



Print Safely and more Sustainably

with HP Latex



Eco-consciousness is a top priority for your customers, who are relying on print businesses to help deliver more sustainable signage.

Historically, the print industry has struggled to adjust to a more sustainable model, but with planning and creativity—combined with the sustainable technical innovation and support offered by leaders like HP, print business owners can lead the way into a new era.

Many companies are accelerating their sustainability roadmaps and setting value chain targets for the end of the decade, and printers need to review their operations and provide sustainable print solutions.

This guide will help you learn more about the environmental advantages of HP Latex technology, and how it can help your business to become more sustainable without trading performance. This can be done by helping your clients on their journey through water-based ink chemistry, compatible eco-conscious substrates, and recycling programs, and all this is backed-up by HP—recognized as one of the most sustainable corporations in the world.¹





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Designed with safety in mind

HP continues to drive a greater sustainable impact in large-format printing reinventing how our products are designed, used, supported, and recovered.

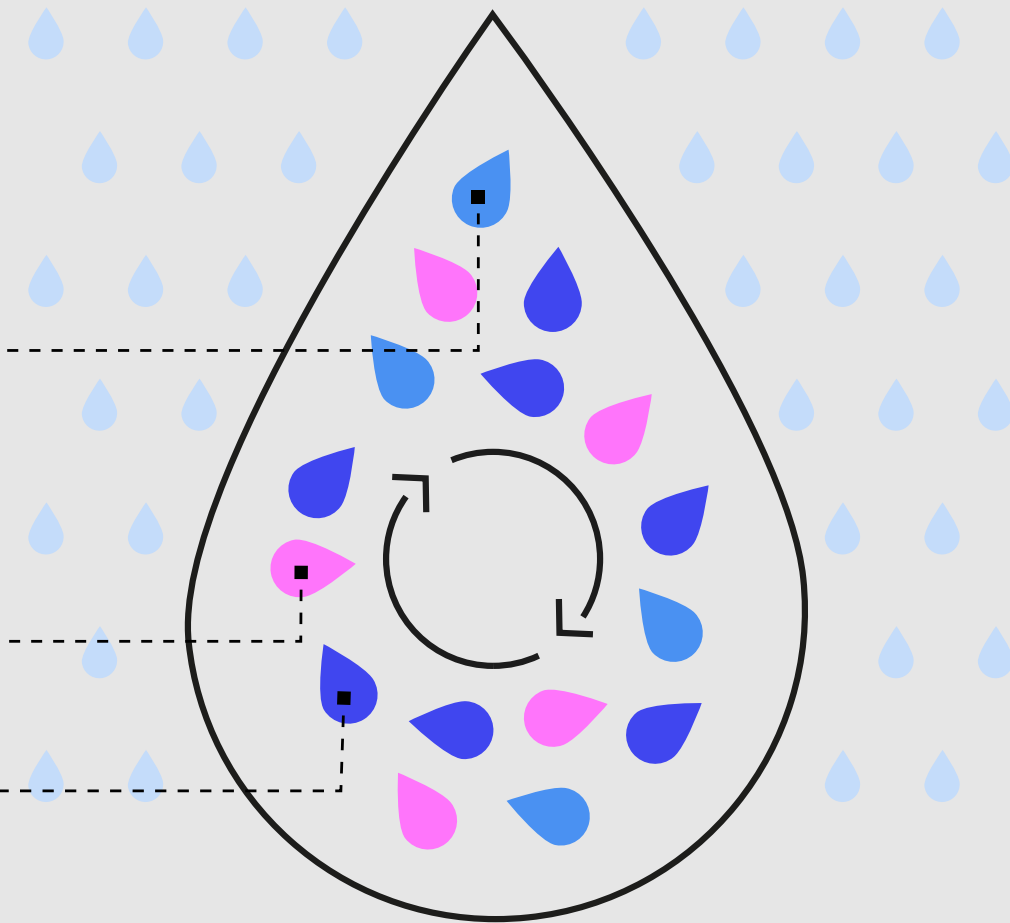
Our solution prioritizes the health and safety of both your operators and customers, as well as reducing print's overall impact on the environment.

SO, WHAT DOES THIS LOOK LIKE?
Each drop of ink contains three key elements:

LIQUID INK VEHICLE
Water, wetting agent, and humectant

PIGMENT PARTICLES

LATEX POLYMER PARTICLES



THE RESULT? OUTSTANDING SUSTAINABLE PERFORMANCE:

Up to 65% water²

No hazardous air pollutants (HAPs)³

Non-reactive monomer chemistry⁴

Odorless prints,⁵ for even the most sensitive indoor spaces.

Water-based HP Latex Inks are designed to avoid the hazards associated with eco-solvent, UV, and UV-gel inks. In most competitive inks, up to 80% of the eco-solvent ink formula is made up of a volatile organic solvent listed as a Hazardous Air Pollutant (HAP) by the EPA.⁶ The high volatility of this compound in high concentrations in eco-solvent inks always results in significantly higher levels of VOCs than water-based inks.⁷

WHAT ARE HAPS?

Hazardous Air Pollutants (HAPs) are particles that are suspected or confirmed to cause serious health or environmental effects. In the US, there are currently 188 chemicals identified as HAPs by the Environmental Protection Agency (EPA).

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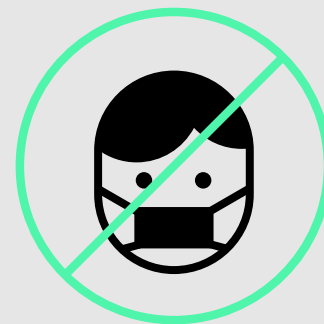
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Designed for operator safety

To improve workforce wellbeing you need to provide a safe place for your operators to work. The chemical composition of your chosen ink has a significant impact on your overall environmental and safety profile.

HP Latex Ink produces odorless prints that ensure a more comfortable working environment⁵ and help avoid health and safety liability concerns.



No HAPs³



Odorless prints⁵



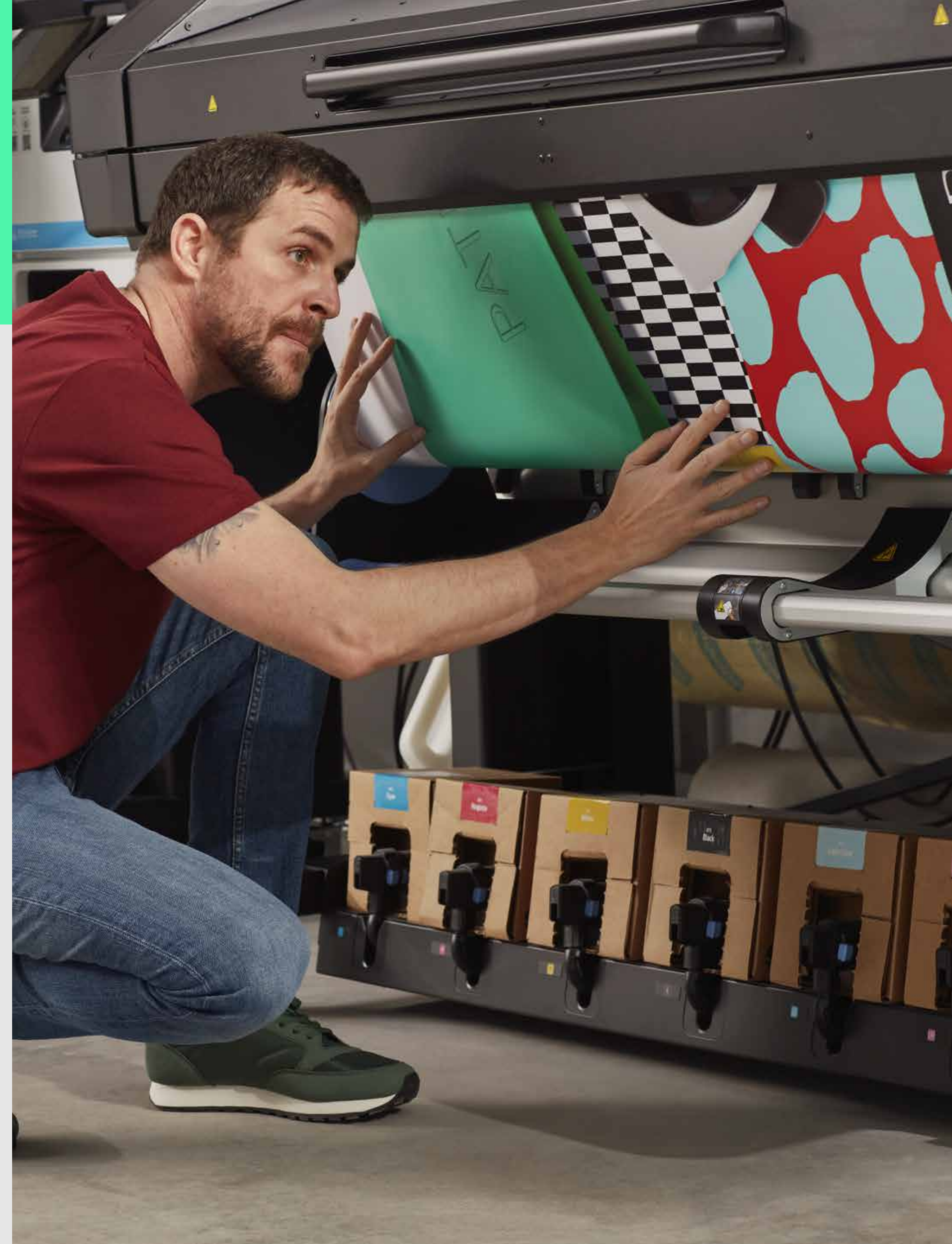
Ozone free



No reactive monomer chemistry⁴



HP Latex is the only technology in the large-format signage market to have UL ECOLOGO[®] Certified inks,⁸ which means they meet a range of stringent environmental performance standards and human health criteria.



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Designed for your clients' safety

To enhance business opportunities and capabilities, it is imperative to secure the certifications and documentation that can help you meet the requirements of environmentally conscious brand owners and their print buyers.

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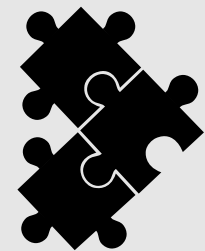
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The most environmentally certified technology¹⁴

Customers value transparency, and third-party certifications are a good way to display it. HP Latex technology delivers the certifications that matter with over fifteen environmental certificates and labels. HP Latex Ink produces odorless prints⁵ and achieves GREENGUARD Gold certification at the unrestricted level.⁹

This certification proves that a product has very low emissions—even at full room coverage—and can be used in sensitive environments such as schools and hospitals. This provides new opportunities for print providers who want to explore these markets.



Inks comply with toy safety standards⁸



DID YOU KNOW?

HP launched the first water based inks for indoor and outdoor signage in 2008 and pushed the industry to adopt third party recognized certifications to be more transparent. HP Latex Inks were the first to have GREENGUARD Gold which now has become a standard.

TOY SAFETY REGULATIONS

While it is the obligation of the toy manufacturer to adequately certify toys for specific uses, HP Latex Inks have demonstrated compliance to toy directives in Canada, Europe, and the US, which screen for problematic heavy metals, amines, and colorants.¹⁰

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Designed with the environment in mind

Responsible design

We make sure all the components that go into our printers are as sustainable as they can be. HP printers and supplies contain recycled plastics designed with post-consumer electronics, soda bottles, UL-validated ocean-bound plastics, coat hangers, and empty Original HP Ink Cartridges. Our global commitments include using 25% recycled plastic across all HP divisions by 2025, and cutting down single-use plastics by 75% in the same timeframe.

HP 872, 882, and 886 Latex Inks utilize cardboard-based ink cartridges in which the exterior cardboard can be recycled through local municipalities.

Responsible end-of-life

Compatible with a range of eco-conscious media¹¹

In printing, the media or substrate has the most substantial environmental impact. PVC is the least sustainable option and is already being banned in a few countries. More eco-conscious alternatives are beginning to take center stage, such as polyester-based fabrics.

HP has a dedicated environmental stewardship program sourcing with a team of engineers, toxicologists, and chemical engineers developing and profiling more and more eco-conscious media.

There are well over 180 media and substrates that have been identified as an eco-conscious alternative. Just look for the 'green leaf' icon in the HP Media Locator to help make a more sustainable impact.



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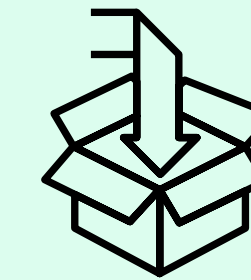


Take-back schemes: Driving the change to a circular economy

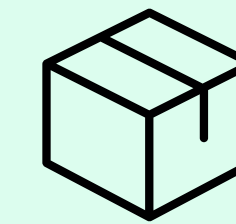
They say what goes around comes around. At HP, we help do just that. With us, you can return your old products for recycling, so the materials can be given a new life in other products.

SUPPLIES

Our free HP Planet Partners take-back program¹¹ helps you recycle eligible HP Supplies to reduce the amount of material heading to landfill. Better for the planet, better for your bottom line.



1.
Store your
cartridges



2.
When the
box is full



3.
Request
a pick-up

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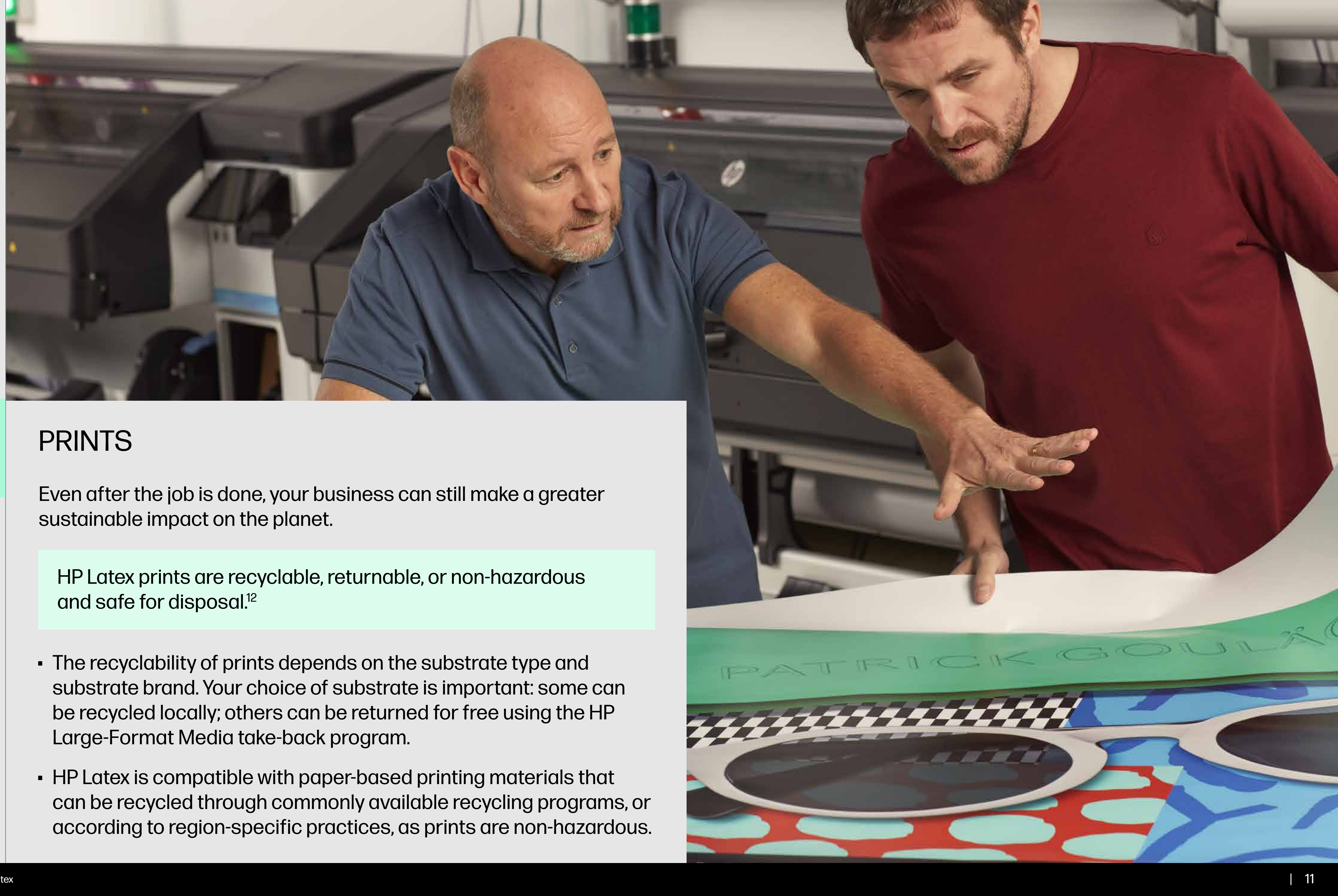
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PRINTS

Even after the job is done, your business can still make a greater sustainable impact on the planet.

HP Latex prints are recyclable, returnable, or non-hazardous and safe for disposal.¹²

- The recyclability of prints depends on the substrate type and substrate brand. Your choice of substrate is important: some can be recycled locally; others can be returned for free using the HP Large-Format Media take-back program.
- HP Latex is compatible with paper-based printing materials that can be recycled through commonly available recycling programs, or according to region-specific practices, as prints are non-hazardous.

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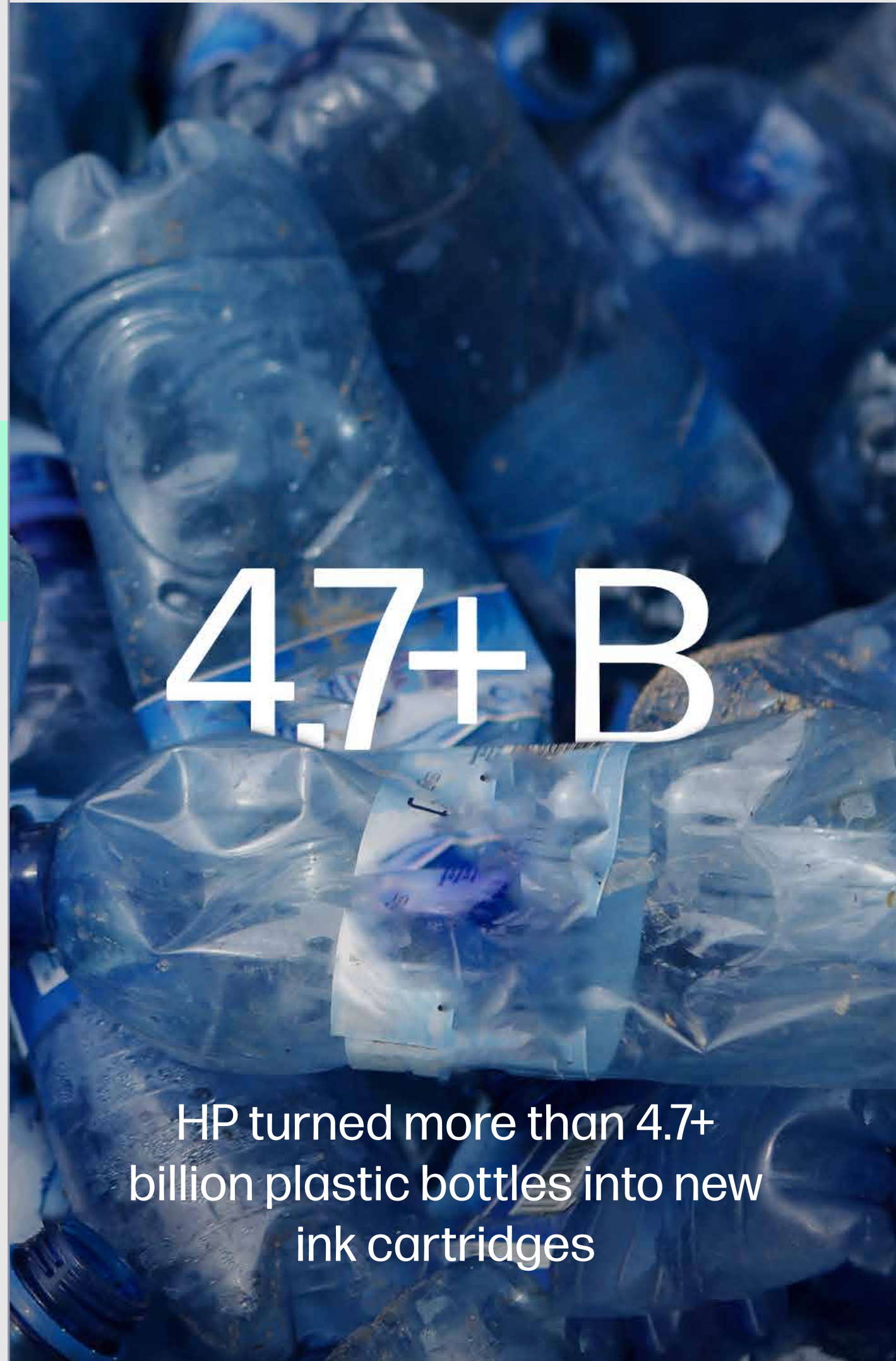
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HARDWARE

HP Planet Partners is also taking back old hardware. Our service offers free collection and transportation for loads over 500kg/1,000lbs in 65 countries.

Please recycle printing hardware and eligible printing supplies and prints. Find out how at our website: <http://www.hp.com/recycle>



4.7+ B

HP turned more than 4.7+ billion plastic bottles into new ink cartridges



875+ M

HP recycled 875+ million old HP ink cartridges



475+ M

HP used 475+ million old plastic hangers to create new print technology products

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It's not just about technology: it's about responsibility

While the tools you use are an important part of your sustainability journey, it's equally important to shift your attitude and keep an open mind towards new ways of working. By getting it right at the production level, print businesses can start the journey off right and help everything fall into place across the supply chain.

You don't have to take on this challenge alone. HP continues to drive a greater sustainable impact in large-format printing with each new generation of the HP Latex printing system.

We have the commitment and the scale to address current—as well as anticipated—environmental needs, and to continue leading change in signage printing.

Need help staying on top of your sustainable practices? Check out our online eco-solutions training courses at the HP Latex Knowledge Center and brush up on everything you need to become a sustainable print partner.¹³

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Want to learn more about HP Latex, and how it can deliver more eco-conscious print jobs? Why not visit The Print Hub, where you can see examples of HP's sustainable solutions come to life.

1. HP is recognized as a leader in environmental sustainability and social impact. See <https://www8.hp.com/h20195/v2/GetPDF.aspx/c08228880.pdf>
2. HP, Think Print isn't Sustainable? Think Again, <https://largeformat.hp.com/cz/blog/think-print-isn-t-sustainable-think-again>
3. According to manufacturers' safety data sheets (SDSs), most eco-solvent inks contain up to 80% glycol ethers. These are categorized by the Environmental Protection Agency (EPA) as Hazardous Air Pollutants (HAPs) under the Clean Air Act. See epa.gov/haps/initial-list-hazardous-air-pollutants. HP Latex Inks were tested for Hazardous Air Pollutants, as defined in the Clean Air Act, per U.S. Environmental Protection Agency Method 311 (testing conducted in 2013) and none were detected.
4. See <http://www.roadmaptozero.com>. Printing with HP Latex Inks avoids the problematic reactive monomers associated with UV printing. Acrylate monomers present in uncured UV inks and UV-gel inks can damage skin.
5. There is a broad set of media with very different odor profiles. Some of the media can affect the odor performance of the final print. For certifications, see <http://www.ul.com/EL> and <http://www.ul.com/gg> or <http://www.greenguard.org>
6. According to manufacturers' safety data sheets (SDSs), most eco-solvent inks contain up to 80% glycol ethers. These are categorized by the Environmental Protection Agency (EPA) as Hazardous Air Pollutants (HAPs) under the Clean Air Act. See epa.gov/haps/initial-list-hazardous-air-pollutants. HP Latex Inks were tested for Hazardous Air Pollutants, as defined in the Clean Air Act, per U.S. Environmental Protection Agency Method 311 (testing conducted in 2013) and none were detected.
7. Comparing main solvent of inks' generation of VOCs at same mass/volume and temperature conditions.
8. Applicable to fourth-generation HP Latex Inks. UL ECOLOGO® Certification to UL 2801 demonstrates that an ink meets a range of multi-attribute, lifecycle-based stringent criteria related to human health and environmental considerations (see ul.com/EL). HP is the only printing company with UL ECOLOGO® Certified inks in the "Printing Inks and Graphics Film" product category, see spot.ul.com/main-app/products/catalog/
9. Applicable to HP Latex Inks. UL GREENGUARD Gold Certification to UL 2818 demonstrates that products are certified to UL's GREENGUARD standards for low chemical emissions into indoor air during product usage. Unrestricted room size—full decorated room, 33.4 m² (360 ft²) in an office environment, 94.6 m² (1,018 ft²) in a classroom environment. For more information, visit ul.com/gg
10. HP 872, 882, and 886 Latex Inks have been tested and demonstrated compliance to the following toy safety methods and protocols: EN 71-3, EN 71-9, ASTM F963-17, US 16 CFR 1303, US 16 CFR 1307, SOR 2011-17, and SOR 2018-83. HP does not recommend using the inks for toys intended to target children under the age of three years.
11. See <http://www.hp.com/go/mediasolutionslocator>
12. Most HP large format paper-based printing materials can be recycled through commonly available recycling programs, or according to region-specific practices. Some HP media are eligible for return through the free, convenient HP Large-Format Media take-back program. Programs may not exist in your area. See <http://www.HPLFMedia.com/hp/ecosolutions> for details. HP large-format printing materials, both unprinted and printed with Original HP Latex Inks, are non-hazardous and safe for disposal. Contact your local waste management authority for local area-specific instructions.
13. <https://digitalprinting.hp.com/au/en/large-format-printers/resources/sustainability/sustainable-edge-with-hp-latex.html>
14. Applicable to HP Latex technology compared to competitive large format printing alternatives using solvent and UV technologies. Not all certifications are applicable for all generations of HP Latex Inks. See individual product data sheets for more information at hp.com/go/latex.