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

Netherlands

Submitting Organization/Company

Kryha

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

< 50

Please indicate the number of employees

36

Title of the action

Reinventing supply chain collaboration to enable traceability, sustainability and circularity with Web3 technologies

Upload your logo or an image

Relevant Website

https://kryha.io/

Main Partners

Tesla, Glencore, World Economic Forum, Shell, Umicore and BASF.

Type of initiative

Private

Description of action

90% of product emissions occur directly in companies’ supply chains. This is why we at Kryha believe that to enable sustainable development, there’s a need to reinvent the wheel of industries, taking a close look at supply chain operations. Blockchain technology has the power to do so.

Achieving impact almost always requires companies and stakeholders in the value chain to share data. Blockchain technology enables parties to collaborate based on shared data, processes, and self-executing business logic without the need for a single authority to ensure trust. This results in accountability of supply chain partners for their role in society, strengthening their brand and social responsibility.

We provide end-to-end solutions to catalyse ecosystems, in both enterprise and Web3 environments, co-creating value no matter the phase of the ecosystem. Our general approach is focused on two pillars: the ecosystem itself and products to collaborate within that ecosystem. We strongly believe that one cannot do without the other.
Over the years we’ve gained considerable experience, developed tools that run in parallel, and let them benefit from each other. We like to say we develop for the industry, by the industry. Such solutions have the ability to transform how industries and enterprises function, collaborate and engage with their supply chain. Enabling traceability, transparency and circularity and driving real sustainable change for the greater good.

**Type of action**

Traceability & Transparency

**Please select the specific area/s of the action**

- Research and Development of Innovative Solutions
- Awareness and Education
- Collaborative Initiatives
- Business Management Systems or Instruments

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

Objective (max 200 words): Kryha empowers enterprises to improve their ESG performance by reinventing supply chain collaboration. Our digital solutions allow customers to trace materials and confidentially share verified ESG data across supply chains, providing actionable insights through powerful dashboarding. This enables companies to take strikes in achieving their Sustainable Development Goals and enhance their market positioning through ESG excellence.

Commitments (max 200 words): Managing increasingly complex value chains is a lot easier if everybody in the industry is on the same page. We align strategies, define common grounds, and help integrate systems across the entire chain to maximise network effects.

Value Chain Scope: We commit to be working across all industries, orchestrating consortiums across full value chains. We believe that the only way to make an actual impact is by collaborating.

**Timeframe and/or milestones for the action**

Constantly expanding to new fragmented supply chains, Kryha is presenting past and future projects across several industries, ranging from fashion, plastics, all the way to minerals. The latest being the industry wide Re|Source project launching in 2022, tracing cobalt from mine to OEM.

**Reference instruments and sources used**

At Kryha we have developed a range of solutions that are able to function as standalone or combined solutions: Confidential Provenance, allowing supply chain organisations to trace products (attributes) from origin to market by securely sharing and verifying data without compromising confidentiality and privacy.

Impact Tokenization. A scalable mechanism for traceable impact investments in ESG projects. The
solution bridges the finance gap between project owners of impactful ESG-related projects and investors who wish to contribute to the projects or wish to offset their environmental impact (mostly carbon emissions). Verification and validation ensure that real impact is created and reported on.

Web3 suite, a range of technical solutions that allow for easier Non-Functional Token (NFT) creation and trading through our white-label marketplace. Our Web3 suite includes NFT Minting, NFT Staking, transaction management, uploading of assets, exclusivity features and frontend packages. NFTs have huge potential to help tackle sustainability and circularity challenges and can depict a compelling “digital story” of a product and its sustainability attributes.

**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

**Stakeholders involved**

- Business and industry associations
- Consumers and consumer associations
- Intergovernmental organizations
- Investors/shareholders
- Local authorities
- Non-governmental organizations (NGOs)

**Key performance indicators for the action**

- The Number of industry stakeholders involved in our solutions
- The volume of materials traced in each industry
- The Number of different materials traced

**Good practices**

Re|Source is a collaborative traceability platform for the EV industry. It allows the tracing of metals from mine to battery, starting with cobalt, and shares ESG data with relevant stakeholders. Re|Source enables data-informed decision making, and ensures accountability for industry-wide transformation.

Re|Source is a unique consortium consisting of 20+ partners from the whole industry – from mines to
OEMs – consisting of top industry players such as Eurasian Resources Group, Glencore, CMOC, Responsible Minerals Initiative and Tesla.

https://kryha.io/cases/resource/

reciChain is a cross-industry digital platform, allowing brand owners, plastic packaging suppliers, NGOs, governmental bodies, recyclers, and assimilators to join efforts in recycling post-consumer waste. Compliance involves demonstrating transparency through recycling certificates that prove investments in waste management infrastructure. The platform facilitates investments in reverse logistic programs. Run by NGOs, these programs scale waste management operations and create better working conditions for waste workers.

reciChain is implemented in Brazil, collaboratively developed by Kryha for industry partners such as BASF, Braskem, Solvi, Henkel and Natura, https://kryha.io/cases/recichain/

Circular fashion NFTs

Our PoC is a circular B2C and C2C apparel market, where brands use NFTs to share supply chain data and digital stories, track garments’ lifecycles, and collect royalties from C2C resales. Consumers can make conscious decisions using this data, resell their items, and return them to brands at the end of their cycle. The circular marketplace is developed in close collaboration with Singapore-based Chemistry.

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

Publicly committing to target crucial sustainability challenges is a step towards more transparency, opening possibilities for collaboration across industries by acknowledging that the challenges we’re all facing is indeed the same.

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

8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
17 PARTNERSHIPS FOR THE GOALS