

Resource not Waste. Supporting the circular economy post pandemic

planzerocarbon.com

@Mitie Plan Zero



Welcome

Nick Carter

Commercial Director - Waste and Environmental , Mitie



Agenda

08:30-08:35 | Welcome by Nick Carter

08:35-08:50 | Nick Carter – Mitie: The circular economy - re-imagining a world without waste

08:50-09:05 | Kevin Green – Mitie: Waste Match - re-establishing the value of unwanted assets

09:05-09:20 | Peter Mather – Mitie-MMC: Sustainable return to the office - rightsizing the estate through re-use

09:20-09:35 | Jon Wyss – Steelcase: Sustainable procurement - in with the new and with the old

09:35-10:00 | Discussion / Q&A



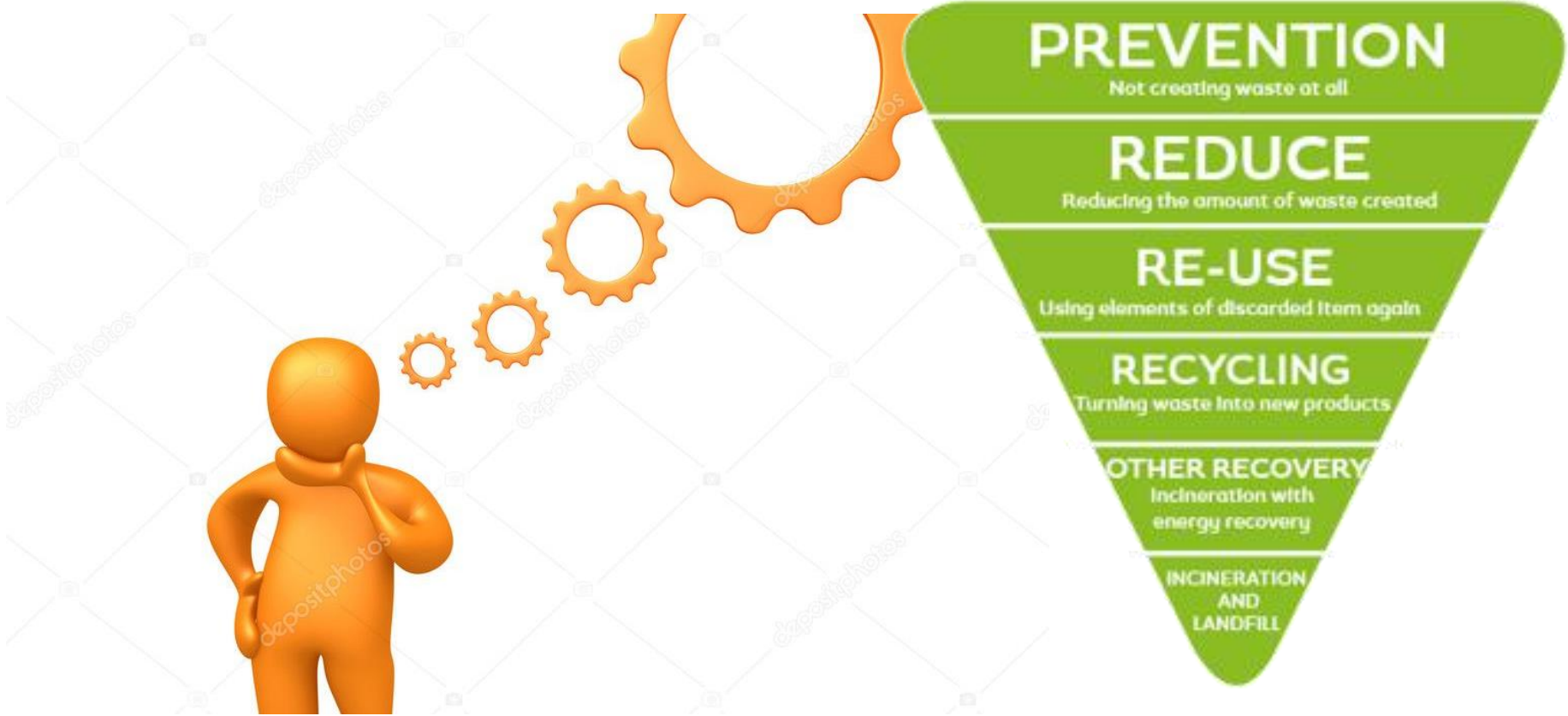
Re-imagining a world without waste

Nick Carter

Commercial Director - Waste and Environmental, Mitie



The Waste Hierarchy



Single Use Cups



482.1 tonnes of plastic waste saved so far 2019/20*	Plastic Items Removed 2019/20	Saving Per Annum	Converted to tonnes**
	Disposable cups from Keep Cups (vending and café)	21 million	378
Condiment Sachets	14.4 million	14.4	
Plastic Cutlery Items	4.3 million	12.9	
Cold Water Machine Cups	10 million	70	
Foam Sanitiser	6221 kg	6.2	
PVA sachets	596 kg	0.6	

*Single use items such as cups and cutlery have been temporarily reintroduced as a result of CV19

Cardboard Boxes

It takes roughly 17 trees to produce just one tonne of Cardboard Boxes.



Effluent Treatment Sludge



Turning it into an opportunity...



The screenshot shows a web browser window with two tabs. The active tab is titled 'What is World Without Waste?' and the address bar shows the URL 'https://www.coca-colacompany.com/faqs/what-is-world-without-waste'. The page header includes the Coca-Cola logo and the text 'THE Coca-Cola COMPANY'. The main heading is 'What is World Without Waste?'. On the left side, there are three social media icons: Twitter, LinkedIn, and a plus sign. The main content area contains the following text:

We aim to help collect and recycle a bottle or can for every one we sell by 2030.

That's our vision for World Without Waste, an ambitious environmental program we launched in 2018.

What role can Coca-Cola play in solving the plastic crisis?

The world has a packaging problem. As the world's biggest beverage company, we have a responsibility to help solve it. That's why we're working to:

- **Make our packaging 100% recyclable** by 2025
- **Use 50% recycled material** in our bottles and cans by 2030

And, as we work toward a World Without Waste, we aim to collect and recycle a bottle or can – regardless of where it comes from – for every one we sell by 2030.

Waste Match - re-establishing the value of unwanted assets

Kevin Green
Waste Match Director, Mitie



Waste V Assets

Assets only become waste when they become inconvenient:

[WasteMatch - Linking Resources on Vimeo](#)



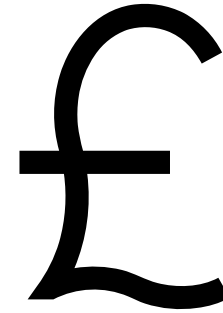
Time/Timing

“Time constraints can be mitigated through planning asset disposal as an integral part of any projects.”



Space

“Off site storage and just in time collections can mitigate the inconvenience of limited space”



Money

“Realising the value of an asset should always result in a cost saving if properly planned”

More Than Furniture

Waste Streams



Industrial Equipment

Clothing

Catering

Furniture

IT Equipment

Lab Equipment

Vehicles

Consumables

School Assets

QHSE – Reusing safely

Implications of providing office/contract chairs for employees who are working at home during and after the Covid-19 Pandemic

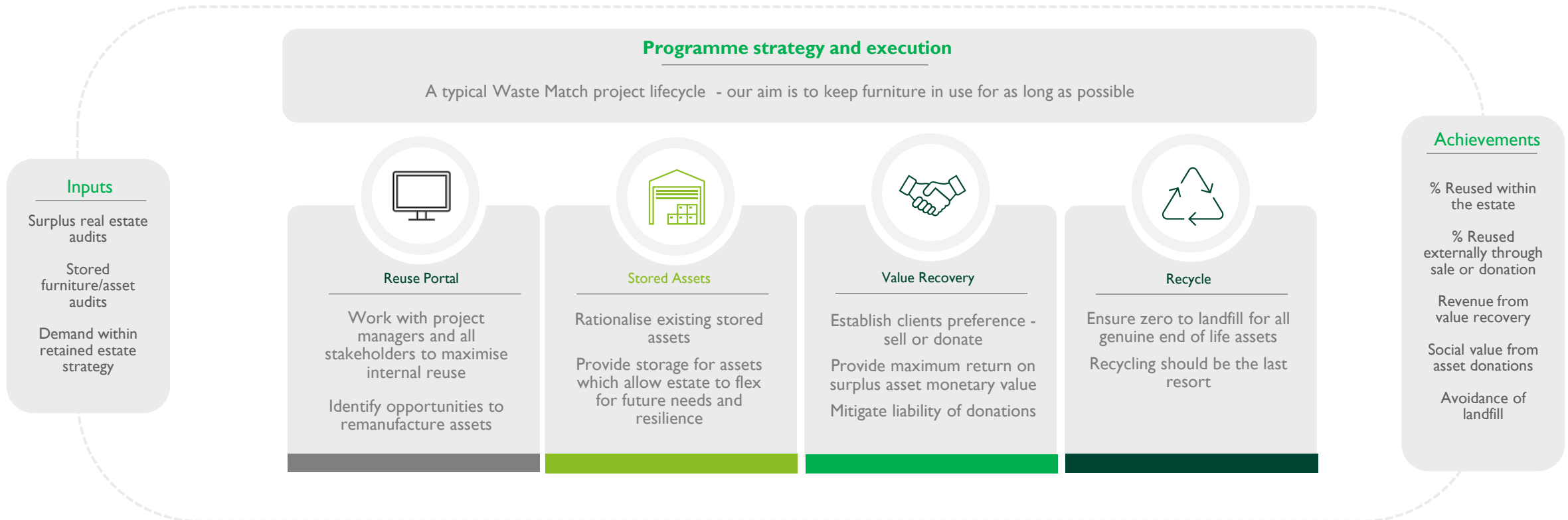
On behalf of its members, the Furniture Industry Research Association has sought clarification from the OPSS (Office for Product Safety Standards) via the Hertfordshire Trading Standards Office (TS), to determine if the office chairs in use in the home environment are required to comply with the UK's Furniture and Furnishings (Fire) (Safety) Regulations 1988 (FFFSR-1988 Regulations) in circumstances where they have already been tested to BS 7176: 2008 + A1; 2011.

The response from OPSS (Office for Product Safety Standards) and Hertfordshire Trading Standards was clear as follows:

"The Furniture and Furnishings (Fire) (Safety) Regulations 1988 set fire safety requirements for upholstered domestic furniture sold in the UK and it is important that fire safety provisions are upheld and maintained. We are not in the position to relax the requirements of the FFFS Regulations or grant an easement as a result of COVID-19. Therefore, office furniture ordinarily intended for use in non-domestic settings would need to fully comply with the requirements of the FFFS Regulations if it is supplied for private use in a dwelling."

What to do with Surplus Assets?

Reuse, Store, Sell, Donate, Recycle



Create better visibility of assets from across the estate, including those currently in storage

Identify opportunities to reuse surplus assets within your estate

Achieve best social and financial outcomes for any genuine surplus assets with zero to landfill and full reporting

Outcomes

Mitie Waste Match works with our clients to keep assets in use for as long as possible

Minimising need for virgin material + energy to make new

£1.9m



Savings against strip out costs and costs of change management for clients

315,000



Individual items of furniture reused

12,000



Tonnes of assets reused equivalent to over 1,000 London buses

21,000



Tonnes of CO2 saved - equivalent of 2.6 billion smart phones charged

£1.2m



Value of donations to charity



Charity Engagement

Charities are stretched to support their own work from home and office refit strategies.

We engage our charity network deeply to ensure we are meeting their current needs

Selling assets and donating the money may suit most struggling charities better than assets that they can't use.

“Consider selling surplus assets and donating money to support preferred charities rather than office furniture that they can't use”

“Furniture can be remade to get the asset you need from the one you already have”

“Mitie Waste Match charity process has always been at the heart of what we do”

Sustainable procurement - in with the new and with the old

Jon Wyss

Strategic Account Director, Steelcase



An aerial photograph of a coastal village with a semi-transparent green overlay. The overlay contains the text 'SUSTAINABLE PROCUREMENT @ IE & STEELCASE'. The background shows a dense cluster of buildings with corrugated metal roofs, palm trees, and a body of water with several small boats.

SUSTAINABLE PROCUREMENT @ IE & STEELCASE

Post COVID:

How is our market changing?

New Sustainability targets and goals being adopted by clients
A new ESG Mindset

There is a new Focus on the environment, social values, employee health.

All these things tie directly into something called 'ESG' (Environmental, Social and Governance). This is a way of thinking about business that emphasizes the environmental, social and governance impact of everything we do. _____



Environment

Carbon neutral now – and reduce emissions by 50% to 2030



Social

Social innovation



Governance

Distributed decision-making meets empathetic leadership



Certifications



BREEAM®



SKArating

Building certification guidance documents: WELL

1. Introduction and overview



WELL Building Standard®
accelerating good design

Steelcase

2. WELL Credit Categories

- AIR
- WATER
- NOURISHMENT
- THERMAL COMFORT
- SOUND
- MATERIALS
- LIGHT
- MOVEMENT
- MIND
- COMMUNITY

3. Product / Application Contribution guidance (Table)

STEELCASE CONTRIBUTIONS			
WELL CREDIT	WELL REQUIREMENTS	STEELCASE CONTRIBUTION	STEELCASE CONTRIBUTIONS
AIR FEATURES			
4 VOC Reduction			
Req. 5.1: Furniture and Furnishings	<ul style="list-style-type: none"> • A. ANSI/HPM1-05.2011 Furniture Sustainability Standards Sections 1.1.1 and 1.2.2, testing in accordance with ANSI/HPM1 Standard Method M7.1.2011. 	<ul style="list-style-type: none"> • Steelcase AIA Indoor Advantage Gold certifications verify that our products meet the criteria - certain product options for upholstery may be available, and are listed out in the contribution guidance. 	
25 Toxic Material Reduction			
Req. 1.1: Chemical Compound Limitation	<ul style="list-style-type: none"> • No performance (PPE) compounds present in the following categories: <ul style="list-style-type: none"> • a. in total amount or greater than 100 ppm in components that constitute at least 1% by weight of a furniture or flooring (disassembly-ready) 	<ul style="list-style-type: none"> • Any PPEs that may be present in the product will be less than 100 ppm and constitute less than 1% of the total weight of the product. • For all fabric materials, read the specifying section for all relevant surface materials, and address the possibility of products meeting this requirement. 	
Req. 2.1: Flame Retardant Limitation	<ul style="list-style-type: none"> • A. All furniture flame retardants are limited to the following percentages: <ul style="list-style-type: none"> • 0.2% (100 ppm) in the amount detectable by fire tests. 	<ul style="list-style-type: none"> • Most Steelcase products are free of halogenated flame retardants (FRs), in FR foam with a low density, which may be regulated by local, state, and federal agencies. Check with the Global Sustainability team for verification of specific products for your product type. A helpful guidance document is referenced in the "Responsible Sourcing" document. State Chemical Challenge compliance list in which products have been verified to be FR-free, along with other chemical lists in this standard. 	
Req. 3.1: Off-gas Limitation	<ul style="list-style-type: none"> • COV at 20°C (68°F) (TVOC) or COV at 25°C (77°F) (TVOC) are limited to the following percentages in 0.1% (100 ppm). 	<ul style="list-style-type: none"> • Product composition of materials to be less than 100 ppm without the presence of VOC components - all Steelcase "Choice" certified products meet this requirement. Check with the Global Sustainability team for verification of specific products. 	
Req. 4: Indoor Air Quality (IAQ) Limitation	<ul style="list-style-type: none"> • Each product, based on its volume, must be tested for formaldehyde, benzene, and toluene. 	<ul style="list-style-type: none"> • Steelcase products are free from prohibited formaldehyde-releasing materials and are compliant with the formaldehyde-free standard. However, the formaldehyde is produced by certain foam and is not a concern for the health of the building occupants. For a complete list of the manufacturing process and test requirements, see the product information in the contribution guidance. 	
Req. 5.1: Chemical Compound Limitation	<ul style="list-style-type: none"> • A. No formaldehyde is found in the following categories: <ul style="list-style-type: none"> • 100 ppm 	<ul style="list-style-type: none"> • Steelcase products contain formaldehyde-free materials. However, formaldehyde is a byproduct of the manufacturing process and is not a concern for the health of the building occupants. For a complete list of the manufacturing process and test requirements, see the product information in the contribution guidance. 	

SUSTAINABLE PROCUREMENT BULLET POINTS



Re-use

Review existing product stock

Restore – validate if existing products can be repurposed e.g. desks reconfigured, soft seating reupholstered etc.

Is buying used an option?



Review

Review manufacturers

Are they using renewable energy for their factories, what is their net zero roadmap?

Review their waste management approach.

Review product transportation and packaging.



Advise

Advise on product selection & specification

Select natural renewable materials like wood, natural fibres for fabrics, cork, bamboo, etc. from our vetted suppliers' ranges. Favour products with a high recycled and recyclable content. Review if products are easy to disassemble to ensure recycling of parts is possible.



Product Documentation

We collate product and supplier certifications, EPDs, PEPs, HPD, product fact sheets that list materials used, recycled material content, recyclability, carbon footprint and other environmental information.

SKArating®

BREEAM®



Warranty

Select products that are durable and easy to maintain.

Does the manufacturer provide extended warranties, spare parts, repair options?

Review product continuity.

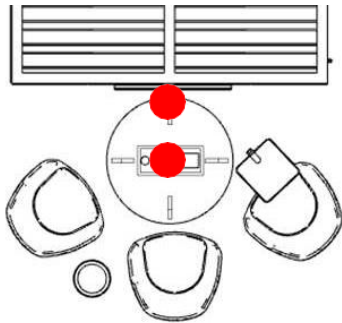


Example of project specific product specification

1A Curated Cabin



Visual needs updating



● Recommended floor grommet locations

X-TA-01 Jura
James Burleigh



£ xxx

Dia 1200mm x H660mm
Extron cubby ready

Finishes:
Top: Standard laminate colour
Large range of laminate colour options available
Base: Oak



X-CH-01 AAL93
Hay



£ xxx

Finishes:
Fabric: Steelcut Trio 3 range
Legs: Oak veneer base black stained

Mix 2 or more upholsteries



Kvadrat
Steelcut Trio 3 0686

Kvadrat
Raas
0942
£ xxx



X-LT-01 Fusion
Connection



£ xxx

H660mm x D470mm x L460mm
Finishes:
Oak Veneer Plywood Square Top
Textured Black Metal Base



X-CH-06 Bob stools
Modus



£ xxx

H440 x W335 x D335

Finishes:
Natural cork



SUSTAINABLE STEWARDSHIP ON EXISTING & NEW FURNITURE



Click here +
To watch the case
Study of the UK
Bank project

GLOBAL BANK PROJECT

- ✓ 300,000 sqft @ £4M
- ✓ WELL Platinum
- ✓ 40+ suppliers vetted
- ✓ Developing asset strategy for multiple sites

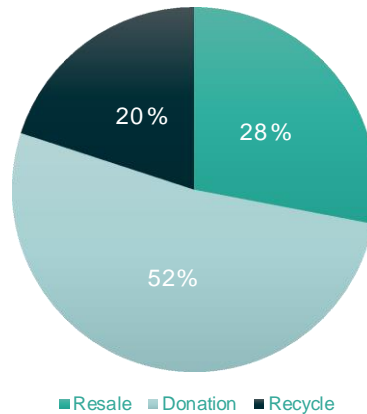
FINASTRA

- ✓ 42,710 sqft @ £1.2m
- ✓ Refurbished existing furniture saving & reused to the saving of £200k

ITEM	QTY	WEIGHT	PROJECTED OUTCOMES
Task Chair	2366	83	Resale 90% Donation 10% Recycle 0%
Desks	2366	118	Donation 80% Recycle 20%
Pedestals	225	8	Donation 40% Recycle 60%
Lockers	436	13	Donation 80% Recycle 20%
Cabinets	378	24	Donation 20% Recycle 80%
Meeting Chairs	466	16	Donation 80% Recycle 20%
Meeting Tables	119	5	Donation 70% Recycle 20%
Soft Seating	35	3	Donation 100%

*A zero to landfill policy will apply

PROJECTION OUTCOME



UK BANK PROJECT

- ✓ FY19 650,000 sqft @ £3m p.a.
- ✓ SKA Silver achieved
- ✓ Contract saving £750k
- ✓ 20% furniture reused
- ✓ FY20 529,359 sqft
- ✓ 6 buildings across UK
- ✓ 5000 desks installed, including 2000 up-cycled desks

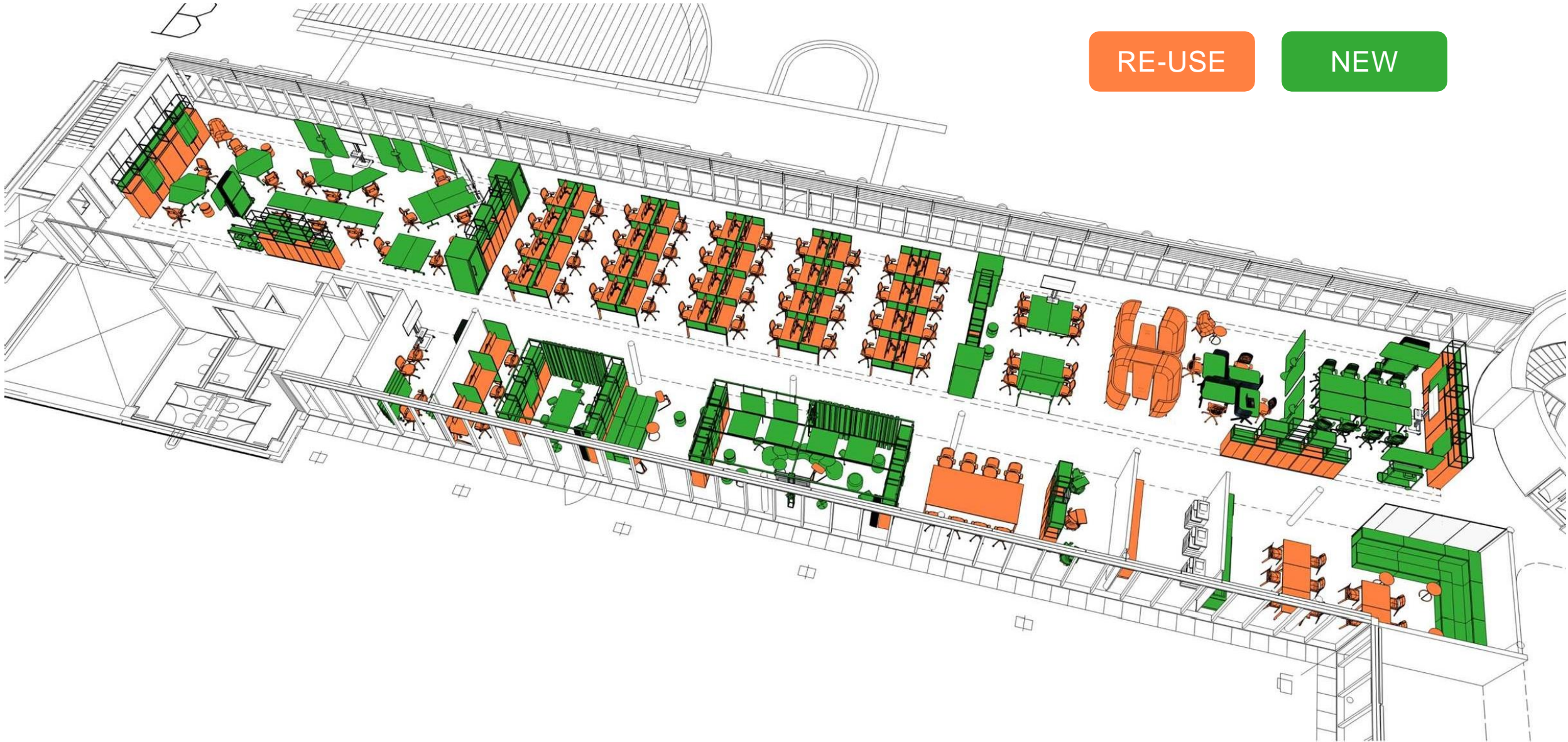
NEW DESIGN PROPOSAL



TEST PLAN RE-USE & NEW

RE-USE

NEW



3rd party supplier commitment example

All Frövi products are certified SCS Indoor Advantage Gold

This means that our products have been certified to have low hazardous VOC emissions that can help to reduce impact on indoor air quality.




SUSTAINABLE PROCESSES

Reducing or recycling any waste products and components. Using environmentally kinder processes like our EPD powder coating and natural, untreated materials where possible.



SUSTAINABLE MATERIALS

We are consciously choosing sustainable materials when designing new products and looking at our existing portfolio for how we can improve.



SUSTAINABLE PACKAGING

80% of our packaging is cardboard, of which 80% is from recyclable sources and 20% from virgin material. All the plastic that we use can be recycled too.



SUPPORT & LEARNING

As reputable source of knowledge, Frövi aims to educate and create awareness of the benefits of wellbeing, sustainability and the WELL Building Standard™.

As we grow and learn more so will we share our expertise and understanding with you to support you in your wellness journey.

Whatever the need or budget rest assured that we have a solution for you.

Environmentally conscious certifications

At Frövi, we care about the environment and not only recognise but appreciate that our operations may have an impact locally and ultimately, globally. We don't claim to be saving the world with a few generic environmental statements but as a company and individuals we do realise that we can make a difference.

We address the latest environmental issues through our ISO14001 Environmental Management System, which is under continual

review and assessment to ensure that it evolves to suit the ever-changing needs of the environment and our business.

In addition to our direct efforts, we are registered with regulatory bodies such as FISP and FSC, that endorse our processes and demonstrate we are taking our environmental and corporate social responsibility obligations seriously.





FISP

Frövi have been taking great strides towards the reduction of our environmental impact during the manufacturing process.

We have increased our FISP [Furniture Industry Sustainability Programme] score from 56% in 2016 to 90% in 2020.

Our main areas of improvement were in the following areas:



<p>REDUCED ENERGY USAGE AS A % OF SALES</p> 	<p>PRODUCT DESIGNS THAT ARE ENVIRONMENTALLY CONSCIOUS</p> 
<p>REDUCED FUEL USAGE Reduced fuel usage by using alternative means of travel, saving 60,000 miles of road travel in a 12-month period.</p> 	<p>INCREASED RECYCLING RATES Waste chipboard re-used to heat factories and old metalwork recycled.</p> 

VOC TESTING

As part of Frövi's push for sustainable production and accountability for our designs and processes, we have partnered with SCS Global Services (SCS) Indoor Advantage™. Their stringent and internationally recognised tests on VOC emissions mean that we meet the highest Indoor Air Quality standards.

Frövi is committed to improving our impact on the environment. To creating a safe, healthy and sustainable future for us all. This important testing not only contributes to better and more healthy buildings but is a great help for those undertaking WELL or LEED Green Building Certification.

ISO ACCREDITATION

Frövi is a registered ISO 9001:2015 and ISO 14001:2015 company. These quality assurance and environmental management accreditations give customers and clients the peace of mind in all Frövi products.



Carbon Neutrality and Science-based Targets



ECO DESIGN PRINCIPLES IN ACTION: THE EXAMPLE OF THE THINK CHAIR



Eco-Design
Management System Certificate
ISO 14006

Product of certified environmental quality and low emissions made for the circular economy with verified environmental information available.

- Available certifications: C2C, NF Environment, SCS IAQ Gold
- Verified environmental information (EPD)
- Product environmental profile available (PEP)
- Choice of Oeko-Tex/EU Ecolabel fabrics available
- Recyclability: 95%
- Recycled content: 28%

Asset interception and redeployment

With Eco'services, available in the French Speaking Markets, Steelcase is acting at each step of the product life cycle.

2008

Creation of Eco'Services

60 000

Number of processed workstations

180 000 m³

Volume of collected furniture

~30%

of furniture were reused



Sustainability

From Ocean to Office

How a new Steelcase fabric is reinvigorating the office and the ocean



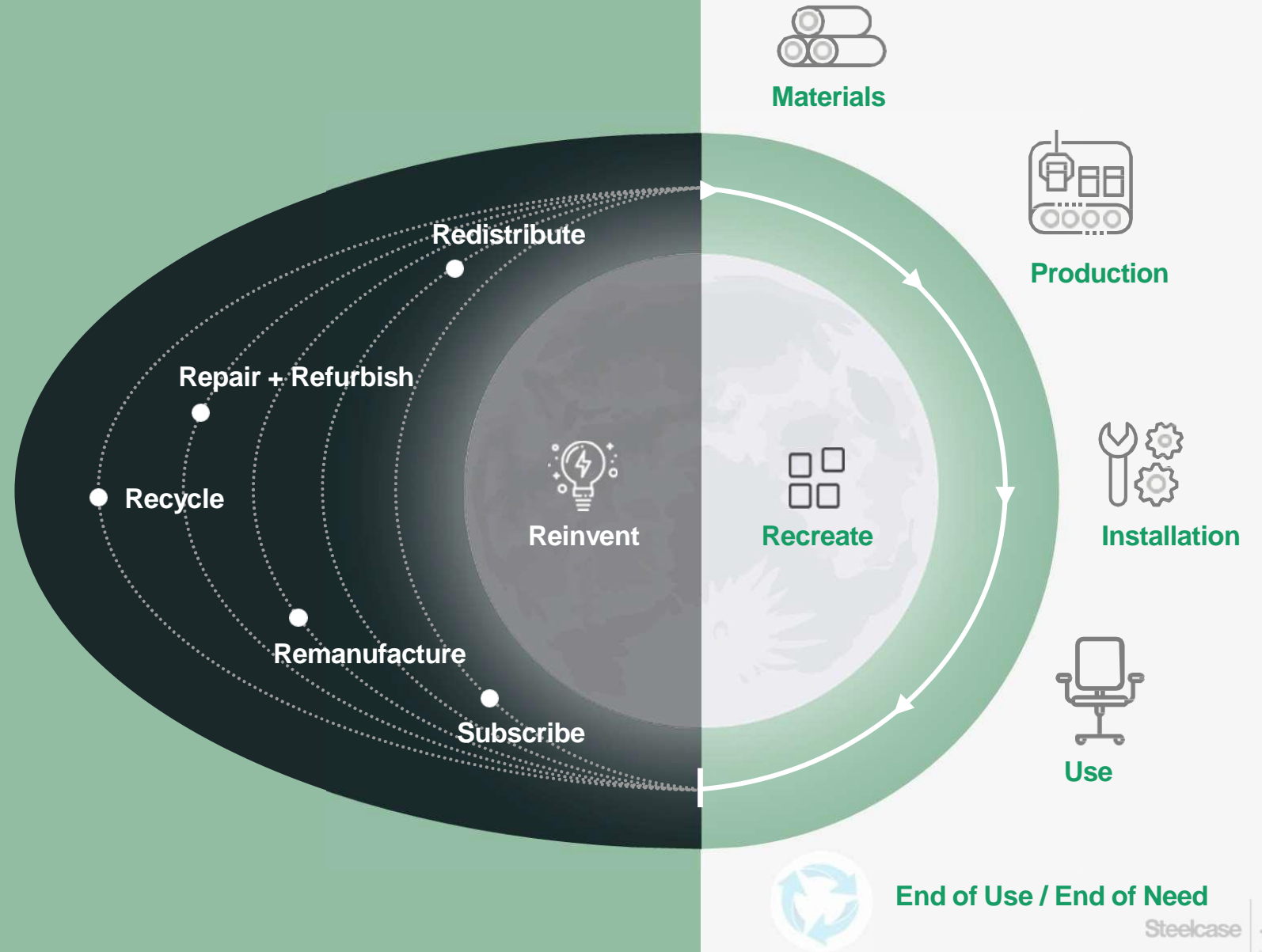
Every year, 12 million tons of plastic are dumped into our oceans. Much of that waste takes decades and even centuries to biodegrade*. Now, Intersection, a new and compelling screen and panel fabric made from Upcycled Marine Plastic has been developed by Steelcase, bringing new life to the office and removing ocean waste in the process.



What next?

Rethinking Business

How does our business model change in a circular economy?



Q&A

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Thank you

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