

# **Climate change strategy and ICT sustainable solutions at Telecom Italia**

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# Telecom Italia's strategy to combat climate change

**The fight against climate change is a priority for Telecom Italia that has developed a threefold strategy based on:**

- ▶ **reducing its own direct and indirect emissions of greenhouse gases**
- ▶ **offering products and services that contribute to reducing emissions**
- ▶ **contributing to spreading a culture based on a correct approach to environmental issues by means of internal communication initiatives (e.g. a **web based training plan**) or external ones (e.g. the **Carbon Meter**)**

## 2011 environmental results<sup>(\*)</sup>

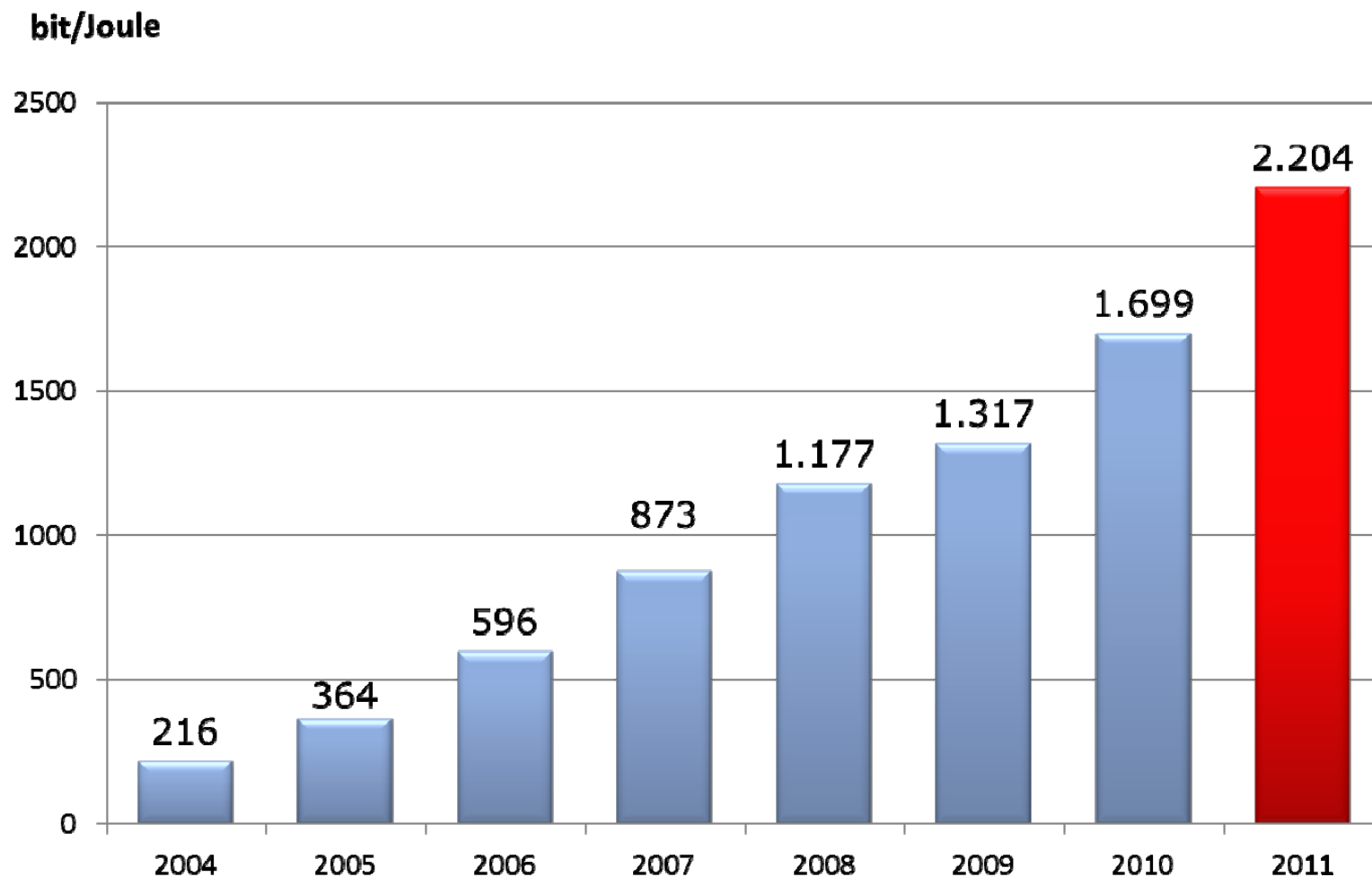
|              |                                                 |
|--------------|-------------------------------------------------|
| <b>8.5%</b>  | <b>reduction in the energy used by vehicles</b> |
| <b>6.3%</b>  | <b>decrease in electricity consumption</b>      |
| <b>29.7%</b> | <b>increase in the eco-efficiency indicator</b> |
| <b>6.2%</b>  | <b>reduction in carbon dioxide emissions</b>    |
| <b>9.6%</b>  | <b>reduction in paper purchased</b>             |

(\*): 2011 versus 2010 data

## **Eco-efficiency indicator (1/2)**

$$\text{Indicator} = \frac{\text{Transmitted traffic (BITs)}}{\text{Energy consumption (Joule)}}$$

## Eco-efficiency indicator (2/2)



# Smart Services

## MOBILITY



## ENVIRONMENT



Smart  
SERVICES

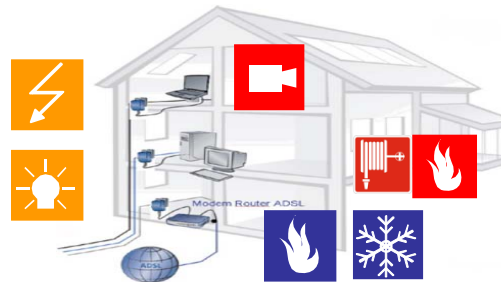
## EMERGENCY



## SECURITY



## BUILDING



## COMMUNICATION



## Smart Inclusion

- ▶ A “Smart Care” touchscreen terminal is installed at the bedside of some Italian hospitals
- ▶ Hospitalized children are able to participate actively in school classes, play recordings of the lessons they have missed, do their homework and use individual self-tuition courses. Moreover, the children can communicate with their families through video calls and access various entertainment programmes (cartoons, films, documentaries and sport)
- ▶ The medical staff can use the system to display all the clinical files of patients with the option of updating them



## My Doctor@Home

- ▶ It is a remote diagnostics service that allows patients suffering from several diseases to measure their clinical parameters from home or from remote locations (e.g. drugstores)
- ▶ The system consists of a technology platform and a software configured on the patient's mobile phone (or on PC / tablet) and on the medical staff's PC
- ▶ According to doctor's schedule, patients receive on their mobile phone reminders about the measurements to be made. They are enabled to record their parameters thanks to portable electrical devices with bluetooth interface. Then, through their mobile phones, they are able to send data automatically to the network platform



**Benefits:** reduction in the number of patients in hospital for chronic diseases, increase of health data quality, availability of health data in real-time and reduction of costs for the healthcare provider. In addition, the service allows a remarkable improvement in the quality of life of patients and the reduction of CO<sub>2</sub> emissions generated by the journeys to the doctor



## Green@Home

**This system enables domestic appliances to be interconnected via radio, using smart devices and/or smart plugs. It allows:**

**real time detection and monitoring of electricity consumption:** from personal Wi-Fi terminals the energy costs of using various products can be displayed and the system advises when is the best time to use them, optimizing both the costs and the respect for the environment. Awareness encourages behaviour geared towards energy saving

**standby management,** automatically disconnecting appliances that are not in use from the electricity network and contributing to families' energy saving

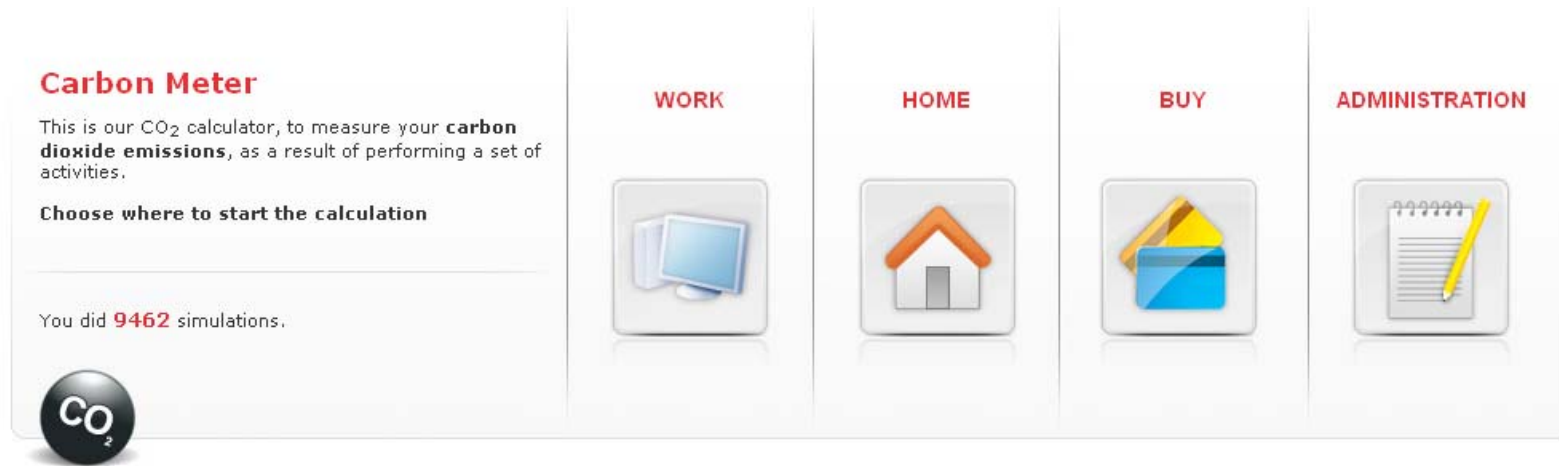
**the control and management of domestic appliances** and various devices when they reach peak energy consumption, avoiding overloading the home network with the consequent risk of a power cut or the need to switch to higher power supplies

## **Telecom Italia Green**

- ▶ **Even though in Telecom Italia we do not manufacture any piece of equipment, we provide our suppliers with guidelines and requirements**
- ▶ **A new green line of products was indeed developed starting from the definition of specifications for power consumption, material choice, disassembling procedures, packaging (example: “Modem Adsl Wi-Fi N”)**
- ▶ **The “Telecom Italia Green” brand will be extended to other environmental friendly devices and to the electric vehicles (Eco Cars) included in the company fleet**



# The Carbon Meter



It is available on our blog on sustainability issues: [avoicomunicare.it](http://avoicomunicare.it)

It allows to find out how much carbon dioxide is produced by our everyday activities

It allows also to discover how we can reduce our carbon footprint through small changes in everyday actions and the use of ICT solutions (video-conferencing or broadband connections for on line shopping and other transactions)

## Web based training plan

