

# PERKINS+WILL GREEN OPERATIONS PLAN



PERKINS  
+ WILL

## Executive Summary

At Perkins+Will, two of our core values are sustainable design and environmental stewardship. Through proactive assessment and action, we educate our employees, colleagues, and our clients on methods for improving operational performance and lessening impact on the environment.

Perkins+Will strives to be the leading green high design firm in North America. An important component of that goal is a focus on greening the firm's operational procedures, policies and activities.

Perkins+Will has taken a holistic approach to developing a set of strategies to improve environmental performance, using the LEED® (Leadership in Energy and Environmental Design) Green Building Rating System™ as a guideline and various reference standards including Green Seal, Environmental Choice™ Program and EPA's Environmentally Preferable Purchasing.

We have identified key environmental issues related to transportation, water and energy use, office consumables, indoor air quality and office renovations. The resulting "Green Operations Plan" (the Plan) is a set of policy statements, implementation strategies which will guide the firm toward significant reductions in its environmental footprint with the ultimate goal of being "restorative" to counteract years of environmental degradation. The Plan will be significantly implemented by the end of 2006 in all Perkins+Will offices.

Following are excerpts from the Plan, including the policy matrix, which outlines goals, assessment methodology, policy statements, and strategies for implementation.

## Green Operations Matrix

The Green Operations Plan is based upon research conducted in the areas of transportation, water and energy use, office consumables, indoor air quality and office renovation. Individual reports follow for each policy area, providing empirical research and supporting reference standards and guidelines (not included in web version). Policy recommendations will be adopted by each Perkins+Will office.

- 1 Transportation** +
- 2 Office Water Use** +
- 3 Office Energy Use** +
- 4 Office Consumables** +
- 5 Indoor Air Quality** +
- 6 Office Renovations and New Construction** +

## 1 TRANSPORTATION

**Goal:** Decrease green house gas emissions associated with employee transportation.

**Policies:**

- A. Assessment:** assess transportation habits used by employees and associated green house gas emissions.
- B. Mass Transit and Cycling:** increase alternative modes of transportation with cycling and mass transit.
- C. Fuel Efficient Company Cars:** purchase or lease only hybrid vehicles.
- D. Offset Air Travel Emissions:** offset all emissions produced by business air travel with purchase of carbon credits or tree plantings.

### A: ASSESSMENT

#### Strategies

Survey employee transportation habits and collect commuting data.

### B: MASS TRANSIT AND CYCLING

#### Strategies

Increase funding of employee public transit from current \$35 subsidy to \$50 subsidy.

Encourage cycling through subsidized off-site shower and storage facilities.

Include shower and storage facilities in all new Perkins+Will office designs per LEED (Sustainable Site, Credit 4).

### C: FUEL EFFICIENT COMPANY CARS

#### Strategies

Buy or lease hybrid vehicles for any Perkins+Will office car.

### D: OFFSET AIR TRAVEL EMISSIONS

#### Strategies

Assess air miles traveled on business trips to determine environmental impact.

Offset air mile emissions with purchase of carbon credits or tree planting.

## 2 OFFICE WATER USE

**Goal:** Decrease office water consumption.

**Policies:**

- A. Assessment:** assess current office water use.
- B. Water Efficient Plumbing Fixtures:** install only water efficient plumbing fixtures.

### A: Assessment

#### Strategies

Calculate approximate office water use with LEED Water Efficiency Credit 3 calculator.

### B: Water Efficient Plumbing Fixtures

#### Strategies

Install water efficient faucet aerators in all sink faucets (0.5 gpm).

Install water efficient plumbing fixtures in any new office build-out including:

- waterless urinals
- dual flush toilets

### 3 OFFICE ENERGY USE

**Goal:** Decrease office energy consumption and associated green house gas emissions.

**Policies:**

- A. Assessment:** assess current office energy consumption.
- B. Reduce Lighting Energy Consumption:** decrease office energy consumption associated with lighting.
- C. Reduce Office Equipment Energy Consumption:** decrease office energy consumption associated with computers, office equipment and appliances.
- D. Purchase Green Power:** purchase renewable energy to offset office power use.

#### A: Assessment

##### Strategies

Calculate office's total energy consumption.

#### B: Reduce Lighting Energy Consumption

##### Strategies

Use only energy efficient lamps.  
Replace incandescent lamps with fluorescent (including task lighting) in non-dimmer controlled areas.  
Use low mercury content lamps.  
Reduce hours of light operation.

#### C: Reduce Office Equipment Energy Consumption

##### Strategies

Consider power usage of computer equipment when making purchasing decisions to continually increase power use efficiency.  
Institute office-wide policy of computer "standby" mode.  
Replace existing CRT monitors with LCD monitors.  
Replace Desktops with laptops for all employees when appropriate.  
Use Energy Star rated equipment and appliances.

#### D: Purchase Green Power

##### Strategies

Purchase 100% green power (or phase in-green power within a set timeframe)

### 4 OFFICE CONSUMABLES

**Goal:** Minimize office waste stream and adopt green procurement strategies.

**Policies:**

- A. Assessment:** assess current office procurement strategies.
- B. Environmentally Friendly Office Paper:** only use environmentally friendly paper and reduce paper consumption.
- C. Environmentally Friendly Kitchen Supplies:** only use environmentally friendly kitchen supplies.
- D. Environmentally Friendly Janitorial Supplies:** only use environmentally friendly janitorial supplies and sustainable cleaning methods.
- E. Environmentally Friendly Office Furniture and Finishes:** only use environmentally friendly furniture and furnishings.
- F. Environmentally Friendly Office Supplies:** only use environmentally friendly office supplies.
- G. Recycling Program:** incorporate an office recycling program and educate staff on recycling methods.

#### A: Assessment

##### Strategies

Review current purchasing polices with office manager.

#### B: Environmentally Friendly Office Paper

##### Strategies

For general office paper and marketing paper:

- Use 100% post-consumer recycled paper products.
- Use paper with PCF (Process Chlorine Free) bleaching.
- Give preference to paper produced by regional mills.

For large format printing:

- Use 30% post-consumer recycled paper products.

Reduce paper consumption:

- Print double sided when possible.
- Purchase duplexers for printers that do not have double-sided printing capabilities.
- Set copiers to double sided as default.
- Single space documents.
- Decrease margins on Perkins+Will templates.
- Review documents on screen before printing.
- Consider designating printer or printer tray which uses discarded paper.
- Only purchase new printers with double sided features.

## C: Environmentally Friendly Kitchen Supplies

### Strategies

Use reusable kitchen supplies as first option (i.e. ceramic coffee mugs and dishes).

**Paper towels** must be Green Seal Certified and made from 100% recovered materials (minimum 40% Post-consumer).

Disposable **tableware** (cups and plates) must be:

- Biodegradable
- Compostable
- Recyclable
- Made of 100% paper
- Non-bleached (if available)
- No plastic packaging/packing materials

Disposable **stir straws** must be biodegradable and compostable.

Disposable **cutlery** must be biodegradable and compostable.

**Coffee Filters** must be unbleached.

## D: Environmentally Friendly Janitorial Supplies

### Strategies

**Cleaning supplies** must be Green Seal Standard GS-37.

**Carpet Cleaner** must be biodegradable and must not contain butyl cellulose.

**Plastic trash bags** to be made of (10-100%) post-consumer recycled material.

**Hand soap** should not contain antimicrobial agents, except where required by health codes.

**Bathroom tissue** and **paper towels** must be Green Seal Certified and made of 100% recovered materials.

**Bathroom tissue** should contain a minimum of 20% post-consumer waste; **paper towels** should contain a minimum of 40% post-consumer waste. Choose unbleached paper towels first; process chlorine free (PCF), second; elemental chlorine free (ECF), third.

Select packaging having minimum environmental impact: made of recycled and recyclable materials; imprinted with safe inks; and containing no toxic metals, dyes, inks or fragrances. Avoid products which are packaged in outer cartons that are inappropriately sized or which contain excessive inner packaging materials.

Seek items having the largest amount of product. Select high-capacity hardwound roll towels (800 feet or more).

## E: Environmentally Friendly Office Furniture and Finishes

### Strategies

**Furniture** manufacturers must be ISO 14000 registered and Green Guard IAQ certified. All manufacturers should be using renewable resources and have recycled content in their products. All furniture must be low VOC emitting.

**Carpet** manufacturers must be ISO 14000 registered. Preferred manufacturers should have 20% or higher overall recycled content. Specifications should include reclamation at the end of the carpets life. Carpet must pass CRI's Green Label Indoor Air Quality Test Program for low-emitting material.

**Millwork** must be fabricated from agrifiber instead of MDF and all finishes should be water-base. All composite woods and agrifiber products must contain no added urea-formaldehyde resins. All wood should be FSC certified.

**Paint** must not exceed limits of Green Seal Standard GS-11 requirements for low-emitting VOC and chemical component limits.

**Textiles** must be produced from recycled material, plant-based materials, natural fibers, or fully compostable materials.

**Adhesives and Sealants** must meet or exceed Regulation 8, Rule 51 of the BAAQMD and the SCAQMD #1168 on VOC's for sealants and sealant primers. Must contain no urea formaldehyde.

## F: Environmentally Friendly Office Supplies

### Strategies

#### Binders

Plastic covered paperboard: plastic (typically vinyl) at least 25% total recycled content; paperboard at least 90% total recycled content, with 75% post-consumer.

Paper-covered paperboard: 90% total recycled content with at least 75% post-consumer.

Cardboard: 100% post-consumer content.

Solid plastic: HDPE, at least 90% post-consumer content; PET, 100% post-consumer content; other plastics, at least 80% post-consumer content.

**Clipboards** must have 100% total recycled content with at least 50% post-consumer.

**Highlighters and markers** must be water-based, certified AP non-toxic, conforming to ASTM D-4236.

When purchasing dry-erase or permanent markers, choose "low odor" or choose refillable.

**Correction fluid** must be water-based, non-toxic and ozone-safe.

#### Envelopes (large)

Kraft Paper: 50% total recycled content with at least 30% post-consumer.

Paper: 50% total recycled content with at least 30% post-consumer.

Alternative Fiber: 50% "tree-free" content, with the balance post-consumer recycled content.

Plastic: 25% total recycled content, all post-consumer.

**File folders** must have 100% total recycled content with at least 30% post-consumer fiber.

**Index Cards** must have 100% total recycled content with at least 50% post-consumer.

**Labels** must have 50% total recycled content with at least 30% post-consumer.

**Pens** must be refillable as the first choice, preferably with the construction materials containing recycled or biopolymer content

Single-use must be 100% total recycled content with at least 50% post-consumer, or choose biopolymer for pen barrels that is also biodegradable.

**Pencils** must have 100% total recycled content with at least 60% post-consumer.

**Presentation Transparencies** must have 50% total recycled content with at least 25% post-consumer.

**Self Stick notes** must have 100% total recycled content with at least 30% post-consumer.

**Toner Cartridges** must be re-manufactured.

**Plastic Office Waste and Recycling Receptacles** must have 20-100% post-consumer content.

**Steel Office Waste and Recycling Receptacles** must have 16% post-consumer content, 25-30% total recovered materials content.

## G: Recycling Program

### Strategies

Incorporate office paper, cardboard, glass, plastic and aluminum & metal as part of the office recycling program.

Educate staff on importance of recycling and proper procedures of recycling.

Post signs encouraging people to recycle.

Post signs delineating what is recyclable and what is not recyclable.

Present recycling procedures during a lunch time presentation.

Introduce recycling policies and procedures at new employee orientation.

Encourage offices to compost wastes.

## 5 INDOOR AIR QUALITY

**Goal:** Increase quality of indoor air.

**Policies:**

- A. Assessment:** assess current office indoor air quality.
- B. Indoor Plant:** incorporate air-cleaning plants into office environment.
- C. Housekeeping:** adopt green house keeping procedures.

### A: Assessment Strategies

Review current indoor air quality by means of an Industrial Hygienist. Test office air quality to determine concentrations of CO<sub>2</sub>, Formaldehyde, Particulates (PM 10), TVOC and 4-PCH.

### B: Indoor Plant Strategies

Determine type of toxins present in the space (based on IAQ report).  
Based on found toxins, implement planting incentives with appropriate 'air cleaning plants'.  
Provide a plant (or plants) to all new employees as an introduction package.  
Distribute weekly "plant award". A merit based program where individuals are rewarded with a personal plant based on task performance.  
Consider "Pod Plant Zones"- Zones where Pod members distribute plant maintenance responsibilities, or compete against other pods for growth rates, etc.  
Create a task force in each office to monitor and implement these recommendations.  
Task force should provide plants to new employees, develop the plant award, etc.

### C: Housekeeping Strategies

Use approved Green Seal Standard GS-37 products for all cleaning supplies.

## 6 OFFICE RENOVATIONS AND NEW CONSTRUCTION

**Goal:** Make a positive impact on the built environment and contribute to sustainable communities.

**Policies:**

- A. Assessment:** Include sustainability issues when assessing proposed sites for office renovation or new construction.
- B. LEED Silver:** All Perkins+Will office renovations or new construction must receive a minimum LEED Silver certification.