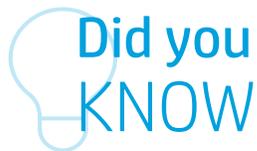# Learn the risks that clone cartridges can present to you, your business, and the environment

What are clone cartridges? Clones are new cartridges that are not affiliated with or authorized by HP. Clones are also known as New Build Compatible (NBC), but are not Original HP toner cartridges.

Did you KNOW

HP was named one of the world's most sustainable corporations in 2017,[1] but most clone manufacturers do not have sustainability programs or recycling capabilities, and do not meet emission guideline limits:[2,3]

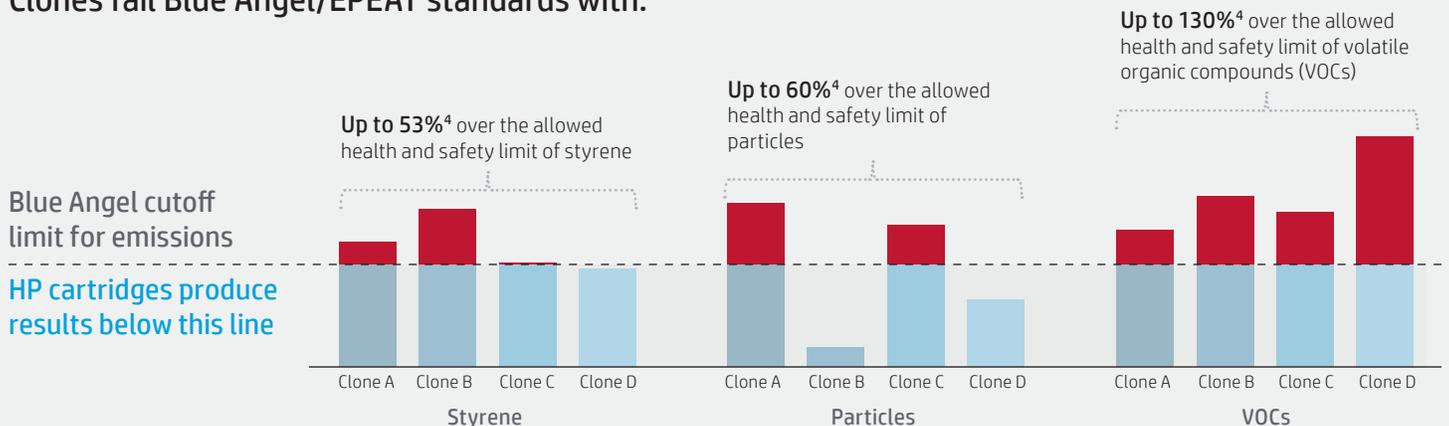|	Indoor air quality and ecolabel compliance[4]	Proven adherence to health and safety standards[4]	Consistent print quality for waste reduction[5]	Free and easy cartridge recycling program[6]
HP	✓	✓	✓	✓
Clones	X	X	X	X

Know the risks of clone cartridges

When using Original HP cartridges, HP printing systems meet limits for indoor air quality emissions, but tests have proven that clone cartridges exceed emission limits.[4]

Clones fail Blue Angel/EPEAT standards with:[4]

Up to 53%[4] over the allowed health and safety limit of styrene

Up to 60%[4] over the allowed health and safety limit of particles

Up to 130%[4] over the allowed health and safety limit of volatile organic compounds (VOCs)

Blue Angel cutoff limit for emissions

HP cartridges produce results below this line

| Clone A | Clone B | Clone C | Clone D |
| **Styrene** |

| Clone A | Clone B | Clone C | Clone D |
| **Particles** |

| Clone A | Clone B | Clone C | Clone D |
| **VOCs** |

Clones—bad for printers,[7]
bad for the environment

In addition to greater emissions, using clones instead of Original HP toner cartridges can also lead to:

Inconsistent print quality
resulting in reprinting and increased paper consumption, which is the largest environmental impact of printing.[5]

29% more pages
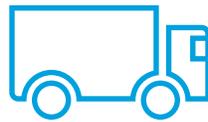to get the same job done[5]

16x the paper waste
from reprints due to inconsistent print quality[5]

Across all areas studied over the life of the cartridge, clones had a larger environmental impact than Original HP toner cartridges:

40% more
energy usage[5]

54% more
fossil fuels consumed[5]

55% larger
carbon footprint[5]

Partner with HP and **help make a difference**

Almost all clone cartridges end up in a landfill. In fact, nearly 90% of the toner cartridges sold by the clone manufacturers surveyed will ultimately be thrown away because most fail to collect their own products.[3] But HP makes it free and easy to recycle your used cartridges through the HP Planet Partners program, available in more than 60 countries and territories worldwide.[6] So your cartridges never have to end up in a landfill.

When you choose HP, you're making a very real difference—for you, your business, and the environment.

[1] The Global 100 Index is a ranking of the world's most sustainable corporations. The list is compiled by Toronto-based media and investment advisory firm, Corporate Knights (CK). Each year, the latest iteration of the index is announced at the World Economic Forum in Davos, Switzerland.

[2] Based on HP internal research of manufacturer web sites, which showed no evidence of sustainability programs.

[3] InfoTrends, 2018 North America Supplies Recycling study, commissioned by HP. Findings are based on average results of interviews with 7 remanufacturers, 2 NBC manufacturers, 3 empty collectors and 3 distributors. For details, see hp.com/go/NA-2018InfoTrends.

[4] 2018 WKI Blue Angel Indoor Air Quality compliance study, commissioned by HP. The study tested 4 New Build Compatible toner cartridge brands sold as substitutes for HP LaserJet Pro MFP M425dn with cartridge 280A. The tests were carried out in compliance with "Prüfverfahren für die Bestimmung von Emissionen aus Hardcopygeräten" for purposes of Blue Angel labeling of office equipment in accordance with RAL-UZ 205. For more information, visit http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-1981ENW.

[5] 2018 Four Elements Consulting LCA study, commissioned by HP, compared Original HP 80A and 83A monochrome toner cartridges with a sample of NBC alternatives across eight environmental impact categories. For more information, visit hp.com/go/NA-LJLCA-NBC-2018. The LCA leverages a SpencerLab 2016 study, commissioned by HP, comparing Original HP LaserJet toner cartridges with three brands of NBC toner cartridges sold in NA. For details, see http://www.spencerlab.com/reports/HPReliability-NA-NBC2016NB.pdf.

[6] Program availability varies. For more information, visit hp.com/recycle.

[7] Printing system consists of HP printer, paper, and toner cartridge.