

Sustainable Development at Teknion

A change initiative "small moves, big shift"





Teknion's Corporate Office - Toronto, Ontario



Background What caused the need for change

- In 2002 we were being asked questions we could not answer
- We were seeing a new "green" standard emerge that geographically was getting some attention
- A customer told us that it was about more than price/delivery/value



What did we do

 Developed our strategy to engage the company by creating a large scale organizational shift

clever/agile/responsive/human

- Pro-active environmental responsibility
- Senior leadership assigned to lead executive sponsor (president)
- Charter to set goals and objectives
- Foundation programs to guide behavior change ISO 14001, Greenguard, Eco Logo, LEED



how do we move forward?

Three underlying principles guide our efforts:

- inform ourselves and each other and spread that knowledge to our partners within the industry and beyond.
- **build** responsibly through environmental programs to create a better company.
- advance sustainability in the industry and the world at large by being engaged, and an active participant









supporting a knowledge community

- GreenWorks team highlighted the importance of knowledge exchange across our organization.
- Knowledge exchange with suppliers and the industry as a whole
- CEU (Continuing Education Units) presentations and accreditation
- Green Building Chapters and at core committee levels in support of LEED for Healthcare in the U.S., the LEED Technical Advisory Group and LEED-CI (Commercial Interiors) in Canada.
- Teknion's showcase at a recent IIDEX/NeoCon Canada,



IIDEX









ISO 14001



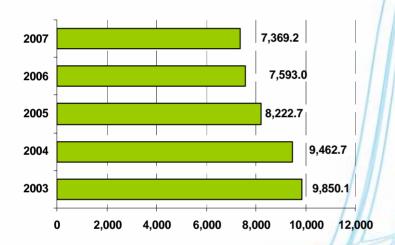
- ISO 14001 is an internationally accepted standard for an environmental management system (EMS).
- Depth of certification
- Change of culture and behavior
- Used to drive corporate initiatives (corporate aspects)
 Energy (Natural Gas and Electricity)
 Waste (Diversion and Reduction)
 Water

(GHG 6 % / year until 2010, and then 2 % each year)

3 million savings and cost avoidance in last four years.

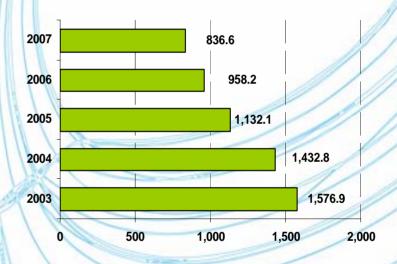


electricity



over the past 5 years, reduced electricity consumption by 26% per \$100,000 of sales

natural gas



from 2003 to 2007, reduced natural gas usage by 46% per \$100,000 of sales

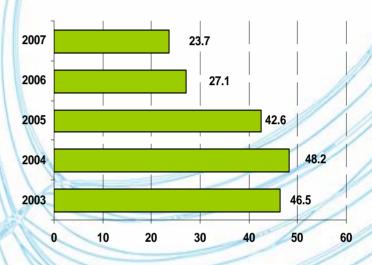


GHG (carbon dioxide)

1.65 2007 2.03 1.76 2006 2.09 2.24 2005 2.26 2004 3.11 2003 2.71 1.00 1.50 2.00 0.00 0.50 2.50 3.00 3.50

over the past 4 years, reduced emissions of GHG through electricity use by 26 % & by 46 % for natural gas per \$100,000 of sales

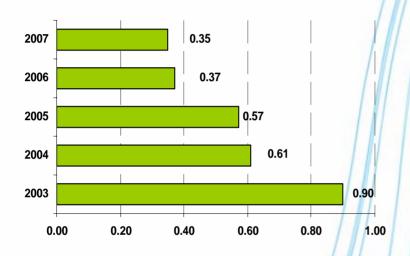
Water



in 2007, we used 50% less water than we did in 2003 per \$100,000 of sales

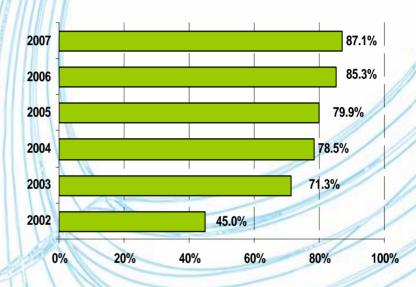


waste to landfill



over the past 5 years, reduced the amount of waste sent to landfill by 61% per \$100,000 of sales

waste diversion rate



in 2007, 87.1% of all waste generated was diverted from landfill





LEED

- LEED® (Leadership in Energy and Environmental Design)
- LEED Accredited Professionals (LEED APs) on staff
- Teknion's product support credits defined in the standard
 - 42 inch (day light & views seated spaces)
 - Low emitting materials (Greenguard Certified)
 - Regional Materials within 500 miles
 - Certified Wood (FSC)
 - Recycled content
 - Construction waste (Blanket wrap and recyclable packaging)
 - Construction Waste Green Solutions (Revive)





Environmental Data Sheet



www.teknion.com

12-Aug-08

Desk, Expansion Casegoods Product:

B PRs2460 Product Code:

Location: Quebec City (LEED - CI & NC - 5.1) Manufacture:

Contact: Your sales representative

> US: 877-TEKNION (835-6466)

Canada: 416-661-3370 International: 416-661-3370

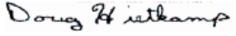


| LEED - NC & CI Credit 4.1 & 4.2 | Product | | Recycled Content | | | | | | Ability to | |
|------------------------------------|---------|----------|------------------|----------|--------|----------|---------------|-------|-------------------------|--|
| | | | Total R | ecycled | Pre Co | nsumer | Post Consumer | | Recycle (recyclable | |
| Material | lbs | <u>%</u> | lbs | <u>%</u> | lbs | <u>%</u> | lbs | % | , | |
| Steel | 5.6 | 5.0% | 1.7 | 1.5% | 0.45 | 8.0% | 1.28 | 23.0% | 100.0% | |
| Particleboard | 99.4 | 89.0% | 99.4 | 89.0% | 99.41 | 100.0% | 0.00 | 0.0% | 0.0% | |
| PVC | 5.6 | 5.0% | 0.0 | 0.0% | 0.00 | 0.0% | 0.00 | 0.0% | 100.0% | |
| Other | 1.1 | 1.0% | 0.0 | 0.0% | 0.00 | 0.0% | 0.00 | 0.0% | 0.0% | |
| Total (Product) | 111.7 | 100.0% | 101.1 | 90.8% | 99.86 | 89.4% | 1.29 | 1.2% | 10.0% | |

LPL, HPL, & Backing is included with the Particleboard

Steel - Recycled content based on percentages from Steel Recycling Institute of North America

| LEED - CI Credit 4.5 | Green Building Council | Greenguard | Grade |
|-------------------------|------------------------|---------------|-------|
| Formaldehyde | 0.05 ppm | 0.025 ppm | PASS |
| TVOC | 0.5 mg/m3 | 0.25 mg/m3 | PASS |
| Total Aldehydes | 0.1 ppm | 0.05 ppm | PASS |
| 4-phrnylcyclohexene | 0.0065 mg/m3 | 0.00325 mg/m3 | PASS |



Doug Hietkamp

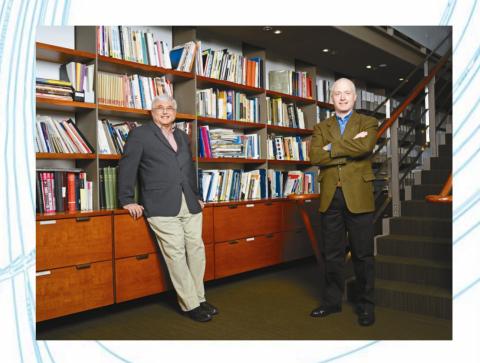
Director of Sustainable Development Programs



customer support/training

Sholem Prasow has run LEED accreditation coaching programs attended by over 1,000 people.

Doug Hietkamp has worked with Teknion's customers who are interested in LEED certification and provided them with the concepts and data to complete their certification submission.

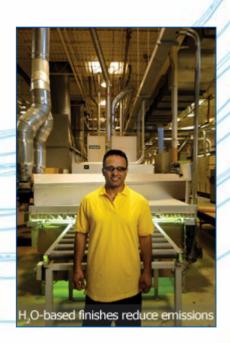




Greenguard



- Greenguard is an indoor air quality certification program established to improve air quality for employees and customers.
- Tests off gassing Formaldehyde and VOCs
- Force to change processes water based adhesives water based stains and paints
- The first office furniture manufacturer in North America to attain certification for all major product lines.



- Recently the first to achieve Greenguard for Children and Schools
- Accomplished by working with suppliers



Low Emitting (Formaldehyde & VOC)

Product (Finished Good)

Standard
Greenguard C & S
BIFMA X7.1
CA 01350

Certifier
AQS
SCS
(indoor advantage & Gold)

Raw Material (Received)

Standard CARB NAUF Certifier (CARB) CPA (Composite Panel Association)

LEED – Leadership for Energy and Environmental Design

NAUF - No Added Urea Formaldehyde

CARB - California Air Resources Board





EcoLogo

- Environment Canada's eco-labeling program identifies products and services that are less harmful to the environment.
- The standard takes into account
 - manufacturing process
 - finished product
 - environment
 - and the health and safety of employees.
- Teknion is the first and only office furniture manufacture to have all major product and manufacturing facilities in Canada certified.



Environmental Leaders Program

- The Program is a collaborative approach between industry and government working on similar objectives.
- A 5 year contract between Ontario's Ministry of Environment and Teknion
- Objectives are agreed upon by both parties.
- Government and Teknion agreed
 - reduction of electricity
 - reduction of particulate matter
 - increase in waste diversion
 - and a reduction GHG (Nox, Co2)

Raise the bar of performance



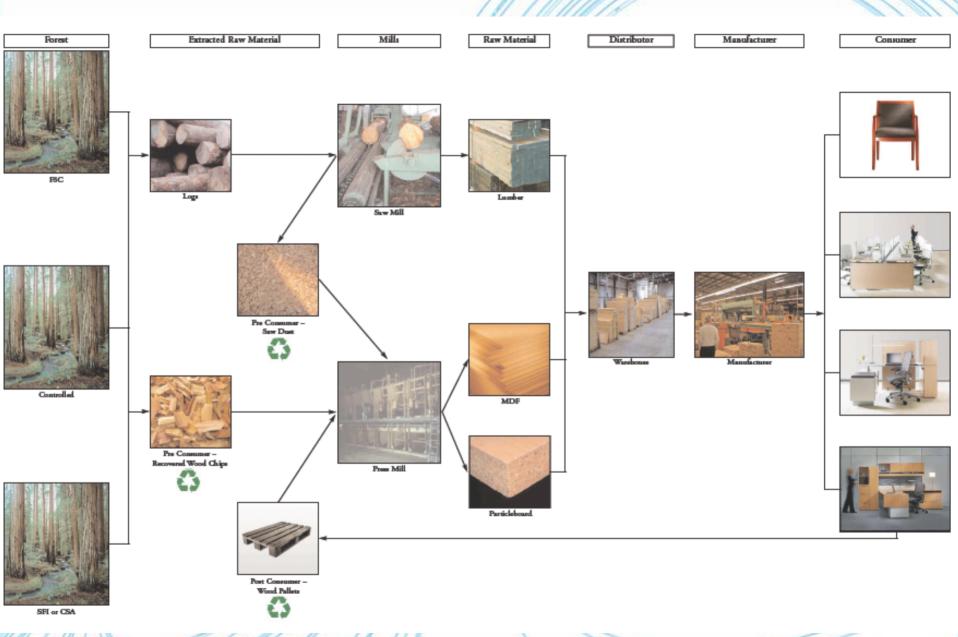




- An international network promoting responsible management of the world's forests
- FSC defines chain of custody as "the path taken by raw materials"
- Teknion offer
 - % based claim
 - 100 % Credit Material









Other materials

- Polyester replacing fiberglass (30 % recycled content)
- Cotton insulation (100 % recycled content)
- Linoleum
- Acrylic edge banding
- 70 % of all standard fabrics include recycled content
- PLA (Poly Lactic Acid) panel fabric.
- Gabriel wool 100% balanced and natural environment.



Design for Environment

Using DfE in the initial design stage can contribute to 80 % of the environmental attributes of the product.





Design for Environment

- We have now formalized DfE into a set of nine guidelines that have become integral considerations to the initial outline for all new product development.
 - Manufacturing for the reduction of waste in all forms
 - 2. Maximize recycled content and recycle-ability
 - Rapid Disassembly to base material recycling stream
 - 4. Eliminate Toxic Materials
 - 5. Bio Based Materials as an **alternative** to conventional **raw materials**
 - 6. Sustainable Wood Based Alternatives
 - 7. Extending Life, future options, upgrade finishes and reconfigure
 - 8. Low Emissions, product to meet standards as defined by Greenguard
 - 9. Define and document environmental information





Marketplace







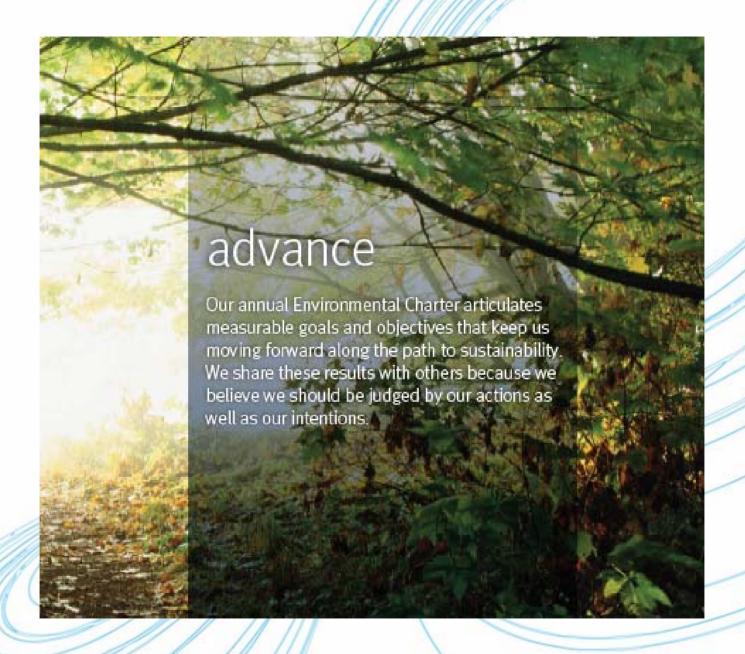


Optos











environmental charter

- Each year, set goals, objectives and deliverables for the entire business
- Endorsed by the CEO and approved by the Executive Committee.
- Done annually because we understand that advancing sustainability is an incremental process.



environmental charter

The Environmental Charter includes objectives such as:

- Continue to expand the scope of the DfE program
 - Materials.....
- Further energy management and impact reduction
 - Power factor, solar thermal...
- Move past regulatory compliance
 - Leaders program
- Attain LEED certifications
 - Ottawa show room LEED-CI Silver
 - San Francisco show room LEED-Cl Gold
 - Calgary LEED CI, In process
 - Teknion world headquarters LEED-EB In process
 - Los Angeles and Boston show room LEED-CI In process



Awards

2007 Globe Foundation Awards

Corporate Competitiveness

2007 RCO Recycling council of Ontario, Gold

Waste Stewardship

2008 CoreNet, Highly Commended

Corporate Sustainable Development

2008 RCO Recycling council of Ontario, Platinum

Waste Stewardship



Teknion

- Take our responsibility seriously
- We've tried to make it about who we are / culture
- We have success as shown by the metrics
- What's good for environment is good for business

