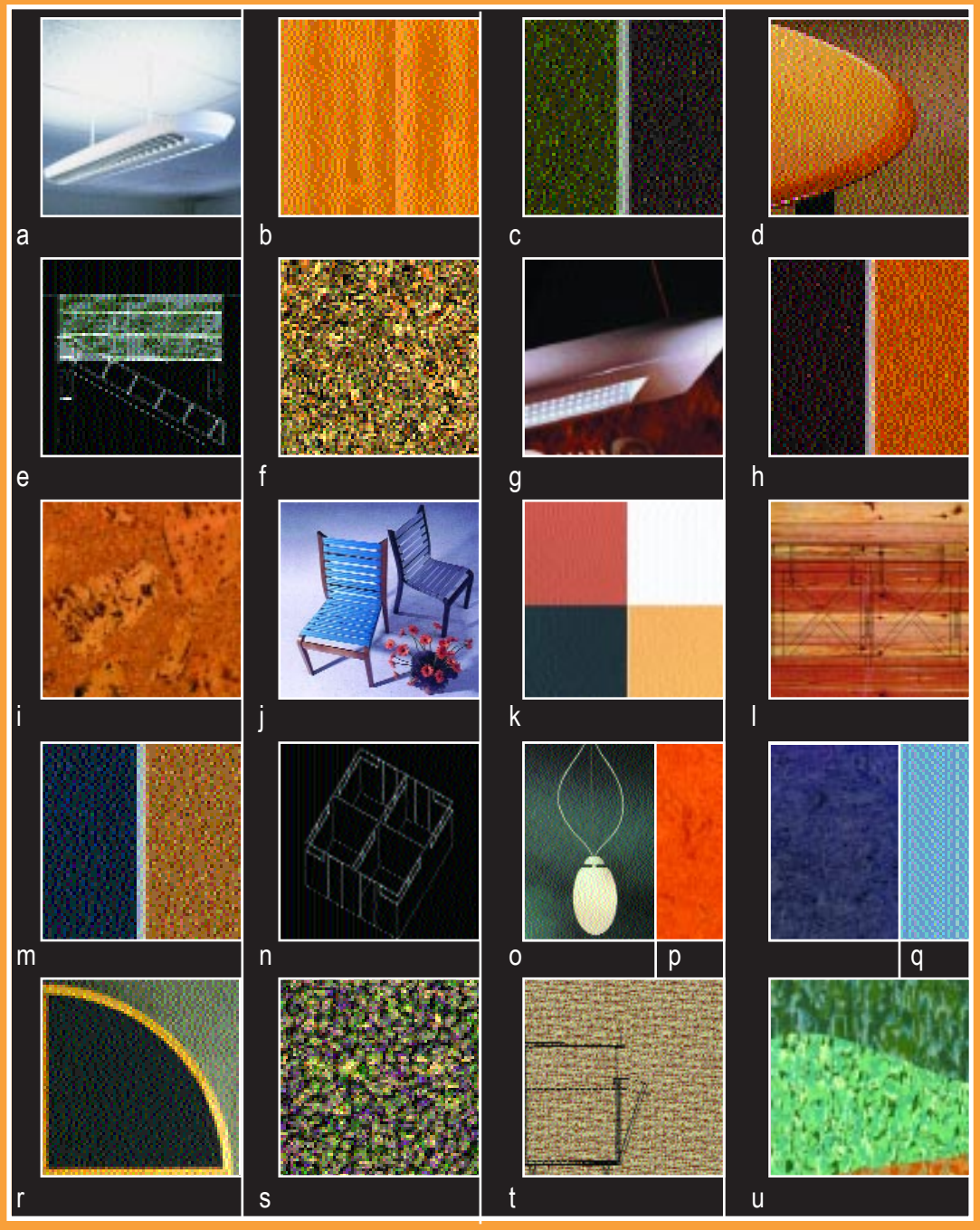


Mission Design

WRI's Office Environment

World Resources Institute

A Message from the President

There is nothing incidental about World Resources Institute's new office space. It implements a vision and is the culmination of months of work by our staff, architects, contractors, and suppliers. At every step from initial conception to finishing touches, our goal was to express in physical terms WRI's values—integrity, innovation, urgency, independence, and respect—and our commitment to move human society to live in ways that protect the Earth's environment. Every material was chosen because it uses natural resources efficiently; many were selected because they are alternatives to conventional, but less environmentally friendly, products. We want to support enterprises that are striving to achieve the sustainable business practices that we advocate. We believe we have succeeded in this goal—our space supports our work in its design and its execution.

I would like to thank everyone who contributed the effort, energy, and in many cases products needed to realize our plans. A wonderful list of donors and suppliers are acknowledged at the end of this booklet. I want to express particular appreciation to Sandy Mendler and her colleagues at Hellmuth, Obata, and Kassabaum, P.C. They worked closely and patiently with WRI staff to create a design that allows for the exchange of ideas so critical to our work. Our commercial broker, E. Randall Lennon of Insignia/ESG, Inc., helped us find space where we could do what we envisioned. Dale Martin of Tramell Crow Real Estate Services managed the project, and Mike Littlefield of the William L. Griffith Co. supervised construction. Both became real partners in the practical execution of the design. Donna Thuotte of Hoppmann Communications surprised us and even herself with her ability to coax donations from firms supplying state-of-the-art communications equipment, which will allow us to get our message out to more of the world than ever before. Finally, thanks to those within WRI whose hard work put it all together: Rich Barnett, Marjorie Beane, Alan Brewster, Allen Hammond, Nancy Kiefer, and Donna Wise.

We consider our new space to be a model of some of the best and most innovative thinking in sustainable design. And just as we can often recognize vibrancy in a stream free of pollutants or clarity in air unburdened by pollutants, we find that our new surroundings are intangibly helping to give WRI a renewed vigor and sense of purpose.

Jonathan Lash

WRI believes a healthy environment and a healthy economy can coexist. Since our founding in 1982, we have used information and knowledge as tools to fulfil our mission: to move human society to live in ways that protect earth's environment and its capacity to provide for the needs and aspirations of current and future generations.

Our relocation to 10 G Street, NE, in March 1999 presented an opportunity to create an office environment that expresses our mission in tangible terms, through environmentally-friendly design, facilities, and technology. The workspace, designed by the architectural firm Hellmuth, Obata, and Kassabaum, PC, is a real-life example of strategic environmental and business management. HOK designer Sandy Mendler says, "Through smarter design, we're creating environments that really are better for people."

The design is built within a conventional leased office space and within a standard budget, but it makes some intelligent choices that use resources efficiently and deal with waste constructively. Just one example is the recycling bins located throughout the new office, which are made from ductwork left over from the construction of the air circulation system (see box t on the cover). Another example is the efficient division between personal and public workspace. The design creates small quiet offices to accommodate solitary work and light-filled meeting areas to encourage creative interaction (see the floorplan on p. 4). And it takes advantage of new technologies to facilitate communication among staff, visitors, and collaborators.

Choosing Materials That Support WRI's Four Themes

WRI's work focuses on four themes: biological resource stewardship, climate protection, viable development, and sustainable enterprise. The materials that were chosen in the project reflect our commitment to these themes.

Biological Resource Stewardship

Biological resources provide the flow of goods and services that sustain human life. Stewardship of these resources by careful management, use, and restoration underlies every strategy for achieving economic, social, and environmental sustainability in the 21st century. WRI's work in this area focuses on efforts to halt the degradation of biological resources, such as frontier forests, and enhance their contribution to development.

All of the wood in the new office is from independently certified sustainable sources, which ensures that the forests are being managed responsibly. We also use salvaged and "character-grade" subpremium wood to make good use of material that would otherwise be considered waste. We use renewable resources, such as bamboo and cork, for the flooring in the reception area. Improvements in our internet-based communications technology let people worldwide access more of our information electronically, which helps to reduce the demand for paper and other forest products.

Climate Protection

Climatic change is a global problem that, if unaddressed, could undermine progress on every aspect of human development and ecosystem protection. WRI's work in this area focuses on preventing dangerous human-caused climate change by promoting efficient use of energy sources and reducing air pollution.

Much of the focus in the planning of the new office was on energy efficiency—in the type of lighting and appliances selected, and the use of sensors and smart controls that cut off or reduce the power supply when products are not in use. Paints and finishes, countertops and flooring, cabinets and carpeting were all chosen for their environmentally-friendly manufacturing processes. Videoconferencing technologies reduce the need for collaborators to travel, which helps to reduce energy demands and carbon dioxide emissions.

Viable Development

Most of the development strategies now being pursued around the world are environmentally unsustainable. Agricultural production is threatened by the intensive use of pesticides and other agrochemicals; water systems are degraded through land use changes and industrial processes; and energy and transportation systems rely heavily on the consumption of fossil fuels that threaten human health and contribute to global climate change. WRI's work in this area focuses on promoting policies that reduce poverty, improve livelihoods, and protect the environment by effectively integrating environmental, economic, and social goals.

We use materials that represent promising alternatives to unsustainable development practices. Some woodwork comes from Plan Forestal Estatal, a community-based forestry project in Mexico using sustainable agricultural practices to build up a local industry. In the reception area, the bamboo flooring is from a new market in China, and the cork flooring comes from Portugal and Spain, where it has been produced sustainably for centuries. New communications equipment supports collaboration between WRI staff and partners around the world.

Sustainable Enterprise

WRI's work on sustainable enterprises engages businesses and financial markets to overcome looming environmental and social challenges. The challenges are immense: significantly reducing material and carbon intensity, de-toxifying commerce, redressing damage from the use and disposal of products, restoring economic opportunity to the disenfranchised, and improving the quality of life. WRI's work in this area fosters the internal management strategies and external incentives that will enable firms to build future profitability around eco-efficient products and processes.

WRI's carpet supplier, Interface, an international corporation based in the United States, is attempting to build the world's first sustainable and eventually restorative enterprise within a competitive business context. Appliances from Asko and Whirlpool are designed to be energy- and water-efficient; they offer cost-effective commercial alternatives to standard products.

Designing Space to Promote Creativity and Interaction

WRI is moving away from conventional office arrangements to maximize the exchange of ideas. Our office environment features equal sharing of space and light, quiet areas for concentration, inviting areas for informal meetings, and modern conference facilities for larger gatherings and videoconferencing.

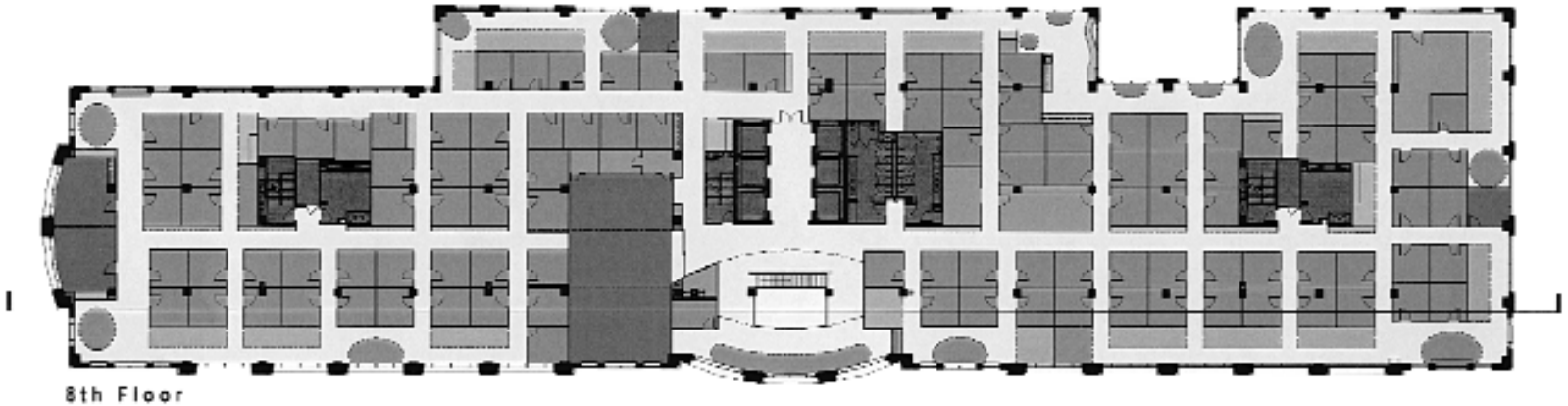
When planning began in July 1997, WRI staff expressed a need for a healthy indoor environment with improved air quality and access to daylight. The new office meets these needs by leaving the perimeter open and grouping offices and work stations in the center of the building, away from exterior walls and windows. HOK designer Sandy Mendler calls the design "an inside-out office" because the closed offices are on the inside of the space and the open spaces are on the outside. There are lots of attractive places for staff to interact with each other and external partners. Because that interaction is part of who we are and how we bring ideas into action, there is lots of transparency, so that the interaction is visible.

The space on the outside provides ample natural light that reaches all of the offices through clerestory windows set six feet high. "People wanted their privacy, but they didn't want to feel they were sitting in a fishbowl. This design provides privacy but also a sense of openness and access to daylight," Mendler explains. All of the offices, including those of WRI President Jonathan Lash and senior staff, are the same size and have the same access to the windows that surround the building.

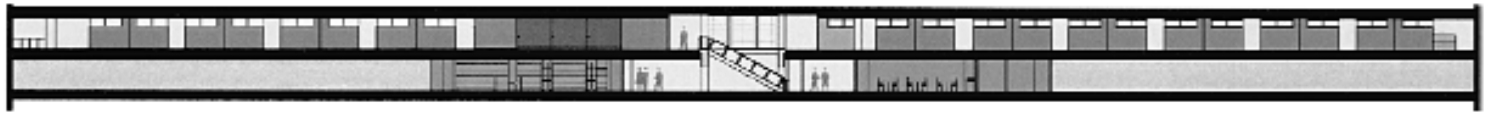
By going down the stairs behind the reception desk, staff visit the lunchroom, the supply and mail room, and WRI's library, as well as three new, glass-fronted conference rooms. The library, housing over 10,000 books, journals, and periodicals, offers staff and visitors workspace and computer access to on-line information.

Adopting Communications Technology for the 21st Century

WRI recognizes that the exchange of ideas in a modern work environment depends on technology as well as materials, electronic connections as well as personal interactions. Our new office incorporates upgraded computer networks, a web-based archive of our publications, and greater capacity to produce interactive digital content in many forms, including text, data, maps, graphics, sound, and video. Videoconferencing facilities, supported by contributions and assistance from AMX, DNP America, Draper, and Trooper Visual Structures, for example, allow WRI's press conferences to reach media internationally. Our expanded website, which now incorporates archival software from Electric Press, can do more to engage and inform the hundreds of thousands of people who already visit our site each week. Other new technology, including laptops from the Dow Chemical Co., telephones from Williams Communications, and contributions from Extron and Gentner, offers us a platform for easier and more comprehensive two-way communication with collaborators around the world. By sharing the lessons of our experience with this new technology, WRI can assist other organizations that want to enhance their communications in the 21st century.



8th Floor



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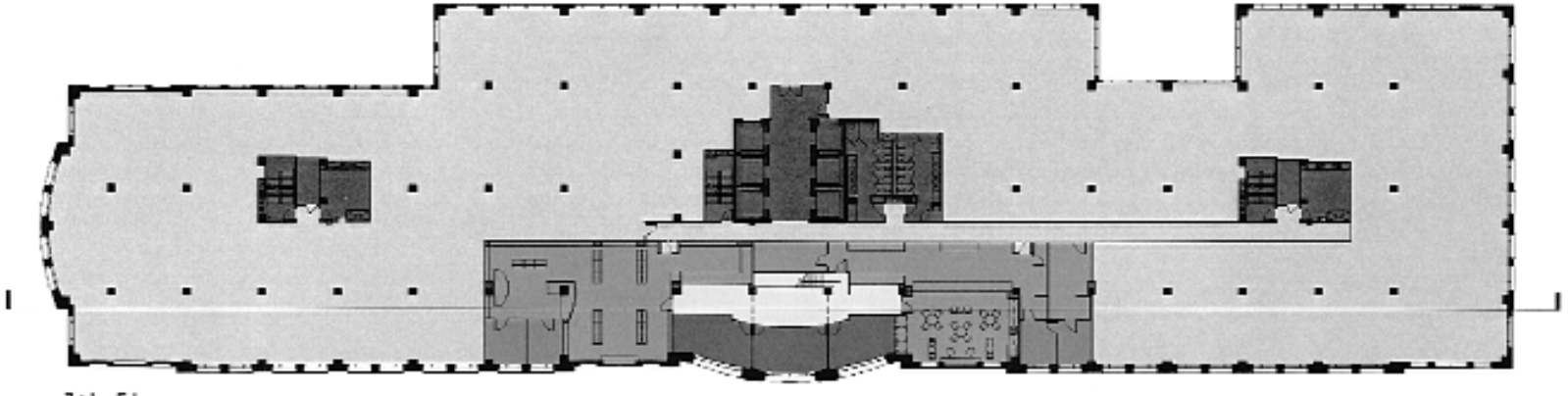

7th Floor

A Guide to Sustainable Materials

WRI is moving toward greater sustainability by using natural, recycled, low-energy, and non-toxic components in doors, walls, ceilings, floors, woodwork, furniture, lighting, and kitchen appliances. Following this text is a list of vendors specializing in sustainable products, with special acknowledgment of those who contributed to WRI's office facilities.

Doors

All office doors in WRI's new facility are made by Architectural Forest Enterprises from compressed wheat straw fiberboard. Wheat straw is an agricultural waste product that is normally burned, emitting harmful gases and particles into the atmosphere. The wheatboard is compressed with formaldehyde-free binders and finished with a UV-cured finish in a variety of colors. WRI's new facility is the first application of this material for commercial doors. Staff members chose the color of their individual office doors to add a bit of individuality to the space. Some doors to nonoffice spaces were salvaged from the construction site. When we found they were headed to the landfill, we repainted them and put them to good use. Doors to meeting and conference rooms are custom made from salvaged lumber, recovered from structures that were being destroyed (see boxes c, h, m, and l on the cover).

Walls

Wall partitions in the new facility are made of gypsum board with high recycled content. The facings are covered with 100 percent recycled paper and finished with a low volatile organic compound (VOC) sealant (see box n on the cover).

Paint

Walls, ceilings, and some metal surfaces are treated with a paint that is water-based and free of volatile organic compounds, donated by ICI Paints North America. Accents in the lunchroom are done with a milk protein-based paint, created by the Old Fashioned Milk Paint Company (see boxes k and q on the cover).

Ceilings

To take full advantage of the natural light, the new facility uses Hi-LR Ultima RH90 ceiling tiles by Armstrong World Industries. Not only are these tiles created with 79 percent recycled industrial waste and post-consumer recycled paper, they exhibit high light reflectance, returning up to 89 percent of ambient light to occupants (see box a on the cover).

Flooring

Visitors to WRI's office will find the most interesting examples of sustainable products beneath their feet. The elevator lobby has flooring made of cork, a natural, renewable, and sustainably harvested material, from the Natural Cork Ltd. Co. When taken in small, infrequent extractions, the cork tree can continue to produce replacement bark. The natural resilience and acoustical performance of cork create an attractive, long-lasting and comfortable surface (see box i on the cover).

The flooring in the reception waiting area is bamboo from Mintec Corp. Grown in Southeast Asia, bamboo is a fast-growing grass that requires no pesticides or fertilizers. It regenerates without replanting, so it is a low-energy, naturally renewable material. Bamboo is also strong, stable, and versatile as a building material (see box b on the cover).

Kitchen and workroom floors are covered with linoleum from Forbo Industries. An environmentally friendly alternative to vinyl, linoleum is made from wood flour, cork flour, natural rosins, linseed oil, and limestone, with a backing of biodegradable jute fiber. Available in a wide variety of colors, this product has a life expectancy of 40 to 60 years (see boxes p and u on the cover).

Carpeting

Offices and hallways are tiled with the carpet manufactured by Interface Flooring Systems. The tiles can be replaced when and where needed, thus minimizing waste. A water-based, zero-VOC adhesive is used to install the carpet tiles (see box s on the cover).

Sustainably Harvested Wood

Moldings and the reception desk are constructed of certified, sustainably harvested wood from EcoTimber International. The handrail on the stairs and the wood panels surrounding the opening to the lower level are made from wood that originated in a project called Plan Forestal Estatal (PFE), a community-based forestry program located in the state of Quintana Roo, on the eastern Yucatan Peninsula of Mexico (see box e on the cover).

PFE formed in 1983 to implement new state and national policies that promote sustainable forestry in the largely unproductive seasonal and dry forests of Quintana Roo. PFE facilitates community participation, encourages diversified forest enterprises that can use local species, and develops harvesting regimes to ensure sustainable use of forest resources. The four communities now milling lumber for export are the only timber producers in the region currently certified by the Rainforest Alliance's Smart Wood program.

Reclaimed Wood

The design also uses reclaimed wood extensively in the reception area. Reclaimed wood makes use of a beautiful and increasingly rare material that would otherwise be destined for the landfill. In turn-of-the-century Virginia, the abundant local heart pine was rapidly depleted to meet a growing need for construction lumber. Today, the Virginia Pine is near extinction, and most remaining stands are second- or third-growth forests. As older structures are replaced with modern facilities, salvage companies have begun to carefully disassemble old factories, houses, and stores to recover the pine. Lumber is then re-milled and used to create hardwood floors, railings, and, in WRI's case, beautiful and unique doors to our main conference rooms (see box l on the cover).

Cabinets and Work Surfaces

Cabinets found in WRI's kitchens and workrooms are made from two types of biofiber materials. These formaldehyde-free fiberboards replace conventional plastic laminate. The Eco-Colors wheatboard is similar to that used for doors; the Dakota Burl is made from compressed sunflower seeds (see boxes c, f, and h on the cover).

Countertops in the kitchen are made of linoleum on a wheatboard substrate. Some work surfaces use a solid, formaldehyde-free biocomposite from Phenix Biocomposites, Inc., made from soybeans and recycled newspaper. Phenix creates a material called Environ, which can be used in any function where wood is used. All millwork surfaces are sealed with Tried and True zero-VOC clear finishes made of polymerized linseed oil.

Furniture

The selected office furniture manufacturer, Haworth Incorporated, is well known for reducing processing waste and emissions. For this project, the designers configured all offices and workstations to allow for the maximum amount of workspace and the best integration of technology. All metal components in the workstations are electrostatically powder-coated, which is also a zero-emission, zero-waste process (see boxes d and t on the cover).

Chairs in the reception area and stools in the coffee bar are designed and manufactured by Persing Enterprises, Inc.–Danko Designs. Both employ automobile seat belts that are remnants or seconds—material that does not meet stringent standards for cars, but is still stronger and more durable than anything comparable used for furniture. Seat belts also eliminate the need for urethane foam, which degrades over time and produces poisonous gas if burned (see box j on the cover).

Lighting

Fluorescent light fixtures, like Ledalite's ErgoLight line, provide high efficiency, long life expectancy, and high visual comfort in WRI's offices. The fixtures, which each hold three Philips fluorescent lamps, are linked to the computer in each office to give the occupant individual control over the level of lighting. Two streams of light are aimed downward onto work surfaces, while one light stream is directed upward to reflect light from the ceiling panels, creating a balanced light atmosphere, reducing glare and shadows (see boxes a and g on the cover). Sensors in the light fixtures automatically dim the lights when the office is empty, which has another environmental benefit—it eliminates the need for wall switches!

Appliances

All appliances in WRI's new facility have the EPA Energy Star rating, as do computer monitors, copiers, and printers. The Asko dishwashers are recognized by the American Council for an Energy Efficient Economy as the most efficient model available.

Conclusion: Putting Ideas into Action

The approaching millennium often evokes predictions of failed technology and environmental disaster. We at World Resources Institute know that these risks are real: our fragile ecosystems are being degraded all around us, and even the most sophisticated computer programs are subject to human error.

But we also know that the shape of the future—good or bad—is determined by decisions and choices that we make today. Our mission commits us to try to "move human society to live in ways that protect earth's environment and its capacity to provide for the needs and aspiration of current and future generations."

And so we are proud to have created an office environment that strives to make responsible, intelligent choices, from the smallest architectural detail to the largest communications network. This new kind of Mission Design satisfies and inspires us. It reminds us every day that things can be improved, that we can take tangible steps to advance our goals of protecting biodiversity and climate or encouraging sustainable development and business practices. WRI's office environment is proof that ideas can be put into action.

We hope that others will be interested in our design and will be moved to follow our lead. We want to support the suppliers who made our space possible, and we'd like to encourage more people to follow their lead, too. Most of all, we wish to use this beautiful space as a forum for discussion about other, better ways to protect earth's environment and its capacity to provide for the needs and aspirations of current and future generations.

Sources and Contributors

Environmental Products and Services

An asterisk indicates suppliers who contributed products or services.

***Architectural Forest Enterprises**
For: Wheatboard and maple veneer doors, wheatboard for millwork
At: 3775 Bayshore Boulevard, Brisbane, CA 94005
(415)467-4800
http://www.ecoforest.com

***Armstrong World Industries, Inc.**
For: Mineral fiber ceiling tiles
At: 3250 Still Road, Cumming, GA 30041S
(800)448-1405
http://www.ceilings.com

Asko Appliances
For: Dishwashers
At: 1129 Weaver Dairy Road, Chapel Hill, NC 27516
(800)267-2444
http://www.askousa.com

DLW-Gerbert, Ltd.
For: Linoleum flooring
At: 715 Fountain Ave., Lancaster, PA 17601
(717)299-5035

Eco Timber International
For: Architectural woodwork
At: 1020 Heinz Avenue, Berkeley, CA 94710
(888)801-0855
http://www.ecotimber.com

E. T. Moore Manufacturing
For: Custom doors from salvaged lumber
At: 3100 Hopkins Road, Suite 101, Richmond, VA 23224
(804)231-1823
http://www.etmoore.com

Forbo Industries
For: Cork-linoleum tackable panels and linoleum flooring
At: P.O. Box 667, Hazleton, PA 18201
(800)342-0604
http://www.forbo-industries.com

***Haworth, Inc.**
For: Office furniture
At: One Haworth Center, Holland, MI 49423
(616)393-3000
http://www.haworth-furn.com

Hellmuth, Obata, and Kassabaum, P.C.
For: Architecture, graphics
At: Canal House, 3223 Grace Street, N.W.
Washington, D.C. 20007
(202)339-8700
http://www.hok.com

***ICI Paints, North America**
For: Wall, ceiling, and door frame paint
At: 925 Euclid Avenue, Cleveland, OH 44115
(216)344-8191
http://www.ici.com

***Interface Flooring Systems**
For: Carpet tile
At: P.O. Box 1503, LaGrange, GA 30241
(770)420-6681
http://www.ifsia.com

Isoboard Enterprises, Inc.
For: Wheatboard substrate for millwork
At: 1300 SW Fifth Avenue, Suite 3030, Portland, OR 97201
(503)242-7345

***Ledalite Architectural Products**
For: Pendant and wall-mounted fluorescent fixtures
At: 9087A 198 Street, Langley, BC V1M3B1 Canada
(604)888-6811
http://www.ledalite.com

Mintec Corp.
For: Bamboo flooring
At: 100 E. Pennsylvania Avenue, Towson, MD 21286
(888)964-6832
http://www.bamtex.com

Natural Cork Ltd. Co.
For: Cork flooring
At: 1750 Peachtree Street, Suite 305, Atlanta, GA 30309
(800)404-2675
http://www.naturalcork.com

***Persing Enterprises, Inc.–Danko Designs**
For: Chairs and coffee bar stools
At: 102 Cypress Lane, Red Lion, PA 17356
(800)882-5300

Phenix Biocomposites, Inc.
For: Architectural woodwork
At: P.O. Box 609, Mankato, MN 56002-0609
(800)324-8187
http://www.phenixbiocomposites.com

***Philips Lighting Company**
For: Fluorescent lamps
At: 200 Franklin Square Drive, Somerset, NJ 08875-6800
(732)563-3000
http://www.lighting.philips.com

Old-Fashioned Milk Paint Company
For: Milk paint
At: 436 Main Street, P.O. Box 222, Groton, MA 01450
(976)448-6336
http://www.milkpaint.com

Tried and True Wood Finishes
For: Low-VOC wood finishes
At: 14 Prospect Street, Trumansburg, NY 14886
(607)387-9280
http://www.calistawood.com

Whirlpool, Inc.
For: Appliances
At: Benton Harbor, MI 49022-0692
(800)253-1301
http://www.whirlpool.com

Communications Technology

An asterisk indicates suppliers who contributed products or services.

***AMX Corporation**
For: Remote control panels for conference rooms
At: 748 North Bethlehem Pike, P.O. Box 620
Springhouse, PA 19477
(800)462-6946
http://www.karpcom.com/amx.html

***DNP America, Inc.**
For: Glass screen for projection system
At: 355 Madison Avenue, 3d floor, New York, NY 10017
(212)503-1060
http://www.dnp.co.jp

***Dow Chemical Company**
For: Laptop computers and communications support
At: Midland, MI
http://www.dow.com

***Draper Shade and Screen Company**
For: Electrical and manual screens
At: 411 South Pearl Street, Spiceland, IN 47385
(765)987-7999
http://www.draperinc.com

***Electric Press**
For: Archival software
At: 11440 Isaac Newton Square, Reston, VA 21190
(703)742-3308
http://www.elpress.com

***Extron Electronics**
For: Computer-video interface
At: 1230 South Lewis Street, Anaheim, CA 92865
(800)633-9876
http://www.extron.com

***Gentner Co.**
For: Teleconferencing systems
At: 1825 Research Way, Salt Lake City, UT 84119
(800)945-7730
http://www.gentner.com

Hoppmann Communications
For: Communication systems consulting services
At: P.O. Box 221855, Chantilly, VA 20153-1855
(703)502-4080
http://www.hoppmann-av.com

***Trooper, Visual Structures, Inc.**
For: Rear projection system
At: 10803 Bloomfield Street, Los Alamitos, CA 90720
(800)655-8766
http://www.vsitrooper.com

***Williams Communications and Solutions**
For: Nortel telephones
At: 2010 Corporate Ridge, McLean, VA 22102
(703)712-7720
http://www.wiltel.com

WRI acknowledges generous contributions to date in support of our new communications facilities from the following members of our Board of Directors:

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About WRI

World Resources Institute is an independent center for policy research and technical assistance on global environmental and development issues.

Because people are inspired by ideas, empowered by knowledge, and moved to change by greater understanding, WRI provides—and helps other institutions provide—objective information and practical proposals for policy and institutional change that will foster environmentally sound, socially equitable development.

In all of our policy research and work with institutions, WRI tries to build bridges between ideas and action, meshing the insights of scientific research, economic and institutional analyses, and practical experience with the need for open and participatory decision-making.

Since our founding in 1982, WRI has become one of the world's most respected policy and research centers for the study of environmentally, socially, and economically viable development paths. As our expertise and scope of work has grown, so has our family. Today we are 125 talented professionals from more than 20 nations, augmented by a network of advisors, collaborators, international fellows, and partner institutions in more than 50 countries. Current areas of work include agriculture, biodiversity, business strategies, climate change, economics, energy, environmental statistics, forests, health, national resource policies, technology, and trade.

For more information about our staff, office space, and programs, visit our website at http://www.wri.org/wri.

KEY

a - Occupancy sensor controlled "Ergolight" by Ledalite

b - Bamboo flooring by Bamtex

c - Wheatboard doors in "Evergreen" and "Charcoal" finishes by Architectural Forest Enterprises

d - "Premise" work station by Haworth

e - Steel framed plant screen wall

f - "Dakota Burl" millwork panel by Phenix Biocomposites

g - Asymmetric linear lighting "Minuet" by Ledalite

h - Wheatboard doors in "Zin" and "Ochre" finishes by Architectural Forest Enterprises

i - "Cleopatra" patterened cork tile flooring by Natural Cork, Ltd.

j - Seating made from remnant seat belt webbing by Persing Enterprises, Inc.–Danko Designs

k - Water based paints by ICI Lifemaster (L to R clockwise): Burma Road, White, Soft Gold, and Andiron

l - Salvaged wood: solid heart pine by E.T. Moore Jr., Co.

m - Wheatboard doors in "Storm Cloud" and "Natural" finishes by Architectural Forest Enterprises

n - Typical office quad configuration

o - "Brere S" pendant light by Flos USA

p - Linoleum flooring by DLW-Gerbert, Ltd.

q - "Solider Blue" milk paint by The Old Fashioned Milk Paint Company, Inc.

r - Conference room modular table

s - "Saffron" carpet tile by Interface

t - Drawing of recycle bin made from on-site recycled sheet metal shown here over recycled polyester work station panel fabric

u - Linoleum flooring by Forbo Impressions

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