

CLOVER'S END-USER FOCUSED WEBINAR:

Strategies To Increase The

ENVIRONMENTAL SUSTAINABILITY

.....

of Office Printing



LEARN FROM THE EXPERTS:



TRICIA JUDGE

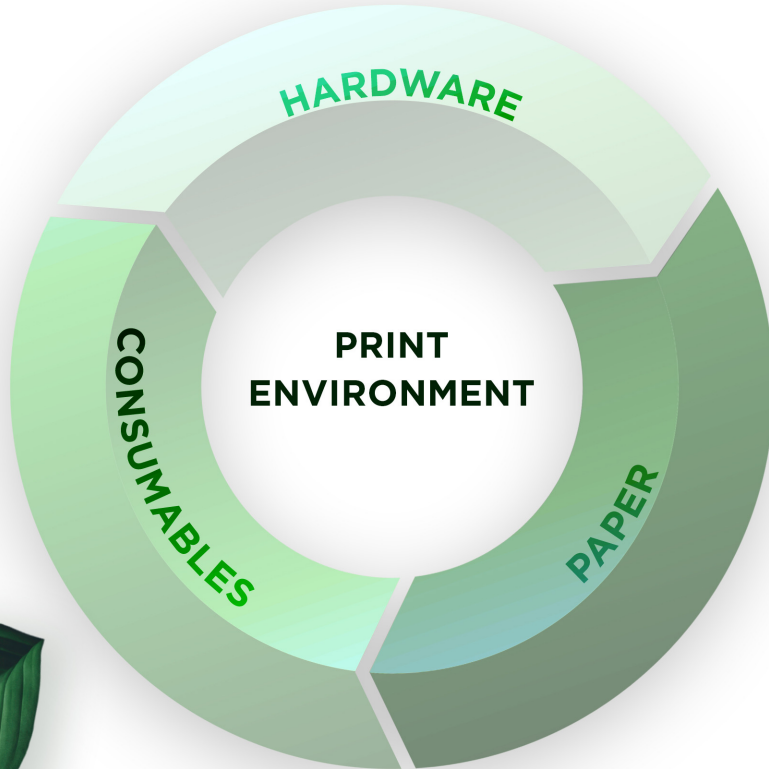
Executive Director,
International Imaging
Technology Council



KELI POSCH

Vice President,
Marketing & Sustainability
Clover Imaging Group

Environmental Impacts of Office Printing



Types Of Buyers

ENTERPRISE

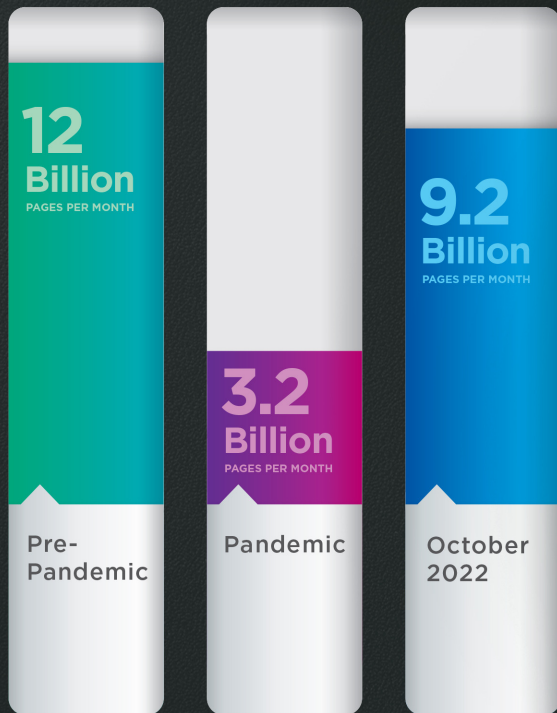
SMB

SOHO

SLED

FEDERAL

Office Pages Printed



Average pages per monthly
unit are down across
the board

Not fewer devices printing,
it's that they are printing less

Printer Hardware

Action Items:

- Work with equipment dealer to analyze your printer fleet
 - Do you need the need the same number and type of devices that you required pre-COVID?
 - Are printers being underutilized?
- Keep devices longer
 - Commercial models are built to be supported 7-10 years
- Look at refurbished printers
- Convert to Energy Star & EPEAT certified printers
- Turn off printers at night and on the weekends

Electronics Environmental Benefits Calculator – Imaging Equipment

EEBC Data Entry Form

Extract to XML XML File: No file chosen

Use this screen to enter information on imaging equipment **already in use from previous years**, to calculate the benefits of extending the life of equipment beyond the default lifespan of 72 months. Enter information on the reuse and recycling of imaging equipment to calculate the environmental benefit of reusing and recycling products **removed from service this year**. **NOTE: A report will not be generated if all cells in the Equipment Use section are left blank.** If you are **only calculating the environmental benefits of Equipment Reuse and Recycling**, enter a dummy value of "1" in the first input box in the Equipment Use section (CMFD Total number of ENERGY STAR® 2.* units) to enable calculation of results for the Equipment Reuse and Recycling information entered in the bottom section.

Equipment Use Information (Lifespan Extension)

	Total number of ENERGY STAR® 2.* units	Average lifespan of units (Months)
Color Multifunctional Device (CMFD)	<input type="text"/>	<input type="text"/>
B & W Printer	<input type="text"/>	<input type="text"/>
B & W Multifunctional Device (MFD)	<input type="text"/>	<input type="text"/>
Total number of units in service	<input type="text"/>	

Equipment End-of-Life Information (Reuse and Recycling)

Reused:	Total number of Units
Color MFD:	<input type="text"/>
B & W Printer:	<input type="text"/>
B & W MFD:	<input type="text"/>
Total number of units reused	<input type="text"/>

Recycled:	Total number of Units
Color MFD:	<input type="text"/>
B & W Printer:	<input type="text"/>
B & W MFD:	<input type="text"/>
Total number of units recycled	<input type="text"/>



What are the different kinds of printer cartridges?

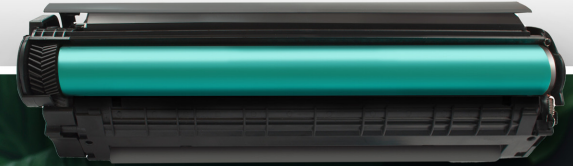


OEM

HP, Lexmark, Epson,
Canon, etc.



Clone & Compatibles



Remanufactured

What is a Compatible/Clone Printer Cartridge?

- “Compatible”, “New Build”, “Clone”, “Counterfeit”, “NBC”
- Imported from overseas
- Many violate OEM intellectual property
- Subpar manufacturing offer lower page yields & uneven quality
- Many fail to meet health and safety regulations & contain carcinogens
- Cannot be remanufactured or recycled & end up in US landfills. China will no longer take them back
- Recently, the city of LA passed resolution to ban these cartridge



The Environmental Impact of Single-Use Printer Cartridges

Number of cartridges entering
U.S. landfills each year:¹

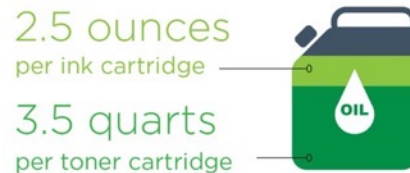
350,000,000



How much metal and plastic
EACH cartridge adds to a landfill:²



How much oil it takes to produce the
plastic in a new-build cartridge:³



What percentage of toner
cartridge components can
be recycled:⁵



97%

How long each cartridge takes to decompose:

1,000 years



The Environmentally Superior Option: Remanufactured Printer Cartridges

- Remanufactured cartridges reuse an existing OEM cartridge
- Supports circular economy, in most cases can be remanufactured many times
- Consume fewer natural resources and have a lower environmental impact than new builds and OEMs
- Many are made in North America– more stable supply chain, support North American economy, less transportation costs and impacts



Who Is Clover Imaging Group

The world's largest and most trusted provider of high quality, environmentally-sustainable printer cartridges



- 25 years of manufacturing excellence
- More than \$350 million in annual revenue
- Business operations across the globe
- Manufacture more than 1 million cartridges per month
- More than 15,000 available products
- Numerous patents
- The manufacturer for Office Depot, Staples, Target, Walmart, AbilityOne

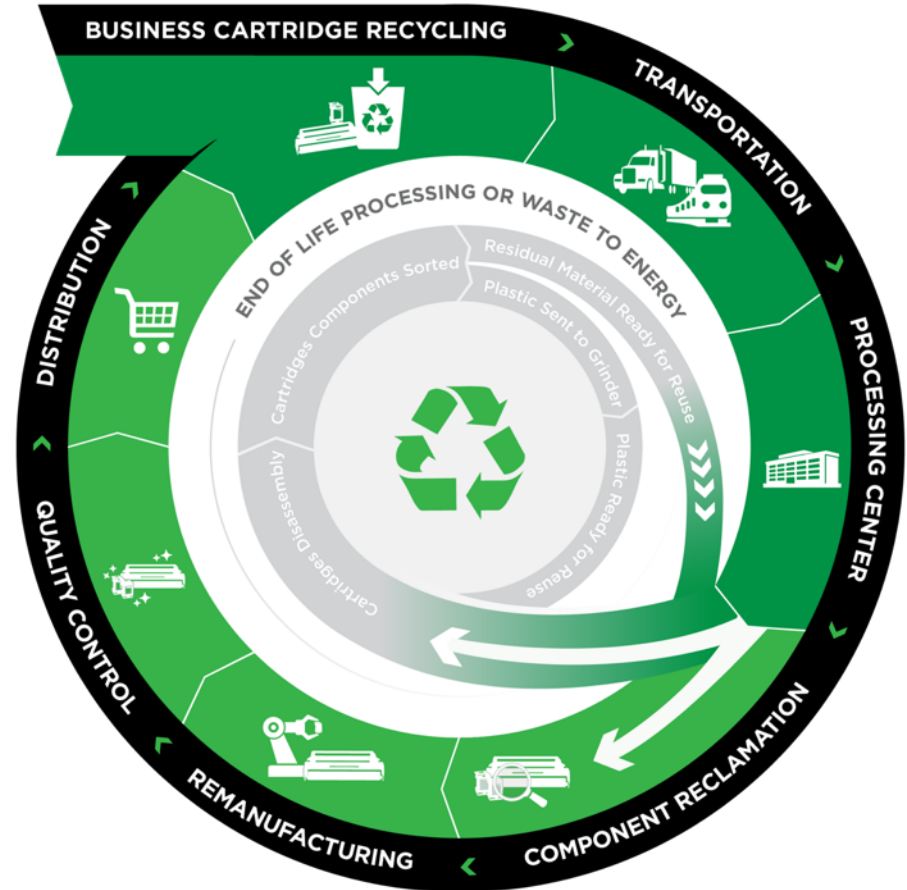


Fortune 500 Businesses & Gov't Agencies Rely on Clover Imaging Printer Cartridges



The Lifecycle of a Remanufactured Printer Cartridge

Recycling is Good,
Reuse is Better!



New!

Comparative Life Cycle Assessment (LCA)

Here are some of the key findings from the third-party, peer reviewed LCA:

www.cloverimaging.com/LCA

Clover Imaging Remanufactured Black Toner Cartridge Compared to OEM Equivalent Cartridge



CARBON FOOTPRINT ⁱⁱ

53%

LESS CARBON



ENERGY FOOTPRINT ⁱⁱⁱ

59%

LOWER ENERGY



NATURAL RESOURCES ^{iv}

52%

LESS IMPACT



HUMAN HEALTH ^v

66%

LOWER IMPACT

Clover Imaging Remanufactured Color Toner Cartridge Compared to OEM Equivalent Cartridge



CARBON FOOTPRINT ⁱⁱ

49%

LESS CARBON



ENERGY FOOTPRINT ⁱⁱⁱ

52%

LOWER ENERGY



NATURAL RESOURCES ^{iv}

40%

LESS IMPACT



HUMAN HEALTH ^v

70%

LOWER IMPACT



**NOT ALL TAKEBACK PROGRAMS
ARE THE SAME**

Send Your Cartridges Back
to Clover for Reuse

When your printer cartridges are empty, simply send them back to Clover Imaging to give them another useful life. Our program is designed to ensure that every component of a printer cartridge is either reused or responsibly recycled.

**Working together we can reduce the
environmental impact of office printing!**

**PLEASE
RECYCLE
YOUR
PRINT
CARTRIDGES
HERE**



CLOVER
IMAGING GROUP

www.cloverimaging.com



Collections Sustainability Reporting

Example Sustainability Report

Impact Summary

Type Desc	Total Qty	Total Pounds
InkJet	4300	767.39
Laser/Toner	9533	31557.41
Miscellaneous	17	4.25
Phones	0	0.00
Printer Components	291	2473.50

End-of-Life Solution (Pounds)

Reused
34802.55

Equivalency Results

Your companys information entered above is Equivalent to one of the following statements:
Annual greenhouse gas emissions from 8.89 passenger vehicles
CO2 emissions from 4632.28 gallons of gasoline consumed
CO2 emissions from 95.74 barrels of oil consumed
CO2 emissions from 0.54 tanker trucks' worth of gasoline
CO2 emissions from the electricity use of 6.97 homes for one year
CO2 emissions from the energy use of 4.75 homes for one year
Carbon sequestered by 686.12 tree seedlings grown for 10 years
Carbon sequestered annually by 53.46 acres of pine or fir forests
Carbon sequestered annually by 0.28 acres of forest preserved from deforestation
CO2 emissions from 1715.29 propane cylinders used for home barbeques
CO2 emissions from burning 0.23 railcars' worth of coal
Greenhouse gas emissions avoided by recycling 14.00 tons of waste instead of sending it to the landfill
Annual CO2 emissions of 0.00 coal fired power plants

Reduce Your Carbon Footprint even more with PrintReleaf



PrintReleaf offsets the environmental impact of your paper consumption by planting a tree for every 8,333 pages printed.

Easily integrates with Clover's MPS remote monitoring software

Monthly reporting enables you to document your sustainability achievements

**Since 2015, Clover & our customers have
reforested over 750,000 trees!**



How much can you lower your printing costs?



MSRP PRICE: **\$216.99**



MSRP PRICE: **\$121.99**

If your office uses 70 cartridges annually,
YOU SAVE \$6,650 IN JUST ONE YEAR

Questions to Ask Your Vendor:

Environmentally Friendly Printer Consumables Check List

- ✓ What remanufactured printer cartridges options do they have available?
- ✓ Has the cartridge's performance been third-party tested against OEM?
- ✓ Does the cartridge vendor have STMC certification?
- ✓ Does the cartridge vendor have third-party environmental certifications and testing data?
- ✓ What kind of recycling or takeback programs do they offer?
- ✓ Can I locate the manufacturer's website?
 - Is there a North American contact?
 - What is the country of origin?
- ✓ Can they quantify my savings?



Key Takeaways

Reference Printer Consumables Checklist

Environmental Calculator <https://i-itc.org/environmental-calculator/>

Large/institutional - MPS/contractual supply arrangements

- Subset of off-lease devices can be used for pilot programs
- Review device refreshment schedule
- Review existing contracts/catalog – reman may already be on there!
- Help with RFP & Environmental Preferred Policy language

SMB - MPS/contractual supply arrangements

- Unsure if STMC or environmental claims are legit, send to tricia@i-itc.org to vet

SOHO

- Staples, Office Depot, Target & Walmart - all have a remanufactured option
- Avoid unknown brands on Amazon



Thank you!



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