



Knoll's Environmental Commitment

For 20 years — without fanfare — Knoll has demonstrated its commitment to the environment, leading the way in "green" design, innovative technology and sustainable business.

We have done this because we believe that a sustainable business works for the environment, the consumer and the employee.

Beyond following environmental laws, Knoll strives independently to take less from the earth, even as it consistently provides world-class designs to our customers.

Recycling, clean air, energy efficiency, non-toxic materials — these and other issues are at the heart of our commitment to respect our customers' desires for products that are not only beautiful, but consistently reliable, enduring and environmentally responsible — and to deliver on our promise to fulfill those desires.



Recycling: Making It Work

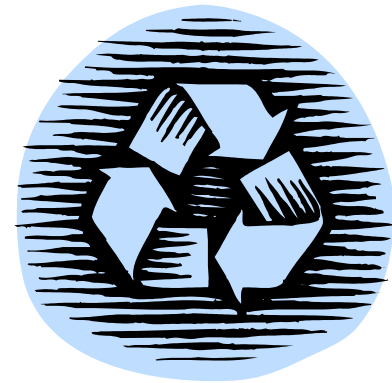
We have invested substantially in conserving many thousands of tons of raw materials in the past 15 years by working with our scores of vendors to create reusable containers and packaging.

- We have spent more than \$500,000 to develop collapsible plastic containers now in a large percentage of the company's shipping. These containers curbed our disposal of cardboard boxes, and also stack efficiently when empty, so less fuel is needed to transport them.
- We use corrugated cardboard shipping pallets made from recycled paper, enabling us to begin phasing out the wooden kind. And when the old wooden pallets break beyond repair, they are recycled in many ways, including grinding them into animal bedding.
- Our factories recycle wood scrap as fuel for steam heat, rather than dump it in landfills. And we've refitted our saws to more efficiently cut wood to reduce waste.
- Our use of reusable packaging for the final phase of furniture delivery is yet another step toward reducing packaging waste.

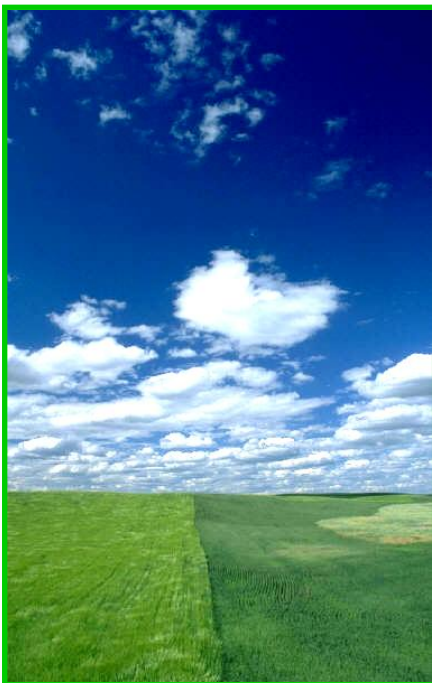
Recycling at Knoll is Standard Practice

Company-wide, recycling is part of our daily business.

- Every year, we remove from the waste stream more than 1,200 tons of pallets, more than 800 tons of cardboard, more than 7,600 tons of wood scrap and more than 100 tons of paper.
- Our paper and cardboard conservation efforts now save 1,750 trees each year.
- More than 90 percent of all plastic parts for our chairs arrive in returnable packing, as do 40 percent of our metal shipments.
- Our cardboard packaging contains on average at least 30 percent recycled material. We examine alternative packaging methods constantly and continue to investigate new opportunities for recycling.
- We help recycle more than 200 tons of fabric each year. Scraps are transported to manufacturers who then pull them apart and reweave them into carpet backing used in automobiles and other end uses.
- We recycle 49 tons of aluminum and nearly 5,000 tons of steel a year.



Clean Technology: Pollution-Free Manufacturing



Since 1986, we have spent more than \$15 million cutting pollution from our manufacturing processes. In pursuing that program we ask ourselves two questions: What is best for the environment? And how do we address the first question in the most economical way? In both cases, clean technology is usually the answer. Put simply, the aim is efficiency — to reduce the amounts of raw materials used, and the pollution produced.

Knoll Clears the Air

- We have not generated any ozone-destroying chlorofluorocarbons (CFCs) in our manufacturing since 1993. Because the ozone layer protects us from the sun's ultraviolet rays, we want to help shield it from these damaging chemicals.

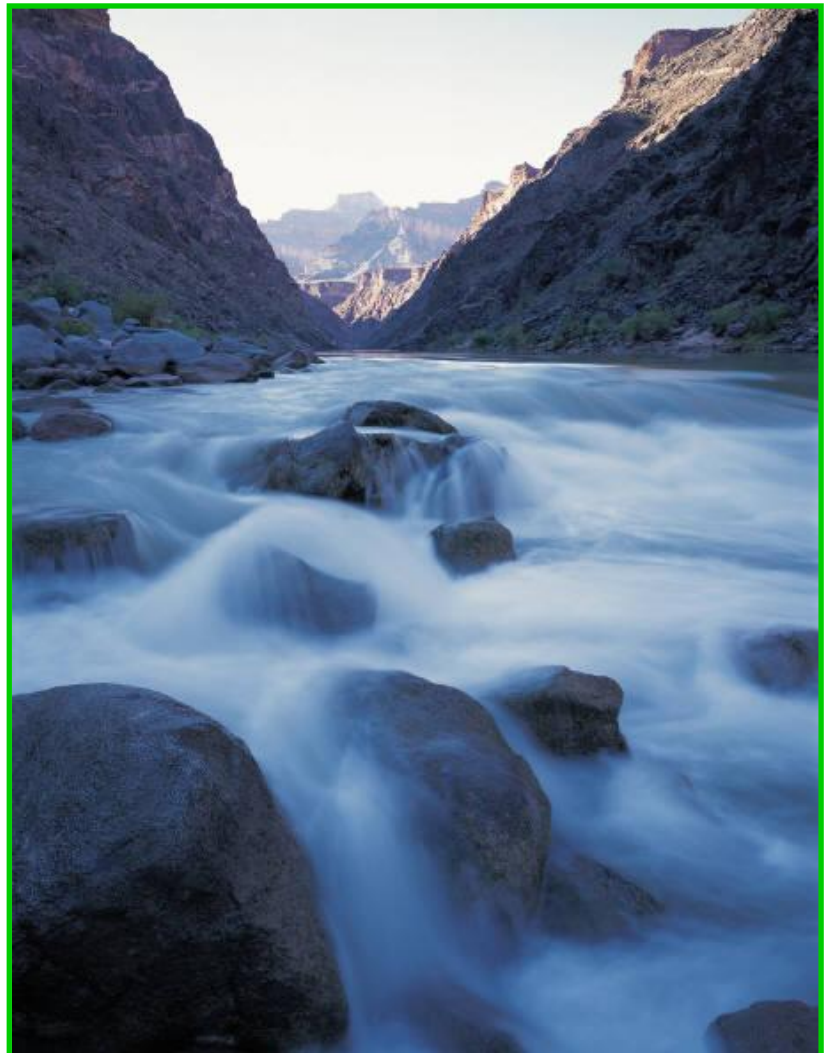
Knoll Clears the Air

- We have been on the cutting edge of reducing volatile organic compound emissions (VOCs) often found in manufacturing processes. VOCs are precursors to smog, and some are potential human carcinogens.
- We have eliminated 99 percent of the VOCs in our metal paints. In 1984, 87 percent of our adhesives were VOC-based; today, all of our glues are water-based or hot-melt. And that means they are practically VOC-free.
- Our clean-air standards far exceed federal and state regulations. Our two Michigan plants — Grand Rapids and Muskegon — in are no longer mandated to submit emission reports to the federal government, because the numbers are consistently so low. All of our sites worldwide are International Standards Organization (ISO)-registered 9000; our Grand Rapids plant is ISO-registered 14000, the highest rating. And all our sites meet the ISO 14000 guidelines.
- Our wood-painting process has seen a 75 percent reduction in VOC-emissions. And we continue to seek progress on that front. At our East Greenville, Pennsylvania, plant alone we've seen our emissions drop from 300 to 25 tons of VOCs a year on wood-coating operations.

Waste Water Treatment — A Long-Standing Practice

As for our water treatment plants — that's old news but still important.

- We treat nearly nine million gallons of waste water a year and conserve more than 115 million gallons. Our waste reduction and elimination programs are so good, we've been recognized by the governors of both Michigan and Pennsylvania for surpassing state environmental standards for our management systems. We've been doing that for years.



Environmentally Friendly Furniture: Setting Standards

How "green" a product is depends on its composition, what it is emitting into the environment, the kind and amount of energy required for its manufacture and the origin of its materials.

The Indoor Air Quality and Recycling Program

We have embarked upon a major initiative: our Indoor Air-Quality and Recycling Program.

- We test all the components of our products and workstations with the potential to emit VOCs or other hazardous gases; every component must pass indoor air standards set by the states of Washington and California — standards more stringent than the EPA's.

- Our furniture must also meet recycling requirements. All steel components, for example, must contain 25 percent recycled content.

- Our goal is to establish an emissions and recycling profile for each product to ensure that any future redesigns or component substitutions do not compromise the product's environmental integrity.

- We have completed testing three of our six office furniture lines, and are in the middle of testing a fourth. We plan to complete this testing by 2002.

- We use EPA-verified testing procedures with independent testing companies that follow established protocol.

We Assiduously Monitor Our Suppliers

Determining the exact recycled content of a product is time-consuming but essential.

- All of our vendors must be contacted to ascertain what materials are in their products — the components of our furniture.



- Often our vendors must return to their suppliers to find out where their materials originate. It's a laborious, detailed process, but it's the only way to find out what exactly our workstations are made of so that we can not only maintain, but also improve the recycled content in future redesigns.

Energy Efficiency: Using Less, Manufacturing More

Several years ago, Knoll surveyed all of the motors at all four of its manufacturing sites to determine which low-efficiency motors needed to be replaced.

- The majority of those motors have since been replaced with new high-efficiency motors, and all new equipment we purchase must meet stringent energy-efficiency guidelines.

- We continue to explore ways to minimize energy consumption by upgrading our HVAC equipment to control heat and air loss. Our air-

cleaning devices are designed so that heated air is returned to our plants. In addition, several of our sites have computer-assisted energy management systems to manage the HVAC equipment and lighting.



Low-Mercury Lighting Program

Knoll is also engaged in company-wide low-mercury lighting program. Mercury is a bio-accumulative pollutant. Fluorescent bulbs are a major source of mercury and many types are considered hazardous waste; ours will no longer be.

- We've begun installing low-mercury bulbs at our manufacturing facilities, and our Equity system already uses them.
- Our plan is that, all of our office installations will have low-mercury lighting by the end of 2001.

Above and Below the Surface, Knoll's Commitment is Clear

Behind most of Knoll's office furniture lies an interesting tale about a common material most of us do not think about often: composition board.

- Composition board — particleboard and MDF (medium-density fiberboard) — forms the backbone of most office furniture. The boards are hidden beneath our beautiful veneers and low- or VOC-free paints and lacquers in our desks, dividers and cabinets.
- Composition boards are made of sawdust, wood chips and plastic resins.
- We ask our manufacturers to use as much recycled sawdust and wood chips as possible. Although this content will vary by supplier, we strive to maintain 30 percent or more recycled content. Today, we are well above that minimum with particleboard that averages about 50 percent recycled content. In our Morrison and Currents product line we consistently reach the 100 percent recycled content.

Helping to Reduce Wood Waste

Typically, in producing "natural" wood veneers, an inefficient 60 percent of the wood becomes waste. We save wood in making our beautiful, man-made veneers.

- Our veneers have half the wood content of "natural" veneers, and very little material goes to waste in their manufacture. We create a multilayered sandwich of thin slices of wood and plastic resin. Then we cut that sandwich vertically into thin slices that become our veneers.

While we don't like to claim that we utilize 100 percent of the materials — since a bit of sawdust is produced — we are very close. And of course it meets Knoll's famous standards for form and function; our veneers are both strong *and* beautiful. The hardwoods we use — maple, walnut, cherry for example — are all from North American-managed forests.



Clean Manufacturing: Saving Our Resources

Knoll is always seeking ways to improve the recycled content in our products.

Enduring and Environment-Friendly Products

One of our biggest challenges is maintaining the structural integrity of recycled plastic to make lasting products.

- We've experimented with various techniques — and found it essential to discontinue some when the products proved not as strong as our initial design.
- When it comes to recycled plastics, some companies make the kind of second-rate products that add up to built-in obsolescence under the guise of "green" manufacturing. We don't.

Maintaining the Integrity of the Product

A second challenge is to maintain the integrity of a product that has been redesigned or that uses parts supplied by a new vendor.

- Our Indoor Air Quality and Recycling Program enables us to evaluate the recycled content of all our products and to maintain our standards.
- New components must meet or exceed established levels, so that our success, to date, in keeping the environment clean and safe, is not compromised.
- We expect to finish testing our extensive product lines by the end of 2001, and the results so far are encouraging.



- A3, our newest office system, is comprised of 50 percent recycled content. Our Morrison plastic laminate workstation and our Currents system each have a total recycled content of 17 percent. We're confident that our remaining office lines — Reff, Equity and Dividends — will also be in this range.

Testing Every Component

Knoll has addressed the recycling issue with every component in our workstations.

- Morrison, for example, boasts 28 percent recycled steel, nearly 24 percent recycled plastic and 15 percent recycled wood pulp. And if one of our 100 percent recycled fabrics is selected, the percentage of recycled plastic for the whole workstation rises to at least 50 percent.



- Currents shares the same percentages of recycled content for steel and wood pulp, although the recycled plastic content is 15 percent. But choose one of our recycled fabrics, and the content of recycled plastic for that workstation jumps to 50 percent.

- Morrison and Currents account for 40 percent of our sales. So every percentage point counts.

Making the Grade:

"A" is for Accommodation

Knoll is a considerate neighbor. We have a good record with the EPA, with states where we work, with communities where we live. The waterways near our factories are clear, and the air overhead is clean, thanks to our water treatment and emissions control systems.

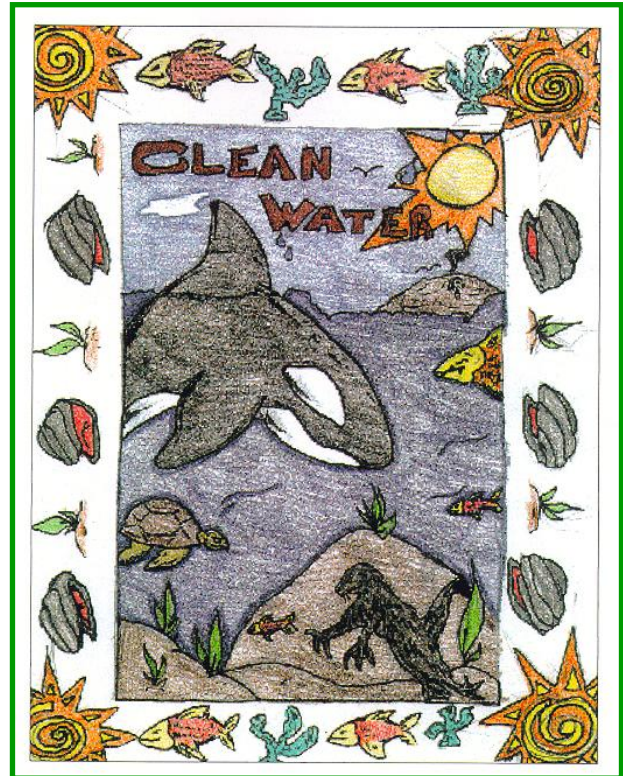
We are confident that we meet green building guidelines. We will continue to work toward enhancing these features, making the workplace safer for our employees and healthier for our neighbors.



Awards and Environmental Education: Working with the Community

Knoll is a member of the community, participating in the environmental curriculum at schools and cooperating with volunteer organizations.

- Each year, our manufacturing sites sponsor an annual Environmental, Health and Safety Art Contest for schoolchildren. Professional artists judge the numerous entries we receive. We're so delighted with results that our latest Environmental, Health and Safety Report features the winning entries.
- Our outreach programs extend to cleaning up the local environment as well. We fund neighborhood volunteer organizations and assist community projects. For example, Knoll provides Dumpsters™ for Earth Day cleanups.
- Our Grand Rapids site is a member of the Michigan Business Pollution Prevention Program, a program which is overseen by the state's environmental protection department.



- Knoll Toronto is a founding member of, and serves on, the executive board of the Black Creek Regional Management Association. The Association is a partnership of the public, private and government working on solutions to reduce the traffic congestion and smog in the Toronto region.
- Our environmental efforts have won international recognition. We were named a "clean corporate citizen" by the governor of Michigan where we have two manufacturing plants. In Pennsylvania, home of our largest facility and our corporate headquarters, we have received the Governor's Award for our waste elimination and reduction programs.

Those Devilish Details We Can't Resist Boasting About ...

- Five of our panel fabrics and one drapery fabric are woven from 100 percent recycled polyester that is made from soda bottles.
- We incorporate Agri-fiber boards as replacement for wood-derived products in a number of our products, including our Currents privacy screen.

- Four of our fabrics — Resolution, Clarity, Weave Three and Harmony — are dyed in an environmentally friendly process; color is added to the liquid polyester by the fiber manufacturer. The color — essentially crushed rocks called mineral pigments — does not affect the environment during production or use. Conventional coloring techniques — yarn and piece-dyeing — produce water and air pollutants; many dyes also contain heavy metals, which are known pollutants.

- Our Currents and Morrison office furniture lines follow the Greenguard guidelines, a system designed by an independent laboratory that meets the indoor air standards for the states of Washington and California. (They're the toughest in the nation.) We are confident that the rest of our office lines will meet those standards, too. Stay tuned.

- All metal in our products contains a minimum 28 percent recycled content.

At Knoll we're always exploring cleaner, safer, more cost-conscious manufacturing methods. We work with sustainability groups to determine the most efficient use of resources, and incorporate practices that are more sustainable.

Efficiency and sustainability, after all, are guiding principles at Knoll.

