Circular procurement: how do we get there?

Frances Edmonds
Head of Sustainable Impact
HP Canada

© Copyright 2019 HP Development Company, L.P. The information contained herein is subject to change without notice.

Circular procurement:
how do we get there?
Radical
Collaboration!

What is Circular Procurement?

"Circular or Sustainable Procurement" ensures that buyers…

- …obtain the **best value for money** when purchasing…
- …the **most sustainable services and goods**…
- …from the **most sustainable suppliers,** in support of…
- …the organization's stated **purpose and strategic goals.**

From Bob Willard : Sustainability Advantage

GLOBAL100 2021 Most Sustainable Corporations in the World

Looking Forward – 2021 and Beyond:

Becoming the World's most sustainable and Just IT company by 2030

CLIMATE ACTION
PLANET

Drive toward a net zero carbon, fully regenerative economy

75% circularity for products and packaging by 2030[1]

NET ZERO greenhouse gas emissions across the HP value chain by 2040

Use **30%** postconsumer **recycled content plastic** across HP's personal systems and print product portfolio by 2025[2]

HUMAN RIGHTS
PEOPLE

Advance human rights, social justice, and racial and gender equality

Reach **ONE MILLION** workers through **worker empowerment** programs by 2030[3]

Women represent greater than **30%** of our workforce in **technical and engineering roles** by 2030

Achieve **50/50 gender equality** in HP leadership by 2030[4]

Currently **MOST DIVERSE** Board of Directors of any U.S. tech company

DIGITAL EQUITY
COMMUNITY

Break down the digital divide by enabling access to education, jobs, and healthcare

Accelerate digital equity for **150 MILLION** by 2030

Enroll **1 MILLION HP LIFE** users between 2016 & 2025

PATH **Partnership and Technology for Humanity** initiative will help pave the way toward digital equity for underserved communities around the world

THE CURRENT PROBABILITY OF STAYING BELOW 2 °C OF WARMING IS ONLY 5%!

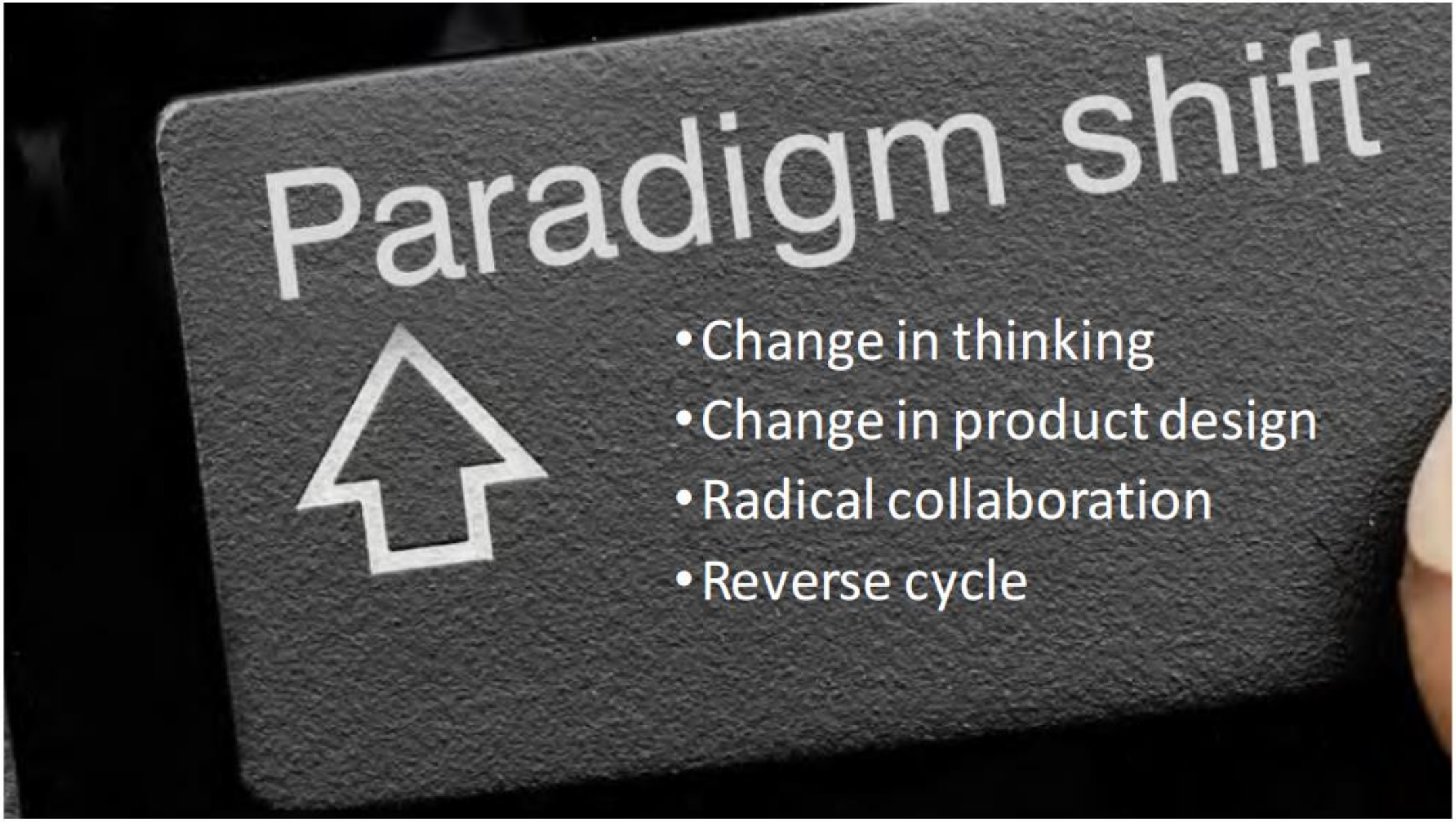
- If all countries in the Paris Agreement fulfilled their pledges to reduce GHG emissions, the probability rises only to 26%
- Nations need to increase their Paris Agreement pledges by 80% to have an even chance of staying below 2°C.

BUT, efforts needed for a pathway with a strong chance of meeting the 2°C target are not radical.

"Achieving the Paris Agreement's temperature goals is something we're not on target to do now, but it wouldn't take that much extra to do it,"

lead author Peiran Liu.

https://www.nature.com/articles/s43247-021-00097-8


Paradigm shift
•Change in thinking
•Change in product design
•Radical collaboration
•Reverse cycle

BARRIERS TO OVERCOME

Government policies and regulations have not kept pace: eg waste versus reuse shipping trans boundary

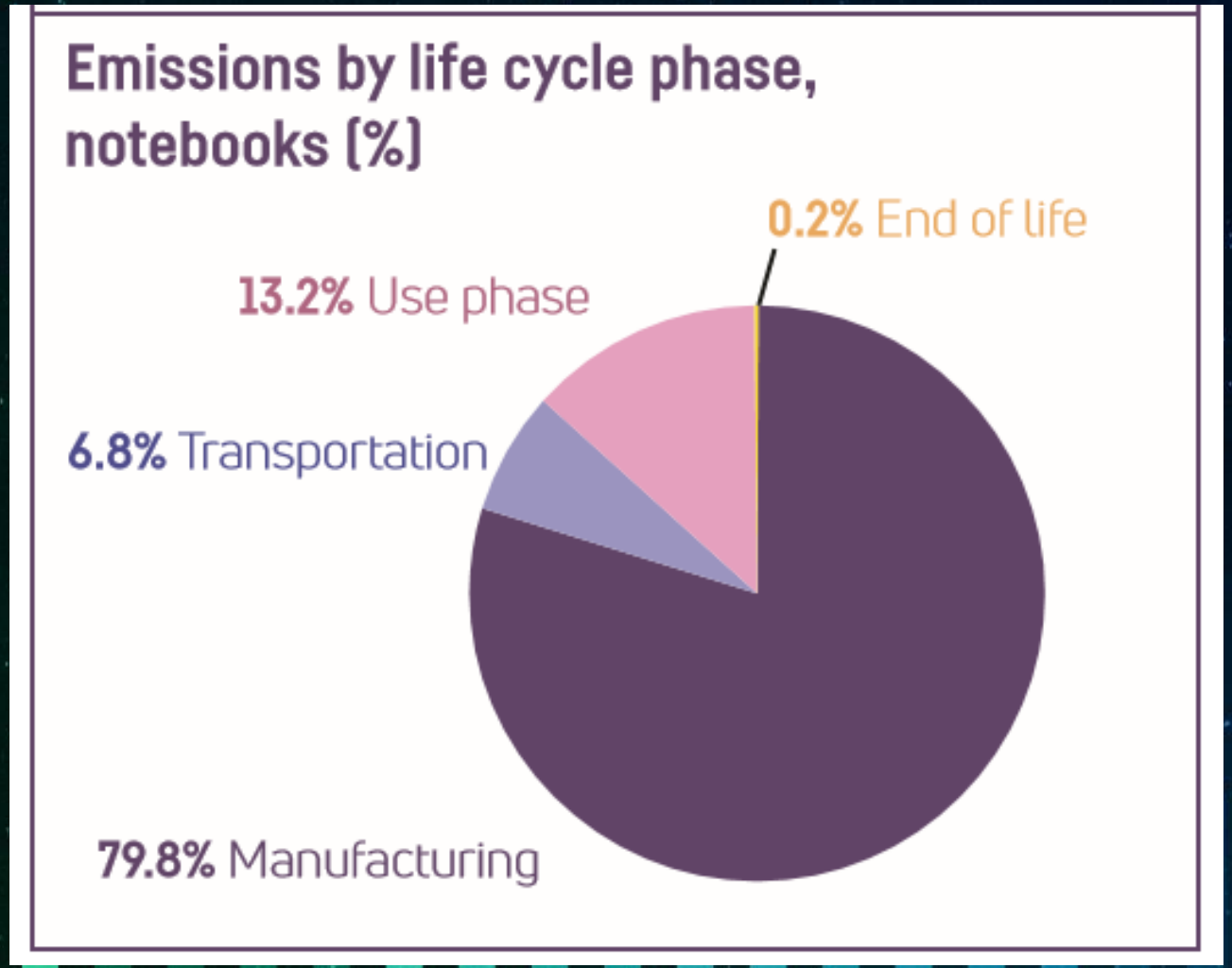
Retail channels and salesforces are traditionally incentivized to sell products not services = linear lock in

Circular models disrupt the status quo and new business models can destroy or cannibalize an existing value proposition- how does a company stay in business through the transition? If we cant spell this out then they wont do it

Material quality is essential to ensure technical performance

Collaboration is key as the journey is evolutionary

© Copyright 2020 HP Development Company, L.P.



Adding 2 years of use to an average PC reduces the carbon footprint by 30%!

From Circular IT management in practice TCO white paper

Product or Device as a Service has lower environmental impacts than retail for all Lifecycle Assessment categories

Compared with transactional sales, DaaS
- reduces GHG emissions by 25%,
- improves resource efficiency by 28%,
- decreases ecosystems impacts by 28%,
- and reduces human health impacts by 29%.

Impact reductions range between 25-30% compared to the linear model.

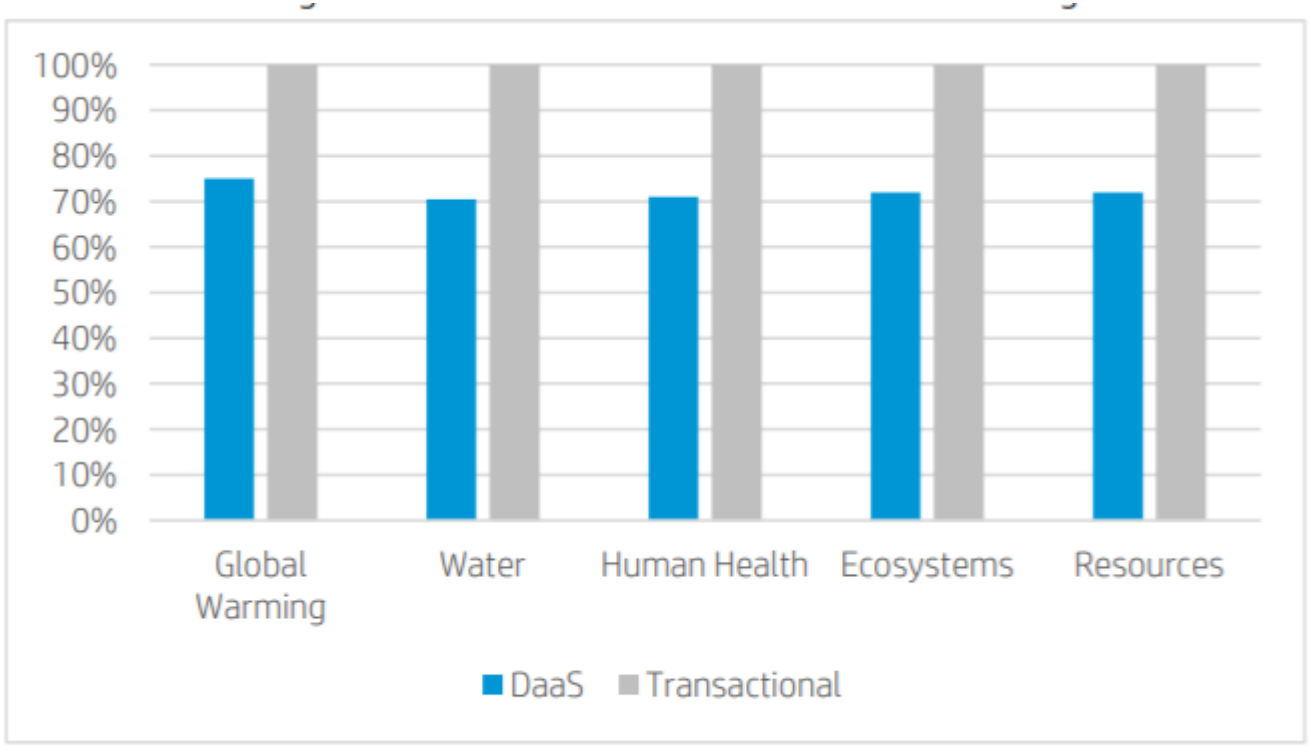
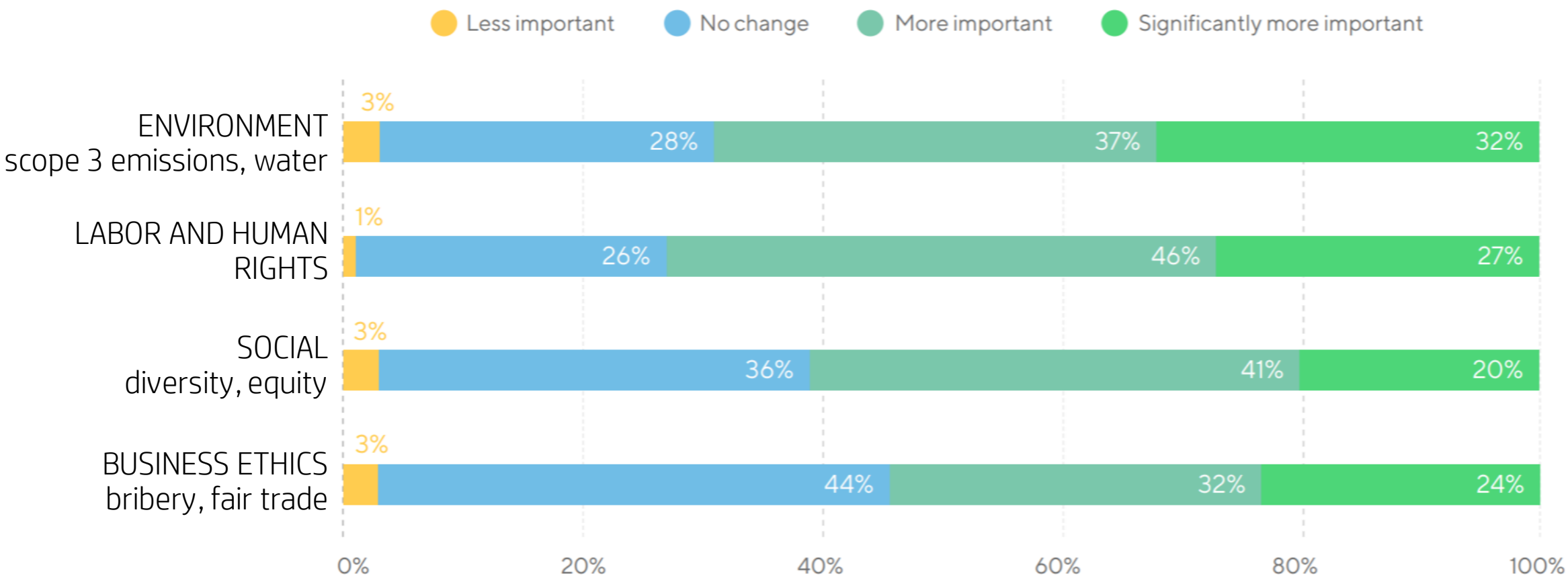


Figure 1: Comparison of Device as a Service to traditional transactional model

HP white paper https://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c06646300

Global trend, including changes due to pandemic

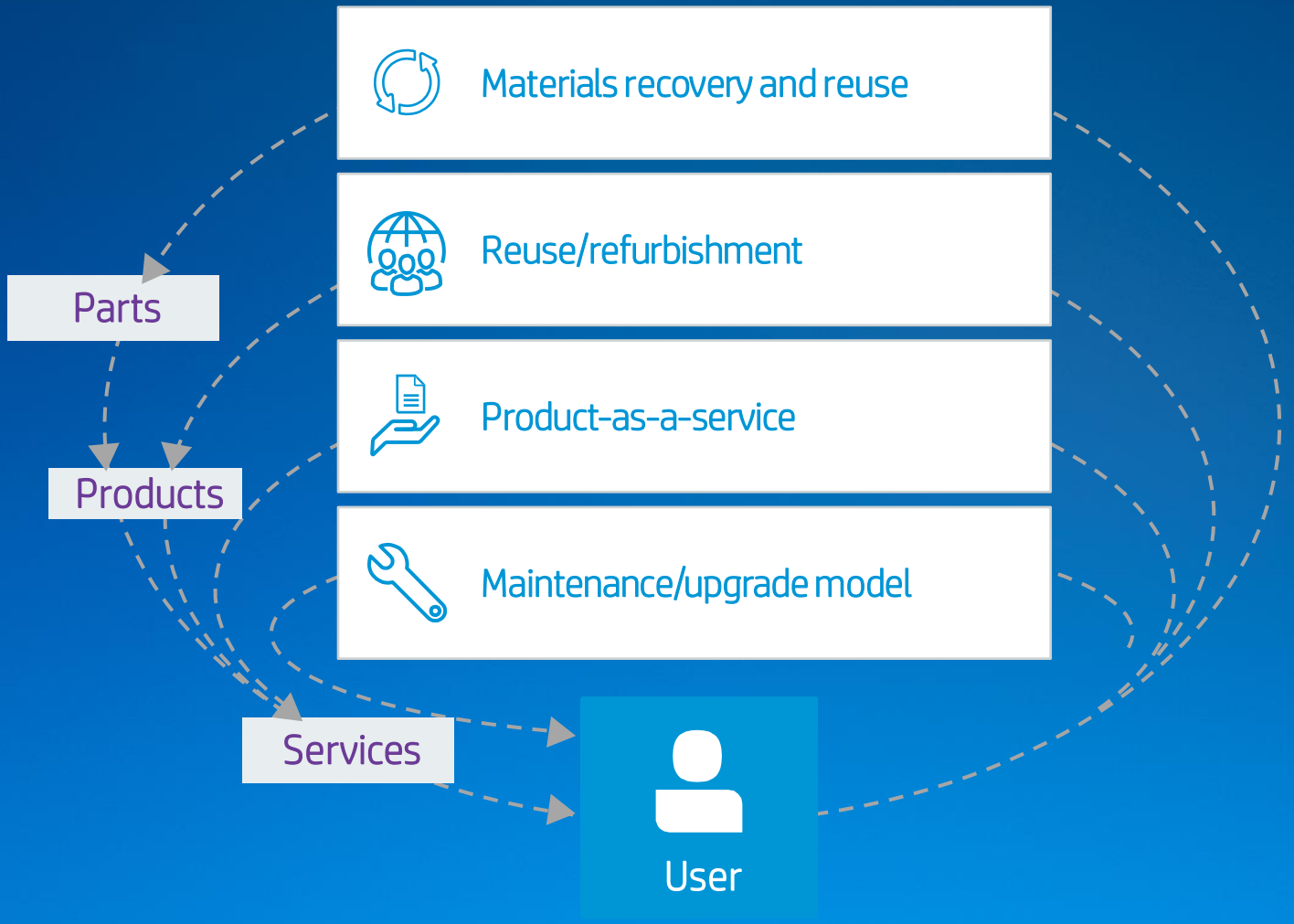
Have the following sustainability issues gained or lost significance in shaping your procurement strategy (supplier selection and management) over the next few years?



EcoVadis Sustainable Procurement Barometer 2021

HP’S Strategy & Goal of 75% product & packaging circularity by 2030

HP's circular economy strategy



Key RFX questions that probe these areas

- Do you have closed loop recycling what are your goals?
- What are your goals for circularity
- Do you offer refurbished products
- How do you ensure my end of first life product gets a second life?
- Can I buy as a service?
- Repairability:
  - Availability of spare parts,
  - Availability of repair manuals
  - Durability testing
  - Are products upgradable
  - What is the IFIXIT score?

COMMON CIRCULAR RFX QUESTIONS ASKED OF HP

Not necessarily the best questions as they risk greenwashy answers but:....

- Specify at least two examples of implementation of an **eco-design** approach among the products proposed in this contract
- Do you offer **refurbishment / retrofit services** for products sold / leased to your customers in order to lengthen devices' lifespan ? If no, describe all initiatives (existing / to come) you have undertaken towards this topic
- Beside new products, do you offer **remanufactured products** to your customers ?
- *How long do you offer spare parts,* minimum 3 years or more.
- How many **% of recycled plastics** do you use in the products, out of parts >25 g.
- Does the product meet **durability testing** according to MIL-STD 810H(droptest, temperature changes, humidity)
- How do you integrate **decarbonization** into your activities?
- How do you **measure sustainability** and decarbonization in your activities?
- What are your **End-of life options**?
- Refurbished products/programs (DRS), **repairability**,
- What is your stand on the **Circular Economy**

RECOMMENDED TOPIC AREAS TO ADVANCE CIRCULAR RFX

The single most impactful thing you can do is to buy as a service!

- Post consumer recycled content in hardware & packaging
- Spare part availability > 3 years bonus for longer
- Require multi attribute Eco Labels like EPEAT as mandatory minimums
- Durability testing
- Long life batteries for notebooks
- Carbon Neutral services like Managed Print

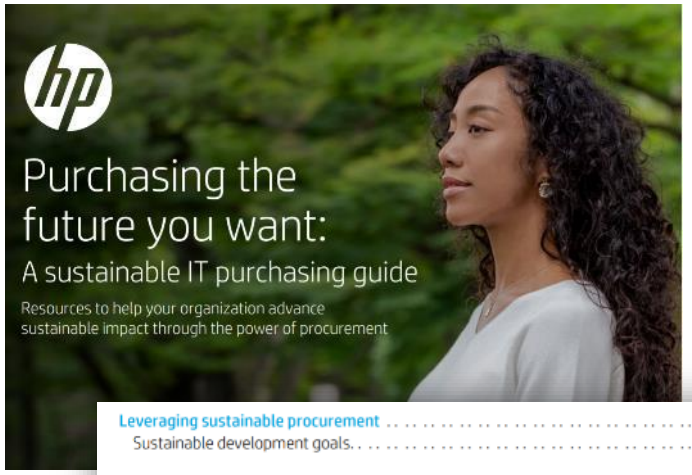
SOME EXAMPLES OF WEIGHTING OF SUSTAINABILITY IN TENDERS

COUNTRY	DETAILS	VALUE	WEIGHT of Sustainability in evaluation
Norway	Stavager Municipality, PC	2 M USD	60%
Germany	Federal customer, PC	>40 M USD	50%
New Zealand	Public sector, IT	X	40%

Most often *compulsory* criteria and 5-15% weight on *award* criteria (in selected EU countries).

HP's 3 + 1 Recommended procurement criteria and Purchasing guide

HP's Sustainable IT purchasing guide



Leveraging sustainable procurement . . . . PG. 3
Sustainable development goals. . . . PG. 3

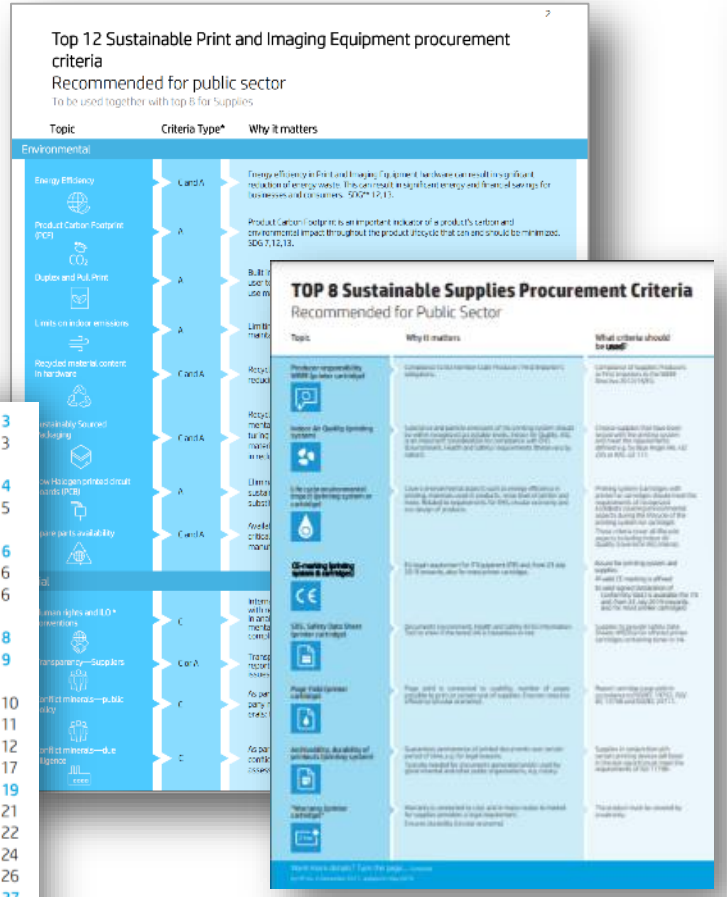
A model for change: The circular economy ecosystem. . . . PG. 4
Circularity drivers . . . . PG. 5

Organizational context: Sustainability goals & supply chain impact. . . . PG. 6
Align your procurement with your sustainability goals . . . . PG. 6
What are the impacts of your organization? . . . . PG. 6

How to evaluate circularity drivers . . . . PG. 8
Evaluating the design of products for circularity. . . . PG. 9
The importance of total cost of ownership (TCO), life cycle assessments (LCA) & carbon neutrality . . . . PG. 10
Ecolabels: A guide to buying with sustainability in mind . . . . PG. 11
Evaluating PC and print products. . . . PG. 12
Evaluating printer cartridges. . . . PG. 17
Evaluating supplier transparency & performance. . . . PG. 19
Human rights . . . . PG. 21
Transparency disclosures . . . . PG. 22
Supplier Transparency: What to include in request for proposal (RFP) questions . . . . PG. 24
Forests and sustainable procurement . . . . PG. 26
Evaluating supplier relationships. . . . PG. 27

Accelerate the circular economy . . . . PG. 29

Top 12 Sustainable Public Procurement criteria for **Print** Hardware, Top 8 for **Supplies**


Top 12 Sustainable Print and Imaging Equipment procurement criteria
Recommended for public sector
To be used together with top 8 for Supplies

Topic | Criteria Type* | Why it matters

Environmental

Energy Efficiency — C and A

Product Carbon Footprint (PCF) — A

Duplex and Pull Print — A

Limits on indoor emissions — A

Recycled material content in hardware — C and A

Sustainably Sourced packaging — C and A

Low Halogen printed circuit boards (PCB) — A

Spare parts availability — C and A

Human rights and L.O.* conventions — C

Transparency—Suppliers — C or A

Conflict minerals—public policy — C

Conflict minerals—due diligence — C

TOP 8 Sustainable Supplies Procurement Criteria
Recommended for Public Sector

Topic | Why it matters | What criteria should be used?

Producer responsibility WEEE (printer cartridges)

Indoor Air Quality (printing system)

Life cycle environmental impact (printing system or cartridge)

CE-marking (printing system & cartridges)

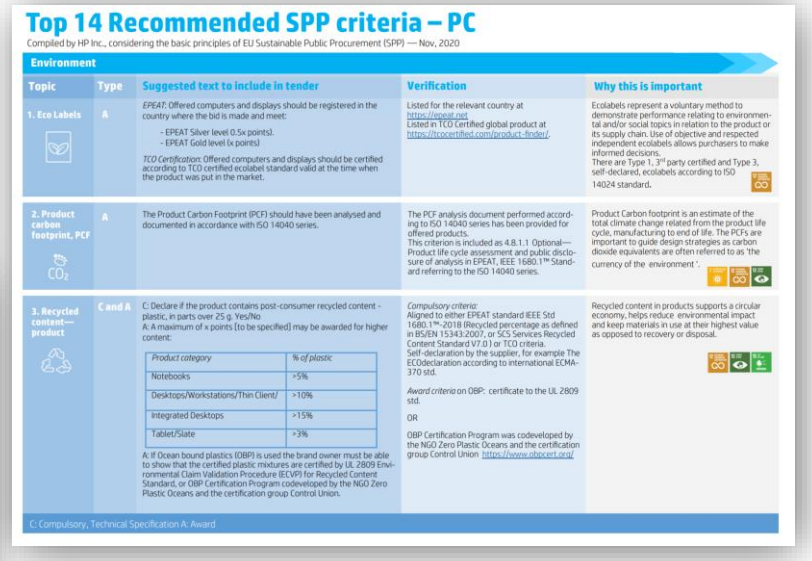
SDS, Safety Data Sheet (printer cartridges)

Page Yield (printer cartridges)

Recyclability, durability of printheads (printing system)

Warranty (printer cartridges)

Top 14 Sustainable Public Procurement criteria for **PC**


Top 14 Recommended SPP criteria – PC

Compiled by HP Inc., considering the basic principles of EU Sustainable Public Procurement (SPP) — Nov, 2020

Environment

Topic	Type	Suggested text to include in tender	Verification	Why this is important
1. Eco Labels	A	EPEAT: Offered computers and displays should be registered in the country where the bid is made and meet: - EPEAT Silver level (0.5x points). - EPEAT Gold level (x points) *TCO Certification:* Offered computers and displays should be certified according to TCO certified ecolabel standard valid at the time when the product was put in the market.	Listed for the relevant country at https://epeat.net Listed in TCO Certified global product at https://tcocertified.com/product-finder/.	Ecolabels represent a voluntary method to demonstrate performance relating to environmental and/or social topics in relation to the product or its supply chain. Use of objective and respected independent ecolabels allows purchasers to make informed decisions. There are Type 1, 3rd party certified and Type 3, self-declared, ecolabels according to ISO 14024 standard.
2. Product carbon footprint, PCF	A	The Product Carbon Footprint (PCF) should have been analysed and documented in accordance with ISO 14040 series.	The PCF analysis document performed according to ISO 14040 series has been provided for offered products. This criterion is included as 4.8.1.1 Optional—Product life cycle assessment and public disclosure of analysis in EPEAT, IEEE 1680.1™ Standard referring to the ISO 14040 series.	Product Carbon footprint is an estimate of the total climate change related from the product life cycle, manufacturing to end of life. The PCFs are important to guide design strategies as carbon dioxide equivalents are often referred to as 'the currency of the environment'.
3. Recycled content—product	C and A	C: Declare if the product contains post-consumer recycled content - plastic, in parts over 25 g. Yes/No A: A maximum of x points (to be specified) may be awarded for higher content: Product category / % of plastic: Notebooks >5%; Desktops/Workstations/Thin Client/ >10%; Integrated Desktops >15%; Tablet/Slate >3% A: If Ocean bound plastics (OBP) is used the brand owner must be able to show that the certified plastic mixtures are certified by UL 2809 Environmental Claim Validation Procedure (ECVP) for Recycled Content Standard, or OBP Certification Program codeveloped by the NGO Zero Plastic Oceans and the certification group Control Union.	*Compulsory criteria:* Aligned to either EPEAT standard IEEE Std 1680.1™-2018 (Recycled percentage as defined in BS/EN 15343:2007, or SCS Services Recycled Content Standard V7.0.) or TCO criteria. Self-declaration by the supplier, for example The ECOdeclaration according to international ECMA-370 std. *Award criteria on OBP:* certificate to the UL 2809 std. OR OBP Certification Program was codeveloped by the NGO Zero Plastic Oceans and the certification group Control Union https://www.obpcert.org/	Recycled content in products supports a circular economy, helps reduce environmental impact and keep materials in use at their highest value as opposed to recovery or disposal.

C: Compulsory, Technical Specification A: Award

TOP 12 for Print: 8 *Environmental* Criteria and 4 *Social* criteria

Topic	Criteria Type*	Why it matters
Environmental		
Energy Efficiency	C and A	Energy efficiency in Print and Imaging Equipment hardware can result in significant reduction of energy waste. This can result in significant energy and financial savings for businesses and consumers. SDG** 12,13.
Product Carbon Footprint (PCF)	A	Product Carbon Footprint is an important indicator of a product's carbon and environmental impact throughout the product lifecycle that can and should be minimized. SDG 7,12,13.
Duplex and Pull Print	A	Built in technology to automatically print on both sides (duplex printing) can help the end user to cut down on the amount of paper used. Through the life cycle of a printer, paper use makes up a significant part of the environmental impact. SDG 12.
Limits on indoor emissions	A	Limiting indoor emissions from printer system, hardware and supplies, contributes to maintaining high standards of indoor air quality. SDG 3.
Recycled material content in hardware	C and A	Recycled content helps support a circular economy and reduces environmental impact by reducing impact from the manu
Sustainably Sourced Packaging	C and A	Recycled content in packaging he mental impact by preventing sing turing of new raw materials. Requ material that the resources shou in reducing deforestation. SDG 12
Low Halogen printed circuit boards (PCB)	A	Eliminating substances of concer sustainability impacts. Toxic, haza substitutions in place to ensure p
Spare parts availability	C and A	Availability of spare parts allows critical part of the circular econon manufactured and processed and
Social		
Human rights and ILO * conventions	C	International Labor Organization (ILO). People working in the Supply Chain should be treated with respect and dignity and their work environment should meet international standards. In analysis of product areas within public procurement associated with social and environmental risks, IT industry supply chain is often included. Customer's stakeholder expect compliance with legal requirements and best practices in human rights. SDG8,10, 12.
Transparency—Suppliers	C or A	Transparency in supply chain and congregated data published in a yearly sustainability report with a description of risk assessment and related processes shows awareness to issues and compliance transparency. SDG 8,10,12.
Conflict minerals—public policy	C	As part of commitment to responsible sourcing, human rights and sustainability, the company must have a publicly available policy related to the possible use of four conflict minerals: tantalum, tin, tungsten, and gold. SDG 8,10,16.
Conflict minerals—due diligence	C	As part of commitment to responsible sourcing, human rights and sustainability, the four conflict minerals: tantalum, tin, tungsten and gold must be included in the supply chain assessment. SDG 8,10.

How to use - PC

Environment

Topic	Type	Suggested text to include in tender	Verification	Why this is important
1. Eco Labels	**A**	*EPEAT*: Offered computers and displays should be registered in the country where the bid is made and meet: - EPEAT Silver level 0.5x points). - EPEAT Gold level (x points) *TCO Certification*: Offered computers and displays should be certified according to TCO certified ecolabel standard valid at the time when the product was put in the market.	Listed for the relevant country at https://epeat.net Listed in TCO Certified global product at https://tcocertified.com/product-finder/.	Ecolabels represent a voluntary method to demonstrate performance relating to environmental and/or social topics in relation to the product or its supply chain. Use of objective and respected independent ecolabels allows purchasers to make informed decisions. There are Type 1, 3rd party certified and Type 3, self-declared, ecolabels according to ISO 14024 standard.
2. Product carbon footprint, PCF	**A**	The Product Carbon Footprint (PCF) should have been analysed and documented in accordance with ISO 14040 series.	The PCF analysis document performed according to ISO 14040 series has been provided for offered products. This criterion is included as 4.8.1.1 Optional—Product life cycle assessment and public disclosure of analysis in EPEAT, IEEE 1680.1™ Standard referring to the ISO 14040 series.	Product Carbon footprint is an estimate of the total climate change related from the product life cycle, manufacturing to end of life. The PCFs are important to guide design strategies as carbon dioxide equivalents are often referred to as 'the currency of the environment '.

How to use - Print

To be used with recommended criteria for Supplies

Topic	Text to include in tenders	How to verify
Environmental		
Energy Efficiency	*Compulsory:* All offered products shall meet the US ENERGY STAR™ requirements for the product group at the time they are placed on the market, as tested with the ENERGY STAR™ test method for determining imaging equipment energy use Rev. Dec-2018. *Award:* Higher energy efficiency. Certain % more energy efficient products to be given award points, based on ENERGY STAR™ TEC value.	Ecolabel certification (Type 1) containing requirement to meet ENERGY STAR™, or self-declaration showing the tests have been performed according to ENERGY STAR™ Test Method for Determining Imaging Equipment Energy Use Rev. Dec-2018 and meeting the limits. Award criteria can be verified with self-declarations/calculations. Please note TEC values may refer to different output ranges.
Product Carbon Footprint (PCF) CO_2	The Product Carbon Footprint (PCF) should have been analyzed and documented in accordance with ISO 14040 series.	Product criterion: Manufacturers shall conduct an assessment of the complete cradle-to-grave life-cycle greenhouse gas (GHG) emissions of the product from raw material extraction through final disposal or end use by the consumer (i.e., the complete product carbon footprint) using PAS 2050:2008, the GHG Protocol, ISO 14067, or ISO 14040/14044. Made available upon request.

SUSTAINABLE IT PURCHASING PILOT RESULTS

HP & Green Economy Canada plus 10 BPS organizations

Participants have identified four significant areas critical to advancing sustainable procurement within the broader public sector:

- Forging new relationships between functional areas/departments;
- Gaining employee support;
- Incorporating scored sustainability criteria into the procurement process; and
- Obtaining buy-in and commitment at the most senior level.

Stay tuned for the full white paper – published by Green Economy Canada for the CIC Technology session on November 17th

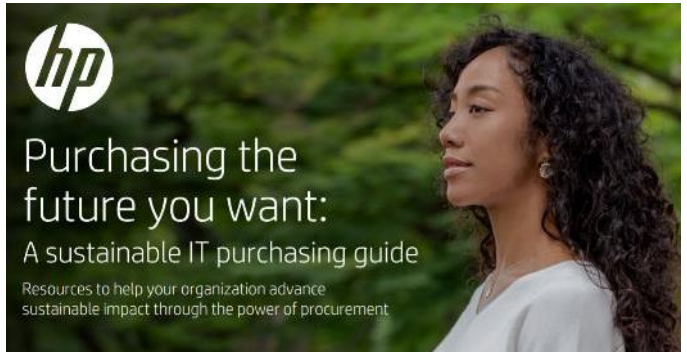
How to make it happen

You can start tomorrow

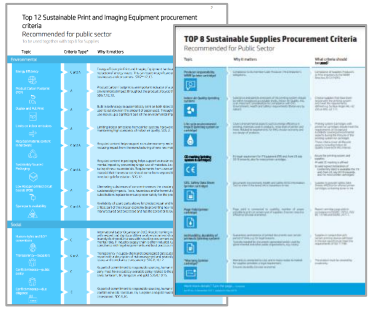
- Desire and commitment to go in this direction
- Resources – human, financial, time
- Management
- Accountability
  - Don’t forget to engage your employees

keep reinventing

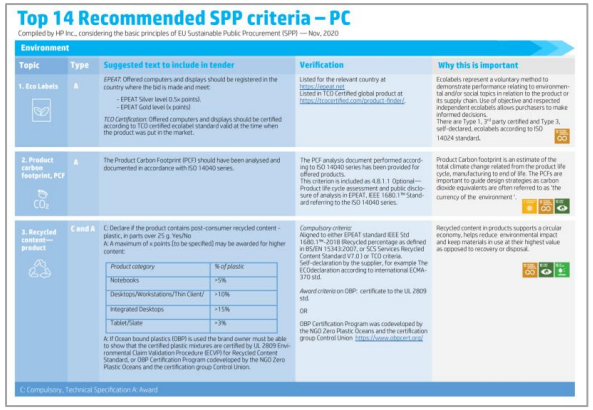
Links



Guide: https://h20195.www2.hp.com/V2/GetPDF.aspx/c03844101.pdf

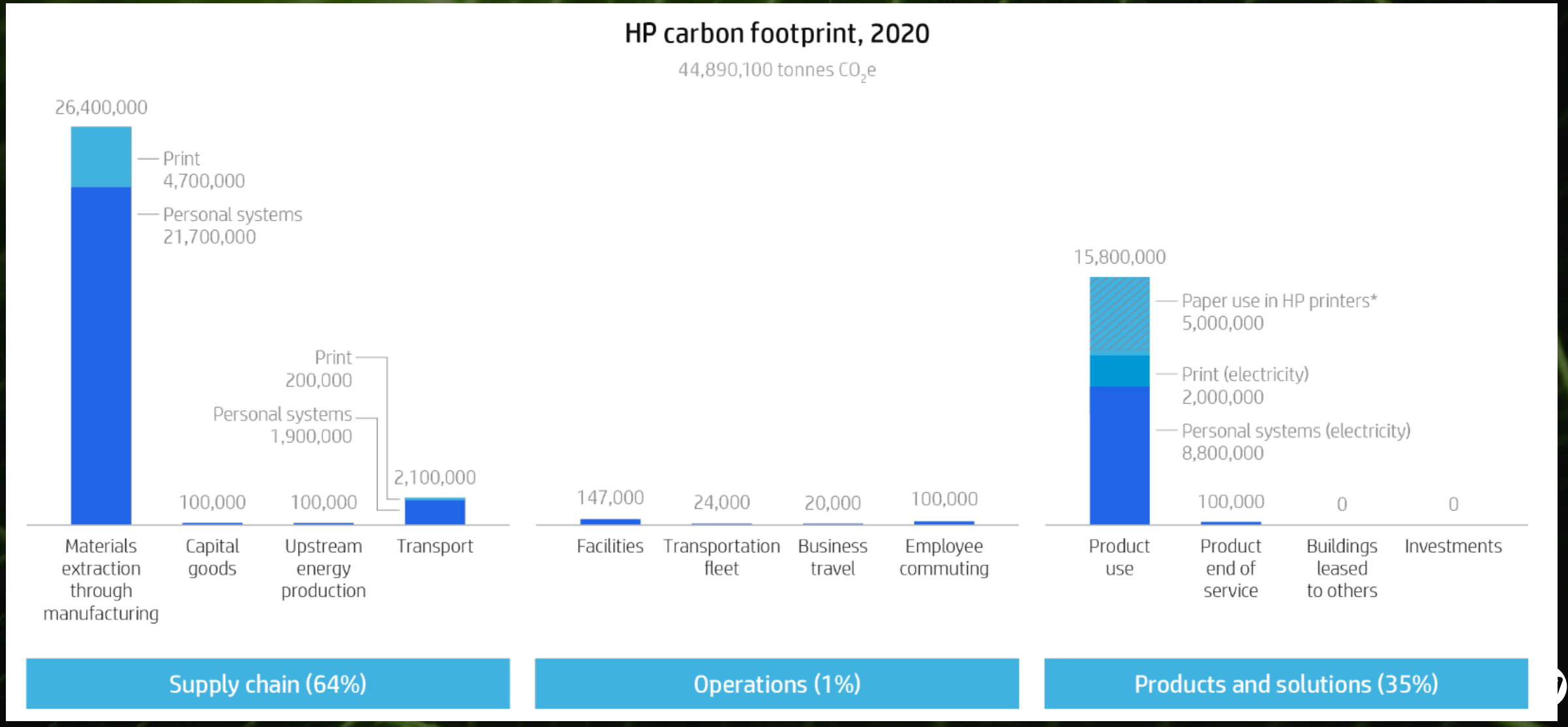


Top 12 Print: https://www8.hp.com/h20195/v2/GetDocument.aspx?docname=c07649558
Top 8 Supplies: https://www8.hp.com/h20195/v2/GetPDF.aspx/c06043765.pdf

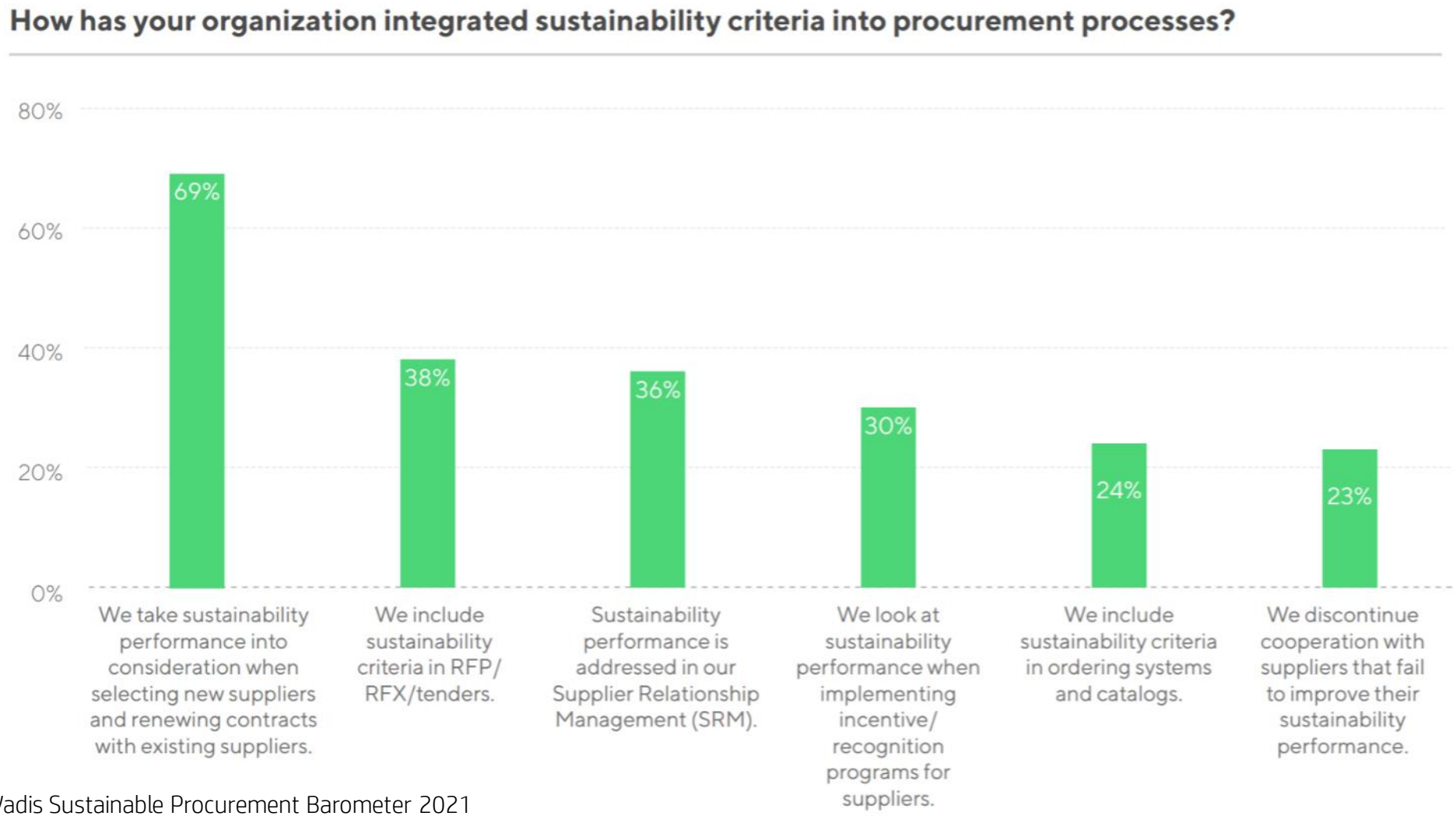


Top 14 PC: https://www8.hp.com/h20195/v2/GetPDF.aspx/c06981117.pdf

Where is the impact of an organization?



How to … almost 7/10 include provisions in **selecting suppliers**



EcoVadis Sustainable Procurement Barometer 2021

BUSINESS AS USUAL IS NOT SUSTAINABLE

1.7 EARTHS needed to support our current consumption rate[1]

68% of global wildlife loss in the past 50 years[2]

HUNDREDS OF MILLIONS of children worldwide are out of school today[3]