

PLANET

Environmental management

We include the environment into our business model and we work to adopt environmental criteria in our operations in order to reduce environmental risks and promote operational eco-efficiency

We are geographically very dispersed, so we have a particular need for uniform environmental management processes

We have an environmental policy applicable to all Telefónica companies and a global environmental management system that lets us ensure compliance with local environmental legislation and improve our management processes continually. While the environmental impacts of our operations are not intensive, we are highly dispersed geographically, making environmental management based on uniform processes highly necessary, and we group this effort around 5 principles:

- Measurement of environmental performance
- Global management of environmental risks
- Compliance with environmental regulations
- Environmental management system
- Eco-efficiency

Environmental KPIs: we measure our environmental performance using the relevant global management indicators (KPIs), applicable to all of Telefónica's operators. Based on these, we take decisions, identify potential environmental risks and measure the environmental impact of our operations in economic terms. [More info](#)

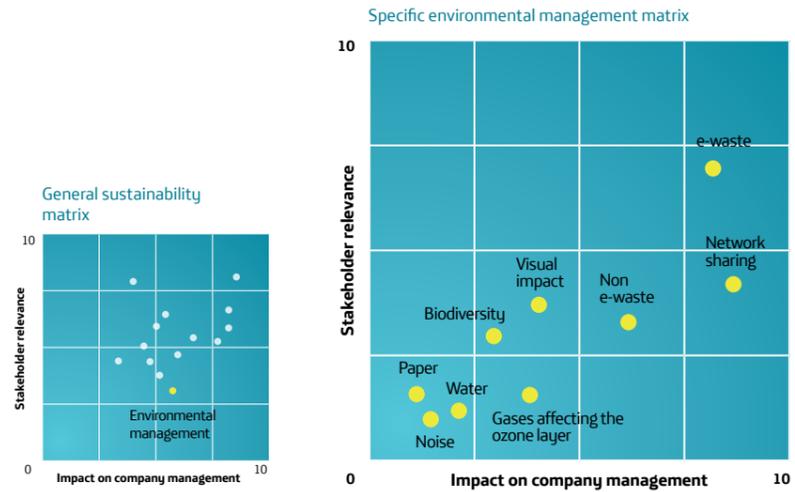
Environmental risks: we handle our environmental risks in terms of the global risk management model. Among the most notable



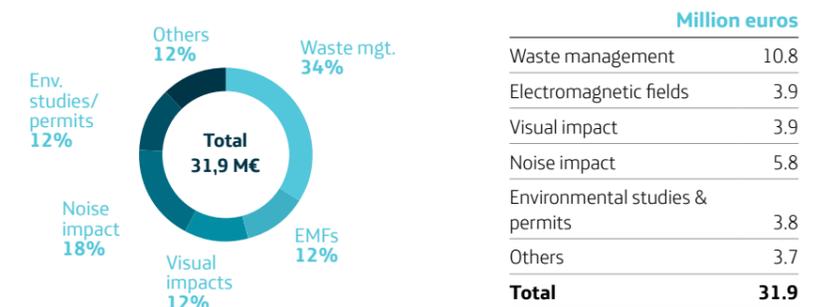
risks could be the existence of environmental liabilities, inadequate waste management, or the effect of climate change in our operations. Every year we place an economic value on our environmental risks.

Legal compliance: we comply with environmental legislation applicable to our operations. Should there not be appropriate legal frameworks, we work with the authorities and the sector to encourage standards and regulations that guarantee the environmental sustainability of our activities within reasonable management parameters.

Materiality matrix



Environmental management expenditure & investment



Environmental management system

Company	ISO 14001 Certific.	Company	ISO 14001 Certific.
Telefónica España*	☺	Telefónica México	☺
TIWS	☺	Telefónica Nicaragua	☹
Telefónica S.A.	☺	Telefónica Panamá	☹
Telefónica Argentina	☺	Telefónica Perú	☺
Telefónica Brasil	☹	Telefónica Venezuela	☹
Telefónica Chile	☹	Telefónica Uruguay	☹
Telefónica Colombia	☺	Telefónica Germany	☺
Telefónica Ecuador	☺	Telefónica UK	☺
Telefónica El Salvador	☹	Telefónica Ireland	☺
Telefónica Guatemala	☹	Telefónica Czech Rep. & Slovakia	☺

* Includes Telefónica Soluciones

Responsible network deployment

We manage the environmental aspects associated to our network infrastructure. Our environmental management is based on processes: before, during and after the deployment of our fixed and mobile networks. We work on the precautionary principle and in compliance with local environmental legislation.

In natural protected areas and of high environmental sensitivity we carry out detailed impact studies. We work on obtaining environmental permits for our operations, waste management, noise control, reduction of visual impact and monitoring electromagnetic fields.

For the deployment of new optical fibre or LTE networks, we make the optimal selection of sites for deployment, always encouraging infrastructure shared with other operators and technical evaluations to reduce the environmental impact of our infrastructure.

We also manage the electromagnetic fields (EMF) in our network, as another aspect of our Global Environmental Management System. This forces us to engage in public participation and community information during deployment, as well as to carry out measurements in the base stations. [More info](#)

Responsible network deployment in figures, 2013

Planning

- 8,700 environmental permits obtained to deploy the network
- 3.8 million euros on environmental studies and obtaining environmental permits

Construction

- 576 visual impact actions
- 3.9 million euros invested in visual impact actions
- 34,421 sites shared with other operators

Operation

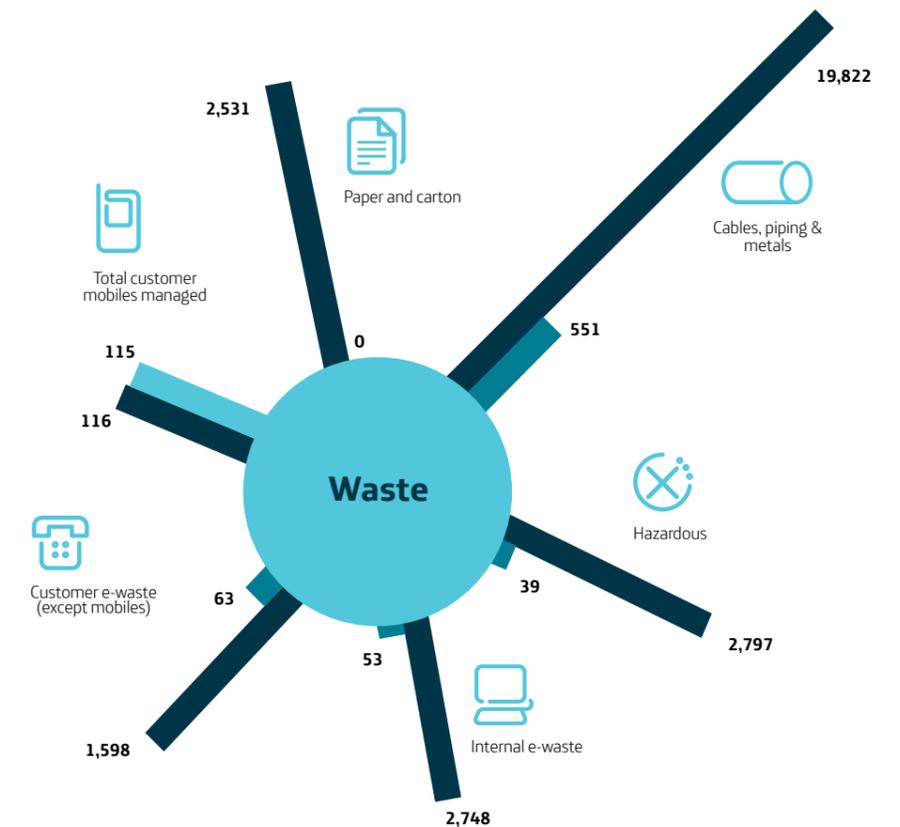
- 5.8 million euros invested in noise abatement
- 24,750 EMF measurements
- 3.9 million euros invested in EMF measurement

Decommissioning

- 20,372 tonnes of operational waste managed (cables, pipes, etc.)
- 1,672 tonnes of operational e-waste managed
- 37 million of revenues from operational waste management

Waste (tonnes)

- Recycled
- Tip or destruction
- Reused



Best practice



Iquitos: Responsible network deployment in Peru

During 2013 Telefónica Peru worked to bring broadband Internet and 3G mobile service to the capital of the Oriente department of Peru, Iquitos, with a project that crossed the extensive Amazon jungle. The route of the project was designed so as to skirt, without crossing, the Natural Reserves of Pacaya Samiria (the largest natural reserve in the country) and Alpahuayo Mishana. Passing close to a large environmentally sensitive area, an intensive programme of work was required, and this commenced in 2012. It included talks with the Peruvian Ministry for the Environment, a detailed environmental impact study, an environmental permit for the operation, energy generation using renewable energy systems, adaptation of the work so as to avoid the rainy season, and a broad process of citizen participation to explain the project to local communities.

[More info](#)

Best practice

Beacon project: Shared infrastructure in the United Kingdom

Telefónica UK and Vodafone UK have reached a network infrastructure sharing accord, leading to the creation of a map of 18,500 shared locations, which will offer joint 2G and 3G coverage in the country, with the objective of covering 98% of the population by 2015.

Telefónica UK has been advised by the global Networks and Operations department. Technology providers are Huawei, NSN and Ericsson and is expected the project would reduce the visual impact of the infrastructure. The project will allow reductions in the costs of operations, in obtainment of environmental permits, deployment of new infrastructure and electricity consumption. It is expected that there will be a fall of about 13% in electricity consumption, considering that around 2000 sites will be dismantled.



Operational eco-efficiency

Efficient use of water. Water consumption at Telefónica is controlled at the level of offices as we do not use this resource in our networks. During 2013, there was a reduction of 20% in total consumption, mainly because of actions on saving, the simplification of the number of buildings in Brazil and awareness-raising campaigns for employees.

Efficiency in paper consumption. During 2013, the Company's offices used 1,089 tonnes of new paper and 409 tonnes of recycled paper. We follow various practices at Telefónica aimed at reducing paper consumption, such as: centralised printing at specific sites, setting of printing quotas, and fomenting the use of recycled paper in offices.

Efficiency in waste management. Waste generation is one of the main environmental facets of our activity. The types of waste are

varied, but all are handled separately according to the risk they pose, and they are dealt with by duly authorised companies in compliance with environmental legislation; the order of priority in handling is: reduction, reuse and recycling. The most important are network and office electrical and electronic equipment, and the most hazardous is basically batteries in our case. In 2013 we handled 30,432 tonnes of waste (recycling and reuse) and we generated 40 million euros of income from sale of waste.

Energy and CO₂ management. The carbon management and the efficient use of energy in Telefónica are managed by the Climate Change and Energy Efficiency Office. We work in energy efficiency projects, renewable energy and emissions reduction activities in our value chain. See Energy and Climate Change chapter.

Best practice

Less paper at Telefónica Germany

New more efficient printing equipment has been installed at Telefónica Germany, which will also save energy. The new equipment works with a printing security card, personal to each employee, without which printing is not possible and which lets the device automatically eliminate print jobs that have not run from its spool. As part of its paper-saving policy, Telefónica Germany has reduced the number of printing, scanning and fax units by at least 50%.



Best practice

Telefónica Peru has carried out a project called Embajador Verde Recicla ('the green ambassador recycles'). The aim of the project was to publicise the existence of the external scheme *Reciclame* (recycle me) for collecting mobiles, chargers and accessories, to motivate our collaborators to recycle so as to look after the environment, raise awareness of the importance of recycling disused mobile devices and manage to increase the amount of equipment sent for recycling.

This project was structured as a test of skill between teams made up of Telefónica Peru collaborators from different departments. The aim of the competition was to collect the largest number of disused mobiles, batteries and other accessories. [More info](#)

E-waste management

We have an integrated policy for managing electrical and electronic waste (e-waste) based on the "3R" principles of eco-efficiency: Reduce, Reuse and Recycle. The principles of e-waste management at Telefónica are:

- Promote e-waste management models based on eco-efficiency principles and in accordance with the legislation in force.
- Support standards that reduce the generation of e-waste and improve the eco-design of this kind of equipment for telecoms services.
- Develop equipment purchase policies for our operations that facilitate reuse and recycling at the end of its useful life.
- Inform our customers and offer them environmentally responsible options for disposing of their unused devices.
- Monitor correct e-waste management by suppliers and authorised handlers.

Following these principles, we have developed systems of e-waste management for obsolete network equipment and we have had recycling and reuse programmes for customer equipment, including mobiles, ever since 2006.

In 2013, Telefónica disposed, for recycling, of around 2,800 tonnes of e-waste from networks and offices. This waste was delivered to qualified handlers, under a model of economic recuperation for recycling and reuse of materials.

The schemes designed by Telefónica are characterised by their promotion of joint work between specialised waste handlers and logistics companies, as well as manufacturers of mobile devices, with the intention of ensuring "extended responsibility" for efficient e-waste management. Among the challenges for Telefónica is that of correct handling of customer e-waste, before, during and after use.

In 2013, we put our emphasis on regulations and standards for correct e-waste management, above all in Latin America, given that not all our countries have suitable legislation in this area. We held two workshops on this subject: one in El Salvador [More info](#) and another in Ecuador. [More info](#)

Sources of e-waste in Telefónica

<p>Fixed & mobile network operations</p> <ul style="list-style-type: none"> ■ Switchboards, transmission ■ Antennas ■ RF equipment 	<p>Offices & logistics</p> <ul style="list-style-type: none"> ■ Computers ■ Telephones ■ Obsolete equipment 	<p>Residential & corporate customers</p> <ul style="list-style-type: none"> ■ Telephones ■ Routers ■ Switchboards ■ Computers
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Delivery to qualified waste managers
Collection of equipment by manufacturers
e-waste recycling & reuse programmes

Greening our value chain

Environmental control to providers. We are extending our environmental monitoring to suppliers and contractors to ensure correct environmental management at Telefónica. For this, as well as incorporating environmental clauses into all our contracts, we carry out activities of training and communication, and also audits to monitor our supply chain. The global environmental management system demands the performance of internal and external audits which ensure compliance with legal requirements and the environmental procedures defined by the Company at a global level. Indeed, Telefónica includes monitoring suppliers as part of our processes of environmental auditing. Further, we manage sustainability in the supply chain through a specific programme for the same.

Our employees. We are aware of the importance of our employees as a pillar in the correct environmental behaviour and performance of the Company. So, during 2013 we have continued to make efforts to involve all our staff in this and have carried out various activities.

- New Telefónica Green Intranet: In 2013, we launched the new global Green Intranet directed at employees, where they can find complete environmental information about the Group.
- Environmental training: in 2013, employees received 20,000 hours of environmental training.
- Environmental volunteering: thanks to the volunteering scheme of Fundación Telefónica, over 100 activities of environmental volunteering took place, involving more than 1950 Telefónica volunteers.

Our global environmental management system requires us to carry out internal and external audits of our suppliers



Best practice

Environment Day 2013, Telefónica District Plantation

Various Telefónica volunteers embarked on a day of planting trees, shrubs and aromatic plants in the area next to the corporate headquarters in Telefónica District. That day these eco-volunteers contributed to improving the landscape and the environment. [More info](#)