

The International Green Purchasing Network Knowledge Sharing Webinar Agenda

June 15th, 2023 (Thursday)

Session 2

Sustainable Purchasing Performance Measurement Methodology

**Initiative on development of a measurement methodology for Green Purchasing Networks
(Concept, framework, work group and timeline)**

Augustine Koh,

Director, GPN BERHAD,

Council member of the IGPN



PROBLEMS CONSIDERED



World Waste Facts
Every year we dump
a massive 2.12 billion
tons of waste.

Opportunity
Every year we throw
away materials worth
> \$1.2 trillion*

** Report by the United Nations Environment Programme (UNEP) in 2019*

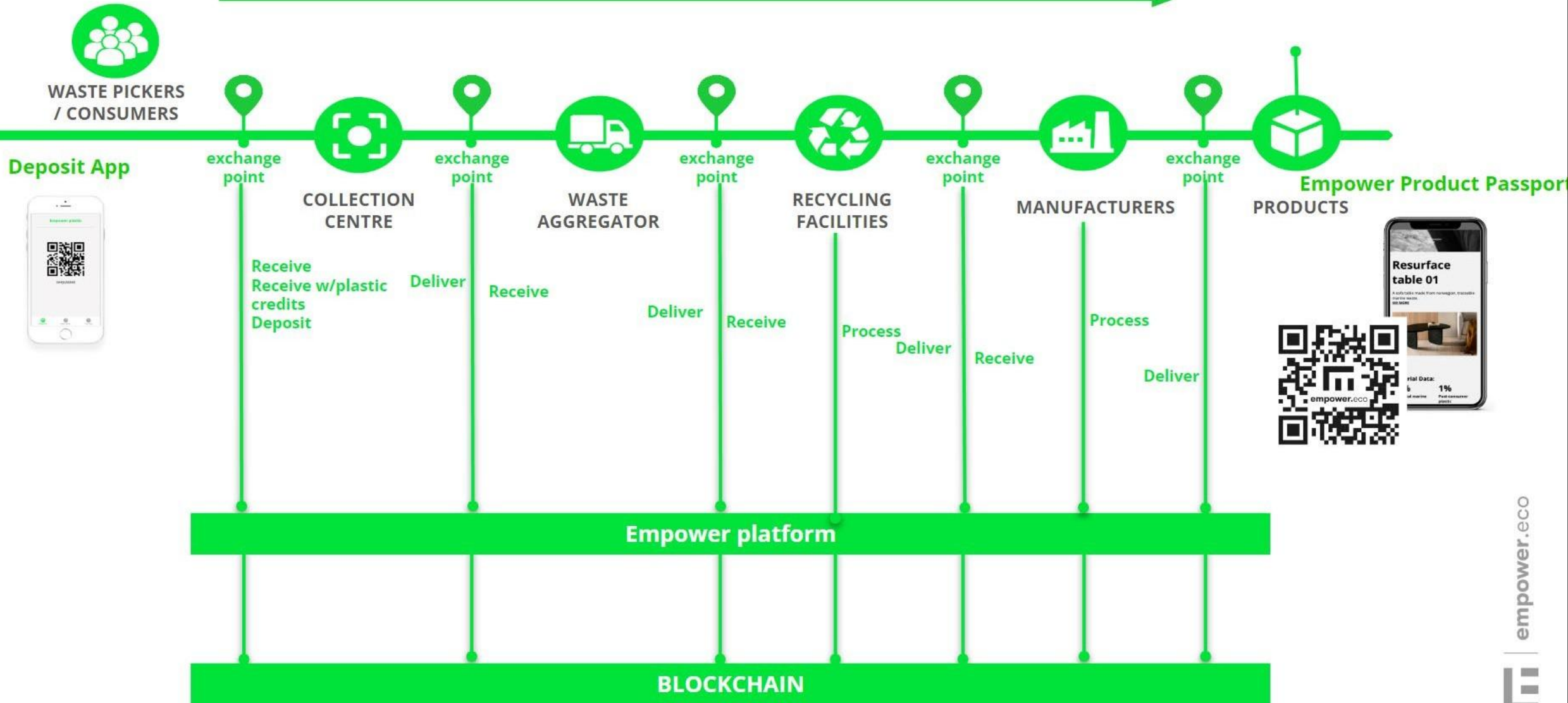


- **The Problem**
- The **cost of collection and segregation** of plastic waste is very high today, often the process to collect, sort and clean is higher than the material value - causing the economy to lose hundred millions of dollars per year. The reason is that most systems consist of mixing materials streams and contamination of materials.
- The challenge we have now is that even if we can **track materials from collection points**, most plastic is not segregated at source
- **Community Benefits**

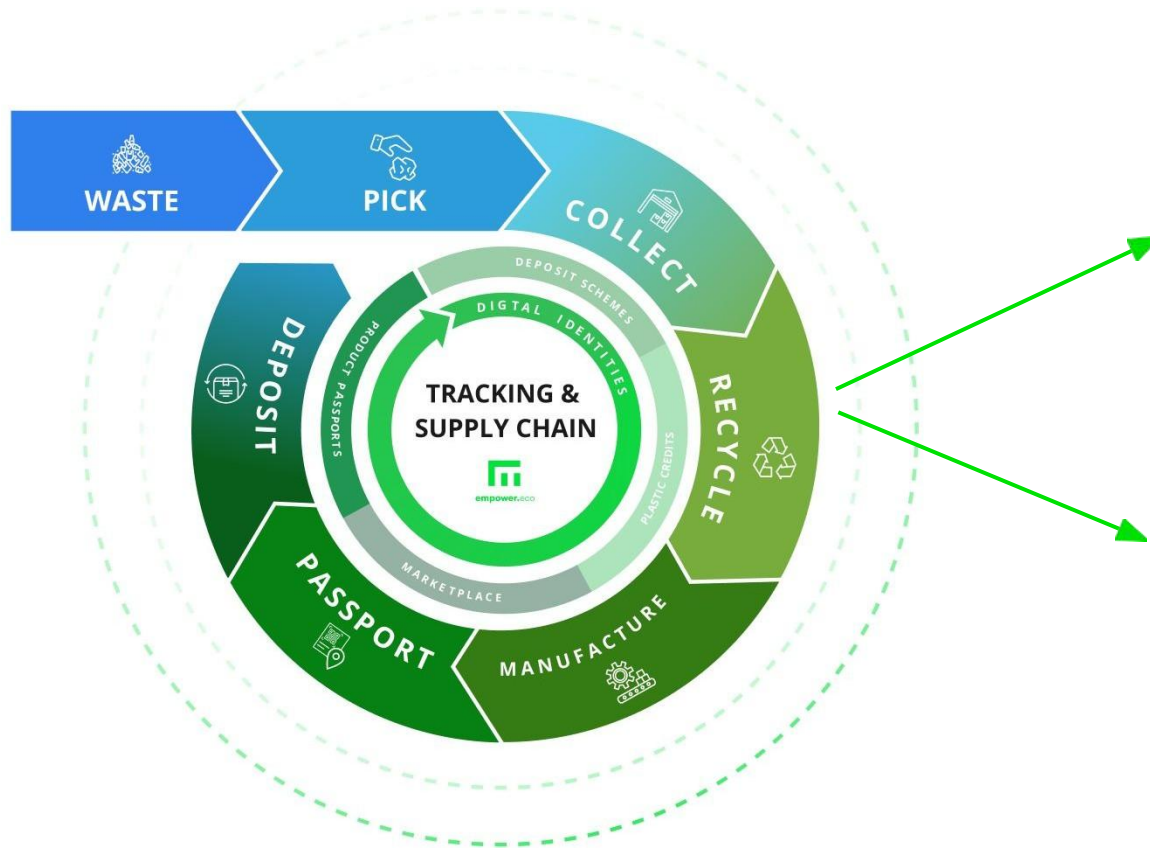
Key Issues Considered in Development of Certification

- 1. Providing Transparency, Independence and Traceability throughout the whole value chain.**
- 2. Market & Regulatory's requirements (eg. Digital Product Passport)**
- 3. Community benefits**
- 4. Incentive schemes: incentivise collection and segregation at source**

Providing Transparency and Traceability through the value chain



VALUE PROPOSITION FOR PRODUCERS & BRANDS



- ❖ Access suppliers, volumes and qualities
- ❖ Access supply chain data on blockchain
- ❖ Comply with new regulations and EPR

- Get **rPlastic®** & **GP-X** certified
- Make Product Passport





GPNB CERTIFICATION SCHEME

DEVELOPMENT OF PROCESS
STANDARD CERTIFICATION FOR
TRACEABILITY (PROOF OF EVIDENCE)
AND TRANSPARENCY WITHIN A
BLOCK-CHAIN ENVIRONMENT

Project Objective

- ***Certify the process of collection, transportation and Chain of Custody for Ocean Bound Plastic (OBP) for compliance with legal, social, environmental aspects***
- ***Develop a robust and cost-efficient certification standard for traceability of OBP***
- ***Easy access to data for auditing and verification***

Key Requirements for GPNB-SCTS

- 1. Compliance with Legal and Other EHS Requirements aligned with Good International Industry Practices**
- 2. Source Attributes**
- 3. Chain of Custody Requirements as per ISO22095:2020**

Scope and Boundary for the Proposed Process Standard for OBP Traceability

- **Scope:**

- **Standard will cover the process of collection, transportation and Chain of Custody from source (e.g., beach, riverbanks etc.) up to bales delivered to the recycler.**
- **Standard will cover different entities such as:**
 1. **Plastic Waste Collectors – Those who collect material from areas at risk of ocean plastic pollution.**
 2. **Material Aggregators– Those involved in the collection and sourcing of raw material in large volumes.**
 3. **Recycling Organization/plant**

- **Boundary:**

OBP recovered from within 50 kilometers (30 miles) of an ocean coastline or major waterway that feeds into the ocean in a geographic region that lacks formal waste management.

GPNB CERTIFICATION SCHEME

DEVELOPMENT OF PROCESS STANDARD
CERTIFICATION FOR TRACEABILITY
(PROOF OF EVIDENCE)
WITHIN A BLOCK-CHAIN ENVIRONMENT

PILOT TEST:

1) Plastic waste to recycled material ready for production in Wongpanit Krabi Recycling Plant.

Specific example: PET waste to PET flakes vs specific customer requirements/standard

1.1) Second pilot: Traceability in palm oil sector: from plantation to palm oil mills, Murum, Sarawak. This pilot will be combined with the traceability of recycled plastic materials from plantation community

2) Apply blockchain technology to trace and collect data using blockchain platform

3) Design data collection process, required data and data input to meet specific customer requirements/standards

4) Design data verification process, when, what, who; internal vs external

5) Training stakeholders: What, when, how, who

6) Testing

7) Monitor/Evaluate/Report (MER) of pilot test: technical, manageable, financial issues, identify key challenges and issues

BENEFITS BEYOND COMPLIANCE

- **Establish direct communication channel with customers**
- **Build trust and engage customers by providing public with data in a structured way**
- **Communicate with your sustainability efforts**
- **Verify data gradually with supply verification tools options**

EXPERT MEETING

DEVELOPMENT OF PROCESS STANDARD CERTIFICATION FOR
TRACEABILITY (PROOF OF EVIDENCE)
WITHIN A BLOCK-CHAIN ENVIRONMENT

26 May 2023, Krabi, Thailand

EMPOWER AS



Empower.eco

GPN BERHAD



WONGPANIT KRABI CO. LTD.



- **GPN Berhad (GPNB)**, a NPO based in Malaysia, develops programs, modules, projects and activities such as certification of green procurers and development of process standards certification for traceability (Proof of Evidence) within a blockchain environment, for all sectors;
- **EMPOWER AS (EMPOWER)**, is a Norwegian company that is into business of tracking recycled plastics using block chain technology and providing rewards to the community;
- **WONGPANIT KRABI (WPNKRABI)**, a waste recycling company in Krabi, Thailand that has been promoting community recycling and is keen to collaborate in the development of the latest state of the art technology and technique in blockchain certification within the established recycling ecosystem.

THE PARTIES

EXPERT TEAM



PROCESS STANDARDS CERTIFICATION

CONCLUSIONS END OF EXPERT MEETING 26 MAY 2023

01

Feedback and discussions with experts

02

Two Pilot Projects

1. Wongpanit Krabi (OBP)
2. Palm oil fruits and plastics, Sarawak

03

GPNB owner of Certification Scheme

04

MASCI
Certification Body

MANAGEMENT SYSTEM CERTIFICATION INSTITUTE
(THAILAND)

05

Standards will be based on the process standards as determined by empower chain with additional requirements from buyers

Roles and Responsibilities

GPNB
Scheme Owner

- Develop Process Standard
- Develop Certification Scheme
- Develop CB Recognition Criteria
- Develop CB Application Requirement
- **Develop CB Operating Requirements**
- Develop Auditors Qualification and Requirement

MASCI
Certification
Body

- Develop CB quality system
- Should be Accredited CB
- Ensure Certification and Auditor Impartiality
- Ensure Auditors and Reviewer Qualification and Performance
- Financing

Focus of Certification

- the **verification of the origin of waste/the traceability throughout segregating and collecting process**
- Audit Scheme covers the requirements to be met by organizations **concerning traceability** according to **ISO 22095:2020**/quality management systems/environmental and administrative
- Certification mark will be granted to **single organization or group of organizations** who obtained a certificate via third-party Certification Bodies based on Audit Scheme.

Independant Body

SIGNING OF MEMORANDUM OF AGREEMENT

26 MAY 2023, KRABI, THAILAND



Logo (draft)

1. Promote recycling, circular economy principles, and ensure sustainable consumption and production patterns (SDG 12.5);

2. Promote the GPNB Certification Scheme, the Empower blockchain tracking system, and the Wongpanit recycling system;

3. Wongpanit Krabi, will support the capacity and capability development (ToT) of stakeholders related to recycling;

4. Empower, will support the initial pilot project through the provision and installation of the EmpowerChain tracking system;

TERMS OF AGREEMENT (MOA)

5. The party will support the development of GPNB activities for:

5.1 Promotion of the certification scheme;

5.2 CSR initiatives,

5.3 Development of the certification scheme and the eco-material database website

5.4 Provide tracking and data capabilities for new collection points and aggregator for all types of local materials

5.5 Provide growth opportunities for blockchain's platform starting with Wongpanit Krabi (OBP) and Sarawak, Malaysia (Palm oil and plastics), and other countries in the Asia Pacific region

5.6 To support programs such as the World Summit on Recycling and Traceability 2025 in a blockchain, micro loans and other types of monetization of blockchain tokens.

6. Jointly approach funding organisations to fund community projects

TERMS OF AGREEMENT (MOA)

The digital infrastructure

“

to power a circular economy.

A world without waste.

- Empower



Empower.eco