

## ***Memorandum of Understanding***

for fostering a new generation of sustainable products and a sustainable economy  
between

**Cradle to Cradle Products Innovation Institute (C2CPPII)**

and

**Shanghai Yangpu District Government  
of the People's Republic of China**

### **I. Foreword**

This MOU represents a non-legally binding expression of hope and sincere intent for), Cradle to Cradle Products Innovation Institute (C2CPPII) located in San Francisco, California, and the Shanghai Yangpu District to work together to promote an innovation-oriented model for eliminating toxic chemicals and other negative environmental impacts in hopes of fostering a model for a sustainable business and a sustainable economy.

The C2CPPII is a non-profit organization based in California focused on transforming the making and consumption of things into a regenerative force for the planet in order to protect the environment. C2CPPII uses design, based on the laws of nature, to help industry create products that are safe for the environment. This rethinking of how we design, manufacture, use and reuse materials will spur a new era of research and innovation, simultaneously driving economic, ecological and social prosperity.

The California State Government has help establish and recognize the C2CPPII to spearhead research and innovation to build a strong economy and clean environment by going from transforming thinking from “less bad” to “more good” with a prosperous C2C economy and products.

C2CPPII is eager to collaborate with the Yangpu Government to provide companies, institutions and consumers with data on the toxicity characteristics of chemicals and materials used in products so that industry can not only identify “chemicals of concern,” but also the “positive” chemicals that could be used to replace them. The Institute’s goal is to effectively find practical solutions to the alternatives problem — offering industry a pathway to comply with, and even exceed, new consumer product regulations. The fruits will help make the regulatory program more efficient and effective while engaging the industry’s unique capability to innovate quickly.

**This will promulgate the ideals of the Expo (“Better City, Better Life”) and transfer the knowledge to practical applications, starting from a focal point into broader areas.**

### **II. C2CPPII’s Core Functions**

C2CPPII’s leadership will advocate for strong standards in China and worldwide in the following areas:

A. Establishing a Framework

Nationally-renown design consultancy firm, MBDC, has donated the certification mark, along with the Cradle to Cradle® protocols to the Institute, which will now be responsible for certifying products. Multiple industries have already demonstrated the viability and benefits of designing products according to the Cradle to Cradle® framework, such as Herman Miller, Shaw Industries, Method, Ford Motor Company and Aveda. To date, more than 300 products and 90 companies have engaged in the C2C certification process.

The Institute will work collaboratively with key stakeholders from academia, the

NGO environmental community, government and industry to establish a rating system for assessing and constant improvement of products that is transparent and independently verified based upon five (5) categories: (1) safe and appropriately sourced materials; (2) material reutilization; (3) renewable energy; (4) access to and release of abundant, clean water; and (5) social responsibility. Products that meet the transparent criteria of this rating system will receive the Cradle to Cradle® certification mark.

## B. Training and Education

C2CPII will then educate and train assessors, called “Licensed Assessment Partners (LAPs),” who will assist companies in complying with the program requirements and any evolving regulatory requirements. The LAPs will submit their assessments to the Institute for auditing and a certificate will be issued if the product meets the prerequisites. Accredited entities will be able to audit and validate the Institute’s procedures at all times.

## C. Transparent Product Registry and Positive List

After the C2CPII has rated a given product, it will work with companies to determine the latter’s trajectory for improvement across each of the five Cradle to Cradle® categories. Companies who participate will voluntarily share information about the chemistry of their materials, along with manufacturing processes, to help transform industry as a whole. Thus, the backbone of the Institute is a robust database that is partially proprietary, partially collaborative. The proprietary portion is the thorough review of the makeup of a product, down to the parts-per-million and parts per billion level. The characteristics of individual chemicals, disassociated from product formulations, will become part of the collaborative portion and lead to the identification and sharing of chemicals, materials, and processes that are evaluated as valuable contributions to positively defined products, i.e. a “White List”. This White List will provide a global, open innovation platform that will facilitate a Cradle to Cradle® economy.

## D.. Job Creation

Innovation in the five Cradle to Cradle® categories, as an expedient and effective alternative to regulation, will spur the creation of safer materials and industrial processes and create new jobs.

As companies adopt this new approach, or start new ventures based on systems-thinking solutions to harmful products, new markets will be created. Science and technology are at the heart of this new thinking. Safe materials development, scientific research, technology

development, commercialization, and technology transfer have tremendous potential to build a stronger, healthier economy and workforce. The job economy will grow exponentially when commerce, academia and institutes team up to reinvent materials and industrial processes.

(In 2007, the clean technology sector, which includes green chemistry, grew to \$3.5 billion in the US. This investment equates to 48,000 new direct jobs in the U.S. and additional revenues of \$10.8 billion. While energy and renewable technology companies received the lion's share of that investment, green chemistry garnered the second largest share (Source: *California Green Chemistry Initiative, Final Report, 2008*).

### **III. Points of Initial Cooperation**

Cradle to Cradle Green Products Innovation Institute (C2C GPII) and the Government of the Shanghai Yangpu District Government of the People's Republic of China (hereinafter referred to as "the Participants"), recognize the following:

Herein lay the proposed principles:

1. Collaborate on the creation of a Cradle to Cradle worldwide protocol (economy, society) where restorative growth is supported through healthy materials, coherent material take-back, clean water, 100% renewable power, and social fairness. The C2C GPII seeks to support the innovation required to design products that are either technical or biological nutrients that will operate in closed loop cycles.
2. Secure a partnership with an appropriate non-profit organization and/or Academic Institution that can help establish a training center for educating about C2CPII protocols and standards in Yangpu. The role of the partner would be to assist the C2CPII start-up in initial phases of development. Through this, establish key stakeholders in government, academic, non-governmental organizations (NGO) and corporate entities.
3. Link to Academic Partners such as Tongji University, Fudan University (School of Management), and California universities such University of California Berkeley, a world-wide leader in Green Chemistry on how to make products with safe, healthy ingredients, or Stanford University (Center for Integrated Facilities Engineering). Stanford University is a recognized leader in sustainably built environments and recently collaborated with Tongji University to host a first international summit in Shanghai ("Better Building, Better World ") to discuss the scalability of sustainable goals and innovation from projects to policy.
4. C2CPII will select a multi-national corporate representative(s) located in China who has demonstrated innovation leadership in Cradle to Cradle practices. This industrial leader(s) will serve as part of the International Advisory Council. r.
5. With international and Chinese experts, evaluate the Chinese context to determine policy frameworks, business models and pilot projects on product design..

6. Identify short, mid and long-term deliverables, including training and capacity building.
7. Government support and leadership is many fold, including:
  - a) Establish a policy platform
  - b) Create an overlay of laws and regulations over time as required that create opportunities consistent with Cradle-to-Cradle ideals,
  - c) Create job training programs to outreach to local citizens,
  - d) Create social media and government marketing explaining the benefits to local citizens,
  - e) Providing space or employees.

The Participants resolve to identify and pursue areas of cooperation where joint expertise, resources, research capacity and combined market size can accelerate progress towards mutual goals.

Wherever possible, cooperation should seek to include expertise from all sectors of the People's Republic of China and provide incentives for engagement at the sub-national level as well as by non-governmental organizations, business and academic sectors.

New initiatives, frameworks or other mechanisms for cooperation intended to achieve the goals of this MOU may be established with the mutual consent of both the Participants.

**Cooperation under this MOU may commence upon the date of signature and is not intended to give rise to rights or obligations under International Law.**

**Cradle to Cradle GPII**

**Shanghai Yangpu District Government**

**By:** \_\_\_\_\_

**By:** \_\_\_\_\_

Bridgett Luther, President

Jin Yin, District Mayor

Cradle to Cradle Green Products  
Innovation Institute

Shanghai Yangpu District Government

**Witnessed By:**

**Witnessed By:**

**State of California**

**Shanghai Government**

**By:** \_\_\_\_\_

**By:** \_\_\_\_\_

Arnold Schwarzenegger, Governor

Han Zheng, Mayor

State of California

Shanghai Government