

# BENEFITS - COSTS - SAVINGS

Effective Managerial Improvements resulting from applying International Standard ISO 14001



Source: Survey 2010 on about 11,000 Organizations ISO 14001 certified (certification obtained on the 30.09.2010 - CESQUA (Study Center for Environmental Quality of Padua university in collaboration with Accredia

# BENEFITS - COSTS - SAVINGS

Porter

•Porterian approach: each probable loss of competitiveness in the short period following investments to improve environmental performances enables the organization to reach a competitive launch in the long term , thus granting a better productivity.

RBR

•Resource-Based-Review: important role of the untouchable resources, improvement of the competitive advantage through know-how; innovative abilities and better relations with the internal and external actors, better access to financings and investments.

Green

**Green Production Oriented** it intervenes mainly on the productive process (e.g. EMAS, ISO 14001, low impact technology) -

•I AM GREEN BECAUSE I REDUCE MY IMPACTS ON THE TERRITORY

**Green Business Oriented** technology, product, service, that minimizes the environmental impact of the other subjects involved in the threading (die)

•I AM GREEN BECAUSE THE ENVIRONMENT IS MY BUSINESS

Porter

RBR

Green

# BENEFITS - COSTS - SAVINGS

Among the strongest impacts on the environmental performances (95%): ability to plan targets in an efficient manner and to achieve them within the times and according to the planned modalities.

In order to optimize the opportunities and maximize the efficiency of the invested costs in the Environmental Management System it is very important to supply threading (die) of goods and services:

- Preference to environmental low-impact products and with higher energy efficiency

- Opening to Technological innovation

- Sustainable Purchase Procedures including environmental criteria

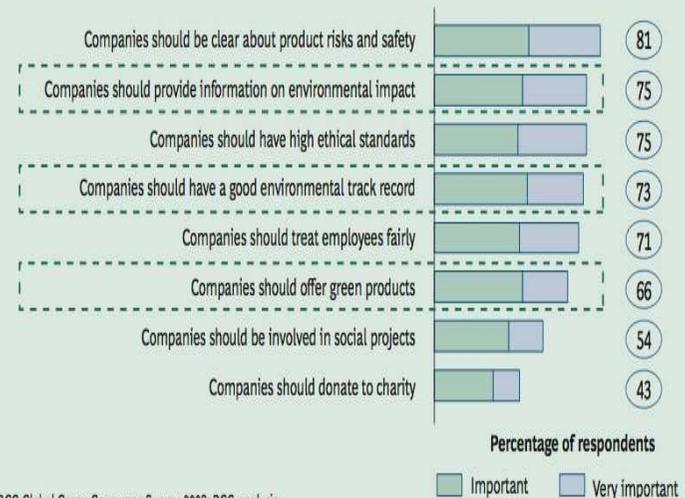
Know-how  
Technological capacity  
Awareness about environmental criteria

Econometric Model 

$$ENVPER = \alpha_0 + \beta_1 EMASAGE + \beta_2 ENVTARGET + \beta_3 GSCM + \beta_4 SIZE + \beta_5 SECTOR + \epsilon$$

(Source: Prof. F. Iraldo)

Exhibit 3. Most Consumers Think It Is Important or Very Important for Companies to Be Green



Sources: BCG Global Green Consumer Survey, 2008; BCG analysis.  
Note: Data are from 1,000 responses across all countries in our survey.

# BENEFITS - COSTS - SAVINGS



## MAIN COSTS FOR THE ORGANIZATION

€ Fixed Costs: regardless of the size of the organisation (e.g.: costs di registration);

€ External Costs: external consulting service for the developing of EMS, training addressed to employees and external audits;

€ Internal Costs: addressed to employees inside the organisation aimed at implementing, managing and reporting on the EMS (e.g.: internal Audits / Audits towards third parties).

> EMAS encouraged internal and external communication among the interested public, relevant stakeholder and employees

Astellas Ireland Co., Ltd. (Dublin Plant) Chemical and Pharmaceutical Sector

> The company has achieved a reduction of negative impacts and a reduction in costs (through recyclable materials)

Dublin Products Ltd, Dunlavin, Co. Wicklow (Ireland) Animal Foodstuff Sector

> The financial costs are more than returned when looking at improved environmental performance, company image and access to markets.

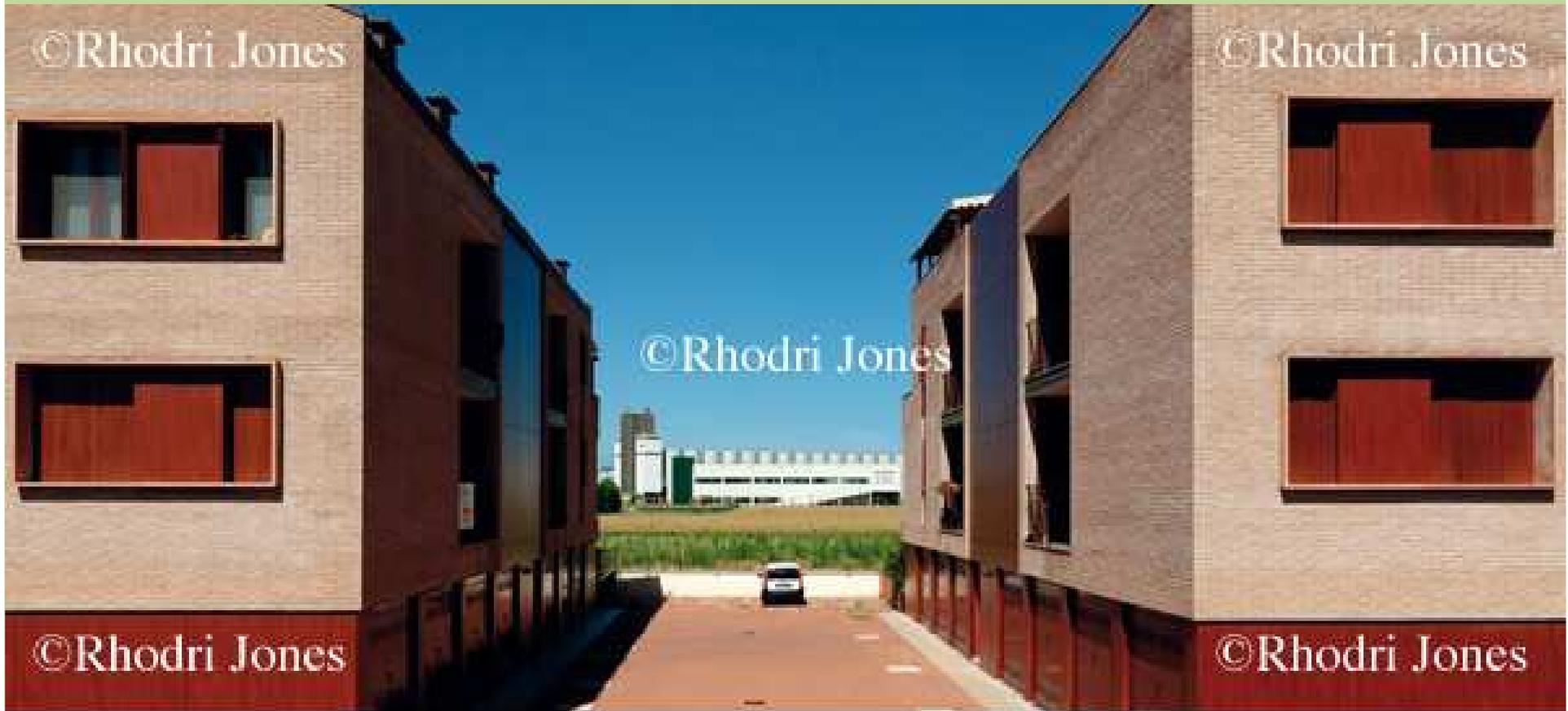
Rescon Mapei Chemical Sector for constructions

>Lack of data and absence of more though analysis of certain aspects is slowing improvements but opportunities for the simplification of some of the procedures are becoming evident plus process of cluster registration is good encouragement for citizens and companies.

Industrial District of Tiles Modena and Reggio Emilia, Italy

# ENVIRONMENTAL PERFORMANCES COMPETITIVENESS

*The Earth does not belong to the man, it is the man who belongs  
to the earth...  
(Indian Chief Seattle)*



# ENVIRONMENTAL MANAGEMENT SYSTEMS BOOST GREEN ECONOMY

Environmental  
Management  
System

Plan-Do  
Check-Act

Benefits Costs  
Saves

Environmental  
Performances  
Competitiveness

Green  
Products  
Services

Boost "Green"  
& GPP

Innovation  
Criteria

Projects

# ENVIRONMENTAL PERFORMANCES COMPETITIVENESS

## Ecolabel

 **Definition:** voluntary instrument which praises products with more environmental quality during the whole Life Cycle

 **Benefits:** those who chose Ecolabel enjoy competitive advantages being able to claim a certification given and approved on an European level

 **Bases:** techno-scientific criteria quantified = the label is granted only to those products which show the criteria defined on the bases of a specific LCA on the type-product of the category

 **References:** CE 880 Regulation = a brand of environmental quality for products  
Regulation CE 1980/2000 = revision of the previous regulation



### Some figures



95% of the eco-label factories / companies showed its active use during their marketing campaigns (i.e. TV, press, promotion for sale corners);

53% of the eco-label factories / companies experimented an increase of market quota;

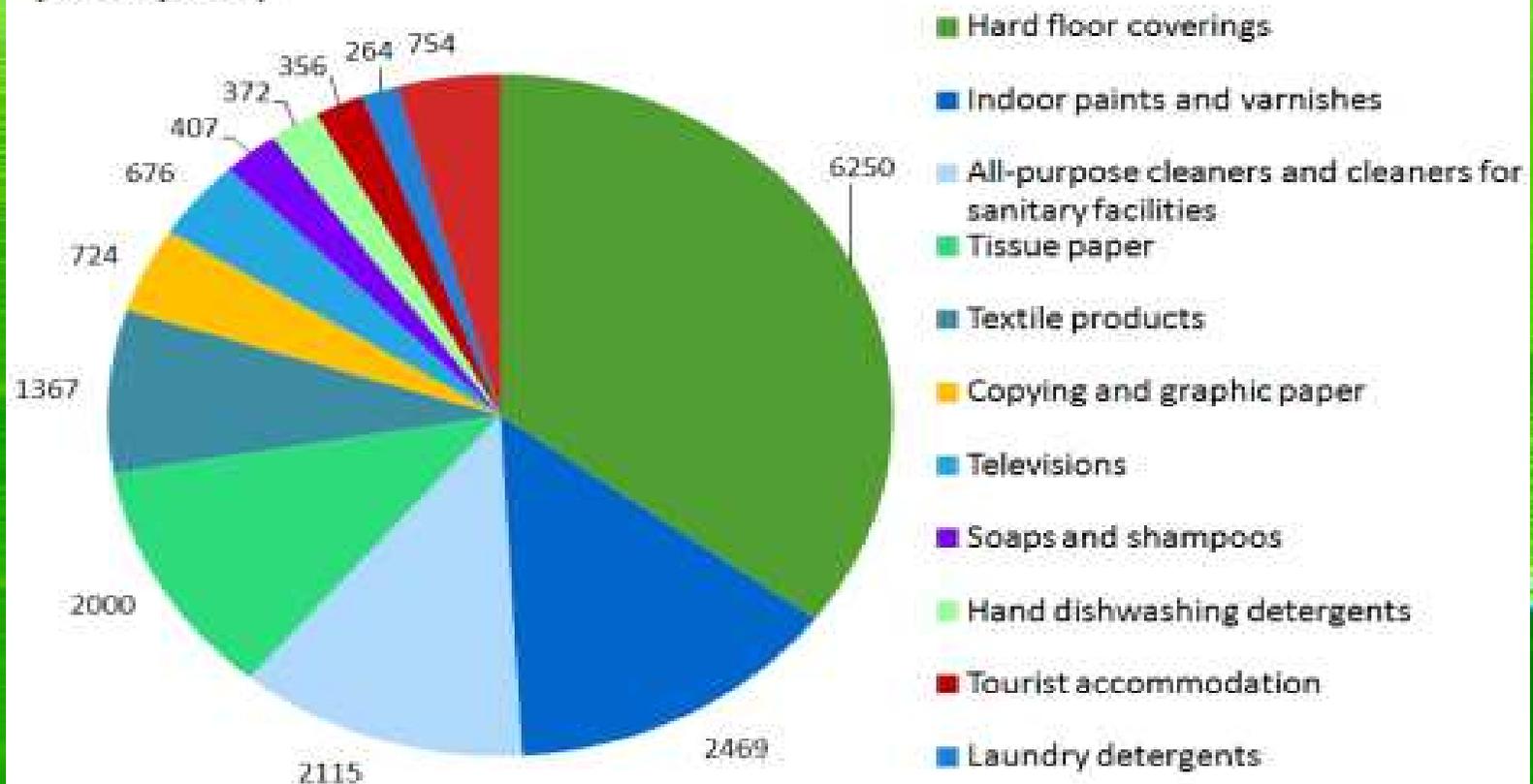
29% of eco-label factories / companies succeed in quantify it as 11,7% yearly.

Source: IEFE Bocconi University Survey on 100 factories UE 2006

# ENVIRONMENTAL PERFORMANCES COMPETITIVENESS



**Number of EU Ecolabelled Products per Product Group Category  
(January 2012)**



# ENVIRONMENTAL PERFORMANCES COMPETITIVENESS

 **Definition:** declarations that quantifies the potential environmental impacts linked to the life cycle of a product or service.

 **Benefits:** instrument that enables producers to communicate information in an objective, comparable and trusting manner with reference to the environmental performances of products and services

- Used Resources
- Polluting emissions
- Potential environmental impacts
- Generated waste

 **Bases:** the information has only a mere informative character and they do not contain any evaluation criteria, elements of preference, or minimum levels to follow

 **References:** Brands/Trade Marks/Environmental Declarations of Type III: Environmental Product Declaration (EPD), based on the ISO 14025 Regulation



## OBJECTIVITY

✓ Use of the Life Cycle Assessment (LCA) as a methodology for the identification and quantification of the environmental impacts

✓ In accordance with the ISO 1404 Rules



## CASE STUDY



# ENVIRONMENTAL PERFORMANCES COMPETITIVENESS



### Technological solutions for the sustainable city

Beghelli Firm's offer was born to support Municipal Administrations in order to adopt advantageous solutions for the sustainability and energy efficiency: innovative technologies meant for the requalification of the urban environment through an intelligent management of the energy, in the light also of the very dangerous effects on the environment that the waste of sources can generate.

The Bolognese firm proposes technological solutions meant for the Public Administration, combining technologies with very high innovative characteristics to the concept of the integrated service.



### Lighting systems for public buildings

Thanks to the **Project "A PLANET OF LIGHT" at zero cost** the public Administrations can set up lighting plants of the very last generation that can guarantee more than 70% of saving of consumption energy, with consequent benefits for the environment besides the zeroing of the maintenance costs. Everything without any economic investment since the plant is repaid with the energy saving obtained.



### Intelligent Street Lighting with very high energy saving

The Street Lamp Beghelli is a lighting street system that enables to save even 60% over the energy costs and zeroing the maintenance costs. The technology of a double lamp, the electronic reactor that compensates the sudden change of tension and the uniformity of the street lighting help moreover to improve sensibly to the safety of the street circulation.

[www.unmondodiluce.it](http://www.unmondodiluce.it)

Source:





# Project presentation

## The idea

- We replace all lighting fixtures at zero cost
- We install a new generation lighting system that allows you to save up to more than 70% compared to traditional products
- We measure the actual energy savings achieved after the new luminaires have been installed
- 10% of the measured energy savings is the first economic gain for the client
- The remaining portion of energy savings is used over the following 7 years as payment for the service
- Throughout the term of the contract the client will benefit from a complete maintenance service, which also includes replacement of any broken fluorescent tubes

## The advantages

- No investment required in order to set up a new lighting system
- Immediate savings of 10% on lighting energy costs
- Installation and complete maintenance service (all-inclusive) throughout the contract period

## Future benefits

- On expiry of the contract your client can take over ownership of the whole lighting system and thus benefit from 100% of the energy savings
- Saving energy also contributes to safeguarding our planet by reducing the polluting emissions associated with the production of energy

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The "A Planet of Light at Zero Cost" project offers automated solutions so that the building owner can be relieved of the task of carrying out the tests and inspections provided for under the new standard laws

