

Office Furniture

What are the key green issues?

- » **Resource Consumption:** Office furniture made from wood that was sourced through poor forest harvesting practices often leads to soil erosion, deterioration of watersheds and loss of plant and animal species. The use of exotic woods like teak and mahogany has led to the destruction of habitat and the loss of biodiversity. Deforestation also impedes the ecosystem's ability to sequester CO₂ and is therefore one factor in human-induced climate change.
- » **Emissions, Indoor Air Quality and Human Health:** Indoor air quality can be 3 to 4 times more polluted than outdoor air. A series of air pollutants are associated with furniture, both during furnishing manufacturing and furniture use. The release of VOCs and other pollutants from furniture and equipment can cause various health concerns, from headaches, eye, nose, throat, and skin irritation, to nausea and respiratory problems and even cancer.
- » **Waste and End of Life:** Recycled-content, recyclability and design for disassembly are key issues to consider when selecting office furniture. Experts estimate that 1.5 million desks and 8.25 million office chairs are thrown away every year in the US.

Myth Buster

Green doesn't have to be expensive or uncomfortable. There is a wide variety of suppliers that offer greener office furniture today comparable in price and comfort with conventional furniture.

Office furniture includes chairs and other types of seating, as well as desks, tables, systems furniture (office cubicles), filing, storage cabinets and their associated components designed for use in office environments. Office furniture is made from a variety of materials including wood, wood-based products, metal, plastics, fabric etc.



How does green office furniture advance Government's strategic priorities?

✓ Reducing Natural Resource Use

Buying furniture made of certified wood products helps reduce the potential impacts associated with forest harvesting and promotes watershed protection and biodiversity.

Furniture containing a high amount of recycled materials and/or rapidly renewable materials instead of virgin wood or other materials will reduce the amount of natural resources needed for production. By recycling used materials from older office products, 85 to 95 percent of the labour and energy used to create a piece of office furniture from raw materials can be reduced.

Modular furniture can be easily adapted to changing work environments (i.e. office relocation or resizing), which will save time and costs. Durable furniture will also save resources required to replace broken or outdated furniture when it breaks or becomes aesthetically outdated.

✓ Reducing Emissions and Improving Air Quality

Furnishing offices with options that have low-VOC coatings and low or no levels of other harmful chemicals can immediately improve the quality of the air that you and your staff breathe 40+ hours a week. Less chemical exposure and cleaner air mean more productivity from healthier employees — and potentially even fewer missed workdays from illness.

Using naturally derived adhesives and resins as a binding agent for fibreboard (e.g., particle board and plywood) instead of formaldehyde, reduces the impact on indoor air quality and human health.

Blowing agents such as water and carbon dioxide to produce polyurethane foam cushions are becoming the norm with the complete phase out of HCFCs by 2020.

✓ Reducing Unnecessary Waste/Recycling

Green office furniture is more durable and lasts longer, preventing frequent disposal and reducing accumulation in landfills.

Modular furniture is designed to be adaptable to new spaces and styles to prevent frequent replacement and waste issues.

Green office furniture avoids excessive and non-recyclable packaging, which reduces the need for the user to dispose of packaging materials.

Recommended	Why is it important?	How do I know I am getting it?
<p>✓ Has received certification or meets or exceeds criteria for ecolabels such as Canada's ECOLOGO, and/or GREENGUARD, and/or SCS Indoor Advantage</p>	<p>Office furniture, e.g. chairs, casework, desks, systems furniture, cabinetry, and panel systems must be either ECOLOGO, GREENGUARD, SCS Indoor Advantage or Cradle to Cradle certified to improve indoor air quality and reduce negative impacts on human health. Furniture certified by either of these standards is readily available.</p>	 <p>Greenguard certification gives you assurance that the furniture will not contribute to any indoor air quality issues associated with the types of adhesives, blowing agents, and furniture coatings. SCS Indoor Advantage gives assurance that furniture will not contribute to any indoor air quality issues. ECOLOGO™ gives assurance on resource conservation, reduction in disposal, and reduction in VOC emissions for Demountable Partitions and Panel Systems. The Cradle to Cradle Certified™ Products Standard gives assurance on material health, material reutilization, renewable energy and carbon management, water stewardship and social fairness.</p>
<p>✓ Wood materials used in furniture must be grown and harvested in a sustainable manner</p>	<p>Requesting furniture made from FSC, SFI or CSA-SFM certified wood helps reduce the potential impacts associated with forest harvesting and promotes sustainability supporting watershed protection, and biodiversity.</p>	 <p>Wood is certified by one of the following internationally recognized forest certifications, which gives you assurance about the environmentally friendly management of forests: Forest Stewardship Council (FSC) Sustainable Forestry Initiative (SFI) Canadian Standards Association (CSA) Group Sustainable Forest Management System (SFM) standard</p>
<p>✓ Minimum average 30 percent recycled and biodegradable content, preferably post-consumer waste (PWC)</p>	<p>Recycled content is a key way to increase resource efficiency and reduce GHG emissions.</p>	<p>Ask your supplier for recycled content rate.</p>

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<input checked="" type="checkbox"/> Take-back policy to refurbish or re-use materials from old office furniture	Take-back policies from suppliers for used furniture can ease the burden of disposal and may divert the used furniture from entering the landfill.	Ask your supplier to provide proof of a take back policy.
<input checked="" type="checkbox"/> Formaldehyde-free Adhesives	Adhesives used in construction, including fibreboard binders must be formaldehyde-free.	If product is not certified, ask vendor for a Material Safety Data Sheet (MSDS).
<input checked="" type="checkbox"/> Low VOC or VOC free Furniture glues and adhesives	Low or no VOC content significantly improves indoor air quality and reduces health risks.	If product is not certified, ask vendor for a MSDS.
<input checked="" type="checkbox"/> Metal components must be powder coated	Powder coating does not require a solvent to keep the binder and filler parts in a liquid suspension form. Solvents contain chemicals that negatively affect human health.	If product is not certified, ask vendor for a MSDS.
<input checked="" type="checkbox"/> Fabric options include recycled content and non-toxic fabric dyes and other treatments	Reducing or eliminating toxic chemical content in fabrics will improve indoor air quality.	Ask your vendor to submit a MSDS for any additional chemical used to treat fabric for such purposes as mothproofing, inhibiting mold, mildew resistance and flame retarding. The Oeko-Tex label gives assurance that products meet applicable standards for substances of high concern.
<input checked="" type="checkbox"/> Durability	The longer the lifecycle of your office furniture, the more resources are saved.	Look for vendors who provide a minimum warranty of 5 years on chairs and interconnecting panels, and a minimum warranty of 10 years on workstations and filing cabinets.
<input checked="" type="checkbox"/> Take back of packaging by supplier; minimal, recyclable and/or reusable packaging (such as blanket wraps), corrugated cartons with a minimum of 30 percent post consumer recycled content	<p>A supplier take back of packaging will reduce government waste.</p> <p>Minimal and reusable or recycled packaging will contribute to a reduced use of resources and diversion of waste from the landfill.</p>	Ask your supplier for a take back guarantee for packaging as well as for proof of the recycled packaging content.

What else could I look for?

In addition to the minimum recommended criteria outlined above, there are stronger green attributes you can look for when making your purchasing decision.

Recommended	Why is it important?	How do I know I am getting it?
Sustainable Delivery Strategies	Consolidating delivery schedules through efficient transportation logistics, proper route planning and no idling of vehicles during product delivery will minimize greenhouse gas emissions and solid waste production.	Work with your vendor for sustainable delivery strategies.