Three Questions!

- How many of you get up each morning thinking: “Let us go rape and pillage the environment.”?

- Have you been told that to build “green” or environmentally responsible is more expensive?

- Would you like to be able to pick environmentally responsible suppliers or products and services?
What to Look for in a Company

- Management support
- Structure to get things done
- Goals and strategy
- Results
Environmental Legacy

“Herman Miller shall be a good corporate steward of the environment.” - DJ DePree, 1953

Max  DJ  Hugh
The DePree Leadership Team
EQAT—A Comprehensive Approach
“A BETTER WORLD”

HMI’s environmental goal is to become a sustainable company.

This has led to Project 2020.
Project 2020

Create a 100% footprint free operations:

- Zero Solid waste
- Zero Hazardous Waste
- Zero Air Emissions
- Zero Water Emissions.
- Use 100% Renewable energy.

Use “Cradle to Cradle” Protocol for Design for the Environment of all new products.

New buildings and renovations must meet USGBC’s LEED requirements.
Project 2020’s Status

Create a 100% footprint free operations:

- Zero Solid waste
- Zero Hazardous Waste
- Zero Air Emissions
- Zero Water Emissions.
- Use 100% Renewable energy.

Use “Cradle to Cradle” Protocol for Design for the Environment of all new products. Currently >10%

New buildings and renovations must meet USGBC’s LEED requirements. Currently meeting requirements
EQAT—A Comprehensive Approach

EQAT

Design for Environment

- Energy Reduction
- Indoor Air
- Environmental Low-Impact Process
- ISO-14001
- Green Buildings
- Environmental Affairs
- Packaging Transportation
- Communications
McDonough Braungart Design Chemistry (MBDC)

HMI’S DfE Version 2

Version 1 +
Cradle to Cradle Design Protocol
Modeling Industry on Nature’s Design
Cradle to Cradle Design

**Technical Metabolism**
Product of Service
- Manufacture
- Distribution
- Use
- Recovery
- Disassembly
- Recycling/upcycling

**Biological Metabolism**
Product of Consumption
- Manufacture
- Growth
- Resource
- Composting
- Distribution
- Use
- Recovery
Design for the Environment-DFE

**Version 1**
- Durability
- Manufactured with minimal impact
- Innovative design
- Longevity of design

**Version 2**
- Cradle to Cradle Protocol
Green Buildings at Herman Miller, Inc.
## LEED V 2.0

<table>
<thead>
<tr>
<th>Category</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable sites</td>
<td>14 pts</td>
</tr>
<tr>
<td>Water efficiency</td>
<td>5 pts</td>
</tr>
<tr>
<td>Energy &amp; atmosphere</td>
<td>17 pts</td>
</tr>
<tr>
<td>Materials &amp; resources</td>
<td>13 pts</td>
</tr>
<tr>
<td>Environmental quality</td>
<td>15 pts</td>
</tr>
<tr>
<td>Design excellence</td>
<td>5 pts</td>
</tr>
<tr>
<td><strong>TOTAL POINTS</strong></td>
<td>69 PTS</td>
</tr>
</tbody>
</table>

## Commercial Interiors (DRAFT)

<table>
<thead>
<tr>
<th>Category</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Sustainable sites</td>
<td>7 pts</td>
</tr>
<tr>
<td>Water efficiency</td>
<td>2 pts</td>
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<tr>
<td>Energy &amp; atmosphere</td>
<td>14 pts</td>
</tr>
<tr>
<td>Materials &amp; resources</td>
<td>14 pts</td>
</tr>
<tr>
<td>Indoor environmental quality</td>
<td>15 pts</td>
</tr>
<tr>
<td>Innovation &amp; accredited professional</td>
<td>5 pts</td>
</tr>
<tr>
<td><strong>TOTAL POINTS</strong></td>
<td>57 PTS</td>
</tr>
<tr>
<td>Category</td>
<td>Total Points</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>New Construction</td>
<td>69</td>
</tr>
<tr>
<td>Commercial Interiors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26-32</td>
</tr>
<tr>
<td></td>
<td>33-38</td>
</tr>
<tr>
<td></td>
<td>39-51</td>
</tr>
<tr>
<td></td>
<td>52+</td>
</tr>
</tbody>
</table>
LEED at Herman Miller

LEED New Construction (LEED-NC)
- Greenhouse: Pioneer Status
- Mainsite’s C-1 Bld.: Gold
- Marketplace: Gold
- Chippenham, England: (In-P) Platinum/Exc.

LEED for Commercial Interiors (LEED-CI)
- Mainsite’s B/G Bld.: Certified
- Washington, DC’s NDC: Gold
- Design Yard’s Front Door: (In-P) Silver-1pt!
- New York & Dallas NDC: (In-P) Gold/Silver
- Toronto, Canada: (In-P) Gold

LEED for Existing Buildings (LEED-EB)
- Hickory Manufacturing: In Process
GreenHouse, William McDonough & Partners, 1995
Storm water retention pond at GreenHouse
Main Street, GreenHouse
GreenHouse - Good use of daylight
Herman Miller’s new “Market Place”, a 100,000 sq. ft. office building
New Construction V.2.0
HMI’s Market Place Project

- Sustainable sites 14 pts 7 pts
- Water efficiency 5 pts 3 pts
- Energy & atmosphere 17 pts 9 pts
- Materials & resources 13 pts 6 pts
- Environmental quality 15 pts 9 pts
- Design excellence 5 pts 5 pts

Total Points Possible 69 pts 39 pts
Gold Plaque for the Marketplace
Natural light & greenery, MarketPlace
Natural lighting from atrium, MarketPlace
# Value Metrics – 100,000 SF Building

<table>
<thead>
<tr>
<th></th>
<th>Traditional &quot;Leased&quot;</th>
<th>MarketPlace Costs</th>
<th>Savings</th>
<th>Savings per 7 Yr. Lease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Building Costs</strong> (incl. TI)</td>
<td>$135/ft²</td>
<td>$89/ft²</td>
<td>$46/ft²</td>
<td>33%</td>
</tr>
<tr>
<td><strong>FF&amp;E Costs</strong></td>
<td>$31/ft²</td>
<td>$27.58/ft²</td>
<td>$3.42/ft²</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Operations Costs</strong>*</td>
<td>$3.84/ft²</td>
<td>$2.26/ft²</td>
<td>$1.43/ft²</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Churn Costs</strong>**</td>
<td>$1.58/ft²</td>
<td>$0.55/ft²</td>
<td>$1.04/ft²</td>
<td>66%</td>
</tr>
<tr>
<td><strong>Total Savings Over 7 Year Lease Period</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*operations Costs include general and administrative expenses, operations and maintenance expenses, and loan servicing expenses.

**churn costs include leasing and defeasance expenses associated with building transactions.
MarketPlace
Organizational Effectiveness Outcomes

- +3% increase in work group process quality
- +7% sense of “belonging” to the organization
- +11% design reflects departmental identity
- - 20% in personal travel distance
- +31% design of the space communicates corporate identity to customers
- +36% design of the space will attract new employees
Design Yard – Front Door

LEED, CI – Targeted Gold

Interior Architects – IA Chicago
US Green Building Council:
LEED CI Certification Categories

Design Yard – Front Door

<table>
<thead>
<tr>
<th>Categories</th>
<th>Submitted</th>
<th>Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Sites</td>
<td>4 pts</td>
<td>7 possible</td>
</tr>
<tr>
<td>Water Efficiency</td>
<td>0 pts</td>
<td>2 possible</td>
</tr>
<tr>
<td>Energy &amp; Atmosphere</td>
<td>4 pts</td>
<td>12 possible</td>
</tr>
<tr>
<td>Materials &amp; Resources</td>
<td>9 pts</td>
<td>14 possible</td>
</tr>
<tr>
<td>Indoor Environmental Quality</td>
<td>10 pts</td>
<td>17 possible</td>
</tr>
<tr>
<td>Innovation &amp; Design Process</td>
<td>5 pts</td>
<td>5 possible</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32 total</strong></td>
<td><strong>57 possible</strong></td>
</tr>
</tbody>
</table>

Rating Scale: 21-26 Certified, 27-31 Silver, 32-41 Gold, 42+ Platinum
Herman Miller, Inc.

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paul_murray@hermanmiller.com
616 654 5035