



# HP PageWide Technology: Redefining the environmental impact of printing

Subtitle

Speaker's Name / Month day, 2018



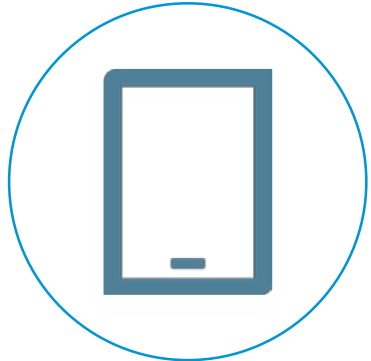


# What's in a perception?

What are some products that challenged our preconceived notions?



Tesla electric car



Voice over Internet



Twitter





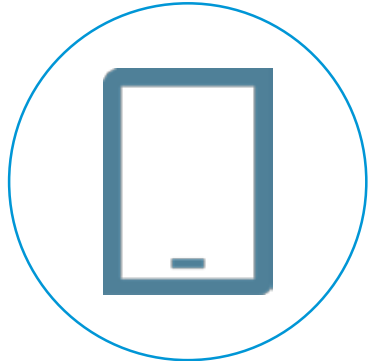
# What do these products have in common?

They changed our minds



Tesla electric car

Electricity can't power a high-performance car



Voice over Internet

I can't imagine talking to someone over my PC



Twitter

You can't organize a revolution in 140 characters or less





# Your print environment may have a perception problem

## Inkjet

"Inkjets aren't designed for the office. They're slow and need new ink all the time."

## Laser

"We print a lot. Energy and supplies are expensive."

## The environment

"I feel like my printer wastes a lot of energy and paper."





# Meet the new technology that changes the way you think about printing

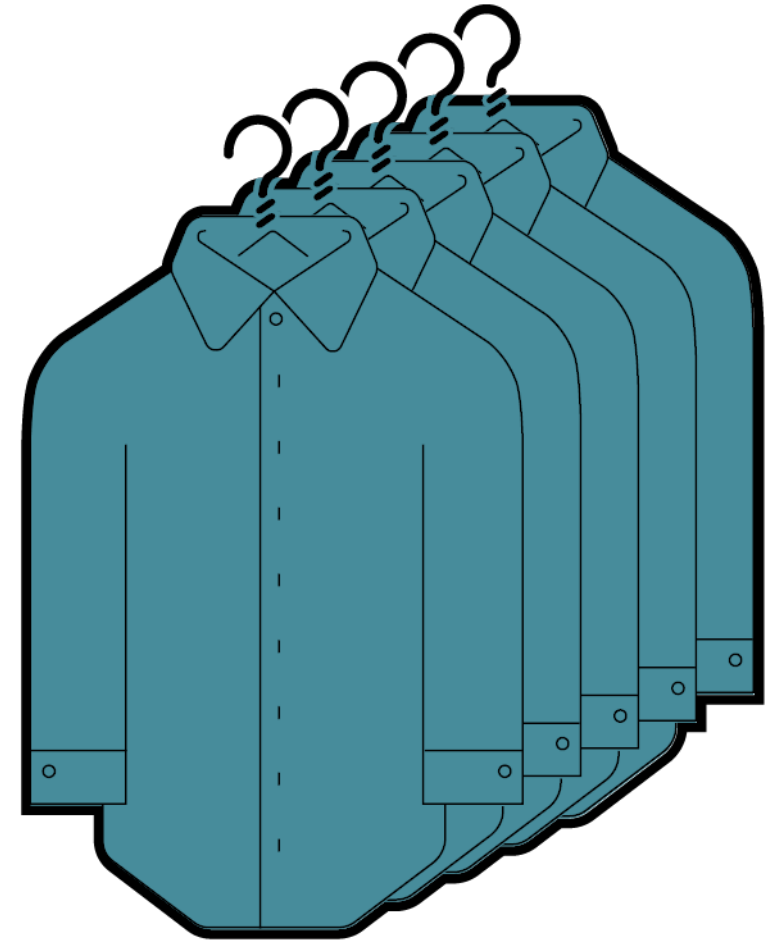
The best energy efficiency of any HP printing platform in its class



# Fun fact

A PageWide business printer uses only **0.68 Kilowatts** of energy per week<sup>1</sup>.

That's less than it takes to iron shirts for the business week!



<sup>1</sup> Based on testing comparisons of major competitors in default modes by Buyers Lab Inc., of usage during a typical work week. June 2017.



# HP PageWide printers are proven environmental performers

HP PageWide Enterprise



HP PageWide Pro



# Raising the bar on energy efficiency

Since 2005, HP has reduced energy consumption of our Printer portfolio by 50% on average<sup>2</sup>

1984 annual energy use of  
HP LaserJet printers:

**€56/year**



**1984**

The HP LaserJet II printer uses 586 kilowatt hours (kWh)/yr., at an annual energy cost of €56 with 8 ppm speeds



**1993**

Instant-on Technology, delivering up to 50% energy savings over traditional fusing



**1994**

HP introduces the HP OfficeJet printer-fax-copier—such multifunction devices can use less energy and materials when compared with standalone products



**2008**

The HP LaserJet P1006 is introduced:

- Uses 30 kWh/yr
- Yearly energy cost of €3
- Delivers 17 ppm
- Uses 19x less energy than the LaserJet II

**>€3.70/year**



**2014 and beyond**

HP PageWide Technology:

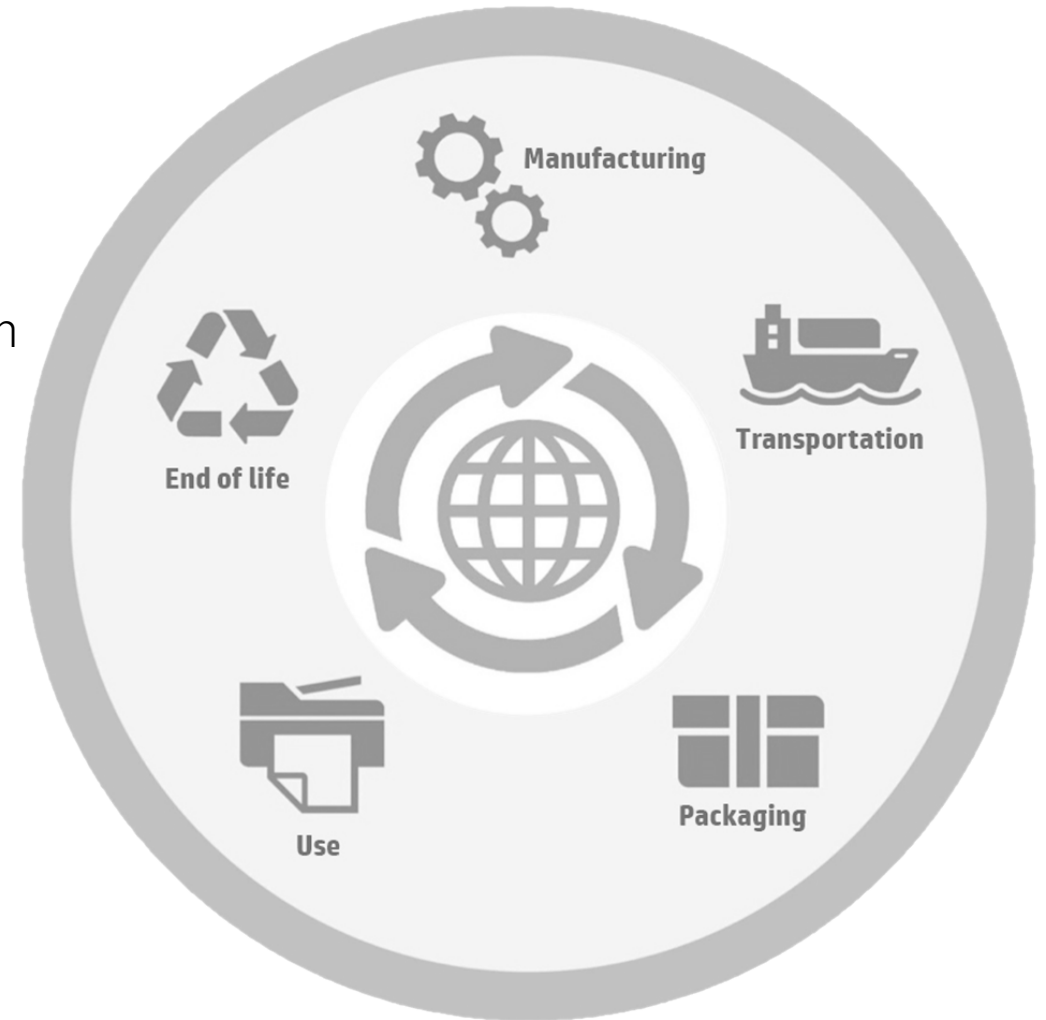
- Up to 73% less energy than comparable HP lasers
- Reduces carbon footprint of printing by up to 52%
- Delivers up to 75 ppm
- Up to 25,000 pages per month

<sup>2</sup>Based on internal testing and energy records of HP printers from 1984 to present.



# Just the facts: HP PageWide Life Cycle Assessment (LCA)

- At HP, we use independent, third-party LCAs<sup>3</sup> to:
- Assess the environmental impact of our products, from cradle to end of life
- Guide R&D and product design
- Reduce our customers' environmental footprint—and our own

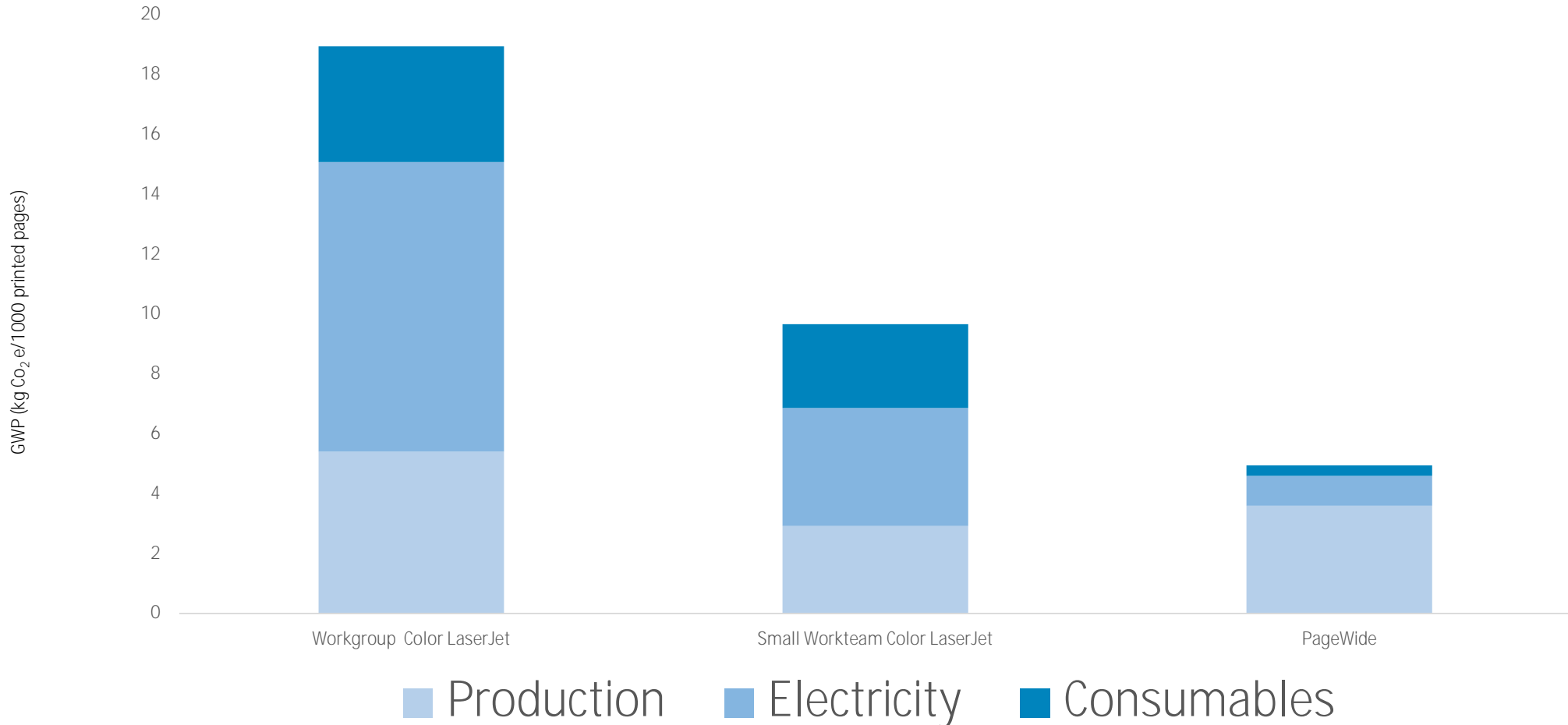


<sup>3</sup> Life cycle assessments of HP PageWide 452dw commissioned by HP and conducted by PE International in June 2017



# Change the landscape of business printing

HP PageWide Technology vs. comparable HP printing platforms, excluding paper<sup>4</sup>



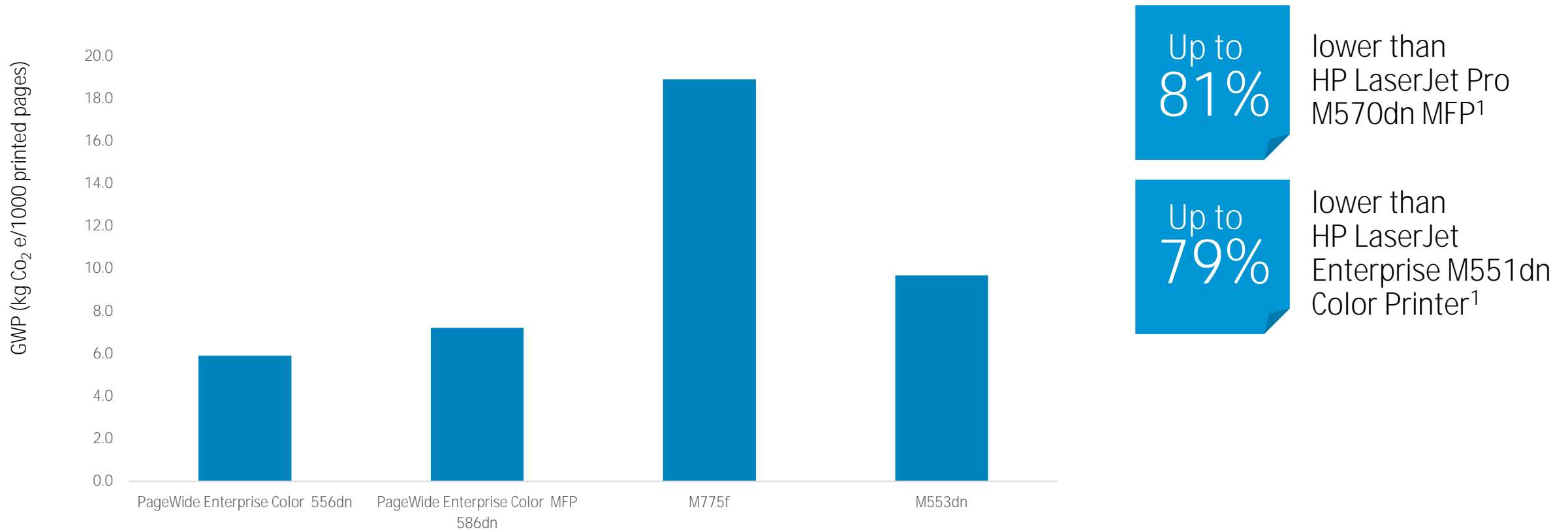
<sup>4</sup> Carbon dioxide equivalent (CO<sub>2</sub>e) savings of HP PageWide Technology vs. LaserJet platforms is based on the average lifetime use of printing 100,000 pages using an HP PageWide Pro 452dw vs. comparable HP LaserJet printers. Peer-reviewed life cycle assessment models commissioned by HP and conducted by PE International for inkjet (August 2016) and LaserJet (May 2016) printing. Specific results run by HP internal LCA experts.



# Slash the carbon footprint of printing

HP PageWide Technology vs. comparable HP LaserJet platforms, excluding paper<sup>4</sup>

Total carbon footprint of printers with HP PageWide Technology<sup>4</sup>



<sup>4</sup> Carbon dioxide equivalent (CO<sub>2</sub>e) savings based on the average lifetime use of printing 100,000 pages. Peer-reviewed life cycle assessment models commissioned by HP and conducted by PE International for inkjet (August 2016) and LaserJet (May 2016). Specific results run by HP internal LCA experts.

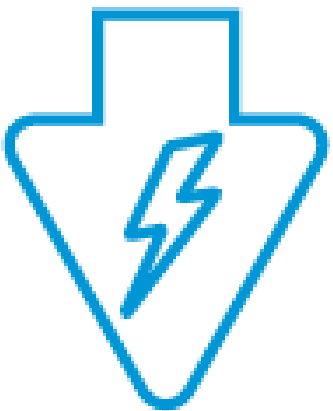




# Save energy with every print

Consume less energy and slash associated energy costs

The industry's most energy-efficient business printers  
Up to **73%** less energy than laser<sup>5</sup>



Power savings

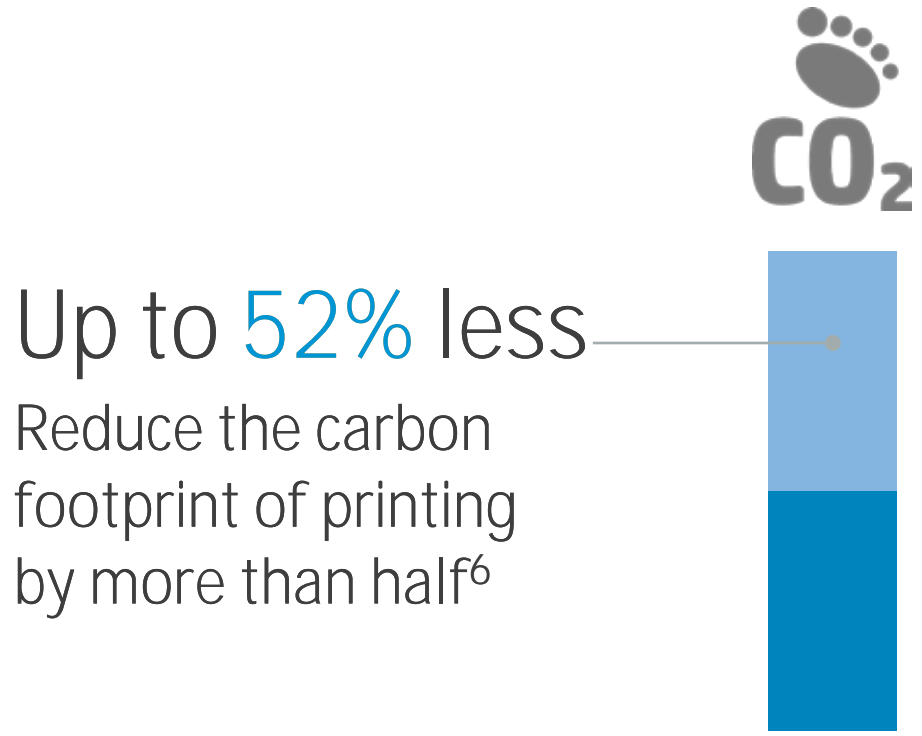
<sup>5</sup>Energy claim based on testing comparisons of major competitors in default modes by Buyers Lab Inc., June 2017. Internal testing reveals the HP PageWide Pro 452dw uses up to 73.01% less energy compared with the majority of color laser MFPs <€1000 and color laser printers <€800 as of September 2016.





# Meet your organization's sustainability goals

Use fewer resources and generate less waste in the office



Replacing just one of HP's previous generation printers with an HP PageWide Pro saves the carbon equivalent of five gallons of gas for every 10,000 printed pages.<sup>6</sup>



<sup>6</sup>Carbon dioxide equivalent (CO2e) savings of the average lifetime use of printing 100,000 pages using an HP PageWide Pro 452dw vs. comparable HP LaserJet printers. Peer-reviewed life cycle assessment models commissioned by HP and conducted by PE International for inkjet (August 2016) and LaserJet (May 2016) printing. Specific results run by HP internal LCA experts.





# Reduce waste from printing supplies and packaging

Count on higher-capacity cartridges and longer-life consumables

Generate  
**up to 95%**  
less supplies  
and packaging  
waste than  
comparable  
lasers.<sup>7</sup>

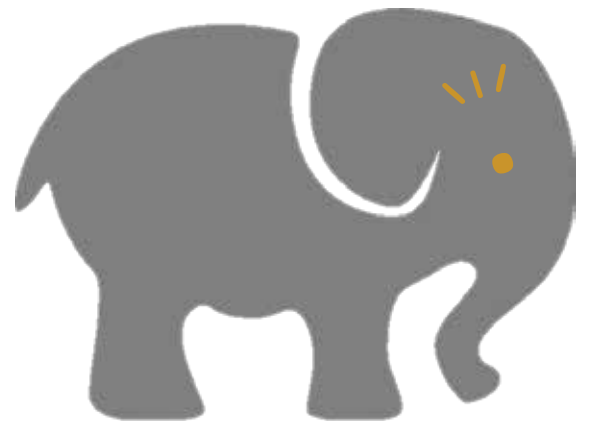


HP PageWide Technology keeps

**47-93 kgs**

of printing packaging waste out of traditional waste streams  
each year when compared with laser competitors.<sup>8</sup>

That's the average size of a newborn **elephant!**



<sup>7</sup> The HP PageWide Pro 452dw generates up to 95.25% less waste to print 150,000 pages compared with major in-class competitors' color laser MFPs <€1,000 and color laser printers <€800 as June 2017. Tested by Buyers Lab Inc. Printing packaging supplies using original HP PageWide cartridges

<sup>8</sup> Buyers Lab Inc, in June 2017, comparison against Lexmark CS410dn and Ricoh SP C320DN





# Summing it up: Reduce your organization's environmental impact

According to a third-party analysis, business printers using HP PageWide Technology...

Can reduce the carbon footprint of printing by up to

**52%**

... saving the carbon equivalent of 5 gallons of gas per printer per 10,000 pages.<sup>6</sup>



Use up to **73%** less energy than laser printers<sup>5</sup>



Generate up to **95%** less supplies and packaging waste than comparable lasers<sup>7</sup>  
... removing as much as 93 kgs from traditional waste streams each year vs. laser competitors.<sup>9</sup>





# Responsibly recycle HP electronics and supplies

With Design for Environment (DfE), we create products that are easier to reuse and recycle

1.52 billion kgs

of computer hardware  
recovered for reuse or recycling  
since 1987



If all the HP ink and toner  
cartridges that customers  
recycled through HP Planet  
Partners were laid end to end  
along the equator, they would

circle the Earth  
2.3 times





# Fun fact

HP's industry-leading solutions make it easy to reduce paper waste



Pull and PIN printing  
saves between  
**10% and 30%**



Fast default duplexing  
saves between  
**25% and 50%**



Digitizing on an MFP  
saves between  
**18% and 70%**



# HP PageWide: A reputation your business can stand on



## Affordable

"We're saving money on every page we print."

## Efficient

"This is a win for environmental sustainability."

## Mobile friendly

"I can print from my smartphone or tablet wherever and whenever I want."

## Reliable

"I'm never disappointed. It's fast and just keeps printing."



# With HP PageWide Technology, you can...



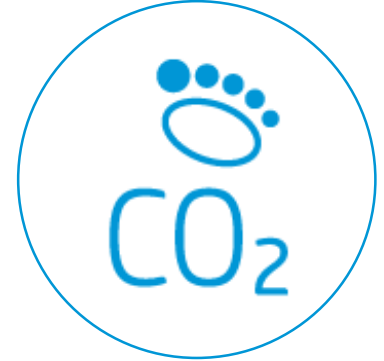
Cut costs with HP's most energy-efficient business printers ever



Leave a lasting impression with the laser-like perfection of HP's superior ink technologies



Work smarter with print speeds twice as fast as laser



Meet sustainability goals by reducing the carbon footprint of printing





# Stay productive

Keep up and running longer with high-capacity cartridges



More pages  
between cartridge  
replacements<sup>9</sup>



<sup>9</sup> Page volume based on HP 973X high capacity Original PageWide Cartridge.





# Print faster, work smarter

Set the pace with every print  
with the fastest desktop  
print speeds



Best in class  
print speeds<sup>10</sup>

<sup>10</sup> Comparison based on manufacturers' published specifications of fastest available color mode of all color business printers €300–€800 and MFPs €400–€1,000 as of November 2015, excluding other HP PageWide products, and products with 1% or lower market share using market share as reported by IDC as of Q3 2015. HP PageWide speeds based on General Office mode and exclude first page. Learn more at [hp.com/go/printerspeeds](http://hp.com/go/printerspeeds).



# Cut printing costs

Print for less without sacrificing quality



Lowest TCO in  
its class

compared with competitive lasers.<sup>12</sup>

<sup>12</sup>Total cost of ownership comparison based on 90,000 pages, manufacturers' published specifications for page yields and energy use, manufacturers' suggested retail prices for hardware and supplies, cost per page based on ISO yield with continuous printing in default mode with highest-available-capacity cartridges, long-life consumables of all color business printers €300–€800 and MFPs €400–€1,000 as of November 2015, excluding products with 1% or lower market share using market share as reported by IDC as of Q3 2015. Learn more at [hp.com/go/pagewideclaims](http://hp.com/go/pagewideclaims) and [hp.com/go/learnaboutsups](http://hp.com/go/learnaboutsups).

# Calculate your own cost savings

Print professional-quality color documents for the lowest total cost of ownership in its class

[Click here to calculate your savings](#)

Step 1 Usage      Step 2 Printer Requirements      Step 3 Current Printer      **Step 4 Savings Calculation**

## Annual Estimated Savings: £4,104

This printer will pay for itself in one month.

[Get full savings](#)

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### Annual Printing Costs

Category	Cost (£)
Current	£5232
Projected	£1128

Re-calculate savings

### Recommended printer

HP PageWide Pro 477dw MFP

**£297.45**

[Contact HP](#)



“This is the best printer ever made, hands down. No printer I’ve ever tested has worked so well. It made me want to print more.”

—John Brandon, Inc.com





Thank you

