

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

United Kingdom

**Submitting Organization/Company**

Xworks Tech

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

< 10

**Please indicate the number of employees**

4

**Title of the action**

Digital Product Passports for Waste and Recycling Commodities

**Upload your logo or an image**



**Relevant Website**

<https://xworkstech.com>

**Type of initiative**

Private

**Description of action**

Xworks is a revolutionary platform that seeks to transform the waste and recycling industry by providing a comprehensive and transparent digital ecosystem that covers the entire waste management value chain. With the goal of promoting responsible waste management practices and addressing environmental challenges, we align our mission with the UN Sustainability Pledge.  
Value Chain Processes Covered:

1. Waste Generation: Xworks assists waste generators in efficiently managing and disposing of waste materials. Our platform facilitates proper waste categorisation, ensuring responsible waste handling from the source.

2. Brokerage and Trading: We enable secure and efficient waste brokerage and trading by connecting verified professionals. Users can find reliable suppliers and off-takers for their waste commodities, fostering sustainability in waste management.

3. Logistics and Transportation: Xworks includes logistics and transportation processes to ensure safe and compliant waste transportation. Our tracking and monitoring capabilities reduce inefficiencies and risks in this crucial stage.

4. Recycling and Processing: We help users identify sustainable recycling facilities, ensuring responsible waste processing and recycling. Xworks promotes a circular economy by connecting waste materials to recycling processes.

5. Certification and Traceability: Transparency and traceability are paramount. Xworks verifies user credentials and certifies compliance with regulations and sustainability standards. Advanced waste tracking and analytics reduce the risk of greenwashing.

It is clear that Xworks is committed to revolutionising the waste and recycling industry, making it more sustainable, efficient, and transparent in line with the UN Sustainability Pledge.

**Type of action**

Traceability & Transparency

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

Research and Development of Innovative Solutions

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

Objective (max 200 words): The objective of Xworks is to revolutionize the waste management industry and drive positive change in corporate sustainability practices. Our mission is to provide comprehensive and innovative solutions that enable businesses to optimize waste management, reduce environmental impact, and promote circular economy principles. Through advanced waste analytics, supply chain transparency, and social data waste tracking, we aim to enhance corporate sustainability practices and help businesses achieve their sustainability goals. By fostering responsible waste handling and recycling, we contribute to the global efforts towards a more sustainable and greener future. Xworks is committed to aligning with the United Nations Sustainable Development Goals (SDGs) and empowering corporations to make a meaningful impact on the environment and society.

Commitments (max 200 words): We actively collaborate with industry experts, regulatory bodies, and like-minded organizations to drive collective efforts towards a more sustainable future. Our commitments drive every aspect of our business, as we work towards creating a world where sustainability is at the forefront of corporate practices.

Value Chain Scope: The Value Chain Scope for Xworks encompasses the entire waste management and recycling process, from waste generation to responsible disposal and recycling. Our platform facilitates end-to-end sustainability tracking, providing insights and solutions at every stage of the value chain. This includes waste collection, transportation, processing, recycling, and the creation of sustainable off-taker partnerships. Xworks aims to optimize waste management practices, minimize waste to landfills, and enhance transparency and traceability throughout the entire value chain. By addressing sustainability challenges at each step, we empower businesses to make informed decisions, reduce their environmental footprint, and contribute to a more circular and regenerative economy.

## Timeframe and/or milestones for the action

The timeframe for the action is to be implemented over the course of two years, divided into four distinct milestones:

Milestone 1 (Months 1-6): Launch and Onboarding

- Develop and launch the Xworks platform, including advanced analytics and social data waste tracking capabilities. MVP Launched in Nov 2022.
- Onboard the first 650 corporate subscribers and establish partnerships with key waste management companies.

## Milestone 2 (Months 7-12): Scaling and Expansion

- Scale the subscriber base to 1500 companies and extend the platform's reach to additional industries.
- Implement AI/ML models to enhance waste management and recycling analytics.

## Milestone 3 (Months 13-18): Global Outreach and Impact

- Implement smart contracts and digital product passports
- Expand operations to target regions, including the UK, EU, Southern Europe, Baltics, Nordics, and North America.
- Divert 50,000 tonnes of waste from landfills and track the recycling of 50,000 tonnes

## Milestone 4 (Months 19-24): Ecosystem Integration and Growth

- Integrate Xworks into the circular economy ecosystem, collaborating with sustainable off-takers and industry associations.
- Achieve a monthly recurring revenue of £100,000 and reach 2000 corporate subscribers.

Throughout the two-year period, regular monitoring and evaluation will be conducted to assess progress and adapt strategies to maximize impact and sustainability.

## Reference instruments and sources used

References and sources for Xworks:

### 1. The European Green Deal:

- European Commission. (2019). The European Green Deal. [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en)

### 2. Landfill Diversion Directive:

- European Environment Agency. (2021). Moving towards a circular economy in Europe: Landfilling in Europe. <https://www.eea.europa.eu/publications/moving-towards-a-circular-economy>

### 3. Circular Economy Initiatives:

- European Circular Economy Stakeholder Platform. (n.d.). Circular Economy Initiatives.

### 4. United Nations Sustainable Development Goals (SDGs):

- United Nations. (2015). Transforming our world: the 2030 Agenda for Sustainable Development.

### 5. Ellen MacArthur Foundation. (2021). Cities and Circular Economy for Food. <https://www.ellenmacarthurfoundation.org/our-work/activities/cities-and-circular-economy-for-food>

### 6. World Economic Forum. (2021). The Future of Nature and Business.

### 7. European Commission. (2021). Circular Economy Action Plan. [https://ec.europa.eu/environment/circular-economy/index\\_en.htm](https://ec.europa.eu/environment/circular-economy/index_en.htm)

### 8. The Ellen MacArthur Foundation. (n.d.). About the Circular Economy.

### 9. World Bank. (2021). World Bank Open Data. <https://data.worldbank.org/>

### 10. United Nations Environment Programme. (n.d.). Marine Litter. <https://www.unenvironment.org/explore-topics/oceans-seas/what-we-do/addressing-land-based-sources-marine-litter>

These references and sources provide valuable insights into the EU Green Deal, landfill diversion incentives, circular economy initiatives, and the United Nations Sustainable Development Goals (SDGs). They serve as a foundation for Xworks' sustainable practices and align the platform's objectives with global sustainability goals.

## 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

## Stakeholders involved

Business and industry associations

Intergovernmental organizations

Investors/shareholders

Local authorities

Non-governmental organizations (NGOs)

## Key performance indicators for the action

Key Performance Indicators (KPIs) for Xworks' action plan over the 5-year period:

1. Waste Diversion Rate: Percentage of waste diverted from landfills and incineration facilities through sustainable recycling and off-take solutions.
2. Greenhouse Gas Emission Reduction: Measure of the reduction in carbon emissions achieved through sustainable waste management practices.
3. Circular Economy Adoption: Number of companies adopting circular economy principles and practices through Xworks' platform.
4. Number of Verified Sustainable Transactions: Number of verified sustainable waste transactions facilitated on the platform, ensuring responsible handling and recycling.
5. Customer Satisfaction Score: Feedback and ratings from clients on the platform's effectiveness in improving sustainability outcomes.
6. Number of Partnerships: The number of partnerships established with waste management companies, off-takers, and stakeholders in the value chain.
7. Revenue Growth: Percentage increase in revenue generated from platform subscriptions, transactional fees, and additional sustainability services.
8. Waste Material Tracked: Total tonnage of waste materials tracked and managed on the platform, showcasing Xworks' impact on reducing waste.
9. Compliance with SDGs: Alignment of Xworks' actions with the United Nations Sustainable Development Goals, contributing to specific targets.
10. Social Impact: Measurement of social impact through job creation, community engagement, and support for sustainable development initiatives.

These KPIs will help Xworks monitor the effectiveness of its sustainability initiatives and track progress towards its long-term goals of fostering a circular economy and reducing waste impact.

## Good practices

Here are some good practices that Xworks can implement to enhance its sustainability efforts and business operations:

1. **Continuous Data Analysis:** Regularly analyze data collected from waste transactions and recycling processes to identify patterns, optimize operations, and make data-driven decisions to improve efficiency and sustainability.
2. **Stakeholder Engagement:** Collaborate closely with waste management companies, off-takers, and other stakeholders in the value chain to ensure smooth operations, gain insights, and foster a sustainable ecosystem.
3. **Transparency and Traceability:** Maintain a high level of transparency and traceability throughout the waste management process, enabling customers and stakeholders to track the journey of waste materials and verify sustainable practices.
4. **Compliance with Regulations:** Stay up-to-date with evolving environmental regulations, such as the EU Green Deal and landfill diversion incentives, to ensure full compliance and leverage opportunities for sustainable initiatives.
5. **Impact Measurement and Reporting:** Implement robust impact measurement mechanisms to quantify the positive environmental and social outcomes achieved through Xworks' sustainability solutions, allowing for transparent reporting to stakeholders.
6. **Technology Integration:** Continuously innovate and integrate advanced technologies like AI, ML, and blockchain to optimize waste management processes, enhance data security, and provide cutting-edge solutions to customers.
7. **Customer Education:** Educate customers about the importance of sustainability and how they can maximize their positive impact through Xworks' platform, fostering a culture of responsible waste management.
8. **Circular Economy Advocacy:** Actively promote the adoption of circular economy principles among businesses and organizations, encouraging the transition from linear to circular waste management practices.
9. **Building Strategic Partnerships:** Forge strategic partnerships with organizations, governments, and NGOs working towards similar sustainability goals, expanding Xworks' reach and impact in the waste management sector.
10. **Employee Training and Engagement:** Invest in employee training and engagement programs to foster a culture of sustainability within the organization, encouraging innovative thinking and commitment to the company's mission.

By adopting these good practices, Xworks can further strengthen its position as a leader in the waste management industry and make a significant contribution to creating a more sustainable world.

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

The UNECE-UN/CEFACT Call to Action is a significant initiative that can contribute to Xworks' strategic engagement and public awareness in several ways: 1. **Credibility and Endorsement:** Xworks' commitment to the UNECE-UN/CEFACT Call to Action showcases its dedication to aligning its practices with international sustainability standards and principles. This endorsement adds credibility to Xworks' efforts, making it an attractive partner for stakeholders, investors, and customers. 2. **Collaboration and Networking:** Participating in the Call to Action allows Xworks to collaborate with other organizations, governments, and stakeholders in the waste management and sustainability domain. Such networking opportunities can lead to valuable

partnerships and potential business opportunities. 3. Increased Visibility: Being associated with a global initiative like the UNECE-UN/CEFACT Call to Action can enhance Xworks' visibility and public awareness. It provides a platform to showcase Xworks' sustainable solutions and initiatives to a broader audience, including potential customers and investors. 4. Advocacy and Advocacy: The Call to Action can also serve as a catalyst for Xworks to advocate for sustainability and circular economy principles at a global level. This advocacy effort can help raise awareness about the importance of responsible waste management and promote positive changes in industry practices. 5. Measuring Impact: Participating in the Call to Action enables Xworks to align its sustainability efforts with specific targets and goals set by the initiative. This allows Xworks to measure and report its impact in a standardized and globally recognized manner. Overall, the UNECE-UN/CEFACT Call to Action provides Xworks with an opportunity to strengthen its commitment to sustainability, foster strategic partnerships, and amplify its message of creating a more sustainable and circular waste management ecosystem.

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

