for each commodity.

Global Collaborative Traceability Schemes

The table below presents a list of global collaborative traceability schemes. These schemes have different scopes, with some providing full certification of sustainability attributes through a chain of custody programme while others offer more general guidance on traceability.

	Agricultural products	Beef	Biofuel	Carpet	Cashews	Cocoa	Cotton	Coffee	Conflict minerals	Diamonds	Down	Electronics	Fish	Flowers		Fruit	Gold	Honey	Leather	Palm Oil	Personal Care	Recycled Materials	Rice	Soy	Spices and herbs	Sports balls	Sugar	Tea	Textiles	Timber	Tin	Titanium	Toys	Vegetables	Wine	Wool		
Conflict Free Sourcing Initiative (CFSI)									●																													
Fair Trade Labelling Organizations International (FLO)						●	●	●						●		●	●	●					●			●		●								●		
Forest Stewardship Council (FSC)																														●								
Global Organic Textile Standard							●																						●								●	
Global Sustainable Beef Roundtable		●																																				
Good Weave				●																																		
IDH Sustainable Trade Initiative					●	●	●	●				●	●	●		●				●					●	●			●		●				●			
International Federation of Organic Agricultural Movements (IFOAM)	●																																					
ITRI Tin Supply Chain Initiative (iTSCi)									●																							●						
Kimberley Process										●																												
Leather Working Group																			●																			
Marine Stewardship Council (MSC)													●																									
Materials Traceability Working Group (of the Outdoor Industry Association)																			●			●																
Programme for the Endorsement of Forest Certification (PEFC)																				●										●								
Rain Forest Alliance						●	●							●		●													●		●				●			
Responsible Jewellery Council									●								●																					
Roundtable for Responsible Soy																								●														
Roundtable on Sustainable Biomaterials (RSB)			●																																			
Roundtable on Sustainable Palm Oil (RSPO)																				●																		
Sustainable Forest Initiative (SFI)																															●							
TE Organic Content Standard							●																							●							●	
TE Recycled Claim Standard																																						
TE Responsible Down Standard											●																											
Tropical Forest Alliance 2020																														●								
UTZ Certified						●		●																					●									

Other Engaged Organizations

In addition to the global collaborative initiatives, a number of other stakeholders also support traceability. Of particular note are the **International Organization of Standards (ISO)**, the **ISEAL Alliance**, **World Wildlife Fund (WWF)** and **Historic Futures**. ISO and ISEAL Alliance are widely recognized organizations in setting and maintaining standards across multiple industries, and Historic Futures provides technical support to businesses and others working on traceability.

In-Depth Commodity Overviews

To provide more information about traceability and how it is playing out for specific commodities, an in-depth overview of ten commodities and their key traceability schemes and challenges is outlined in the **Annex**. The ten commodities covered include:

- Beef
 - Biofuel
 - Cocoa
 - Cotton
 - Fish
- Leather
 - Minerals/diamonds
 - Palm oil
 - Sugar
 - Timber

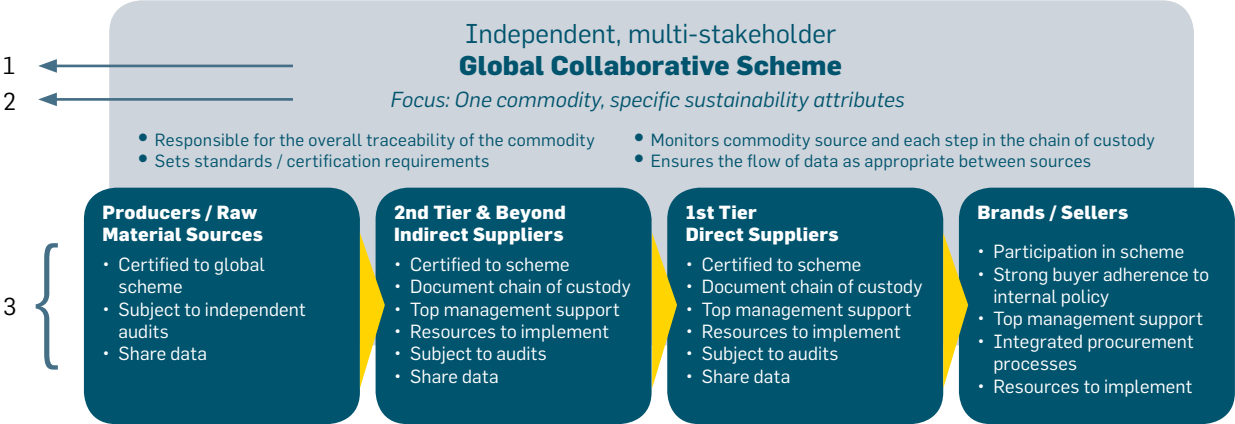
3. BEST PRACTICE IN TRACEABILITY

Companies and stakeholders have realized that they must work together in collaboration towards achieving the traceability of commodities. A few companies interviewed during the development of this guide disclosed that their attempts to establish company-specific traceability schemes were unsuccessful. The roadblocks were due to two key factors: the reluctance of suppliers to share information, and the fact that there was a particularly opaque section of the supply chain, such as when there are agents or distributors not prepared to share sources, or a large number of small producers that are difficult to track. Attempts by the organizations in question to pursue traceability alone did not offer a solution.

THE MODEL: COLLABORATION IS BEST PRACTICE FOR TRACEABILITY

A clear model has emerged of best practice in traceability based on interviews and research conducted in developing this guide. The model has three distinctive features:

1. **One independent, multi-stakeholder Global Collaborative Scheme.** This organization provides guidance and works on commodities to advance traceability.
2. **Focus.** The traceability scheme is focused on a limited number of issues, both in terms of the number of commodities and the sustainability attributes that must be traced.
3. **Appropriate collaboration along the supply chain.** The supply chain actors along the way are participating in the scheme in a manner appropriate to their position in the supply chain, and are communicating with their immediate business partners.





EXPLANATION OF KEY FEATURES OF THE MODEL

The Collaborative Scheme

The core of this model is the independent, multi-stakeholder Global Collaborative Scheme, which serves as the umbrella of the entire effort. The scheme ideally focuses on one or related commodities, and the traceability of that commodity in relation to a specific and limited set of sustainability attributes.

The scheme is responsible for traceability all along the supply chain, and has the following responsibilities:

- Provides guidance to ensure the source of the commodity meets the sustainability claims;
- Provides guidance to ensure that the full chain of custody or supply chain meets the sustainability claims;
- Provides guidance to ensure that the processes of the companies involved in the supply chain are enabling the commodity to maintain its sustainability attributes;
- Verifies/audits as appropriate to enable responsibilities 1-3 or links to a third party auditor and provides certification;
- Stores the relevant data in a secure system and enables the information to be shared within the business partnerships in the supply chain;
- Manages labelling requirements and sustainability claims attached to products; and
- Provides format or source for standardized data collection.

The collaborative scheme needs to be a trusted, well-governed independent body that all actors have confidence in, and that maintains the relationship at every step in the supply chain.

The Supply Chain

The **supply chain** in the model is intentionally generic, moving from producers / raw material sources to the brands / sellers of finished goods, demonstrating the traceability responsibility of the actors along the way.

Each step along the supply chain has specific responsibilities in terms of traceability. It is important to note that no single step in the supply chain is fully responsible for ensuring that steps further up or down the chain are maintaining the sustainability attributes of the commodity. While businesses can influence, and certainly should communicate to and hold their direct business partners accountable, the model recognizes that beyond immediate business relationships, suppliers and buyers usually have limited influence. This underlines the importance of the multi-stakeholder scheme, as a neutral party that is responsible for the assurances across the whole of the chain and that can exercise leverage with suppliers and producers where an individual company may have little influence.

While recognizing that all supply chains are different, there are some universal responsibilities that apply across commodities.

PART 3

Practical Guide for Companies to Pursue Traceability

Businesses increasingly pursue traceability systems to help them achieve sustainability goals and support sustainability claims. But the reasons for instituting a traceability programme and the criteria for choosing the right one is specific to each company. Businesses need to ask “*Why are we pursuing traceability? Is it right for us and our stakeholders?*”

This section provides guidance for companies on how to consider and potentially implement traceability. In particular, it looks at drivers and benefits, the seven steps that a company can take when implementing traceability, options and alternatives to traceability, and then finishes with some practical key lessons, summarizing learnings from companies who have significant experience implementing traceability programmes.

1. DRIVERS AND BENEFITS

This section outlines key reasons why companies should consider traceability. These drivers are grouped into four main themes: **Values and efficiencies, stakeholder pressure, regulation, and global alignment**. For a given company, any combination of these drivers may factor into their decision to pursue traceability.

Value and efficiencies

Businesses stand to gain from implementing a traceability system with sustainability objectives in a number of areas including:

- Reducing risk
- Operational efficiencies & process consistency
- Securing supply
- Supplier selection and supplier relationships
- Reputational benefits

Risks associated with the supply chain can be addressed through traceability systems, as traceability allows a closer look into the supply chain from producers to first tier suppliers. A traceability system that focuses on improving sustainability is a mechanism for identifying potential problems within the supply chain. In industries using minerals, for example, traceability can help mitigate the risk of conflict minerals appearing in the supply chain. Reducing risk ultimately helps businesses identify and address problematic materials or practices; however, it should be noted that traceability schemes may uncover only some areas of risks, depending on the specific focus of the scheme, and are not a substitute for the broader responsibility to identify potential or actual negative impacts to, for example, human and labour rights across a company’s supply chain.

Operational efficiencies and process consistencies can be identified and replicated as part of implementing a traceability system. Several companies interviewed cited that a better understanding of the supply chain and its inherent challenges was a primary

Values and Efficiencies	Stakeholder Pressure	Regulation	Global Alignment
1. Reducing risk 2. Operational efficiencies and process consistency 3. Securing supply 4. Supplier selection and supplier relationships 5. Reputational benefits	6. Meeting stakeholder demands for more product information 7. Ensuring sustainability claims are true	8. Meeting legal requirements	9. Standardization of expectations, processes and systems 10. Ensuring security of natural resources

benefit for businesses. A traceability system implemented at different stages of the supply chain can reveal processes that are especially effective (or on the contrary, that could be improved). The exchange of data and documentation related to implementing traceability can also open space for dialogue about process improvements. Ultimately, traceability can contribute to spreading best practices throughout supply chain actors to achieve operational efficiencies, cost reductions and increased productivity. Plus, many of the requirements in traceability standards translate to good business management, which can bring benefits in terms of product quality, as well as sustainability. In addition, once risks related to weak spots in the supply chain have been identified it is easier for companies to switch to more credible alternatives or take action to jointly resolve the identified risks.

A **secure supply** of commodities can be central to business now and in the future. Ensuring that commodities are sourced in ways that are respectful of the UN Global Compact Ten Principles is a way to invest in the future of the business. Thus, the value of commodities can sometimes drive the decision to implement a traceability system.

Pursuing traceability can also help a business make better decisions in terms of **supplier selection and supplier relationships**. For new suppliers, businesses can ask questions about how they are tracing their own supply chain, and gauge the benefit that the supplier could bring to their business. In addition, for longer-term supplier relationships, engaging in traceability creates a new positive dynamic with the supplier.

Leading businesses gain **reputational benefits** through traceability systems that demonstrate a commitment to sustainability outcomes. The data collection and increased understanding of the supply chain can serve as the first step to achieving broader sustainability objectives, increasing competitive advantage and providing added value for customers. Traceability systems demonstrate resources and technology going toward addressing risks in the supply chain, such as

reputational risks arising from fines, negative legal judgments, boycotts, public protests and/or negative media attention in response to social and environmental harm. Leading businesses have been rewarded with positive impacts on external reputation. Moreover, companies suggested that there are internal benefits related to reputation as well. Traceability systems have been connected to greater employee morale and pride within organizations, representing another driver for business investment in traceability.

Stakeholder pressure

- **Meeting stakeholder demands for more product information**
- **Verification of sustainability claims**

Companies face **stakeholder demands for product information** that ensures that supply chain processes do not include harmful environmental or social practices. News stories on issues like conflict minerals, rainforest destruction, or animal welfare are increasingly gaining public attention. Consumers represent one group of stakeholders that is sensitive to the sustainability records of products they purchase. NGOs and advocacy organizations also work to raise sustainability issues and to elicit more information from companies about procurement practices. Traceability systems can help businesses respond to these demands for information and levels of transparency.

Companies need to have a means of **verifying sustainability claims** linked to their products, and traceability systems can help business follow through on attributes connected to their products. Traceability in particular provides a tool to monitor products and materials as they travel through the supply chain in order to ensure that responsible social and environmental practices are used at every step. Verifying the claims they make about these materials through mechanisms like third-party audits has been an important issue for stakeholder relations. Traceability systems can help companies fulfill their sustainability promises by providing a means of assuring sustainability and by generating data that can be shared with stakeholders.

Regulation

• Meeting legal requirements

Respecting national or international **legal requirements** or guidance directives related to sustainability issues is a priority for any company. Regulation addressing issues like minerals extracted in conflict zones or threats of illegal logging require various degrees of due diligence on the part of actors throughout the supply chain to achieve compliance. Companies operating in the European Union or the United States and working with high-risk commodities must implement origin assurance or traceability systems in order to

meet legal requirements to operate in that area. Guidance from the Organisation for Economic Co-operation and Development (OECD) also provides best practices for establishing a traceability system. In addition, traceability can help companies to meet other legal requirements, such as truth in labeling laws. It is important to note that companies have the responsibility to ensure they understand the regulation that applies to them, and that participation in a global traceability scheme is not a substitute for due diligence or legal compliance.

OVERVIEW OF EXISTING TRACEABILITY RELATED REGULATION AS OF MARCH 2014 ¹⁸	
Fish	
European Commission Food Law Regulation 178/2002	Contains general food traceability requirements (including for seafood) such as that food has to be traceable through all stages of production, processing, and distribution. Every food item must have an identifiable supplier and customer. ¹⁹
Minerals	
Dodd-Frank Wall Street Reform and Consumer Protection Act, Section 1502	Requires that US Securities and Exchange Commission (SEC)-registered companies disclose their use of conflict minerals (sourced from the Democratic Republic of the Congo or adjoining countries), effectively requiring origin information for all products containing minerals. ²⁰
OECD	Provides guidance for due diligence for responsible supply chains related to conflict minerals, including recommending traceability systems. ²¹
Timber	
EU Timber Regulation 995/2010	Prohibits the placing of illegal timber and timber products on the EU internal market and requires “due diligence” and risk management of EU traders of timber, including obligations to keep records that facilitate traceability. For example, traders need to keep records of their suppliers and customers so that operators can always be traced. Furthermore, operators must have access to information that describes the timber and timber products such as country of harvest, species, quantity, supplier details and information on compliance with national legislation. ²²
US Lacey Act	Tackles trade of illegal timber and timber products in the US along the entire supply chain and requires that importers exercise “due care” in identifying the source of their goods. ^{23a} This includes working with suppliers to ensure that timber is sourced from forests where legal harvest and chain of custody can be verified, as well as declaring the species, country of origin and other relevant information important to the wood or product’s origin. ^{23b}



Global Alignment

- **Standardization of approach across an industry**
- **Ensure security of natural resources**

Standardization of expectations, processes and systems with regards to traceability of the sustainability attributes of a commodity is advantageous as it reduces duplicative work and the burden on individual companies, as well as makes sustainability requirements a norm in the industry. The emergence of common reporting templates and standardized processes has made it simpler and cheaper for companies to respond to traceability demands. The Conflict Free Smelter Programme, for example, was developed in response to industry desire for greater alignment around conflict minerals and for easy-to-use tools. As these points of collaboration develop, companies are more likely to engage in traceability for two reasons: common tools make up-take easier, and industry-wide acceptance motivates companies to participate.

Beyond the direct business value of raw materials, **security of natural resources** broadly speaking is crucial for businesses and stakeholders alike. Companies play an active role in managing land, water, and living resources during operations throughout the supply chain. Contributing to the conservation of those resources for the long term can be part of a business's mandate, and is increasingly expected by stakeholders. Traceability systems provide a means of monitoring impacts on the environment and can be a tool for companies to support the conservation of natural resources.

2. THE PRACTICALITIES OF TRACEABILITY: IMPLEMENTATION IN SEVEN STEPS

Following this overview of traceability and its benefits, are the steps businesses can take to implement traceability.

1. Identify the key²⁴ commodities

Make an effort to map the material supply chain inputs, looking across all procurement categories and tracing products back to raw

materials where possible. This can be a difficult process, and the information should be gathered through direct interaction with first tier suppliers, conversations with NGO partners who focus on commodities and commodity organizations, and where relevant, producers and potentially impacted stakeholders. This will help identify which raw materials or commodities carry the highest risks of being involved with adverse impacts. Some businesses will already know the answer to this before even reading this step, but for others, this may take some assessment. Either way, challenge conventional wisdom and look deeply at what is in the company's products — the commodities that carry the highest risks might be a surprise.

2. Gain a full understanding of all relevant sustainability issues to those commodities and identify whether traceability is the best way to mitigate those risks.

Once you know the key commodities, familiarize yourself with all sustainability challenges associated with those commodities. Again, some of this will likely already be common knowledge to you or to the category manager responsible for the commodity, but there are likely to be surprises to uncover. Relying on external data or talking to trusted stakeholders to get their perspective would be helpful. It is also recommended to take a life-cycle approach considering holistically the sustainability issues for specific commodities — i.e. consider not only the risks associated with the production of the raw material itself, but also its processing, use and end-of-life stage. For example, a company may source “sustainable” bamboo, but if it goes through the traditional rayon processing, the net environmental impact may be negative, due to the harsh chemicals used.

This is also the time to fully take stock of what the alternatives to traceability to achieve your sustainability objectives are, and mitigate salient risks. Get stakeholder input on what they think is the best way to improve the sustainability attributes of the said commodity to gain external perspective on whether traceability is your best course of action. Traceability may be the most effective way to address only one set of risks, depending on the specific scope of the scheme, but

not all potential negative impacts. It should be noted that sustainability issues that are not covered by traceability, whether they relate to key or non-key commodities, should still be addressed separately using the appropriate policies and procedures.

3. Develop the business case for traceability.

Once you are clear about the commodities that are involved in your business, the most material risks associated with these commodities, and have identified that traceability offers a method for mitigating these risks, you should build the business case to pursue traceability. This is a critical step, especially in convincing senior internal stakeholders that traceability is the best means of addressing sustainability issues that arise from the sourcing of the key commodities. Develop an understanding of your internal appetite and resources that could be put towards pursuing traceability. Observe what your competitors are doing. Determine if there is an existing traceability scheme for the commodities in question using this guide as a resource.

4. Take traceability action.

Once you have identified that traceability is the right way to mitigate sustainability issues and have developed the business case, you have two options:

- a. **If there is an existing traceability scheme, get involved** in the most appropriate way. Schemes serve as a resource to businesses pursuing traceability and a forum to exchange best practices. There is no reason to 'reinvent the wheel'. Either join the initiative, support the initiative financially, or simply decide to pursue the certification for your products.
- b. **If there is not an existing scheme for that commodity, reach out to peers and stakeholders (and the UN Global Compact) to encourage or start one.**

Most existing schemes have been founded through multi-stakeholder engagement. Partnerships are often formed to overcome the absence of a common standard in particular commodity groups.

Forest Stewardship Council

The Forest Stewardship Council was formed through a collaboration of social, economic and environmental interests including WWF, IKEA and B&Q, among others. It gained momentum through the United Nations Conference on Environment and Development in 1992, which provided a platform for multi-stakeholder support.

Better Cotton Initiative

The Better Cotton Initiative was part of a "round table" initiative led by WWF. Early partners and supporters in the establishment of BCI include adidas, Gap Inc., H&M, the International Cocoa Organization (ICCO), International Federation of Agricultural Producers (IFAP), International Finance Corporation (IFC), IKEA, Organic Exchange, Oxfam and PAN UK.

Roundtable on Sustainable Palm Oil

The Roundtable on Sustainable Palm Oil began as an informal engagement between WWF, Unilever, Aarhus United UK Ltd, Migros, and the Malaysian Palm Oil Association, which then formed an Organizing Committee.²⁵

5. Engage internally with key staff, and develop solid internal practices and processes.

Adopt an internal policy and approach to support your commitment to traceability in the targeted commodities. Be sure this internal policy is reflected in all the relevant procurement processes, and that your commitment to traceability is supported by senior management.

6. Engage with suppliers.

Your requirements are specific to your business, but you will need to communicate to suppliers so that they understand the benefits they will gain from traceability. You also need to understand if they can meet the requirements, as well as educate them about the traceability scheme and their responsibilities. It is important to listen to them and what they have to say. By connecting and communicating early and regularly, you can set up your company and its supply chain for success.

7. Stay the course.

Traceability can be difficult, it takes time, and it can get frustrating when initially it seems that you will not be able to achieve your objectives. Stay the course — those who have been at it the longest see pay off after at least a few years of engagement. At the same time, evaluate over time whether the traceability scheme is successful in mitigating relevant risks and achieving your sustainability objectives. If risks are severe, you will typically need to see progress more quickly.

These steps are a simplification of an iterative and complex process. They should provide some guidance to all businesses and can be referred to throughout the process.

QUICK REFERENCE: SEVEN STEPS TO TRACEABILITY IMPLEMENTATION

1. Identify the key commodities.
2. Gain a full understanding of all relevant sustainability issues to those commodities and identify whether traceability is the best way to mitigate those risks.
3. Develop the business case for traceability.
4. Take traceability action.
 - a) If there is an existing traceability scheme, get involved.
 - b) If there is not an existing scheme for that commodity, reach out to peers and stakeholders (and the UN Global Compact) to encourage or start one.
5. Engage internally with key staff, and develop solid internal practices and processes.
6. Engage with suppliers.
7. Stay the course.

3. ALTERNATIVES TO TRACEABILITY

As described in the previous section “Drivers and Benefits”, traceability is an excellent option to achieve key sustainability objectives. However, traceability is not the only option available for companies to achieve sustainability objectives, and there are compelling alternatives that should be assessed.

In terms of alternatives, companies should consider strategies that are most likely to have a direct impact, and lead to improved, more sustainable practices related to production of key commodities.

The top five alternatives that have been identified for this guide are:

1. Direct investment in improvement programmes and technologies in producer countries;
2. Direct supply partnership with producers / a group of producers;
3. Implementation of sustainable agriculture training programmes at producer level;
4. Partnerships with NGOs who are developing sustainable practices in producer countries; and
5. Engaging with public policy in producer country governments to improve practices (e.g. enact legislation or improve enforcement).

While this is not an exhaustive list of options, it highlights that the alternatives to traceability are activities that involve a relatively high level of engagement or investment. This is in contrast to other sustainable supply chain activities, such as participating in industry initiatives, creating guidance for suppliers, or sharing best practice with peers.

It should be noted that it is not always a binary choice between traceability and the activities listed above. As in many cases, companies active in traceability are also engaging in these alternative activities. Often, a combination of activities, including traceability, may be most important to mitigate the different sustainability risks that can be associ-

ated with a commodity. The decision-making process surrounding the implementation of traceability or alternatives is dependent on the resources and appetite for engagement at the individual company level, and what is most appropriate to mitigate an identified risk or impact.

The following table outlines the key drivers and alternatives to traceability that could meet the needs expressed by that driver.

Driver	How traceability addresses this driver	Other options to address this same driver
Value and efficiencies	Provides a process for the supply chain/sourcing teams to address risks, achieve efficiencies, secure supply, and gain reputational benefits.	Investment in internal systems. Consolidation of supply chain where possible.
Stakeholder pressure	Assures stakeholders that the product / supply chain is meeting sustainability demands and verifies sustainability claims.	Investment in producer communities. Direct training to producer communities. Transparency around internal sustainability efforts.
Regulation	Increasing regulation requires companies to have direct knowledge of raw materials from high-risk areas that appear in products.	No real alternative where regulation requires companies to know the sources of their materials, but key complementary activities are: Engaging with producer countries to change practices. Direct investment in improvement programmes and technologies in producer countries.
Global alignment	Provides assurance of a standardized approach across an industry and brings alignment on natural resource conservation.	Engaging with producer countries to change practices. Direct investment in improvement programmes and technologies in producer countries.



4. KEYS TO SUCCESSFUL IMPLEMENTATION: HELPFUL ADVICE FROM PEERS

The businesses interviewed for this project were unanimous in their views that traceability has benefited their organizations, and at the same time has been challenging to undertake. The individuals interviewed were willing to share their perspectives of particular challenges, expectations and lessons learned. The following is a summary of the main findings.

Focus on those commodities that are most material to your business, and areas where you have the greatest risk and leverage.

As outlined in our steps above, companies should not feel pressured to participate in traceability schemes across every commodity they buy, but rather focus on those that are most material to the business based on assessments of sustainability risks and potential adverse impacts. It can be difficult to gain internal buy-in for developing a traceability programme, and it makes it much easier if the business case is clear, which relies largely on the level of risk and opportunity that a company has for leverage.

Devote time, effort and resources to collaboration.

There is no doubt that collaboration is critical to the success of traceability. Companies interviewed urge others to take a collaborative approach.

Companies should be prepared that collaboration with parties external to their company can be challenging, with the need to align very different points of view behind a common purpose.

There are also clear opportunities for companies to take leadership in driving traceability initiatives further towards scaled impact. Traceability schemes are not perfect, and they likely have challenges that companies can take an active role in helping to overcome. Whether it is addressing governance issues, improving stakeholder engagement and involvement, leading the development of tech-

nology to support the initiative, resourcing for scale, or investing in other areas, business has a significant role to play.

Traceability is a long-term investment; be prepared to stick with it over the long-term.

Companies interviewed for this guide did not reveal specific financial measures that demonstrated the ROI on traceability; however, the perspective of those involved in traceability for some time was that it does pay off in the long run.

Companies also need to devote internal resources to the programme.

Many of the companies interviewed revealed that they did have to overcome opposition, and in some cases demands for a short-term ROI. However, this is a difficult area to calculate financial costs and benefits, and traceability is also a long-term investment in the reputation of the company. It is advisable to find ways to protect the programme from demands for short-term pay-offs.

Strong supplier relationships and good supplier communication is key to the success of a traceability programme.

It is a well-accepted fact in all areas of supply chain sustainability that good relationships and communication with your supply chain is critical to meeting your sustainability objectives.

A company should set clear expectations about involvement in the traceability programme from the outset, and communicate them regularly through different methods.

Traceability programmes can be expensive for suppliers, so it is worth considering in your communication what the expectations are around cost, and providing suggestions for how suppliers can manage this aspect. It is also worth considering your own commitments here; if you are asking suppliers to take on more costs, have a look at your payment terms to ensure they are fair.

An example of a good practice in supplier engagement and communication on sustainability issues is providing consistent messaging through a variety of different types of

engagements. Companies should consider including clear messages about traceability in their buyers' regular exchanges with the suppliers, through supplier portals, through conferences or regional meetings, and even through targeted training programmes.

CONSIDERATIONS FOR SMALL-AND MEDIUM-SIZED ENTERPRISES (SMEs)

This guide has been written with both large and small businesses in mind, and SMEs can benefit from traceability as much as big businesses.

Traceability is a great strategy for SMEs to pursue for a number of reasons. First, they are less likely to run into the resource constraints that large companies face in terms of procuring "enough" traceable raw materials. Committing to only purchase certified, traceable organic cotton or sustainably sourced palm oil will be an easier commitment to make for a company that is purchasing a smaller batch of this resource.

In addition, many SMEs are suppliers to large multinational enterprises (MNEs) that increasingly have more stringent sustainability requirements, and are looking for suppliers who can help them achieve these goals. By committing to engage in recognized traceability schemes, SMEs demonstrate to customers their commitment to sustainability, and contribute to the achievement of their customers' sustainability goals.

The challenges to SMEs are actually not that dissimilar to some of the key challenges for MNEs, but are potentially amplified due to their smaller size. Most importantly, the cost of the certified materials is across the board higher than for non-certified materials, so the business will need to be able to absorb this cost. Another major consideration is resources, which may be a challenge for SMEs due to staffing and other resource constraints.

CONCLUSION

and Outlook for the Future

It is hoped that readers have enjoyed and gained value from the guide, and will be taking appropriate steps to engage with traceability in their companies and organizations. The stated objectives of the guide were to:

- Provide an overview of the importance of traceability for sustainability purposes;
- Highlight the global opportunities and challenges of traceability; and
- Outline practical steps of how to go about implementing traceability.

Global collaboration, driven by multi-stakeholder collaborative schemes, is the key to success in traceability. As our best practice model demonstrates, the most effective way forward for traceability is through the global support of independent, multi-stakeholder collaborative schemes to govern traceability by commodity. Companies, governments, NGOs and stakeholders must work together towards this goal.

Companies that attempt traceability on their own will face immense hurdles and may actually impede the work being done on an industry level. This does not mean that companies must be willing to embrace and support collaborative initiatives, while mindful of their imperfections. However, the benefits outweigh the negatives: by getting involved in a global initiative, companies have a chance to shape and drive the initiative, and have the support of their peers and a trusted stakeholder as they develop their own related approaches.

Outlook for the Future

The overwhelming consensus from the individuals interviewed for this guide is that traceability is here to stay, and will continue to increase in importance and impact.

One of the most critical drivers of this trend is increased consumer demand to know more about the products they are buying — what is in them, where they come from, the conditions under which they were made, how they got to them, and even how they will be disposed of. Companies who invest in increased transparency, traceability and measurements of sustainability data along the value chain will have a competitive advantage in meeting this consumer demand.

It is possible to see a future where technology enables the full product and supply chain information that consumers expect, and traceability will be the norm. Tools already exist to enable people to use their smart phones to scan a barcode and learn more about a product from a sustainability perspective; it is easy to see this trend evolving as technology improves, and as the ability to collect, analyze and share data becomes easier and cheaper.

Any additional input is welcome; please contact the UN Global Compact and BSR if you have feedback you would like to share to improve our work, or if you have questions for the writers of the guide or the organizations that were interviewed for the guide. Only by working together around the world can we truly collaborate to drive more sustainable supply chains.

ANNEX

Traceability by Commodity: Gaps and opportunities for collaboration

Building on the landscape of different collaborative schemes by commodity, this annex offers guidance about which initiatives currently have the most momentum and points to areas of potential collaboration and alignment for 10 commodities.

It is important to note that this list does not represent a comprehensive record of all existing commodities, but includes only those that are widely associated with traceability for sustainability purposes. It is worth considering that many other commodities could benefit from a traceability approach.

Beef

What are some of the key sustainability issues relevant to this commodity?

- Preventing deforestation: Working to ensure a sustainable livestock creation without further deforestation of the Amazon Biome due to cattle ranching.
- Protecting land rights for indigenous peoples: Working to prevent invasion of protected areas for cattle ranching.
- Promoting animal welfare: To prevent animal mistreatment at farms and during transport to slaughter.

Who are some relevant actors?

- The Global Roundtable for Sustainable Beef²⁶ (GRSB) is a multi-stakeholder initiative with the aim to develop a sustainable global beef value chain.
- The Tropical Forest Alliance 2020²⁷.
- Several national advanced traceability schemes.
- NGOs: World Wildlife Fund²⁸, Rainforest Alliance.
- Active organizations: McDonalds and Walmart are supporting the initiative.

What are current gaps or opportunities for collaboration on commodity traceability systems?

GRSB is a multi-stakeholder global forum that addresses sustainability issues in the beef supply chain. The initiative is in the stage of best practice sharing and organizes conferences for its growing membership. Scattered national traceability schemes are in place, yet more alignment of standards and a focus on social, environmental and economic impact as promoted by GRSB would drive the sustainability agenda.

Biofuel

What are some of the key sustainability issues relevant to this commodity?

- Social Impact: Working to protect human and labour rights throughout the supply chain and respect prevailing land rights.
- Economic impact: Working to preserve the functioning of local economies and to include small-scale producers.
- Environmental impact: Manage impacts of new feedstock farming for natural habitats and ecological balance. Working to guarantee local food security and prevent deforestation.²⁹

Who are some relevant actors?

- Roundtable on Sustainable Biomaterials³⁰ (RSB) - The RSB sustainability standard represents a multi-stakeholder initiative of over 100 organizations including farmers, refiners, regulators and NGOs. RSB uses several “chain of custody” options, such as 100 per cent segregation and Mass Balance to meet producers’ needs.

- › First certificate issued in 2012, today RSB issues around 10 certificates.
- International Sustainability & Carbon Certification (ISCC) EU Certification³¹.
 - › Complies with the European Renewable Energy Directive (EU RED).
 - › Certifications issued mostly for German and European companies, but also recognized internationally.
- Bonsucro³² Certification System (sugarcane and ethanol).
 - › Thirty-one production certificates have been issued as of the date of this publication and 106 companies and organizations are members of Bonsucro.
- BIO-EN-AREA³³ project tries to develop a Biomass and solid biofuels certification and traceability control system (BIOPATH).
- NGOs: Sustainable Agriculture Network³⁴, Forest Stewardship Council³⁵.
- Active organizations: BP, Shell, World Wildlife Fund, Ethical-Sugar, the Coca-Cola Company and Kraft.

What are current gaps or opportunities for collaboration on commodity traceability systems?

RSB has issued 10 certificates for sustainable biofuel certification to date. ISCC has been especially recognized by the European Commission. However, more robust certification schemes, especially towards traceability, could provide a more integrated approach towards sustainability and help to gain momentum. Current schemes are furthermore targeted towards large-scale production and exclude small-scale farmers.

Cocoa

What are some of the key sustainability issues relevant to this commodity?

- Establishing labour rights: Working to enforce labour rights in terms of working conditions of children, women and migrants.
- Protecting human rights: Following the rule of law and respecting land tenure, children's rights, cultural and religious rights and advocating for gender equality.
- Enable empowerment: Working to facilitate farmer organization, access to finance and credit; prevent social exclusion and marginalization, gender equality to establish resilient and sustainable livelihoods.³⁴

Who are some relevant actors?

- UTZ Certified³⁷ using Mass Balance and Segregation — Their membership comprises 300,000 cocoa farmers from 14 countries. UTZ certified cocoa products are sold in more than 50 countries and supply has increased by 150 per cent from 2012 to 2013. Twenty-two per cent of cocoa produced globally is certified sustainable, of which more than half is UTZ certified.
- CEN/TC 415 Project Committee on Sustainable and Traceable Cocoa of the European Committee for Standardization (CEN) initiated its work on traceability standardization in 2012 and aims to publish a combined ISO/CEN Standard in 2015.³⁸
- Fair Trade Labelling Organization International³⁹ (FLO) certified more than 827 producer organizations. The product certification is carried out by FLO-CERT which is ISO 65 certified. The ISO 65 certification

guarantees that quality management is in place and transparency is secured.

- Other organizations that promote sustainable cocoa supply chains: IDH Sustainable Trade Initiative⁴⁰, International Cocoa Initiative⁴¹, International Cocoa Organization⁴², World Cocoa Foundation⁴³, Rain Forest Alliance⁴⁴, Cocoa Connect⁴⁵, Harkin – Engel Protocol (Child labour)⁴⁶.
- Other NGOs: Source Trust⁴⁷ in Nigeria, Solidaridad⁴⁸ and Oxfam Novib⁴⁹.
- Active organizations: Fazer, Ahold, Cargill, Heinz Benelux, Mars, Nestlé and ECOM.

What are current gaps or opportunities for collaboration on commodity traceability systems?

The UN International Cocoa Agreement⁵⁰ gave momentum to the formulation of standards and certification scheme in the cocoa sector in 2012. Currently-used certification schemes comprise the UTZ certification and the Fair Trade Label. However in 2012 the CEN/ISO working group on Sustainable and Traceable Cocoa initiated work and will add on to the available standards. While a lot of initiatives and standard-issuing work is under way, more alignment is needed in order to find a common and transparent scheme for all involved stakeholders.

Cotton

What are some of the key sustainability issues relevant to this commodity?

- Environmental impact: Working to reduce chemicals and water used in the cotton industry and improve carbon footprint.
- Social impact: Protecting workers and small farmers and providing them with fair compensation.

- Labour and children rights: Working to prevent child labour and implement fair working conditions.

Who are some relevant actors?

- Better Cotton Initiative⁵¹ (BCI):
 - › Better Cotton Fast Track Programme (BCFTP) to speed up sustainable cotton production.
 - › Two Chain of Custody mechanisms are used and can be tracked via an online tracking system for BCI members. From the farm to the gin, BCI uses physical segregation and after that Administrative Mass-Balance.
 - › Objectives: demonstrate the business case of sustainable cotton, increase supply chain traceability and enable joint initiatives and best practice sharing.
- Sustainable Trade Initiative⁵² - IDH supports BCI and awareness raising.
- Textile Exchange Organic Content Standard, Global Organic Textile Standard
 - › In place for more than 10 years.
 - › More than 3,000 units certified to robust traceability standards.
- NGOs: Fair Trade Labelling Organization International (FLO).
- Active organizations: IKEA, H&M, M&S, Nike, Patagonia, Adidas, and Levi Strauss & Co.

What are current gaps or opportunities for collaboration on commodity traceability systems?

As cotton is one of the most polluting commodities where 10 per cent of all chemicals used in agriculture are processed worldwide, the demand for fair trade and organic cotton has grown. However, the organic cotton market is still relatively small and initiatives need to gain momentum in order to improve sustainability for mass production. So far an

online traceability scheme is available for BCI members only. However, BCI projects that by 2020 the initiative will be recognized as a mainstream sustainable commodity and comprise around 30 per cent of global cotton production. In addition, the Organic Content Standard (OCS) and the Global Organic Textile Standard (GOTS) each have had big impacts with more than 3,000 units certified globally and a robust process due to the use of transaction certificates. Hence, the initiative needs to gain momentum and provide standards applicable to the mass market and share best practice in order to allow for traceability.⁵³

H&M

More cotton is used by H&M than any other raw material. Considering the high volume of cotton used and the understanding of the huge impacts of cotton production, H&M has committed to sourcing all cotton from more sustainable sources by 2020. Better Cotton, organic and recycled cotton are key to achieving this target. The commitment to better raw material sources plays out in their requests to suppliers, as H&M is not directly involved in the purchase of raw materials. H&M refers to their preferred materials as “conscious” materials; these include organic, recycled, and Lenzing Tencel. H&M has committed to never using a “conscious” material if there is no certification in place. BCI is also part of their strategy to transition to more sustainable cotton. Standards that cover the chain of custody from the raw material to the final product allow H&M to verify the content of products even when other information is not yet known. To assist the transition from trial to implementation phase, H&M invests in farmer training under the BCI system.⁵⁴ H&M would like to see traceability schemes including BCI develop in scale, and recognizes a need for better technology to support them.

Fish

What are some of the key sustainability issues relevant to this commodity?

- Preventing overfishing: Working to ensure global fisheries maintain sufficient stock over time.
- Environmental impact: Reducing effects of aquaculture farms and wild-capture fisheries on the environment.
- Reducing instances of illegal fishing: For wild-catch fish, instances of IUU (illegal, unreported, and unregulated) fishing are a concern and can be connected to poor environmental and/or labor practices.

Who are some relevant actors?

- The Marine Stewardship Council⁵⁵ (MSC) sets and maintains standards for wild-capture fisheries. MSC includes the **MSC Chain of Custody Standard for Seafood Traceability** that requires traceability by batch from raw material input to final consumer.
- The standard uses traceability to provide assurance that the products with an MSC ecolabel originated from a certified fishery. The Chain of Custody standard also requires segregation of certified products from non-certified products at all steps of the supply chain. Compliance is checked by independent auditors using a traceability test and Mass Balance. The MSC’s **Environmental Standard for Sustainable Fishing** is the standard against which fisheries are certified as sustainable, based on maintaining a sustainable fishing level, minimizing environmental impact and meeting local regulation.
 - › *Currently 8 per cent of wild caught fish are MSC certified. Fifty per cent of the top 25 US seafood retailers have commitments with MSC.*
- The Aquaculture Stewardship Council⁵⁶ (ASC) sets and maintains standards for farmed seafood. ASC works with MSC for its Chain of Custody Standard, and additional requirements relevant to farmed fish have

been added to an annex of the MSC Chain of Custody Standard.

- UN Food and Agriculture Organization⁵⁷ (FAO) has best practices guidelines for eco-labelling of fishery products developed during a multi-stakeholder process, including *Guidelines for Responsible Fishing and Guidelines for Marine Eco-Labelling Programme*.
- ISEAL Alliance⁵⁸ developed three Codes of Good Practice that its members, including MSC, need to comply with. Its most relevant codes of good practices are the *Standard-Setting Code: Setting Social and Environmental Standard v5.0* and the *Assurance Code: Assuring Compliance and Environmental*
- ISO 12875: 2011⁵⁹ Traceability for finfish products (food safety, quality, and labelling).
- Interested Organizations: Monterey Bay Aquarium Seafood WATCH, Audobon Society, Blue Ocean Institute, and Marine Conservation Society.

What are current gaps or opportunities for collaboration on commodity traceability systems?

MSC's Chain of Custody and ecolabel are recognized as a robust traceability scheme; by incorporating the ASC's guidelines in the annex, the standard covers both wild-catch and farmed seafood. The standard also meets ISEAL Alliance and FAO best practice guidelines, and serves as a widely utilized traceability scheme in the seafood industry. Greater alignment around the MSC Chain of Custody standard could strengthen it and offer credible assurance for sustainability claims.

Leather

What are some of the key sustainability issues relevant to this commodity?

- Preventing deforestation: Working to ensure a sustainable livestock creation without further deforestation of the Amazon Biome due to cattle ranching.
- Protecting land rights for indigenous peoples: Working to prevent invasion of protected areas for cattle ranching.
- Slave labour concerns: Child labour in connection with hides and skins and forced work at farms.
- Promoting animal welfare: To prevent animal mistreatment at farms and during transport to slaughter.

Who are the relevant actors?

- The Leather Working Group (LWG)⁶⁰ is a multi-stakeholder group that has developed and maintains a protocol to assess environmental performance compliance for tanners. The Leather Working Group Environmental Stewardship Protocol includes a Guidance Note for Hide Traceability that helps leather manufacturers to have a clear understanding of the supply chain up to raw materials.
 - › The LWG audits 10 per cent of the global leather production, and 20 per cent of the footwear leather supply chain.
 - › The LGW has currently 140 member companies from 21 countries.
- Euroleather⁶¹ (initiated by COTANCE and European Trade Union) supported by Member States (Germany, Greece, Spain, France, Italy, Netherlands, Portugal, Sweden, United Kingdom, Lithuania, Bulgaria, Romania and Poland) looked into political and technical issues of traceability/transparency systems. The project established a database that rates currently available traceability methods in regards to applicability and costs with access for members only. The

European veterinary/sanitary certificates on hides and skins and animal welfare could be used as the basis for a guarantee system of good practice.

- Others: EMAS — The European Eco-Management and Audit Scheme, IVN Natural Leather Standard in cooperation with IMO⁶² (Institute for Market Ecology), ISO 14000 / ISO 14001 Environmental Management Standard, CITES (Convention on International Trade in Endangered Species of Wild Flora and Fauna), PETA, and Greenpeace.

What are current gaps or opportunities for collaboration on commodity traceability systems?

The LWG represents a current leading collaborative initiative on traceability in the leather supply chain. On its website, LWG provides guidance notes for slaughterhouses, suppliers of splits and raw material suppliers. The LWG benchmarking functions as an incentive system for tanners. Only manufacturers that submit their benchmarking data are promoted and rated as an LWG supplier. However, the traceability guidance note is relatively new and the connection with the environmental audit protocol is weak. Strengthening the current scheme could help the leather industry more effectively address sustainability issues and bring more leather supply chain actors to the table. Alignment is under way, for instance a certification following ISO 14000 or EMAS, and would be beneficial for the LWG auditing process.

Minerals / Diamonds

What are some of the key sustainability issues relevant to this commodity?

- Non-conflict diamonds and human rights: Working to ensure that diamonds purchased are not financing violence in certain areas of Africa.
- Social impact: Working to protect labour

rights, prevent forced work and maximize community empowerment.

- Environmental impact: Reduce the use of water and the impact on biodiversity.

Who are some relevant actors?

- Conflict-Free Sourcing Initiative⁶³ (CFSI):
 - › Founded in 2008 by members of the Electronic Industry Citizenship Coalition and the Global e-Sustainability Initiative.
 - › Conflict Free Smelter Program (CFS) is an audit tool with a compliance protocol to identify conflict-free smelters and refiners.
 - › Membership of over 160 participating companies.
 - › Provides due diligence tools, such as the Conflict-Minerals Reporting Template (CMRT), that standardizes supply-chain due diligence inquiries.
- Responsible Jewelry Council⁶⁴ (RJC)
 - › The RJC is a not-for-profit, standard setting and certification organization with more than 450 member companies.
 - › The Code of Practice addresses human rights, labour rights, environmental impact, mining practices and product disclosure.
 - › The Chain-of-Custody standard applies from mine to retail, and includes requirements for conflict-sensitive sourcing for gold refiners.
 - › RJC provides training, guidance, due diligence tools and audit protocols for accredited third party auditors.
- Kimberley Process Certification Scheme⁶⁵ (KPCS)
 - › The KP has 54 participants, representing 81 countries and account for approximately 99.8 per cent of the global production of diamonds.
 - › World Diamond Council created a System of Warranties.
- Diamond Development Initiative International⁶⁶ (DDI)

- › DDI's ethical diamond certification project promotes sustainable sourcing.
- › DDI's Development Diamonds Standards (DDS) certification scheme intends to improve conditions for small scale miners (15 per cent of total gem diamond supply) who are left out of other schemes.
- Jeweltree Certification⁶⁷
 - › Independent ISO based certification scheme for artisanal miners.
 - › Certifies against supply chain transparency for well operated third party verified mining sites and polishing factories.
- ICGLR Regional Certification Mechanism for Conflict Minerals⁶⁸
 - › Multi-stakeholder regional certification scheme involving 11 member states from the Great Lakes Region of Africa focusing on the "3 T's" (tungsten, tantalum, tin) and gold.
 - › Comprised of six tools. Includes a tracking and certification scheme, harmonization of mining legislation among member states, creation of a mineral database, formalization of artisanal and small-scale mining, a whistleblowing system, and promotion of EITI.
- Business for Peace⁶⁹
 - › Multistakeholder platform launched by UN Secretary General Ban Ki-moon to deepen and expand private sector action for peace in the workplace, marketplace, and in local communities.
 - › Working with the Office of the Special Envoy to the Great Lakes Region, Mary Robinson, to enhance the private sector role in support of the Peace, Security, and Cooperation Framework. This project has an emphasis on sectors with supply-chains in conflict-affected areas like energy, mining, agroindustry, and information and communication technologies.
- Other: OECD Due Diligence Guidance, Dodd Frank Act – Conflict Minerals, Gold refiner audit cross-recognition, Artisanal and Small-Scale Mining, and Recognized Responsible Mining Standards.

What are current gaps or opportunities for collaboration on commodity traceability systems?

There is harmonization under way, however, there is still a wide offer of different traceability schemes. For instance, the Kimberley Process in cooperation with the Diamond Development Initiative International is trying to capture the broad spectrum of suppliers. Hence, a robust and integrated certification process led through multi-stakeholder initiatives could help enhance traceability and address the complexity of actors in the mineral supply chain.

THE MOSAIC COMPANY

The Mosaic Company refers to the increasing demand for responsibly sourced products from both their customers and investors, as one of the main drivers for their traceability activities. In addition, they have initiated an open dialog with NGOs and other stakeholders, particularly in relation to the legitimate sourcing of minerals purchased in Africa. Mosaic understands the importance of transparency and accountability in developing and maintaining customer relationships. To remain a profitable going concern, they have taken steps to ensure that they remain a reputable and trustworthy supplier within the industry. In recent years, this involved divesting of an unintended supplier in the disputed territory of Western Sahara. While the „clean up“ took a great deal of time and resources, it was essential to ensuring that the company's supply chain remained free from conflict minerals, and their reputation intact.

Palm Oil

What are some of the key sustainability issues relevant to this commodity?

- Deforestation of rain forests: Working to ensure a sustainable farming without further deforestation of rain forests, which also adversely affects climate change.
- Destruction of habitat of flora and fauna: Manage impacts of farming for natural habitats and biodiversity.
- Climate change: Prevent greenhouse gas emissions due to deforestation and water pollution through palm oil plantations.
- Social impact: Working to respect land rights of indigenous people and provide a fair source of income to small-scale farmers.

Who are some relevant actors?

- Roundtable on Sustainable Palm Oil⁷⁰ (RSPO) - RSPO is a global certification scheme formed in 2004 to set the standard for “sustainable palm oil”.
 - › Combined RSPO issued around 300 certificates in the categories of grower certification, supply chain certification and trademark licenses.
 - › Supply chain model:
- Physical trading system via Mass Balance.
- Segregated and Identity Preserved through the online platform eTrace that covers the physical trading of Certified Sustainable Palm Oil (CSPO).
- Trading of green certificates through GreenPalm.
- GreenPalm⁷¹
 - › Uses Book and Claim.
 - › Endorsed broker by RSPO to trade in sustainable palm oil.
- The International Sustainability and Carbon Certification scheme⁷² (ISCC) is one of the main certification schemes for palm oil used as a feedstock for biofuels.

- Other: Sustainable Palm Oil Platform⁷³, Belgian Alliance for Sustainable Palm Oil⁷⁴, SAY NO TO PALM OIL⁷⁵, Sustainable Agriculture Network(SAN)⁷⁶, Roundtable on Sustainable Biomaterials⁷⁷ (RSB), Global GAP⁷⁸, Fairtrade International⁷⁹, Organic Trade Association (OTA)⁸⁰, and The Tropical Forest Alliance 2020⁸¹.
- New initiatives: Indonesian Sustainable Palm Oil⁸² (ISPO) standard.
- Active organizations: Unilever set a target to source all its palm oil from certified, traceable sources by 2020.

What are current gaps or opportunities for collaboration on commodity traceability systems?

RSPO is a widely-used certification scheme for palm oil used in food and oleo-chemicals, whereas the ISCC is utilized more frequently for palm-oil certification for biofuels. Today, 14 per cent of palm oil globally is certified by the RSPO, which provides an electronic system to enable the traceability of palm oil. Another player in palm oil certification is GreenPalm. GreenPalm provides a trading system for RSPO's certificates. Despite this collaboration, the RSPO's eTrace system works only for RSPO data. The Palm Oil Platform provides a good picture of the current development of the palm oil traceability scheme and available certifications. Further integration of both systems could strengthen the scheme and allow companies to keep track of their palm oil with one single tool. This could lead to increased practicability of palm oil traceability.

Sugar

What are some of the key sustainability issues relevant to this commodity?

- Working conditions: Enable compliance with legal standards, labour and human rights to prevent child work and improve working conditions.
- Environmental impact: Manage impacts of new feedstock farming for natural habitats and ecological balance. Working to guarantee local food security.⁸³

Who are the relevant actors?

- Bonsucro Certification System⁸⁴ is divided into Bonsucro Production Standard certifying mills and Bonsucro Chain of Custody Standard targeting any supply chain actor.
 - › It was started by the Better Sugarcane Initiative, and has provided certifications since 2011. Thirty-one production certificates have been issued so far and 106 companies and organizations are members of Bonsucro.
 - › The supply chain coverage covers Bio-fuel feedstock production and primary processing.
- Better Sugarcane Initiative⁸⁵
 - › Multi-stakeholder initiative of the World Wildlife Fund, comprising sugarcane retailers, investors, traders, producers and NGOs.
- ISCC EU Certification⁸⁶ (sugar as component of biofuels)
 - › Complies with the European Renewable Energy Directive (EU RED)
 - › Certifications issued mostly for German and European companies, but also recognized internationally.
- Fair Trade Labelling Organization International⁸⁷ (FLO)
 - › Certified more than 827 producer organizations.
 - › Carried out by FLO-CERT, which is ISO 65 certified. The ISO 65 certification guarantees that quality management is in place and transparency is secured.

What are current gaps or opportunities for collaboration on commodity traceability systems?

The traceability of sugar is still in its initial stages and Bonsucro is the first global metric standard in the sector that tries to enforce standards. The assessment shows that more initiatives and working groups are needed in order to develop and enable proper enforcement of standards and tractability schemes.

Timber

What are some of the key sustainability issues relevant to this commodity?

- Climate change: Working to protect water quality and monitor CO2 emissions.
- Deforestation of rain forests: Prevent illegally harvested timber and promote sustainable harvest levels and prompt regeneration (e.g. replanting and reforestation).
- Destruction of habitat of flora and fauna: Protection of biodiversity and preservation of species at risk and wildlife habitat.
- Land rights: Working to respect land rights of indigenous people and prevent conflicts over land ownership.

Who are the relevant actors?

- Forest Stewardship Council⁸⁸ (FSC) was created in 1993 and uses a segregation approach (FSC pure products) and Mass Balance approach (FSC mixed volume products).
 - › FSC developed the FSC chain of custody system and introduced an online timber traceability platform in order to improve communication between certified companies.
 - › FSC has issued 27,367 CoC certificates and 1,256 FM/CoC certificates.
- Programme for the Endorsement of Forest Certification⁸⁹ (PEFC) Chain of Custody certification is in compliance with EU Timber Regulation (EUTR) requirements.



- EU Timber Regulation⁹⁰ (EUTR) requires a due diligence and no voluntary chain of custody as an automatic proof of compliance.
 - › Timber accompanied by a FLEGT (Forest Law Enforcement, Governance and Trade) or CITES (Convention on International Trade in Endangered Species) license is accepted by the EU.
- Other: Sustainable Forest Initiative⁹¹ (SFI), Tropical Forest Alliance 2020⁹², eAmerican Tree Farm System⁹³ (ATFS), the Canadian Standards Association's Sustainable Forest Management Standard⁹⁴.
- Active companies: Tetra Pak.

What are current gaps or opportunities for collaboration on commodity traceability systems?

The traceability scheme for timber is quite extensive and today more than 50 different

certification programmes address certain types of forests. The two largest international forest certification programmes are FSC and PEFC. PEFC is the largest framework in terms of forest area covered and FSC has the highest growth rates partly due to its online platform. The UN reports in its annual review of "Forest Products" that the total number of PEFC and FSC chain of custody certificates issued increased from May 2012 to May 2013 by 11.8 per cent, which equals some 3,766 more certificates. The global area of certified forest has for the first time topped the 10 per cent mark in proportion to the total forest area.⁹⁵

The efficiency of the schemes could be enhanced through more alignment between governmental and voluntary standards as the EU Timber Regulation shows. For example, green public procurement in the UK and the Netherlands has started to recognize FSC and PEFC endorsed programmes.

IKEA

IKEA recognizes wood as the most important raw material to its business and a precious natural resource. Wood makes up around 60 per cent of all materials used in IKEA products, making it a critical commodity both for sustainability goals and for the core business. Incorporating Forest Stewardship Council's (FSC) Chain of Custody Standard and Certified Forests has been a means of supporting well-managed forests. The standard ensures that wood is procured from certified forests, which means that forest management practices meet social, economic, and environmental conditions. Incorporating FSC into their procurement practices has helped IKEA invest in the long-term viability of wood as a raw material, and move toward their goal to become forest positive by 2020, promoting the adoption of more sustainable forestry methods across the industry and contributing to ending deforestation.

END NOTE

1. Praxiom Research Group Limited (2013), ISO Definition Traceability, <http://www.praxiom.com/iso-definition.htm#Traceability>.
2. Praxiom Research Group Limited (2013), ISO Definition Traceability, <http://www.praxiom.com/iso-definition.htm#Traceability>.
3. Asian Development Bank Institute (2009), The Evolution of Traceability Systems, <http://www.adbi.org/working-paper/2009/05/28/3012.ict.food.traceability.system/the.evolution.of.traceability.systems/>.
4. European Commission (2005), General Food Law – Implementation Guidelines, http://ec.europa.eu/food/food/foodlaw/guidance/index_en.htm
5. Office of the High Commissioner for Human Rights (2011), Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework, http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf
6. United Nations Economic Commission for Europe, Forest Products: Annual Market Review 2012-2013, <http://www.unece.org/fileadmin/DAM/timber/publications/FPAMR2013.pdf>.
7. Marine Stewardship Council (2014), MSC in Numbers, <http://www.msc.org/business-support/key-facts-about-msc/?searchterm=numbers>.
8. Better Cotton Initiative, BCI Story, <http://bettercotton.org/about-bci/bci-story/>.
9. UTZ Certified (2014), Press release: UTZ certified farms show higher yields and better crops, https://www.utzcertified.org/attachments/article/26582896/Press%20Release_Impact%20Report.pdf.
10. ISEAL Alliance (2014), Certification can be proof of sustainability under new EU public procurement rules, ISEAL Alliance blog, Norma Tregurtha, <http://www.isealalliance.org/online-community/news/certification-can-be-proof-of-sustainability-under-new-eu-public-procurement-rules>.
11. Rainforest Alliance, Why Promote Sustainability?, <http://www.rainforest-alliance.org/marketing/why>.
12. Fairtrade See Part 2), Section 3 “Best Practice on Traceability”.
13. Fairtrade (2011), Windward Island Farmers’ Association, http://www.fairtrade.org.uk/producers/bananas/winfa_2/default.aspx.
14. UTZ Certified offers mass balance and segregation to supply chain actors involved in the cocoa production. UTZ Certified, Cocoa, <https://www.utzcertified.org/products/cocoa?lang=en>.
15. 15 Book and Claim, Trade Certificates Support the Environment, <http://www.bookandclaim.co.uk/>.
16. US EPA (2014), Renewable Energy Certificates (RECs), <http://www.epa.gov/greenpower/gpmarket/rec.htm>. 17. This list does not represent a comprehensive record of all existing global regulation on supply chain traceability.
17. This list does not represent a comprehensive record of all existing traceability schemes. The inclusion of a traceability scheme in this list does not constitute an endorsement of the individual organization by the UN Global Compact and BSR.
18. This list does not represent a comprehensive record of all existing global regulation on supply chain traceability.
19. Seafish (2013), Fish traceability requirements, <http://www.seafish.org/industry-support/legislation/traceability-and-labelling/fish-traceability-requirements>.
20. U.S. Securities and Exchange Commission, Dodd-Frank Wall Street Reform and Consumer Protection: Frequently Asked Questions, <http://www.sec.gov/divisions/corpfin/guidance/conflictminerals-faq.htm>.
21. OECD (2013), OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas: Second Edition, OECD Publishing, <http://www.oecd.org/daf/inv/mne/GuidanceEdition2.pdf>.
22. European Commission, Timber Regulation, http://ec.europa.eu/environment/forests/timber_regulation.htm.
- 23a. Rainforest Alliance, Verification and Validation, The Lacey Act Amendment: What Does it Mean to Your Business?, <http://www.rainforest-alliance.org/forestry/verification/lacey-act>.
- 23b. Environmental Investigation Agency, U.S. Lacey Act, <http://eia-global.org/lacey/>
24. In assessing what commodities are “key” and material, best practice would be to identify which commodities, or processes associated with these commodities, entail the highest risks of adverse impacts on the environment, human and labour rights, rather than what is of key/importance to the business. It should also not be assumed that the “key” commodities are those with the highest volume — it could also be, for example, a raw material that makes up a small part of a product, but that are rare or for which no suitable alternatives exists and that entails potentially severe risks of adverse impacts.
25. Roundtable on Sustainable Palm Oil, Factsheet, <http://www.rspo.org/file/RSPOFACTSHEETFINALRT91.pdf>.
26. Global Roundtable for Sustainable Beef. Homepage, <http://grsbeef.org/>.
27. Tropical Forest Alliance. Homepage, <http://www.tfa2020.com>.
28. World Wildlife Fund. Homepage, <http://worldwildlife.org>.
29. Food and Agriculture Organization (2013), ‘Biofuels and the Sustainability Challenge: A Global Assessment of Sustainability Issues, Trends and Policies for Biofuels and Related Feedstocks’, <http://www.fao.org/docrep/017/i3126e/i3126e.pdf>.
30. Roundtable on Sustainable Biomaterials. Homepage Member Overview, <http://rsb.org/about/organization/rsb-members/>.
31. International Sustainability and Carbon Certification. Homepage, <http://www.iscc-system.org/>.
32. Bonsucro. General FAQs. Homepage, <http://bonsucro.com/site/about/general-faqs/>.
33. Bioenarea. Homepage, <http://www.bioenarea.eu>.
34. Sustainable Agriculture Network. Homepage, <http://sanstandards.org/sitio/>.
35. Forest Stewardship Council. Homepage, <https://us.fsc.org>.
36. Cocoa Initiative (2013). Homepage, <http://www.cocoainitiative.org/en/reports/policy-updates/105-icis-participation-in-the-third-meeting-of-the-european-committee-for-standardization-cen>.
37. UTZ Certified (2014). Products: Cocoa, <https://www.utzcertified.org/en/products/cocoa>.
38. Fazer (2014), Cocoa School: Traceability, <http://www.fazer.com/cocoaschool/traceability>.
39. Fairtrade International (2011), <http://www.fairtrade.net/>.
40. IDH Sustainable Trade Initiative. Homepage, <http://www.idhsustainabletrade.com>.
41. International Cocoa Initiative. Homepage, <http://www.cocoainitiative.org>.
42. International Cocoa Organisation. Homepage, <http://www.icco.org>.
43. World Cocoa Foundation. Homepage, <http://worldcocoafoundation.org>.
44. Rain Forest Alliance. Homepage, <http://www.rainforest-alliance.org>.
45. Cocoa Connect. Homepage, <http://www.cocoaconnect.org>.
46. Responsible Cocoa: The Harken-Engel Protocol, <http://responsible-cocoa.com/about-us/the-harkin-engel-protocol/>.
47. Source Trust. Homepage, <http://www.sourcetrust.org>.

48. Solidaridad. Homepage, <http://solidaridadnetwork.org>.
49. Oxfam Novib. Homepage, <http://www.oxfamnovib.nl>.
50. UN (2010). International Cocoa Agreement, https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtsg_no=XIX-47&chapter=19&lang=en.
51. Better Cotton Initiative. Homepage, <http://bettercotton.org/>.
52. IDH: The Sustainable Trade Initiative, <http://www.idhsustainable-trade.com/cotton>.
53. As above.
54. Textile Exchange (2013). Building Integrity, A Case Study, http://textileexchange.org/sites/default/files/te_pdfs/integrity/Building%20Integrity%20HandM.pdf.
55. Marine Stewardship Council. Certified Sustainable Seafood, <http://www.msc.org/>.
56. Aquaculture Stewardship Council. Homepage, <http://www.asc-aqua.org>.
57. UN Food and Agriculture Organisation. Homepage, <http://www.fao.org/home/en/>.
58. ISEAL Alliance. Homepage, <http://www.isealliance.org>.
59. ISO 12875: 2011. Homepage, <https://www.iso.org/obp/ui/#iso:std:iso:12875:ed-1:v1:en>.
60. Leather Working Group (2010). Improving Environmental Stewardship, <http://www.leatherworkinggroup.com/about/brazil>.
61. COTANCE (2013). Euroleather, 'A New Project on Traceability of Raw Materials', <http://www.euroleather.com/policies/rawmaterials/131-a-new-project-on-traceability-of-raw-materials.html>.
62. Institute for Market Ecology, Natural Leather Certification, http://www.imo.ch/logicio/client/imo/file/sectors/textile/fibres/leather/leder_20111220.pdf.
63. Conflict Free Sourcing Initiative (2014), <http://www.conflictfree-smelter.org/cfs/home.htm>.
64. Responsible Jewellery Council. Homepage, <http://www.responsible-jewellery.com/>.
65. Kimberley Process. Homepage, <http://www.kimberleyprocess.com/>.
66. Diamond Development Initiative International (2009), <http://www.ddiglobal.org/>.
67. The Jeweltree Foundation, <http://www.jeweltreefoundation.org>.
68. Partnership Africa Canada. Homepage, <http://www.pacweb.org/en/regional-certification>.
69. UN Global Compact, Business for Peace, www.business4peace.org.
70. Roundtable on Sustainable Palm Oil, <http://www.rspo.org/>.
71. Greenpalm Sustainability, <http://greenpalm.org/>.
72. Sustainable Palm Oil Platform, Certification Schemes, <http://www.sustainablepalmoil.org/standards-certification/certification-schemes/>.
73. Sustainable Palm Oil Platform. Homepage, <http://www.sustainable-palmoil.org>.
74. Belgian Alliance for Sustainable Palm Oil. Homepage, <http://www.sustainabelpalm.be>.
75. Say No To Palm Oil. Homepage, <http://www.saynotopalmoil.com>.
76. Sustainable Agriculture Network. Homepage, <http://sanstandards.org/sitio/>.
77. Roundtable on Sustainable Biomaterials. Homepage, <http://rsb.org>.
78. Global GAP. Homepage, http://www.globalgap.org/uk_en/.
79. Fairtrade. Homepage, <http://www.fairtrade.net>.
80. Organic Trade Association (OTA) (2013), <http://www.ota.com/about/accomplishments.html>.
81. Tropical Forest Alliance 2020. Homepage, <http://www.tfa2020.com>.
82. Indonesian Sustainable Palm Oil. Homepage, <http://www.ispo-org.or.id>.
83. Food and Agriculture Organization (2013). Biofuels and the Sustainability Challenge: A Global Assessment of Sustainability Issues, Trends and Policies for Biofuels and Related Feedstocks, <http://www.fao.org/docrep/017/i3126e/i3126e.pdf>.
84. Bonsurco. General FAQs. Homepage, <http://bonsurco.com/site/about/general-faqs/>.
85. WWF: Better Sugarcane Initiative, http://wwf.panda.org/what_we_do/footprint/agriculture/sugarcane/better_sugarcane_initiative/.
86. International Sustainability and Carbon Certification. Homepage, <http://www.iscc-system.org/>.
87. Fairtrade International. Homepage, <http://www.fairtrade.net>.
88. Forest Stewardship Council. Homepage, <https://fic.fsc.org/eu-timber-regulation.46.htm>.
89. Programme for the Endorsement of Forest Certification (PEFC). Homepage, <http://www.pefc.org/certification-services/eu-timber-regulation>.
90. European Union Timber Regulation (2013), http://ec.europa.eu/environment/forests/pdf/EUTR_Leaflet_EN.pdf.
91. Sustainable Forest Initiative. Homepage, <http://www.sfiprogram.org>.
92. Tropical Forest Alliance 2020. Homepage, <http://www.tfa2020.com>.
93. American Tree Farm System. Homepage, <https://www.treefarm-system.org>.
94. The Canadian Standards Association's Sustainable Forest Management Standard. Homepage, <http://www.csasfmforests.ca>.
95. UNECE and FAO (2013). Forest Products Annual Market Review 2012-2013. <http://www.uncece.org/fileadmin/DAM/timber/publications/FPAMR2013.pdf>.

PHOTO CREDITS:

Cover (clockwise from center): © Mirza Zahidul Alam Shawon: Garment Worker; World Bank/Curt Carnemark; World Bank/Arne Hoel; iStock: Palm Fruit and Cooking Oil (Stock Photo: 26352846); iStock: Young Man with a Heavy Load of Bananas (Stock Photo: 6251427); iStock: Computer Circuit Board (Stock Photo: 16358242); iStock: Blue Jeans Sale (Stock Photo: 2380122)

Page 5: ©World Bank/Gennadiy Ratushenko

Page 9: ©Washing Diamonds' (Stock Photo: 9545062):<http://www.istockphoto.com/stock-photo-9545062-washing-diamonds.php?st=596e73f>

Page 13: ©iStock: Cocoa Beans (Stock Photo: 29124824)

Page 14: ©World Bank/Anvar Ilyasov

Page 19: ©iStock: Female Clothing Factory Worker (Stock Photo: 21200972)

Page 23: ©iStock: Fresh Fish in the Market (Stock Photo: 16330335)

Page 28: ©iStock: Glass Factory (Stock Photo: 10977070)

Page 41: ©World Bank/Curt Carnemark

The Ten Principles of the United Nations Global Compact

HUMAN RIGHTS

- Principle 1 Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2 make sure that they are not complicit in human rights abuses.

LABOUR

- Principle 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4 the elimination of all forms of forced and compulsory labour;
- Principle 5 the effective abolition of child labour; and
- Principle 6 the elimination of discrimination in respect of employment and occupation.

ENVIRONMENT

- Principle 7 Businesses should support a precautionary approach to environmental challenges;
- Principle 8 undertake initiatives to promote greater environmental responsibility; and
- Principle 9 encourage the development and diffusion of environmentally friendly technologies.

ANTI-CORRUPTION

- Principle 10 Businesses should work against corruption in all its forms, including extortion and bribery.

