Country (Insert country of origin of your company / organization or its headquarters' location)

France

Submitting Organization/Company

Crystalchain

If Organization or Company, please indicate the approximate number of employees

< 50

Please indicate the number of employees

15

Title of the action

Blockchain-enabled traceability platform for greater transparency in the fashion and luxury industry

Upload your logo or an image

CRYSTALCHAIN
Construisons la confiance™

Relevant Website

crystalchain.io

Main Partners

Paris Good Fashion, le Défi, IFM, Chargeurs, Saint James

Type of initiative

Private

Description of action

Our platform is a multi-sectorial cloud-based independent traceability platform that enables brands and other key players in the value chain to record events throughout the product lifecycle and collect data pertaining to the product or range of products : raw material origin, production methods, transport, dates, times and volumes of deliveries, inventory data, waste management data, etc.

The data is collected and assimilated into the platform throughout the value chain and KPIs are assigned, to measure (for example) distance travelled from point of origin to point of sale, water usage, etc.

Certificates (Ecocert, Oekotex, organic raw materials, etc) can also be saved onto the platform as proof that products or materials meet regulatory/quality requirements, either to BtoB customers or to end consumers.

Each step on the product journey has its set of data, and each event recorded on the platform is linked to the others, to form a traceability chain that can be followed and analysed according to customer requirements.

This precision (and the reliability and trust provided by the blockchain technology that the platform is based on) means that KPIs identified at the setup stage by the brand can be closely followed and enable, for example, CSR or quality strategies to be driven using the tool. It also has the benefit of enhancing trust within the ecosystem and industry, improving communication and productivity for brands.

With the French law AGEC coming into force on Jan 1st 2023 for large fashion companies, Crystalchain is developing an offer dedicated to consumer-facing transparency, with product information to consumers either on the brand website or through a QR code on the label. We already have experience of this type of transparency with our historic clients, but we are taking it further by offering CSR scoring as an optional module.

Type of action

Traceability & Transparency

Please select the specific area/s of the action

Research and Development of Innovative Solutions

Business Management Systems or Instruments

Scope of the action, including a description of the value chain processes that are covered

Objective (max 200 words): Contribute significantly to the reduction of the ecological footprint of major brands and the fashion industry as a whole, by integrating entire textile & fashion value chains into our traceability platform, aggregating multiple data inputs along the way and enabling analyses and certification of said data. Assimilation of the data and application of dashboards to help monitor performance (in terms of quality, CO2 emissions, water usage, air pollution, health & safety regulations, respect of legal and industrial norms, etc) with a view to highlighting areas of weakness and 'low-hanging fruit' ripe for quick improvements, whilst engaging long term action plans for the high-performing aspects of the business. One of the most important projects we are working on is a consumer-facing environmental scorecard taking into account multiple sustainability factors.

Commitments (max 200 words): Continue to harness our expertise (both business and technical) for the common good through participation in online and offline events as expert speakers ; evangelising the use of new technology as a sustainable solution to the climate emergency for several industries, including fashion & luxury ; Continue to chair the French commission for blockchain standardisation at Afnor and ISO ; Continue to make use of the PoS protocol for all our public blockchain transactions (>7400 x less energy consumption per transaction on average) ; Continue to publish our own carbon footprint data each year and identify levers for GHG emission reduction year-on-year (per employee).

Value Chain Scope: End-to-end (raw material suppliers to distributors), including independent third parties such as auditors, laboratories, and other certifying authorities.

Timeframe and/or milestones for the action

2018 - Development of an internal blockchain traceability platform for Nativa label wool for Groupe Chargeurs, from farm to processing, spinning and weaving. We have several other projects in progress in the fields of leather, animal fibers, natural fibers and more.

2019 - Development of a multi-customer blockchain traceability platform with monitoring dashboards and consumer restitutions.

2020 - Addition of a Circular economy module; "generalization" of the platform and consolidation of processes; implementation of CSR indicators for industry improvements (fashion in particular).

2021 - Automation of modular platforms (batch traceability, entity traceability, certification monitoring); Launch of white label traceability platforms; integration of environmental impact calculation with traceability data.

Our presence online and at physical events to 'spread the word' about traceability as a tool for measuring and then reducing the negative social & environmental impacts of the fashion & luxury industry has increased tenfold in the past 12 months.

Reference instruments and sources used

AGEC (French anti-waste and circular economy law) ; Afnor and ISO standards (e.g. ISO 26000), REE/ESG (responsabilité étendue des entreprises), loi climat et résilience. Paris agreement (Cop 21)

Expected benefits and impact for the stakeholders involved

Enhanced visibility of compliance with sustainability requirements by industry actors/partners along the entire value chain

Enhanced traceability of the social/environmental/ethical attributes of product(s)/materials along the value chain; for example, for origin, quality, sustainability performance, and compliance with health and safety requirements for consumers and workers

A measurable impact on sustainability in value chains over time, eventually verified through life-cycle assessments and/or sustainability certifications

Enhanced environmental and socially responsible consumption and production, and circularity of the value chain, that may be relevant to and inspire other countries and industry actors/partners

Management of reputational risk for manufacturers, brands and retailers who are selling the products concerned

Improved working conditions for workers along the value chain and, particularly, those who work for "suppliers to suppliers" in parts of the value chain that today are often "hidden"

Stakeholders involved

Business and industry associations

Consumers and consumer associations

Key performance indicators for the action

Number of companies susbscribing to the platform
Number of 'events' recorded on the platform (and % of those events linked to sustainability)
Number of certificates validated
Number of environmental scorecards generated
Number of carbon tokens generated

Good practices

Using tried-and-tested methodologies for data modelling, scaling up, onboarding, sustainability scoring etc, whether homegrown or certified by a competent authority.

How has this UNECE-UN/CEFACT Call to Action contributed to strategic engagement and/or public awareness in support of your commitment?

It has led to more companies being interested in traceability and transparency (although regulations and consumer demand were already pushing towards that), more quickly. Market-side we can see that the huge increase in second hand clothing sales via platforms such as Vinted reflect consumers' wishes to consume more responsibly and less wastefully (as well as more economically). This has transformed the fashion industry and has been something of a wake-up call to all brands. The latter have started turning to upcycled or recycled materials and launching their own secondhand sites or in-store corners to keep up with the competition from peer-to-peer platforms. But it isn't enough to say your item is eco-friendly or recycled : now you must prove it to your buyers and the industry as a whole. The need for traceability as a means to achieve transparency is a steeper hill to climb, but we believe every item in the industry will be traced before 2030.

Link to relevant goal(s) and specific target(s) of the United Nations