

The Knoll logo is displayed in a bold, orange, sans-serif font. It is positioned in the upper left quadrant of the page, overlaid on a light blue horizontal band. The background of the entire page is a photograph of a wind turbine with three blades, each featuring a red and white striped tip, standing in a field of bright yellow rapeseed flowers under a clear blue sky.

Knoll

2013

**Environmental
Health & Safety
Annual Report**

The 2013 Annual Environmental Health & Safety Report is the 19th published by Knoll. We make this information public in order to keep our customers, employees, vendors and partners informed about our ongoing progress toward becoming a sustainable company.



“As part of our ongoing work to contribute to the most inspiring workspaces worldwide, our sustainability standards create a preeminent platform for product innovation and the Knoll facilities that produce them.”

-Andrew Cogan, Knoll CEO

Highlights from 35 years of Sustainable Design

1978

Knoll hires fulltime environmental engineer and redesigns wastewater treatment plant at its East Greenville facility, reducing harmful effluents.

1984

Company sets goal to eliminate VOCs from all manufacturing operations. Today, Knoll is more than 95% VOC free.

1986

Lubin manufacturing facility in East Greenville is completed. The environmentally-advanced building, designed for sustainability, earns LEED® Gold in 2004.

1988

Knoll works with consultant to inaugurate emissions testing of office furniture in a protocol that is the precursor of UL GREENGUARD.

1993

The Bulldog Chair developed and manufactured for clean technology from start to finish, including returnable and reusable packaging.

1996

Knoll is the first major OEM to make panel fabrics from 100% producer-colored polyester fibers: completely recyclable, benign pigments, no effluents.

1998

Knoll is the first U.S. OEM to receive ISO14000 Standard for Environmental Management Systems certification.

2005

Knoll East Greenville facility designated OSHA VPP Star Site

2006-2009

Knoll joins Clinton Global Initiative and, with capital investments of more than \$2,000,000, increases CO2 reductions beyond the 10% reduction goal.

2009

Generation by Knoll® becomes the first product in the contract industry to earn SMaRT® Sustainable Platinum certification.

2010

Knoll is the first contract furniture company to earn BIFMA level™3 in multiple product categories for Knoll Dividends Horizon®, Antenna and Autostrada systems, Generation and MultiGeneration chairs, Calibre storage and Reff wood casegoods.

2011

Knoll Full Circle Program, the first of its type in the industry developed in partnership with non-profit ANEW, diverts 326.1 tons of decommissioned furniture, fixtures and equipment from landfill through resale, repurpose, recycling and converting waste to energy.

2012

Knoll Boston Showroom awarded LEED® Platinum certification, raising the total of Knoll LEED certified facilities to 11, including the LEED Gold Lubin Manufacturing Facility in East Greenville, PA. (Two additional facilities are pending certification for 2013.)

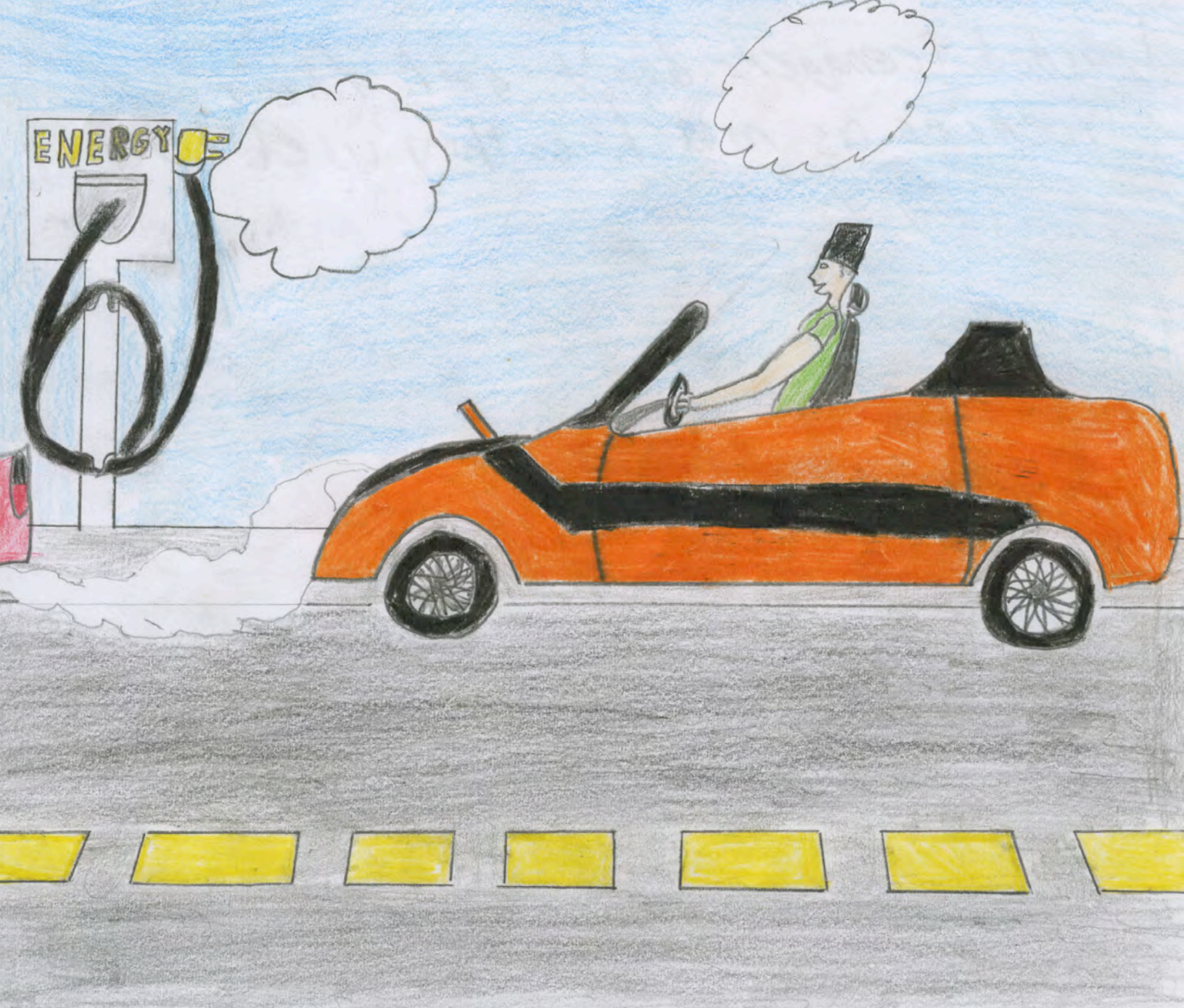
2012

ReGeneration by Knoll® achieves SMaRT® Sustainable Platinum certification and an HPD (Health Product Declaration) providing product transparency.



INTRODUCTION

In 2013 Knoll continued to pursue sustainability in multiple areas of our business. We focus on key practices that offer the most comprehensive and promising approach to reducing the environmental footprint of our manufacturing, products, facilities and business operations. Through *Energy Reduction and Sustainable Forestry* initiatives we address a leading issue of our time: reducing carbon emissions to slow climate change. Our comprehensive *Design for the Environment* process establishes a structure and protocol for creating sustainable products and facilities. *Third Party Certification* ensures that the products we manufacture meet benchmark sustainable standards as certified by recognized, objective third parties. And in our *Social Equity* practices we act responsibly and give back to our associates and the communities in which we do business.



ONE

Energy Reduction & Climate Change

Carbon Reduction Strategy and CDP Membership continued in 2013

Knoll pursued its comprehensive Carbon Reduction Strategy in 2013 with activities targeted at reducing CO₂ emissions, a major contributor to climate change. The company has continued its investment in energy efficiency initiatives and infrastructure.

Knoll participation in the CDP (formerly the Carbon Disclosure Project) commits the company to ongoing carbon reductions and public disclosure of results. Based on production ratios of pounds of CO₂ per product manufactured, Knoll realized a reduction of 733 tons CO₂ emission at its US production facilities in 2013.

2013 CO₂ Reductions

Year	Total Direct CO ₂ (tons)	Total Indirect CO ₂ (tons)	Total CO ₂ (tons)
2006	19,453	50,735	70,188
2007	20,507	49,579	70,086
2008	19,442	46,639	66,081
2009	15,669	35,920	51,589
2010	15,628	36,516	52,144
2011	17,208	39,117	56,325
2012	14,536	38,191	52,727
2013	15,870	36,091	51,961

In 2013, Knoll put into place four initiatives designed to further reduce energy consumption and carbon emissions:

Sub-Metering

Sub-Metering couples energy-measuring software with electric meters to measure energy use at a more granular level than is possible with existing measurement procedures. The goal of the program is to empirically quantify energy use to identify energy saving opportunities and document overall energy reduction, site to site, year over year. Using Vorne Boards that track the volume of parts produced on manufacturing equipment and integrating specialized software into the machine/meter process, we are able to create energy-use data points for every shift or targeted segments of shifts, measure the comparative energy efficiency of multiple devices, and plot historical energy-use trends. Now, in addition to tracking all metal, wood and assembled parts, we can pinpoint how much energy was used for each part in these categories. The pilot project initiated in

July 2013 and installed in Grand Rapids at the end of the year, will roll out in all facilities in 2014.

Compressed Air

Compressed Air projects in all US facilities employed utility company and energy consultant auditors to assess and analyze compressor operations, identify leaks and target opportunities for additional efficiencies. As a result of equipment repairs and changes in practices based on this data, Knoll realized compressed air energy reductions in its US facilities of \$132,984 in 2013.

Lighting Technology and Equipment

Lighting Technology and Equipment upgrades at the East Greenville facility provided significant 2013 energy savings and set the stage for expansion in 2014. Kanepi occupancy sensor technology, previously installed in one area of the East Greenville facility, delivered savings of more than a gigawatt hours of electrical energy, prompting an energy audit to assess its potential for reductions in other parts of the facility. The audit showed that the system, which functions independently of human interaction and is used with T8 light sources, could deliver additional energy savings of one half million kilowatt hours a year. Expanded integration of the technology with lighting equipment began in East Greenville in 2013 and will be implemented at the Muskegon plant in 2014.

Lighting upgrades from existing metal halides to high-efficiency T8's and installation of an occupancy sensor system at a leased distribution facility in East Greenville produced dramatic energy reductions (of 1,200,000 kWhs.) "The utility company gave a rebate for doing this project and the savings were so great they had to install light meters at the facility to confirm the numbers, because for such high reductions the Public Utilities Commission required empirical data," explains Knoll Energy Manager Ed Berger.

Centers of Excellence

Centers of Excellence, a new 2013 Knoll program, initiated an evaluation and rationalization of production across all facilities to streamline the manufacturing process and create greater energy efficiencies. This program is part of a long-term strategy to eliminate redundancy, further reduce energy consumption and lower the company's carbon footprint.

In addition to these initiatives, Knoll pursues its carbon reduction strategy through a variety of existing programs and practices:

In product design we use lifecycle assessment (LCA) methodology to aid in the selection of materials. LCA provides data on energy embodied in materials during extraction and in processing and transporting, as well as CO2 released into the atmosphere at end of life. Identifying the energy costs associated with material choices helps us make decisions early in the design process that can maximize the sustainable attributes of the final product.

In facilities design we apply LEED guidelines in constructing, renovating and retrofitting Knoll manufacturing facilities, showrooms and offices. To date, Knoll has a total of 12 LEED certified facilities, including its LEED Gold Certified 350,000 sq. ft. Lubin Manufacturing Facility in East Greenville, PA and 11 showrooms/sales offices in the US and Canada. In 2013, Knoll completed LEED showroom/office projects in San Francisco and New York, certification pending.

CDP

CDP is an international, not-for-profit organization providing the only global system for companies and cities to measure, disclose, manage and share vital environmental information. Working with market forces to motivate companies to disclose their impacts on the environment and natural resources and take action to reduce them, CDP uses the power of measurement and information disclosure to improve the management of environmental risk. By leveraging market forces including shareholders, customers and governments, CDP has incentivized thousands of companies and cities across the world's largest economies to measure and disclose their environmental information. Through its global system companies, investors and cities are better able to mitigate risk, capitalize on opportunities and make investment decisions that drive action towards a more sustainable world.
www.cdp.net

In energy sourcing Knoll pursues the use of non-fossil fuels where feasible. We continue our membership in the EPA Green Power Partnership, a voluntary program of the US Environmental Protection Agency that supports the organizational procurement of green power (electricity produced from renewable resources, such as solar, wind, geothermal, biomass and low-impact hydro). In 2013, the company purchased 100% of the electrical power for the East Greenville Lubin facility and additional power for other facilities on the site from wind power sources, a total of 5 million KWH per year.

In manufacturing Knoll translates quantified energy use into carbon emissions expressed in terms of lbs CO₂/lbs steel processed, lbs CO₂/lbs wood processed, and lbs CO₂/units assembled. This data tells us exactly where we are using energy and creating CO₂ and enables us to set product-specific carbon reduction targets and implementation strategies. For example, if a table costs 10 lbs. of CO₂ to produce, we might, by re-engineering processes or modifying materials, be able to reduce the cost to 8 lbs.

In transportation Knoll reduces carbon emissions by partnering with shippers who participate in SmartWay®, a public/private collaboration between the US EPA (Environmental Protection Agency) and the freight transportation industry that helps freight shippers, carriers and logistics companies improve fuel efficiency and save money. In 2013 Knoll achieved fuel reductions and savings through the efficient loading of trailers, vehicle maintenance, good driving practices and alternate distribution strategies that consolidate loads and minimize redundancy in routes.

In strategic planning Knoll continues to implement its Carbon Reduction Strategy. Annual CO₂ reduction targets were set for each site and progress was reported on a monthly basis. We maintained a database for energy efficiency and conservation that compares best practices to standard practices.

In capital investment we apply a data based energy ROI to the review of capital projects to ensure that the best energy reduction technologies are being proposed. In 2013, the metric for Energy Capital Planning achieved a reduction of 1.4% over 2012.

In energy recovery Knoll diverts non-recyclable waste from organic materials used in manufacture (primarily wood) from landfill to energy-from-waste facilities. As part of our commitment to become a zero waste company, Knoll has achieved dramatic year-over-year increases in the amount of waste diverted from landfill. In 2013, Knoll US facilities on average recycled 93% of the total normalized waste generated at its facilities and sent wood scrap and non-PVC plastics that could not be readily recycled to regulated and permitted Energy from Waste (EfW) facilities. The amount of sawdust and wood reduced by Knoll East Greenville and diverted from landfill to EfW was 3910 tons in 2013. The Grand Rapids facility diverted virtually 100% of its non-recyclable waste from landfill to an EfW facility.

At end of product life Knoll addresses energy recovery through the Full Circle program, which helps keep Knoll products, as well as those of other manufacturers, out of landfill. Full Circle is a customer-focused program that includes components for Reselling, Repurposing and Recycling products, and for generating Energy from Waste (EfW). In 2013, the Knoll Full Circle Program diverted 931.9 tons of discarded product from landfills. 165.43 tons were repurposed to charity, 217.56 tons were recycled and 508.4 tons were resold. (For details see Design for the Environment.)

Knoll Toronto Promotes Transportation Energy Reduction Initiatives for Its Associates and the Region

In 2001, Knoll Toronto was one of a few pioneer partners in Smart Commute NTV (North Toronto, Vaughan), an award-winning, non-profit Transportation Management Association committed to reducing traffic congestion, improving air quality and taking action on climate change. Smart Commute NTV encourages individuals to covering a gamut of entities including healthcare facilities, universities and colleges, hotels, utilities, malls, banks and non-profit organizations. Knoll EHS Manager Lawrence Bouchard serves as Smart Commute NTVs Chairman of the Board. Between April 1, 2011 and March 13, 2012, Smart Commute NTV prevented 5,230,500 kg of greenhouse gas from entering the atmosphere.

As part of its Smart Commute program in 2012, Knoll provided preferred parking for carpooling associates, offered associates a free ride-matching website, encouraged cycling to work by providing bike racks and bike storage, and supported events that promote alternatives to commuting in single occupancy vehicles.

“Lawrence Bouchard has been involved in Smart Commute NTV since the very beginning and has been an incredible steward of the program. He has played a strong leadership role in the network, and he practices what he preaches by looking outside the corporate interest and asking, ‘what can we do to save our people time and money as we do something positive for the environment?’”

Brian Shifman, Executive Director,



Tracking Total Greenhouse Gas Emissions

While CO₂ emissions are critical to climate change, other greenhouse gases, including nitrogen oxide NO_x and methane, also play key roles. Pollutants such as NO_x contribute to global warming, affect climate change, and have a serious impact on health. Methane is 21% more potent as a greenhouse gas than CO₂. In 2013, Knoll continued its efforts to reduce or eliminate these gases from its processes.

Knoll has reduced its total emissions, on an absolute basis, by 25.8% between 2003 and 2013.

Today, Knoll facilities are virtually VOC-free.



TWO

Design for the Environment

Knoll uses a process we call Design for the Environment (DfE) to focus on environmentally responsible materials, products and processes in design and manufacture. DfE is part of the Knoll infrastructure carefully built over time to strategically support sustainability in all aspects of our operation.

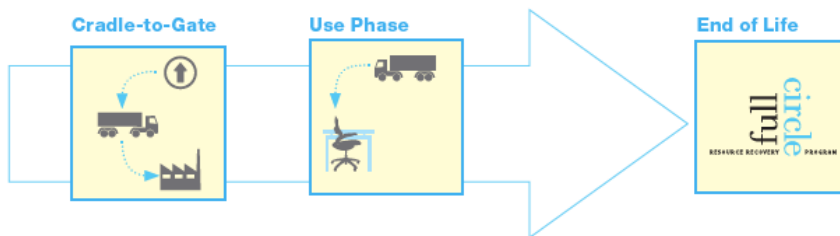
DfE establishes standards for product design and development.

The keystone of DfE policies and procedures is a Product Commercialization Process based on stringent SMaRT[®] criteria. DfE requires a product to meet targeted environmental standards relating to materials (embodied energy and emissions criteria), material content (minimum recycled content) and production processes (energy consumption and clean technology.) Under DfE procedures, the purchase of parts from a new vendor requires documentation of vendor practices that is reviewed by third-party auditors. When new materials are sourced, suppliers must provide documentation of their sources and data on post-consumer and post-industrial recycled contents.

Life Cycle Assessment (LCA) measures impacts.

Knoll products undergo Life Cycle Assessment (LCA) during design and development to measure potential environmental impacts. Final and complete LCAs are performed on all new products put into production, enabling Knoll to provide customers with detailed and reliable information on the sustainable attributes of the products they purchase. In 2013, Life Cycle Analysis was completed on the Toboggan chair.

Knoll uses GaBi LCA software and has developed internal platforms designed to make optimal use of the tool. GaBi Software, which is used by more than 1,000 companies worldwide, enables us to drill down to deeper data that we can use in developing products.



Knoll structures its LCA process in three phases: Cradle to Gate, Gate to Gate and Gate to Grave/Cradle (land-fill/recycled). An LCA software tool is used to calculate inputs and impacts at each stage of the process.

- + **Cradle to Gate** looks at supply chain inputs, from raw materials extraction to transportation and secondary manufacture of parts purchased by Knoll.
- + **Gate to Gate** looks at Knoll wood, metal and assembly processes for turning materials and parts into products.
- + **Gate to Grave/Cradle** looks at what happens to a product at the end of its useful life.

The data from all three phases are entered into the LCA software tool that calculates impacts. The quality of the data is critical to the value of the Life Cycle Assessment: the more specific the inputs, the more accurate and reliable the LCA results. Knoll collects large amounts of detailed information on our own specific processes, sources and customers, as opposed to relying on industry data available from online subscription libraries. Using our own data lets us pinpoint where we can take energy out of a process or where a change from one material to another will contribute to a more sustainable product.

Environmental Product Declarations (EPDs) and Health Product Declarations (HPDs) provide essential information to our customers.

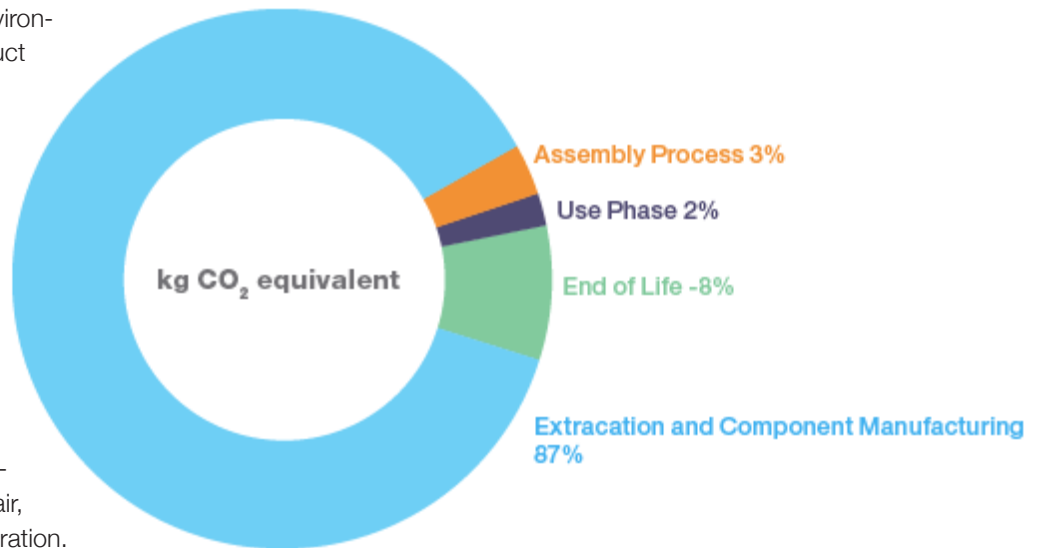
EPDs and HPDs document the environmental impacts of products and must be certified by a qualified third party. Additionally, EPDs and HPDs can earn multiple points under the new LEED v4 standard now in beta testing.

An EPD is a standardized ISO and LCA-based tool for communicating the environmental performance of a product or system. EPDs, based on Product Criteria Rules (PCRs), provide uniform and consistent criteria for measuring the environmental attributes of products. An EPD includes information about the environmental impacts associated with a product or service, such as raw material acquisition, energy use and efficiency, content of materials and chemical substances, emissions to air, soil and water and waste generation.

Certified EPDs are built on well-structured and quantitative data certified by a program operator.

An HPD provides more detailed information on the chemical transparency of individual compounds in products and standardizes the way building product manufacturers report the contents, chemical hazards, emissions, and health effects of their products. Adoption of the standard is voluntary. HPDs provide transparency into building products. The HPD standard is managed by the Health Product Declaration Collaborative, a nonprofit organization governed by a 15-member volunteer board of directors.

In 2013, Knoll completed SMaRT® certified HPDs for the Generation, Moment, Life and Chadwick chairs.



Knoll participant on BIFMA Committee for Developing Product Criteria Rules

In 2013, Knoll East Greenville EHS Manager, Allan Wise, served as a member of the BIFMA Committee for Developing Product Criteria Rules. BIFMA (The Business and Institutional Furniture Manufacturers Association) supports the creation of Environmental Product Declarations (EPDs) for furniture products that carry reliable environmental information. EPDs are based on Product Criteria Rules (PCRs) that provide uniform and consistent criteria for measuring the environmental attributes of products. Last year, BIFMA released PCRs for storage systems to be used by manufacturers in creating EPDs for their storage products, and work began on PCRs for seating.

Twenty-Four New “Green Bar” Fabrics Introduced by KnollTextiles in 2013

The Green Bar designation indicates that a fabric contains at least 49% recycled content, at least 75% rapidly renewable material (natural fiber), or 100% Eco-Intelligent fiber. Green Bar fabrics can help companies, healthcare organizations and educational institutions achieve LEED certification. In 2013, 50% of all new patterns introduced by KnollTextiles qualified for Green Bar designation. The twenty-four new additions bring the total number of Green Bar designated patterns in KnollTextiles collections to 139. All new Green Bar fabrics listed below are UL GREENGUARD Indoor Air Quality® certified.

Upholstery:

Arber 100% Cotton

Intrigue upholstery contains 78% cotton, 22% wool

Bistro 50% Recycled polyester, 50% Polyester Acrylic Backing

Commuter Cloth 75% Recycled polyester, 25% Polyester

Diamond Days 100% Cotton

Greenwich 72% Recycled polyester, 28% Nylon

Honour 94% Cotton, 6% Polyester Acrylic Backing

Journey 50% Recycled polyester, 50% Polyester

Kinabalu 75% Cotton, 25% Viscose

Matondoni 81% Linen, 15% Cotton, 4% Polyester

Wallcovering:

Express 78% Recycled polyester, 22% Polyester

Mainframe 100% Recycled polyester

Cubicle:

Fanciful 54% Eco Intelligent® polyester, 46% Recycled polyester with Agion®

Olema 100% Cotton

Origins 43% Cotton, 33% Nylon, 20% Linen, 4% Post consumer recycled polyester Teflon® soil and stain repellent

Piper 79% Cotton, 21% Linen

Rosemond 73% Cotton, 27% Linen

Sherman 33% Acrylic, 30% Cotton, 21% Wool, 8% Alpaca, 8% Nylon

Soon 100% Cotton

Sutton 56% Recycled polyester, 44% Polyester

Synth 100% Post consumer recycled polyester

Trophy 100% Recycled polyester

Utrillo 91% Wool, 9% Nylon

Versa 100% Eco Intelligent® polyester

Skylark 58% Recycled polyester, 42% Polyester



In 2013 KnollTextiles continued to offer *Ultrasuede* textiles made with 80% post-industrial recycled microfiber from film used in products such as plasma screen TVs and *Eco-Intelligent*® Polyester fabrics made of fiber that is a “technical nutrient” designed to be safely recycled into new fabric with no hazardous by-products, dyes or catalysts. KnollTextiles continues to add to its growing list of fabrics approved to meet Google’s Red List ban on targeted toxic materials.

Knoll Full Circle Program diverts more than 930 tons of office surplus from landfill in 2013

The Knoll Full Circle program of integrated sustainable end of life solutions for office furniture, fixtures and equipment (FF&E), established in 2009, is the first comprehensive one-stop program in the contract industry. Full Circle diverts from landfill products that businesses no longer use or want by reselling, repurposing, recycling and converting waste to energy. It applies to projects of all sizes, includes Knoll and non-Knoll furnishings, and encompasses all furniture, fixtures and equipment – from desks, chairs and workstations to carpeting and other materials.

Knoll developed Full Circle in partnership with ANEW, a California-based national non-profit foundation dedicated to extending the life cycle of FF&E in an economically, socially and environmentally responsible way. ANEW is dedicated to transforming corporate surplus into community service.

Full Circle alliance partners include InstallNET, a company with approximately 250 independent quality furniture installers across the U.S. and Canada; and Covanta Energy, which owns and/or operates more than 40 Energy-from-Waste facilities in the U.S. that produce clean, renewable energy and recycle metals.

Full Circle 2013 Metrics

Total tons diverted from landfill:	931.9 tons
Resale	508.4 tons
Repurpose	165.43 tons
Recycle (50% diversion)	217.56 tons
EfW	41 tons



How Full Circle Works

Full Circle starts with the Knoll dealer who works with ANEW to develop a Full Circle Decommissioning Strategy for clients that are planning to relocate or renovate a space, based on the client's objectives. Options include:

- + **Reselling** — usable FF&E is sold to capture financial value for the customer, which can help offset the costs of labor associated with the removal, recycling and/or transportation to an Energy-from-Waste (EfW) facility
- + **Repurposing** — usable FF&E is identified, matched and distributed to the underserved, charitable organizations and public agencies, primarily with a 25-mile radius of the project site to strengthen the local community. Donor Clients receive the tax benefits of donating to a 501 (c) (3) organization (ANEW)
- + **Recycling** FF&E that has no resale or repurpose value
- + **Recovering Energy** by converting waste into clean energy (EfW), thereby diverting from landfill anything that cannot be recycled, resold or repurposed. The EfW process generates electricity by combusting municipal solid waste at high temperature, turning water in steel tubes surrounding the combustion chamber into steam. EfW is a greener alternative to creating energy than coal, oil or natural gas; produces electricity with less environmental impact than almost any other source of electricity; and prevents tens of millions of tons of CO₂ annually from entering the atmosphere by diverting material from landfill.
- + **Reporting** to the customer, which may include documentation for use toward LEED Certification. (Various aspects of the Full Circle program, including donation and recycling, can earn LEED Material Resources, Construction Waste Management credits.) ANEW provides each client project independent third-party review of its metrics for verification.

More information is available at www.knoll.com – FullCircle FAQs.

ANEW Alchemy: Transforming Corporate Surplus into Community Service

A Knoll Full Circle project with a Pennsylvania pharmaceutical firm had identified 7.4 tons of usable office furniture when the SOS came from international NGO World Vision. Its West Virginia office was wiped out in Hurricane Sandy, and it was struggling to rebuild. Soon, one and a half truckloads of repurposed chairs, tables and desks were on their way to help World Vision get its Appalachian office up and running.

The Toxic Facts about Landfill

More than 135 million tons of debris from construction sites are brought to U.S. landfills every year, making them the single largest source in the waste stream. A new 50,000 sq. ft. building (typical mid-size suburban office building) will generate 195,000 pounds or almost 100 tons of waste. Demolition of existing buildings creates much more waste, almost 4,000 pounds per 50,000 sq. ft. building. Much office surplus without resale value also ends up in landfill. And most furniture recycling programs salvage only metals: wood and plastics are generally landfilled. These organic materials in landfill create methane gas, which is hazardous for humans, animals and the environment.

Metrics developed by U.S. EPA.

Full Circle projects completed in 2013

- + A major national investment company, New Jersey offices
Resale: 16.8 tons
- + An Asian/American manufacturing partnership, Pennsylvania offices
EfW: 6 tons
- + An international food and beverage company, Purchase, NY
Resale: 113.4 tons
Repurpose: 118.63 tons
Recycle: 61.91 tons

Knoll furniture at the Bullitt Center part of The Living Building Challenge

Knoll Design for the Environment demonstrated its value when Knoll furniture was chosen for the \$30 million living laboratory for sustainability built by the Bullitt Foundation in downtown Seattle. The six-story 50,000 square-foot office building was designed and constructed to a certification process called *The Living Building Challenge*, which requires among a list of 20 rigorous demands both water and energy self-sufficiency. All water for the building will be supplied by rainwater collected in a 56,000-gallon cistern and a rooftop array of photovoltaic panels will produce an estimated 230,000 kilowatt-hours a year. The timber and steel frame uses native Douglas fir certified by the Forest Stewardship Council; the site provides on-site parking for bikes but none for cars; and furnishings are extensively vetted and documented to certify their manufacture with sustainable, non-toxic materials. While *The Living Building Challenge* has 143 registered projects in 10 countries, its process is so demanding that only three buildings in the United States have been fully certified to date. Knoll is proud that Bullitt has made us part of their effort.

- + A major American banking corporation, New York, NY
Resale: 113.4 tons
- + A professional services consultant, Aurora, CO
Resale: 53.1 tons
- + An international beverage company, Atlanta, GA
Resale: 34.3 tons
Repurpose: 7.4 tons
Recycle: 43.81 tons
EfW: 34.51 tons
- + A cable-TV company, El Segundo, CA
Resale: 139.5 tons
Repurpose: 39.4 tons (distributed to 15 charities + 2 public agencies)

Education, Training and Communication

Knoll is committed to expanding and leveraging our sustainable learning through participation in industry platforms as well as through education, training and communication within the company, with customers and with the larger design community. Initiatives in 2013 included:

- + Knoll Educational Forums offered continuing education instruction on sustainability-related topics. Attendees earned CEU credits.
- + New Knoll EHS Managers in East Greenville received Life Cycle Assessment (LCA) training.
- + Knoll Sustainability Manager, Chris Marozzi – who provided training to the A&D community in Santa Monica, Chicago and Dallas on Knoll sustainability programs, LEED v4 and LCA – was named a member of the Policy Committee at the American Center for Life Cycle Assessment and chaired EPD lectures at the Center. In addition, Marozzi was seated on the BIFMA Joint Committee, was named co-chair of the BIFMA level Materials Work Group, participated in the BIFMA Chemicals of Concern summit, and worked on a 4-team edit/re-write of the BIFMA Chemicals of Concern Annex B.
- + Knoll collaborated with Microsoft, delivering presentations on sustainability and working with personnel at the company's 93% waste-free Seattle warehouse facility to integrate Knoll product with the Microsoft stocking system. Terri Campbell, Knoll Global Implementation Manager and a certified Lean Six Sigma Greenbelt, conducted workshops to identify and implement sustainable strategies in shipping, packaging and storage for Microsoft's Knoll stocking program that meet the shared environmental goals of both companies.
- + Knoll manufacturing CO2 emissions were made public as part of the Carbon Disclosure Project.



THREE

Third Party Certification

Knoll has been a contract furniture industry pioneer in advocating and submitting its products for independent third party certification.

Knoll supports product certification by independent, respected third-parties because it provides the most impartial and trustworthy foundation for broad compliance. Such certification helps ensure that all manufacturers are held to stringent, uniform environmental standards. It tells customers that they can trust a manufacturer's claims about the environmental attributes of its products.

Knoll submits its products for BIFMA level™ certification, a standard designed specifically for the contract furniture industry to give customers comparable measures of sustainability with which to assess a manufacturer's products in relation to those offered by other manufacturers. In 2013, Knoll also continued to submit to certification standards set by LEED, FSC, GREENGUARD and SMaRT®, all acknowledged leaders with distinguished records for driving long-term, meaningful change in spheres beyond the furniture industry. Also in the past year, Knoll was re-certified under FSC, UL GREENGUARD and ISO 14001.

BIFMA level™

The BIFMA level™ standard is a voluntary product standard developed by the Business and Institutional Furniture Manufacturer's Association to support safe, healthy and sustainable workplace environments. Products, organizations and facilities are scored on sustainability criteria in four areas: Materials, Energy and Atmosphere, Human and Ecosystem Health, and Social Responsibility. Points in each of these areas are awarded for the Organization, Manufacturing Facility and Product and the total of these three provide the final level score. Certification is awarded at three levels: level 1 (32-44 points), level 2 (45-62 points) and level 3 (63-90 points). Level points may be applicable to LEED.

Knoll was the first manufacturer in the contract furniture industry to achieve level 3 certification for a systems product (Dividends Horizon®) and went on to earn distinction as the first company in the industry to earn level 3 certification for products in multiple categories.

The following Knoll Office system, seating and storage products were recertified at level 3 in 2013:

Systems

Dividends Horizon®	Graham Collection
Antenna	Morrison
AutoStrada	Reff Profiles
Currents	Template
Equity	

Casegoods and Storage

Reff Wood Casegoods	Series 2 Files and Storage
Calibre Storage	

Chairs

Life	ReGeneration
Chadwick	Sapper
Moment	Essentials Work Chairs (EWC)
Generation	RPM
MultiGeneration	

In 2013 the Knoll Office Toboggan chair earned level 2 certification.

level™

The level™ standard is a voluntary product standard developed by BIFMA to support safe, healthy and sustainable workplace environments. Products, organizations and facilities are scored on sustainability criteria in four areas: Materials, Energy and Atmosphere, Human and Ecosystem Health, and Social Responsibility. The program establishes prerequisites, requires third party certification including audits of manufacturing plants, and mandates annual reviews to maintain certification. Certification is awarded at three levels: Entry-level 1 (32-44 points), level 2 (45-62 points) and level 3 (63-90 points). Points in the four sustainability areas are awarded for the Organization (possible credits 17), Manufacturing Facility (possible credits 38) and Product (possible credits 35.) The total of these three scores provide the final level score (maximum possible 90 points.) Level points may be applicable to LEED.



FSC

Knoll is one of the largest contract suppliers of FSC-certified Furniture in North America as well as one of the largest commercial manufacturers of FSC products in the world. In 2013, Knoll provided FSC Certified Wood as Standard for (95%) of the Wood in Systems and Tables manufactured at Knoll facilities. The standard applies to the core of all Knoll products with laminate and domestic cherry, maple, oak and walnut natural veneer surfaces and related core Knoll finishes. Through the FSC standard program, Knoll provides FSC-certified wood at standard lead times on all general office plan open systems, casegoods and tables, with the exception of certain products from the KnollStudio Collection. Covered products include the open plan systems Antenna, Autostrada, Currents, Dividends Horizon, Equity, Morrison, Reff and Template; as well as the Graham Collection, Interaction Tables, Magnusson Desks and Upstart Tables.

Our FSC standard is part of the Knoll Sustainable Wood Policy, which is targeted to protect endangered forests and promote sustainable harvesting of wood resources. For more than a decade, Knoll has been establishing the infrastructure and outreach required to develop the supply chain for sustainable wood; creating the business and manufacturing processes and protocols for sourcing, tracking and incorporating FSC wood into product; and building FSC certification into the ISO 14001 process. All suppliers of material used to manufacture Knoll FSC-certified products are currently FSC certified, and the company goal is to expand this to all suppliers of wood used in Knoll wood products. To this end, we work with vendors in preparing required documentation for FSC certification. The Rainforest Alliance, through its Smartwood program, continued to audit and administer Knoll's FSC chain-of custody certifications in 2013.

Why FSC

The Forest Stewardship Council (FSC) is the international standard-setting body for defining and measuring a well-managed forest and providing traceability through chain-of-custody certification. Knoll partners with FSC because it has the most stringent wood certifying standards and maintains a presence on the ground in locations where the wood is harvested. Knoll FSC certification ensures that Knoll products bearing the FSC mark are manufactured with wood from forests that protect environmental, social and economic values.

Deforestation and Climate Change

- + Reducing CO₂ emissions is a critical strategy for mitigating climate change.
- + Trees absorb CO₂ and convert carbon into leaves, stems, and roots, while releasing oxygen.
- + Forests account for more than a quarter of the land area of the earth, and store more than three-quarters of the carbon in terrestrial plants and nearly 40% of soil carbon.
- + When forests are cleared, some of their carbon is released to the atmosphere—slowly through decay or quickly through burning.
- + Deforestation is one significant source of CO₂ emissions. It is estimated that deforestation releases about 5.9 GtCO₂ (gigatons or billion metric tons of CO₂) annually, about 17% of all annual human-caused greenhouse gas emissions.
- + Reducing deforestation to lower CO₂ emissions is seen as one of the least costly methods of mitigating climate change.
- + FSC is the world's most comprehensive and reliable advocate for controlling deforestation and illegal harvesting of wood.

(Data from Deforestation and Climate Change Congressional Research Service)



UL GREENGUARD™

UL GREENGUARD certified building products and furnishings are scientifically proven to meet some of the world's most rigorous third-party chemical emissions standards – helping reduce indoor air pollution and the risk of chemical exposure while aiding in the creation of healthier indoor environments. Knoll UL GREENGUARD certified products include all Knoll North America systems and seating; the majority of textiles; most KnollStudio products; and all KnollExtra accessory products except poster boards. In 2013, KnollStudio achieved UL GREENGUARD certification for the Richard Schultz 1966 Collection, LSM Conference Table Collection, Olivares Aluminum Chair, Washington Coffee Table by David Adjaye, Washington Skeleton Chair by David Adjaye, and Washington Skin Chair by David Adjaye.

UL GREENGUARD Gold certification standard includes health based criteria for additional chemicals and requires lower total VOC emissions levels to ensure that products are acceptable for use in environments such as schools and healthcare facilities. Knoll UL GREENGUARD Gold certified products include all Knoll Office Seating, Template and Calibre Storage Systems, Antenna and Morrison Systems, and Wood Casegoods. In 2013, the Knoll Toboggan chair was certified UL GREENGUARD Gold.

Knoll furniture included in LEED v4 beta site project

International engineering firm and building sustainability leader Thornton Tomasetti was among the first to register a LEED v4 beta site. The firm is seeking LEED Platinum for the complete build out of its new consolidated San Francisco office. After careful consideration of sustainable furniture options, Thornton Tomasetti chose Knoll systems and seating for the new workplace, providing a challenging opportunity to engage with USGBC in interpreting and fulfilling new LEED v4 criteria. Knoll A&D Manager, Neda Thiele and Hogue Office Furniture Sr. Acc. Exec. Olivia Swinehart, worked closely with Knoll Sustainability Manager, Chris Marozzi, to provide beta v4 data, ensuring multiple LEED furniture credits for the project, and providing Knoll with valuable expertise in addressing changing v4 categories and reporting requirements.

LEED™

LEED (Leadership in Environmental Design) is an initiative of the USGBC (US Green Building Council.) LEED is a green building certification program that recognizes best-in-class building strategies and practices. To receive LEED certification, building projects satisfy prerequisites and earn points to achieve different levels of certification in categories based on project type in 2013. The USGBC is conducting beta tests of LEED v4, the next version of the green building program designed to streamline the process and update LEED criteria, a key focus of which will be increased transparency in the supply chain for materials and products.

Knoll maintains LEED (recycled content) databases for all office products and new databases are created as products are introduced. Additionally over the past year, Knoll began the process of aligning its database protocol with changing LEED v4 requirements. We supplied LEED documentation on Knoll systems, seating, furniture and textiles for 171 client projects in 2013. This information is requested by clients pursuing LEED certification for their workplaces and by those simply interested in choosing sustainable product solutions for their businesses.

In 2013, LEED databases were created for all new office products and for KnollStudio LSM Conference Tables. Creating LEED databases for KnollStudio products requires vetting detailed information on materials used in manufacturing Knoll products from hundreds of suppliers in six countries on three continents. (LEED databases for KnollStudio products provide useful information on sustainable attributes of products but do not guarantee that a product will earn LEED credits).

Knoll has a total of 11 LEED certified facilities, including its LEED Gold Certified 350,000 sq. ft. Lubin Manufacturing Facility in East Greenville, PA and 10 certified showrooms/sales offices nationwide:

+ Knoll Philadelphia and Miami showrooms LEED CI Silver

- + Knoll Chicago Sales Office LEED CI Gold
- + Knoll Atlanta, Dallas, Washington D.C., Phoenix and Seattle showrooms LEED CI Gold
- + Knoll Toronto showroom LEED CI Platinum
- + Knoll Boston showroom LEED CI Platinum (added in 2012)

In addition, Knoll completed two LEED projects in 2013 that are now in documentation review with anticipated certification at the following levels:

- + Knoll San Francisco showroom LEED CI Gold
- + Knoll New York showroom and corporate offices LEED CI Silver, Retail Shop LEED Gold

Knoll AIA Award-Winning New York Showroom and Retail Shop on target for LEED Certifications

“For 75 years the design community has looked to Knoll for great design. Now it also relies on us for leadership in sustainable products and practices. The New York showroom is a place where we express our commitment to the beautiful integration of sustainable furniture, architecture and workplace design.”

–Benjamin Pardo, Vice President of Design, Knoll, Inc.

FilzFelt earns LEED points in Knoll New York Showroom

FilzFelt (the name combines the German and English words for felt) brings color and texture, utility and sustainability to the Knoll New York showroom. Wool felt is one of the oldest man-made textiles. FilzFelt German-milled Wool Design Felt is a 100% natural biodegradable material and a rapidly renewable resource. It is processed using water that is recycled and re-used within the mill and colored with vegetable-based dyes. FilzFelt sells or donates all remnant materials from the manufacture of its products, including the cutouts from custom panels. In the New York showroom, FilzFelt products serve multiple functions. Rugs, hanging space dividers, wall cladding in small work booths, and acoustical fill in ceilings all contributed to LEED points for sustainable materials. Founded in Boston in 2008 by designers Kelly Smith and Traci Roloff, FilzFelt was acquired by Knoll, Inc. + Spinneybeck in 2011.

Architecture Research Office (ARO), designer of the Knoll New York showroom is a fellow recipient of the Cooper-Hewitt National Design Award and winner of an AIA Institute award for the New York project. The firm collaborated with the Knoll design team and LEED AP consultants Watkins Architect, to create a space that is functional, beautiful and sustainable. The showroom location at 1330 Avenue of the Americas is just around the corner from The Museum of Modern Art, at a bustling hub for workers and tourists in the same neighborhood where Hans Knoll founded the company in 1938. The 50,000 square foot space, which opened in May 2013, includes a showroom on the building's second floor and working offices on the third and fourth floors. At street level, the new Knoll Shop features furniture, textiles and accessories focused on design for the home. The showroom includes high and wide corner windows that afford ample natural light and views of the Manhattan streetscape. Offices showcase Knoll office planning solutions, combine open plan, private, and “Activity Spaces,” as well as act as an extension of the showroom – providing opportunities for clients to experience the furniture in use. All three floors of the new space and the retail shop offer an exuberant celebration of materials, colors, and textures.

“The new Knoll showroom provided the opportunity to improve a half-century-old New York City building, introducing new light, energy efficiency and other environmental characteristics. We were able to bring LEED attributes to a tenant space in a non-LEED building and as the first in the building to achieve LEED certification we hope to set an example for other tenants.”

–Jeffrey Biehn, Architect and LEED AP Consultant, Watkins Architect

The Knoll New York showroom anticipates LEED Silver certification for the following project features:

- + Building offers access to community services and public transportation
- + Optimized energy performance for lighting and equipment

Greenbuild 2013 features tour of Knoll LEED®-certified Lubin Manufacturing Facility

On November 18, 2013, Knoll welcomed Greenbuild participants to East Greenville, Pennsylvania for a tour of the company's LEED®-certified Lubin Manufacturing facility. The USGBC Greenbuild expo, which chose Philadelphia as the site for its 20th annual event, is the world's largest conference dedicated to green building. Knoll Architecture and Design Manager Kimberly Smith served as co-chair of the 2013 Tours and Education Committee. The tour program, "Philadelphia: Manufacturing Center for the World," was designed to highlight "businesses that are enhancing productivity with LEED industrial facilities that marry energy-saving buildings with efficient processes." Other tour sites included Tastykake Bakery, the world's largest new LEED Silver food processing center; US Airway's LEED Silver Ground Support Equipment (GSE) Maintenance Facility, the first LEED-certified building at Philadelphia International Airport; and Morphotek's Pilot Plant, the ISPE award-winning 2013 Facility of the Year in Sustainability. In addition to hosting the tour, Knoll sponsored the USGBC event by providing furniture for use in the conference center.

- + Use of off-site green power
- + Over 14% recycled content in building materials
- + More than 47% of building materials manufactured within a 500-mile radius of the project site
- + Low-emitting materials: adhesives, sealants, paints, coatings, composite wood and agrifiber, and systems furniture and seating
- + Views to the outside for almost 98% of occupied spaces
- + A green housekeeping program
- + More than 84% of construction waste diverted from landfills
- + Exemplary performance in several categories

The Knoll Shop anticipates LEED Gold:

- + Location provides access to community services, public transportation and bicycle commuting
- + Optimized energy performance for lighting, HVAC and equipment
- + Use of off-site green power
- + More than 82% of construction waste diverted from landfills
- + Over 13% of building material content was recycled
- + More than 26% of building materials were manufactured within a 500 mile radius of the project site
- + Over 10% of building material content was from rapidly renewable resources
- + Low-emitting materials include: adhesives, sealants, composite wood and agrifiber, furniture and ceiling and wall systems
- + Views to the exterior are provided for almost 100% of the space
- + A green housekeeping program is in place
- + Exemplary performance in several categories

Knoll San Francisco Showroom in line for LEED Gold

The new San Francisco showroom at 140 New Montgomery Street in the South of Market district brings Knoll to the heart of the city's business hub. The showroom occupies the entire 25th floor of an architecturally distinguished mid-1920's Neo Gothic building adjacent to the San Francisco Museum of Modern Art. A recent interior rehab earned the building LEED Core and Shell certification. The 8,000 sq. ft. Knoll space, designed by Architecture Research Office (ARO) with the Knoll design team, showcases workplace and residential furnishings in a range of alternative, primary and collaborative work environments. Work settings for 20 associates are placed throughout the interior, demonstrating the intelligent integration of the full range of Knoll product for clients in a variety of industries, including growing sectors such as social media. Large windows afford natural light and views. Knoll Interpole delivers power and data – providing function and separation while saving materials and energy otherwise required for permanent architectural features. The project includes a new HVAC system designed specifically for the space to maximize energy efficiency.

"When it comes to sustainability, our customers are quite well educated. The San Francisco design community understands that we offer the top tier of sustainable furniture products. What they like about this showroom is the opportunity to see the other the parts of the sustainability story as well, like textiles and FilzFelt, all integrated into the story."

–Peter Cracknell, Regional Director, Knoll

The San Francisco showroom anticipates LEED Gold certification for these project features:

- + Located in a LEED for Core and Shell building
- + Easy access to community services and public transportation
- + Optimized energy performance for lighting, HVAC and equipment
- + Use of off-site green power
- + Diversion of more than 95% of construction waste from landfills
- + Over 18% recycled content in building materials
- + More than 22% rapidly renewable content in building materials
- + 50% FSC wood
- + Low-emitting materials: adhesives, sealants, paints, coatings, flooring, composite wood and agrifiber products
- + Views to the outside for more than 99% of occupied spaces
- + A green housekeeping program
- + Exemplary performance in several categories

SMaRT[®]

SMaRT (Sustainable Materials Rating Technology) from MTS (Market Transformation to Sustainability) is a comprehensive sustainability standard covering areas including Public Health and Environment; Renewable Energy and Energy Efficiency; Bio-based or Recycled Materials; and Innovation in Manufacturing. SMaRT addresses 80% of the world's products and has been adopted by more entities than any other product certification. It partners with the federal government to educate manufacturers and purchasers on credible sustainable product attributes and prerequisites.

Knoll was the first contract furniture manufacturer to achieve SMaRT certification (for the Life chair in 2007) and in 2009 Generation by Knoll became the first task chair to earn SMaRT Sustainable Platinum. Other Knoll SMaRT certifications include the Chadwick Chair, SMaRT Gold; MultiGeneration chair, SMaRT Gold; the ReGeneration Chair, SMaRT Platinum; and the Template System, Series 2 Storage and Calibre Storage all SMaRT Gold.

In 2013 Knoll issued SMaRT-certified HPDs for the Generation, Moment, Life and Chadwick chairs. Products with SMaRT-certified EPDs and HPDs determine toxicity and comply with a number of LEED v4 credits, including those requiring ISO-compliant life cycle assessments.



FOUR

Social Responsibility

“As a company Knoll supports the larger communities in which we operate through varied means, including United Way, and our associates are generous in their participation. Our people are also exceptionally creative and openhearted in their outreach to service organizations, friends and neighbors in special need in their immediate communities. They nurture a culture of social responsibility of which we are all proud.”

–Lynn Utter, President and CEO, Knoll, Inc.

True sustainability balances on three legs: environment, economy and society. Under the leadership of President and COO of Knoll Office Lynn Utter, Knoll is a major contributor to United Way. In 2013, employee contributions, matched by corporate donations, were raised through pledged payroll withholding and in earnings from special events.

United Way – Employee Contributions	\$115,946.99
Knoll, Inc. Matching Funds	\$82,199.83
Total 2013 Contribution	\$198,146.82

The Knoll Educational Scholarship Program assists dependents of Knoll associates (age 25 and under) to pursue undergraduate education in college, university or vocational school. It awards scholarships of up to \$8,000 each year for full-time study at an accredited institution of the student’s choice. Students may reapply and receive awards up to four times.

At the facility level, Knoll conducts blood drives, participates in community events, supports local not-for-profit organizations, and opens its doors to members of the community for flu shots and other services. In 2013, multiple blood drives at U.S. facilities registered 321 donors. Free flu shots were provided at all U.S. facilities to hundreds of employees and family members.

Special events to benefit the community in 2013 included:

At Knoll East Greenville, the *Go Red* campaign for women’s health featured a silent auction, luncheon and 1-mile run that raised funds for the Lehigh Valley Chapter. On the day of the event, cholesterol and blood pressure screenings were offered to people in the community along with information to help them to make healthy decisions. In partnership with the non-profit *In Ian’s Boots*, associates collected, cleaned and distributed new and gently used shoes, winter boots and soccer cleats to families in the Pennsylvania area. Partnering with Open Line of Pennsburg, Knoll associates donated gift items and assembled Christmas stockings for distribution to underserved families in the community. Associates also participated in the annual Stream Clean Up at Perkiomen Creek.

In Muskegon, 15 hearty Knoll associates took a February Polar Plunge into Muskegon Lake, raising about \$1200 for the Michigan Special Olympics. Muskegon facility nurse, Deb Bosma, served as a member of the Business Group for **1 in 21**, a county wide program aimed at making Muskegon the fittest county in the state. The program – a collaboration between businesses, neighborhood groups, schools and churches – provides information and incentives to promote healthy eating, exercise and other health-focused life choices.

In Grand Rapids, associates contributed to the American Heart Association; participated in the Tough Mudders Veterans’ Run; collected food, toiletries and

Christmas gifts for a local shelter; and contributed to the Toys for Tots campaign organized by the union.

Each year, Knoll sponsors an Environmental, Health and Safety Art Contest at the Upper Perkiomen Middle School in East Greenville, Pennsylvania to encourage student awareness of environmental issues. Some of the winning entries from the 2013 contest, chosen by professional artists, illustrate this report.

On a global scale, the Knoll commitment to social equity is reflected in our supply chain where we carefully vet our vendors and refuse to conduct business with those who use child labor or engage in other predatory labor practices. For example, we choose as partners FSC and the Rainforest Alliance, which work with local residents and indigenous peoples in areas where natural resources having financial value place people at risk of exploitation or self-destructive resource harvesting. FSC puts people on the ground to teach about managing forests and how to secure resources so they will provide income for the long-term.

Our global social responsibility efforts also include protection of the cultural assets of countries in which we do business. Knoll is the recipient of the World Monuments Fund 2013 Watch Award, which recognizes individual advocacy, activism, and significant achievement on behalf of heritage preservation. Knoll is the Founding Sponsor of World Monuments Fund's Modernism at Risk initiative and the biennial World Monuments Fund/Knoll Modernism Prize. WMF honored Knoll CEO Andrew Cogan at the Hadrian Gala in New York City on October 22, 2013, noting, "Andrew B. Cogan and Knoll exemplify the spirit of the Watch Award. Under his leadership as Chief Executive Officer, Knoll has earned the distinction as a leading supporter of great works of twentieth century architecture and received recognition for its commitment to modern and sustainable design."

At Grand Rapids, Materials Manager Paula Leach combines her passion for the environment with social outreach. In 2013, the Grand Rapids facility donated end rolls of plastic sheeting, manufacturing scrap, discontinued fabrics, work gloves and glues to Habitat for Humanity. Labels nearing expiration were donated to schools for classroom projects, and discontinued and scrap fabrics went to school theater departments for costumes and sets. Gently scratched or dented and customer-returned worksurfaces, cabinets and chairs were contributed to the YMCA for its annual White Elephant Sale. "My mission is zero landfill," Paula explains. "If we can find a way to repurpose anything to help the community instead of sending it to landfill, that should be our goal."



FIVE

The Knoll 8



Knoll has established ambitious standards for guiding and reporting on our progress toward becoming a more sustainable company. They are mandated in a comprehensive Environmental, Health and Safety Plan and are defined under Eight Principles that are the foundation of this report:

1. Protection of the Biosphere
2. Sustainable Use of Natural Resources
3. Waste Reduction and Disposal
4. Conservation
5. Risk Reduction
6. Safe Products and Services
7. Environmental Restoration
8. Informing the Public

1. Protection of the Biosphere

We will strive to make continued progress toward reducing or eliminating the release of any hazardous substance in an effort to safeguard all habitats affected by our operations.

We will continue to reduce the use and/or emissions of hazardous air pollutants and volatile organic compounds from our manufacturing operations through the introduction of clean technologies.

- + In 2013, Knoll U.S. manufacturing facilities were more than 95% free of hazardous air pollutants (HAP) and VOC.
- + More than 95% of PVC has been replaced by ABS (Acrylonitrile butadiene styrene) for standard edges on laminate work surfaces.
- + The Grand Rapids facility is a State of Michigan Clean Corporate Citizen. Knoll is the only furniture manufacturer in Michigan to achieve the honor, which recognizes excellence in clean technology, waste management and other key environmental factors.

We will provide water treatment facilities that meet or exceed discharge criteria.

- + In 2013, the water treatment facility in East Greenville treated 9,786,625 gallons of wastewater, a reduction of 4,881,973 gallons from 2012's 14,668,590 gallons.

We will monitor storm water, conserve water use and develop processes to minimize water pollution.

- + The plating process for pre-treating metal parts at the East Greenville facility saves approximately 1,000,000 gallons of water a year over former water-intensive processes.
- + The Muskegon facility continued to pipe wastewater to a county treatment facility that employs sludge ponds and settling ponds to treat water, which is then used to irrigate food-producing farm plots on the property.

2. Sustainable Use of Natural Resources

We will strive to make the best use of renewable resources, such as water, soil and forests, and conserve non-renewable natural resources.

We will make sustainable use of renewable natural resources through efficient use and careful planning.

- + In 2013, KnollTextiles offered a wide range of fabrics made with natural fibers (e.g., linen, cotton, wool) from rapidly renewable sources.
- + FilzFelt, a Knoll + Spinneybeck company offered rugs, wall hangings and other products made of wool felt, a 100% natural material made from a rapidly renewable resource using environmentally responsible processes and vegetable-based dyes.

We will continue to seek opportunities to use wood from sustainable forests in our products.

- + In 2013, Knoll continued to provide FSC Certified Wood as standard without asking and at standard lead times on office systems, casegoods and tables with the exception of certain products from the KnollStudio Collection. The FSC standard applies to 95% of wood-containing products manufactured at Knoll facilities.
- + Knoll continued to partner with The Rainforest Alliance to certify sustainable forestry compliance under its SMARTWOOD program, and wood provenance under FSC-Chain of Custody protocols.

We will minimize the use of wooden pallets.

- + Knoll continued to repair, reuse and recycle pallets at all facilities. In 2013, 1003.2 tons of wood pallets were recycled.

We will attempt to recycle or avoid landfill of all wood scrap generated in our manufacturing operations.

- + Knoll facilities avoided landfill of 5935.55 tons of wood scrap and 1102.57 tons of sawdust in 2013.
- + In 2013, East Greenville sent almost 100% of its wood scrap to a waste-to-energy facility, diverting from landfill 3905.58 tons of sawdust and scrap.
- + The Toronto facility continued to burn wood scrap as heating fuel in the winter and use excess heating capacity to provide hot water for finishing processes in the warmer months. Burning wood scrap in place of natural gas reduced total gas consumption by 23,422 cubic feet in 2013, or 30% of total Toronto facility fuel needs.

We will continue to recycle steel, aluminum and other metal components.

- + In 2013, Knoll facilities recycled 1,738.8 tons of steel and 120.69 tons of aluminum.

We will continue to seek recycling opportunities for scrap generated in our manufacturing operations.

- + In 2013, Knoll facilities recycled a total of more than 599.04 tons of corrugated cardboard, 107.71 tons of paper and 94.9 tons of fabric and leather.
- + The Grand Rapids and Muskegon facilities recycled powdercoat waste in 2013, keeping 174.8 tons of material out of landfill.

We will continue to utilize post-consumer and post-industrial materials in our products where practical.

- + KnollTextiles fabrics include products made of 100% post-consumer recycled content.
- + 139 KnollTextiles fabrics carried a “Green Bar” on their label in 2013, indicating 49%+ recycled content or 75%+ natural fiber.

We will be environmentally responsible in our purchase of materials.

- + The Knoll FSC Certified Wood Standard and Sustainable Wood Policy certified through The Rainforest Alliance ensured that wood materials used in our products in 2013 came from environmentally responsible sources.
- + All Knoll leather goods were obtained as by-products of the meat packing industry. No hides or skins from endangered species were used.

3. Waste Reduction and Disposal

We will reduce, recycle, and where possible, eliminate waste and will dispose of all waste using safe and responsible methods.

We will seek opportunities to reduce waste and recycle process scrap from our operations.

- + In pursuit of the goal to become a Zero Waste company, Knoll facilities diverted an average of 90% of waste from landfill in 2013.
- + The Grand Rapids plant diverted virtually all waste except metal (which was recycled) to the City of Grand Rapids’ waste-to-energy facility in 2013, keeping 937.98 tons of waste out of landfill.
- + In 2013, Knoll facilities recycled virtually 100% of all aluminum and steel scrap generated in manufacturing. In addition, wood, leather and fabric scrap was recycled for beneficial use wherever possible.
- + Knoll facilities also recycled 1.33 tons of waste batteries and 24.9 tons of waste glass in 2013.
- + In 2013, in partnership with Re-Source Recycling, the Knoll Toronto facility recycled 6.38 tons of fabric and 5.54 tons of laminated plastic rolls.
- + The East Greenville, Grand Rapids and Muskegon facilities recycled printer cartridges or donated to charity for recycling.
- + At the East Greenville facility, compactor trash waste decreased on an absolute basis as overall recycling went from 3,625.41 tons in 2012 to 3,395.04 tons in 2013.
- + At Muskegon, improved trash separation resulted in the volume of trash compactor waste remaining stable while production volume increased.

We will dispose of our waste only in well-operated permitted facilities.

- + All Knoll manufacturing facilities adhered to stringent mandates for disposal of waste in approved and monitored facilities.

4. Conservation

We will conserve energy by improving the efficiency of our internal operations and the goods and services we sell. We will make every effort to use environmentally safe and sustainable energy sources.

We will conserve energy and improve energy efficiency.

- + In 2013, a comprehensive air compression project was undertaken at all U.S. facilities. Third-party audits were conducted, leaks and energy inefficiencies were identified, and repairs and improvements were implemented. New compressors were purchased for East Greenville and Muskegon. The air compression project at Grand Rapids resulted in total energy savings of \$172,095 in 2013.
- + Under its Energy Management Program, Knoll initiated a sub-metering pilot project in 2013 at the East Greenville facility designed to integrate energy management software with manufacturing equipment to provide granular data on actual energy used to manufacture each metal, wood and assembled part.
- + Under the Glide Path program, older equipment in the East Greenville wood shop was replaced with new equipment that produce more parts in less time with greater energy efficiency.
- + The Muskegon plant received utility rebates for replacement of conventional battery chargers with energy saving “opportunity chargers” on forklifts.

The benefits of conservation are measurable:

Paper recycling:

- + 1,831,070 trees saved
- + 753,970 gallons of water saved in processing
- + Recycling paper vs. using new paper reduces air pollution by 95% and water pollution by 80%.

Steel recycling:

- + 2,173.5 tons of iron ore saved
- + 104.33 tons of limestone saved
- + Recycling steel vs. using new steel reduces air pollution by 86% and water pollution by 76%.

Aluminum recycling:

- + 1689.66 KWH of electricity saved
- + Recycling aluminum vs. using new aluminum reduces air pollution by 95%.

We will implement a program to upgrade existing low-efficiency motors to higher efficiency motors.

- + In 2013, Knoll continued to specify high-efficiency motors on all new equipment purchases at all North American facilities as part of its sustainable Procurement Policy. At Muskegon, the replacement of 15 HP motors with variable speed motors is projected to provide energy savings sufficient to achieve investment payback in less than a year.
- + The Knoll Energy Manager conducted training at all manufacturing sites on the specifics of energy efficiencies in production equipment to help plant engineers make informed equipment purchasing decisions.

- + Total Preventive Maintenance (TPM) was performed at all manufacturing facilities. It requires machine operators to monitor and maintain motors to optimize energy efficiency.

We will implement a program to upgrade existing lighting, where practical, at each facility.

- + All Knoll manufacturing facilities have completed lighting upgrades (bulbs and ballasts) to energy saving T8's.
- + In 2013, lighting upgrades from existing metal halides to high-efficiency T8's and installation of an occupancy sensor system were implemented at a leased distribution facility in East Greenville.
- + The integration of Kanepi occupancy sensor technology with lighting equipment throughout the East Greenville facility was initiated in 2013 and will be implemented at the Muskegon plant in 2014.



5. Risk Reduction

We will strive to minimize the environmental health and safety risks to our associates and the communities in which we operate through safe technologies, sound transportation practices, safe facilities and operating procedures, and preparing for emergencies.

We will design our processes to prevent injury to the health and welfare of Knoll associates, the community and the environment.

- + In 2013, the total case incident rate at Knoll manufacturing facilities improved by 16.3% and days away from work and restricted time improved by 16.4% over the previous year. The overall Knoll Inc. incident rate for all divisions of the company was 2.51 in 2013.
- + The Knoll East Greenville facility is an OSHA VPP Star site, placing Knoll among a select group of companies to achieve that honor. The VPP (Voluntary Protection Program) is a partnership with the U.S. Occupational Safety and Health Administration reserved for companies that demonstrate exceptional long-term success in reducing risk and protecting the health and safety of employees.
- + In 2013, a Knoll mandated 3-year facility audit was conducted at Toronto. In this process, the facility's safety consultant, insurance carrier, attorney and safety team worked together to identify hazards and establish a time line for implementing remedies.

We will develop and implement health and safety policies and programs to help prevent injury and illnesses to our associates.

- + Knoll continued to perform ergonomic reviews of production processes at the East Greenville and Muskegon facilities. In an effort to improve safety outcomes, manufacturing facilities re-engineered processes and purchased new equipment, including adjustable height-work tables, adjustable standing mats at workstations, and automated stapling machines. A re-engineered material handling retrieval system in the East Greenville wood shop cut significantly cut down on panel lifting and flipping.
- + In 2013, as part of Knoll's work hardening program, the services of an on-site physical therapist were made available free of charge to employees at all U.S. manufacturing facilities (days and hours differ by site). Therapists provide hands-on therapy and individualized exercise programs for both work and

non-work related strains and injuries.

- + The “Model Cells” program for continuous improvement in manufacturing was adopted as a model for health and safety in 2013. Full time Continuous Improvement managers with special health and safety training rotated among U.S. facilities, working with site-based volunteer teams to identify and implement health and safety opportunities.
- + At East Greenville, a Safety Excellence Workshop begun in 2012 that brought together production managers and safety committee members for 24 hours of training targeted at changing the safety culture was rolled out to all employees in 2013.
- + The Grand Rapids and Muskegon facilities continued their cross-site safety audit program in which teams of employees from the three West Michigan plants visit all facilities on a rotating schedule, bringing fresh eyes to production safety issues.
- + Knoll facilities continued to hold safety classes, maintain safety teams, carry out regular safety inspections and hold monthly safety meetings. Facilities use a variety of methods, including stop light systems, maintenance Job Safety Assessment (JSA) cards, and Safety Score Cards to raise awareness, flag hazards and ensure accountability.
- + Knoll U.S. manufacturing facilities continued to offer a voluntary stretching program that includes instruction and 10 minutes of free time at the start of each shift for stretching exercises.

We will develop and implement health and wellness awareness and illness prevention programs.

- + A monthly health and wellness newsletter was created and distributed via email (and in print where requested) to all employees across the entire company. Topics included exercise, diet, diabetes control and smoking cessation.
- + Knoll manufacturing facilities provided hearing conservation testing of all workers with physician review of test results as well as offered hearing protection equipment and education.
- + In 2013, Knoll U.S. facilities provided free flu shots to associates and their families.
- + All Knoll U.S. facilities conducted blood drives.
- + The East Greenville facility offered associates free cholesterol screening and blood pressure testing.
- + In 2013, the Muskegon facility put special focus on wellness activities with a Weight Loss Competition that attracted a total of 65 participants in winter, spring and fall sessions; participation in a county-wide Seaway Run and Ride Your Bike to Work Week; Apple Day, a facility-wide event in which apples were distributed at all associate meetings to promote healthy eating; and a Lunch Time “Best Health, Breathe, Move and Relax” Wellness Session.

We will design and develop training programs to provide Knoll associates with the necessary skills and knowledge to fulfill the objectives of the Environmental, Health and Safety Plan.

- + In 2013, Continuous Improvement Teams (CIT's) at all Knoll facilities conducted regular safety meetings, showed safety videos, trained volunteer safety observers, and created safety posters and newsletters.
- + Knoll facilities continued to train employee First Responder volunteers in CPR,

AED (Automated External Defibrillator) and first aid.

6. Safe Products and Services

We will reduce and, where possible, eliminate the use, manufacture or sale of products and services that cause environmental damage or health or safety hazards. We will inform our customers of the environmental impacts of our product or services in an effort to prevent unsafe use.

We will design and engineer durable products; investigate using recycled materials in the design of our products; and design safety features and ergonomics into our products.

- + In 2013, the Toboggan chair earned BIFMA level™ 2 certification. Level is a voluntary product standard, developed by the Business and Institutional Furniture Manufacturer's Association, to support safe, healthy and sustainable workplace environments. The newly certified products join other Knoll products already certified, including multiple products certified at level 3 (See Third Party Certification for a complete list of Knoll level 3 certified products.)
- + In 2013, Knoll continued to design and engineer durable products that use recycled materials in their manufacture, have high recyclability, and include ergonomic and safety features.
- + Knoll Design for the Environmental (DfE) guidelines were followed in the design and development of all new products. DfE principles include economy of materials, recycled content, clean technology, ergonomics, durability and ease of assembly and disassembly. In 2013, LCA (Life Cycle Assessment) was completed for the Toboggan chair.
- + In 2013, SMaRT-certified Health Product Declarations (HPDs) were created for the Generation, Moment, Life and Chadwick chairs.
- + In 2013, KnollTextiles added 24 new fabrics with environmental attributes to its collections. These bring to 139 the total number of Knoll Green Bar designated fabrics, which contain at least 49% recycled content, at least 75% rapidly renewable material (natural fiber), or Eco-Intelligent fiber. All new fabrics are UL GREENGUARD Indoor Air Quality® certified.
- + KnollTextiles continued to offer *Ultrasuede* textiles made with 80% post-industrial recycled microfiber from film used in products such as plasma screen TVs and *Eco-Intelligent® Polyester* fabrics made of fiber that is a "technical nutrient" designed to be safely recycled into new fabric with no hazardous by-products, dyes or catalysts. KnollTextiles continues to add to its growing list of fabrics approved to meet Google's Red List ban on targeted toxic materials.

We will provide independent testing to help assure the safety of our products.

- + All Knoll systems and seating, all KnollTextiles fabrics, most KnollStudio furniture and all KnollExtra accessory products except poster boards are UL GREENGUARD certified.
- + All Knoll office seating, the Template and Calibre Storage Systems, the Antenna and Morrison Office Systems, and Wood Casgood products are UL GREENGUARD Gold certified. In 2013, numerous KnollStudio products earned Gold certification: for a detailed list see UL GREENGUARD under Third Party Certification.

- + Knoll performs structural testing of our products using ANSI/BIFMA protocols. Products are tested in our Quality Assurance Laboratory and independently at outside labs certified by the Canadian General Standards Board (CGSB).
- + All Knoll urethane foam cushioning on seating products meets or exceeds requirements of California Technical Bulletin 117 (CAL 117).
- + Most Knoll seating products include upholstery options that comply with California Technical Bulletin (CAL 133), the most stringent flammability test protocol in the industry.
- + All Knoll systems are listed products with Underwriter's Laboratories. Listing includes periodic testing of upholstered vertical panels and UL audits of Knoll and component suppliers' factories four times per calendar year.

7. Environmental Restoration

We will comply responsibly with the law to address conditions we have caused that endanger health, safety or the environment.

- + In 2013, Knoll caused no conditions that endangered health, safety or the environment.

8. Informing the Public

We will comply with the law to inform in a timely manner those who may be affected by conditions caused by our operations that might endanger health, safety or the environment and will encourage associates to report dangerous incidents or conditions to management.

- + No incidents or conditions occurred in 2013 at any Knoll North American facility that affected the surrounding community or required public notification.

Each year Knoll sponsors an Environmental, Health and Safety Art Contest at the Upper Perkiomen Middle School in East Greenville, Pennsylvania. Some of the winning entries from the 2013 contest, chosen by professional artists, illustrate this report.