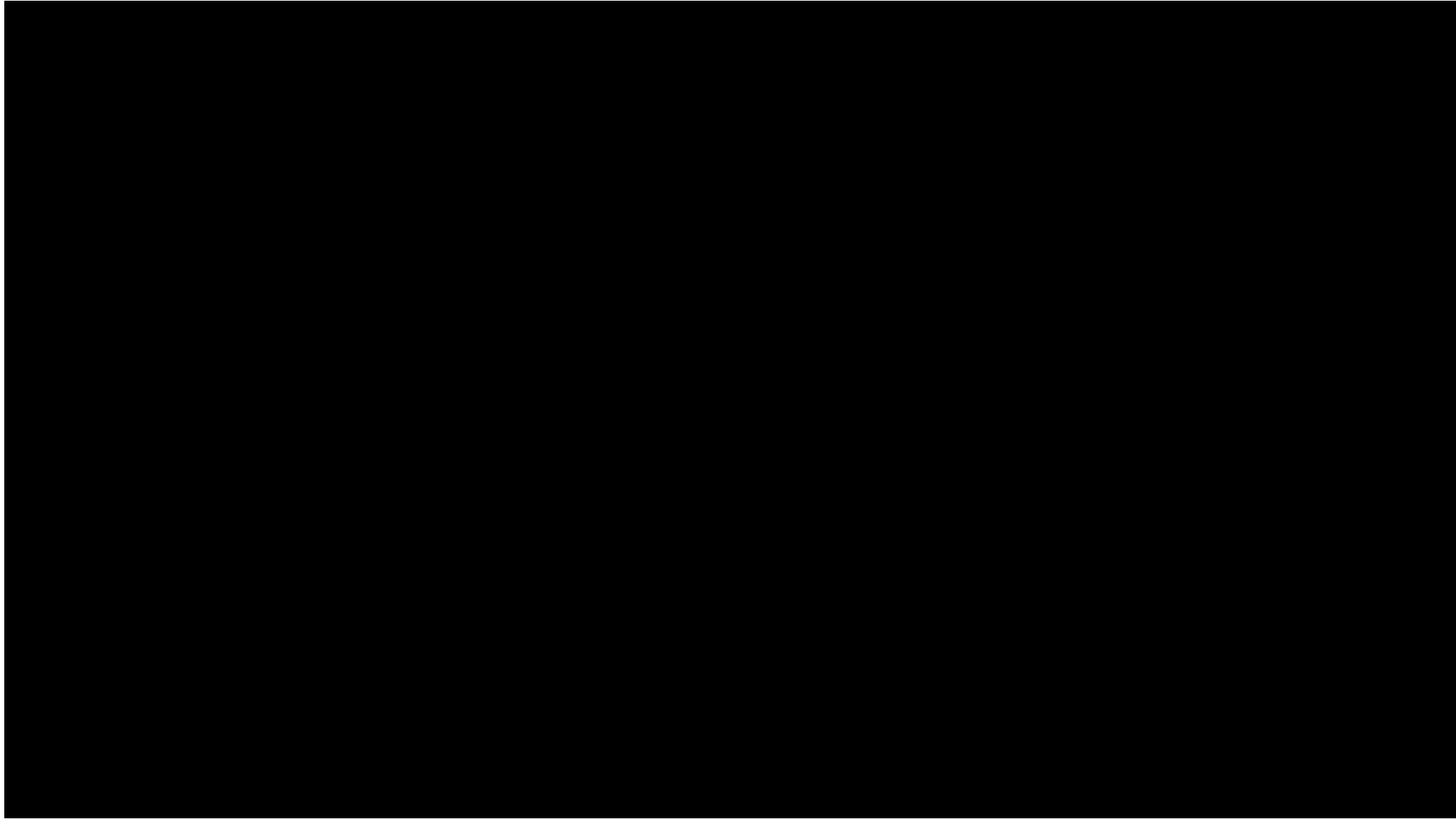




# Full Circle: HP's Contribution to the Circular Economy

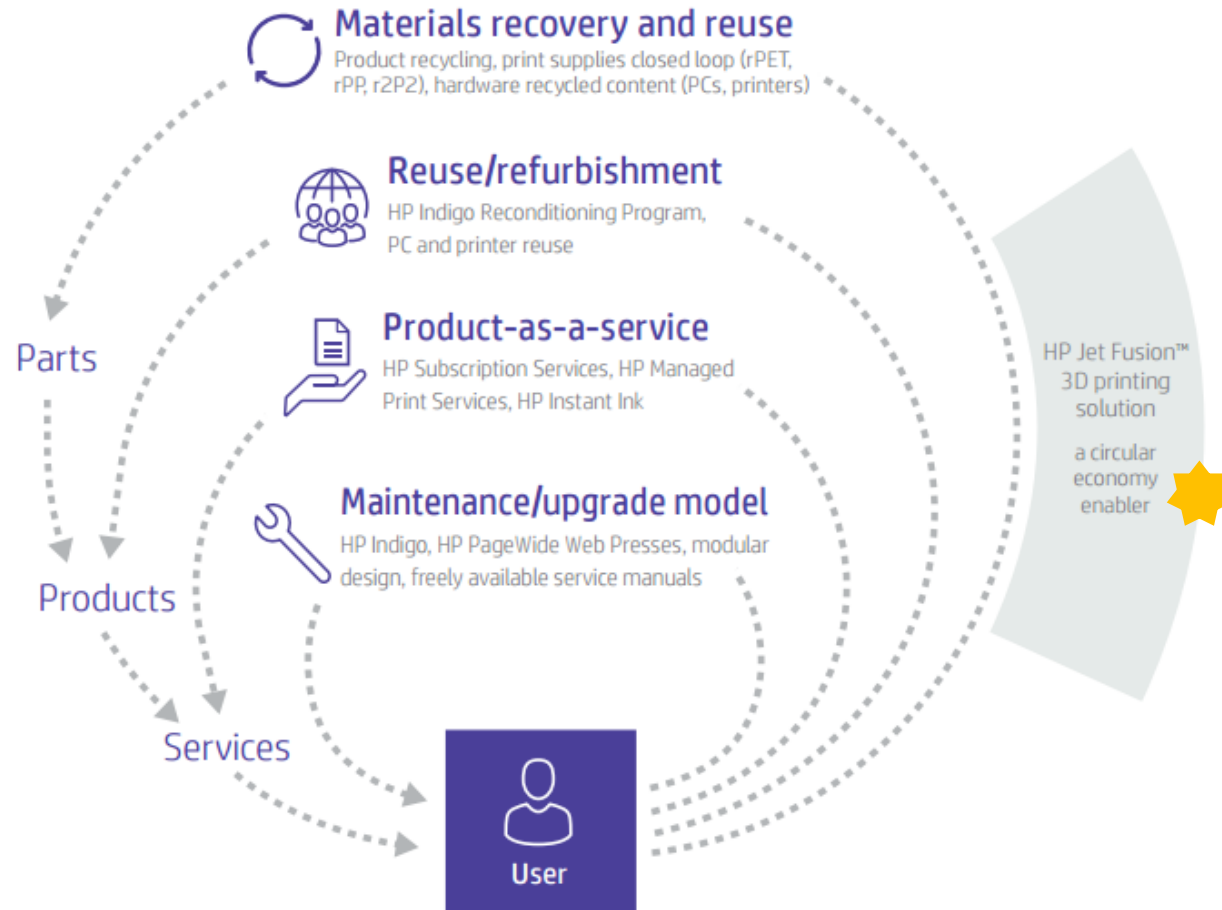
H-GAC Regional Recycling Roundtable  
Ngozi Lawanson / September 8<sup>th</sup>, 2016





# Agenda

## HP circular economy strategy



- Materials Recovery and Reuse
  - HP Planet Partners Program
  - Ink Cartridge Recycling History and Milestones
  - Recycled Plastic in HP Products
- Reuse/Refurbishment
  - Refurbished Products
- Product-as-a-Service
  - HP Service Programs
- Maintenance/Upgrade
  - Durability and Repair-ability
  - Upgradability
  - Serviceability

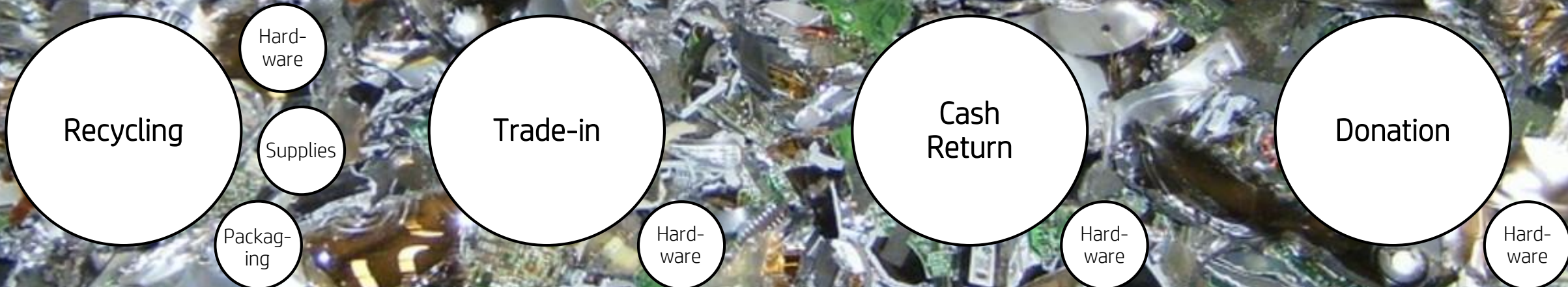
# Recycle

HP recovered 155,200 tonnes of hardware and supplies in 2015!

# HP Planet Partners

[www.hp.com/recycle](http://www.hp.com/recycle)

A landfill is a wonderful thing to waste!





# HP Planet Partners celebrates 25 years of supplies recycling ...making a difference together

682 million

recycled HP cartridges  
from 60 countries



3.3 billion

recycled plastic bottles



50 million

recycled hangers



3 billion

new print cartridges



Used cartridges and other plastics you recycle are combined to make new HP print cartridges—3 billion of them.

# Free and convenient supplies recycling options-medium and enterprise businesses\*



Use your own box or order a box to recycle by the box



Recycle by the pallet for large office buildings

\*service varies by country. See [hp.com/recycle](http://hp.com/recycle)



## Free and convenient recycling options - individual customers \*



Drop off at one of HP's 11,350 drop off locations worldwide



Order a free recycling envelope suitable for shipping up to 6 empty ink cartridges at a time



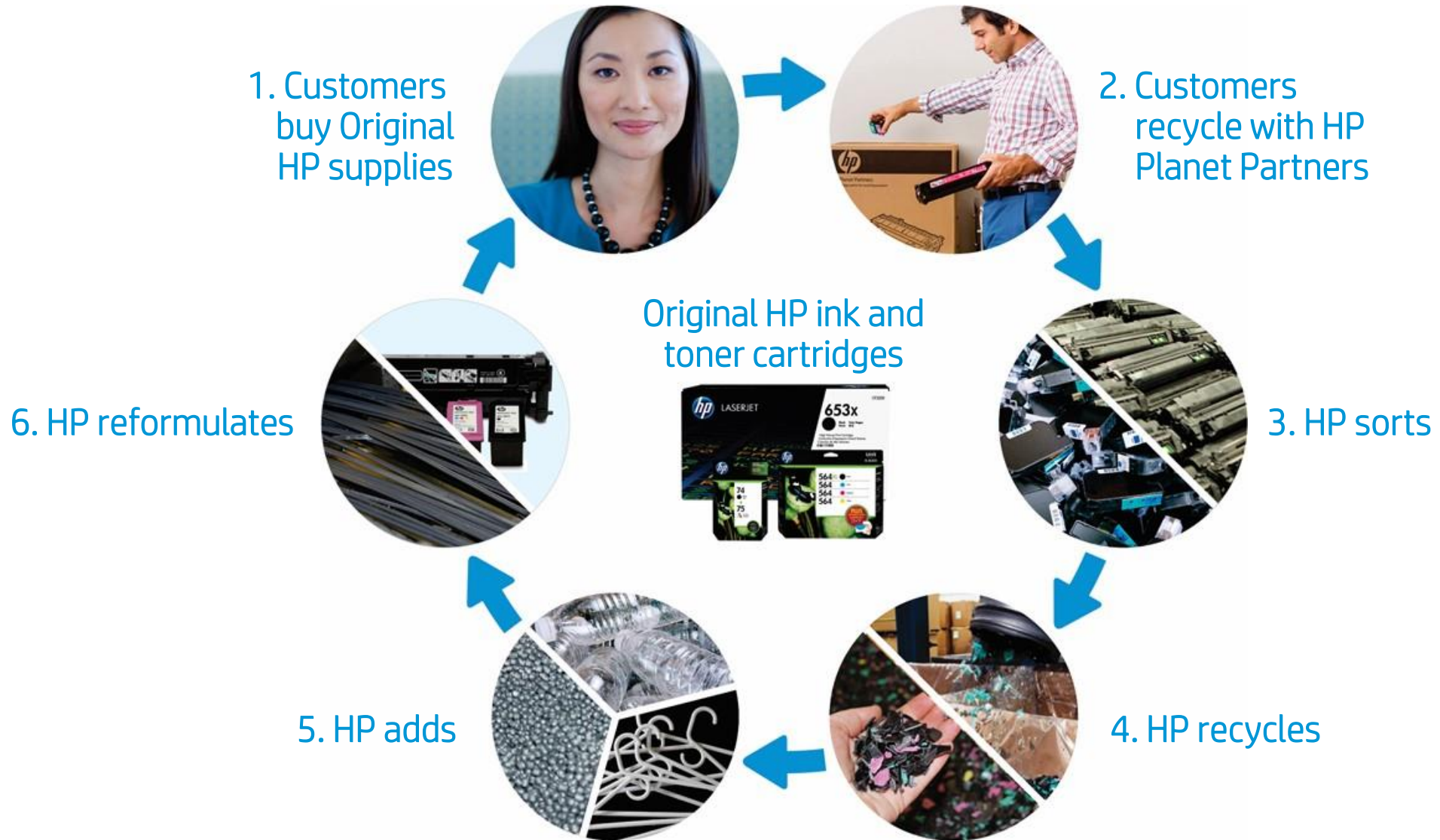
Print a free label at [hp.com/recycle](http://hp.com/recycle)  
Mail in your HP LaserJet toner cartridge using the free enclosed label (US)  
You can strap up to 8 toner boxes together and use one label

\*service varies by country. See [hp.com/recycle](http://hp.com/recycle)





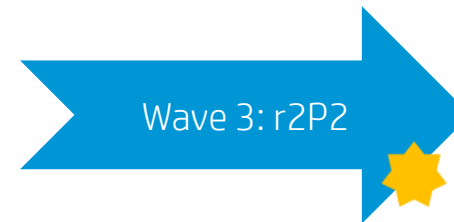
# Materials Innovation: HP's "closed-loop" process



# Closed-loop recycled plastic progression

## Leveraging knowledge and extending leadership

- Recycled PET (rPET)
  - [Five](#) year development, 2005 start
- Recycled polypropylene (rPP)
  - [Three](#) year development, 2013 start
  - Implemented 2013
- Recycled high impact polypropylene (r2P2)
  - Less than [12 months](#) development, 2014 start



# Closed-loop plastic development results

How much and how many?

# 110M

# 2.7B

## Pounds recycled content material used since program start

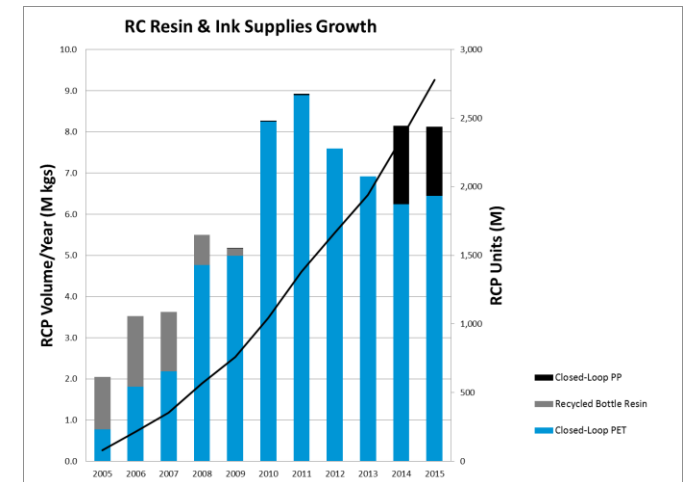
- More than 2,750 forty foot container loads of material\*
- Over container RC material per day for past six years

\* Assumes 40,000 pound container loads

## Ink cartridges manufactured with recycled content material

- More than 3.3 billion PET water bottles
- More than 50 million PP hangers

Upcycling!



# In 2015, HP Launched 5 EPEAT Gold LaserJet Printers

Nearly all HP Gold models feature :

- Recovered content in fiber-based packaging (required)
- 5% content of postconsumer recycled plastic
- 90 % recyclable packaging



HP LaserJet Enterprise M402DN\*  
(Gold: US Gov Sku- Only)



HP LaserJet Enterprise M506DN\*  
(Gold: US Gov Sku- Only)



HP LaserJet Enterprise Flow MFP M527c\*  
HP LaserJet Managed Flow MFP M527cm\*  
HP LaserJet Enterprise Flow MFP M527z \*  
(GOLD: US SKU)



# When it comes to Recycled Plastic Usage, Commercial Displays Lead the Way



- More TCO Edge certifications in 2015 than any other manufacturer (16 certifications)
  - Received TCO Edge certification through using 85% post-consumer recycled plastic (according to TCO definition)
- In 2015, 71% of HP commercial displays shipped with more than 10% post-consumer recycled plastic.
- 6 elite displays introduced in 2015 shipped with more than 30% post-consumer recycled plastic (according to EPEAT definition)

# Reuse/Refurbishment

# Refurbishing and Remanufacturing Recovered Product



- Computing products are refurbished and recertified to be sold through our business outlet
  - All refurbished products are backed by a 1 year warranty and care pack

# Product-as-a-Service



# HP Services



HP Subscription Services

HP's Device-as-a-Service program bundles the latest computing and imaging products for rent with HP lifecycle services and an account manager under one simple contract.



HP Managed Print Services

HP's MPS program designs out waste by creating unique printing solutions to meet clients' printing needs and practices, as specified through environmental assessments.

**Reduces paper waste by 25% or more!**



HP Instant Ink

A subscription service working to ensure customers never run out of ink, HP Instant Ink reduces waste, enforces recycling, and costs up to 50% less for customers.

**Reduces cartridge-related materials consumption by 67% per page!**



# Maintenance

# Extending Product Life



## Durability

- HP's portfolio of MFPs and color printers won Buyer's Lab's 2016 "Line of the Year" award, partly due to great product reliability.
- Select printing and computing products are tested to the MIL810g standard, which measures product durability in a variety of environmental and atmospheric stress tests.



## Repair-ability

- 3 HP Products have been awarded perfect scores for repair-ability by iFixit.

## Predictive Support

- TouchPoint Manager for PCs

# Designing for Upgradability - Workstations



HP Z840 Workstation

Desktop workstation products employ a tool-less design, which allows users to easily take apart their devices and replace/upgrade certain parts.



HP Z1 G3 Workstation

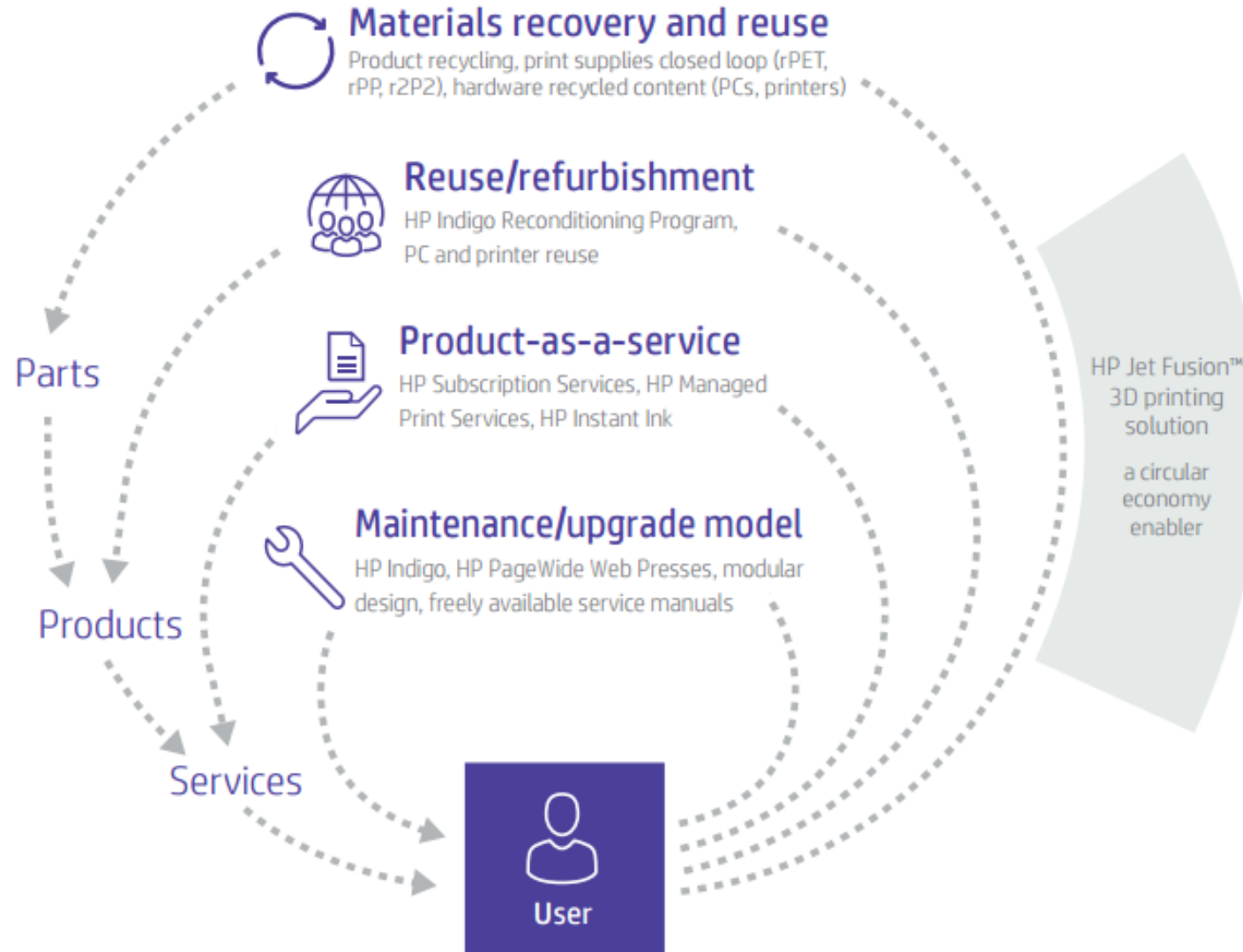
# HP as a Serviceability Organization



## HP Maintenance and Repair Offerings:

- Publicly available maintenance and repair manuals and videos for nearly every computing and printing product
- 3 year extended warranty for all commercial computing products
- Spare parts available for 5 years post-production for all commercial computing products
- Care packs available for computing products for further support

# Summary





keep reinventing