# THE CASINO CARBON FOOTPRINT, THE 1ST COMPLETE ENVIRONMENTAL LABELLING SCHEME IN FRANCE



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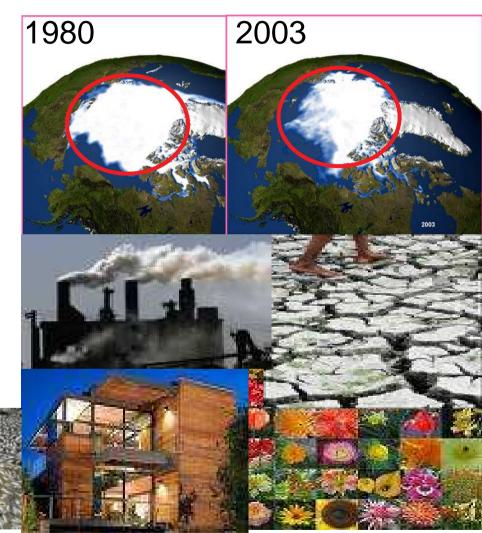


# Why worry about environmental matters?



- The following issues must be faced:
- Climate change
- End of petrol
- Management of water
- Decreasing biodiversity
- World population growth

To achieve sustainable development, it will be necessary to focus on "environmental excellence" in coming years.





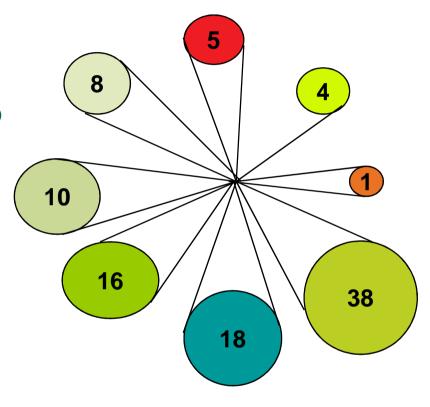
# Casino and environmental actions.

Greenhouse gases emitted as a result of our French activities, analysed using the Bilan Carbone® methodology (percentage values):

France: 553 million metric tons of CO<sub>2</sub>

Casino France: 1.3 million metric tons of CO<sub>2</sub>

- Customer travel
- Refrigerant emissions
- Goods transport
- Energy consumption
- Other
- End-of-life of direct waste
- Equipment, building and vehicle depreciation
- Employee travel





## Casino and environmental actions.

✓ Goods transport (16% of our greenhouse gas emissions): Continuously optimised as a result of deploying GPS tracking and renewing the tractor unit fleet with new-generation units (the effect of "Euro 5" engines)



✓ Refrigeration equipment (18% of our greenhouse gas emissions): the mandatory replacement of old-generation refrigerants before 2010 provides a real opportunity for us demanding that our refrigerationists improve the sealing of our cooling circuits and reduce our emissions.





# Casino and environmental actions.

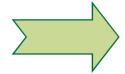
We have gained expertise enabling us to optimise our packaging

#### Chocolate mousse

Action: Eliminating the cardboard sheath

Saving: 16g of cardboard per multi-pack







## **SOME DATA:**

> 312 metric tons saved in 2006 and 2007.

Target at the end of 2008: 700 metric tons.

> More than 1000 products have been or are being studied.



# **Sustainable Manufacturing and consumption**

- To promote products from reasoned farming, organic farming
- To develop and promote eco-friendly products
- IT'S NECESSARY TO SET UP ENVIRONMENTAL INFORMATION USEFUL TO SUSTAINABLE CONSUMPTION'S EMERGENCE





# Casino's objectives

- Two major objectives:
  - Informing consumers of the environmental impact of the products they consume daily and helping them to act ecologically
    - through clear, relevant information enabling them to become players in their consumption
  - Improving the environmental quality of Casino products
    - through a global project actively involving all areas of the company: Purchasing, Quality Assurance and stores
    - in partnership with suppliers, major corporations and small- and medium-sized businesses



# Listening to consumer expectations



# I Two primary objectives

- Optimising understanding of environmental information
- Building consumer support for the approach

## Several consumer surveys

- Nearly 1,000 people questioned in the first 6 months:
  - Group sessions to improve our understanding of perceived ideas and preferences
  - Large-scale assessment of several potential ways of presenting the information

# Key lessons to be considered

- Considerable demand for learning through daily consumption products
- Demand for information that is simple to understand at first sight...
  - ...while also offering consumers more complete information if they require later
- A need for a benchmark for the environmental information...
  - ...while avoiding the introduction of potential finger-pointing



#### .... June 2008: the Casino Carbon Footprint is born



- The Casino Carbon Footprint is calculated from the greenhouse gases emitted as a result of EACH Casino brand product during the 5 key stages of its life cycle
  - Production stages (agricultural in the case of food products)
  - Manufacture of the product
  - Transport, from the field to the Casino warehouses
  - Packaging, from raw material extraction to recycling
  - Distribution, from the Casino warehouses to the consumer's home.
- I The calculation method has been developed scientifically by the independent Bio Intelligence Service agency and approuved by ADEME
- The carbon footprint is expressed as the equivalent number of grams of CO<sub>2</sub> generated per 100g of product



# Calculation method: Agricultural Stages Footprint





- What are we trying to calculate?
  - The greenhouse gases emitted as a result of the methods of growing and rearing the ingredients used in food products, or extracting the raw materials in the case of other ingredients.
- Which data are used?
  - Data from life cycle analysis standard literature.
  - Calculated from each ingredient in the recipe, so that the emissions are proportional to the quantity of the ingredient used in the recipe.



# **Calculation method: Production Footprint**





- What are we trying to calculate?
  - The quantity of greenhouse gases emitted during the product's production by the manufacturer.
- Which data is used?
  - Energy consumption of production plants that manufacture the Casino products.

or

 Data provided by Bio Intelligence Service, from life cycle analysis standard literature.

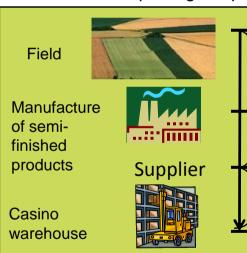


# **Calculation method: Transport Footprint**



#### What are we trying to calculate?

Greenhouse gases emitted as a result of
 transporting the product from the field to Casino warehouses.



<u>From field to supplier</u>: average distance travelled by all of the product's components (ingredients, semi-finished products and packaging) proportional to their weight

- from the field to the supplier, in the case of ingredients and semi-finished products.
- from the manufacturer to the supplier, in the case of packaging (primary, multi-pack and palletising)

<u>From supplier to Casino warehouses</u>: average distance travelled by the finished product and its packaging from the supplier to the Casino warehouses, proportional to the delivered volumes per warehouse

#### Which data is used?

 Emission factors produced using the Bilan Carbone<sup>™</sup> (carbon footprint) method for each means of transport used for each element of the product's composition.



# **Calculation method: Packaging Footprint**





- What are we trying to calculate?
  - The greenhouse gases emitted as a result of raw material extraction, production and end-of-life processing of all of the product's packaging: primary, multi-pack and palletising.
- Which data are used?
  - Emission factors mainly produced using the Bilan Carbone<sup>™</sup> (carbon footprint) method according to the weight and material used in each part of the product's packaging.



# **Calculation method: Distribution Footprint**



## What are we trying to calculate?

- The greenhouse gas emissions
   generated at each stage of the product's distribution
  - Warehouse operations
  - Transport between warehouses and stores
  - Store operations
  - Transport between stores and customers

#### Which data is used?

- The product's greenhouse gases emissions listed by Casino Group in producing its Bilan Carbone<sup>TM</sup> (carbon footprint), making a distinction between fresh/frozen products and those stored at room temperature.
  - Emissions due to refrigerant leaks have been allotted only to fresh products.
  - Electricity consumption has mainly been allotted to fresh products.
  - Other emissions have been allotted to all products in stores
- Emissions are calculated for 100g of the product according to its net weight.



# Displaying the Casino Carbon Footprint



## On the front of packaging

The Casino Carbon Footprint is represented by a **green leaf** with a number showing the quantity of greenhouse gases emitted per 100g of the product, together with a message inviting the consumer to see the reverse for more information.





# **Displaying complete information**

"Casino commits to the environment by working with its suppliers to reduce its greenhouse gases emissions "

#### **THE CARBON INDEX\***

is an estimate of the quantity of greenhouse gases (CO2...) released during the main stages of the product's life cycle (growing + manufacturing + packaging + transporting and retailing).

This method of assessment has been developed through collaboration with an independent organisation. The quantity is given as the equivalent in g of CO2 for 100 g of product.

\* Valid in Metropolitan France

#### THE CARBON INDEX of this product



Further information: www.produits-casino.fr or CUSTOMER SERVICE DEPARTMENT



Casino's undertaking

Casino Carbon Footprint's position

Casino Carbon Footprint definition

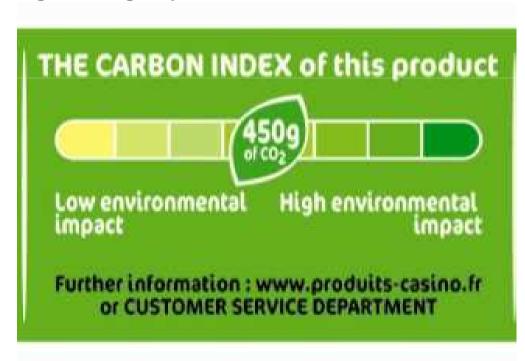
Recyclability indicator



# **Displaying the Casino Carbon Footprint**



The Casino Carbon Footprint is shown as a **green ruler** enabling consumers to rate the product's environmental impact on a graduated scale defined in collaboration with the ADEME environment and energy management agency.





# **Recyclability information**

## On the reverse of packaging

A two-part diagram encouraging consumers to sort the packaging correctly and maximise its recyclability:

- The light-green side shows what percentage of the packaging will be recycled (as households currently sort their waste),
- The dark-green side shows what percentage could be recycled if all consumers sorted their waste properly.





# **Deploying the Casino Carbon Footprint**



- Yogurt, natural x 4 glass pots
- Yogurt, vanilla x 4 glass pots
- Yogurt, lemon x 4 glass pots
- Ondilège soda, raspberry & cranberry flav
- Ondilège soda, apple & lychee flavour
- Pizza base mix
- Pancake mix
- Sponge cake mix, plain
- > annual sales of 1.5 million units















Eventually all Casino brand products



## **Consumer information channels**

- I Creating a special mini-website for the Casino Carbon Footprint
  - Two objectives
    - Completing the packaging's information if there is insufficient space
    - Providing more detailed information
  - Very rich content
    - Global approach
    - Calculation method
    - Criteria details
    - Product list
    - Ecological advice
    - Links to partners









# **Consumer information channels**

- I Use of innovative technology with Mobile Tag
  - Modern new tools
    - Intelligent barcode printed on the packaging
    - Mobile phone with camera (over 500 compatible models)
    - WAP mobile Internet site offering more product information
  - POS access to various information
    - Global approach
    - Calculation method
    - Criteria details
    - Product list





# **Consumer information channels**



- On-shelf callouts for identifying the products concerned
- Casino Carbon Footprint display posters
- Information brochures available to consumers





# I Awareness-building messages in our communications media

- Inserts in sales flyers
- Display in loyalty programme documents (mail-shots, magazines, etc.)
- Use of all available media











# A progressive approach

- A new way of envisaging the distribution business
  - Buy differently
  - Sell differently
- Casino undertakes to:
  - Reduce its products' environmental impact
  - Adapting its packaging's life cycle to use of environmentallyfriendly production and printing techniques.



# A progressive approach

Optimising the carbon footprint through a packaging change

#### Casino salmon lardon

The carbon footprint has changed from 940g to 880g of CO<sub>2</sub>

(Packaging and transport change)

= 14.5 metric tons/year

Differences in impact depending on the supplier's location:

#### For a can of an identical product

- 225g of CO<sub>2</sub>, transported only by truck from France
- 235g of CO<sub>2</sub>, transported by boat and truck from India
- 305g of CO<sub>2</sub>, transported only by truck from Europe (Ukraine)



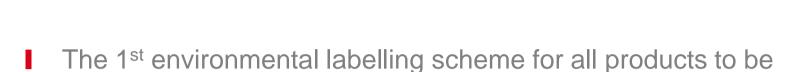
## A progressive approach



- Organising a supplier forum in june 2008 that will shortly bring together the 500 suppliers of Casino brand products
  - Objective: to present the labelling approach that Casino has introduced
- Providing Casino's manufacturers with an IT tool enabling them to calculate their products' packaging, transport and distribution footprints themselves automatically
  - Objective: to enable companies to become involved in a continuous improvement process and be competitive at the environmental level, regardless of their size
- Setting up a carbon footprint research centre to enable the Group to work in detail on improving each item, in collaboration with our suppliers
  - Objective: to provide the manufacturers with active follow-up in the new field of mass-consumption product eco-design



# **Summary: the Casino Carbon Footprint**



- The 1<sup>st</sup> labelling to incorporate 5 key stages of the product's life cycle and its recyclability aspects
- Consistent with Grenelle Environment Round Table conclusions
- Enables consumers to act daily to protect the environment
- Encourages the Casino Group to progress

deployed at a national scale

