



## Implementing “zero impact” invoices



### The business case

Committed to neutralize the environmental impacts associated with its paper invoicing process, EDP has engaged in a compensation program based on (1) life cycle assessment and (2) externalities compensation through agro-forestry good practices that restore the ecosystem service originally impacted by invoicing activities.

### The issue

#### The environmental impact of invoicing

EDP – Energias de Portugal, an electrical utility company, distributes around 34 million paper invoices per year in Portugal, a quantity that has non-negligible environmental impacts. To mitigate these impacts, EDP has first committed to reduce the number of invoices mailed out every month. In 2007, it started to promote on-line invoice services, and by the end of 2009, more than 500.000 clients had joined the initiative. The company was willing to go further and to compensate all the impacts resulting from its paper invoicing process, through an innovative environmental compensation methodology.

### The response

#### Life Cycle Assessment methodology to assess impacts on ecosystems

The approach, called “Zero Impact” has been developed at the Lisbon school of engineering – *Instituto Superior Técnico*. It goes beyond the offset of CO<sub>2</sub> emissions in voluntary markets (already common worldwide), as it aims to quantify and cover all negative environmental externalities of the life cycle of paper invoices. The software used for this Life Cycle Assessment (Sigma Pro 6.0) accounts for the resources, energy and equipment used for generating invoices (paper, plastic and printing process), as well as for invoices delivery (fuel).

The offset initiative consists mostly in agro-forestry good practices, which are implemented in rural areas. The approach is as follows:

- 1) Compensation of environmental impacts is carried out in the same ecosystem service category and, whenever possible, in the same location.
- 2) When not possible, compensation is carried out in another ecosystem service category.

The compensation initiatives cover most of the impacts on ecosystem services, as for example: water used for paper production, or soil protection provided by the agro-forestry good practices implemented in the vicinity of EDP’s activities.

The remaining negative impacts not covered by the agro-forestry initiative are compensated through the CO<sub>2</sub> markets, representing approximately 1120 tons of CO<sub>2</sub> credits.

### The results

#### An ecosystem services approach at the basis of success

The methodology used has proved to have clear biodiversity conservation results. Compensation activities included not only 9.800 m<sup>3</sup>/year of water savings through irrigation process optimization, 585 ha of agriculture best practice use, but also incorporated biodiversity conservation projects such as soil nest protection (691 ha) or protection of riverbed vegetation (2,1 km). It also helped reinforce relations with stakeholders and in particular local communities.

Its first implementation was a success and has led to its extension for another 3 years, allowing EDP to evaluate the perspective of making this approach a new business opportunity in the future by using biodiversity market mechanisms.



#### FURTHER INFORMATION

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