



Sun Screen IT

for

IGEL Secure - London

June 12th 2024

Ethical IT Asset Disposal – Simple, Sustainable, Awesome

Nathaniel Comer – Founder & CEO

Nathaniel@SunScreenIT.com

00 44 (0) 7917 265 712

www.SunScreenIT.com

www.SunScreenITFoundation.org

**‘NEVER DOUBT THAT A SMALL GROUP
OF THOUGHTFUL, COMMITTED CITIZENS
CAN CHANGE THE WORLD
INDEED, IT’S THE ONLY THING
THAT EVER HAS.’**

- MARGARET MEAD



MISSION

Objective 1: *Transform* IT Disposal from WASTE into a TOTAL CIRCULAR ECONOMY

Objective 2: *Close* the Digital Divide, sustainable IT Education – areas of economic need

Nathaniel@SunScreenIT.com

www.SunScreenIT.com

The old IT Charity Model

was

BROKEN

The word "BROKEN" is rendered in large, white, 3D block letters. Each letter is filled with a different scene of poverty and hardship, such as a child in a slum, a person in a tent, and a person in a makeshift shelter.



...we have unlocked a way for IT Industry to ***RIGHT this WRONG***

“Platitude”

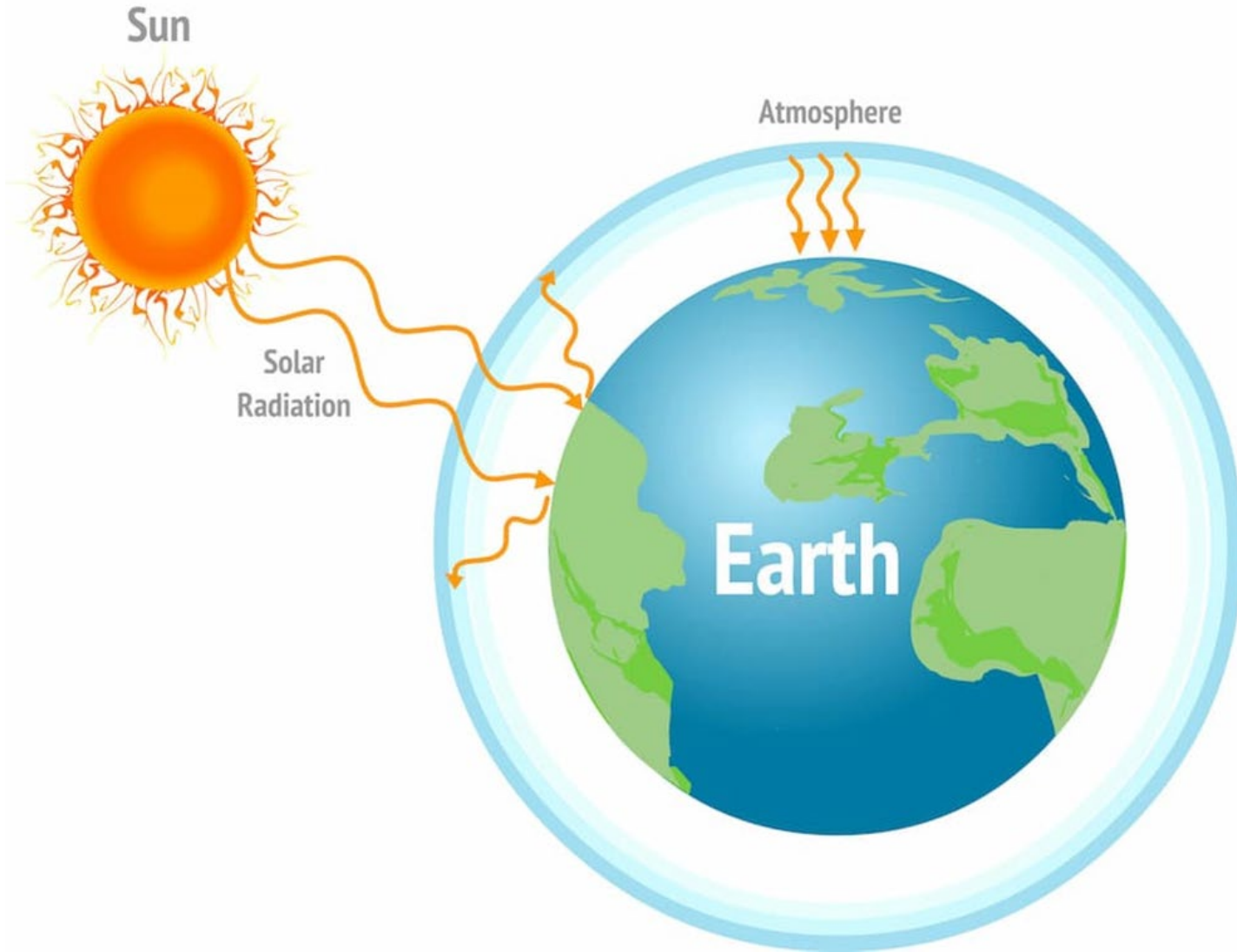
Definition:

- a remark or statement, especially one with a moral content, that has been **used too often** to be interesting or thoughtful.
- a flat, dull, or trite remark, especially one uttered as if it were fresh or profound.
- a banal, meaningless, or stale remark – attempting to unify wisdom over a difficult topic

Examples:

“Global Warming”
“Greenhouse effect”

The “Greenhouse effect”



..the earth's getting a bit hotter

“Green House Gases”

#CO2e

Carbon Dioxide Emissions
Absorb the Sun's heat...



Fairly simple when
you look at it...

but..



..the blanket's getting thicker

“Green House Gases”

#CO₂e

Carbon Dioxide Emissions
Absorb the Sun's heat...

BEFORE

Industrial
Revolution

AFTER

Simple: Heat = **Climate Crisis**

CONSUMPTION

The greatest Threat

[Download the
Circularity Gap
Report 2024](#)

CIRCULARITY

Our greatest Hope



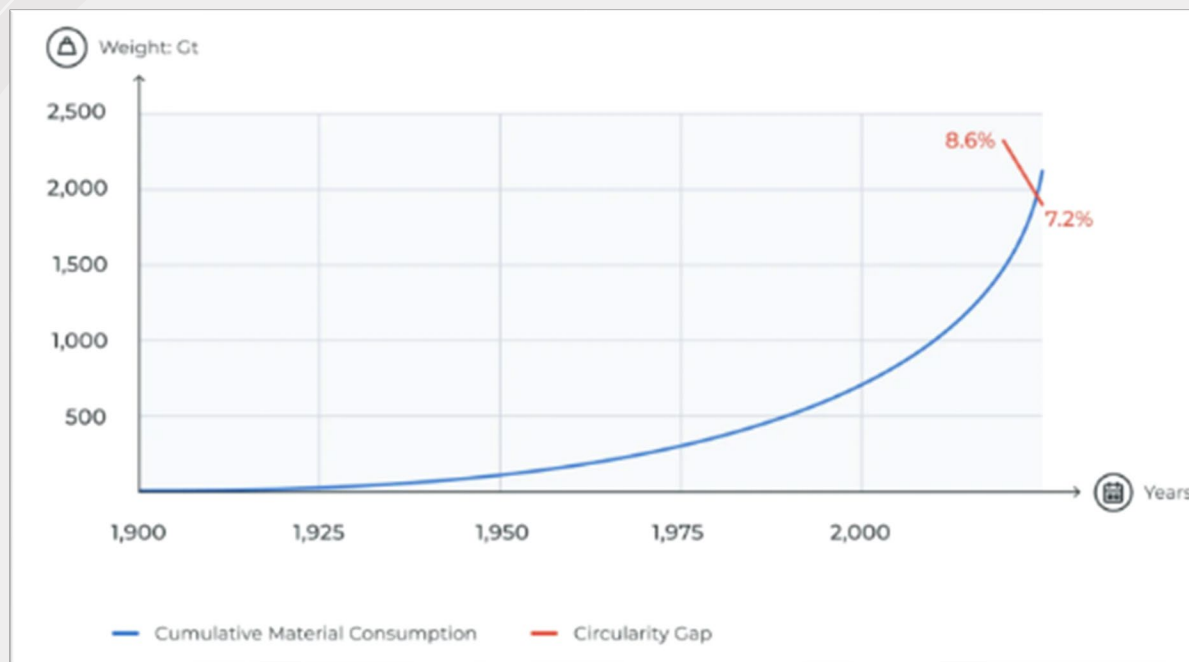
CIRCLE ECONOMY

In collaboration with:

Deloitte.

A background image showing the mast and rigging of a sailboat, with the text overlaid on a dark circular area.

THE
**CIRCULARITY
GAP** REPORT
2024



28% of global
consumption
since 1900...

**... was within
last 6 years**

**Never before have we needed to act more swiftly
in support of UN SDG 12:**

[12: Responsible consumption and production - The Global Goals](#)

- *12.4 – Waste Management – Zero Landfill*
- *12.5 – Waste Generation – Reduce Reuse Recycle*
- *12.6 – ESG Reporting – Clarity & Fact-based*
- *12.7 – ESG lead Procurement – Businesses have largest potential*





THE 'URBAN MINE' REFERS TO ALL OF THE AGEING AND UNUSED ELECTRONIC ASSETS SITTING IN PEOPLES HOUSES AND IN DATA CENTRES/STATIONARY CUPBOARDS ACROSS THE WORLD...

ACCOUNTS TO APPROXIMATELY **US\$65 BILLION** OF RAW MATERIALS SITTING DORMANT



TODAY, ONLY **17%** OF ELECTRONIC WASTE IS ACCOUNTED FOR VIA VIABLE **E-WASTE RECYCLING** PROCESSES

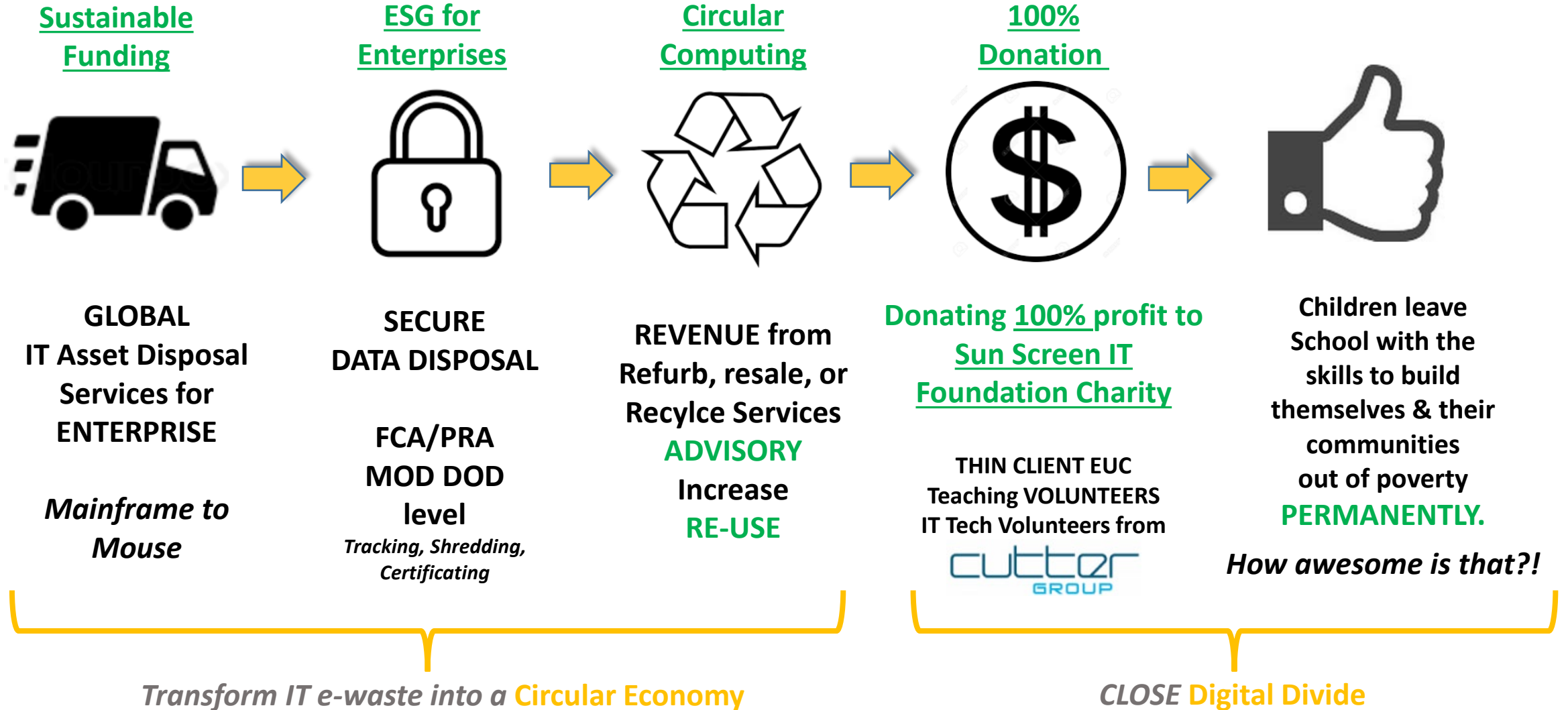


THE REST OF THE **WORLD** BOUNCES AROUND **19%** PUT ANOTHER WAY, OVER **80%** OF THE WORLD'S ELECTRONIC WASTE IS UNACCOUNTED FOR

We *Disrupted* ITAD to enable *Global Change*



Simple, Sustainable, Awesome. (+ Globally Unique)



ESG Reporting for ITAD Clients



Edinburgh Napier
UNIVERSITY



KPMG



McKinsey
Sustainability

Uptime
Institute®



**United
Nations**

stacker

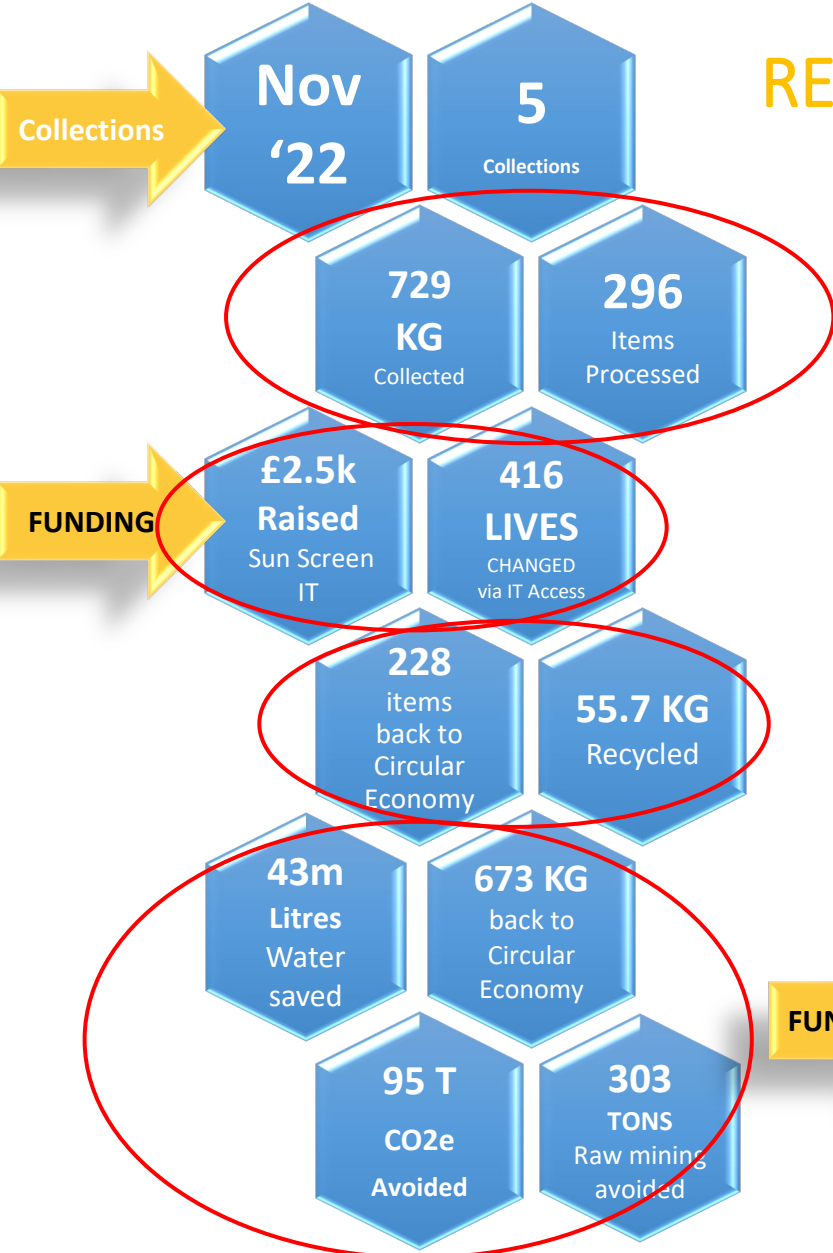


Deloitte.



ROYAL BERKSHIRE NHS FOUNDATION TRUST

REAL RESULTS – REAL OUTCOMES



**E
S
G**



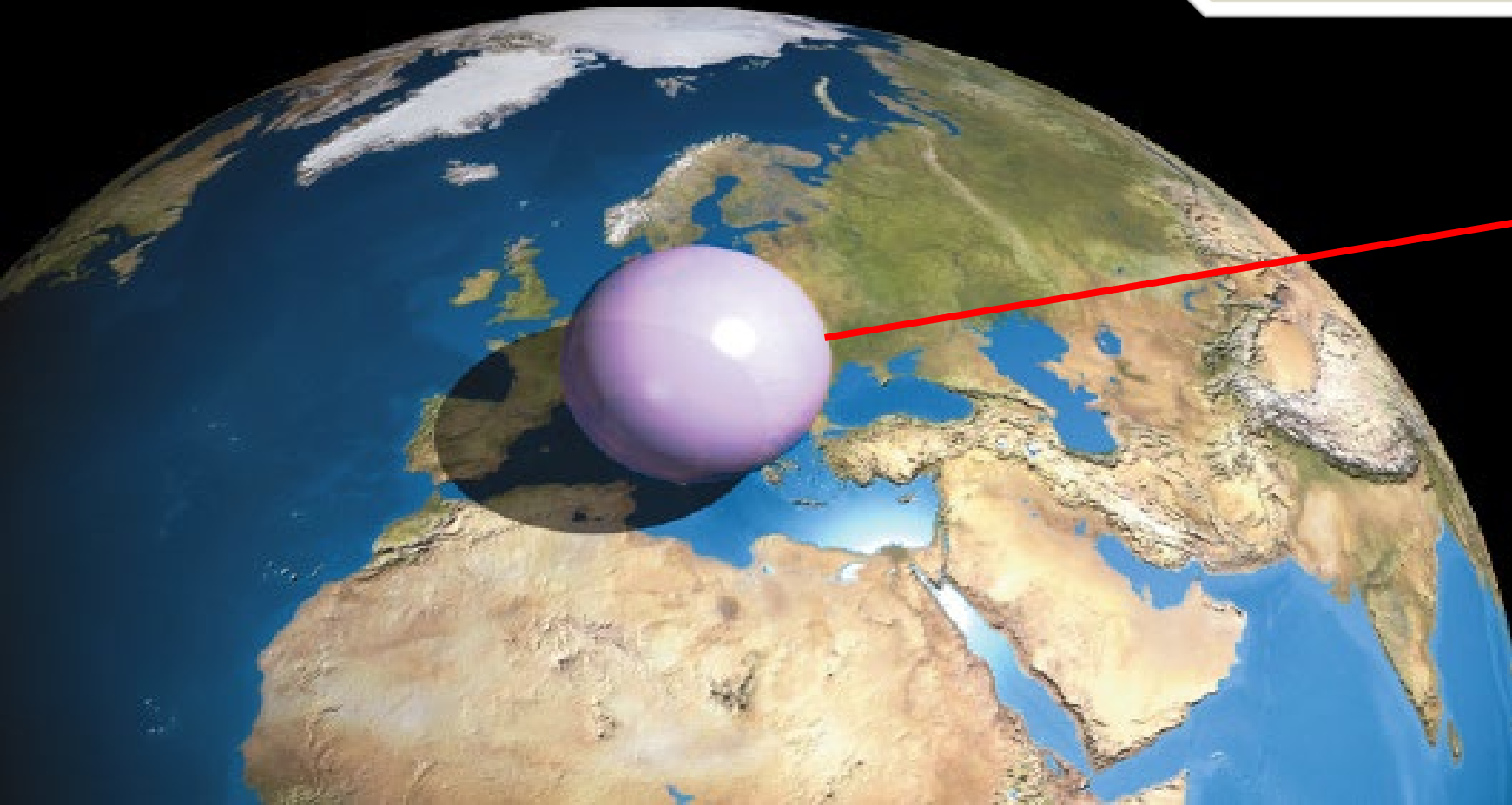
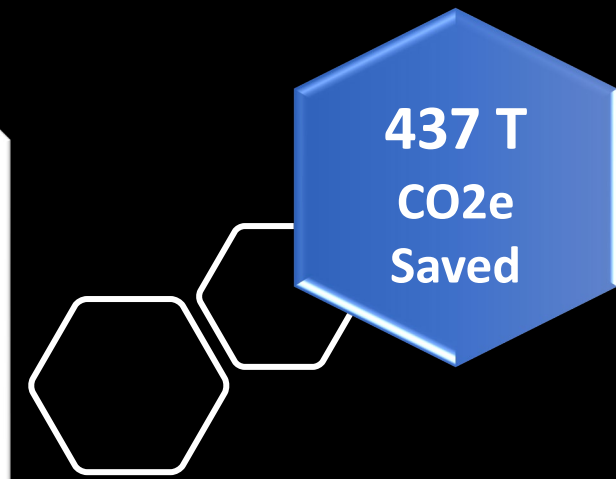
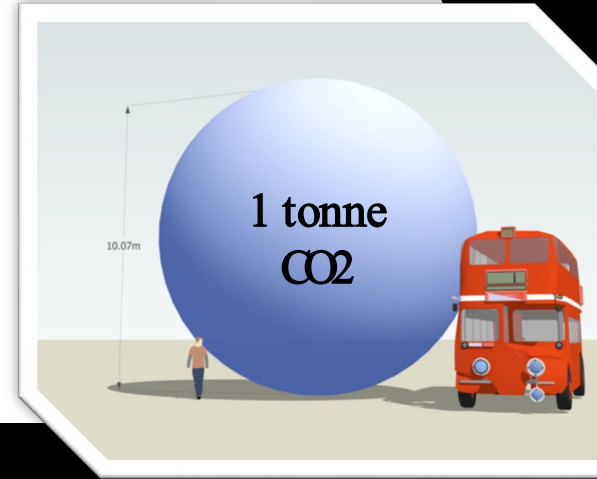
- Supporting UN's Sustainable Dev Goals
- Reducing Carbon, Water, & Energy
- Funding Life-changing Charities
- Assuring E-Waste away from Landfill



£1543 raised for Royal Berks NHS Charity

Client: \$6.4bn Fashion Brand

- ✓ 437 Tonnes Co2e avoided
- ✓ 100% Circular Servers & Storage



...All the air in our
entire atmosphere

Real *CHANGE*

2.9BN
Without
WWW_{95%}
1.99BN
School
age
998m
NO ICT
In school



Digital Divide = 998m Children... who can have a chance...

Giving 998m pupils a new Device

Ecological DISASTER.

IT doesn't have to be that way

..because...?

IGEL
IGEL OS



Constant supply
Viable 2nd User Devices

IGEL
OS

ONE OF THE WORLD'S BEST HOPES
for the
CIRCULAR IT ECONOMY
and the
DIGITAL DIVIDE

BUSINESSES



EDUCATION

What can you do?

..It only takes one Voice in an organisation..

To Ask: "Where does all our IT stuff go?"

Good Answer?

Please speak to us.

"NEVER DOUBT THAT A SMALL GROUP OF THOUGHTFUL, COMMITTED CITIZENS CAN CHANGE THE WORLD; INDEED, IT'S THE ONLY THING THAT EVER HAS."
-MARGARET MEAD

Nathaniel@SunScreenIT.com



UK Premiere “ITSPIRACY”

London: Weds 12th June 2024

Filmed on location from UK, Nepal, & Ghana, West Africa

IT Disposal – The **most** overlooked part of the Supply Chain

- ❖ The dark side of IT e-waste on the Digital Divide & Planet
- ❖ Circularity & IT processing in Europe
- ❖ Innovations & step changes with ethical IT Asset Disposal & Recycling
- ❖ Digital Divide - Sustainable IT Education access in areas of economic need



A united, committed, alliance – Taking Action to address IT’s Global Impact



The authentic delivery of ESG across BOTH Business and Charitable activities.

Appendices

Closing the Divide: **Real lives, changed..**



UK



Chelea
"Amazing - It's a new skill for me and I can put it on my CV."



Marion
No access before our deployment 2020
Now employed in Banking



"We use computers to learn , to connect to the World"

Ghana

"It will help the kids to learn – it's amazing"



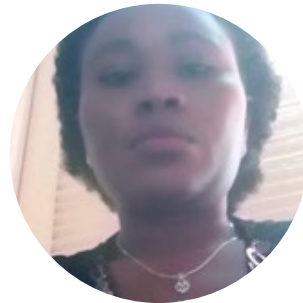
"a lot of these young women don't have access to IT at home"

Sierra Leone



Abdul

"I want to do Social work for the less privileged because someone helped me when I was in need".



Fracess – Sierra Leone

New IT skills – now working at "2 Young Lives" – Mentoring young mothers on building brighter futures



Nepal

"Before, we had to queue to use one computer.."



Outcomes Sierra Leone...



Sierra Leone – West Africa

- ✓ Sustainable Thin Client IT Access
- ✓ Over 2,000 local pupils per year
- ✓ Young adults Vocational Training
- ✓ Micro-Revenue for host school via night classes



IT Lab Donation - Nepal FY23

Shri Amar Jyoti School, Syangja, Pokhara.

High in the hills south of Pokhara, in the shadow of the Annapurna Himalayas – pupils cannot travel to reach Digital Hubs – but are now equipped with IT Education for a brighter future:

- 400 Pupils in rural Nepal
- Sustainable Thin-Client IT Lab delivered
- In Partnership with EduTech Nepal





IT Lab Donation – Ghana 2024

Presbyterian Junior High School – Akropong, West Africa

- 1800 Pupils (600 Junior, 1200 Primary) over 5 years
- Sustainable Thin-Client IT Lab delivered
- IT Lab & 6 Classrooms connected via Wide-Area Wi-Fi
- Delivered with volunteers from Cutter Group

cutter
GROUP



Manufacture
1 PC

190,000
Litres

WATER

2 Tonnes

MINING

400kg

CARBON

60.8 Trillion Litres pa

350 Million Tonnes pa

140 Million Tonnes pa

Global Desktop
Production
320m – 360m pa

CONSUMPTION

Jubilee Mine - SA
6,500 tonnes of
copper
Dillon Marsh

Just one Tonne of CO₂e

“Preventing emissions is orders of magnitude easier than trying to fix the problem afterwards.”

“Behind me you can see the volume of 1 tonne of CO₂ at atmospheric pressure.”

“It's enormous.

In a few hours long flight, we can often emit that amount (per passenger!!).

However, to remove that much CO₂ from the atmosphere for example, with #DACCS (direct air capture and storage), you need to pump that much air 35,000 (thirty-five thousand) times through a 20% efficient device.”

Avoiding CO₂e is far preferable....



The most sustainable energy and material is the energy and material we never needed



Diana URGE-VORSATZ · 3rd

Professor, Vice Chair of the IPCC, Director at Center for Climate Change and Sustainable Energy Policy, Central European University



ITAD Recycling metrics



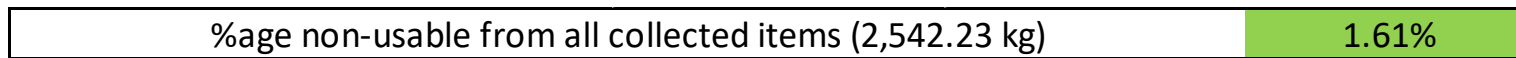
Asset Type	Asset Count Not fit for Refurbish into Circular Economy	Total Non-Refurbished KG	Non-Useable Recovered Material %age	Non-Useable Recovered Material Weight KG
TABLET	1	0.77	7.00%	0.0539
DESKTOP	22	121.68	2.00%	2.4336
LAPTOP	29	50.43	2.00%	1.0086
HDD	63	43.90	3.00%	1.317
SSD	86	24.73	3.00%	0.7419
ALL-IN-ONE DESKTOP	114	875.85	4.00%	35.034
Internal SSD	117	7.41	4.50%	0.33345
Grand Total	432	1124.77		40.92245

Important Factors:

- Strict R2 & AATF Laws ensures:
- ZERO land-fill Assurance
- Of entire 2.542 tonnes Collected
 - 1.61% Non-Useable**
 - 40.9kg – Waste**
- 100% Hazardous Waste avoided

Highest Weight Items Recycled:

- Desk Phones
- Network Devices
- Desktops
- Printers
- Monitors
- HDD
- Laptops
- Printers



Responsible
Recycling™

Observations & Advisory

Continual Improvement for your ITAD Service



✓ Grade of your Equipment – Optimising Residual Value

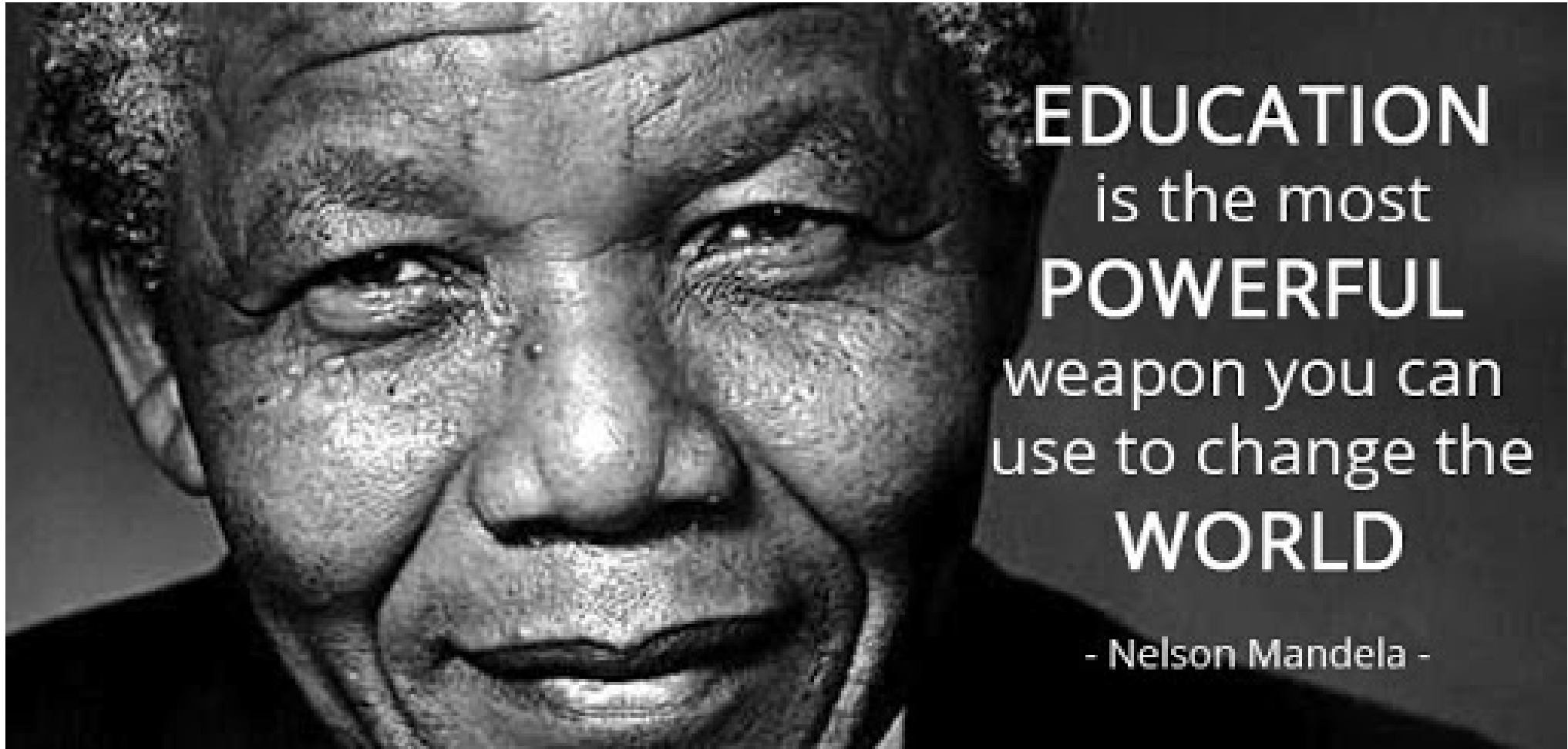
- Grades A,B,C = Resold into Circular Economy
 - ✓ • COST REDUCTION
 - ✓ • ENVIRONMENTAL WIN – CO2e, H2O, Raw Mining
- **However – 71% – Non-Refurbished**
 - **INCREASING YOUR COST**
 - Missing the environmental opportunity

Asset Type	Re-Sold into Circular Economy (Grades A,B,C)	Recycled	Totals
TABLET		1	1
COMPUTER COMPONENT	2		2
DESKTOP	13	22	35
LAPTOP	25	29	54
HDD		63	63
SSD		86	86
Internal SSD		117	117
ALL-IN-ONE DESKTOP	139	114	253
Sub Total	179	432	611
Percentage	29.30%	70.70%	

✓ 3 Recommendations – Buying & Retiring Kit to maximise Residual Value

1. Ask us how to **optimise ITAD collections & storage** to decrease damage – and MAXIMIZE sale returns
2. What is the strategy for lifecycle of each item? 2/3/5 years?
 - Ask us for a **Residual Value Appraisal for your entire Infrastructure**
3. Have you considered Cost reduction, buying Refurbished IT from us?
 - Many items are now available as 2nd User – achieving both **COST and ENVIRONMENTAL improvements**





EDUCATION
is the most
POWERFUL
weapon you can
use to change the
WORLD

- Nelson Mandela -