

Knoll and Environmental Sustainability

Key Focus Areas at a Glance

1. Climate Change

Addressing Global Warming

Knoll has taken a leadership position on climate change. We are working on meaningful approaches to conserve energy and promote the use of renewable energy sources. We have:

- ▶ A framework for energy management.
- ▶ A system for identifying process changes that save energy.
- ▶ In 2006, Knoll became the first company in the contract furniture industry to join The Chicago Climate Exchange (CCX®). Knoll membership in CCX was the result of our participation in the Energy and Climate Change Group of the non-partisan Clinton Global Initiative.
- ▶ In 2007, Knoll successfully met Phase 1 of its greenhouse gas reduction program with CCX. We achieved an 8.8% reduction in carbon dioxide emissions over the 1998-2001 baseline. This exceeded the required 4.25% reduction.
- ▶ In 2008 Knoll achieved its Phase II commitment to reduce emissions by an additional 2.5% by 2010 – two years ahead of schedule. We will continue to reduce our energy footprint and implement innovative programs to further drive down CO2 emissions. CCX will verify final data and certify total reductions at the end of the 2010 contract period.

2. Third-Party Certification

Third parties provide independent verification of environmental standards that are transparent and universally accepted. We partner with the following organizations:

The U.S. Green Building Council

- ▶ The USGBC's Leadership in Energy and Environmental Design (LEED®) green building rating system is the accepted benchmark in North America for the design, construction and operation of high performance green buildings.
- ▶ Knoll is aligned with the USGBC and can help

companies, governmental agencies, healthcare organizations and educational institutions achieve LEED certification.

- ▶ Many of our products are eligible for LEED credits and can contribute to LEED certification; we publish environmental databases for all Knoll systems and seating products. Up-to-date LEED information is available at knoll.com/environment.

The Forest Stewardship Council

- ▶ The Forest Stewardship Council (FSC®) is an international not-for-profit membership based organization that brings people together to find solutions to the problems created by bad forestry practices and to reward good forest management. Knoll has supported FSC since 1996.
- ▶ In 2007, Knoll began implementation of a sustainable wood policy targeted to protect endangered forests and promote sustainable harvesting of wood resources.
- ▶ Knoll is Chain of Custody certified by the FSC, and, effective December 1, 2009, Knoll established FSC certified wood as the standard for general office open plan environments. For more information, see "Knoll and the FSC Certified Wood Standard."

GREENGUARD Environmental Institute

- ▶ The GREENGUARD Environmental Institute sets standards for indoor air quality.
- ▶ Our strategy is to maintain GREENGUARD status on existing products, including new wood casegoods.
- ▶ We are also moving products to the more stringent GREENGUARD Children & Schools standard in the future. All Knoll office seating products have achieved Children & Schools certification.

International Organization for Standardization

- ▶ Today, all Knoll facilities worldwide are ISO 14001 certified under the revised 2004 standard.
- ▶ ISO is the world's largest developer and publisher of international standards.

Key Focus Areas at a Glance *continued*

- ▶ ISO 14001 addresses environmental management. This means that the complying organization:
 - ▶ Minimizes harmful effects on the environment caused by its activities.
 - ▶ Achieves continual improvement of its environmental performance.

Occupational Safety and Health Administration

- ▶ OSHA aims to ensure employee safety and health in the U.S. by working with employers and employees to create better work environments.
- ▶ In 2005, the Knoll East Greenville, PA, facilities were designated an OSHA VPP (Voluntary Protection Program) Star site.

Environmental Design Guidelines

Our approach to sustainable design considers all of the parts and pieces of the supply chain. We have “Design for the Environment” guidelines for all new products. We:

- ▶ Offer step-by-step procedures that define sustainable practices for the total design, development and manufacturing of a Knoll product.
- ▶ Mandate accountability from all disciplines and departments.

SMaRT® Consensus Sustainable Product Standard

What is the SMaRT Standard?

- ▶ Unlike McDonough Braungart Design Chemistry’s (MBDC) Cradle to Cradle Certification, SMaRT is a transparent, quantified sustainable product standard that measures a product’s environmental benefits throughout the global supply chain, from raw materials to end-of-life.
- ▶ SMaRT was developed by the Institute for Market Transformation to Sustainability (MTS), which brings together a powerful coalition of manufacturers, environmental groups and government leaders with the goal of increasing the sale and market share of sustainable products.

- ▶ SMaRT certification requires:

- ▶ The completion of a Life Cycle Assessment (LCA) process, which ensures that all key materials and processes are captured and converted into environmental impacts.
- ▶ GREENGUARD Children & Schools Product Certification.
- ▶ No polyvinyl chloride (PVC) or other toxic chemicals.

- ▶ Our strategy is to use the SMaRT Standard for all sustainable product certification.

- ▶ The following products are certified under the SMaRT Standard: Generation by Knoll (Platinum); Life (Gold); Chadwick (Gold); Calibre (Gold); Moment (Gold); Template (Gold).

- ▶ We will aim to certify all new products under the SMaRT Standard.

- ▶ SMaRT certification qualifies for an Innovation Credit under the LEED rating system.

- ▶ Life Cycle Assessment

- ▶ Knoll has partnered with a non-profit to develop an affordable, universal, computer-based LCA tool that can be used by the entire contract furniture industry.
- ▶ LCA is a science-based measurement of a product’s environmental impacts throughout its life cycle, from raw materials sourcing through manufacturing, shipping, use, and re-use or end-of-life.

level™

level™ is the certification program for the BIFMA furniture sustainability standard. BIFMA, the Business and Institutional Furniture Manufacturer’s Association, has established level as a common framework to evaluate environmental and social responsibility impacts across a variety of products. level is part of BIFMA’s ongoing development of voluntary product and industry standards that support safe, healthy and sustainable workplace environments.

Key Focus Areas at a Glance *continued*

- ▶ The level standard is applicable to all business and institutional furniture.
- ▶ level is modeled after the U.S. Green Building Council's LEED® Rating System.
- ▶ level provides a single, transparent way of understanding and communicating what sustainable furniture product is.
- ▶ In the BIFMA level certification process, a product, the organization and facilities that produced it are scored according to sustainability criteria in four areas:
 - ▶ Materials
 - ▶ Energy and Atmosphere
 - ▶ Human and Ecosystem Health
 - ▶ Social Responsibility
- ▶ In order to achieve a level certification, a manufacturer must partner with a recognized, independent third-party certification body.
- ▶ Knoll partners with Scientific Certification Systems (SCS), the first to certify products to the level program; SCS is known for its integrity and scientific rigor.
- ▶ level has three conformance thresholds: level 1, level 2 or level 3 certification.
- ▶ level 3 is the highest award a product can achieve.

3. Environmentally-Friendly Materials, Products & Manufacturing Processes

Environmental Design Guidelines

Our approach to sustainable design considers all of the parts and pieces of the supply chain. We have "Design for the Environment" guidelines for all new products. We:

- ▶ Offer step-by-step procedures that define sustainable practices for the total design, development and manufacturing of a Knoll product.
- ▶ Mandate accountability from all disciplines and departments.

Polyvinyl Chloride

- ▶ Polyvinyl Chloride (PVC) is one of the most common synthetic materials. Recently, however, the manufacture and disposal of PVC have been identified as potentially harmful to the environment and human health.
- ▶ PVC will not be used in new systems, seating, ergonomic or KnollStudio products, and a program to eliminate it from existing products has been initiated.

Bio-Based Materials

- ▶ Our strategy is to explore the use of bio-based materials in Knoll products.
- ▶ A foam derived from corn feed stock is currently being tested. The goal is to use this material in seating products.
- ▶ Our Generation by Knoll work chair has been developed with a leading polymer company. We are exploring an alternate version of the chair using renewable resource materials.

KnollTextiles

- ▶ KnollTextiles has over 70 fabrics in its line with environmental attributes related to fiber content, low emissions or environmentally sensitive manufacturing processes.
- ▶ These are designated with a "green bar" and may contribute to points for achieving LEED certification.

available at:



800.531.3746

info@thehumansolution.com
thehumansolution.com