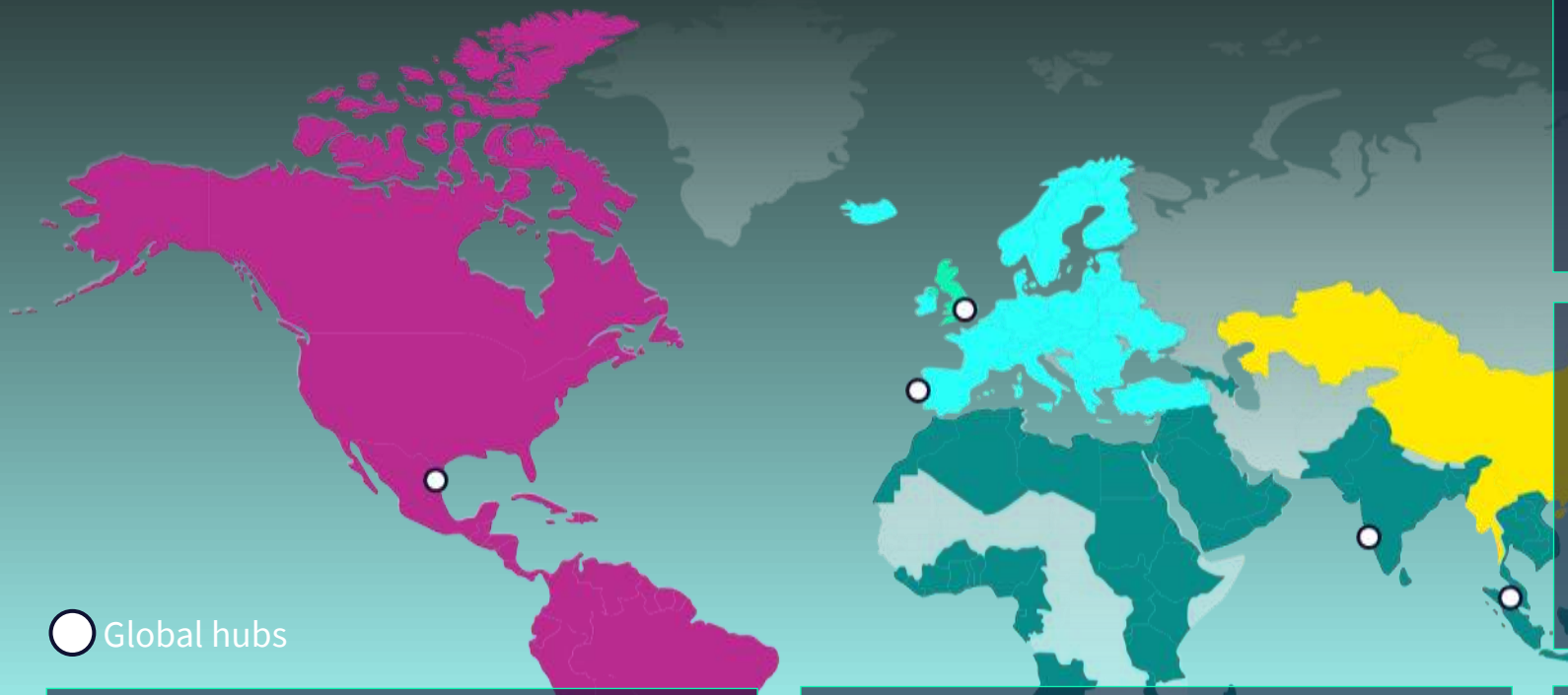
FDRA Zero Waste Program

Towards zero manufacturing waste to landfill or incineration in footwear suppliers

Supporting you around the world



Global hubs

3,102
Auditors
Experts in assessing against internationally recognised standards, aligning with the latest requirements and developing bespoke audit programmes

1,819
Inspectors
Our specialist inspectors support your compliance journey and transition to cleaner energy – helping you minimise asset, equipment and supply chain risk

792
ESG experts
Trusted specialists helping you navigate sustainability regulations and expectations, from your carbon footprint to your supply chain

179
Cyber experts
Our skilled experts help you identify and manage cyber risks, building your resilience to combat the ever-evolving threat landscape

135
Trainers
Industry specialists aligned to your business needs to deliver effective and robust training

The environmental agenda – who is driving change?

Organisations are under continued pressure from multiple stakeholders to meet Net Zero targets, demonstrate environmental best practice and continuously ensure they are doing the right thing for the planet. Transparent, progressive and impactful climate and environmental achievements can meet regulatory compliance, enhance brand equity and increase investor confidence.

Governments

- Prices on and more responsibility for harmful environmental activities along value chains
- Increased due diligence and traceability obligations
- New environmental standards and certification for energy performance, emissions and pollutants
- Subsidies and tax rebates to promote transformative technologies

Consumers

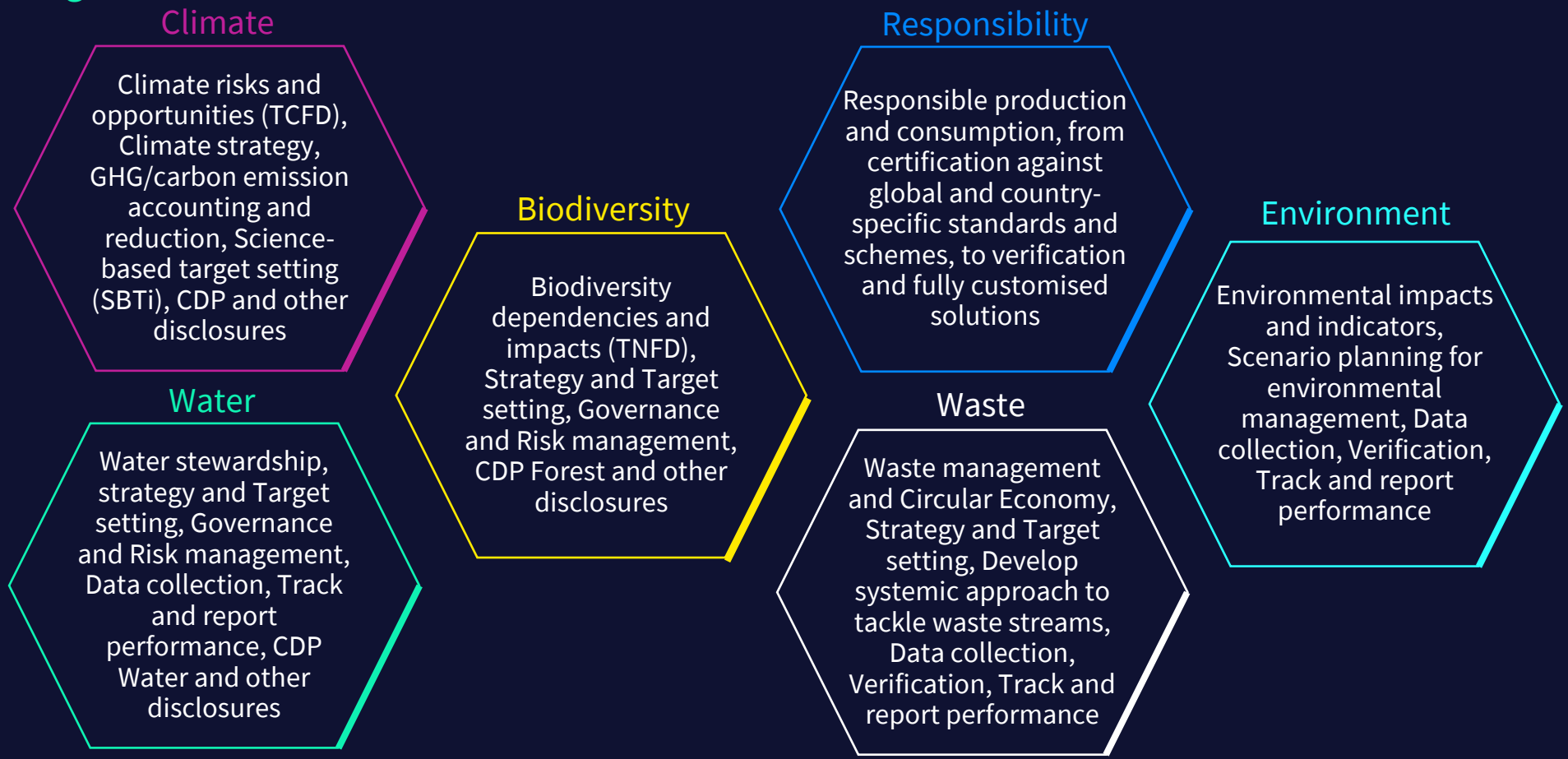
- Choose products with minimal environmental impact
- Support companies with sustainable practices
- Look for transparency based on eco-/sustainability-labels and certifications
- Vote with their wallets

Investors

- Sustainability as part of business and (long-term) investment strategies
- Actively disclosing and managing environmental risks
- Seizing opportunities related to the transition to a low-carbon economy
- Attracted and retained by responsible business practices

Our expertise

Our capabilities cross all major areas of Environmental focus and concern, meaning no matter what your challenges are, we have longstanding expertise related to your specific risk and the people capable of delivering a service which drives real change.



Content

Background

1

Waste is a human invention.

- Ellen Macarthur Foundation – Regenerate nature

ELLEN MACARTHUR FOUNDATION

We have to confront Waste Crisis

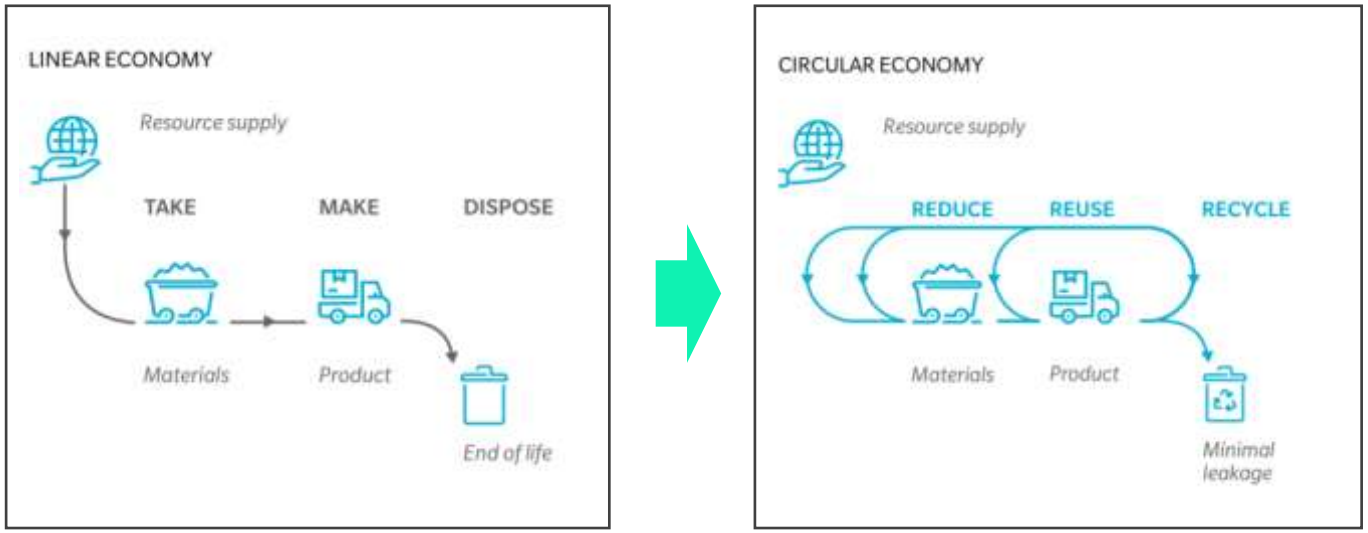
Waste hazards human in multiple ways

- Reduce soil fertility, reduce crop yields, and endanger human health through biological migration
- Waste landfill generates leachate, pollutes rivers, lakes, and seas, pollutes groundwater, and endangers human survival
- Waste landfill and incineration generates harmful gases and particulate matter, leading to respiratory diseases and increasing the likelihood of cancer transformation
- Waste landfill and incineration damage ecosystems and endanger biodiversity
- Waste landfill and incineration generates a large amount of greenhouse gases, which damage the carbon neutrality goals
- Jeopardizes full utilization of Earth‘s resources

Circular Economy - Way to Transform our System

The circular economy is based on **3 principles**, driven by design:

- Eliminate waste and pollution
- Circulate products and materials (at their highest value)
- Regenerate nature



Circular economy aims to minimize waste and promote a sustainable use of natural resources, through smarter product design, longer use, recycling and more, as well as regenerate nature.

UNDP - What is circular economy and why does it matter?

More and more brands move towards a Circular Economy

Wastes Generated in Footwear Industry

- Generally, **1 ton production wastes were generated when 10,000 pairs shoes were made**.

0.1 kg/ pair

  - In recent 10 years, around **2.18 million tons** of production wastes per year were generated due to average **21.8 billion pairs shoes** were manufactured per year.
  - In 2022, **2.39 million tons** of production wastes were generated collaborated with total **23.9 billion pairs** shoes.

World Footwear Yearbook 2023, APICCAPS

We want factories to rethink waste as a resource!

More attention from local Governments and Media

Zero Waste is not only an initiative from brands, but also a legal requirement

China

- On Jan. 11th, 2024, China government set a goal – **by 2035, full coverage of Zero Waste City**
- More news about the factories being fined due to no record kept for solid waste.

中共中央、国务院：到2035年，“无废城市”建设实现全覆盖

新京报贝壳财经讯 1月11日，《中共中央 国务院关于全面推进美丽中国建设的意见》发布。《意见》要求，强化固体废物和新污染物治理。加快“无废城市”建设，持续推进新污染物治理行动，推动实现城乡“无废”、环境健康。加强固体废物综合治理，限制商品过度包装，全链条治理塑料污染。深化全面禁止“洋垃圾”入境工作，严防各种形式固体废物走私和变相进口。强化危险废物监管和利用处置能力，以长江经济带、黄河流域等为重点加强尾矿库污染治理。制定有毒有害化学物质环境风险管理法规。到2027年，“无废城市”建设比例达到60%，固体废物产生强度明显下降；到2035年，“无废城市”建设实现全覆盖，东部省份率先全域建成“无废城市”，新污染物环境风险得到有效管控。

编辑 宋钰婷

区镇动态丨未建立工业固废管理台账，多家企业被责令限期整改

禅城区

厚街：企业未建立工业固体废物管理台账将面临罚款

Vietnam

70-90 percent of industrial waste to be controlled by 2025

Vietnam has set a target of having 70-90 percent of industrial waste controlled by 2025.

VNA

The aim of this decision is to finish and release legal regulation in 2025 regarding technological instructions on exhaust fumes, **solid waste**, and sewage management, with the priority on recycling and effectively using natural resources

Decision No.1375/QD-TTg about environment protection plan for industry and trade fields in the period from 2020-2025

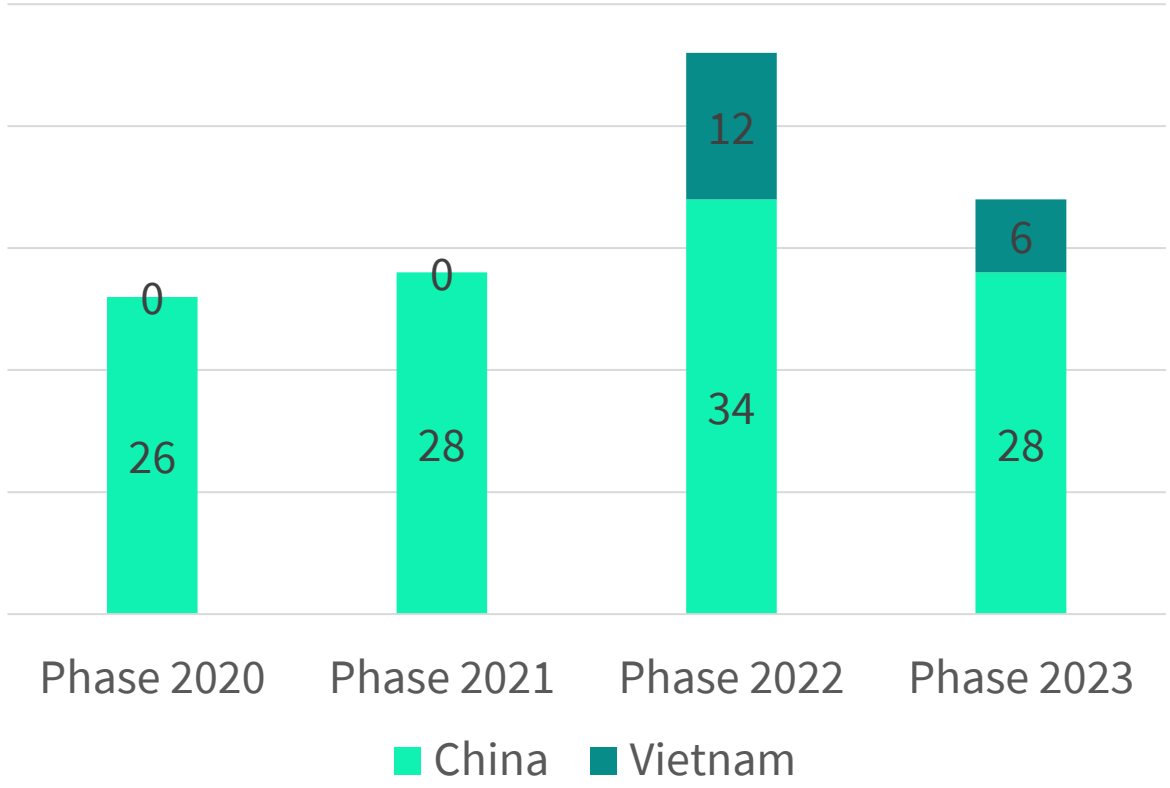
FDRA Zero Waste Program

2

FDRA Zero Waste Program Overview

13 Brands enrolled 134 factories since year 2020

- FDRA Zero Waste program is an industry-wide 12-month program aimed at **eliminating landfill and incineration** of general industrial waste in shoe factories.



FDRA Zero Waste Program Overview

Behind this 91 factories completed year 1……

- **298 Millions** pairs of shoes/ year
- **30,259 tons** of waste/ year

After year 1 in this program……

- **79%** of waste diverted from landfill and incineration – **23,972 tons of waste** which includes:
  - 343 tons of waste Reused - **1%**
  - 9,772 tons of waste Recycled - **32%**
  - 13,858 tons of waste diverted by Energy Recovery - **46%**

FDRA Zero Waste Program – 2 Key Components

Waste Management System + Data Collection & Analysis

- Waste Management System
- Training and Communication
- Upstream and Downstream Management
- Operational Excellence
- Waste Data Management
- GHG Management

General Data

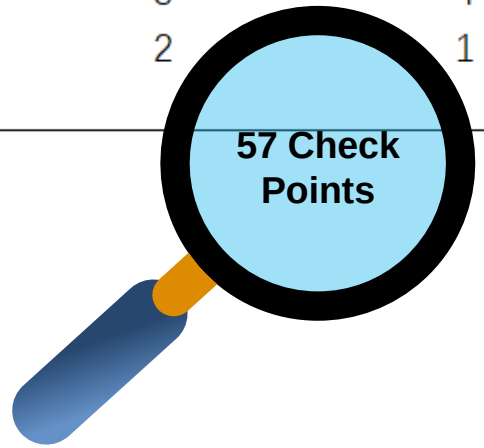
- Workers number
- Monthly output
- Material outbound
- Monthly waste data per type per disposal method

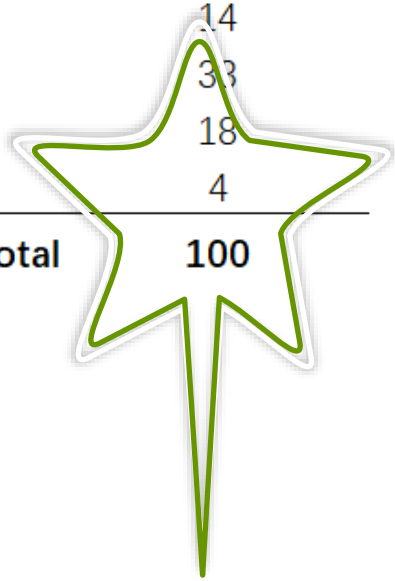
Environmental Data

- Activity data of Scope 1 and 2: **17 data points** aligned with ERSA 3.0 including Fuel, Onsite PV, purchased electricity, purchased steam, etc.
- Water usage
- Waste water discharge

Waste Management System

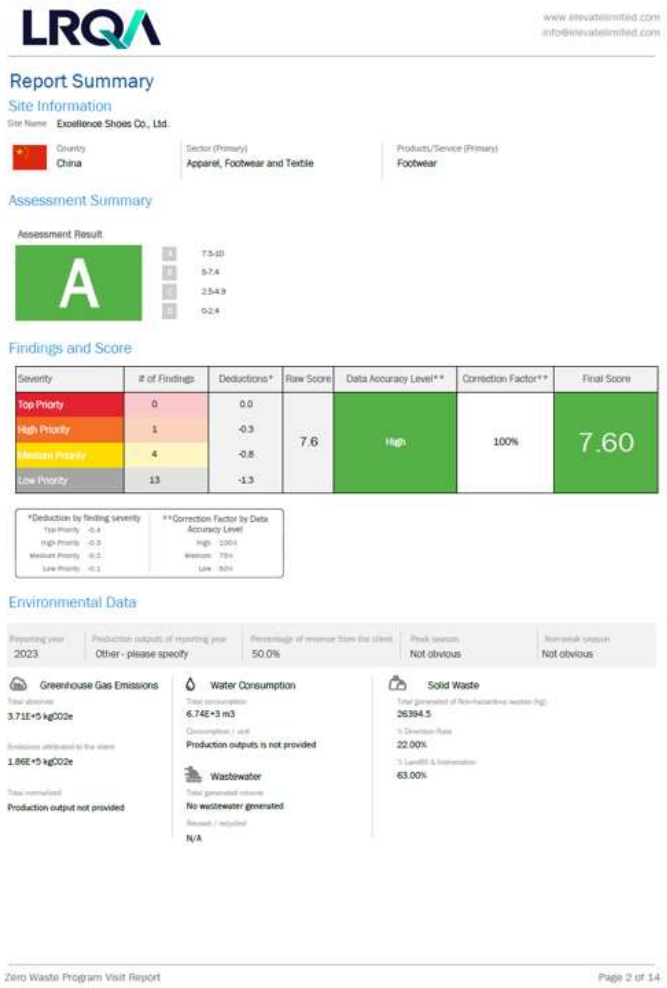
		X 4	X 3	X 2	X 1	
		Top Priority	High Priority	Medium Priority	Low Priority	Total Points
1	Management system		2	3	5	17
2	Training and communication		1	3	5	14
3	Upstream and downstream management	1		1	8	14
4	Operational excellence	2	3	4	8	33
5	Waste data management	2	2	1	2	18
6	GHG management				4	4
					Total	100





Waste Management System Assessment

- Waste Management System
- Training and Communication
- Upstream and Downstream Management
- Operational Excellence
- Waste Data Management
- GHG Management



LRQA

Report Summary

Site Information

Site Name: Excellence Shoes Co., Ltd.

Country: China | Sector (Primary): Apparel, Footwear and Textile | Products/Service (Primary): Footwear

Assessment Summary

Assessment Result: A

Severity	# of Findings	Deductions*	Raw Score	Data Accuracy Level**	Correction Factor**	Final Score
Top Priority	0	0.0	7.6	High	100%	7.60
High Priority	1	-0.3				
Medium Priority	4	-0.8				
Low Priority	13	-1.3				

*Deduction by finding severity | **Correction Factor by Data Accuracy Level

Environmental Data

Reporting year	Production outputs of reporting year	Percentage of revenue from the client	Peak season	Non-peak season
2023	Other - please specify	50.0%	Not obvious	Not obvious

Greenhouse Gas Emissions: 3.71E+5 kgCO2e; 1.86E+5 kgCO2e; Production output not provided

Water Consumption: 6.74E+3 m3; Production outputs is not provided

Wastewater: No wastewater generated; N/A

Solid Waste: 26394.5; 22.00%; 63.00%

Zero Waste Program Visit Report — Page 2 of 14

Factory's performance in managing the waste will be classified into **A, B, C, D**.

Rating criteria

A	7.5 - 10
B	5 - 7.5
C	2.5 - 5
D	0 – 2.5

- Final score = Raw score x 0.75 (if the level of data accuracy and confidential is Medium)
- Final score = Raw score x 0.5 (if the level of data accuracy and confidential is Low)

Data Collection & Analysis

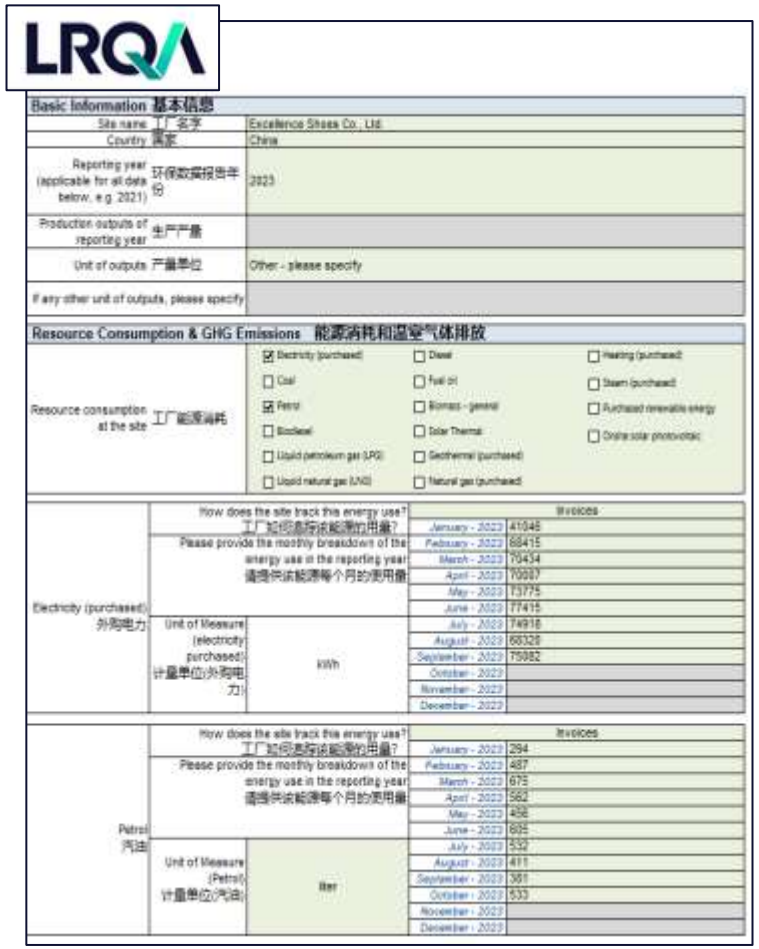
Critical tools were created to ensure data accuracy and confidentiality

General Data

- Workers number
- Monthly output
- Material outbound
- Monthly waste data per type per disposal method

Environmental Data

- Activity data of Scope 1 and 2: 17 data points including Fuel, Onsite PV, purchased electricity, purchased steam, etc.
- Water usage
- Waste water discharge



# Production Workers		生产员工数量	422
Total monthly income from waste handling		月度废弃物处理总收入	602
Total monthly expenditure of waste handling		月度废弃物处理总支出	780
# Pair of Shoes Produced:		总产量 (双)	38,027
Amount (pairs) 生产数量 (双)	Athletic shoes	运动鞋	
	Boots: Rain boots	靴子: 雨鞋	
	Boots: Winter boots	靴子: 冬靴	
	Boots: Other	靴子: 其他	
	Canvas shoes	帆布鞋	
	Casual shoes	休闲/便鞋	
	Dress shoes	正装鞋	
	EVA clogs	EVA 凉鞋	
	Flip-flops	人字拖	
	Sandals	凉鞋	
	Slippers	拖鞋	
	Sneaker	板鞋	
	OTHER	其他	38,027
	OTHER	其他	

FDRA Zero Waste Program – 4 Steps

1. Baseline and Planning

- Kick off webinar
- **Baseline assessment**
- Waste handler research
- Waste data collection

2. Training and Capacity Building

- Group training
- Improvement plan development
- Bi-monthly data review conference call

3. Review and Impact Assessment

- **Midline visit**
- Improvement plan update
- Setting individual factory's waste diversion rate target
- **End-line visit**/ impact evaluation
- Program evaluation and wrap up webinar

12 months

4 Continuity

- Monthly data collection
- Semi-annual data analysis and reporting
- Annual **verification visit** and reporting

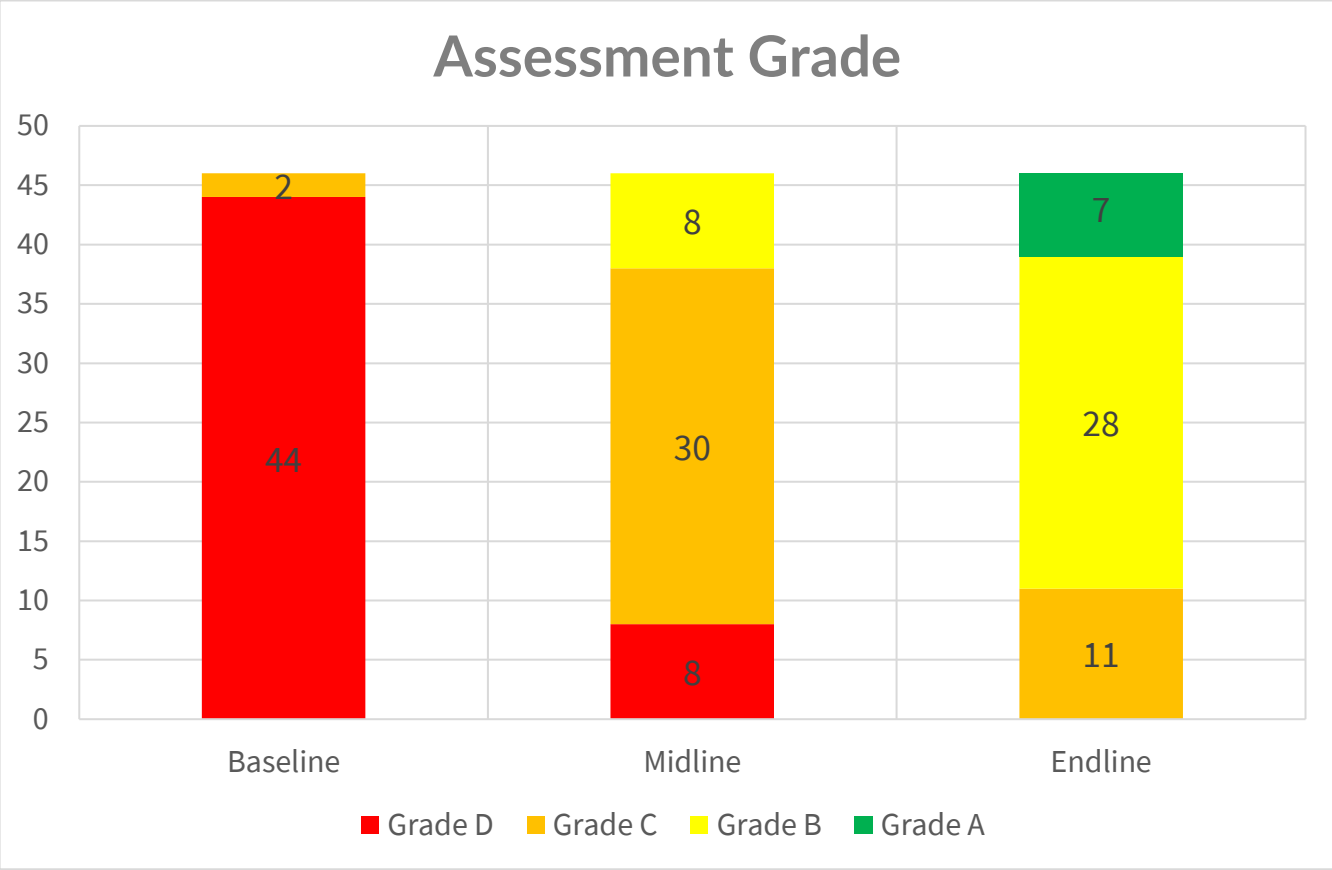
Achievement of FDRA Zero Waste Program Phase 2022

3

Implementation Period:
Apr 2022 to Mar 2023

Improved Waste Management System

35 factories (76%) achieved grade A or B



Remark: 11 factories were graded as C, mainly due to the data accuracy – all the data of waste is being estimated, not by a weighing scale, which would subject to continuous improvement upon brands' decision

Waste Reduction/ Diversion KPIs

122 million pairs of shoes were produced by 34 factories in China and 12 factories in Vietnam (total 46)

Total **13.4 million (kg)** of waste were generated in 12 months

Avoid # tons of waste from incinerating and landfill - **79%**

10,560 tons **of wastes were diverted from landfill and incineration =**

441 containers

- China - 7,194 tons
- Vietnam - 3,366 tons

9,779 MTCO2E **GHG emission were avoided by waste reuse and recycling**

- = 161,697 tree seedlings grown for 10 years, or
- = avoid 10,953,980 pounds of coal being burned.

35,000+ people

influenced by Zero Waste Program

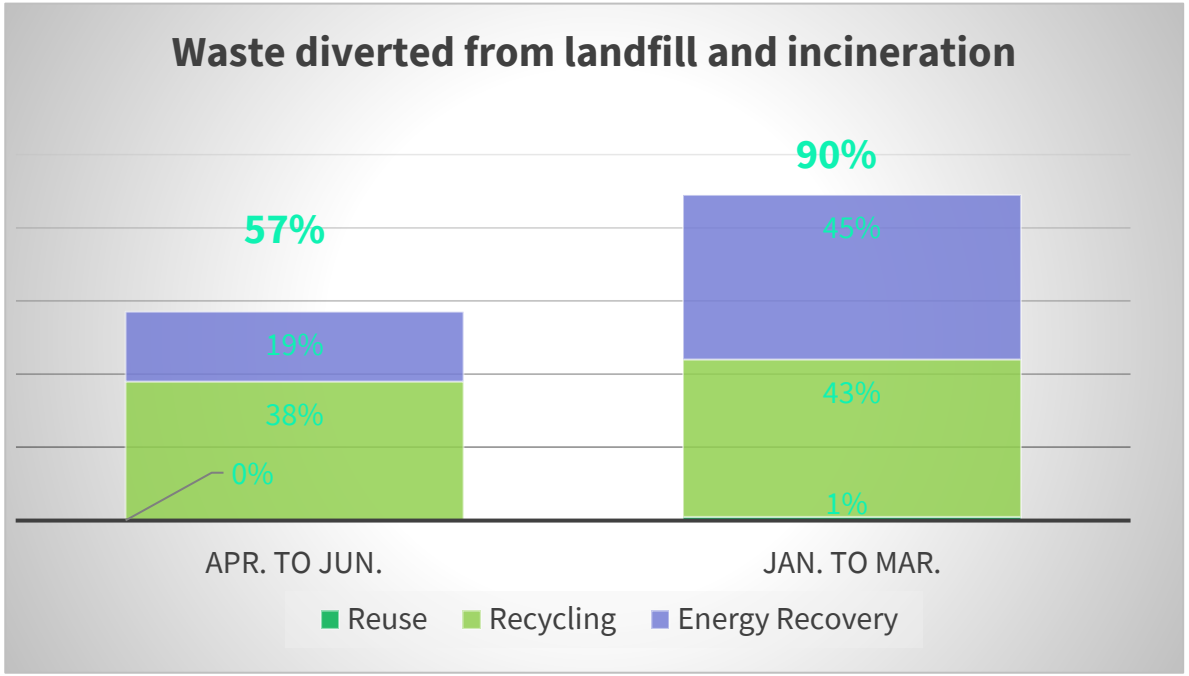
- China - 20,150 people from 34 factories
- Vietnam - 15,218 peoples from 12 factories

KPI - Waste Diversion Rate increased 33%

Comparison between the average of the first and last 3 months

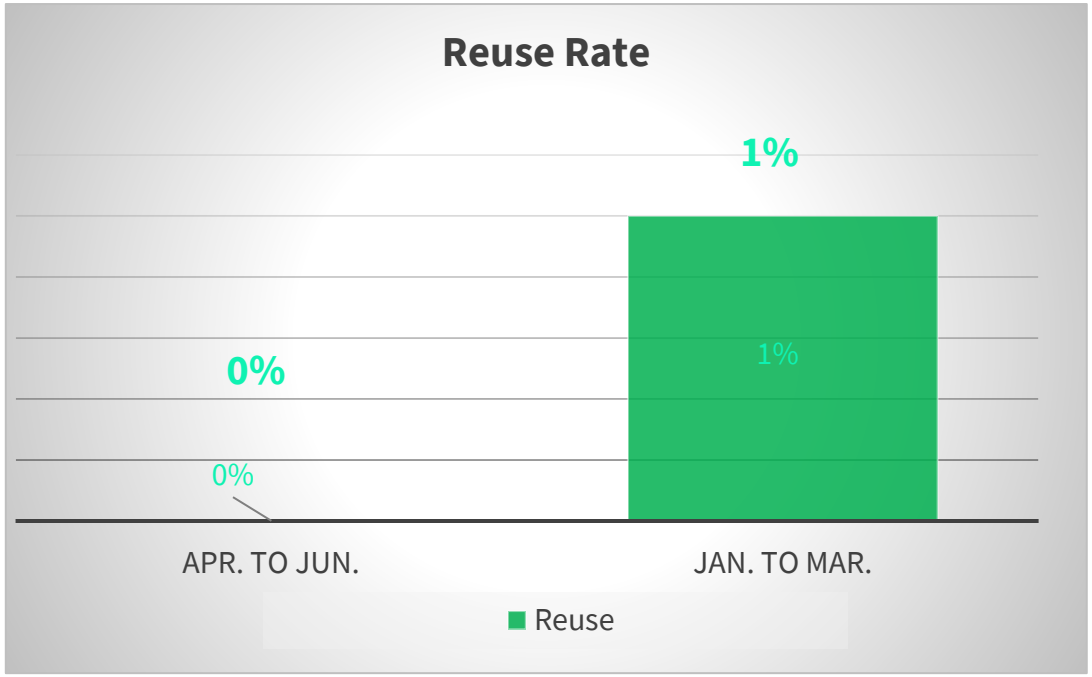
33%

Increased of wastes diverted from landfill and incineration



KPI – Reuse Rate increased 1%

1%



- 26 factories (56.5%) factories keep record of reused waste
- The types of reusable waste is limited, includes bobbins, plastic bags, cartons and carboard tubes

Cartons

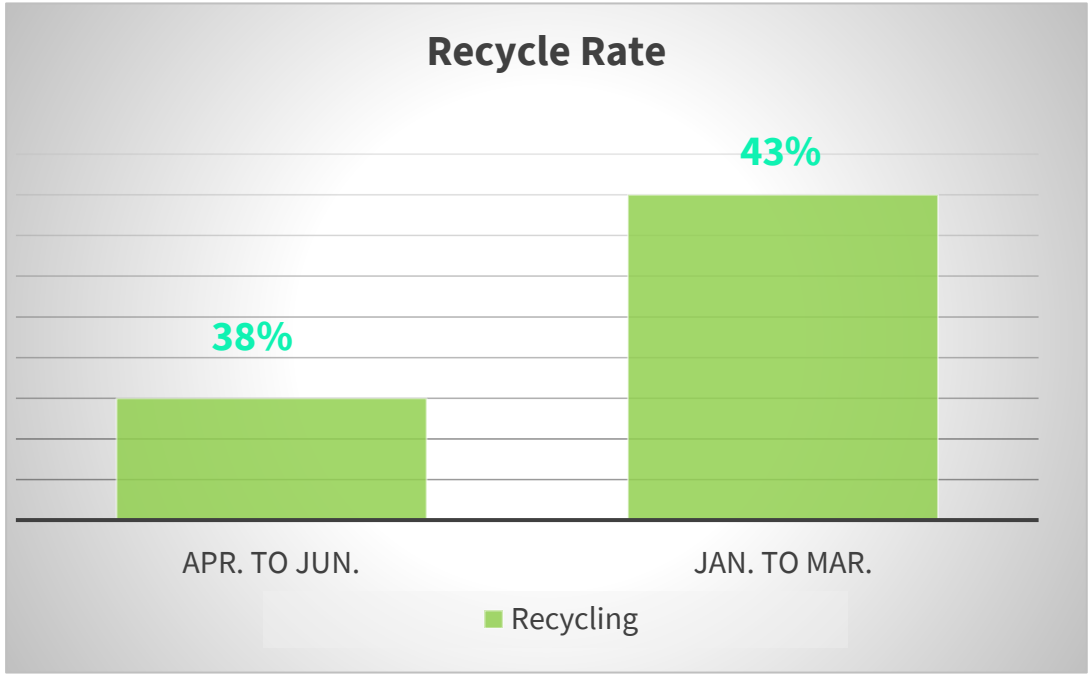
Carboard Tubes

Plastic bags

Bobbins

KPI – Recycle Rate increased 5%

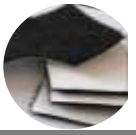
5%



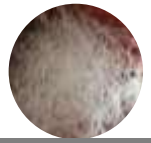
- All factories having good intention to recycle waste as much as possible.
- The factories producing EVA clogs and slippers could achieve in-house close-loop recycling as those EVA waste could be blended with certain percentage as raw material.
- Example of recyclable wastes:


TPR runner


Plastic bobbin


Magic clasp

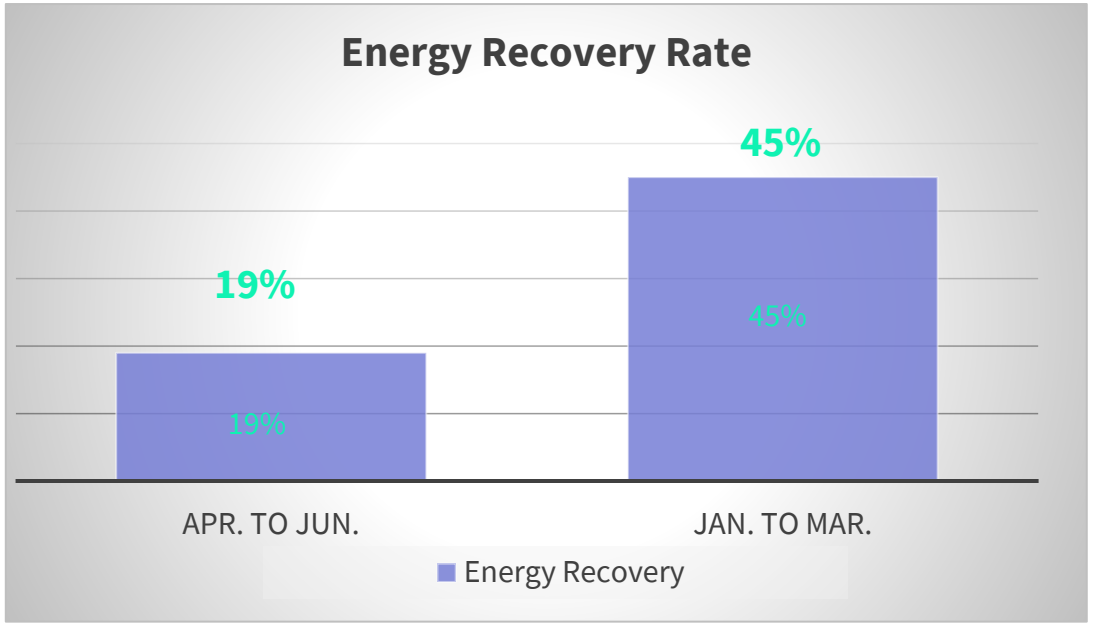

Waste paper


Nylon stripe


Plastic lasts

KPI – Energy Recovery increased 26%

26%



- Energy Recovery is the major diversion way, especially in **China**. Which helps the factories in China to achieve 100% diversion.
- The main reason is in footwear industry, the material laminating technology is commonly being used, laminated material could not be reused or recycled, could only be diverted by Energy Recovery

- Energy Recovery in **Vietnam** was restricted by limited number of waste-to-energy plant which is part of the local infrastructure. As result, only 16 (2 out of 12) factories in Vietnam had achieved 100% waste diversion. The overall diversion rate in Vietnam is **71%**

Case Study & Good Practices

4

Key Points of Waste Management - SAAVE

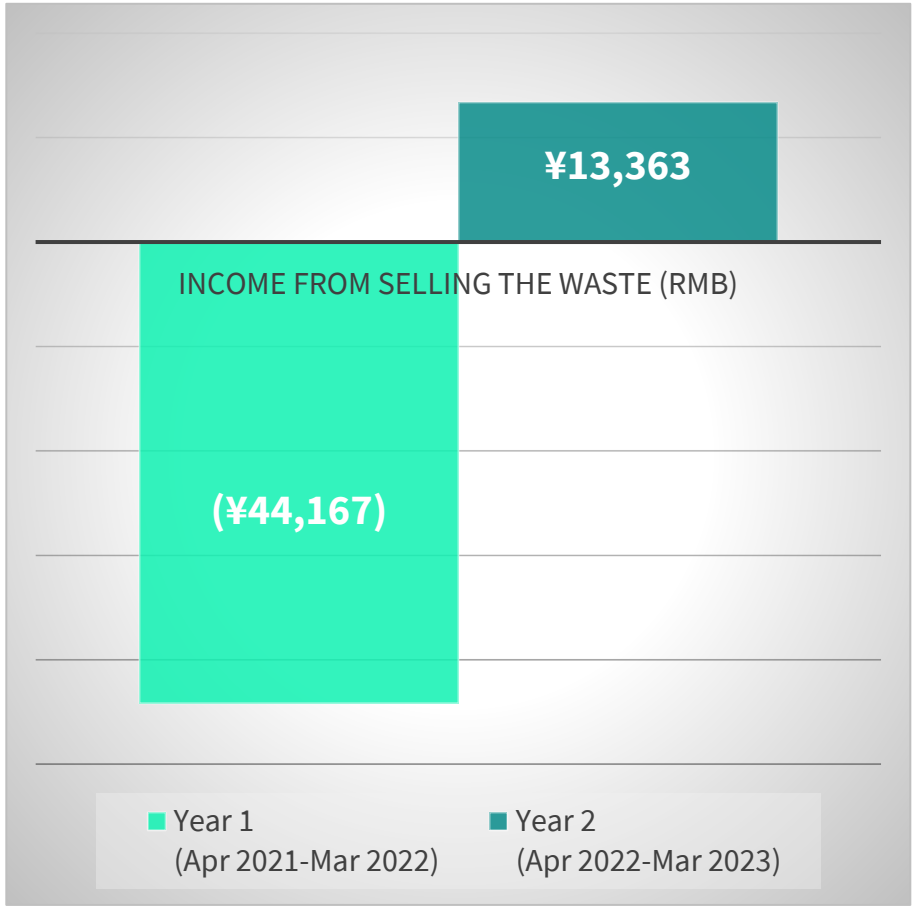
We recommend this concept to all the factories under this program to be a fast-track improvement

- **Subcontract**: subcontract the waste to the right waste handlers, considering both compliance with requirements and capability to recycle more
- **Accountability**: Integrate the responsibility of waste reduction into management employees KPIs, especially the production and product development departments who are the major contributors
- **Award**: Consider waste reduction as important as quality and on-time delivery, award the high performance team or individual contributor
- **Vendors**: Engage with all upstream/ downstream vendors to achieve a close loop recycling, encourage the vendors the take the responsibility of recycling.
- **Education**: Awareness is the foundation for getting all the employees involved in Waste Reduction, regular training and competition would be very helpful.

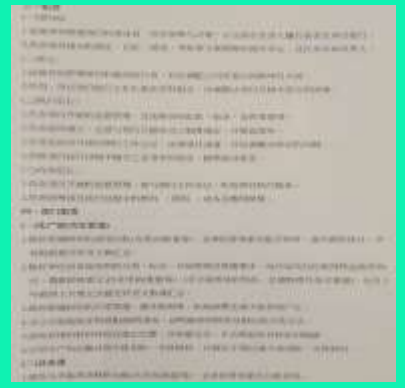
Case Study – Turn Waste into Profit by SAAVE

Factory A who has been implementing Zero Waste for two years, saved more than RMB 57K by selling the waste in the 2nd year

- **Subcontract**: Conducted a new round of bidding to contract a new waste handler who is capable to recycle more waste
- **Accountability**: Integrate the responsibilities of waste reduction into the Job Description of all management positions, waste reduction became a mandatory session in their performance report
- **Award**: Promote the concept of 'Turning Waste to Gold' among all employees, incentivize the saving from Reuse and proper waste segregation. As result, 10 types of new reuseable waste were identified by internal employees in the 2nd year.
- **Vendors**: Engage vendors and initiate a 'Take Your Waste Home' project asking the vendors to take the waste back to their factories to create more opportunities of Reuse and Recycle.
- **Education**: Include the waste management into the training system covering new and existing employees



Good Practice – Policy, SOP, Contracts



- Zero waste policy and targets were established and posted for workers' awareness

- Waste Segregation SOP has been established, and integrated into training system to ensure all workers are aware of this SOP, kept proper training records

- Instruction on the wall to show the standard operation

- The contract with waste handlers specifies the waste treatment methods and disposing location to ensure compliance.

Good Practice – Segregation, Weighing, Record

- Waste containers are properly and visibly labelled for effective waste segregation

- Proper waste segregation also properly set in central waste storage area

- Applies weighbridge instead of regular scale to weight the waste

Weigh all the waste and maintain detailed records

Good Practice – Small Items

- Inner cardboard of sellotapes

- Remaining part of paper stick were collected and then recycled in packing area.

- Small pieces of cardboard cutoff.

Good Practice – Small Items

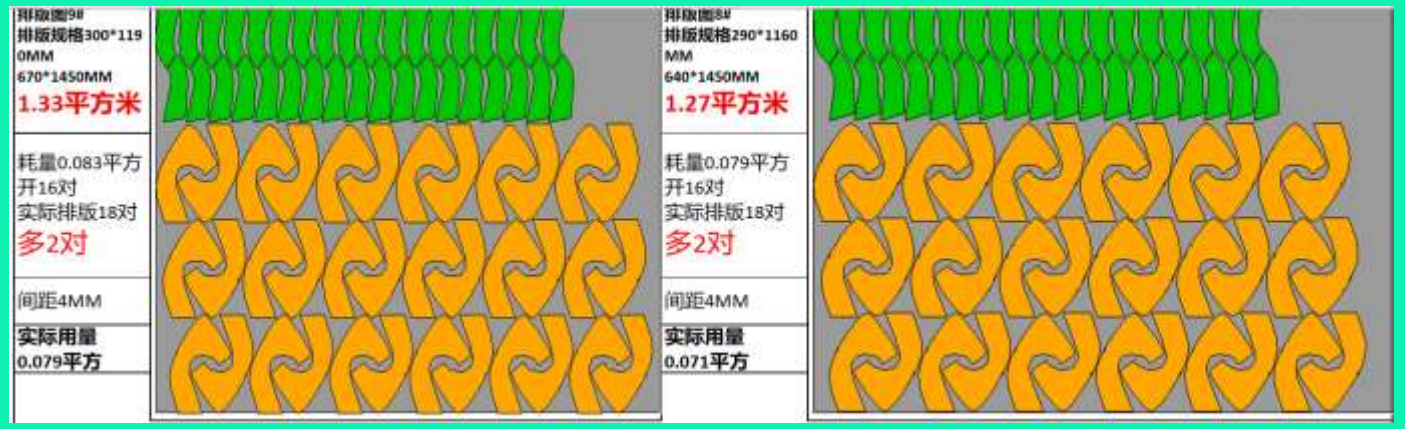
- Plastic bags are being reused as waste bin in workshops

- The soft paper are being collected and reused to protect uppers

- Rubber bands are being collected and reused

Good Practice – New Technologies

- Apply automatic cutting machines to increase the utilization of material and reduce the waste



- Automatic cutting machines can save 4.8% materials in cutting section.

Benefits, Prcing, FAQ

5

What are the Benefits for You?

- **Save cost** in waste disposal by reusing and recycling more wastes.
- **Increase awareness** of protecting our planet in your supply chain
- Show your ambition **doing good to the Earth**
- Provide a new aspect of your **Responsible Sourcing** principle
- Quantify your global supply chain's contribution to **UN SDGs**
- Increase Brands' **reputation** on accountability and responsibility
- Tell good stories on **ESG reports** and inspire others to do the same

ESG Reports

About News & Features Careers Sustainability & Governance Investors Press

We endeavor to make recycling simpler and more convenient for our guests with select take-back programs. We have held **car seat trade-in events** each year since 2016.

Supply Chain

Our suppliers play an integral role in helping Target achieve our waste reduction, recycling and reuse program goals. This effort begins during the onboarding process of new suppliers and continues throughout our engagement with additional training to confirm Target's expectations are understood and met. We leverage a broad network of suppliers to optimize the reuse, recycling, donation and composting streams to continue to increase diversion capabilities on an annual basis.

As a step in achieving our overarching Zero Waste1 goal, Target is working to have 50% of owned brand apparel, footwear, home and hardlines suppliers by spend achieve zero manufacturing waste to landfill (ZMWL) by 2025.

Work toward our ambition for key suppliers to achieve this goal is already underway in owned brand footwear. In 2019 and 2020, we co-created the Shoe Waste Factory program with the Footwear Distributors & Retailers of America to drive continuous improvement in establishing waste management systems and divert waste from landfill. We will continue to work with participating factories to support their ongoing success, look to add additional factories to the program in the future and explore ways to use the footwear model to reduce waste across other owned brand categories.

We are also investing in Accelerating Circularity U.S. trials, which aim to incorporate post-consumer recycled textiles into new garments. By investing in Accelerating Circularity, we have been able to gain insights into the current gaps in the collection, sortation and preprocessing of textile waste and the innovation needed to spin recycled fibers into yarn.

We will continue to make every effort and drive collaboration in the industry to build a zero-waste supply chain, by:

STEVE MADDEN FOUNDATION

STEVE MADDEN

Nations Global Compact (UN Global Compact)
ar Distributors and Retailers of America (FDRA)
n Footwear Foundation
able Apparel Coalition (SAC)
e Based Targets Initiative
RAP
Stewardship Council
ee Planted
Amp
n Scholarship Fund
l University
Festival of Culture Foundation
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CALERES
★5★

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RIES ON SCOPE 3

ect (Scope 3) greenhouse
supply chain, we launched
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audits.
e are expanding supplier
more of our factories in
ve at an estimate of the
Services portion of our

21

FDRA Zero Waste Program – Step 1 to 3 (Year 1)

USD 5,000/ factory excluding the travel cost

		M0	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14
Tool review and consolidation		■														
Stage 1: Assessment and Planning Period																
Item 1.1	Factory kick-off webinar	■														
Item 1.2	Baseline assessment		■													
Item 1.3	Mapping of primary waste handlers per region															
Monthly data collection and submission			■	■	■	■	■	■	■	■	■	■	■	■		
Stage 2: Training and Capability Building																
Item 2.1	Group Training				■											
Item 2.2	Improvement Plan Development				■											
Item 2.3	Bi-monthly data review conference call			■		■		■		■		■		■		
Item 2.4	Setting individual factory's waste diversion rate target					■										
Stage 3: Review and Impact Assessment																
Item 3.1	Midline visit							■								
Item 3.2	End-line visit/ impact evaluation													■		
Item 3.3	Program evaluation and wrap up webinar														■	■

■ Onsite

■ Remote

FDRA Zero Waste Program – Step 4 (Continuty)

USD 1,500/ factory excluding the travel cost

		M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14
Item 1:	Monthly waste data collection	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Item 2:	Quarterly data review meeting				■			■			■			■	
Item 3:	6-month data analysis and reporting							■						■	
Item 4:	Verify the data by an onsite visit													■	
Item 5:	Annual program wrap-up report														■

■ Onsite ■ Remote

FAQ

- **What would be the biggest challenge of this program?**
  - The factories are lack of motivation to run this program. They consider this program as audits, they would only make movement while PO being impacted.
  - This program needs the close attention from the brands to push/ support the factories.

- **Does this program guarantee the factories would make money from selling the waste?**
  - No, but we do have successful cases
  - Waste segregation is the most fundamental process to maximize the value of the waste.
  - It is constrained by local infrastructure, and the available waste handlers in surrounding area.
  - We consolidate a list of local waste handlers who could help to do more recycling, sharing with the participating factories.

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