

Sustainable business

Enabling sustainable living for all

Our products and services make a real difference to people's lives around the world. This year we developed and launched a new vision that builds on our longstanding commitment to sustainability which will help more people to improve their lives.

Our vision is to unleash the power of Vodafone to transform societies and enable sustainable living for all.

Market context:

Many of the challenges faced in today's world demand a change in thinking and behaviour. In various different markets, our customers face pressure from food shortages, ageing populations and economic crises.

Goals:

We have a unique opportunity through our services to transform societies and enable sustainable living for all.

Strengths:

We have strong foundations and our technology is becoming ubiquitous, giving access to digital communications, and the services that we have developed, to people in many parts of the world.

Actions:

This year we developed and launched a new vision that builds on our longstanding commitment to sustainability which will help more people to improve their lives.

Progress:

Our Connected Agriculture research report, published in 2011, specifically identifies the opportunities for mobile to address challenges in world food supplies. Our 7.8 million machine-to-machine connections can lead to a dramatic reduction in carbon emissions, whilst improving business efficiency.

Our vision

The Executive Committee has overall ownership of the sustainability strategy, and the Board receives annual progress updates. Local markets develop their own strategies that address the primary opportunities and risks in their countries whilst supporting the Group's overall vision.

Throughout the year, we have kept abreast of the material issues through contact with customers, investors, employees, suppliers and governments. The Vodafone Sustainability Expert Advisory Panel met twice during the year and gave insight about our revised strategy.

Delivering transformational services

We aim to deliver products and services which can transform people's lives and contribute to more sustainable living.

M-Pesa

60% of the world's population do not have access to basic financial services such as a bank account or insurance. In addition to the challenges this presents for employment and education, efficient remittances to rural relatives rely on secure money transfer. The M-Pesa mobile money transfer platform and mobile contactless payments are the result of our focus on the development and deployment of innovative financial services. Further information is contained in "Emerging markets" on page 26.

Connected agriculture

By 2050 the world will need to produce 70% more food to satisfy a global population of nine billion¹. We can help farmers meet this challenge by using mobile technology to improve productivity and increase efficiency throughout the agricultural value chain. Our Connected Agriculture research report, published in 2011 with Accenture, found that mobile technology could boost farmers' productivity enough to increase agricultural income by US\$138 billion by 2020 across our markets, primarily in India, Africa and the Middle East.²

We are piloting services with some of our corporate customers to improve information sharing across their supply chains. For consumers we have established information services for farmers in several local markets which are paid for through special tariffs. More than 600,000 farmers in Turkey now subscribe to Vodafone Farmers' Club.

They receive SMS alerts with weather forecasts, crop prices and other information tailored to their local area. We estimate this has increased Turkish farmers' productivity by €100 million.

mHealth

The projected growth in the number of people over 55 years old will lead to an increase in public expenditure on healthcare especially for the treatment of chronic illness. In the European Union, spend on healthcare is projected to jump from 8% of GDP in 2000 to 14% by 2030³. Vodafone mHealth Solutions is focused on delivering services that cover remote care services, access to medicine and clinical research, such as our collaboration with Boston Scientific Corporation to develop remote mobile health monitoring products. Further information is contained in "Emerging markets" on page 26.

Notes:

- 1 UN Food and Agriculture Organization, How to feed the world, 2009.
- 2 Vodafone and Accenture, Connected Agriculture: The role of mobile in driving efficiency and sustainability in the food and agriculture supply chain, 2011.
- 3 According to World Bank figures.
- 4 Sourced from IDC.

600,000

Subscribers to Vodafone Farmers Club Turkey. Part of the Connected Agriculture programme.

7.8m

Machine-to-machine connections can lead to a dramatic reduction in carbon emissions, whilst improving business efficiency.

Climate

Climate change represents one of the biggest global challenges and remains a key concern of our business and stakeholders. Our machine-to-machine (‘M2M’) services enable reductions in carbon emissions from logistics, manufacturing processes and office energy use, whilst improving business efficiency and increasing quality of services.

In our African operations we are investigating Community Power, which uses excess electricity from our solar-powered mast sites in off-grid rural areas to power community facilities. We envisage Community Power will support local economic and social development by bringing green energy to rural communities.

Smart working

It is forecast that remote mobile workers will number 1.3 billion by 2015⁴. Creating better ways of working can deliver efficiency and productivity benefits, but there are also sustainability and life enhancing benefits to smart working.

A study which was carried out across Vodafone’s operations in the UK was completed in 2011. The study, which compared figures from financial year 2011 with those of 2007, showed:

- 45% decline in carbon emissions from travel;
- 37% drop in CO₂-equivalent emissions from building energy use within five years;
- a saving of 24,000 tonnes of CO₂-equivalent emissions every year (this is equal to the average annual CO₂ emissions associated with the energy use of 4,000 UK households).

Responsible and ethical wherever we do business

To transform societies, we need our stakeholders’ trust and co-operation. To earn that trust we must manage the issues that matter to them and behave ethically in everything we do.

Operating responsibly

In 2012 we signed up to industry principles of the ICT Coalition for a Safer Internet for the development of products and services which help keep children safe online.

In 2011 we joined with seven other telecom operators to collaborate in auditing the working conditions of our common suppliers, as well as requiring all our suppliers to sign up to our Code of Ethical Purchasing.

Environment

We have launched an eco-rating for mobile phones in the Netherlands, as part of our commitment to raising standards across our range of devices, and providing information to customers.

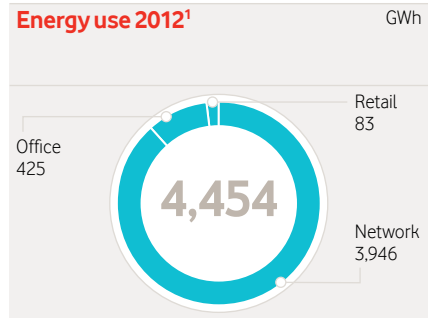
We co-chair the Global e-Sustainability Initiative (‘GeSI’) working group to develop long-term solutions for the management of electronic waste within the ICT industry, particularly in emerging markets.

We have modernised our network by installing new, more efficient single Radio Access Network (‘RAN’) technology that operates 2G, 3G and LTE networks. Single RAN units are now present in 24% of our base station sites, saving up to 40% energy compared to traditional RAN units.

Based on better and more complete data this year our energy use increased by 8.2%, with greater consumption by our network being partially offset by network modernisation and energy efficiencies.

This has impacted our CO₂ emissions which have risen by 12.1%. In addition, there have been changes to the conversion factors used to calculate CO₂ from electricity particularly in Germany, Spain and Italy. This year we sourced 18% of our electricity from renewable sources. This was primarily from purchasing green tariff energy from the grid in mature markets.

In 2012 we opened the Vodafone Site Solution Innovation Centre in South Africa, a joint venture with Vodacom, to develop and field test innovations such as solar foil and hybrid power solutions. Examples of innovations at the Centre include a next-generation hybrid generator, known as a ‘power cube’, that improves efficiency by 40% and significantly lowers installation and operating costs.



Carbon dioxide emissions¹ Millions of tonnes

2010	1.21
2011	1.96
2012	2.20

Note:
1 The charts above on energy use and carbon emissions are calculated using actual or estimated data collected by our mobile operating companies. The data is sourced from invoices, purchasing requisitions, direct data measurement and estimations where required. The 2012 data includes India, Ghana, Qatar and South Africa but excludes all other Vodacom markets. Our joint venture in Italy is included in all years.



Vodafone sustainability report

Our 12th annual sustainability report, which is assured by Ernst & Young LLP using the International Standard on Assurance Engagements (‘ISAE 3000’) to check adherence to the AA1000 AccountAbility Principles Standard (‘AA1000APS’), is available at www.vodafone.com/sustainability. 16 local markets publish their own sustainability reports.



Smart metering

In New Zealand, ASB Bank used smart meters to monitor and modify its energy use, leading to carbon savings of 2,200 tonnes CO₂-equivalent (27%) and cumulative cost savings of £1.6 million in the first three years of use.