

The Role of Green Building Councils in the Development of Sustainable Materials Industries

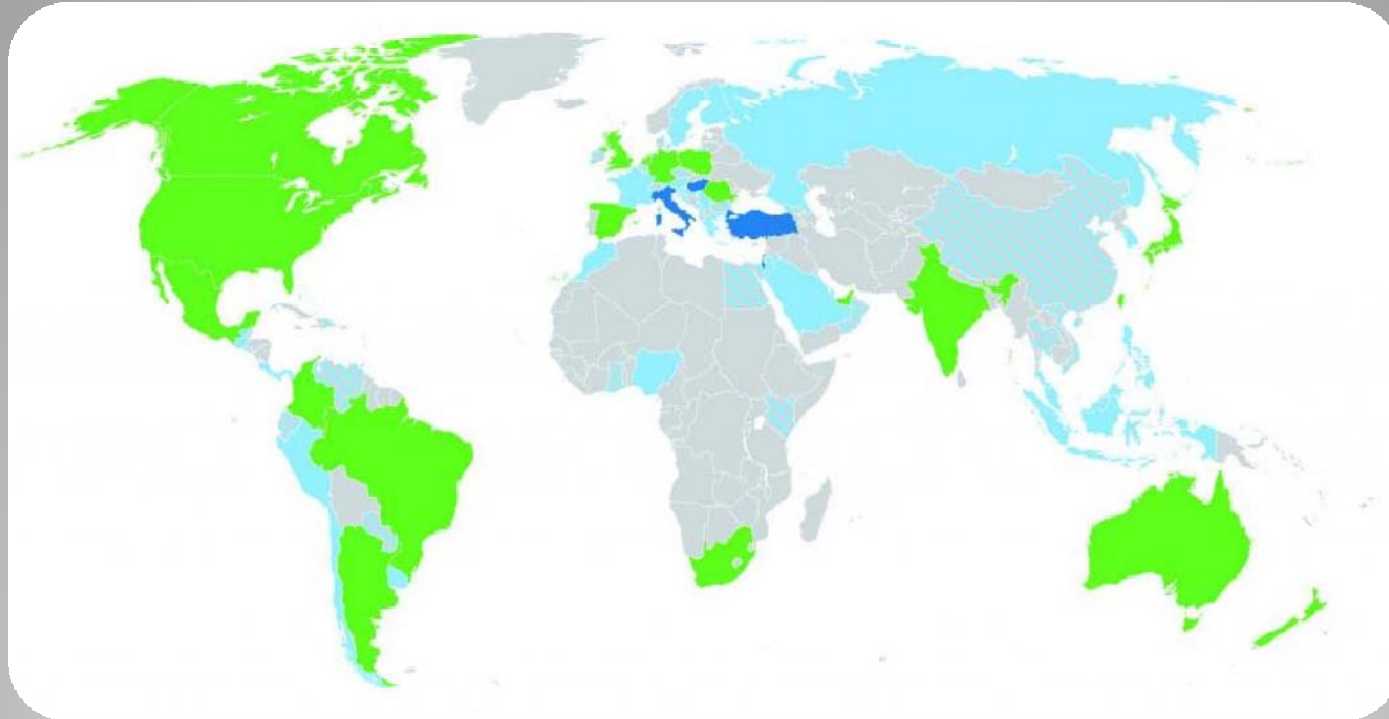
&
Their importance in the Global Green Market Transformation

**Healthy prosperous planet
for all children of all species
in present and future ?**

What does the technical definitions of GBCs and Concrete
have to do with this vision ?

- **WorldGBCs :**
 - A union of national Green Building Councils from around the world, making the largest international organization influencing the green building marketplace.
- **our visions:**
 - A healthy BUILT environment for a sustainable planet and prosperous life for all species.
- **our missions:**
 - Lead and accelerate the Green Building Market Transformation nationally and internationally .

what are GBCs ?



WorldGBCs Global Network

- European Green Building Network
- African Green Building Network
(Stared at UN-Habitat Green Building Ratings in Nairobi, May 2010)
- **MENA** Green Building Network
(recently announced at Green Build Chicago)

Organized into area networks:

Morocco: environmentally friendly industries

Concrete Sector operating cleaner



- “ All Environment ”
Option announced by the Moroccan concrete industries a few years now.
- Interest raised since 1992
(coinciding with World Earth Summit in Rio)by
 - Liberalization
 - Restructuring
 - Modernization
- 1997 concrete sector signs:
Six years Voluntary Partnership convention for Environmental Protection

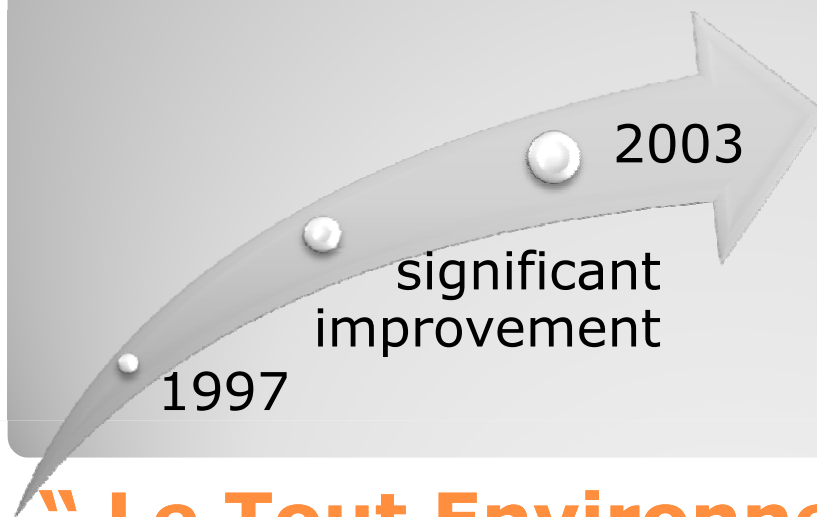
with the Ministry of Territory Management,
Water and Environment .

(1st of its kind in Morocco, Proved very fruitful)

“ Le Tout Environnement ”

- Within the six years agreement, the environmental damages Caused by the concrete industry **diminished** by 63%

(independent study by Swiss SBA and ECOSYS requested by ministry of environment)



- In 2003,

Cost of damages and inefficiencies
of the Moroccan concrete sector
raised to only 4.7 %

compared to 12.7 % in 1997.

First Victory

- The sector was allocated a 700 million Moroccan Dirhams for Environmental improvements :
- important resulting benefits:
 - **Less use** of raw materials & combustibles
 - **Substantial economies** of Energy & Resources.
 - **Better controls** of atmospheric emissions
 - **Better management** skills and practices.

First Victory



First Victory: Source: APC (Association Professionnelle des Cimentiers)



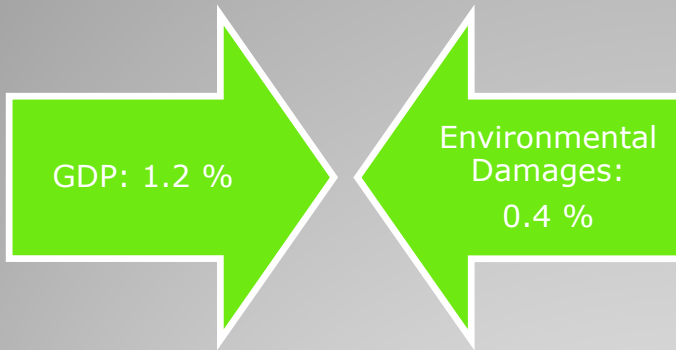
Productivity



Environmental
Impact

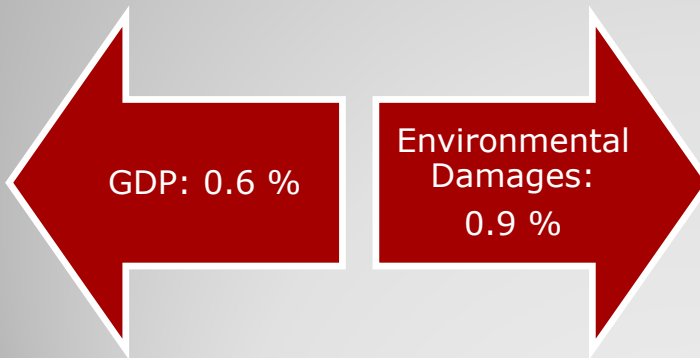
- Proportionally lowered remediation costs
3.9% in 2003 vs. 7.2% in 1997
- Equally lowered costs & damages of inefficiencies .
- Electrical energy use reduced by 9 % (1997-2003)

First Victory



2003

- GDP: 1.2 %
- Environmental Damages: 0.4 %



1997

- GDP: 0.6 %
- Environmental Damages: 0.9 %

Concrete Sector Contributions to Morocco's GDP & Environmental Damages

- Voluntary agreement a **SUCCESS** :
- Deployment of 2.5 billion Dhs to build more technical capacity
- Continued Renewal of the agreement :
 - 2003, 2006, 2008.

Higher expectations for 2012: a switch of labels From *Pollutants* to contributors to *De-pollution*, while lowering environmental impact to less than 0.7%

- Renewable Energies : Wind & Solar.
- Waste & Water management:
 - Incineration Technologies and Waste water re-use

Challenges & Projections

projections

- 30% growth in GDP contribution
- Lower environmental impact

Current Actions

- 3.5 billion dhs for new plant.
- 310 ha Green zone
- Forest preservation project
 - 1.200 ha of Argana trees planting in collaboration with water & forestry department.

GREEN MOROCCO PLAN.

Challenges & Projections

GBCs collaborations

Morocco Green Building Council

Optimizing Efforts ,
Meeting Challenges,
Exceeding Expectations

- Information & Experience sharing
ex. Concrete Sustainability Conference
- Education & Training
- Advocacy and Awareness
National & Global Government outreach for incentives
- Performance Verification
(Green Building Rating systems, Common Carbon Metric)

Synchronizing Global Efforts
Sustaining initiatives

Get involved within your GBC Country Network World

Green Building Councils are more than *a place for networking*

Hubs :
*environmental, industrial, economical success stories are being
Replicated and customized to shape the present and future of
our planet **NOW** through **GREEN BUILDING**.*



A word from our colleagues

- That makes US all: ?

Getting involved

- That makes US all: **GREEN Market?**

Getting involved

- That makes US all: **GREEN Market**



TRANSFORMERS

Getting involved

- That makes US all: **GREEN Market**



....Literally **TRANSFORMERS**

Getting involved

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what are GBCs ?

- Word-Origins.com concrete Word History
- Date of Origin 14th c.
-
- In origin, something concrete is something that has **‘grown together’**. The word comes, via Old French concret, from Latin concrētus, the past participle of concrēscere ‘grow together’, hence ‘harden’. This was a compound verb formed from the prefix com- ‘together’ and crēscere ‘grow’ (source also of English crescent, increase, and accrue). Its original application in English was fairly general – referring to that which is solid or material; its use for the building material did not emerge until the early 19th century.

Word History

- con·crete (kn-krt, kng-, knkrt, kng-) adj. 1. Of or relating to an actual, specific thing or instance; particular: had the concrete evidence needed to convict. 2. Existing in reality or in real experience; perceptible by the senses; real: concrete objects such as trees. 3. Formed by the **coalescence of separate particles or parts into one mass**; solid. 4. Made of hard, strong, conglomerate construction material. n. (knkrt, kng-, kn-krt, kng-) 1. A hard, strong construction material consisting of sand, conglomerate gravel, pebbles, broken stone, or slag in a mortar or cement matrix. 2. A mass formed by the coalescence of particles. v. (knkrt, kng-, kn-krt, kng-) con·cret·ed, con·cret·ing, con·cretes v.tr. 1. To build, treat, or cover with hard, strong conglomerate construction material. 2. To form into a mass by coalescence or cohesion of particles or parts.

Not intended for reading !

- technique or technic (tɛkniːk)
- 1. a practical method, skill, or art applied to a particular task 2. proficiency in a practical or mechanical skill

Gk téchnē art, skill

Concrete & GBCs

Same TECHNICAL Definition !?!!

ART & SKILL of

- **Concrete :**
compound verb formed from the prefix com-
'together' and crēscere *'grow'*
- **Green Building Councils:**
A *union* of national Green Building Councils from
around the world, *making the largest* international
organization influencing the green building
marketplace.

“ O Mankind!

We created you from a male and female, and made you into peoples and tribes so that you might come to know each other.

The noblest among you in Allah’s sight is the one with the most Taqwa. Allah is All-Knowing, All-Aware”

Holy Quran, 49:13

Surat Al-Ĥujurāt (The Rooms) - سورة الحجرات

Taqwa: Empowerment & Protection
& Most benefit to the rest of CREATION.

Quran Kareem