



Sustainability

BASF's strategic approach
and its implementation.

 **BASF**

The Chemical Company

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BASF Sustainability Management



“For us, sustainable enterprise means combining economic success with environmental protection and social responsibility, thus contributing to a high quality of life for coming generations.”

CEO, Jürgen Hambrecht


To the man in the street...

- Sustaina'what'
- Fairness
 - Yes you must
- Social conscience
 - Having looked after No 1 of course
- Do the right
 - but don't tell me what to do



Education is still needed

First thoughts



*I have a brochure
in my desk drawer*

*If you can't measure it,
you can't manage it*

It is about compliance

*It is our business
to earn money,
not to save the world*

*Isn't there anybody else
in charge of that?*

Challenges of Sustainable Development

- Growing world population
- Limited natural resources
- Limited capacity of ‘understood’ ecosystems
- Economic and social differences



What the 'process' of sustainability should not be...

- Inflexible and not responsive to requests or direction changes
- Have poor governance – with little interest in being accountable
- No measures or performance standards that can be duplicated
- Have many measures but unclear and unagreed definitions

Megatrends – BASF addresses the challenges of the 21st Century



Growing & Aging World Population



Urbanization



Energy Demand & Climate Protection



Globalization & Developing Markets

MEGATRENDS

Health & Nutrition

Construction & Housing

Energy & Resources

Mobility & Communication

Some general sustainability targets

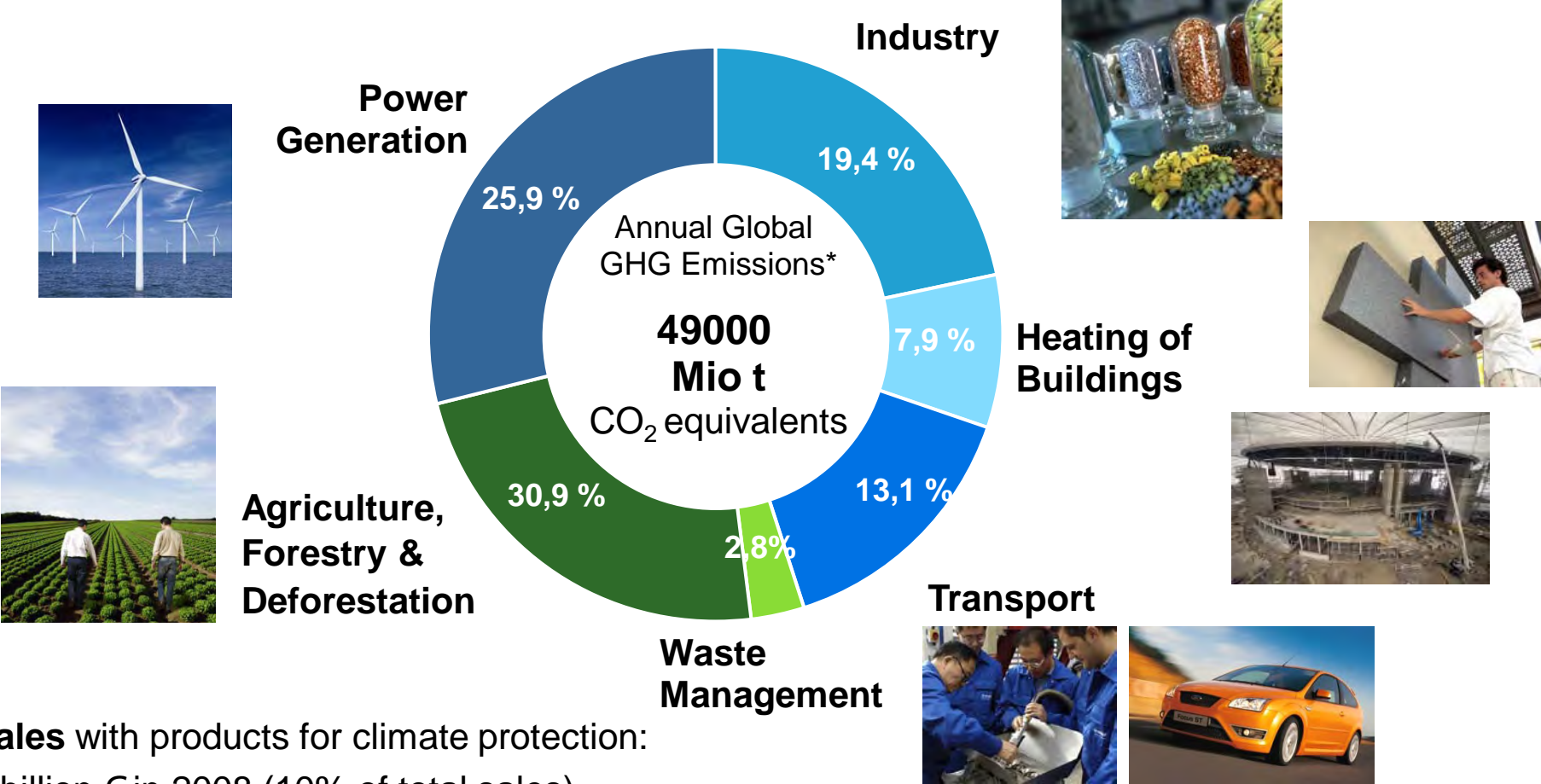
MORE

- Energy & resource efficiency
- Renewable energy
- Recycled & reusable items
- Local supply
- Sustainably managed resources

LESS

- Fossil fuel usage
- Water consumption
- Transport
- Excess packaging
- Disposable items
- Hazardous materials
- Sweatshop labour

BASF's products for climate protection



Sales with products for climate protection:
6 billion € in 2008 (10% of total sales)

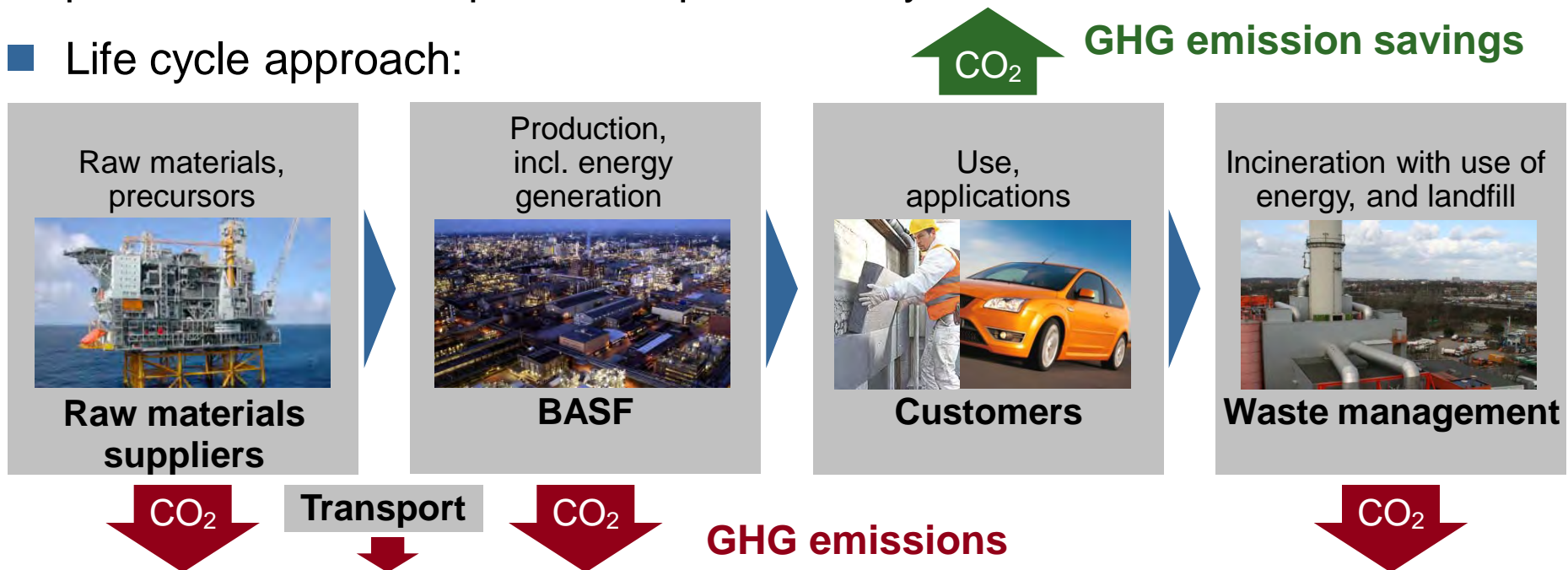
R&D expenditures for energy efficiency and climate protection innovations:
450 million € in 2009 (about one third of total R&D expenditures)

*Source: IPCC (2004 data)

Objective

- Quantitative analysis of how much GHG emissions are caused by production and disposal of all chemical products produced by BASF in 2008 and of how much GHG emissions are saved through the use of the products for climate protection produced by BASF in 2008.

- Life cycle approach:



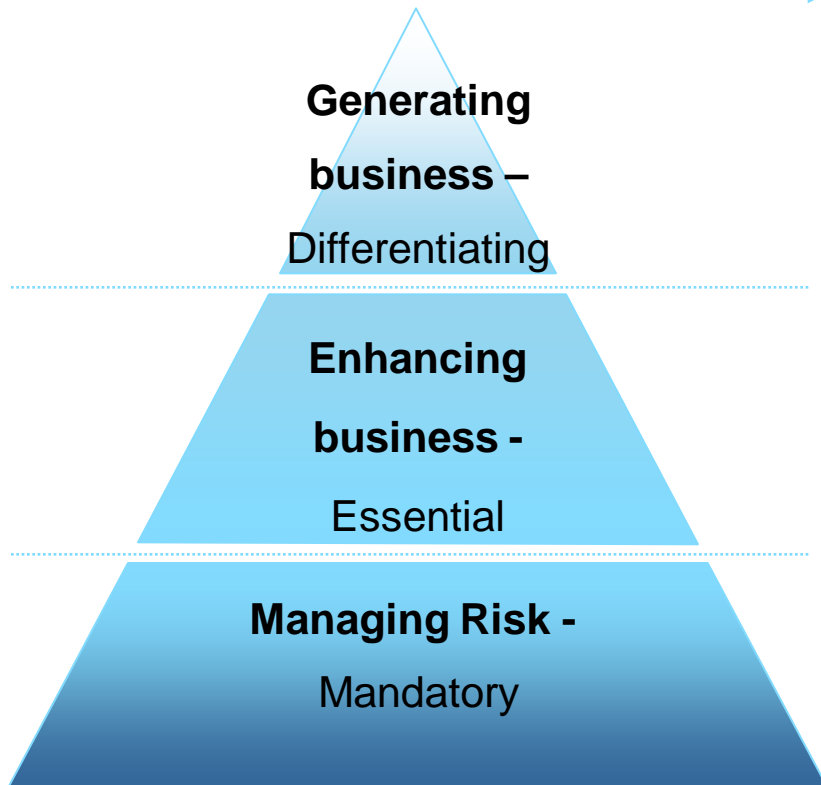
1 | A base strategic approach

2 | Walk the talk

3 | Transparency and reporting

Sustainable Development – Not only a response but also an opportunity

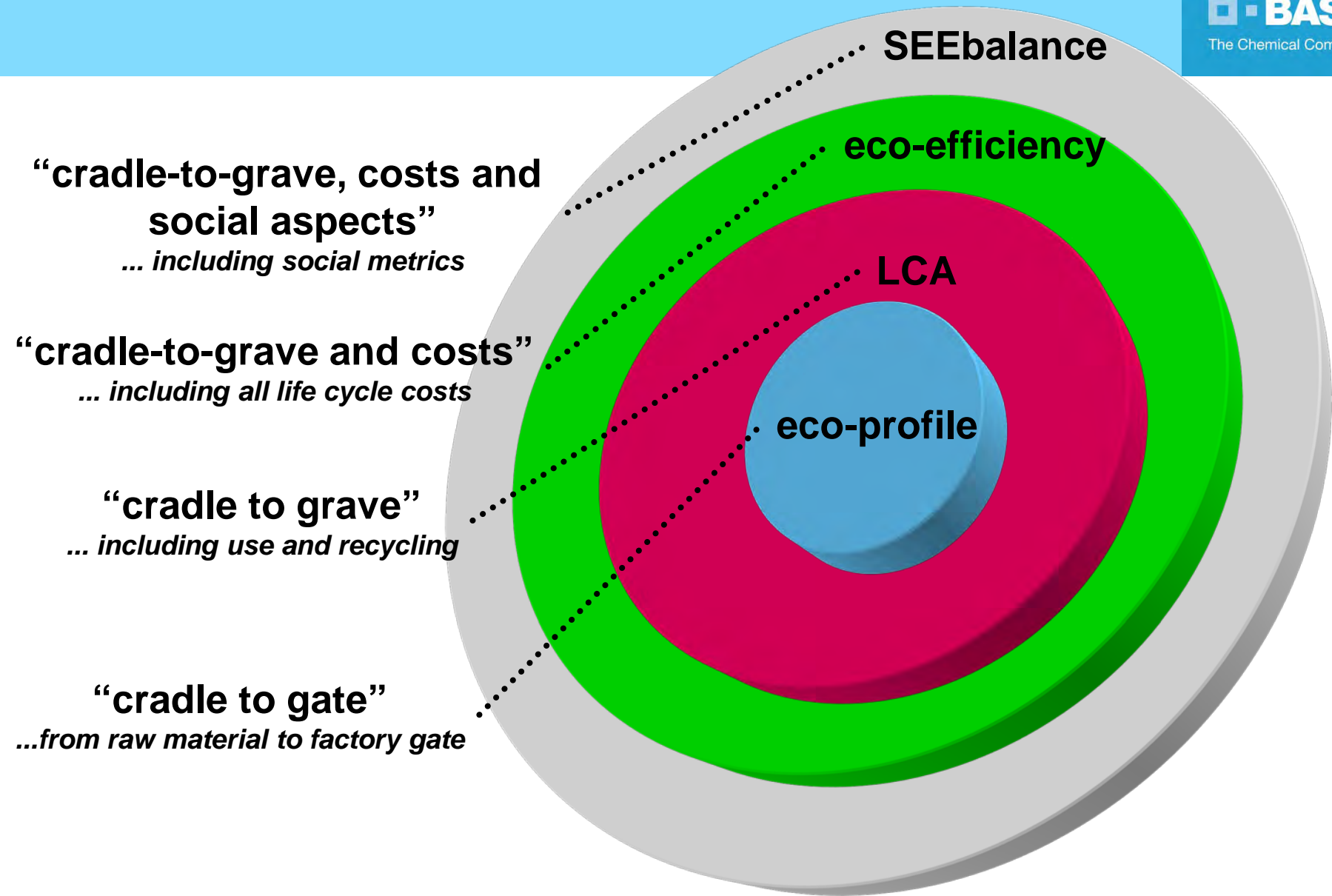
Sustainability areas of action



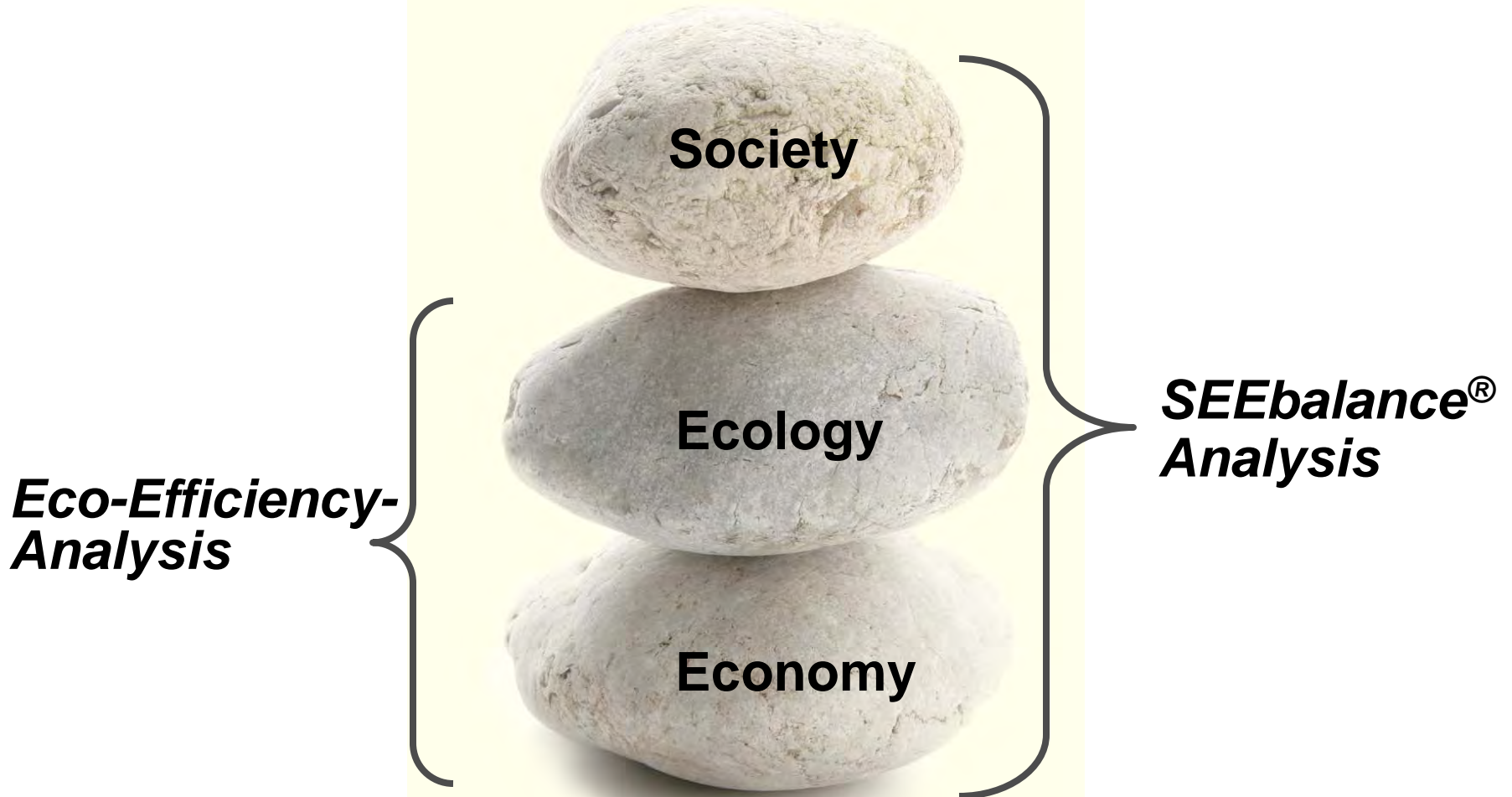
Contribution to a company's success

- Access new target groups and markets
- Increase market-differentiation
- Increase customer retention
- Strengthen brand image
- Optimally leverage resources
- Generate beneficial business environment
- Ensure that laws are respected
- Minimize material risk
- Reduce reputational risk

Types of Analyses

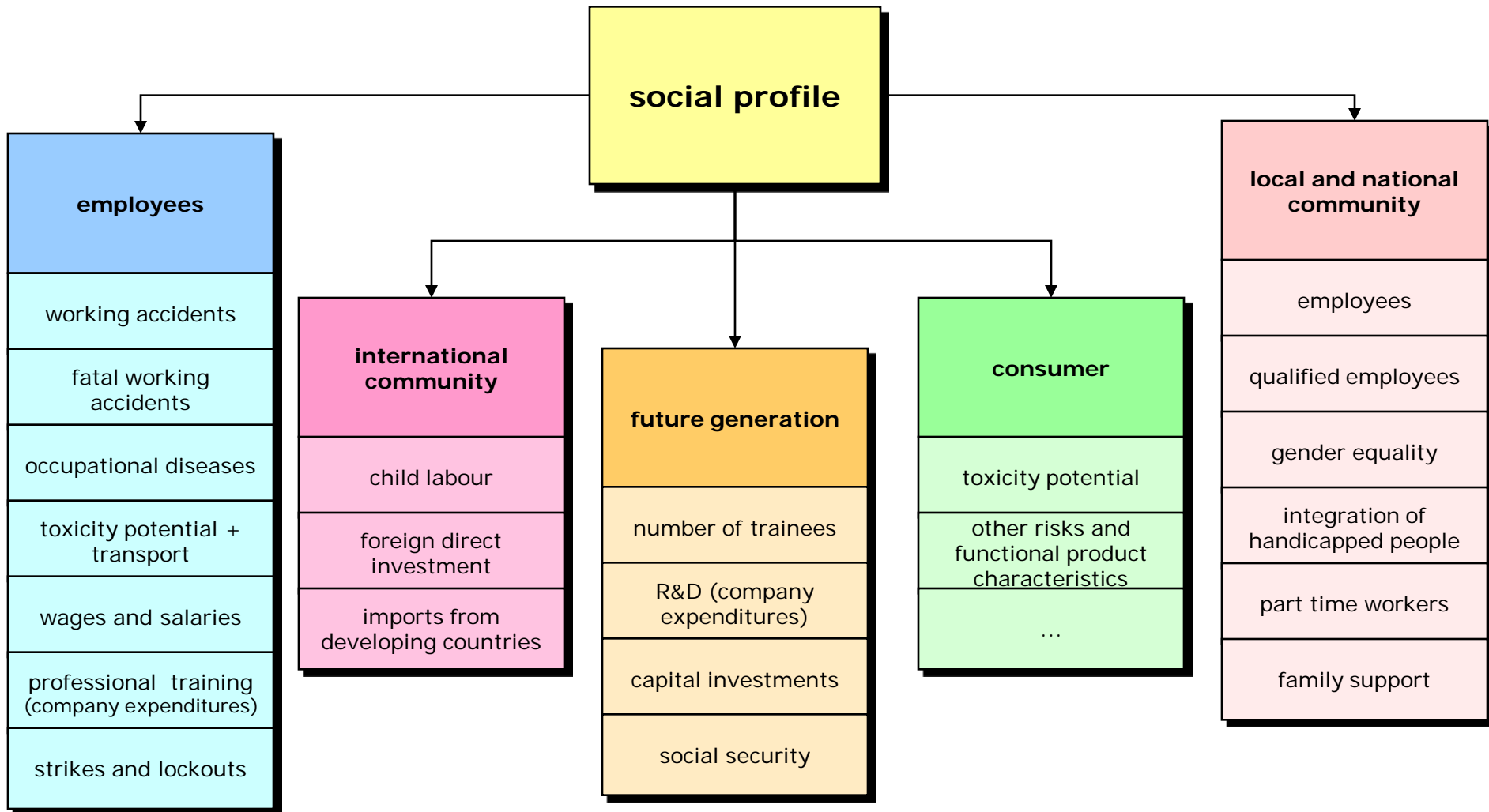


Sustainable Development is based on three pillars



SEEBalance®

What is a Social Profile?



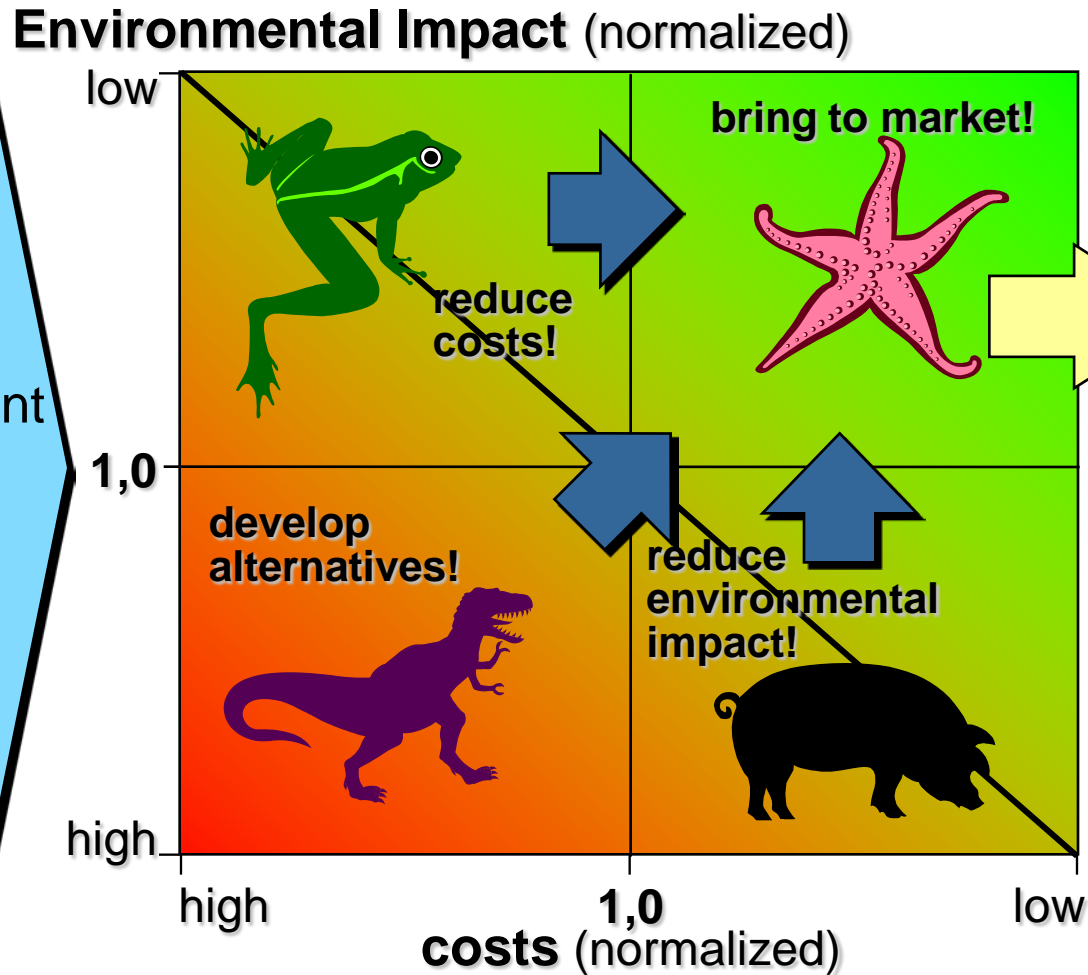
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Consequences of Eco-Efficiency Analyses

Depending on the position of the analysed product, different strategic recommendations are given.

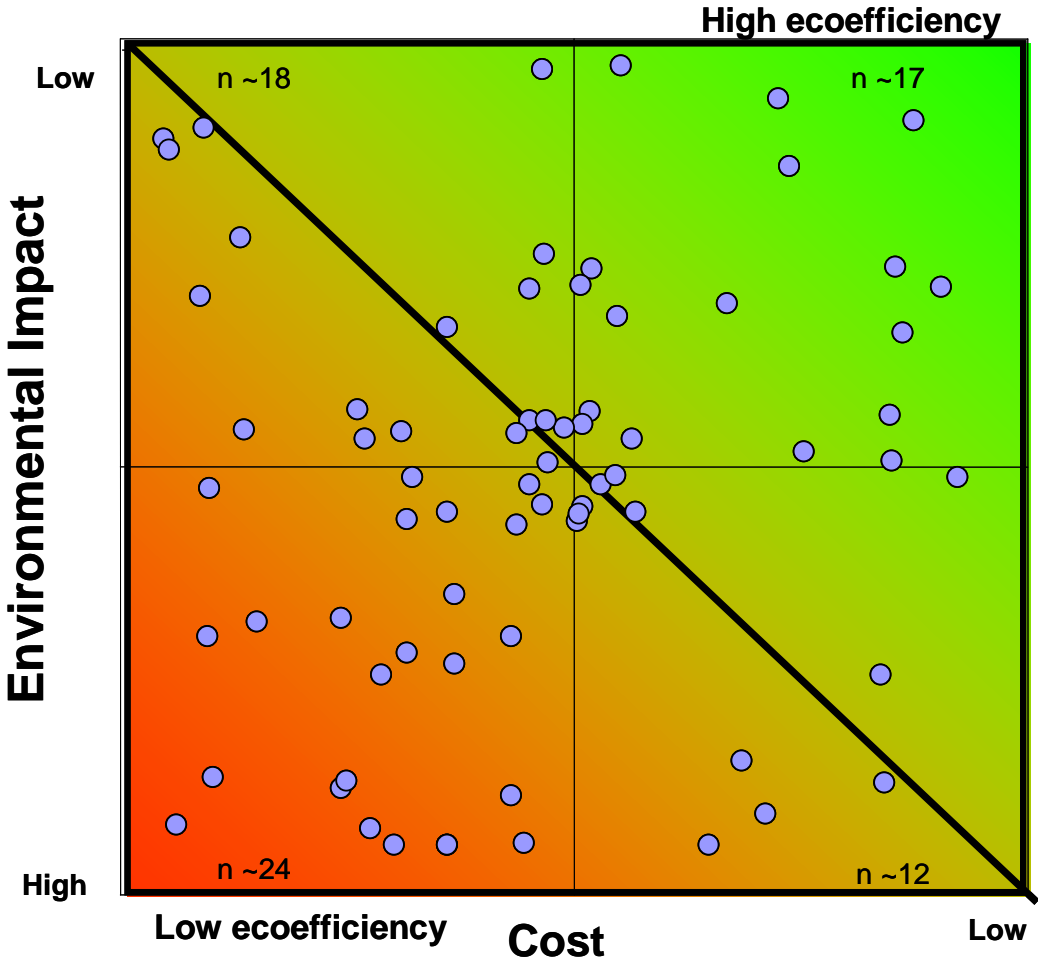


Analysis beats “green-washing”: A scientific approach is needed to understand which technology is best

Eco-efficiency of bio-based materials vs conventional materials

Eco-Confusion –
Bio-based are not
always the most eco-
efficient.

Need to do the
analysis



But are we all talking about the same thing in the same way?

- 'E-numbers and edible...' a recent BBC programme demonstrating many e-numbers are found in nature and are very good for you (against common misconception).
- So what is natural?
 - Can natural products be isolated?
 - Nature identical synthesis
 - Artificial – production or use?
 - Free from artificial? Natural?
- Green technology – you mean GM?
- Organic – you mean free of what? Or?
- Nano?

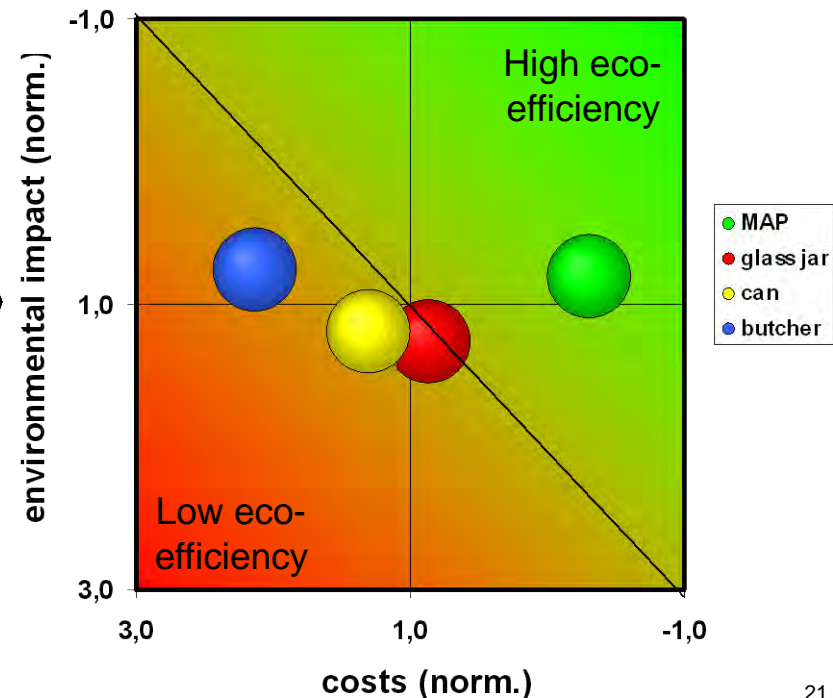
Eco-efficiency Portfolio for Sausage Packaging

Compare the eco-efficiency of four packaging alternatives for hotdogs:

- Modified atmosphere packaging (MAP) – multilayer film structure with PA6
- Glass jar with screw-lid top
- Tin-free steel can
- Butcher (coated paper)



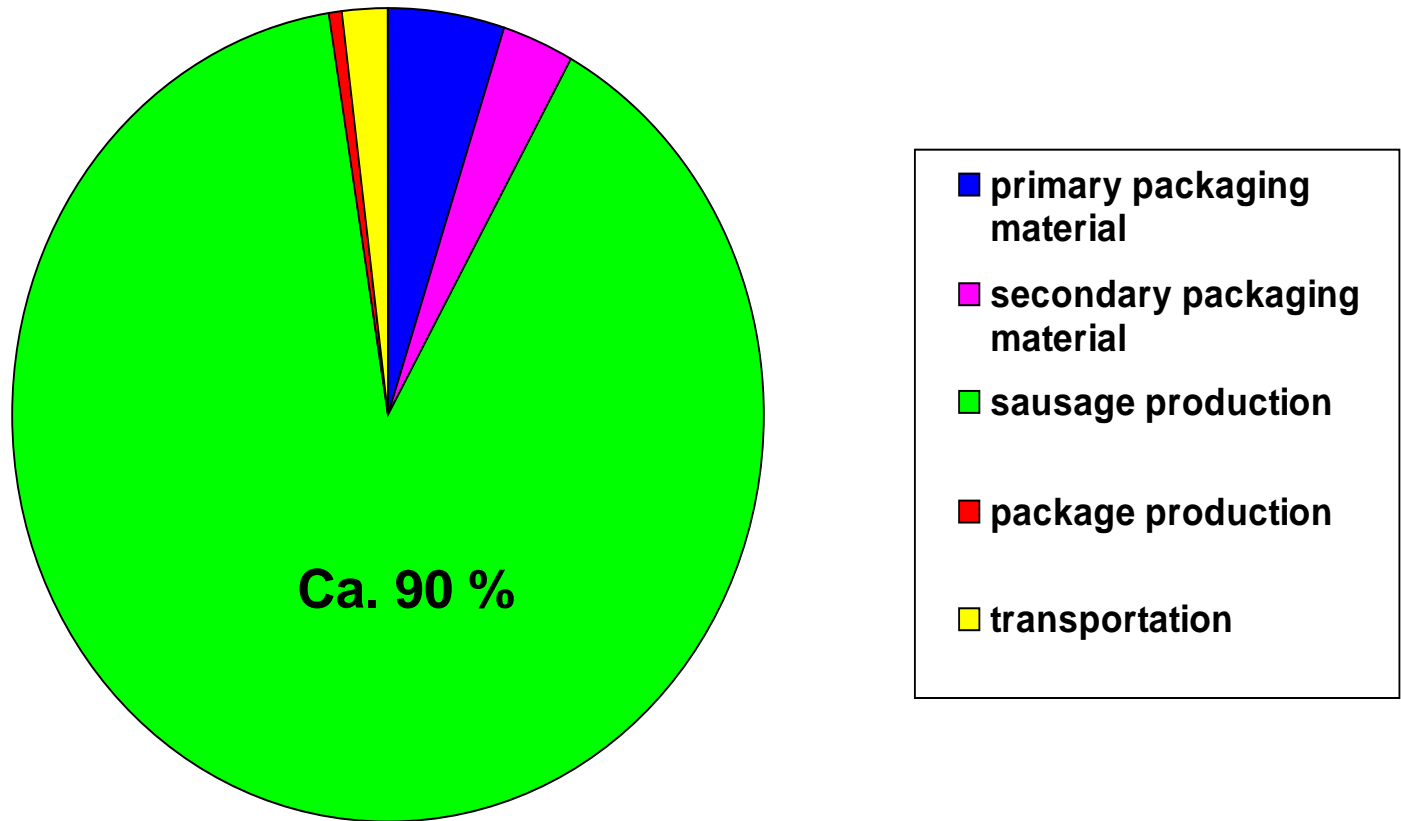
customer benefit:
packaging and consumption of 1000 kg sausage



Sausage Packaging

Energy loss due to spoiled food is most significant

Energy use for MAP packaged sausage

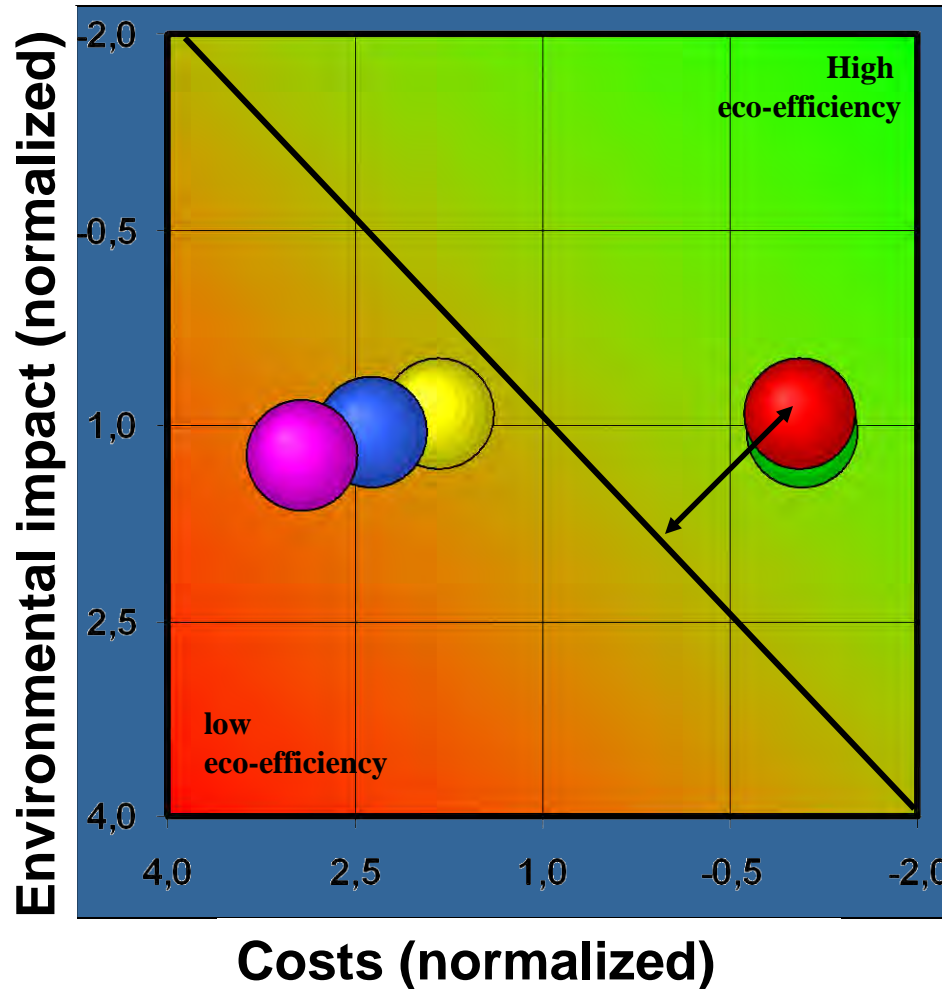


Catering service for outdoors

Functional unit:

Catering service for 400 servings for use outdoors: (includes dishes, bowls, cutlery and cups)

Portfolio



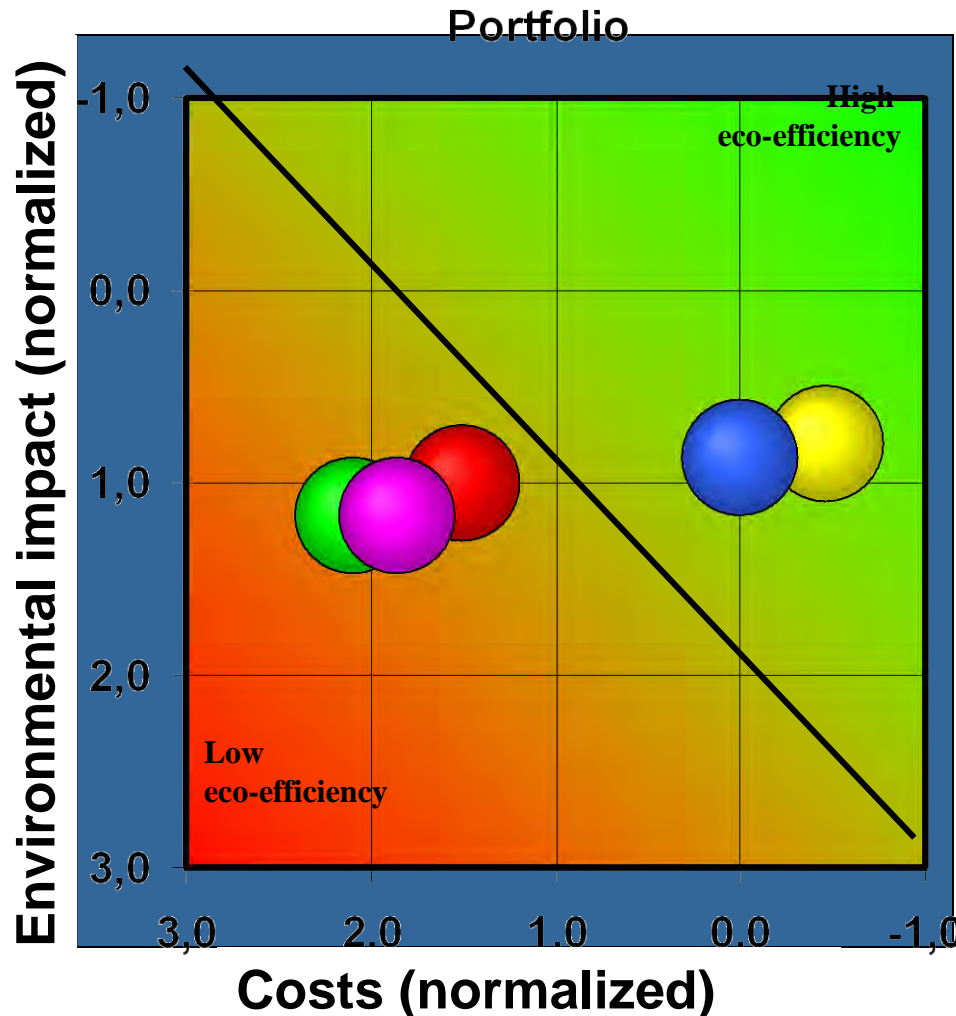
- Einweg: PS
- Einweg: Karton
- Mehrweg 1%
- Mehrweg 3%
- Mehrweg 5%

One-way options are the most eco-efficient: paper and polystyrene

Catering service for the canteen (indoors)

Functional unit:

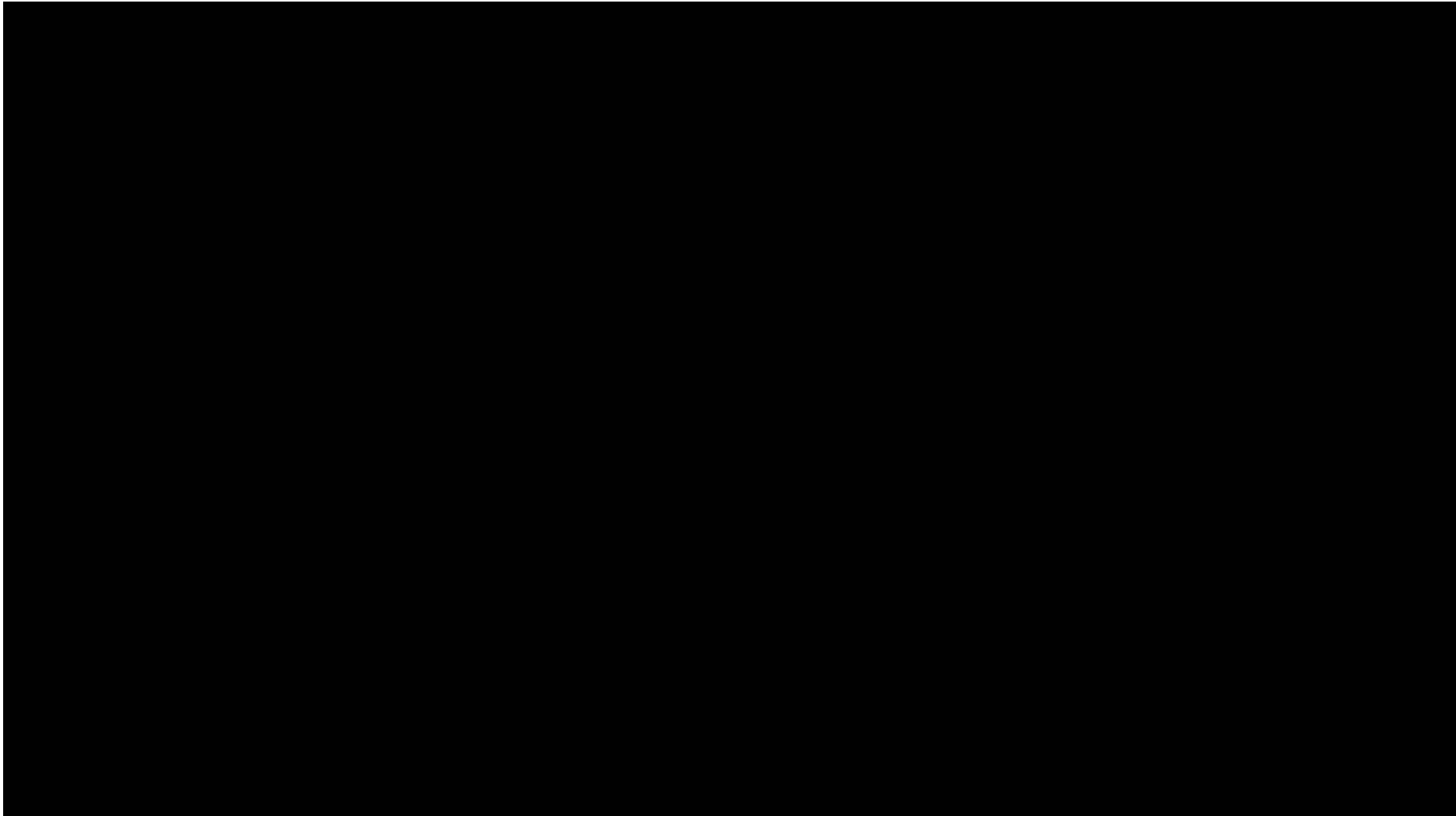
Catering service for 400 servings for use outdoors: (includes dishes, bowls, cutlery and cups)



- Einweg: PS
- Einweg: Karton
- Mehrweg 0,5%
- Mehrweg 1%
- Mehrweg 3%

Reuse systems are the most eco-efficient for indoor use

A BASF house...



The BASF House – a Showcase for simple and cost-effective solutions

SIPS first floor & roof using **Elastopor® H**

Metal Roof & first floor wall cladding (Corus / **BASF Coatings & EVP Heat Management Pigments**)

ICF ground floor (using **Neopor® & Rheocell ICF**)[®]

Relius® Render system



Selected other BASF Products :

- SmartBoard®
- Luraskin® / Permaskin®
- Wolmit® wood treatment
- CPW Plasticisers in vinyl flooring and entrance-matting
- Various plastics materials from KTE, KTS and KSE in the bathroom suite, and in the Beko kitchen appliances
- A range of PCI products, including tile adhesive, wall and floor grouts, floor-leveller, adhesive for the vinyl floor, etc.
- and many more ...

Sustainability benefits for pre cast concrete

■ BASF Wins British Precast Sustainability Champion 2008 Title



- Reduces energy consumption;
- Eliminates vibration and associated noise;
- Increases productivity;
- Reduces production cycles;
- Increases durability;
- Improves the health and safety aspects of the production process



Business through sustainability: Shirts and blouses

Customer benefit

Wearing a blue man's shirt, during 40 washing cycles.

Alternative

Cotton 100%



Other alternatives

Polyester 100%

**Mixed tissue:
65% cotton,
35% polyester**



Photo Limagrain UK

- 1 | A base strategic approach**
- 2 | Walk the talk**
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Transparency and reporting

- Corporate report
 - according to GRI
 - KPMG externally verified



- Sustainability website up-to-date

Sustainability services

Success – Added Value through Sustainability

Sustainability is becoming an increasingly important success factor for our business partners. We see great opportunities for integrating our sustainability expertise into customer partnerships. This is why, in 2007, we developed the strategic initiative "Success – Added Value through Sustainability" which enables our business units to identify how they can differentiate themselves through sustainability. This initiative brings together our longstanding competences in the fields of environment, health, safety and sustainable management. The services offered range from individual offers to tailor-made packages. For example is our service package Greenloop since 2008, has enabled customers to recycle electronic chemicals, such as solvents, which are recycled for other applications.



- Regular sustainability communications

- Added value services and expertise

In 2008, we implemented 196 sustainability projects for our customers aimed at expanding and strengthening customer relationships through sustainable business. **More information on this topic at basf.com/success_e**

Eco-Efficiency Analysis and SEEBALANCE

The screenshot shows the BASF Sustainability website interface. At the top, there is a navigation bar with links for 'Über uns', 'Produkte & Märkte', 'Innovationen', 'Sustainability', 'News & Media Relations', 'Investor Relations', and 'Karriere'. A search bar is located on the right. Below the navigation is a large banner with the word 'Sustainability' and a group photo of people. A sidebar on the left contains a menu with items like 'Home', 'Sustainability', 'Pressemittlungen', 'Grundwerte und Compliance', 'Management und Instrumente', 'Ökoeffizienz-Analyse', 'Ökonomie', 'Gesellschaft', 'Dialog', and 'Global Compact'. The main content area features a 'Sustainable Development' diagram with three interconnected circles: 'Grundwerte und Compliance', 'Management und Instrumente', and 'Ökoeffizienz-Analyse'. To the right of the diagram is a 'Global Compact' section with three radio buttons for 'Ökonomie', 'Ökologie', and 'Gesellschaft'. At the bottom right, there is a 'Aktuell' section with a date '30. Mär. 2004' and a 'Service' section with a contact link to the Sustainability-Center. A footer at the bottom right contains the BASF logo and the text 'The Chemical Company'.

Sustainable Development
NEWSLETTER

BASF's Participation in existing Sustainability Networks

- Voluntary initiative by the chemical industry
- Global initiatives
- Business driven initiatives
- NGOs



Responsible Care



WE SUPPORT



World Business Council for Sustainable Development



Forum Nachhaltige Entwicklung der Deutschen Wirtschaft



Forum for the Future



BASF is listed in the leading sustainability indexes and funds:



FTSE4Good



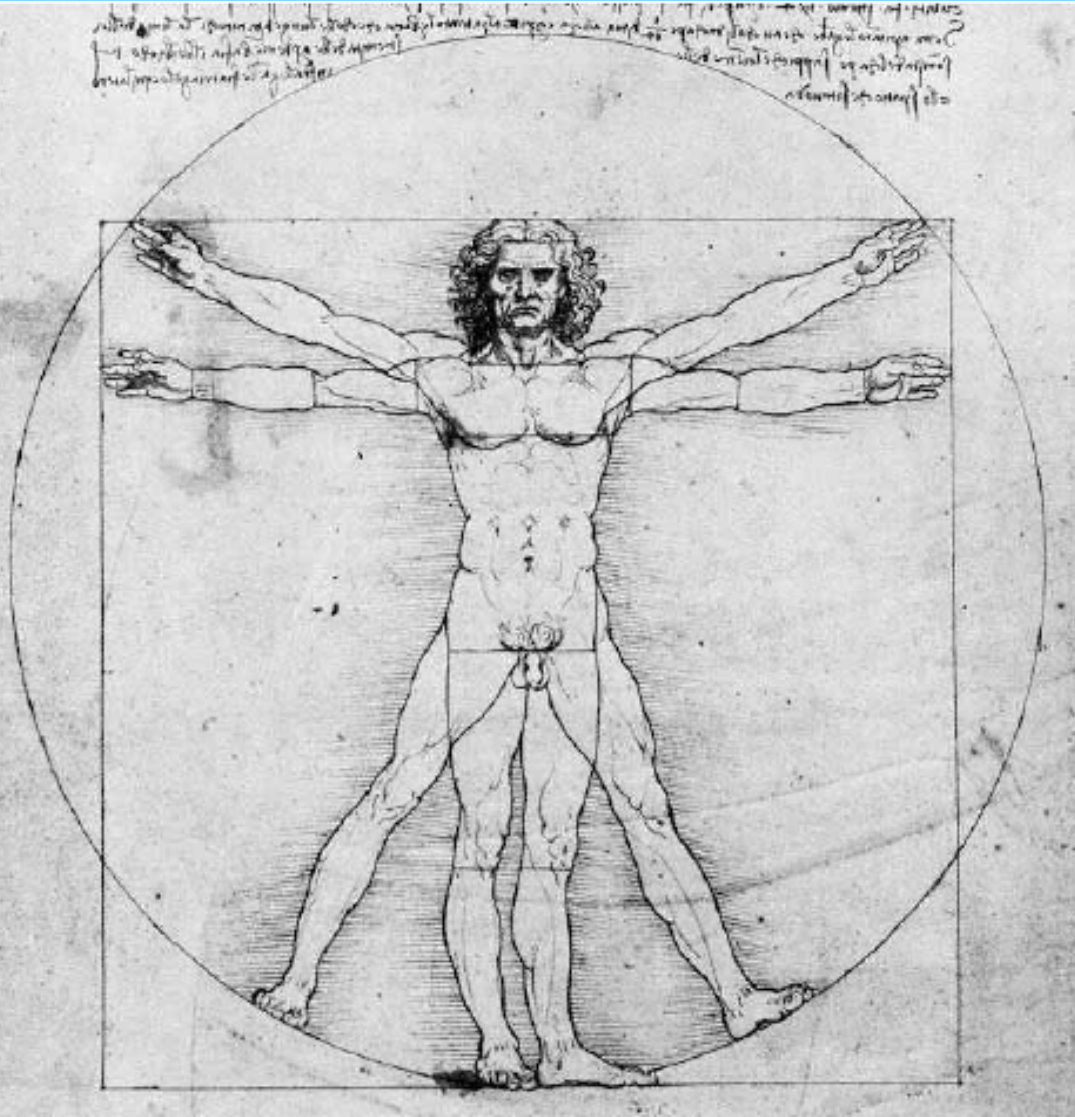
- Dow Jones Sustainability Indexes (DJSI)
 - With the world's leading sustainability-driven companies that implement sustainability operationally.

- FTSE4Good Indexes
 - Include companies with good records in corporate social responsibility.

- STOREBRAND SRI Funds
 - Contain companies with good environmental and social performance.

- (...)

Some needs do not change...



- Air
- Food
- Water
- Moderated environment
- Sanitation
- Social

The brand issue...

Questions?

