

# Closing The Loop

**Roy Vercoulen**

Vice President

Head of European Operations

October 2<sup>nd</sup>, 2013

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# Imagine a World ...

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... Where consumption is a *good* thing

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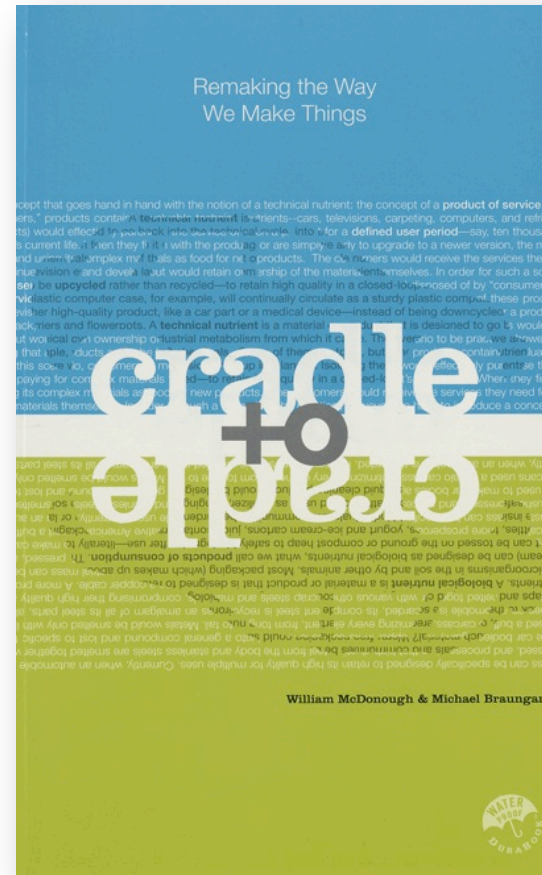
# Shift The Mindset To Positive

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## Designing for Positive Impacts

# Origins of Cradle to Cradle

- Products that are “more good” not just “less bad”



# Design For Eco-Effectiveness

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- Deal directly with the issue of maintaining resource quality and productivity through many cycles of use, rather than seeking to eliminate waste
- Transform products and material flows, so they form a supportive relationship with ecological systems and future economic growth
- Enable materials to maintain their status as resources and accumulate intelligence over time

# Modeled After Nature

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## Eco-Efficient

- Minimize toxic chemical use
- Aim for zero waste
- Shrink carbon footprint
- Reduce water use and emissions
- Avoid human rights violations

## Eco-Effective

- Healthy for people and planet
- All 'waste' is nutrient for industry or nature
- Sequesters carbon and cleans air
- Filters and replenishes water systems
- Flourishing communities

# Cradle to Cradle® Principles

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Waste equals food    Everything is a nutrient for something else

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Use current  
solar income    Use only renewable energy sources

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Celebrate diversity    Biodiversity  
Cultural diversity  
Conceptual diversity

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# Vision to Reality

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- The Cradle to Cradle Certified<sup>CM</sup> Products Program
- 15 years private development with many of the world's top brands



# Vision to Reality

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CRADLE TO CRADLE PRODUCTS INNOVATION INSTITUTE

- Private recognition system becomes independent, public, third-party certification system
- “Transferred into the public domain to become a public good so there can be lots of people who do what we do.”

William McDonough



# About the Institute

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**Guide** Product manufacturers and designers in making safe and healthy things for our world.

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**Train** Assessors who conduct third-party assessments of a product's materials and manufacturing process against the C2C Certified Standard

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**Educate** Consumers and other stakeholders about the value of certification

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**Certify** Products by reviewing third-party assessments and issuing certificates

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**Develop** Open resources, including a public database of “preferred” alternative chemicals and materials

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# About the Institute

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## Funding

Bridge funding is provided by foundations and individuals. Self-sustaining revenues will result from training programs and certification (€ 2.000, - / € 500, -) and licensing fees.

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## Organization

The Institute is governed by an independent board of directors and is headquartered in San Francisco, California, with field-offices in Venlo and Amsterdam.

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## Initial Support

Initial support has been provided by the Dutch National Postcode Lottery and the Schmidt Family Foundation, established by Wendy and Eric Schmidt.



# Company Quotes

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*We know this works. Our earnings have gone up nine-fold between 2007 and 2010. | **DESSO***

*Although it takes intellectual capital to go figure out the chemistry about the different materials we use, by the time we get done with the process, it is less expensive for us to produce and develop a Cradle to Cradle Certified product than (it is) what we did historically. | **HERMAN MILLER***

*The certification is the highly valued crown on our work that helps us distinguish our value proposition in the marketplace. | **VAN HOUTUM***

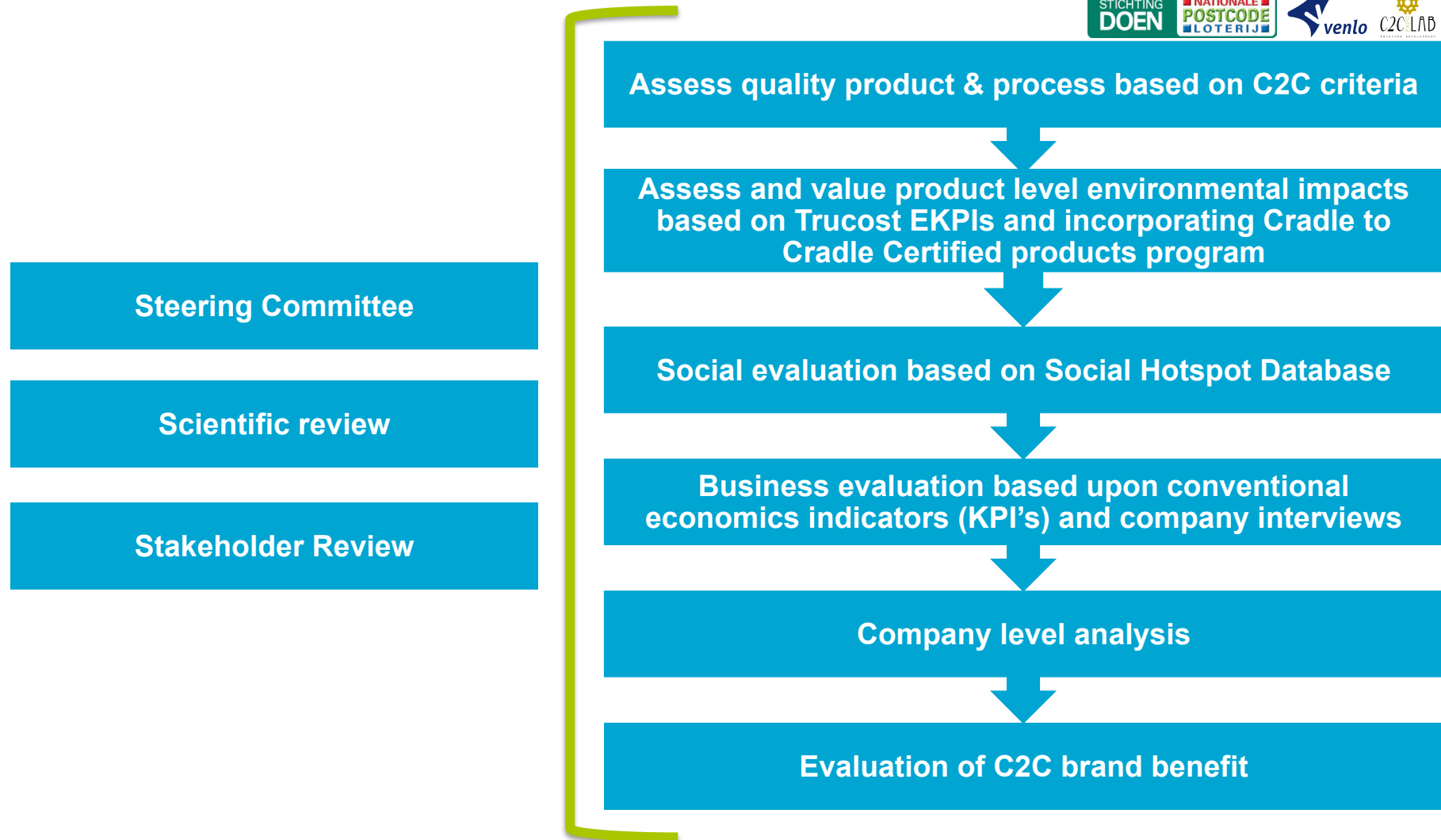
*Cradle to Cradle Certified Program provides a critical platform for transparency around the material health of our products. | **MICRO-PAK***

# Project-Goal

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The Institute is researching the impacts of the certification program to better understand and showcase the benefits of pursuing Cradle to Cradle product certification. The key research question is *“What are the actual and quantifiable impacts of pursuing Cradle to Cradle product certification on business, society, and the environment?”* The research will identify and measure actual impacts and actual added value for business, nature, and society.

# Impact Study



# Participating Companies

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Company	Product	Comment/status
<b>AGC Glass Europe</b>	Planibel blue float glass	Data provided, analysis underway
<b>Aveda</b>	Invati shampoo	Data provided, Analysis underway
<b>Construction Specialties</b>	Acrovyn 4000 profile	Data provided, Analysis underway
<b>Desso</b>	Ecobase Airmaster	Data provided for product, site and company pre and post optimisation. Analysis underway
<b>Ecover</b>	Multi Daily	Data provided, Analysis underway. Limited social and financial data due to recent launch.
<b>Mosa</b>	Global wall tile	Data provided for product. Analysis underway.
<b>Puma</b>	Incycle mens basket footwear	Data provided, analysis underway. Limited social and financial data due to recent launch.
<b>Shaw</b>	EcoWorx tile	Data provided , Analysis underway
<b>Steelcase</b>	Node chair	Data provided , Analysis underway
<b>Van Houtum</b>	Satino black paper towel	Data provided , analysis underway

# Why Does This Matter?

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## Children's Products Contain Harmful Chemicals Associated with Cancer, Hormone Disruption

May 07, 2013 10:29 AM EDT By Renee Anderson

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Reuters

# Why Does This Matter?

The New York Times

**SundayReview** | The Opinion Pages

Search All NYTimes.com

Go



WORLD U.S. N.Y. / REGION BUSINESS TECHNOLOGY SCIENCE HEALTH SPORTS **OPINION** ARTS STYLE TRAVEL JOBS REAL ESTATE AUTOS

OPINION

## Where Do Old Cellphones Go to Die?



Jane Hahn/European Pressphoto Agency

Computer parts line the ground at a dump site in Agbogbloshie, a suburb of Accra, Ghana.

By LEYLA ACAROGLU

Published: May 4, 2013

# Why Does This Matter?

In the Media

 Listen  Print

## Middle East will face severe water scarcity between 2015 and 2020



By [Sarah Jones](#)

Apr 17, 2013 in [World](#)

[1 comment](#)

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Jordan faces massive water shortages due to limited resources, population growth, open borders for refugees, constant interruptions to water projects and an ongoing water dispute with Israel

Water, like any natural resource or energy source, is a matter of national security. The depletion or scarcity of water limits a nation's industrial development, economic growth, food production and overall well being and health of

its population. Jordan not only has one of the lowest levels of water available per capita in the world and it has already been forced to tap into its "non-renewable water resources from fossilized deep-water aquifers," according to the [World Health Organization \(WHO\)](#).

# Why Does This Matter?

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## **Pope condemns 'slave labor' conditions in collapsed Bangladesh factory**

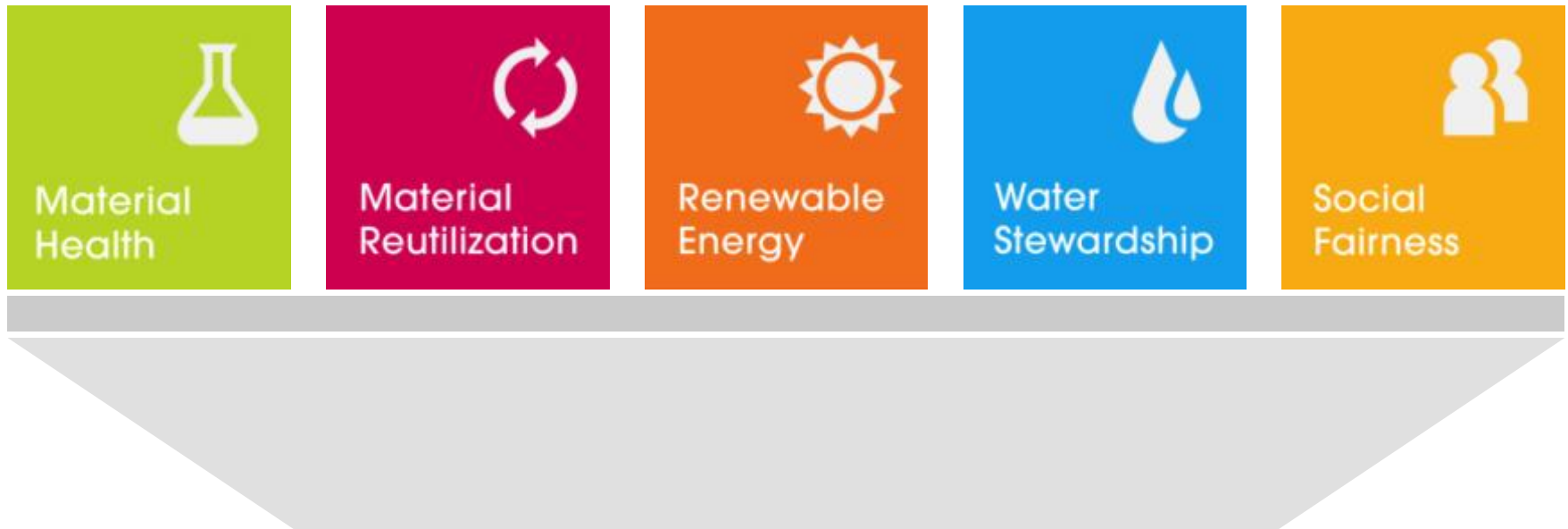


Gabriel Bouys / AFP - Getty Images

Pope Francis looks on after his weekly general audience in St Peter's Square at the Vatican on May 1, 2013. Pope Francis urged political leaders to make every effort to create jobs and said unemployment was caused by economic

# The Certified Product Standard

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Categories based on Cradle to Cradle principles

A combination of product metrics and company metrics

Certifying both intent and achievement

# Categories Based on Principles

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Select safe and healthy materials



Material  
Health

Eliminate the concept of waste



Material  
Reutilization

Power with abundant clean energy



Renewable  
Energy

Protect water as a precious resource



Water  
Stewardship

Respect human and natural systems



Social  
Fairness

# Continuous Improvement

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Note: Cradle to Cradle Certified<sup>CM</sup> is a certification mark exclusively licensed to C2CPII

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# The product certification process

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## 1 PLAN

Visit [c2ccertified.org](http://c2ccertified.org) to review the certification program overview and choose an accredited assessor who will review your product's preliminary information and respond with a comprehensive certification plan: timeline, estimated cost, trademark licensing considerations, and clearly assigned responsibilities for all aspects of data collection and assessment.

## 2 ANALYZE

Work with your assessor to establish what is in your product, how it is made, and what happens to it at the end of use. You will complete the product's Bill of Materials, optimization plans, and other documentation - usually with non-disclosure agreements in place between the assessor, your company, and your suppliers.

## 3 ASSESS

Your assessor follows the guidelines in the product standard to evaluate in detail the composition of product ingredients and manufacturing processes. This includes a site visit to the final manufacturing/ assembling facilities and the completion of an Assessment Summary Report to be submitted to the Cradle to Cradle Products Innovation Institute for review.

## 4 CERTIFY

Congratulations! Products that meet the criteria receive the Cradle to Cradle Certified hallmark at a specified level of achievement. You will be asked to sign the Institute's Trademark License Agreement to guide your use of the mark on the product and marketing materials. Your product will be added to the online product registry and circulated to the Institute's network of like-minded product listings. The Institute team is on hand to support your marketing efforts.

## 5 RENEW

Companies must maintain the certification by updating product and process data, as well as showing good faith efforts to make continuous improvement in all criteria categories.

# A Platinum Product

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- All chemicals assessed, no “x”
- Product materials actively returned to industry or nature
- 100% of purchased electricity and direct on-site emissions are renewably sourced or offset
- All water leaving manufacturing facility meets drinking water quality standards
- The company actively conducts innovative social projects that positively impacts employee’s lives, the local community, global community, social aspects of the product’s supply chain

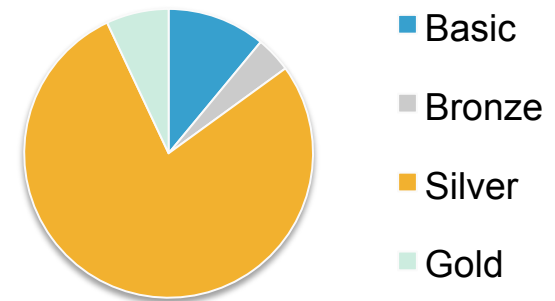


# Certifications to Date

**Total** • 515 certifications issued  
• 180 companies

**In 2013** • 32 new certifications  
• 17 new companies

## Certification by Level



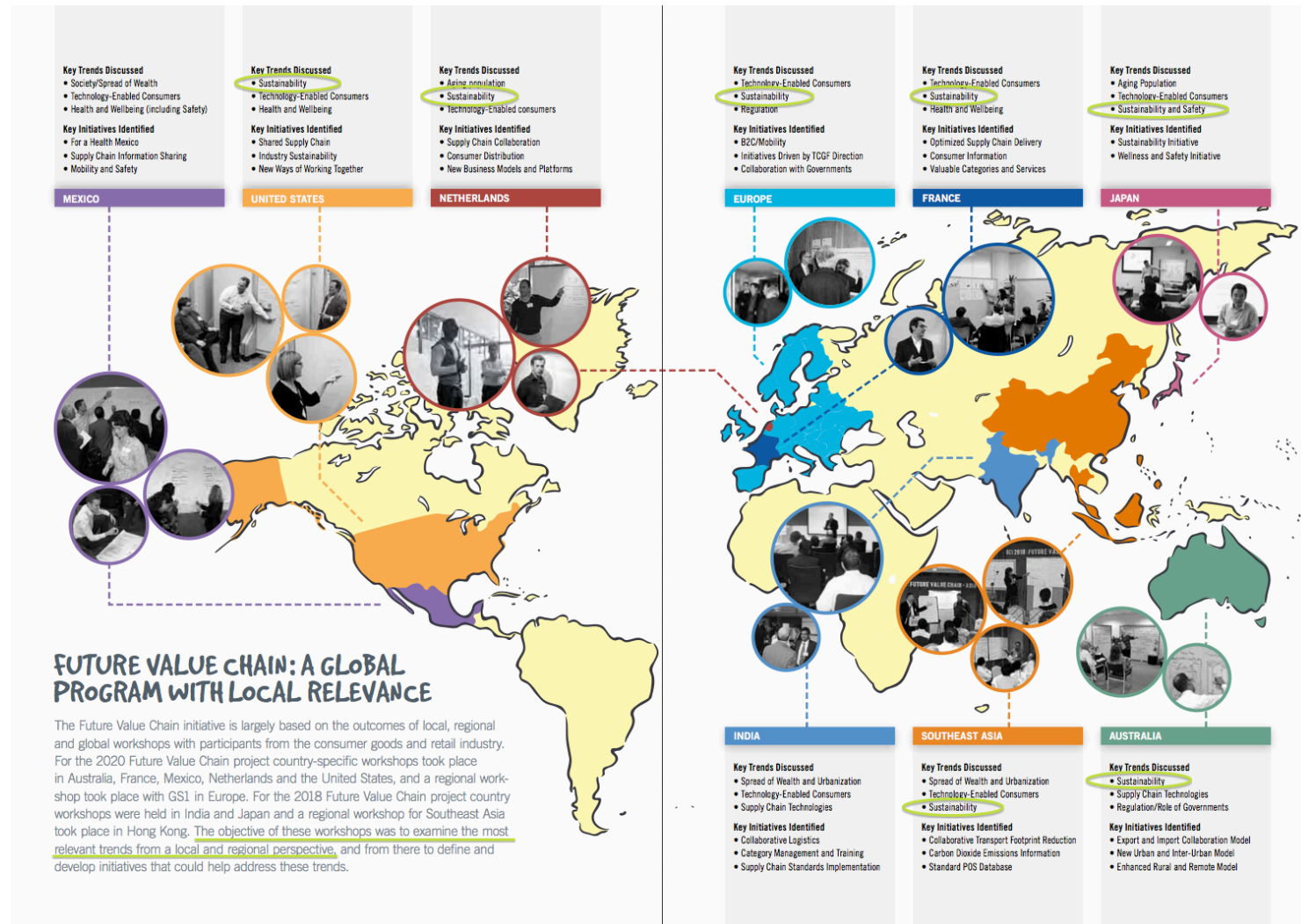
ECOZEN



SKY



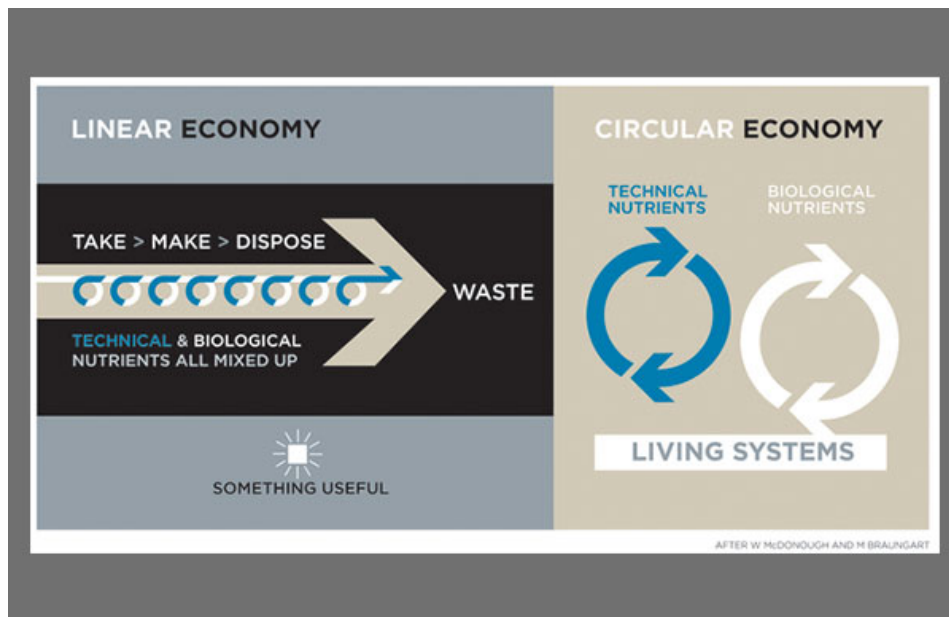
# Relevant trends in different markets



Source: Building Strategies for the new decade, future value chain 2020, TCGF & Cap Gemini

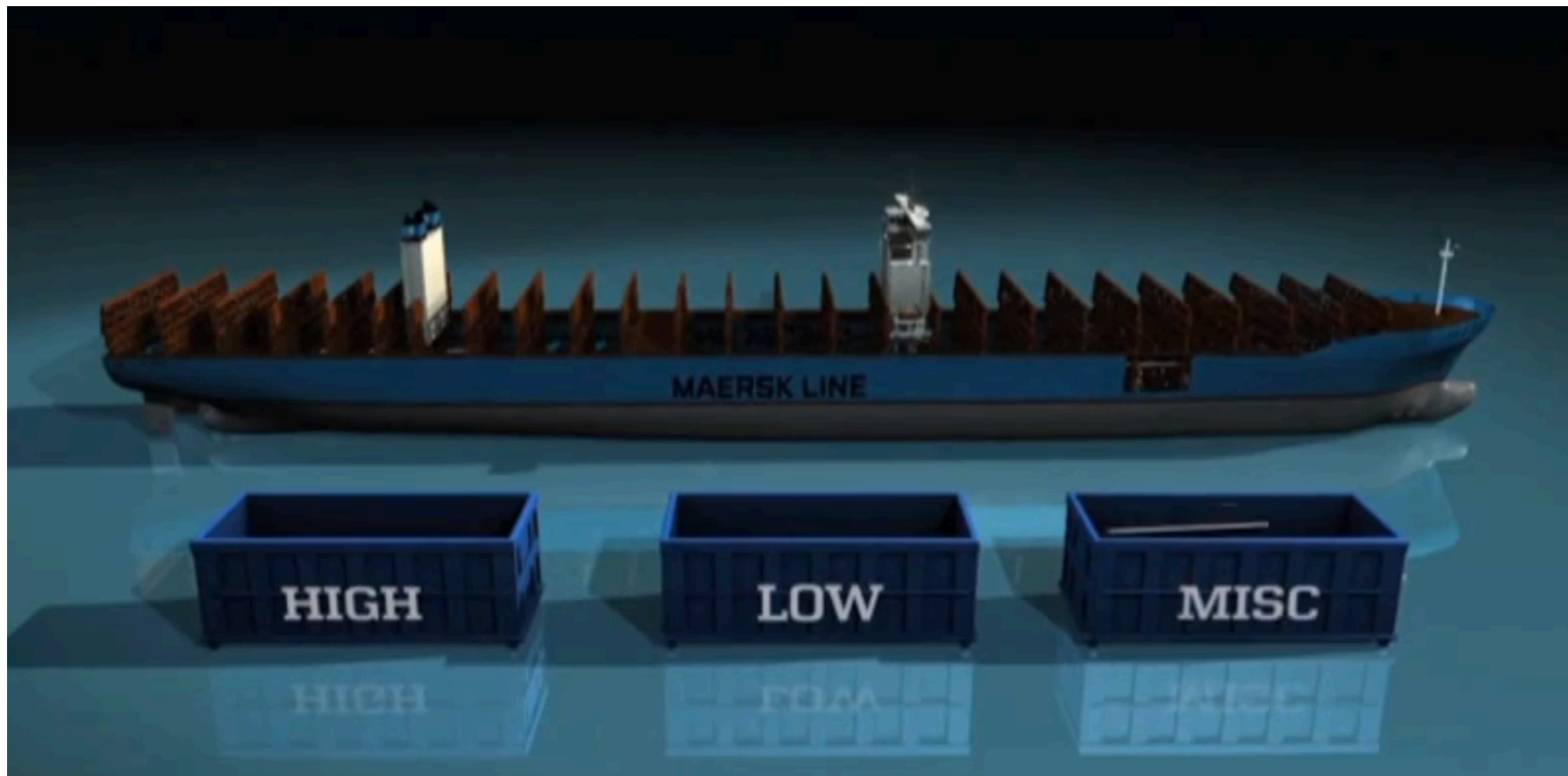
# The Circular Economy

Consumer Goods Sector...  
“\$700 billion in potential savings”



# Design for Disassembly / Materials banking

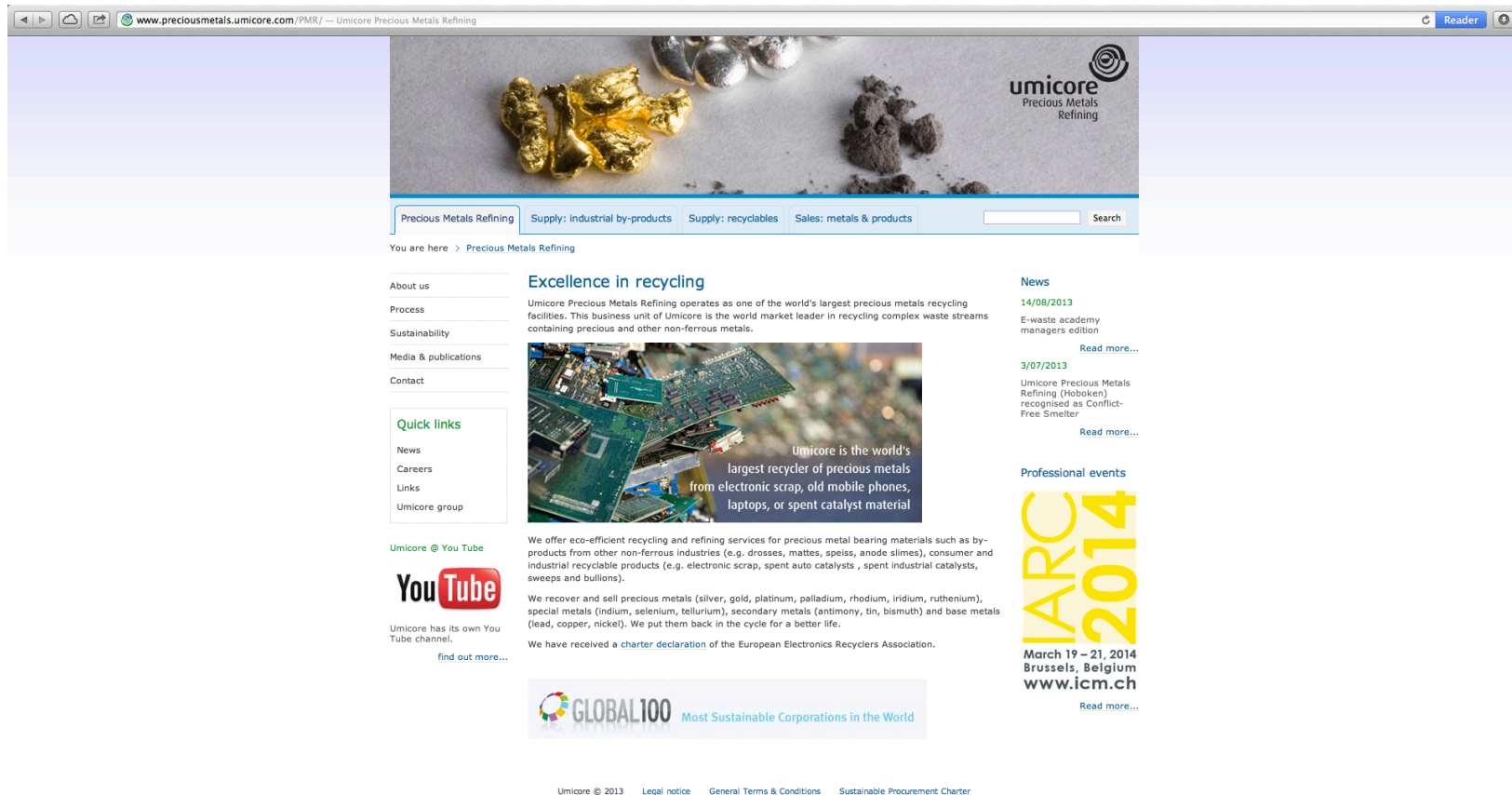
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Maersk Cradle to Cradle Passport - Total Vessel Recycling

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# Urban Mining



www.preciousmetals.umicore.com/PMR/ — Umicore Precious Metals Refining

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Refining

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**Excellence in recycling**  
Umicore Precious Metals Refining operates as one of the world's largest precious metals recycling facilities. This business unit of Umicore is the world market leader in recycling complex waste streams containing precious and other non-ferrous metals.

Umicore is the world's largest recycler of precious metals from electronic scrap, old mobile phones, laptops, or spent catalyst material

We offer eco-efficient recycling and refining services for precious metal bearing materials such as by-products from other non-ferrous industries (e.g. drosses, mattes, speiss, anode slimes), consumer and industrial recyclable products (e.g. electronic scrap, spent auto catalysts, spent industrial catalysts, sweeps and bullions).

We recover and sell precious metals (silver, gold, platinum, palladium, rhodium, iridium, ruthenium), special metals (indium, selenium, tellurium), secondary metals (antimony, tin, bismuth) and base metals (lead, copper, nickel). We put them back in the cycle for a better life.

We have received a [charter declaration](#) of the European Electronics Recyclers Association.

**News**  
14/08/2013  
E-waste academy managers edition  
[Read more...](#)  
3/07/2013  
Umicore Precious Metals Refining (Hoboken) recognised as Conflict-Free Smelter  
[Read more...](#)

**Professional events**  
**IARC 2014**  
March 19 – 21, 2014  
Brussels, Belgium  
[www.icm.ch](http://www.icm.ch)  
[Read more...](#)

**GLOBAL100** Most Sustainable Corporations in the World

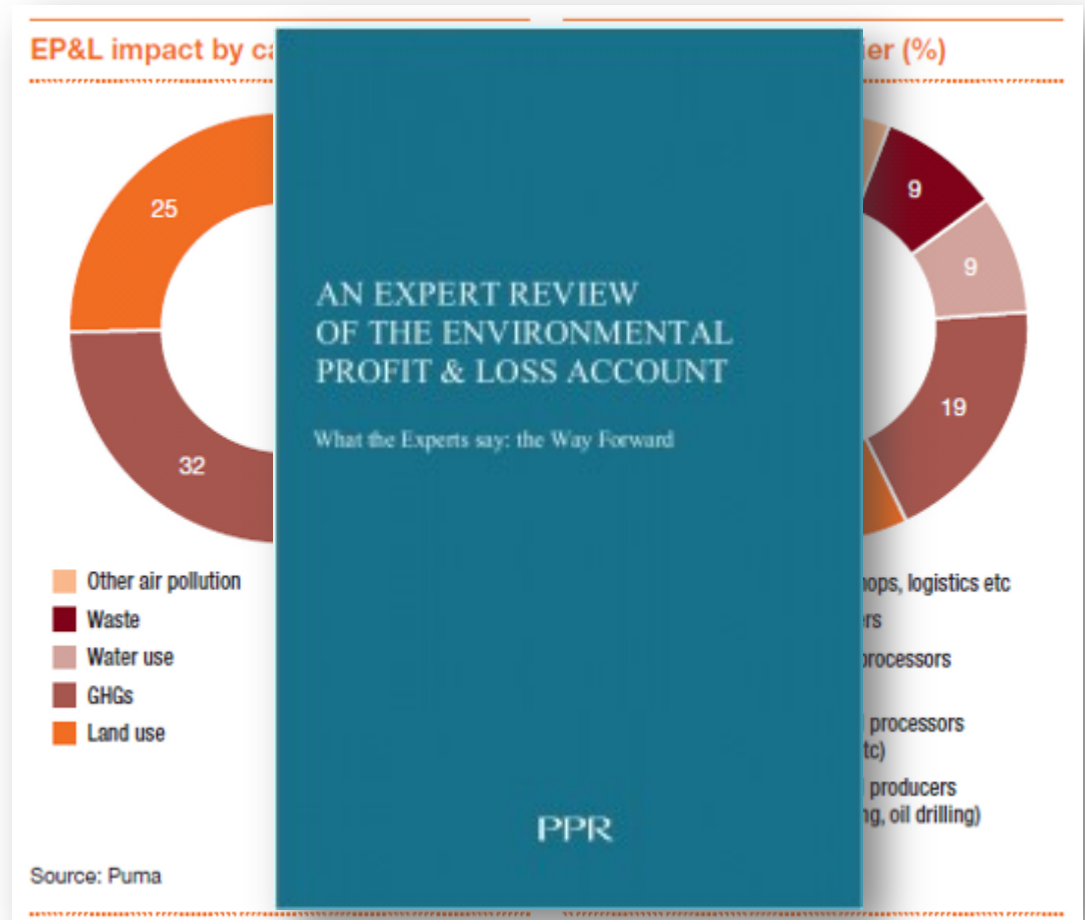
Umicore © 2013 [Legal notice](#) [General Terms & Conditions](#) [Sustainable Procurement Charter](#)

1.000 kilograms of mobile phones contain more gold than 1.000 kilograms of gold-ore!

# Environmental Accounting

- PUMA's Environmental Profit and Loss

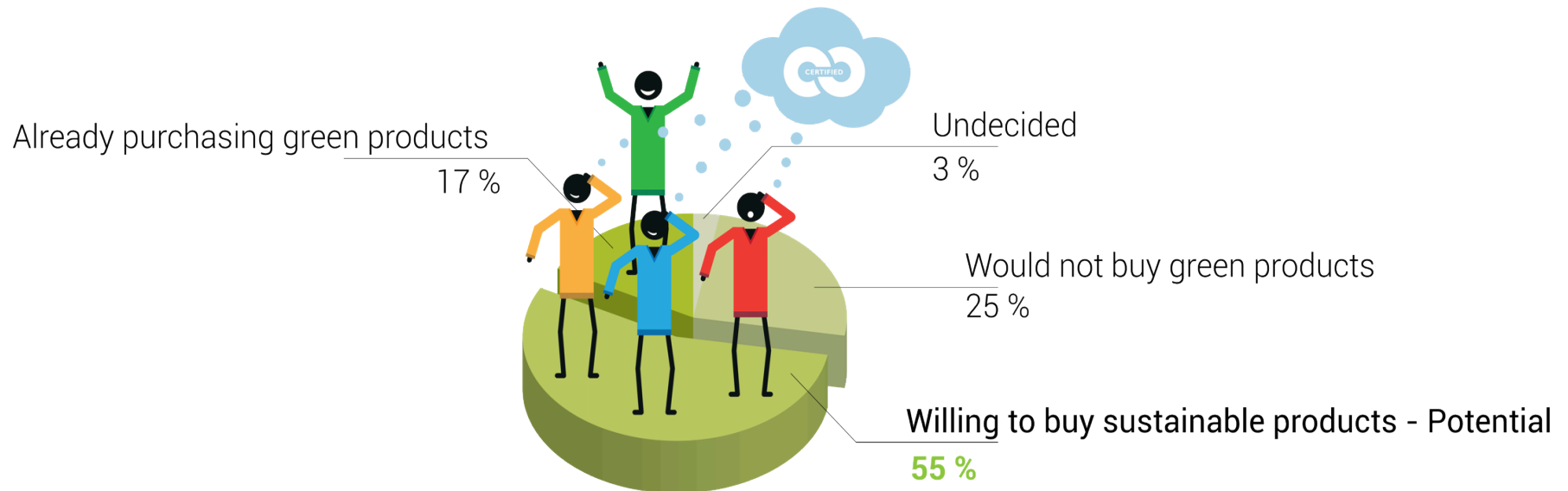
“Expert Review”  
May 2, 2013:  
The Way Forward  
“an excellent first  
step’ toward  
promoting the  
sustainable use of  
natural capital”



# Consumer Attitudes in EU & BRIC

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## Consumer attitudes towards Sustainable Products in Europe



## Regeneration Consumer Study 28-11-2012:

*“Consumers in Brazil, India, and China more inclined towards sustainable consumption; more likely to influence peers to buy from companies that are Socially and environmentally responsible.”*

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# Questions



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**2013**  
Covering the bases

**2014**  
Optimize & roll-out

**2015**  
Get Excellent

**2020**

**Spur Innovation**

**Generate Demand**

**Build Capacity**

**Establish C2C as a Quality Standard**

**C2C products certification is the preferred standard for healthy and sustainable products worldwide.**

**2013**

- Launch Product Innovation Prize-competition: 115 participants Global initiative 250k Q1 - Q4 **dwell**
- Launch & roll-out '1 prefer'-campaign Global initiative Q2 - Q3
- Summit and Events in NL and US Q4
- Commit frontrunners on Institute plans EU and Global initiative Q1

**2014**

- Identify critical substances & stimulate search for alternatives: Cradle to Cradle Fashion Initiative 2014
- Build knowledge to optimize C2C-certification process + criteria 2014 **ANACHE** **TRADUP**
- Identify new EU markets 2014 **EMG** **ANACHE** - the UK, - Belgium
- Develop communication & marketing materials: Product certification Institute Certification process Business benefits Assessors Training EU and Global initiative Q4 **EMG** **TRADUP**
- Fundraising Q1 - Q4 **JOEN** **TRADUP**
- Set-up European Advisory Board May 2013 - Henk van Houtum - Philip Mulenberg - Claire Teurlings - Gerrit Bruggeman
- Build networks and partnerships Q1 - Q4 **GOOD** **TRADUP** **EMG** **TRADUP**

**2015**

- Supply Chain Certification 2015
- Use framework for stimulating C2C procurement retail-chains + Government 2015 **MVO**
- Help partners to position C2C in higher education in EU 2014
- One additional assessor trained 2014 **SEARCH**
- Participate European in round tables and networks 2014 **BERLIN FASHION WEEK**
- Impact-study, 200k Q1 - Q4 **AGC Glass Europe** **Aveda Corporation** **Construction Specialties Products Inc.** **Ecover Belgium** **Koninklijke Mossa BV** **Puma SE** **Shaw Industries Group Inc.** **Steelcase Products Inc.** **Van Houtum BV**
- Two additional assessors trained 2015
- Create presence in emerging markets 2015
- Fund raising: Cradle to Cradle Fashion Initiative 2015
- Fund raising 2014
- Accreditation as certification standard in EU 2014
- Promote benefits product certification to stakeholders 2013
- Open EU offices in NL Q1 - Q4 Office Venlo, January 2013 Office Amsterdam, June 2013 **venlo**

**AS-IS**