

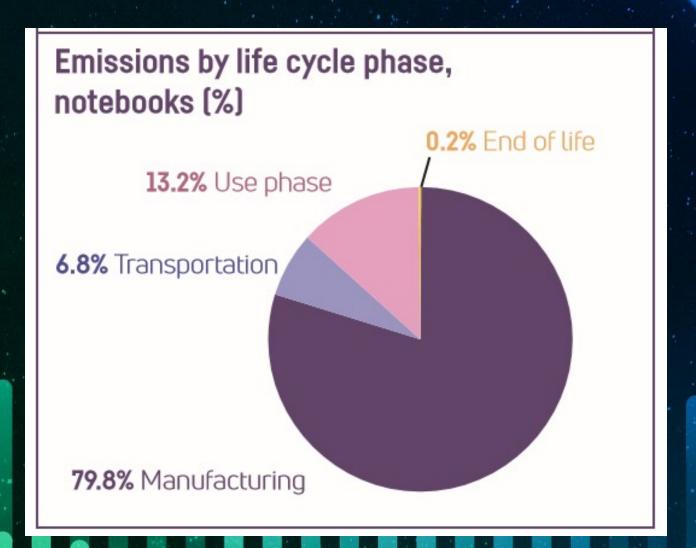
WHAT ARE THE POTENTIAL OPPORTUNITIES AND CHALLENGES FOR A CIRCULAR ECONOMY IN CANADA?



- "Circular or Sustainable Procurement" ensures that buyers
- 1) obtain the **best value for money** ...
 - Does TCO help you do this?
- 2) the most sustainable services and goods... How do you measure this?
- 3) from the most sustainable suppliers, How do you measure this?
- 4) in support of your organization's stated purpose and strategic goals.
 - Such as a Climate Emergency meeting the UN SDGs

- "Circular or Sustainable IT Procurement" ensures that buyers
- 1) obtain the **best value for money** ... **Does TCO help you do this? Somewhat for Print**
- 2) the most sustainable *services* and goods... How do you measure this? Leverage Eco Labels & disclosures
- 3) from the most sustainable suppliers, How do you measure this? Transparency, ambition & recognition
- 4) in support of your organization's stated purpose and strategic goals.

 Such as immediately reducing carbon impacts getting to net Zero—
 meeting the many UN SDGs



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

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.

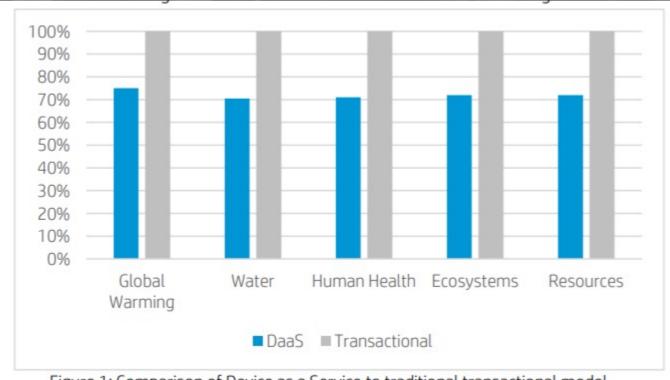


Figure 1: Comparison of Device as a Service to traditional transactional model

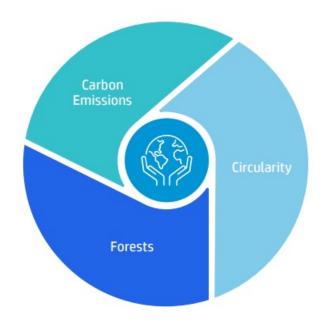




SUSTAINABLE IMPACT

Our Strategy

We have created an ambitious agenda, rooted in science and aligned to the UN Sustainable Development Goals, that connects HP to the most defining and urgent issues of our time where we can have the greatest impact as a brand:



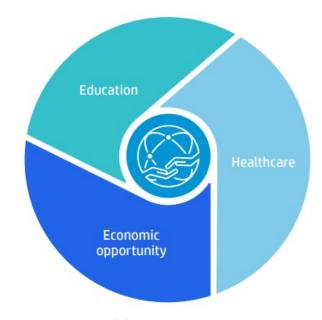
PLANETClimate Action

Drive toward a net zero carbon, fully regenerative economy while engineering the industry's most sustainable portfolio of products and solutions.



PEOPLEHuman Rights

Create a powerful culture of diversity, equity, and inclusion. Advance human rights, social justice, and racial and gender equality across our ecosystem, raising the bar for all.



COMMUNITY Digital Equity

Lead in activating and innovating holistic solutions that break down the digital divide that prevents many from accessing the education, jobs and healthcare needed to thrive. Drive digital inclusion to transform lives and













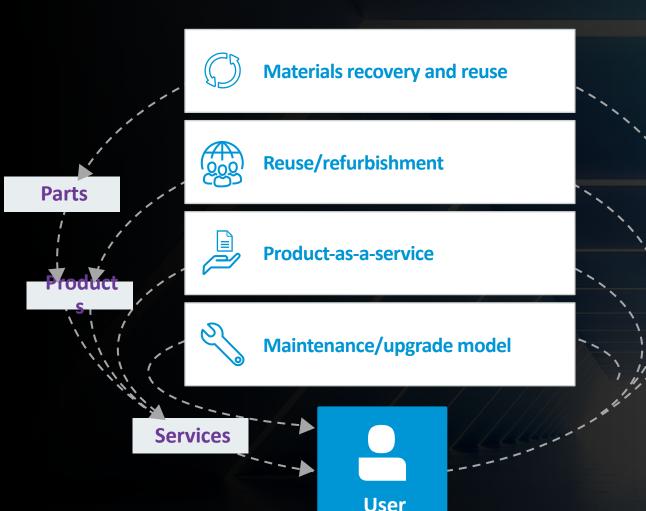






HP's circular economy strategy

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?

Why is technology procurement so critical & such an opportunity?

IoT enables you to leverage the power of tech to:

- DATA: Get baselines set goals and deliver improvement metrics to your organization
 - This allows you to directly contribute to your organizations' goals with strong metrics
- Manage Costs: with better data you can target specific costs
- Manage for security during use & at end of first life

There are a lot of opportunities to align with your organization's goals:

- The tech industry has been working on sustainability for longer than many others- allowing you to set a high bar and expect continuous improvement
- Work in sustainable supply chains has been ongoing for 20 years
- The tech sector has the power to tackle many of our societal problems with you
- A variety of Eco Labels makes it an easy choice



Achieve certified carbon neutral printing

- HP Managed Print Service Using third-party verified lifecycle assessment (LCA) data, along with information unique to your organization, HP calculates the total carbon emissions for your fleet Carbon emissions due to:
 - Raw material extraction
 - Manufacturing
 - Transportation
 - Use of HP printers, Original HP supplies, and paper
 - End of service
- HP provides ongoing fleet analytics & helps you set and meet goals to reduce your printing impact then:
- HP has chosen high-quality carbon offset projects that are verified by third-party standards* to enable you to state your printing is Carbon Neutral

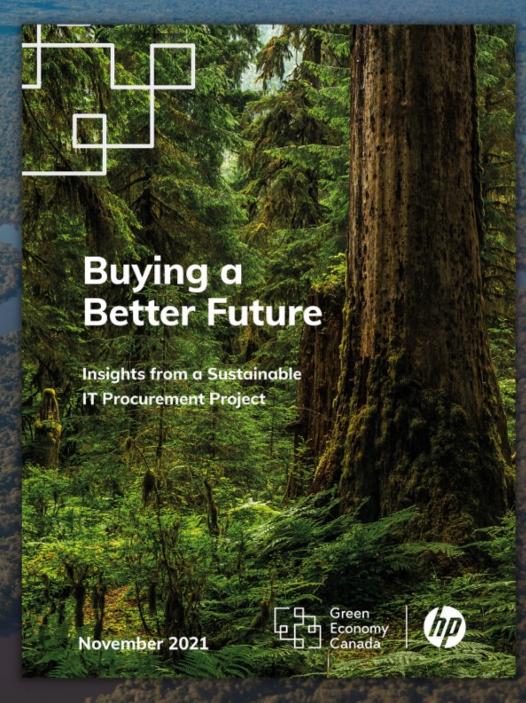


LET'S FLEX OUR **BUYING POWER TO** DRIVE A CIRCULAR **ECONOMY**

LEARN HOW







Sustainable IT Procurement Pilot Impact























- Increased internal conversation, collaboration and buy-in.
- Built knowledge & equipped participants to implement sustainable IT procurement practices.
- Equipped participants to engage with vendors and impact the RFX process to drive market transformation.

Key Steps to Advancing Sustainable Procurement



- 1. Build an internal team (senior leader support, cross-functional representation) and align activities with existing sustainability mandates.
- 2. Assess your starting point (Self-Assessment Tool) and opportunities for improvement.
- Identify upcoming bids & build knowledge of potential sustainability criteria (RFX Guide)
- 4. Engage vendors to equip them and gauge readiness to meet sustainability criteria.
- 5. Modify bids and evaluate responses to prioritize sustainable services and goods (best value for money).
- 6. Continue to work with vendors and adjust bids to improve the sustainability performance of vendors products and services.

1. Vendor Level Performance in Environment & Social Responsibility

What is the issue?

Suppliers need to be aware of and manage risks within their

Applicability of criteria





Types of Answers to expect

General Supplier Transparency - Supply Chain	downstream. When risk assessment and the associated	technical specifications of bid documents. Award: The producer must be able to state the location and company name for final assembly manufacturers for the offered products and the most important components, such as printed circuit boards, batteries, SSD, and built-in screens. Award: The producer must be able to state the location of their recycling vendors as well.	Self-declaration by the supplier. Sustainable reports or similar documentation
Supplier Transparency -	Suppliers are part of the community you live and work in. All businesses have a responsibility to contribute to their community & the world. External ratings are an excellent way to measure a wide range of sustainability performance. Transparency is important because without it you cannot measure the supplier's sustainability prowess.	Award: Please list your: Canadian Social investments over the last year together with your: - policies for employee volunteering, - donations - cash matching - time off grants to donate time to charities - Canadian sustainability website links in French & English. You can determine what aligns with your organizational values and place/score these items appropriately.	Data can be provided on volunteer hours, grants/donations (not sponsorships), and policies on volunteering. Website links are usually provided.
Environment & Greenhouse	Transparency is the basis for stakeholder dialogue and is critical to low carbon and circular economy. Leveraging the Climate Disclosure Project's (CDP) analysis of a company's disclosures and ambitions assures buyers that they are dealing with responsible suppliers.	Compulsory: Company carbon footprint must be disclosed to CDP under the "Climate" disclosure. Award: Award higher points for higher scores by CDP and additional scores for higher scores in Forests, Water, and Supply Chain disclosures too Award: Award extra points for organizations that have set science-based targets through the Science-based Targets Initiative (SBTi) Include in technical specifications of bid documents.	Refer to CDP website for details https://www.cdp.net/en/companies/companies-scores CDP rates supplier's transparency in their supply chain with an A-D "grade" rating in the 3 categories (Topics: Carbon (GHGs), Water, Forests) Refer to https://sciencebasedtargets.org
Supplier Transparency - External Support	Often buyers do not have time or resources to do a detailed analysis of a large multinational company's environmental & social impact. This can be outsourced to companies like Ecovadis (you can access independent ratings like CDP, Know The Chain, and the Global 100) Transparency is important because without it you cannot measure the supplier's sustainability prowess or compare performance between suppliers.	Award: List external rankings of your organization's transparency on sustainability in addition to CDP (above), include: - Global 100 score if listed - Ecovadis score - Know the Chain ranking OR - other 3rd party listings Add to the technical specifications of bid documents.	The Global 100 lists the top 100 most sustainable suppliers in the world Ecovadis rates companies on their Environmental, Labour & Human rights, Ethics, and sustainable procurement and gives an overall score Know the Chain is a resource that addresses forced labour in supply chains and ranks companies based on performance to benchmarks.

Best Question

Compulsory: The producer must be able to state the location and company

name for final assembly manufacturers for the offered products. Include in

2. Multifunction & Print Devices, Print Supplies





Applicability of criteria	What is the issue?	Best Question	Types of Answers to expect	
	Identifying the best in class devices in a range of competitor's products is complex. EcoLabels provide a simple way to ensure basic minimums are met and allow comparisons between vendors and products. EnergySTAR: is the simplest but only covers the energy consumed by the product; EnergySTAR is a requirement of EPEAT (below).	Add to the technical specifications of bid documents. Award: List specified products that are listed EnergySTAR products		
Ecolabels - Print Device Attributes	EPEAT: is a much more comprehensive EcoLabel covering the manufacturer and product's ability to meet certain required and optional criteria that address the full product lifecycle, from design and production to energy use and recycling. Bronze-rated products meet all of the mandatory criteria in their category. Silver-rated products meet all of the required criteria and at least 50% of the optional criteria, while Gold-rated products meet all of the required criteria and at least 75% of	Award: List the EPEAT ratings for all products	EPEAT, IT Eco Declaration & MSDS weblinks to where to find the certificates and information.	
	the optional criteria, while dold-lated products meet all of the required criteria and at least 75% of the optional criteria. Noting that for print products, EPEAT is only valid if using the original manufacturer's supplies (ex. ink & toner).	Compulsory: List the Safety Data Sheets (SDSs) for all printer supplies (Ink and Toner) to ensure office indoor air quality		
	IT Eco Declaration: this is a high degree of transparency giving you information on such items as recycled content, packaging material composition, product material composition.	Award: List the IT Eco Declaration for all products		
	Take back and recycling the printer consumables cartridges is a key part of the circular economy and helps you reduce your impact. Suppliers should ensure nothing goes to landfills and be transparent about how the recycling is done.	Award: Describe your take-back and recycling program for printer supplies. Identify volumes recycled to date and any innovations/awards in this process.	Data in their Annual Sustainability Report on recycling volumes, list of videos and websites for process explanations and awards	
Plastics in Print Devices and Future Ambition	Plastics are accumulating in our oceans and environment because there is little demand for	Compulsory: List the % of post-consumer recycled content and post-industrial recycled content in the printers and in the supplies. By product and supplies.		
	goods that contain recycled plastics. You can help stimulate that demand by asking for products that contain recycled plastic content and by working with vendors that have set ambitious goals for increasing their % of recycled content in products/consumables	Compulsory: List your company post-consumer recycled content goal and target date. List the volume of post-consumer recycled plastics you have used in the last reported year. Include in the sustainability section of bid documents.	declared - public goals should be	
Responsibly Managed Forests and Paper Procurement	Paper and packaging contain forest products made from trees. Deforestation is a major global	Award: FSC or PEFC marks are preferred over paper that is made without responsible forestry practices.	Vendors will provide FSC or PEFC	
	issue that contributes to climate change and biodiversity loss. IT suppliers should have a strong commitment to responsible forestry to ensure the future of both healthy thriving forests and your investment in print products and services.	Look for the FSC® or PEFC™ marks on paper and packaging products. (e.g. "FSC 100% Recycled"). Ask suppliers to demonstrate their commitment to Responsible Forestry with an organizational paper policy that outlines principles for buying, selling, and using paper, as well as buying, and using product packaging made from paper.	certificates. Visit https://fsc.org/en/fsc-labels for more information.	

3. Personal Computers (PC), Laptops & Displays





Applicability of criteria	What is the issue?	Best Question	Types of Answers to expect
Ecolabels: PC Device Attributes	Ecolabels represent a voluntary method to demonstrate performance relating to environmental and/or social topics in relation to the		Information will be provided in kilowatts or watts.
	product or its supply chain. Use of objective and respected independent 3rd party verified ecolabels allows purchasers to make informed comparative decisions without greenwashing taking place. EcoLabels provide a simple way to ensure basic minimums are met and allow comparisons between vendors and products.	Add to the technical specifications section of bid documents. Compulsory: Provide energy use information for specified products. Lower use is preferred and scored	Devices will be listed at the web links provided under "Ecolabel Databases" heading above.
	EnergySTAR is the simplest EcoLabel but only covers the energy consumed by the product; EnergySTAR is a requirement of EPEAT (below). EPEAT: is a comprehensive EcoLabel covering the manufacturer and product's ability to meet certain required and optional criteria that	as such. Award: EnergyStar certification	Vendor will provide EnergySTAR weblinks to where to find the certificates and information for the product specified.
		Award: List the EPEAT ratings for all products: Offered computers and displays should be registered in the country where the bid is made and meet: - EPEAT Bronze level	Devices will be listed at the web links provided under "Ecolabel Databases" heading above.
		- EPEAT Silver level (0.5x points) - EPEAT Gold level (additional points)	Vendor will provide EPEAT weblinks to where to find the certificates and information for the product specified.
	IT Eco Declaration: this is a high degree of transparency giving you information on such items as recycled content, packaging material composition, product material composition.	Award: List the IT Eco Declaration for all products.	Vendor will provide IT Eco Declaration weblinks to where to find the certificates and information for the product specified.

Find more details including post consumer plastics at http://greeneconomy.ca/sustainable-it-procurement-resources/



LEARN HOW WE CAN USE IT

http://greeneconomy.ca/sustainable-it-procurement-resources/





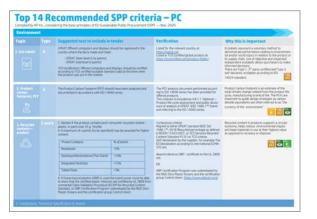


HP tools and resources Links



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



