

eTrios Commodities LLC

SF-TRACK: A SUPPLY-CHAIN SOLUTION FOR FOOD, AGRICULTURE, FORESTRY, ECOLOGICAL AND ENVIRONMENTAL PRODUCTS

THE PROBLEM

There are a variety of good-deed related claims that are made by commercial organizations. However not all claims have been borne-out to be true.

For example, in a recent review of claims by Greenpeace of companies' performance in meeting their claims (March 2016), Greenpeace found the following:

"What we found was a bit alarming. Only a few companies are making significant headway towards ensuring that there is no deforestation in their palm oil supply-chains, and most are moving far too slowly.

It turns out, some companies might think that making a promise is easy - and that no one is going to notice if they don't keep it."

This problem exists for food quality, deforestation, child labor violations, *de facto* slavery, and many environmental and ecological claims made by firms to show responsible corporate citizenship.

For example, the number one deforestation challenge is verifying across all entities in the supply-chain that products originate from sustainable agriculture practices. Legacy supply-chain tracking systems cannot support recording the traceability of the convoluted chain-of-custody that agricultural and forest products undergo through their supply-chain. Therefore, today no practical way exists to verify that a commodity originated from a sustainable source.

In fact, the United Nations asserts that this problem is ubiquitous and supply-chains must be better managed. Nevertheless:

"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."

We assert, what the United Nations saw as the future, is here today.

THE SOLUTION

The SF-Track™ project is a simple and cost effective approach to verifying claims of good-deeds. It can revolutionize agricultural, forestry and other sustainability-based claims by providing real-time traceability with pin-point accuracy.

Recent advances in information technologies called "blockchain" hold the promise to solve this heretofore intractable problem.

Since the development of computers, the application of data tracking has been done with centralized database systems.

These systems have many shortcomings including difficulty in managing security, linking with other systems, simplicity in use and an ability to transfer updated information quickly to thousands

of users in a secure and quick manner.

A solution to the centralized system problem now exists with the invention of the blockchain. Similar to how the invention of the internet revolutionized communication technology, blockchain technology has the capability to radically transform any transaction of ownership of stocks, bonds, property, commodities and almost any commercial transaction.

Blockchain's features will revolutionize chain-of-custody transactions enabling visibility and speed of record updating on an unprecedented scale. While, the technology was invented in 2008, it has only recently developed into a well-defined process. Many Blockchain applications have emerged which will replace traditional centralized legacy systems leading to a tsunami of re-engineering. Blockchain technology is a security rich, flexible, and platform



independent protocol that allows for record immutability and extreme flexibility.

The SF-Track application, based on blockchain technology, can be utilized by anyone with a computer, smartphone, or feature phone anywhere in the world. This feature is critical in proving provenance. Transactions are immediate, time-stamped and cannot be tampered with. All or parts of a transaction can be public or private and immediately visible to all authorized parties.

SF-Track will provide the ability to track product qualities from the grower to the end-product producer, distinguishing products sourced from documented zero-deforestation areas from those that are not.

SF-Track supports third party auditing and giving credit where credit is due: recognizing responsible corporate citizenship, encouraging others to do the same and flagging obvious scofflaws.

Specific data to be tracked will vary according to the sustainability measure we are tracking. However typical tracked data will include, for a commodity:

- Attribute type (deforestation, water management, greenhouse gas emission reduction), size, weight, quantity, quality, etc.,
- Name and contact info of person(s) and firms entering data,
- Time, date and location of data entry,
- Testing/measurement/certification protocols used,
- 3rd party attestations (if any), and
- Internal auditing ability to confirm data has been accurately entered.

THE ETRIOS BLOCKCHAIN SOLUTION PROMOTES SUSTAINABILITY

There are three pillars of sustainability: social, environmental, and economic. Today, firms, industry trade associations, non-governmental organizations, financial organizations and other stakeholders have concerns regarding firms' adherence to internationally accepted standards to meet sustainability goals.

Compliance with sustainability standards has become a *de facto* standard for many firms. However, in some cases, firms have a *de jure* obligation. For example the Financial

Accounting Standards Board (FASB), the International Accounting Standards Board (IASB) and others strongly encourage public companies to disclose data on sustainability factors.

Others organizations such as Global Reporting Initiative (GRI) are voluntary, so too are the guidelines from the Sustainability Accounting Standards Board (SASB).

The International Standards Organization (ISO) has several sustainability standards, but in all cases, these standards highlight the truth in the cliché: "You can't manage what you do not measure, track and verify."

Documenting the veracity of supply-chain claims is no longer an add-on to sustainability programs. Documenting the veracity of claims must be built into sustainability reporting, sector-by-sector and product-by-product.



ETRIOS COMMODITIES LLC

eTrios focuses on market-based solutions to energy, ecological, environmental, and sustainable development problems. By using blockchain technology, we can capture and track sustainability-related data from "birth" to ultimate-use across an entire sector.

The goal is to support auditing and reporting on the improved ecological, environmental and social outcomes to be derived from interventions such as zero-deforestation activities, improved water management, creating greenhouse gas reductions and greenhouse gas credits, and improved groundwater management. Other blockchain applications to promote sustainability are under development.

YOU CANNOT MANAGE WHAT YOU DO NOT MEASURE, TRACK AND VERIFY

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