## GET cradle to cradle CRADLE ASSESSMENT BODY TOCRADLE CERTIFIED

## WORK WITH



The original creators and among the foremost implementers of the Cradle to Cradle Certified® Products Program Our goal is a delightfully diverse, safe, healthy and just world, with clean air, water, soil and power – economically, equitably, ecologically and elegantly enjoyed.

#### Remaking the Way We Make Things

In their 2002 book *Cradle to Cradle: Remaking the Way We Make Things*, architect William McDonough and chemist Michael Braungart presented an integration of design and science that provides enduring benefits for society from safe materials, water and energy in circular economies and eliminates the concept of waste.



Waste Equals Food
Use Current Solar Income
Respect Diversity





In 2010, MBDC transferred an exclusive license for the certification program and methodology to the Cradle to Cradle Products Innovation Institute, co-founded by William McDonough and Michael Braungart. Today, the Institute owns the certification program. It sets, developes and maintains the global standard through a multi-stakeholder process and runs the related Products Program.

#### Cradle to Cradle Certified® Products Program

We created the original Cradle to Cradle Certified® to be the world's most comprehensive product assessment and certification system based on five focused areas:



**MATERIAL HEALTH:** ensuring materials are safe for humans and the environment



**PRODUCT CIRCULARITY:** enabling a circular economy through regenerative products and process design



CLEAN AIR & CLIMATE PROTECTION: protecting clean air, promoting renewable energy, and reducing harmful emissions



**WATER & SOIL STEWARDSHIP:** safeguarding clean water and healthy soils

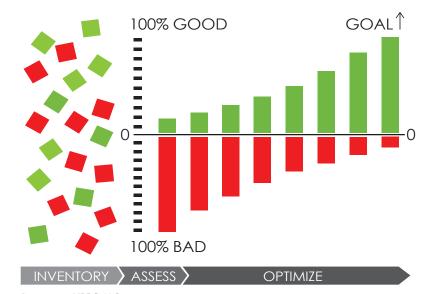


C2C Certified® Product Standard

**SOCIAL FAIRNESS:** respecting human rights and contributing to a fair and equitable society

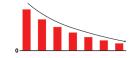
## MBDC's Unique Approach to Innovation and Continuous Improvement

Products are often described as **goods**. We design and assess products to make sure they actually are.

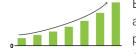


The Upcycle Chart
Enables our clients to
1) inventory, 2) assess
and then 3) optimize
products, processes
and systems with
positive intentions
and beneficial goals.

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Industry can do better than conventional, eco-efficient approaches which seek to reduce or minimize damage and typically portray reducing a negative footprint.



By adding eco-effective approaches and integrating positively defined goals based on Cradle to Cradle® values and principles, we are able to direct innovation in a coherent and positive trajectory.

## put GOODback in GOODS

Cradle to Cradle Certified®, originally created by MBDC, is more than a recognized mark of product quality—it is a process that leads companies to make better products, better companies and better communities. It puts the Good back in Goods!

Read about MBDC's clients who have benefited economically, environmentally and socially with Cradle to Cradle Certified®

## 88% of the products Shaw manufactures are Cradle to Cradle Certified®



cradle to cradle

A Walk In The Garden a collaboration with William McDonough

#### SHAW CONTRACT GROUP

Shaw's "We Want It Back" program results in a 10% savings from storing raw materials on customers' floor for reclamation (perpetual assets).

#### SHAW CONTRACT GROUP, a

Berkshire Hathaway Company, made the groundbreaking decision in 2002 to apply Cradle to Cradle Design™ principles and introduce PVC-free commercial carpet tiles designed to be separated into component materials for carpet-to-carpet recycling. Each tile is labeled with a toll-free number that customers can call to have used tiles picked up for recycling. Shaw worked with McDonough and MBDC to assess the human and environmental health attributes of all ingredients and identify preferred substitutes, as needed.

#### **ACHIEVEMENTS**

In 2003, Shaw Industries and MBDC received the inaugural Presidential Green Chemistry Challenge Award from the White House and the U.S. EPA for its EcoWorx® backing.



Currently, nearly 90% of the products Shaw manufactures are Cradle to Cradle Certified® and have undergone a rigorous material health assessment, including residential and commercial carpet, carpet tile and hardwood flooring.

Shaw Industries moved to #1 in the U.S. market share for carpet tile and is now the world's largest carpet company.





Mirra® Chair ©Herman Miller, Inc.

## **HERMAN MILLER**100% of Herman M

### 100% of Herman Miller's electrical energy is from renewable resources.

"Bill McDonough had the drive, vision, and connections to make this protocol a standard across all industries. Also, McDonough was willing to put together resources for the implementation of his vision, therefore ensuring that C2C would be more than just a nice idea on paper. Finally, the 'virtuous closed loops' concept that is behind C2C enabled businesses to move beyond the traditional 'be less bad' to the 'consumption is good' paradigm. C2C is a godsend to business!"

—Mark Schurman, Senior Vice President of Supply Chain Management, Herman Miller

HERMAN MILLER'S dedication to doing more good extends beyond their adoption of Cradle to Cradle Certified® to their "Greenhouse "Factory and Offices in Holland, Michigan designed by William McDonough + Partners. To fully incorporate Cradle to Cradle Design into their practices and Design for the Environment guidelines, together we built a customized assessment tool that analyzed materials for their human health and ecological effects, recyclability and design for disassembly.

#### **ACHIEVEMENTS**

The first product designed from the beginning to end under the Cradle to Cradle Design protocol was the Mirra chair which - during implementation - led to the training of more than 300 employees. The chair was the first engineered product to use the Cradle to Cradle protocol and received considerable attention from customers who sought out environmentally sustainable products. The resulting protocol, employee engagement and product has led to Herman Miller further expanding their Cradle to Cradle product portfolio and securing brand recognition as a firm deeply involved in sustainability.



#### **BEAUTY KITCHEN**

### 100% natural beauty products designed based on *Cradle to Cradle*

"From formulation within our supply chain to packaging and social impact, Cradle to Cradle Certified® provides us with a credible, independent improvement framework to confirm that our sustainable approach is the right one. Having this good design in place ensures good business can happen. It enables us to lead the industry by democratizing the circular economy with our reusable packaging and safe formulations. It also enables us to create a positive impact on people and planet in an accessible and scalable way through personal care products."

—Jo Chidley, Fouder and CEO, Beauty Kitchen

#### MATERIAL HEALTH: PLATINUM

The Abyssinian Oil Advanced Skincare range is **fully optimized for human and environmental health** to achieve **Platinum**, the highest level in the C2C Certified® Products Program

#### PRODUCT CIRCULARITY: GOLD

Products are identified as biological nutrients, containing ingredients that can safely return to the biological cycle. Beauty Kitchen aims to **source ingredients that are both renewable and biodegradable** 

#### **CLEAN AIR & CLIMATE PROTECTION: GOLD**

Beauty Kitchen purchased **carbon offsets to counteract the greenhouse gas emissions** associated with 50% of the electricity used to manufacture these products

#### WATER & SOIL STEWARDSHIP: GOLD

All **process chemicals in effluent** related to the manufacture of the Abyssinian Oil Advanced Skincare products have been **fully assessed** for human and environmental health

#### SOCIAL FAIRNESS: PLATINUM

Beauty Kitchen has been a **certified B-Corp** since 2017 and all products are **Leaping Bunny Certified** 



Carols
Daughter
Born in Brooklyn. Made with Love.

Carols
Daughter

## GODDESS STRENGTE (strength & length system)

1 Use= 15X Stronger Hair

#### FORTIFYING SHAMPOO

FOR WEAK, BREAKAGE-PRONE HAIR

NO Sulfates, Parabens, Artificial Colors

with castor oil, ginger, black cumin seed

11.0 fl oz / 325 ml

### GODDESS STRENGTE strength & length system

| Use= | 15X Stronger Hair

#### FORTIFYING CONDITIONER

FOR WEAK, BREAKAGE-PRONE HAIR

NO Parabens, Petrolatum, Mineral Oil, Artificial Colors

with castor oil, ginger, black cumin seed

11.0 fl oz / 325 ml

#### L'ORÉAL CAROL'S DAUGHTER

## Available on Amazon under its 'Climate Pledge Friendly' badge



"From formulation to packaging and production, we're holding ourselves accountable to our sustainability goals across all of the brands within our portfolio," said Azoulay. "Cradle to Cradle certifications demonstrate our commitment to pushing the boundaries of sustainable product innovation throughout our value chain."

— Danielle Azoulay, former Head of CSR and Sustainability, L'Oréal USA

#### MATERIAL HEALTH: SILVER

Products are identified as **biological nutrients** with a strategy in place to attain Gold level

#### PRODUCT CIRCULARITY: GOLD

Both the shampoo and conditioner source from **renewable** and **biodegradable ingredients** 

#### **CLEAN AIR & CLIMATE PROTECTION: GOLD**

The products' manufacturing facility is powered by **100% renewable electricity** 

#### WATER & SOIL STEWARDSHIP: SILVER

All process chemicals in effluent which are related to the shampoo and conditioner have been **assessed with a strategy in place for optimization** 

#### SOCIAL FAIRNESS: GOLD

Completed a **social fairness screen for all tier one suppliers** and a UN Global Compact self assessment of management, human rights, labor, environment and anti-corruption practices





SILVER

BRONZE

## APEX PLAZA NET-POSITIVE ENERGY | MASS TIMBER Designed by William McDonough + Partners Charlottesville, VA | Under Construction

#### NORDIC STRUCTURES

First in North America to achieve Cradle to Cradle Certified® Silver and Bronze for Mass Timber products

NORDIC STRUCTURES, achieved the world's first Cradle to Cradle Silver certification for their Nordic X-Lam and Bronze for their Nordic Lam and Lam+. The X-Lam met Gold qualifications in several categories, including Material Reutilization, confirming its circular potential.

William McDonough + Partners facilitated the relationship as part of a commitment to safe, healthy and circular building materials. WM+P's

design for HITT Contracting's Co|Lab, the first Mass Timber building in Virginia, utilizes both Nordic Lam and X-Lam panels. Nordic's products were also quickly identified for use in Apex Plaza, which will be the tallest Mass Timber building on the East Coast.

V HITT CO|LAB

NET-POSITIVE ENERGY

MASS TIMBER

Falls Church, VA | Completed 2019







#### SILVER

#### **HENRY ROSE + IFF**

#### First 100% transparent fine fragrance

"I set out to see if it was possible to develop a line of fine fragrances providing you don't need to sacrifice quality and sophistication for safety. And we did it!" — Michelle Pfeiffer, Founder, Henry Rose

"This collaboration between Cradle to Cradle [chemists at MBDC], the Environmental Working Group and IFF is unprecedented. Not only have we broken new ground with our product — the first fine fragrance that is 100 percent transparent with its ingredients — but environmentalists and the fragrance industry were able to reach across the aisle to work together towards our common goal."

—Melina Polly, former CEO, Henry Rose

#### MATERIAL HEALTH: SILVER

**Fragrance achieved Silver level** and is free of molecules likely to cause allergic reactions as well as any ingredients on the Cradle to Cradle banned list

#### PRODUCT CIRCULARITY: GOLD

Henry Rose is created to **safely biodegrade in natural systems**. Bottles are made from **90% recycled glass**, which is also recyclable, and include compostable caps

#### **CLEAN AIR & CLIMATE PROTECTION: GOLD**

IFF is committed to using renewable energy in its manufacturing and has a goal to procure **75% of its electricity needs from clean**, **renewable sources by 2025** 

#### WATER & SOIL STEWARDSHIP: SILVER

IFF **reduced water use in manufacturing processes by 66%** between 2010 and 2019, surpassing its goal of reaching 50% below 2010 levels by 2020

#### SOCIAL FAIRNESS: GOLD

Henry Rose **donated a portion of proceeds to farming families** in Haiti as part of a partnership with IFF and Heifer International



#### **IPG**

First certified recyclable carton sealing tape that is repuplable with the corrugate it is applied to

"Achieving the first Cradle to Cradle Certification® for WAT and the Western Michigan University OCC Equivalency certification for our non-reinforced WAT, in each case provide our e-commerce customers evidence that these products are made for a circular economy." —Greg Yull, President and CEO of IPG

#### MATERIAL HEALTH: BRONZE

IPG committed to using the Cradle to Cradle Certified® Material Health protocol to assess their products and to **eliminate chemicals** of concern

#### PRODUCT CIRCULARITY: BRONZE

Certified water-activated tape can be **recycled and/or use recycled materials** in its production

#### CLEAN AIR & CLIMATE PROTECTION: BRONZE

Achieves energy goals by implementing **continuous improvement programs and employee training initiatives** across the entire organization

#### WATER & SOIL STEWARDSHIP: BRONZE

IPG's Manufacturing department was audited to ensure that its water usage has minimal impact on the environment

#### **SOCIAL FAIRNESS: SILVER**

IPG is **accountable to all stakeholders** within the company and the communities where they conduct business



#### C&A

Real-life example of how rigorously sustainable clothing that can return to nature and can also be accessibly priced.

"What we really need is other brands to go down the same path and to recognize that Cradle to Cradle Certification® is really one of the most well-thought-through, holistic, third-party, peer-reviewed standards for the circular economy."

—Jeffrey Hogue, former Global Chief Sustainability Officer, C&A

#### MATERIAL HEALTH: PLATINUM

Achieved Platinum level - the **highest level in the Cradle to**Cradle Certified® Products Program

#### PRODUCT CIRCULARITY: GOLD

T-shirts are **recyclable** and can be **composted** - returned to healthy soil in about 12 weeks - at the end of their useful lives

#### **CLEAN AIR & CLIMATE PROTECTION: GOLD**

C&A purchased offsets for 50% of purchased electricity and CO2 emissions related to the t-shirt production

#### WATER & SOIL STEWARDSHIP: PLATINUM

**All effluent is filtered.** The only water imported from the local watershed is for drinking and utility purposes, as well as to compensate for process losses

#### SOCIAL FAIRNESS: GOLD

Both factories where the t-shirts are produced have impressive and **innovative social fairness initiatives and projects** 





#### C&A

### First Cradle to Cradle Certified® Gold jeans.

MBDC worked closely with C&A, their supply chain, Fashion for Good and other assessors – Eco Intelligent Growth (EIG) and EPEA Switzerland – to address challenges in designing such a complex product. The process included evaluating and optimizing the garment for human and environmental health, recyclability and biodegradability, renewable energy use and carbon management, water stewardship and social fairness.

Designed in partnership with
Fashion for Good, an opensource initiative co-founded
by William McDonough, that
supports the transformation of
apparel culture toward a circular
economy, C&A's new Cradle to
Cradle Certified® denim garment
release is accompanied by the toolkit
Developing Cradle to Cradle Certified®
Jeans. This toolkit includes concrete
solutions on how to approach

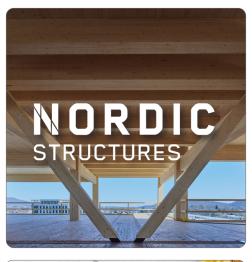


complex products and projects, such as jeans, which contain multiple technical and biological nutrient components (from thread to zipper) to reach product certification at the Gold level.



















Join this community of innovative companies and become the products of choice for numerous environmentally preferred purchasing programs and consumers



## MBDC is Where You Start on Your Path to Cradle to Cradle Certified®

MBDC has decades of experience working throughout the supply chain to collect formulations and evaluate product and manufacturing data to meet the requirements. MBDC supports and advises clients throughout the entire process.

## 1 ENGAGE MBDC TO REVIEW AND ASSESS YOUR BILL OF MATERIALS FOR CERTIFICATION REQUIREMENTS

Conduct initial analysis to determine if it is within the scope of certification

Cross-reference ingredients with the Banned Chemicals List

Determine if there is a commitment to continuous improvement

Conclude if your product meets the eligibility requirements in the Cradle to Cradle Certified® Product Standard

## 2 MBDC ASSESSES YOUR PRODUCT AGAINST THE PRODUCT STANDARD CRITERIA

Work with you and your supply chain to collect data

Evaluate data against the Product Standard criteria

Partner with you to develop optimization strategies

# 3 MBDC SUBMITS AN ASSESSMENT SUMMARY REPORT TO THE CRADLE TO CRADLE PRODUCTS INNOVATION INSTITUTE FOR FINAL REVIEW AND CERTIFICATION

The Institute provides independent verification of assessment and issues certificate



## 4 MBDC WORKS WITH YOU TO CONTINUOUSLY IMPROVE

Every two years, we work with you and your supply chain to gather new data for re-certification

Evaluate data and progress on optimization strategies for continuous improvement

## Cradle to Cradle Certified® is recognized as a preferred product certification by major retailers, organizations and cities.

When brand-name retailers take a stand for safe and healthy products, industry takes note. By adopting Cradle to Cradle as a third-party, multi-attribute certification and as a design framework, companies are not only embracing safe and circular practices, but also encouraging their peers to adopt similar values.



Google's Healthy Materials Program includes the Cradle to Cradle Certified® Product Standard as part of its selection criteria for products to use in its facilities.



The Home Depot Eco
Options program allows
suppliers to use Cradle to
Cradle Certified® and the
Material Health Certificate
from the Cradle to Cradle
Products Innovation
Institute at an achievement
level of Silver or higher in
the material health category
to qualify for their program.



The Cradle to Cradle
Certified® Product
Standard has been
recognized by the United
States Environmental
Protection Agency (EPA)
in its Recommendations of
Specifications, Standards,
and Ecolabels for Federal
Purchasing.



The City & County of San
Francisco require all carpet
and adhesives installed in
city-funded construction
projects be Cradle to
Cradle Certified®. Carpet
tiles must be Cradle to
Cradle Certified® Silver
or higher, and adhesives
must have a Material Health
Certificate at the Bronze
level or higher.



Through the company's Commitment to Sustainable Chemistry, Walmart encourages the use of Cradle to Cradle Certified® Silver and above products.



Walgreens/Boots Alliance is working to enable consumers to make informed choices by by encouraging suppliers to obtain credible certifications such as Cradle to Cradle Certified®, and to make it easy for consumers to find these more sustainable products.



Amazon, as part of its 'Climate Pledge Friendly," badge, empowers customers to find and purchase products that are Cradle to Cradle Certified™ and recognizes the standard as a leading certification for sustainable products.



Cradle to Cradle
Certified® also
supports global
building rating
systems



LEED has recognized
Cradle to Cradle
Certified® products to
earn points toward LEED
certification within the
v4 MR credit: Building
Product Disclosure and
Optimization.



Cradle to Cradle Certified® is recognized within the WELL Building Standard in WELL Feature 26, and WELL Feature 97 via option c.



Amazon features Cradle to Cradle Certified® as part of their 'Climate Pledge Friendly' badge to make it easier for customers to discover and shop for sustainable products

William McDonough was quoted in Amazon's press release saying:

"Cradle to Cradle certification provides a framework for product optimization based on the principles of designing with safe and healthy materials, using clean renewable energy and water, celebrating diversity, and eliminating the concept of waste," said McDonough. "We love that Amazon is making it simple for customers to find sustainable products. Amazon's new program will expand our reach and enable us to empower more brands to deliver safer and more sustainable products for the circular economy."



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