



## Environmental Stewardship Case Study

# Metro

The 230 workers employed by Metro design and manufacture modern office furniture. The 100-year-old company operates a 265,000-square-foot factory in Oakland, California, and has showrooms across the country. Metro is a wholly owned subsidiary of Steelcase Inc., the largest office furniture manufacturer in the world.

### Facts-at-a-Glance

#### Challenges

- Uphold commitment to environmental performance improvement
- Comply with and exceed tough Bay Area air-quality standards
- Formulate an environmentally friendly wood finish with exceptional clarity

#### Solutions

- Wood feedstock from sustainable sources
- Furniture made from recycled and recyclable materials
- Water-borne finishes and adhesives
- VOC-free powder-coat metal finishes
- Sponsor annual planting program to regenerate hardwood forests

#### Benefits

- Environmentally responsible furniture is key to marketing strategy
- Waste reduced by 70%
- Reduces environmental impact

### The Story

From its choice of raw materials to consideration for what happens to its products at the end of their useful life, Metro takes many steps to improve sustainability. As a member of the Steelcase Design Partnership, Metro can make an even bigger environmental impact—serving as a proving ground for its much larger parent company. When Metro moved to Alameda County, the staff contacted the StopWaste Partnership right away. Since then, this partnership encourages StopWaste and Metro to expand their goals and take the initiative on important environmental projects.

*“We are working to make sustainability standard.”*

KEVIN OWENS  
Director, Product Applications & Environmental Strategy

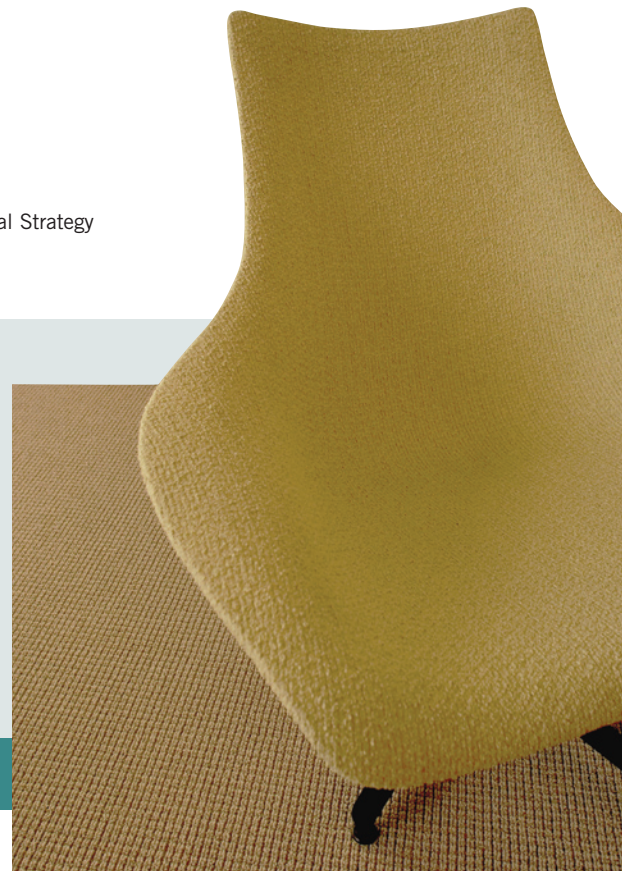
### Challenges

Metro is committed to continuously exploring materials and manufacturing processes that improve sustainability. However, furniture manufacturing requires the consumption of raw materials, the use of finishes, and the unavoidable production of some scrap. Metro's challenge is to honor its environmental commitments while remaining a fast-growing and profitable business. With the move to Alameda County, the company faced yet another big challenge: some of the strictest air-quality standards in the country.



Helping Make Business Sustainable

Metro's Poly line of furniture is made from recycled materials, can be easily disassembled, and is 100% recyclable.





Metro

# Solutions

Use sustainably grown forest resources, formulate low-VOC (volatile organic compound) finishes, recycle and reuse scrap, and sponsor a tree-planting program to replenish hardwood forests.

## Sustainable Product Design

Metro selects sustainably grown cherry, maple, and walnut veneers and hardwoods. All particleboard and medium-density fiberboard and many of the plastics used contain recycled content. Metal components are finished with a VOC-free powder coating; most of the coating overspray is captured and reused. Metro developed and formulated its own wood finish, which emits only one-fifth of the VOCs allowed by San Francisco Bay Area requirements. The company tests its furniture before shipping to ensure that formaldehyde emissions are well below safe levels. Some products are designed for easy disassembly at the end of their useful life and are 100 percent recyclable.

to the supplier where it is recycled to produce carpet pads. Fabric and leather scrap is separated and reused by local small businesses. All ferrous and non-ferrous (aluminum) scrap metal is recycled. Installing cardboard and plastic film balers has cut recycling costs by \$28,000 and earns \$24,000 a year in revenue. Shipping boxes are composed of post-consumer, recycled cardboard and are designed to minimize protective packing materials inside.

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*“The products we make today are what we are going to have to deal with as waste 20 years from now.”*

KEVIN OWENS  
Director, Product Applications & Environmental Strategy

## Resource and Energy Conservation

Metro sponsors an annual program for planting cherry, maple, and walnut trees to replenish the natural resources used in its products. Computer-controlled, low-energy lighting systems decrease total factory electricity consumption by 20 percent. Computer-controlled heating and cooling systems significantly reduce energy consumption.

## Waste Reduction

On StopWaste’s recommendation, Metro began sending its waste pallets to a pallet recycler to be refurbished and reused. Foam rubber scrap is returned



## The StopWaste Partnership

The StopWaste Partnership is a free technical assistance service dedicated to improving the environmental performance and reducing costs of Alameda County businesses and public agencies. The program provides expert support and funding to prevent waste, conserve water and energy, and use all resources more efficiently.

Helping Make Business Sustainable



## The bottom line:

- Cardboard and plastic film balers net \$52,000 a year
- About 100 tons of pallets are sent to a pallet recycler to be refurbished and reused
- Improves customer loyalty

Visit [www.StopWaste.Org/Partnership](http://www.StopWaste.Org/Partnership) or call 1-877-STOPWASTE.