



**ECO-INNOVATION**  
WHEN BUSINESS MEETS THE ENVIRONMENT

# Eco-innovation

## Closing the gap between research and markets

**EACI, European Commission**  
**Dr Theodoros Staikos,**  
**Project Officer**

First Workshop SATURN project -  
11 March 2010, Eurogress Centre, Aachen

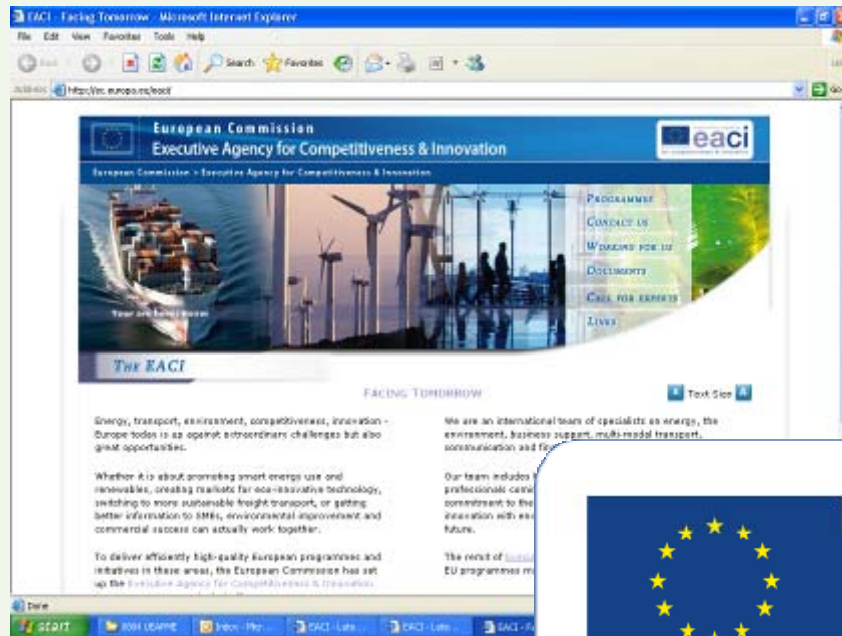


<http://ec.europa.eu/environment/etap/ecoinnovation>



**ECO-INNOVATION**  
WHEN BUSINESS MEETS THE ENVIRONMENT

## Who are we?



<http://ec.europa.eu/eaci>



EUROPEAN COMMISSION

executive agency  
**eaci**  
for competitiveness & innovation

First Workshop SATURN project - 11 March 2010, Aachen



<http://ec.europa.eu/environment/etap/ecoinnovation>



**ECO-INNOVATION**  
WHEN BUSINESS MEETS THE ENVIRONMENT

## What do we do?



**MARCO POLO**  
NEW WAYS TO A GREEN HORIZON



**ECO-INNOVATION**  
WHEN BUSINESS MEETS THE ENVIRONMENT



*Business Support on Your Doorstep*



First Workshop SATURN project - 11 March 2010, Aachen



<http://ec.europa.eu/environment/etap/ecoinnovation>

## How do we define eco-innovation in market replication?

- **New services:**  
greening businesses
- **New processes:**  
cleaner production
- **New management methods, new technologies and products**

**« All forms of innovation reducing environmental impacts and/or optimising the use of resources »**

First Workshop SATURN project - 11 March 2010, Aachen



## First Application and Market replication projects ~200m€million

- Aim at bridging the gap between Research & Development and commercialisation
- Support projects concerned with the first application or market replication of eco-innovative techniques, products, processes or services, which
  - ▶ due to remaining risks need incentives to penetrate significantly the market.
- Projects should aim at reducing environmental impacts, increasing resource efficiency or improve environmental performance of enterprises.
- Create and enlarge markets, with a strong emphasis on SMEs

**Good for business, good for the environment**

First Workshop SATURN project - 11 March 2010, Aachen



## CIP Market replication initiative. What's in it for SMEs?

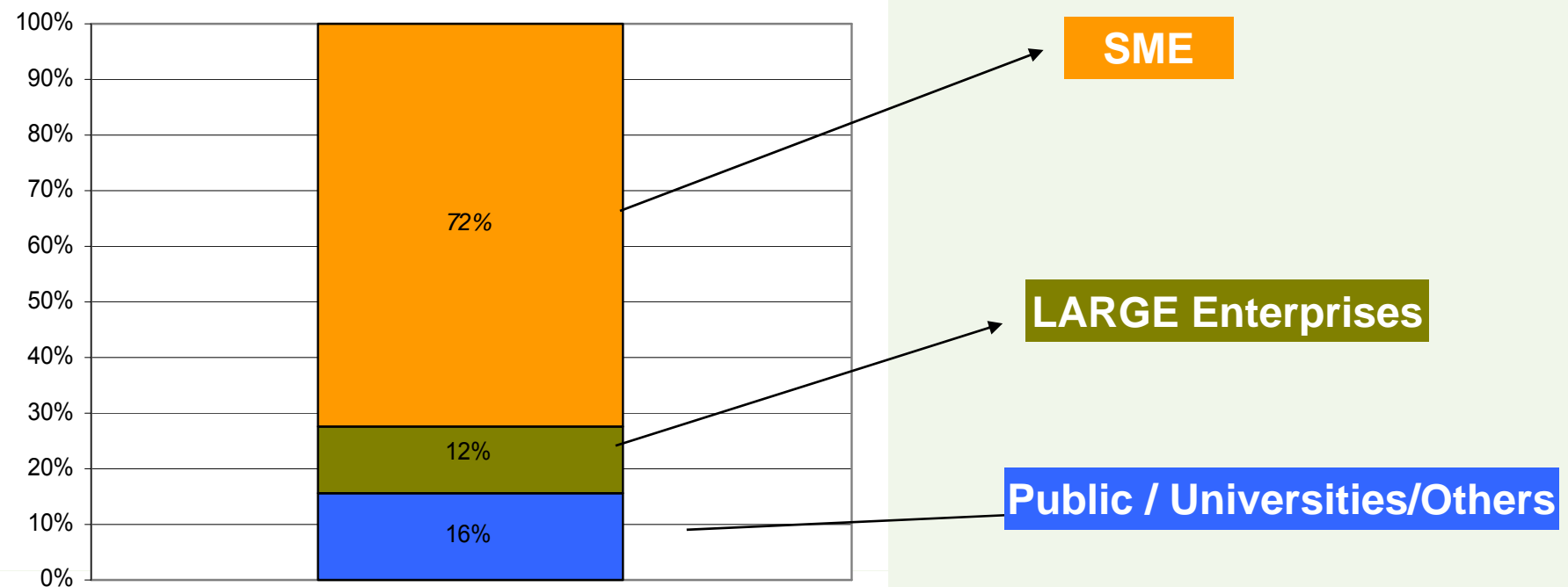


- Risk sharing for green ideas (50%)
- Market orientation
- Direct funding (no intermediaries)
- Grants – no loans
- Multiple partnership not required – but EU added value important (this year half of the proposals were multinational and this rate went up to 3/4 in the approved proposals)
- Relatively short timing between proposal submission and the contract

First Workshop SATURN project - 11 March 2010, Aachen



## Call 2009 – SMEs (selected projects)



First Workshop SATURN project - 11 March 2010, Aachen





## Eco-innovation is a cross-cutting issue but we have defined four (non exclusive) priorities

- **Materials recycling**: Innovative recycling products, new recycling solutions, better sorting processes...
- **Buildings**: Sustainable construction materials, innovative ways of reusing and recycling of construction and demolition wastes...
- **Food and drink sector**: Cleaner production processes aiming at higher resources efficiency, reduction of waste and increasing recycling and recovery, high efficiency in the water process ...
- **Greening business and smart purchasing**: Integration of eco-innovation in supply chains and purchasing, innovative approach aiming at reducing environmental impacts, or improve environmental performance of enterprises.

Currently working in the fine-tuning of the 2010 Call priorities

First Workshop SATURN project - 11 March 2010, Aachen



<http://ec.europa.eu/environment/etap/ecoinnovation>

## Indicator requirements

- **Improved environmental performance**
  - CO<sub>2</sub> emissions
  - Particulate matters
  - Tons of waste diverted from landfills
- **Better use of natural resources**
  - Reduced water consumption
  - Energy from RES and energy efficiency
  - Resource efficiency
- **Economic Performance / Market Replication**
  - Market size in million Euros
  - Number of start ups
  - Leverage factor / expected revenues
  - Patents

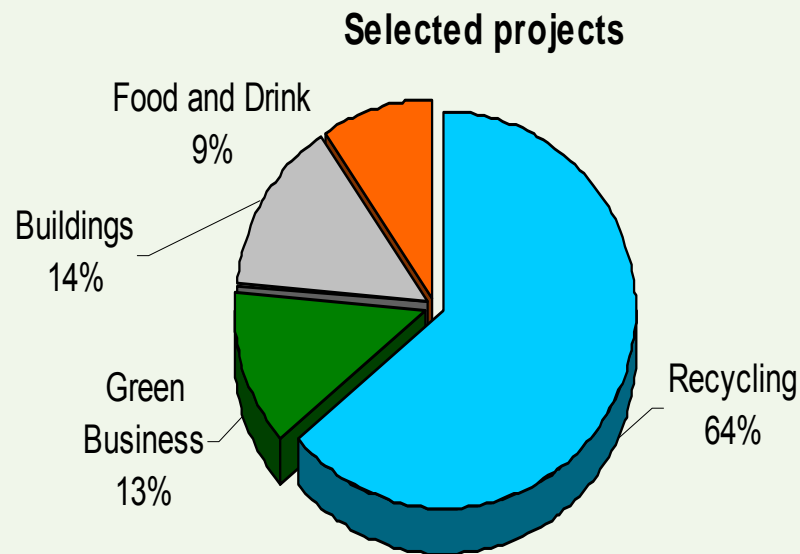
First Workshop SATURN project - 11 March 2010, Aachen





**ECO-INNOVATION**  
WHEN BUSINESS MEETS THE ENVIRONMENT

## 2008 Eco-innovation Call (1<sup>st</sup> Call) by sector



- 44 out of 134 project proposals selected
- Around 800.000€ per project requested EC funding
- We fund up to 60% of the total project costs
- €28 million EU funding to mobilise €60 million
- Cross cutting approach including services, products, processes and business

First Workshop SATURN project - 11 March 2010, Aachen



<http://ec.europa.eu/environment/etap/eecoinnovation>

## Overview of Materials Recycling

### ■ Types of approved projects:

#### ▶ **New Recycling Processes/Technologies**

- new sorting methods, clean tanning, recovery of metals, ceramic, etc.

#### ▶ **New Products from Recycled Materials**

- Textiles, ceramic, metals and tyres are emerging as the most interested sectors.

#### ▶ **New Recycling Services**

- reuse and recycling of used carpets, vegetable oil collection, grey water recycling, etc.

First Workshop SATURN project - 11 March 2010, Aachen



## ECO-RUBBER

- Follow-up of a successful FP6 project (CRIOSINTER)
- Industrialisation of an innovative tyres recycling and rubber sintering process to produce eco-friendly urban furniture
- To develop an Eco-label specification for the produced products



First Workshop SATURN project - 11 March 2010, Aachen



## Overview of the Food & Drink Sector

### ■ Types of approved projects:

- ▶ **Industrial waste water treatment: meat, dairy, wine, olive and fruit juice bottling industries**
  - phytoremediation
  - combined filtering systems
  - recipe that reduces sewage sludge surplus from treated water
- ▶ **New fertilizers and other valuable by-products such as poliphenols for the cosmetic industry**
- ▶ **Food packaging and labelling**
  - sustainable materials for bottles, bottle stoppers, nets, and new laser mark technology to replace paper labels
- ▶ **Eco-innovation in logistics**
  - New ICT technologies aimed at the monitoring of food conditions during transport

First Workshop SATURN project - 11 March 2010, Aachen



## Winenvironment: reducing the impact of wine production

- **Answer to the wine producers needs:**
  - ▶ Application of 2 technologies to reduce water consumption in the cellars (filtration and recovery system)
  - ▶ Implementation of an environmental and quality management methodology for vine cultivation and
  - ▶ wine production
- **3 demonstrations in 5 countries**
- **Environmental objectives:**
  - ▶ reduce by 20% the use of phyto sanitary products and pesticides
  - ▶ reduce the use of water in the cellars by 30%



First Workshop SATURN project - 11 March 2010, Aachen



## Overview of Green Business

### ■ Types of approved projects:

#### ▶ New products

- Biobased binders, plastics or dyes

#### ▶ New production processes

- For the ceramic, leather or motorcycle industry

#### ▶ New EMAS implementations and greening services

- Tourism, printing, ports, production of electronic and electrical equipment

#### ▶ Certification schemes

- Forestry, plastics recycling

First Workshop SATURN project - 11 March 2010, Aachen



# EU CERTPLAST

## European certification of plastics recyclers



- **Objective:**  
guarantee reliable quality of recycled plastics
- **Benefits:**  
waste collectors have a standard EU tool to guarantee that delivered waste will be recycled in a sustainable manner; increased transparency also for consumers

First Workshop SATURN project - 11 March 2010, Aachen



## Overview of the Building Sector

### ■ Types of approved projects:

- ▶ **Construction materials which reduce consumption of resources and production of waste**
- ▶ **Technologies for reuse and recycling of debris and waste materials**
- ▶ **Insulation materials using recycled waste**
- ▶ **Efficient use of water**
- ▶ **Sustainability index and green label for concrete**

First Workshop SATURN project - 11 March 2010, Aachen





**ECO-innovation**  
WHEN BUSINESS MEETS THE ENVIRONMENT

## INSULA TFH: pre-insulated wall panels from recycled materials

- Low cost process to produce pre-insulated timber frame panels with cellulose fibre insulation.
- Pulp processing; controlled filling into wall panels; delivery on site.
- Environmental benefits:
  - ▶ Recycling of waste paper and wood
  - ▶ Materials with low embodied energy
  - ▶ Reduced transport
  - ▶ Reduced packaging and landfill



First Workshop SATURN project - 11 March 2010, Aachen

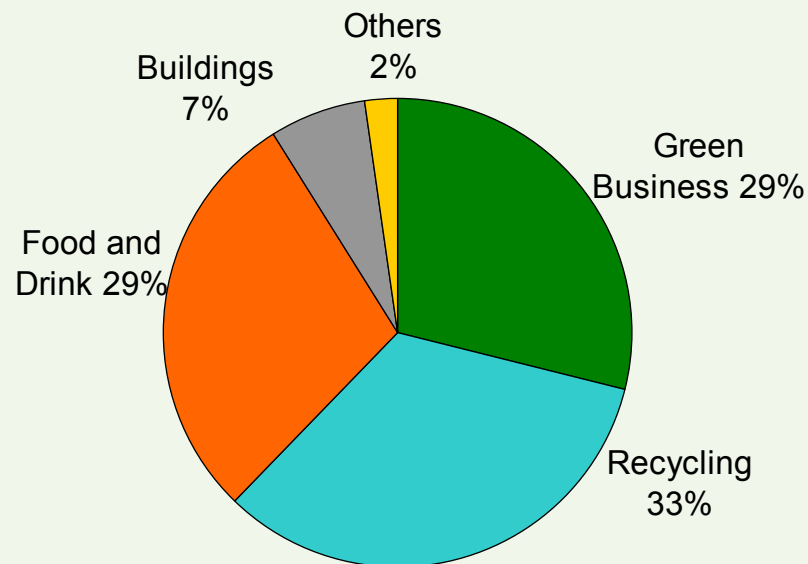




**ECO-INNOVATION**  
WHEN BUSINESS MEETS THE ENVIRONMENT

## Eco-Innovation Call 2009 results

Selected projects



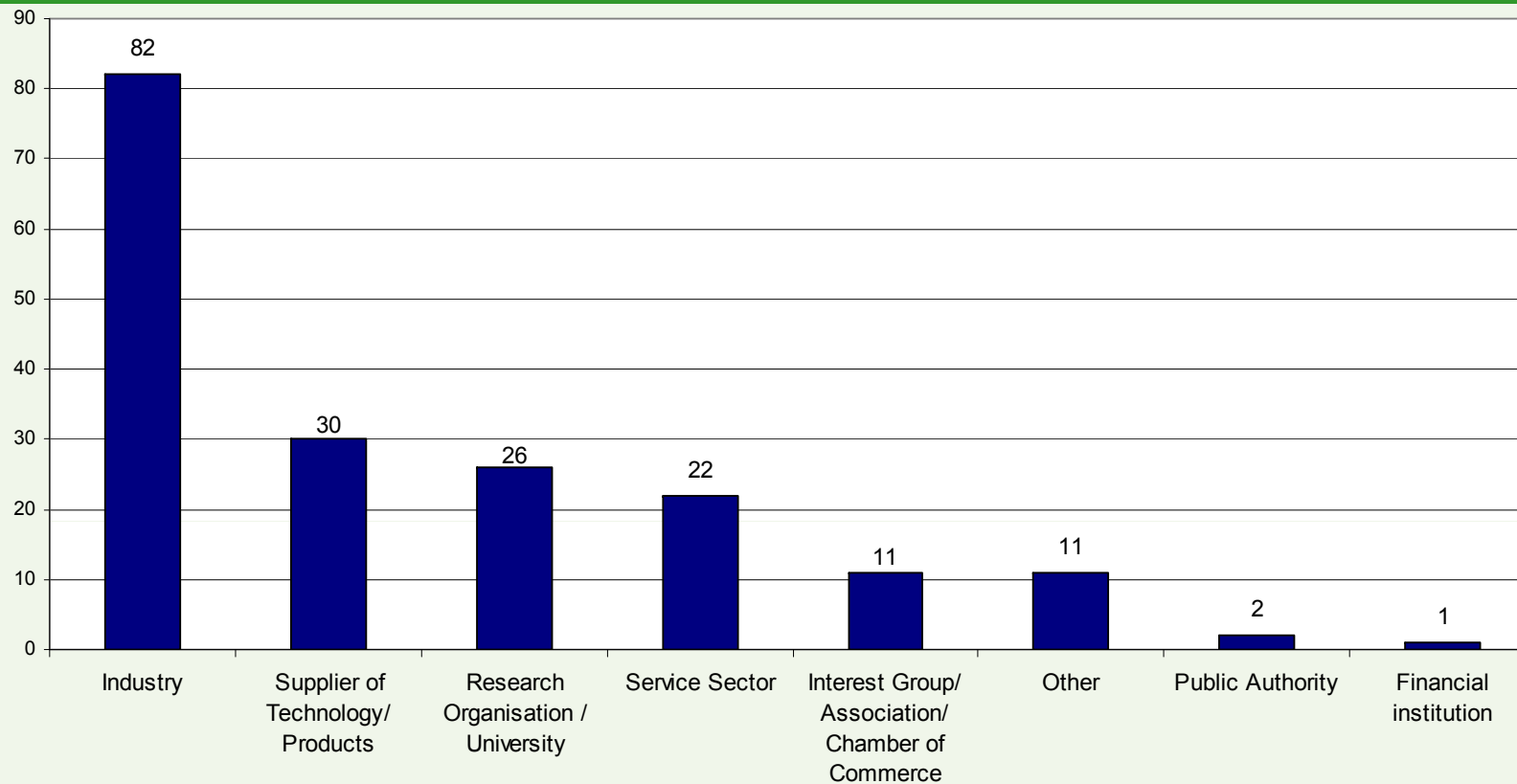
- 56 projects selected out of 202 coming from all over Europe.
- Only 45 proposals will get funded due to budget constraints (11 projects in reserve list)
- More than 70% of the beneficiaries are SME's
- EC Co-financing: 50% of the total project costs.
- €32 million EU funding to mobilise €64 million
- Cross cutting approach including services, products, processes and business

First Workshop SATURN project - 11 March 2010, Aachen



<http://ec.europa.eu/environment/etap/ecoinnovation>

## Call 2009 – Beneficiaries (selected projects)



■ **~85 % private sector participants**

First Workshop SATURN project - 11 March 2010, Aachen



## Next Steps

- **Next Call 2010 to be launched in April 2010**
- **Priorities will be fine-tuned based on the outcome of the 2009 Call**
- **Eco-innovation Info-day on 13 April in Brussels**
- **Organise Eco-innovation Info-days across Europe**

First Workshop SATURN project - 11 March 2010, Aachen



## Conclusions

- After two years working on market replication Eco-innovation, we can confirm that there is a market absorption capacity in Europe
- Our funding instrument interest SMEs and we are able to reach them (70% participation)
- Despite the economic situation, 2009 Call attracted more than 50% proposals than the previous year.
- Challenges in the short term would be:
  - ▶ To manage expectations (~30M€ per year)
  - ▶ To learn from successes and failures.
  - ▶ To quantify the environmental and market effect of the Eco-innovation market replication instrument.

First Workshop SATURN project - 11 March 2010, Aachen





**ECO-INNOVATION**  
WHEN BUSINESS MEETS THE ENVIRONMENT

# Eco-Innovation website as source of information

- Newsflash subscription
- Call for proposals
- Guide for proposers
- Frequently asked questions
- Info days
- Contact



<http://ec.europa.eu/ecoinnovation>



<http://ec.europa.eu/environment/etap/ecoinnovation>



**ECO-INNOVATION**  
WHEN BUSINESS MEETS THE ENVIRONMENT

**Thank you very much for your attention**

**For more info:**

**<http://ec.europa.eu/ecoinnovation>**

**[eaci-eco-innovation-enquiries@ec.europa.eu](mailto:eaci-eco-innovation-enquiries@ec.europa.eu)**



<http://ec.europa.eu/environment/etap/ecoinnovation>