



InnoBlock Technology Limited

Applying blockchain applications in cybersecurity, supply chain management and ESG reporting



Company Introduction

InnoBlock is a company with the vision to implement Blockchain and AI technology in order to increase efficiency, transparency and security in various industries. Our team has a vast amount of experience working with Blockchain technology and AI, making them well-versed with its different applications and methods of optimization.



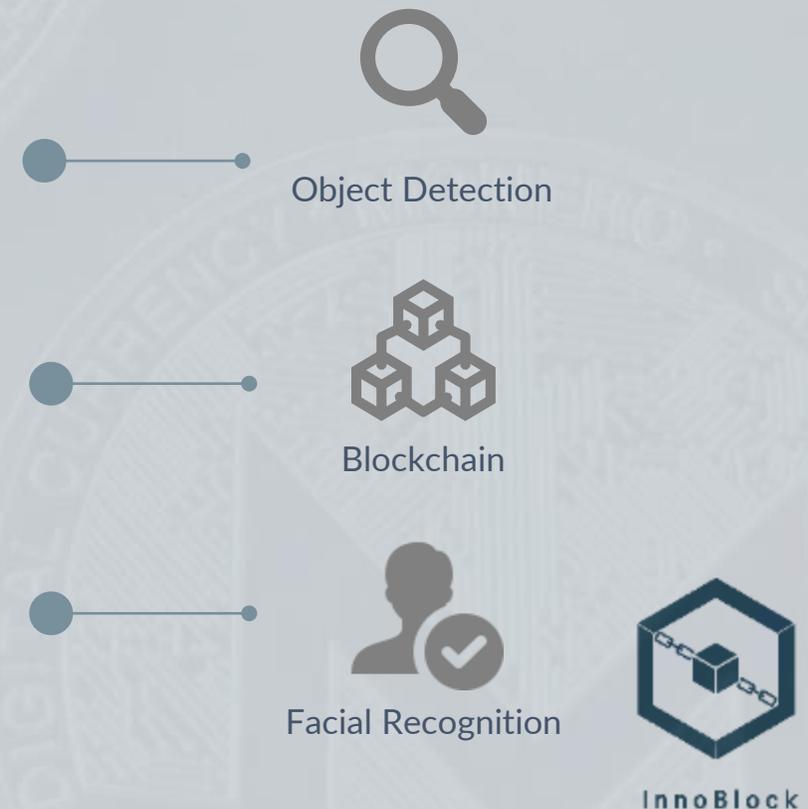
About InnoBlock

Runner-up in the HKMA's Global Regtech Challenge

Problem Statement 3: Customer Data Privacy



SafeGuardChain



Agenda

- 1. TT Chain (Supply Chain Management & ESG Reporting)**
- 2. Cyber Security: SafeGuard Series**



1. Supply Chain Traceability: TT Chain



tt-chain.com



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TT Chain

provide an **end-to-end secure and trustworthy traceability platform**



1. Supply Chain

TT Chain Supply Chain - Builds an ecosystem of producers, farms, suppliers, manufacturers, logistic partners, retailers and others creating a smarter and safer traceability platform on production data.



2. ESG

TT Chain ESG: In the areas of environmental protection, social equity, and governance efficiency. Immutable data on TT Chain facilitates third party certification on ESG rating and reporting.



3. Green/ Supply Chain Finance

TT Chain in Finance – Driving transparency and improving efficiency in the reporting processes of sustainable finance products, and to support management on corporate actions on ESG.

Adoption on different Use Case

Module 1: TT Chain Supply Chain

Module 2: TT Chain Supply Chain + ESG Reporting

Module 3: TT Chain Supply Chain + ESG Reporting + Green/Supply Chain Finance



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TT Chain: Track and Trace

Raw-materials Producers/ Farms/ Suppliers



By Lab/DNA Test,
RFID, GS1, etc.



Supply Chain Participants



Manufacturing



Inspection

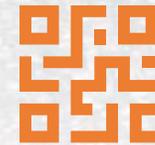


Logistics



Retails

Traceable with QR code



Products



Data on Blockchain

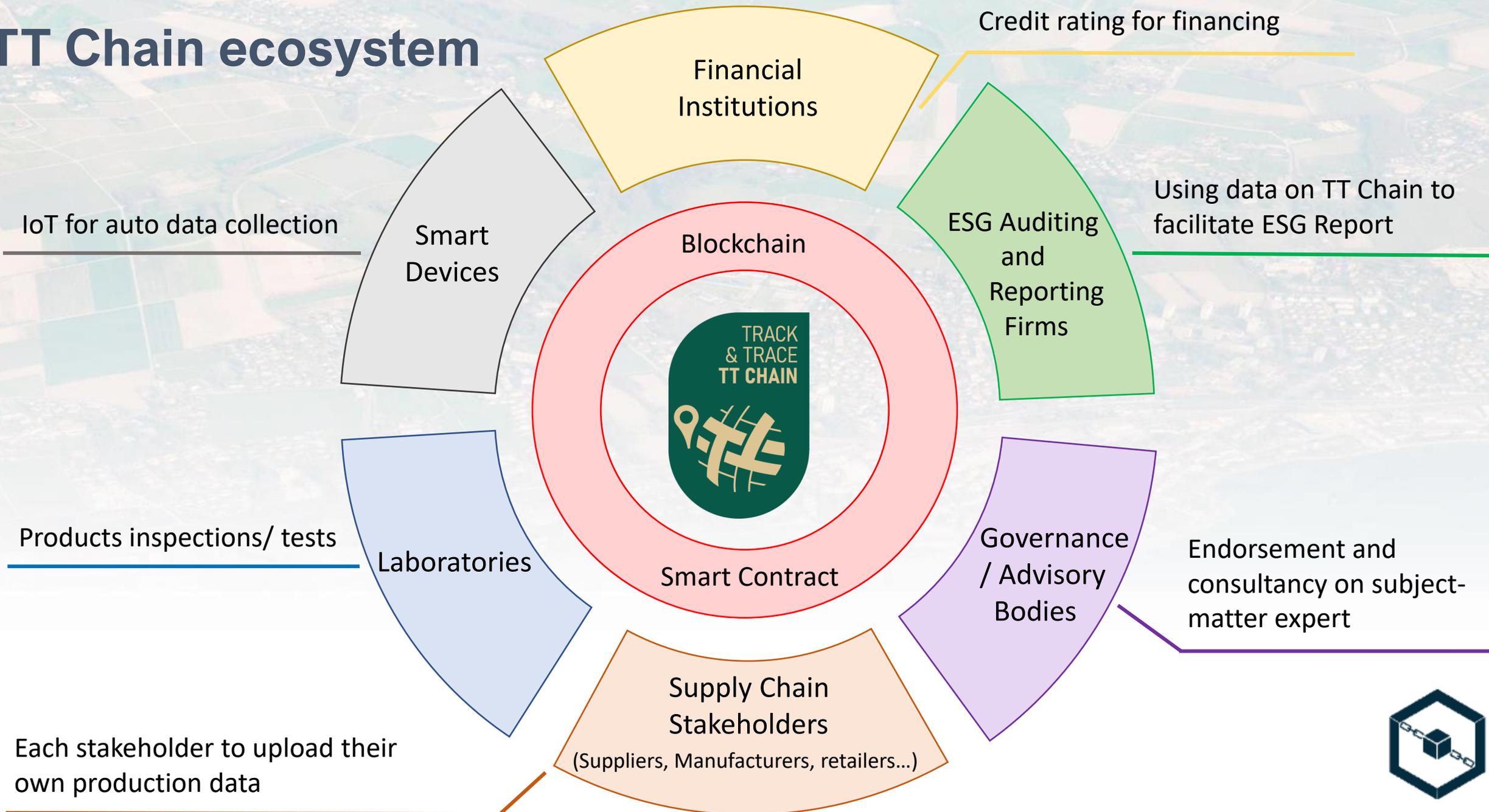


provide an **end-to-end secure and trustworthy traceability platform**



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TT Chain ecosystem

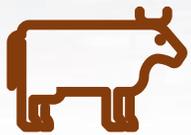


Use Case 1 – “Blockchain Beef”

What is “Blockchain Beef” Pilot about?

TT Chain have all the data from cattle in the ranch in Canada all the way to consumers’ hand in Hong Kong.

RFID on ear tags record all feeding and treatment details from birth date



Growing Records

A batch of 40 cattle being harvested on 19 April and exported on 1 May



Harvest & Export

Certifications uploaded:

- VBP+
- Canadian Angus (hormone-free)



Attributes Verification

Arrived HK on 6 May with all logistic details recorded



Logistic on Arrival

Processed into patties and meat cuts with photo and info proofs



Final Product Info



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Use Case 2 – Aquaponics: From Food Waste to Fish Feed



Food Waste Collection



Processing



Fish Feed



Fish Feeding



Traceable Empurau

All data are being stored on the blockchain

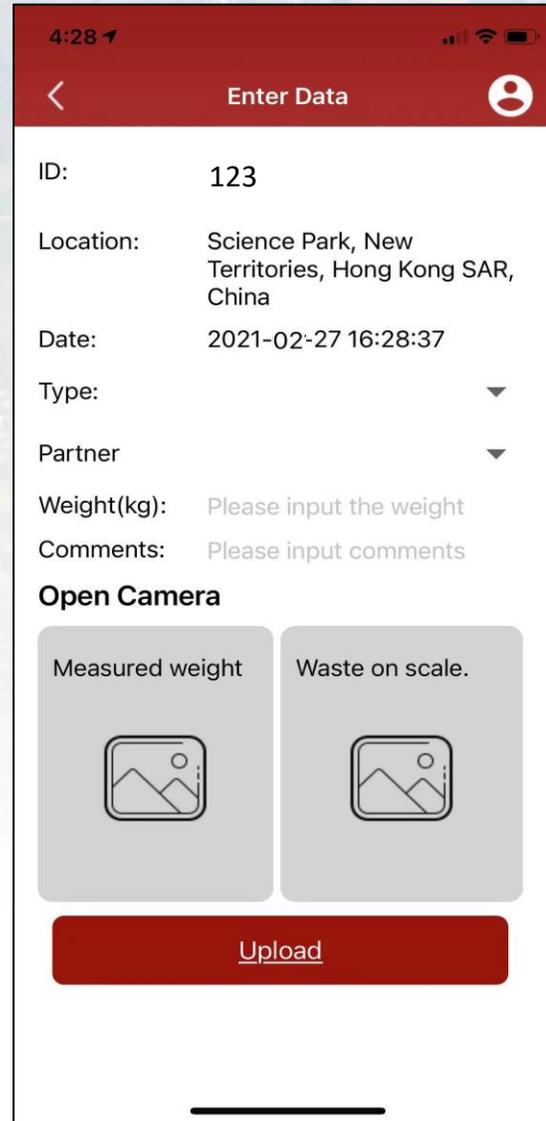
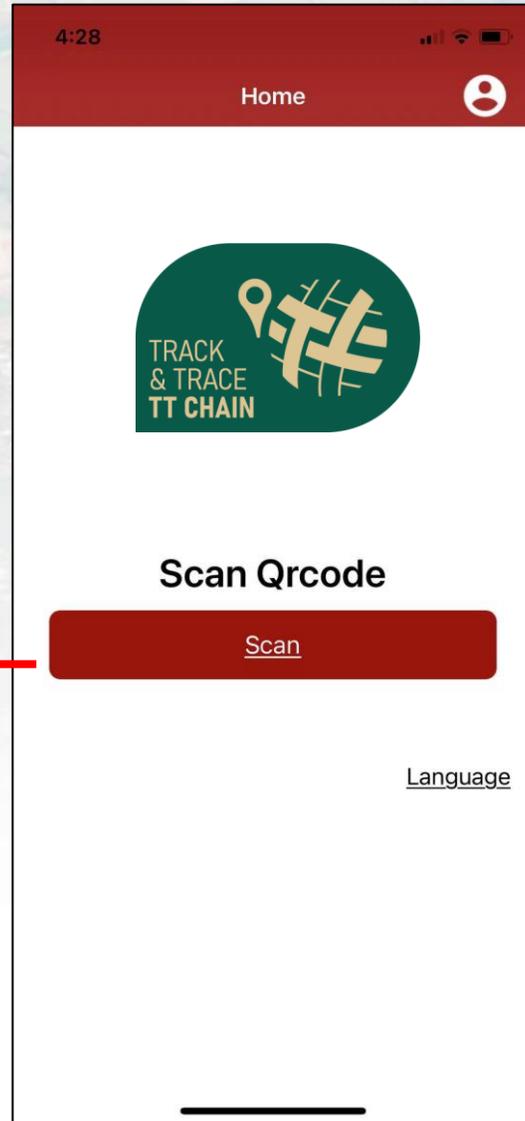


✓ A Proof of Sustainability on Aquaponics

- To trace the authenticity and source of materials through the whole supply chain
- To proof sustainability
- To support ESG report



Use Case 2 - App for driver data entry



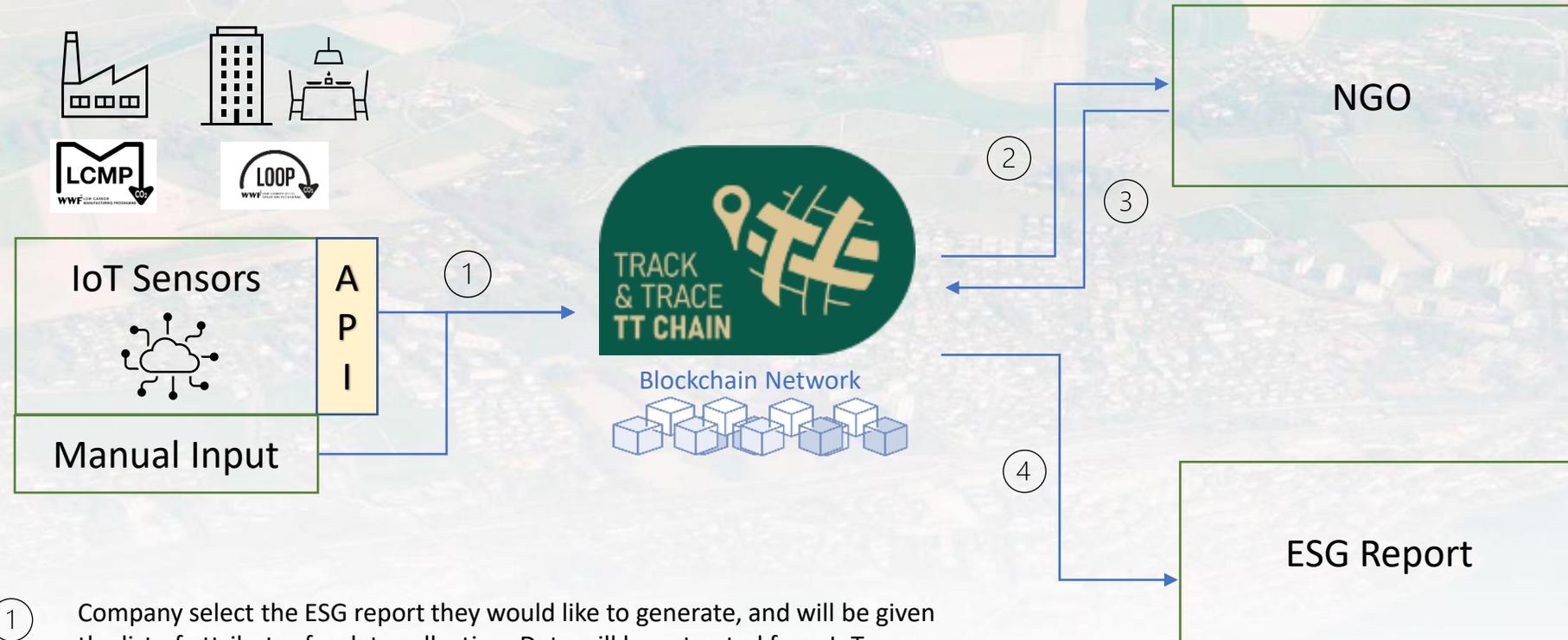
Innoblock has designed a user-friendly app for truck driver to store data.

Most of the info. will be auto-generated through the QR code, for example ID, location, date.

The rest will be selected by the driver in a drop-down list to minimise human error



How does company gets world-recognised NGO Report?



- ① Company select the ESG report they would like to generate, and will be given the list of attributes for data collection. Data will be extracted from IoT sensors automatically and transmitted to TT Chain platform*
- ② TT Chain will send the according data to NGO for customization on factor calculation base on its business
- ③ NGO will send the formula to TT Chain for ESG reporting
- ④ TT Chain will generate ESG report to the company

*IoT sensors will be supported by TT Chain's partners



ESG report generated by TT Chain



- Home
- ▼ SMART CHAIN ENTERPRISES LIMITED
 - ▼ Meadow Apparel Ltd
 - ▼ Scope 1: Direct GHG emission
 - ▶ Activity 活动: Stationary Comb...
 - ▶ Activity 活动: Company Owne...
 - ▼ Scope 2: Indirect GHG emission
 - ▶ Activity 活动: Electricity Grid
 - ▶ Activity 活动: Water Consumpt...
 - Scope 3: Other GHG emission
- IOT Dashboard
- Attendance
- Production
- Report

2. GREENHOUSE GAS EMISSIONS

2.1 Key performance indicators

	Base Year	Previous Year	% Change
Total emissions (Unit : tonne CO2)	247.55	0	-
Emissions / tonne of material production Unit : (tonne CO2 /t)	0	0	-
Emissions / sales (Unit: g CO2/RMB)			

2.2 Emissions Inventory Summary in 2020

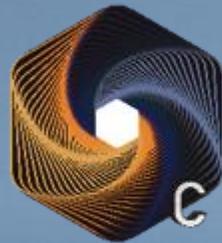
Type of emission 排放類型	Tonnes CO2-equivalent
Scope 1 範圍 1	
Gasoline	0.0000
Refrigerant R410a	0.0000
Septic Tank	0.0000
CO2 Fire Extinguisher	0.0000
Diesel	0.0000
LPG	0.0000
Wood	0.0000
Total Scope 1 Emissions [tonne CO2]	0.0000
Scope 2 範圍 2	
Electricity Bangladesh Grid	90.9284
Water Consumption	0.0000
Total Scope 2 Emissions [tonne CO2]	90.9284
Scope 3 範圍 3	
Total Scope 3 Emissions [tonne CO2]	0



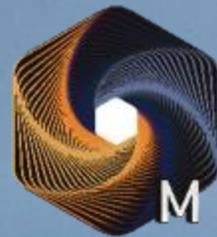
2. Cyber Security: SafeGuard Series



SafeGuard Lite PC



SafeGuardChain



SafeGuard Lite Mobile



How does it prevent data leakage through external threats?

User under constant surveillance by Facial Monitoring and Targeted Object Detection (i.e. live camera)

1

Unauthorized User



2

Peeping



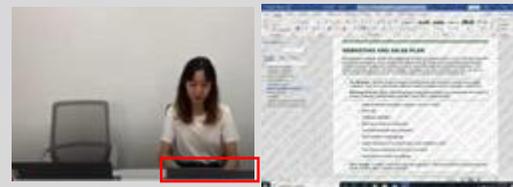
3

Blocked Front Camera



4

Multi computers log-in



5

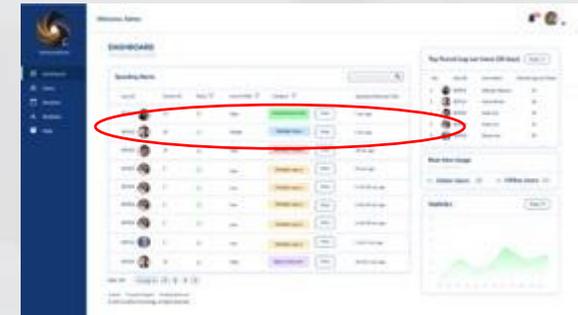
Object detected



Forced Log Out / Lock Screen



Spoofing Alert to Administrator



- All facial records will be stored on the Blockchain with a unique hash which is **immutable**
- Computer screen will be captured **simultaneously** when user cannot be authenticated



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The End

For enquiries and partnership, please contact us at

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