

Jennifer Reece Sustainable Materials Program Manager December 4th, 2018



HP's Sustainable Impact

Planet



Grow our business, not our footprint—and support our customers to do the same

People



Champion dignity, respect, and empowerment for all people with whom we work

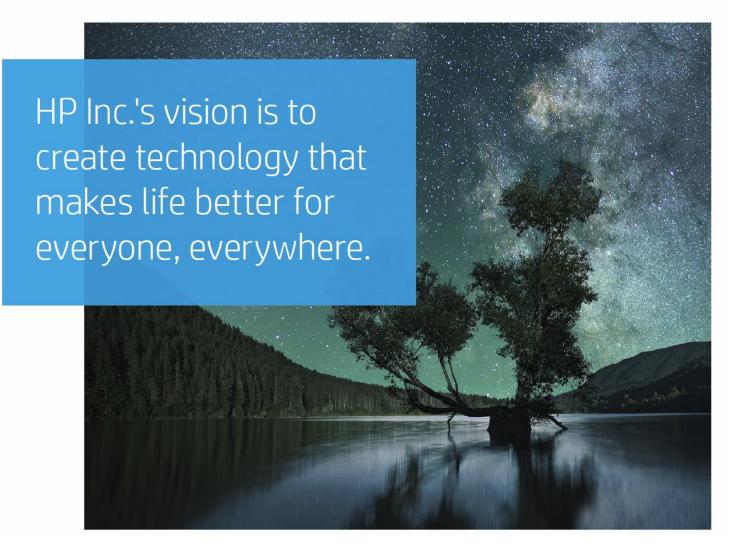
Community



Catalyze positive change in communities where we live, work, and do business



Sustainable Impact



Chemical Management: How do we get there?

- Regulations: RoHS, REACH
- Market access requirements: Eco-labels, Green Public Procurement, Customer driven forces
- Strategic substitutions: phthalates
- Voluntary initiatives: lowhalogen, process chemicals



HP Goal setting inputs

UN Sustainable Development Goals











Community





HP 2017 materiality assessment



Business drivers





















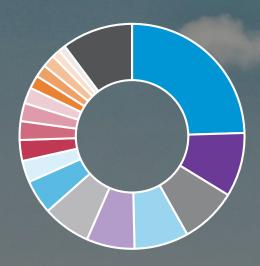






Setting a quantitative goal

Typical Notebook Material Content¹



- PC/ABS
- ■Steel
- □ Copper (Cu)
- Aluminum (Al)
- Lithium Cobalt Oxide (LiCoO2)
- Borosilicate Glass
- PET/PBT
- Carbon (C)
- Printed Circuit Board Epoxy
- Other Organic Solvents
- Polyethylene (PE)
- Silica (SiO2)
- Acrylonitrile Butadiene Styrene (ABS)
- Iron (Fe)
- Polybutylene Terephthalate (PBT)
- Nickel (Ni)
- Flame Retardants
- □ Low-level Additions (<1%)*





Chemical Footprint Reduction Goal

Plan to achieve goal





Overcoming society's greatest challenges





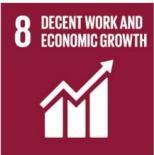






























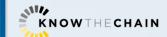




Recognized as one of the world's most sustainable companies



One of only 25 companies named to both 2017 Climate and Water "A" Lists; achieved a spot on 2018 Supplier Engagement Leader Board



Recognized as an industry leader for commitment to address forced labor in supply chain



Earned 14th spot on Gartner Supply Chain Top 25 list with perfect 10 for efforts in corporate social responsibility



With 2018 rankings, listed on the World Index for the 7th time in a row



Received Gold Medal Award for International Corporate Achievement in Sustainable Development



Named one of the 100 Most Sustainable Corporations in the World



Included on the FTSE4Good Index since 2003



Recognized for continued commitment to delivering product energy efficiency



Received 100% on Corporate Equality Index for 2003-2018



Rated among the top technology companies for corporate social responsibility efforts



HP Brazil recognized for sustainability efforts in 2013, 2014, 2016, and 2017



Named one of Canada's Greenest Employers for 11th year in a row



HP's strategy

Decouple growth from consumption

- Keep materials in use at highest state of value
- Reduce resource use
- Repurpose materials properly

Disrupt industry business models

- Shift to service models
- Reduce waste and costs
- Extend product lifespans and increase reuse and recycling

Digitize supply chains and production

- Transform product design, manufacture, and distribution
- Create in more efficient and environmentally sound way



HP aspires to a world where our products and operations use materials and chemicals that cause no harm

- The <u>HP Materials And Chemical Management Policy</u> guides how we specify materials and chemicals for use in products, packaging, and manufacturing processes.
- Our approach includes:
 - Identifying and evaluating materials used in our products and throughout our supply chain, and providing information on the <u>material content of typical HP</u> <u>personal systems and printers</u>.
 - Prioritizing materials for restriction. See <u>HP's General</u>
 Specification for the Environment (GSE).
 - Working with and guiding our suppliers on replacing substances of concern with environmentally preferable alternatives

See HP's <u>Green Chemistry Timeline</u> for milestones in this area

Substance / Material	Scope	Date ³
Antimony	Bleached paper ⁴	2012
Antimony Trioxide	Low halogen products ⁴	2011
Arsenic / Arsenic compounds	All products	2009
Beryllium / Beryllium compounds	All products	2010
Bis(2-methoxyethyl) ether (DEGDME)	All products	2017
Bisphenol-A	Thermal paper	2011
	External plastics	2016
Cadmium	All products	1996
Chlorinated paraffins, medium chain (MCCPs)	Low halogen products ⁴	2013
Chlorinated paraffins, short chain (SCCPs)	All products	2002
Chlorine	Bleached paper ⁴	2012
Cobalt dichloride	Desiccants and humidity indicators	2012
Flame retardants, polybrominated biphenyls (PBB) / polybrominated diphenyl ethers (PBDE) (including DecaBDE)	All products	1991
Flame Retardants, Chlorinated (CFRs)	External case plastics	2007
Flame Retardants, Brominated (BFRs)	External case plastics	2007
	New HP Brand Personal computers	2009
Hexabromocyclododecane (HBCDD)	All products	2012
Hexavalent Chromium	All products	2004
Lead / Lead compounds	External Cables	2003
	All products	2004
Mercury / Mercury compounds	All products (except bulbs)	1998
	Notebooks	2008
N,N-dimethylacetamide (DMAC)	All products	2018
Ozone Depleting Substances (ODS)	All products and manufacturing processes	1993
Phthalates	Cables (Di-(2-ethylhexyl) phthalate (DEHP), Dibutyl phthalate (DBP), Butyl benzyl phthalate (BBP), Diisobutyl phthalate (DIBP)	2010
	Non-EEE products (DEHP, DBP, BBP, Diisodecyl phthalate (DIDP), Di-n-hexyl phthalate (DnHP)	2011
	New Personal computing products (DEHP, DBP, BBP)	2011
	Packaging (DEHP, DBP, BBP, DIBP)	2013
	New Personal computing products (DIBP)	2016
	New Inkjet printers (DEHP, DBP, BBP, DIBP)	2016
Polycyclic aromatic hydrocarbons (PAH)	External rubber or plastics	2008
Polyvinyl Chloride (PVC)	External case plastics	1993
	Packaging	2006
	New HP Brand Personal computers	2008



^{1.} See Joint JEDEC/ECA Standard: Definition of "Low-Halogen" for Electronic Products.

^{2.} This does not include PageWide Printers or external components for any products (mainly cables and external power supplies).

^{3.} Dates refer to when proactively adopted materials restrictions were first introduced on a HP product, ahead of regulatory requirements. For a comprehensive list of HP's materials restrictions, including numerous materials restricted by HP on a worldwide basis in response to regional regulations, refer to HP's General Specification for the Environment.

^{4.} These requirements apply only when designated by specific HP business units.

HP Sustainable Impact goals





