

Circular Economy at HP

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Paradigm shift



- Change in thinking
- Change in product design
- Radical collaboration
- Reverse cycle



“the real reason
HP exists is
to make a
difference”



Propelling a more circular economy

Closed-loop processes
improve product end-of-life options

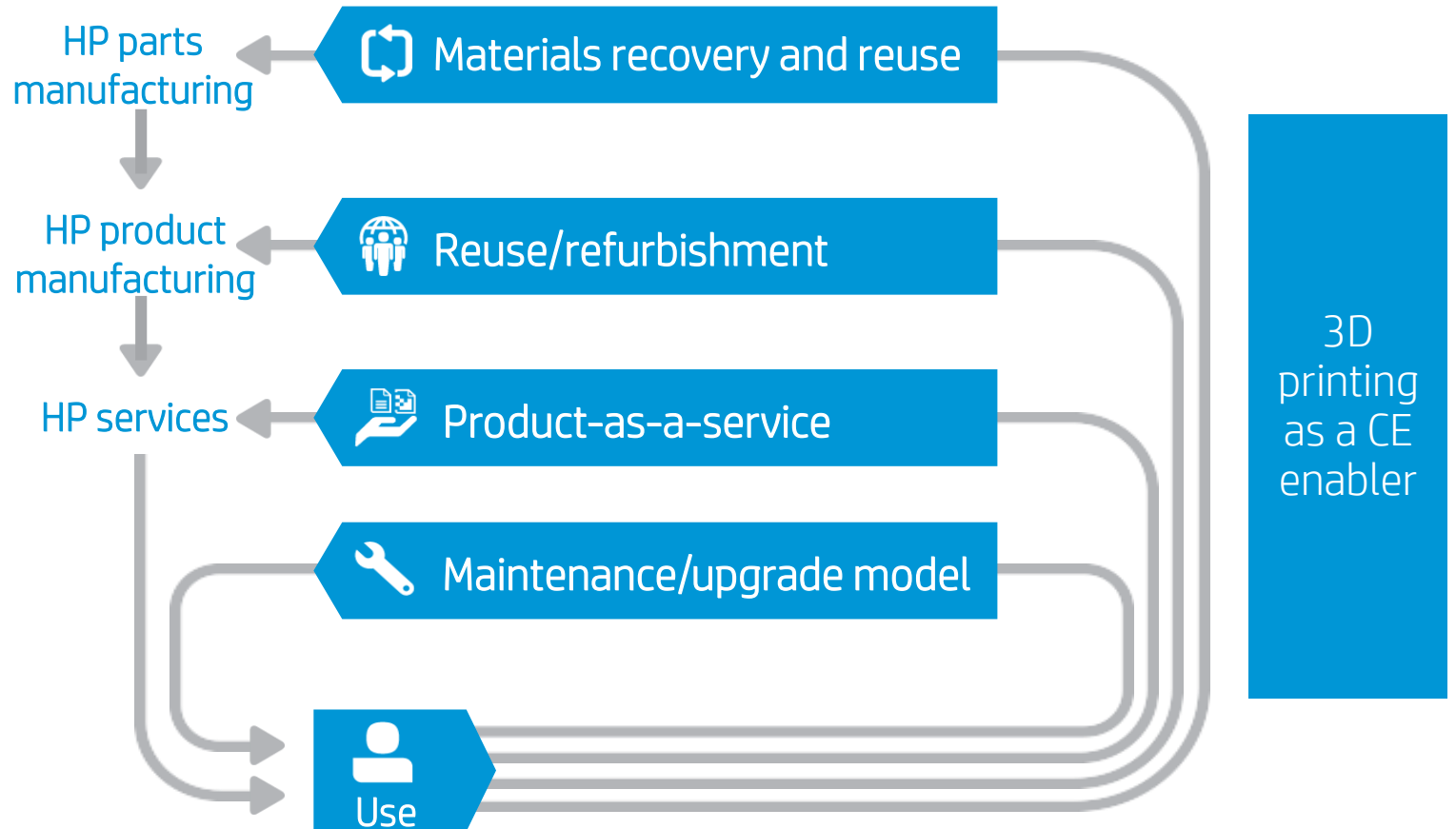
Service-based models
reduce product footprints

3D printing will dematerialize and
democratize how the world creates
and delivers goods and services



Creating Circular Economies: sustainability in action

The HP Multi jet Fusion 3D printer can print up to half of its components.... It's a printer that can largely print itself



HP Instant Ink

Business Models that change design and consumer behavior

Web-based ink replacement service ensures customers never run out of ink when they need it



Up to
67%

Less waste
Per printed page



97%

Satisfaction rate



Customers save up to 50% on ink

HP Elite x3: The one device that's every device!

Is this the future of
the desktop?

-ZDNet

Compared with a traditional work solution, an x3 solution uses up to **56%** less material!



Disruptive Technology – 3D Printing

HP Jet Fusion™

1	Speed
2	Quality
3	Economics



Rethinking repair - keep products out of the trash and in use longer

3D allows manufacturing on demand of an infinite inventory of spares, electronically

“We are no longer able to supply spare parts, or carry out service or repairs for several models.”



eSpares.com carries over 9600 different oven knobs!



Design for repairability: don't take our word for it.....



HP Elite x2 1012 G1 Repairability Score:

10 out of 10 (10 is the easiest to repair):

- ✓ Except for a minor amount of tape over the sensor array, there is no adhesive.
- ✓ All screws are standard T6 Torx or Phillips #0.
- ✓ Easy access to [repair documentation](#) and [replacement parts](#) by HP makes self-repair more feasible.
- ✓ A modular and flat overall construction allows access to most components without a lengthy disassembly process.



Digital Print Manufacturing

HP Inkjet High Speed Printing Systems



No *known* end-of-life: totally field upgradeable





A circular business model requires everyone involved in the product supply chain to become involved practically in ‘stewarding’ the materials used in the product, from ‘cradle to cradle’

Think of the barriers and opportunities for this today.....



HP's Journey to become Canada's most environmentally responsible IT company



Only PC company listed on the **Canada's Greenest Employers** List in 2016.



HP Planet Partners

HP Planet Partners, our return & recycling program turns 25 years old in 2016



Numerous awards at the **Environmental Print Awards**



Only IT company globally **to disclose our full carbon footprint** with reduction goals in all areas of the value chain. Published in 2014.



Only IT company to win 2 **Clean 16** awards for leadership and 3 **Top Projects** awards for contributions to clean capitalism.



Won an award for how we manage our corporate grounds: **The Greening Corporate Grounds** program with Credit Valley Conservation celebrates ecological landscaping and education.

HP's Global Operations pledged to use **100% renewable electricity**. Joined **RE100**, a global collaboration of companies leading this effort.



Member of CE100, a program that is accelerating the transition to a circular economy.



We have the most **comprehensive environmental education program** in Canada's IT industry- spanning from Kindergarten to companies that aren't even our customers.



HP named to **Dow Jones Sustainability World Index** and North America Index in 2015.



For a multi-year view of the highlights of our achievements see the **Environmental Citizenship Milestones Document** on hp.ca/environment



HP ships 100% of our products in North America using SmartWay-approved road transportation carriers. (U.S. EPA. SmartWay trucks consume about 18% less fuel than conventional class 8 freight trucks).





keep reinventing

HP's circular economy

