Corporate Social Responsibility Report 2009

TenneT

Contents

GRI REPORT
GRI CHECKED

The cover depicts the new, innovative 'Wintrack' pylons along the A12 motorway near Bleiswijk.

Summary

TenneT TSO B.V. ('TenneT') is the Netherlands' national Transmission System Operator (TSO) responsible for managing the national high-voltage electricity grid. Since its establishment in 1998, TenneT has pursued a strategy geared towards the development of a single European energy market. We are investing more than ever before in the expansion of the high-voltage grid and new cross-border interconnections. The 'Strengthen and Build' strategy adopted seven years ago may be considered a resounding success. In late 2009, TenneT made a further significant step towards the creation of a European energy market with its acquisition of the German grid company transpower, thus creating the first cross-border transmission grid in Europe. This acquisition is entirely in line with TenneT's intention to become a transmission system operator which plays a key role in an increasingly liberalised European electricity market. Joining TenneT and transpower's robust infrastructures offers many advantages in terms of security of supply, system management and market integration, and the integration of a sustainable energy supply throughout Europe. In short, TenneT is focused on the future.

TenneT also aspires to be at the forefront of Corporate Social Responsibility (CSR) when it comes to TSOs in north-west Europe. We wish to play a leading role in rendering the energy supply fully sustainable, doing so through such means as the creation of an offshore grid. At the same time, Corporate Social Responsibility comprises an important part of our day-to-day operations.

Although our CSR policy is still very much a 'work in progress', all TenneT's actions and decisions are informed in consideration of CSR. To establish a sound starting position, in 2008 we conducted a full inventory of our CSR efforts and performance to date. This Corporate Social Responsibility Report presents the findings of that project. It has been produced to offer accountability to all stakeholders: our staff, the shareholder, customers, suppliers, NGOs (non-governmental organisations), and other TenneT stakeholders. We are always willing to discuss CSR with these groups. It is nevertheless important to stress that we are still working on methods to render performance fully measurable.

As in other organisations, TenneT's approach to CSR relies on the three pillars of People, Planet and Profit. With regard to **People**, we devote much attention to Health & Safety and to talent development in our operational processes. We promote physical and mental wellbeing by providing access to professional care services. We also encourage staff to maintain physical fitness by taking part in our unique 'Committed Power' sports programme. In terms of professional and personal development, TenneT offers a special two-year training programme for recent graduates. In 2009, the 'TenneT Academy' was launched to offer lifelong learning opportunities for all staff.

The second pillar is the **Planet**, which entails concern for the environment. We acknowledge that our operations can have some adverse environmental impact. We strive to minimise this impact. For example, we monitor our 'carbon footprint' and take measures to reduce it. We attempt to prevent or limit air emissions and soil pollution, and we compensate for any loss of natural value in a particular location by creating new nature areas elsewhere. We also try to minimise grid losses i.e. losses which occur in the transmission of electricity via the grid. Innovation plays a crucial role in promoting sustainability. In 2009, TenneT therefore established a dedicated in-house innovation team known as TennovuM.

The third pillar of our CSR policy is **Profit**, which we approach in terms of 'the market'. Effective market mechanisms and guaranteeing the supply of electricity are of great economic and social importance. Through effective maintenance of all grid components and 'smart' system management, we strive to

ensure full security of supply at all times. This aim is also furthered by our significant investments in new grid connections and in the maintenance of the existing infrastructure. Last but by no means least, TenneT attaches great importance to customer satisfaction. The reporting period saw further efforts to improve upon our already high 'approval rating' of 7.1.

In 2010, TenneT will continue to develop its CSR policy based on these three pillars. For each, attention will be devoted to certain specific themes and topics. One of our main objectives for the year ahead is to embed CSR fully into the organisation, to which end we shall devise Key Performance Indicators (KPIs) and define precise CSR objectives which will be incorporated into the annual plans of all business units and departments.

Committed to Corporate Social Responsibility

In its capacity as international grid company, TenneT undertakes a task of great social importance within a liberalised market. We manage the high-voltage grid in order to facilitate the open energy market to the greatest extent possible. As society and the environment are strongly dependent on a good energy supply, TenneT bears a particular responsibility for people, the environment and society. We are fully aware of this responsibility and will act accordingly at all times. In this first Corporate Social Responsibility Report, we set out exactly how we intend to do so.

It is appropriate for any modern, transparent organisation to publish a report such as this, particularly when that organisation has acknowledged quality and integrity to be among its key values. TenneT has established clear guidelines with regard to accountability, responsibility to the regulators, and co-determination on the part of both internal and external stakeholders.

Our ambition is to be at the forefront of Corporate Social Responsibility within the European energy sector. As such, TenneT is playing an active role in the transition to a fully sustainable energy supply system. Our efforts include the creation of new interconnections with hydroelectric plants in Norway and wind farms in Denmark, and assistance in the development of new large-scale offshore wind farms.

With this report, we wish to explain our view of TenneT's social role and responsibilities. We occupy a central position in society. However, a Corporate Social Responsibility report must not be seen as an end, but as a means to an end. It should encourage dialogue – both internal and external – about the social aspects of doing business.

TenneT observes the three principles of CSR, People, Planet and Profit, which we have chosen to explore under the headings of 'People', 'Planet' and 'Profit'.

Concern for the first of these components – People – is essential if we are to achieve true excellence in our activities. The input of our highly-qualified staff and close cooperation with external partners form the basis for the high security of supply of the Dutch national grid.

In all our business activities, we devote due attention to environmental impact (Planet). In determining the route of a new connection, for example, we try to avoid infringing upon areas of particular ecological value, actively attempting to integrate our infrastructure into the landscape in the most responsible way possible.

TenneT further ensures that the electricity market can function effectively (Profit). We provide transmission and system management services in line with our legal responsibility to ensure full security of supply. We actively aim to facilitate and encourage a free and fair market which will regulate itself through the natural market forces of supply and demand. Our overall objective is to develop a single integrated north-west European electricity market.

Given our important social task, we feel a strong sense of involvement in various social developments. Our ambitions go further than just contributing to a sustainable energy supply. TenneT is fully aware of its 'supply chain responsibility'. As such, we recognise the opportunities offered by sustainable purchasing. We wish to establish the best possible balance between Corporate Social Responsibility on the one hand and the security of supply demanded of the Dutch national grid on the other.

We take pride in this first Corporate Social Responsibility Report and invite you, the reader, to join us in a dialogue about the social aspects of our business operations.

Arnhem, May 2010

J.M. Kroon MBA
President and Chief Executive Officer

R.E. Selman
Chairman of the Supervisory Board

1. About TenneT

TenneT's acquisitions of Dutch transmission grids in 2009

31 March 2009 – Enexis
• TenneT purchased the 110 kV and 150 kV transmission grids from Enexis (formerly Essent Netwerk), comprising approximately 3.000 km of cables and 123 transformer substations in the northern provinces of Groningen, Drenthe, Overijssel and Flevoland, and the southern provinces of Brabant and Limburg.

9 June 2009 – Delta
• TenneT purchased the 150 kV and 380 kV transmission grids from Delta, which passed into TenneT's ownership with retrospective effect from 1 January 2008. The grid comprises approximately 200 km of cables and 11 transformer substations, mainly in the province of Zeeland.

11 June 2009 – Liander
• TenneT purchased Liander's (formerly Nuon Netbeheer) high-voltage grid (110 kV and above), comprising approximately 1,800 km of cables and some 70 transformer substations in the provinces of Friesland, Gelderland, Noord-Holland and Zuid-Holland. The acquisition excluded those high-voltage grids (in Flevoland and part of Gelderland) which are encumbered by a 'cross-border lease' arrangement.

1.1 Who are we?

TenneT TSO B.V. ('TenneT') is the Netherlands' national Transmission System Operator (TSO) and is therefore responsible for managing the national high-voltage electricity grid. Since its establishment in 1998, TenneT has pursued a strategy geared towards the development of a single European energy market. It has made significant investments in expanding the high-voltage grids and in establishing new cross-border interconnections. Over the past two years, the acquisition of grids previously managed by Enexis, Delta and Liander (for a total sum of EUR 775 million) has helped to create a robust national transmission grid managed by a single operator. We have also invested in interconnections with neighbouring countries, such as the NorNed cable between the Netherlands and Norway, and a planned cable linking the Dutch and British grids. In late 2009, TenneT's acquisition of the German TSO transpower represented a further significant step towards a single European energy market, creating the first cross-border transmission grid in Europe. This acquisition is entirely in keeping with TenneT's aim of becoming a key player in an increasingly liberalised electricity market. Joining TenneT and transpower's robust infrastructures offers many advantages in terms of security of supply, system management and market integration, and the integration of a sustainable energy supply throughout Europe.

TenneT does not generate electricity itself; it is responsible for transmitting the electricity produced by others to its (end) users. TenneT's role is defined by the Dutch Electricity Act (Elektriciteitswet) of 1998, which establishes the framework for free-market operation in the Dutch electricity supply system on the basis of various European directives. The Electricity Act designates TenneT as the independent transmission system operator of the Netherlands, whose role is to enable the actual producers of electricity to operate in a free and fair market. Other European countries have also designated independent TSOs to fulfil the same task in the context of ongoing market liberalization.

In 2008, the Independent Grid Management Act (Wet Onafhankelijk Netbeheer) made TenneT responsible for managing all Dutch transmission grids with a capacity greater than 110 kV. Prior to 2008, TenneT was responsible only for grids with a voltage level of 220 kV or higher. The expansion of the electricity grid for which we are responsible has resulted in marked growth within TenneT itself. In 2007, the company had 567 staff. By 2008, this figure had risen to 838 and by 2009 it had reached 934. We expect to welcome at least two hundred new colleagues in 2010 as the result of autonomous growth and a number of major infrastructural projects.

In 2009, TenneT acquired three regional transmission grids from Enexis, Delta and Liander. As a result, TenneT now manages a total of 280 high-voltage substations, 22 of which have a capacity of 380 kV, 12 of 220 kV, 147 of 150 kV and 99 of 110 kV. In most cases, the transformer substations remain the property of the regional operators. In some instances, an entire grid remains the property of the system operator but TenneT has assumed responsibility of its operational management. One example of this arrangement is the regional transmission grid owned by Stedin. This is still encumbered by a 'cross-border lease', which entails certain obligations towards foreign investors. There are two sections of Liander's transmission grid for which management responsibility has passed to TenneT, but not full ownership.

TenneT's sole shareholder is the Dutch Ministry of Finance. The company's head office is in Arnhem and there are four regional offices: Waddinxveen (West), Hoogeveen (North), Arnhem (East) and Weert (South). In 2010, the number of regions is to be reduced to three, with East being integrated with the

others. Following TenneT's acquisition of transpower, which came into effect as of 1 January 2010, the company also operates from four locations in Germany: Bayreuth, Bamberg, Lehrte and Dachau.

1.2 What do we do?

TenneT plays a key role in the electricity market on behalf of Dutch society. It is charged with a number of important tasks to ensure transparency and an efficient market. A distinction may be drawn between its regulated responsibilities, as established by legislation, and its 'non-regulated' tasks. The former category derives from the 1998 Electricity Act, and predominantly consists of ensuring an effective, sustainable and reliable electricity supply by providing transmission and system services. Compliance with these regulated responsibilities is overseen by the Dutch Office of Energy Regulation, which also regulates the fees which TenneT may charge for its services. For a more comprehensive account of TenneT's regulated responsibilities, please see www.tennet.org.

Both the regulated and non-regulated responsibilities are undertaken by various business units and operating companies under the umbrella of TenneT Holding B.V. The acquisition of the German transpower in 2009 and the resultant management and maintenance activities are also the responsibility of the holding company. This Corporate Social Responsibility report confines itself to the regulated activities conducted by TenneT TSO B.V. (TenneT).

The high-voltage grid

The transmission of electricity by TenneT (in accordance with its regulated, legal responsibilities) relies on the high-voltage grid. This grid comprises various components which are considered to be TenneT's 'tangible fixed assets'. High-voltage pylons are the most conspicuous example of an asset. There are also various high-voltage substations from which electricity (at 110 kV, 150 kV, 220 kV or 380 kV) is transferred along the high-voltage routes via transformers and switching systems. We constantly monitor voltage levels and current intensity.

The non-regulated activities conducted by TenneT Holding B.V. are largely intended to promote the efficient functioning of the energy market. To ensure that these activities are appropriate to our corporate profile, we employ a number of clear criteria. For example, they must help to enhance the transparency and efficiency of the Dutch energy market, or must help to reduce the environmental impact of the energy supply. Such tasks must never detract from the quality of TenneT's services nor erode its independent status. Some of the non-regulated tasks are undertaken by APX, the market exchange for electricity and gas which is jointly owned and managed by TenneT, Fluxys and Nederlandse Gasunie.

1.3 Corporate Social Responsibility: policy and implementation

The Netherlands' electricity supply system is inextricably linked to those in other countries. The Dutch national grid includes several direct interconnections to grids in neighbouring countries such as Germany, Belgium and Norway. The planned (direct) connections with the United Kingdom and

Corporate Governance
TenneT observes all provisions of the Netherlands Code of Corporate Governance, which acts as a guideline for good entrepreneurship by establishing certain business principles and 'best practices'. TenneT strives to maintain an open and transparent structure, with quality and integrity as key values. Accordingly, we have also introduced our own internal Code of Conduct, together with a Whistleblower's Charter whereby staff can report irregularities without fear of reprisals or recrimination. For further information about TenneT's corporate governance, please refer to our regular Annual Report, which can be downloaded from http://jaarverslag.tennet.org.

Denmark will increase the opportunities to exchange energy with other countries. This will promote the development of a strong north-west European electricity market, which will in turn promote economic growth and secure a sustainable future.

Due to its geographic location and the ready availability of cooling water, the Netherlands is a prime location for the construction of power plants. However, there is little or no point in generating electricity if there is no way of getting it to the end users. The creation of new cross-border transmission connections enables electricity to be imported and exported in greater quantities. This applies equally to the sustainable 'green' energy generated in Norway and Germany.

It is a matter of course that TenneT is also interested in the development of sustainable energy sources in the Netherlands. The Dutch government has stated that at least twenty percent of all electricity used in the Netherlands should be derived by sustainable means by the year 2020. There are plans for large offshore wind farms to help achieve this target. It falls to TenneT to ensure that these new sources of clean energy can be integrated into the grid in the most efficient manner possible. We are therefore working closely with various ministries, local and regional authorities, market parties, research institutes and other stakeholders. Further details are to be found elsewhere in this report, notably in Section 2.5.

Respect for the human environment is part and parcel of the TenneT approach, which meets and often exceeds all legislative requirements. Since the organisation was founded in 1998, concern for CSR has informed all company decisions. In order to chart TenneT's performance in this field more clearly and to establish measurable performance indicators, the Board of Management decided to formulate a specific CSR policy in 2007. TenneT then approached DHV, a consultancy specialising in CSR, for advice and support in devising an appropriate policy.

The first phase of the project began in 2008 with a stakeholder analysis and staff survey. The Board of Management was then able to establish a number of CSR 'spearheads'. The second phase involved a full inventory of the current status of CSR within TenneT. The current report is based on these findings, which also act as the springboard for the third phase: the establishment of measurable targets or 'Key Performance Indicators' (KPIs). Section 3.1 describes the next stages in the process.

The discussions and agenda-setting with regard to CSR are very much based on the wishes and requirements of our stakeholders. The government, local residents, employees and advocacy groups such as the environmental lobby are all important stakeholders, as are the national and international industry federations. Although the Dutch context must prevail – we are, after all, the national TSO for the Netherlands – TenneT also takes European developments into account.

The basic, minimum objective is to meet all national and European legislative requirements. Our CSR policy does not explicitly address some of the aspects covered by the OECD Principles for Multinational Enterprises, which details the protection of human rights, equal opportunities for staff and stakeholders etc. Nevertheless, we realise that these principles can indeed be relevant to TenneT, particularly in terms of the issues which affect the entire supply chain. In developing our (new) assessment criteria for suppliers, we shall therefore apply the principles in full.

How is CSR embedded within the TenneT organisation?

At senior management level, Mel Kroon (CEO) is responsible for CSR policy. He reports on behalf of the entire Board of Management to the Supervisory Board.

CSR policy is established centrally and is implemented locally. All business unit and departmental managers are responsible for the various CSR-related activities and the relevant budgets, which must be incorporated into their annual plans. There is a central CSR Coordinator at senior management level who is responsible for the continued development of CSR policy and, as the name suggests, for coordinating the various activities.

Until recently, CSR was approached as a 'total package' rather than being divided into its various aspects, each with separate objectives. It formed part of other areas of concern such as Health & Safety and the pursuit of sustainable energy. From 2010, however, separate CSR objectives are to be included in the annual plans of all business units and departments. The specific areas for attention have been designated by the business units themselves, using CSR policy as a guiding principle.

At present, our CSR objectives remain rather qualitative in nature. In some areas, however, such as 'sustainable catering' and achieving a higher customer approval rating, quantitative targets have indeed been set. We will utilise targets in other areas in 2011.

1.4 Strategic profile

Mission

In today's liberalised energy market, TenneT is an important facilitator. It offers high-quality transmission services and an individualised approach to customer requirements. It is also continuing to develop a broad range of new systems management services. It does much to promote the efficiency of the market and the transition to a fully sustainable energy supply. TenneT helps to ensure that the Dutch electricity market operates as optimally as possible by making investments, both at home and abroad, which lead us ever closer to the creation of an integrated north-west European electricity market. TenneT is leading the way towards a sustainable society.

Vision

TenneT wishes to achieve further growth in the Dutch and north-west European electricity markets, strengthening its position accordingly. This aim is in keeping with the 'Strengthen and Build' strategy it has adopted, which is geared towards the international market context. As a TSO, TenneT wishes to play an active role in strengthening the European electricity market, and will do so based on an international vision. It will proactively pursue development in cooperation with fellow TSOs, regulators and governments. TenneT considers full integration of the various countries' electricity markets to be the best way of achieving a strong European market characterised by transparency, adequate liquidity and effective pricing mechanisms. The overall aim is to create a single unified market in north-west Europe, in which TSOs are able to preclude congestion and in which market parties face no transmission

“CSR policy can only work if you have firm targets”

Gineke van Dijk, CSR Coordinator

Three years ago, Gineke van Dijk was tasked with devising a formal CSR policy for TenneT. She can now see her efforts coming to maturity. “We have high ambitions. But we must first make CSR measurable and set firm targets.”

When Gineke van Dijk was assigned to draw up the company’s CSR policy, she first wanted to hear her colleagues’ thoughts on the matter. She set up a workgroup which included staff who were particularly enthusiastic about CSR, and she conducted an online survey among all employees. “The survey responses revealed that relatively little thought had been given to CSR in the formal sense, although many staff had devised initiatives which demonstrate a high degree of personal involvement.”

As an example, Gineke cites Berend Kielman of the Transmission Operations business unit. He is responsible for maintenance of the pylons, which involves outsourcing the painting. “Berend has gone to the trouble of producing spreadsheets in which he records the emissions of Volatile Organic Compounds which result from the painting work. Moreover, whenever he considers entering into a contract with a painting company, he checks that it offers young people ample opportunity to learn the trade and is not a ‘closed shop’.”

The staff survey helped Gineke identify the areas in which TenneT can make the greatest difference, such as purchasing and reducing grid losses. “We recently purchased an aluminium-based conductor which greatly reduces grid losses,” she notes. “In fact, this was an essential criterion for its purchase.”

There are many other aspects of CSR in which TenneT can make a substantial difference. “We are playing a key role in the transition to sustainable energy,” Gineke states. “And we consider it extremely important that new connections can be integrated with a minimum of nuisance or adverse environmental impact.”

Eighteen spearheads of policy

Having investigated stakeholder attitudes to CSR, Gineke’s next step was to draw up the policy. A number of special management workshops were held during which eighteen CSR ‘spearheads’ were identified. These were combined to form the first draft of a CSR policy during the summer of 2008. “We then set about establishing our standpoint and approach to each of the issues listed,” Gineke recalls. “We decided that we should have a set of Key Performance Indicators (KPIs) to measure our actual achievements. Those KPIs have since been defined. This was a crucial step. Once the KPIs are there in black and white, it really sets the wheels in motion for discussion. The time has now come to start setting firm targets with regard to grid loss reduction, sustainable procurement practice, and so on. We can either accomplish these ourselves or adopt the existing standards applied by other organisations.”

Gineke believes that having firm targets is essential to the success of the CSR policy. “It’s one thing to say that we’re going to install Bird Flight Diverters on high-voltage pylons, or that we are going to reduce paper consumption. That’s fine as a starting point. However, it’s another thing entirely to actually commit to achieving the targets set. This is why we say we are going to reduce bird deaths or paper consumption by such-and-such percent. Or that the staff restaurant must offer a certain proportion of organic food on its menu.” According to Gineke, now that TenneT has a formal CSR policy and targets have been – or soon will be – set, it is time to publicise our efforts more widely. “I think that this first ever Corporate Social Responsibility Report makes our performance and intentions perfectly clear to the public,” states Gineke.

restrictions. This market zone will have a common system for supply-demand balancing i.e. uniformity and a 'level playing field' for market parties, allowing them to cover their risks.

Corporate Social Responsibility ambitions

As the Transmission System Operator of the Netherlands, TenneT occupies a unique position in the electricity sector. That position entails certain social obligations. Society has clear expectations with regard to an affordable, reliable and sustainable energy supply. We regard it as our social responsibility to use our expertise and position to meet these expectations, and to adapt in any way necessary in order to do so.

TenneT's strategic priorities with regard to Corporate Social Responsibility are very much linked to its mission and vision, whereby it strives to:

- promote the development of the North-west European electricity market by creating further interconnection capacity between countries and national hubs of (sustainable) electricity generation
- apply a responsible investment policy in order to safeguard the security of supply throughout the high-voltage grid, meeting or exceeding legislative requirements at all times. We also take the potential impact on the human environment and the health of both staff and public into consideration
- develop the electricity grid and associated control systems in such a way as to facilitate the optimal incorporation of both large and small-scale sources of (sustainable) energy production.

We shall use our knowledge and expertise to further the public debate about energy-related issues. Our active role entails proposing appropriate solutions. We have, for example, devised a number of possible future scenarios which take our day-to-day business decisions into account. (See also Section 2.4). We have also opted to take an active role in the development of an offshore electricity grid (see Section 2.5).

TenneT is fully aware that its operational processes may cause some adverse effects. We are keen to limit these effects where possible. We make every effort to reduce grid losses and air emissions of SF_6 gas and Volatile Organic Compounds (VOC). Concern for Corporate Social Responsibility is also evident in our ongoing efforts to protect the health and safety of our staff, the general public and the human environment. This is described in more detail in Chapter 3.

1.5 Accountability

This report has been produced for the benefit of our customers and staff. We wish to inform customers about the socially responsible manner in which we guarantee the security of the electricity supply. We also wish to answer to staff for the company's performance in all aspects of CSR. The commitment and active involvement of all TenneT employees is essential for achieving our CSR ambitions.

This Corporate Responsibility Report is also produced for the benefit of government authorities at all levels and for the general public. Both are important stakeholders, whose interests we take into consideration when planning or conducting any construction or maintenance work on the high-voltage grid.

This report will represent an important aid in our communication with various non-governmental organisations. We regularly meet with these organisations to exchange ideas and discuss the current and future impact of our operational processes.

Finally, this report addresses the expectations of our shareholder, the Dutch Ministry of Finance, with regard to the transparency of our CSR policy and its implementation.

In producing this report, we have observed the guidelines of the Global Reporting Initiative (GRI) version G3, and the 'Sustainability Reporting Guidelines & Electric Utility Sector supplement (version 3). Appendix 1 of this report provides cross-references to the relevant GRI indicators and disclosures. The authors have also drawn upon the 'Transparency Benchmark' (2010), published by the Dutch Ministry of Economic Affairs.

This report marks the first time that the results of a number of performance indicators have been published externally. These indicators have been selected on the basis of their relevance to TenneT's business operations. The selection process itself was conducted under the guidance of an external expert, DHV, and included a desk study to identify stakeholder expectations and a number of interviews with employees. For further information about the process and definitions of some of the performance indicators used, please refer to Appendix 2.

Except where otherwise noted, this Corporate Social Responsibility Report is restricted to activities conducted by, or under the legal responsibility of, TenneT TSO B.V. during the 2009 reporting year. It therefore includes those activities undertaken by the subsidiaries TSO Auction B.V., B.V. Transportnet Zuid-Holland and CertiQ B.V., the staff of which are formally on the payroll of TenneT TSO B.V. CertiQ B.V. has also produced its own separate Annual Report, which can be downloaded from www.certiq.nl.

The accuracy of the information included in this report has been checked and verified by internal experts in various disciplines. At the time of producing the report, the various information flows had yet to be fully integrated due to the regional grids acquired in 2009. It was therefore not possible to include all quantitative information for 2009. Partly for this reason, we opted not to have the report verified by an external auditor.

1.6 Contact information

We welcome readers' feedback. All comments and questions about this report should be addressed to our CSR Coordinator, either via telephone (+31 26 373 1717) or via e-mail mvo@tennet.org. Further information about TenneT and our CSR policy can be found at www.tennet.org.

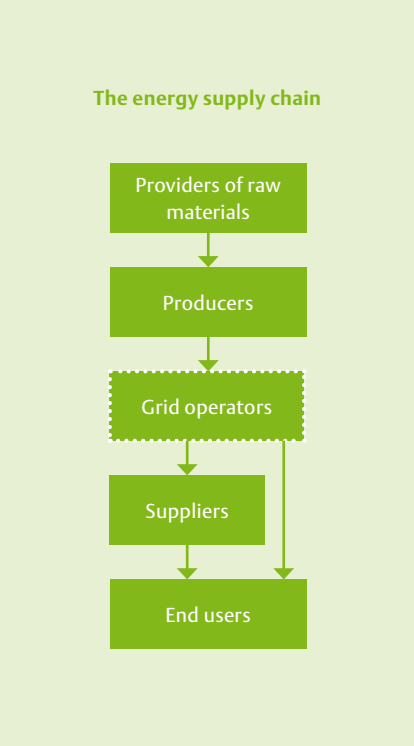
2. The basis

2.1 The energy supply chain in the Netherlands

In recent years, energy consumption in the Netherlands has been approximately 3,350 PJ per annum (1 PJ is the equivalent of 1015 Joules). Most of this energy is used to generate heat for households and industrial processes, mobility, agriculture and to generate electricity. TenneT is required by law to maintain and manage the high-voltage electricity transmission grids (110 kV and above). As the national TSO, we are an important link in the overall energy supply chain, which also includes the providers of raw materials, producers of electricity, suppliers (the utility companies) and end users.

Raw material providers and electricity producers

The 'producers' are responsible for the actual generation of electricity. At present, the process still relies largely on fossil fuels such as coal, gas and oil, with some nuclear energy in use. The fossil fuels are supplied by the 'raw material providers'. The Netherlands itself is a major source of gas used for electricity generation. Coal and oil are imported from various regions, including South Africa, South America and the Middle East. In order to prevent the complete depletion of fossil fuel resources and reduce emissions of the main greenhouse gas carbon dioxide (CO_2), greater attention is now being devoted to sustainable and renewable energy sources. In the Dutch context, wind generation and solar energy are seen as the most promising alternatives to fossil fuels. One significant adverse environmental effect of conventional generation methods is the emission of gases such as nitrogen oxides, sulphur dioxide and CO_2 into the air. There is also some loss of energy in the form of heat. New techniques allow more efficient production and the capture and storage of CO_2, meaning that adverse environmental impact can be greatly reduced. Moreover, the heat generated during the production process can often be used by means of combined heat and power plants, whereby both heat and electricity are generated and supplied simultaneously.



Grid operators

The grid operators facilitate the transmission of energy from the producers to the suppliers and the end users. TenneT's grid is connected to the local and regional distribution grids, several of which are managed by other operators. However, all grid operators have a similar role as 'facilitator'. Unlike the producers and suppliers, they do not function as commercial market parties.

This report is concerned with the CSR aspects of TenneT's electricity transmission activities. The greatest potential threat of these activities is that to the environment. Given the Dutch (and north-west European) context in which we operate, the potential negative social effects are far less marked than

What is TenneT's role in the electricity supply chain?

TenneT is responsible for the transmission of electricity by means of lines and cables. This must take place in a controlled manner in order to guarantee the security of supply. One of TenneT's key tasks is to ensure the optimal balance between supply and demand on the national grid at any given moment. Electricity cannot be stored on any large scale. The volume of electricity produced must therefore be as close as possible to that which is required for immediate use. The process is known as 'balancing'.

To ensure a good balance between supply and demand, strict rules apply on both sides. The supplier is known as the 'programme responsible' party, and as such is responsible for both the purchase of electricity and the resale of that electricity. If the supplier fails to match supply and demand effectively, TenneT will charge that supplier for the costs incurred by the resulting imbalance. The wholesale purchase price of electricity is subject to market forces e.g. on trading exchanges such as the APX. TenneT has absolutely no influence over the price.

Under the provisions of the Electricity Act 1998, TenneT is subject to a 'connection obligation'. This means that, in principle, we are required to provide access to the grid to any party who wishes to supply electricity. We do not distinguish between 'conventional' and 'sustainable' producers in this regard. Indeed, the law precludes us from doing so.

Similarly, TenneT does not distinguish between conventional and sustainable production in its transmission activities. However, a bill is currently before parliament which, if enacted, will allow priority to be given to sustainable electricity in times of limited transmission capacity. The government may opt to amend the Electricity Act to make this possible. TenneT has been asked to advise on the practicality of the proposed arrangements.

TenneT produces regular 'capacity plans' in which we estimate the total grid capacity required based on current market developments. These plans are submitted to the Netherlands Office of Energy Regulation.

those faced by our counterparts in developing countries. For more information on our CSR performance, please refer to Chapter 3.

Suppliers and end users

The suppliers (utility companies) supply energy to the end users e.g. domestic households and business premises. Suppliers are commercial market parties who purchase a certain quantity of electricity for resale at a profit. Some end users account for such significant consumption that they are able to purchase electricity directly from a producer without going through a supplier.

Various potential environmental effects can be seen at the level of the end users, the consumers of energy. 'Sustainable' initiatives such as the use of more energy-efficient production techniques in industry may help to reduce demand.

2.2 Engagement: awareness of social developments and stakeholder interests

TenneT is constantly looking for ways in which to improve the security of supply and to enhance the sustainability of the energy supply. In doing so, we take our (legal) obligations and the expectations of our stakeholders into account at all times. The term 'stakeholders' can refer to those with whom we have a legal or contractual relationship, such as government bodies at all levels, our customers, employees and suppliers. However, the term also applies to individuals and organisations whose interests may be affected by our activities, such as local residents, environmental groups and society in general.

It is inevitable that the interests of different stakeholders will occasionally clash. For example, it may be necessary to create new high-voltage connections to increase the overall reliability of the grid and safeguard the security of supply to customers and end-users, even though doing so will impact upon the interests of those who live in the vicinity of the proposed route. The following paragraphs set out how we attempt to address the interests of each stakeholder group.

Government

TenneT attaches great importance to open communication with government bodies at the national, regional and local levels. We clearly explain what we believe will be the consequences of certain decisions, and we clarify the dilemmas involved. At first sight, for example, the substantial investments required to integrate innovative, sustainable technology into the grid may not be entirely in keeping with our obligation (imposed by government) to invest as efficiently as possible. Socially desirable innovations such as low-noise transformers and infrastructure with reduced magnetic field intensity (e.g. the Wintrack pylon) require investment in research and development, and in most cases represent higher investment costs than conventional alternatives.

We are nevertheless convinced that an investment strategy geared to sustainability will prove the most effective in the long term. We attempt to demonstrate this in the business cases developed prior to any major investment project, such as the construction of new high-voltage connections. One such business case concerns the Wintrack pylon, which will be used for the first time in the planned Randstad 380 kV expansion project. The first designs for the Wintrack pylon were produced in 2006 and have since been further refined. The final design consists of two slender, tapering poles that appear visually separate to the observer. This allows the pylon to be integrated into the landscape more effectively. The high-voltage wires (conductors) are closer together than in traditional pylons, thus generating a

relatively small magnetic field along the line. Moreover, the simple structure and smooth surfaces of the Wintrack pylon make it virtually maintenance-free and saves on the quantity of paint used to coat it.

Customers

Our main customers are the regional grid operators and parties that take electricity directly from the high-voltage grid (110 kV and above), such as heavy industrial users which are connected to the transmission grid. TenneT does not supply the domestic market directly.

Producers may also be classed as customers. Though the main producers are the large power stations, smaller producers of sustainable electricity are rapidly growing in importance. This group includes companies in the greenhouse-based horticultural sector which use combined heat and power plants as a means of selling their 'spare' output to the national grid. There are also a number of investment consortia which have built, or plan to build, wind farms.

TenneT wishes to resolve any customer complaints as quickly and effectively as possible. We closely monitor our performance in this regard, registering all complaints and the time it takes us to reach an acceptable solution. We ask our customers to evaluate our service provision on an annual basis. Various methods are used, including annual the 'customer satisfaction survey' (see Paragraph 3.4).

Suppliers

TenneT obtains goods and services from various suppliers. For our maintenance and construction activities, for example, we purchase physical products such as transformers, switchgear, cables and wires. We also employ the services of specialist consultants to assist in permit application procedures and environmental studies such as soil quality tests, and employ contractors to undertake activities such as soil decontamination projects and asbestos removal.

In 2009, we took the first steps in implementing a sustainable procurement policy. The first phase involved the development and internal evaluation of a set of (draft) assessment criteria for suppliers. The criteria we intend to apply are based on various aspects of CSR such as the reduction of the CO_2 footprint, safety and quality assurance. The sustainable procurement policy has already been applied in the tender procedure for a new conductor. We opted for a conductor with wires made exclusively of aluminium alloy, as the higher conductivity of the wires significantly reduces grid losses.

Local residents

We try to avoid causing nuisance to local residents as much as possible and, if such nuisance is indeed unavoidable, to minimise it. During large-scale maintenance or construction work, we remain in close contact with local authorities to ensure that (temporary) solutions such as alternative traffic routes are in place. We also organise information meetings for local residents and other stakeholders in order to clearly explain what we intend to do. We invite an open dialogue about the expectations, wishes and requirements on both sides. During such evenings we receive valuable responses and tips which we incorporate into the planning and implementation of the work.
Information meetings are announced in the local and regional press, and on TenneT's own website. Attendance is generally very high. In order to give everyone an opportunity to take part, several meetings may be held on different dates and in different locations. In 2009, for example, separate meetings were held in Bleiswijk (11 May), Pijnacker (13 May) and Delft (18 May) to discuss the 'South Ring' of the Randstad 380 kV project.

In addition to these meetings, members of the public can make their views known by means of the statutory planning procedures and consultation processes.

Society

TenneT organises various activities for specific target groups, intended to promote the development of a fully sustainable energy supply. One example is the 'Power Minor' lecture series for students at higher education level, which examines the energy supply chain in the Netherlands. TenneT staff facilitates the lectures in various ways. TenneT has also endowed the Chair of 'High-Voltage Transmission and System Management' at Delft University of Technology, and is closely involved in the Chair of Cradle-to-Cradle Design at Erasmus University Rotterdam. The essence of the 'cradle-to-cradle' concept is that products should be designed in such a way as to allow the complete recycling and re-use of the materials used. Once the product has reached the end of its useful life, it is 'reborn' as an entirely different product, or the raw materials are returned to nature.

Staff

TenneT is extremely proud of its employees. Working on the high-voltage grids and in system management demands specialist knowledge and great dedication.

The safety of our staff and any other workers acting on our behalf is of paramount importance to TenneT. We therefore see to it that rules of conduct (such as our Company Code of Conduct) are strictly adhered to. The Transmission Operations business unit, responsible for carrying out work on the high-voltage grid, is SCC certified.[1] We also require this certification from contractors whom we employ. Furthermore, employees who work with high-voltage pylons must complete additional specialised training provided by an external agency.

TenneT attaches great importance to the health and well-being of its staff. There is an active policy to reduce unnecessary absenteeism which includes many precautionary measures such as ergonomic office design (see also Section 3.3). Furthermore, through its 'Committed Power' programme, TenneT encourages staff to keep fit by taking part in sport and exercise. The 'Young TenneT' club organises various social activities and 2009 saw the creation of a new staff association for all employees.

TenneT welcomes comments, suggestions and ideas from staff, particularly with regard to improvements that can be made within the organisation. Employees may submit their views via the appropriate channels (e.g. the Works Council) or, in particular cases, via a 'confidential counsellor'. There is also a 'Whistleblower's Charter' whereby staff can report shortcomings or irregularities without fear of reprisals or recrimination. TenneT has organised an employee survey since 2007, inviting staff to offer opinions on the organisation as a whole and their immediate managers. The results are used to implement any necessary improvements.

NGOs, industry federations and advocacy groups

Other stakeholders with whom TenneT maintains close contact include its counterparts in other countries, and the national and international industry federations and knowledge platforms such as Netbeheer Nederland, Sein, E-laad, ENTSO-E and Cigré. We are also open to a full and frank dialogue with environmental and nature conservation organisations. In 2009, we held some particularly constructive

1 SCC **

discussions with various NGOs, including the Netherlands Society for Nature and Environment (Friends of the Earth), Greenpeace, WWF (at national and European level), Germanwatch, Deutsche Umwelthilfe, the Potsdam Institute for Climate Impact Research, the European Climate Foundation, the DE Foundation for Sustainable Energy, and Birdlife. TenneT is also co-founder and an active member of the Renewables Grid Initiative.

2.3 Leading the way in offshore wind generation

TenneT must abide by legal requirements as established in the Electricity Act and the Grid Codes. This can make it difficult to take the lead in certain developments and optimally facilitate the market, although that is the role our stakeholders expect us to take.

A prime example is the planned offshore wind energy supply. The Dutch government has designated wind energy to be an important sustainable energy source. The 'National Action Plan for Wind Energy' (2008) states that its use is important for environmental reasons. It is certainly a viable, sustainable and relatively cost-effective source of energy. The government is aiming for 6,000 MW of electricity to be generated by wind power by 2020. The preferred location to realise this capacity is offshore.

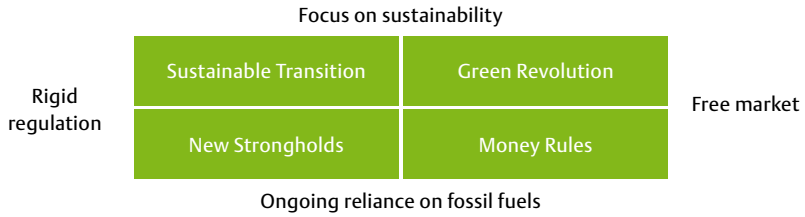
In our view it would be only logical for TenneT, as the national TSO, to create and maintain the necessary connections between the offshore wind farms and the national grid on land. This standpoint is shared by parliament, which adopted a motion (tabled by member Samsom) calling on the government to confirm TenneT's appointment in this role as soon as possible.

In early 2010, TenneT was indeed designated the offshore grid operator, responsible for the construction and installation of necessary infrastructure. It only remains for the Electricity Act to be amended accordingly. In anticipation of the government's final decision, we have already begun preparations. It is crucial to start the process as quickly as possible. Given our formal obligations and the various interests that must be taken into account, the planning and implementation of the infrastructure will take several years. Unless TenneT takes action now, the government's targets will be unattainable. The Minister of Economic Affairs has requested us to continue the preparatory work. As such, we have started spatial planning procedures for two shore landing points, located in IJmuiden and Borssele. The initial memorandums for the relevant projects will be published in mid-2010. We are also working on the technical specifications for the two offshore installations and the cable connections to the mainland.

2.4 Taking the future into account

TenneT wishes to play an active part in ensuring a sustainable future. As the national TSO, we must be prepared to anticipate changing circumstances. We have therefore produced and evaluated four scenarios for the 220 kV and 380 kV grids as they may appear in the year 2030.

Four scenario



The 'Green Revolution' scenario assumes that there will be a global energy market based entirely or largely on sustainable resources such as biomass, solar generation and wind energy. Hydrogen is also included as an important fuel for transport purposes. The 'Sustainable Transition' scenario is based on a similar social shift towards greater sustainability, but one which focuses on the national rather than global level. The 'New Strongholds' scenario assumes the continued use of coal-fired power plants and nuclear power stations. Due to the favourable conditions for the development of such resources, the Netherlands will become a net exporter of energy in this scenario. Finally, the 'Money Rules' scenario is one in which little or no attention is given to social or environmental considerations. The existing fossil fuels will be used until they are entirely depleted.

In all four scenarios, it becomes evident that a single, robust 380 kV grid on the mainland is essential if electricity is to be transported from producer to end user in a reliable and cost-effective way. Such a grid offers robust and reliable infrastructure for both the important and export of energy. It will be possible to connect new energy generation sources along or off the coast, such as the planned wind farms, to the transmission grid with relative ease. Short lines between the main 380 kV grid and local generators will also enhance transmission security.

New high-voltage connections to bolster the national grid structure

North-West 380 kV • This overhead line will run between Eemshaven and Diemen, where it will connect to the central high-voltage grid. The project began in 2007 and is due to be completed by 2017.

South-West 380 kV • In 2007, TenneT started preparations for a new high-voltage overhead line in Zeeland. Four possible infrastructural scenarios have been developed. The project is due to be completed by late 2014.

Randstad 380 kV • In 2003, TenneT began work on a new 380 kV overhead line from Wateringen, through Bleiswijk and Beverwijk, covering a total distance of 85 kilometres. The project is due to be completed by 2013.

Doetinchem-Wesel • A new cross-border 380 kV connection between Doetinchem and Wesel (Germany) is under construction. The line will be some sixty kilometres in length. This project started in 2007 and will be completed by 2013 at the earliest.

Opting for this robust 380 kV grid leaves all options open. It allows a truly sustainable transition to be achieved, in which numerous (small) decentralised producers can be connected to the national grid. At the same time, it will be possible to incorporate large-scale sustainable generation, or to continue to use fossil fuels in anticipation of a transition to alternative sources.

The scenarios are described in further detail in the document Vision 2030, which can be downloaded from www.tennet.org. During the years ahead, TenneT will also develop a long-term vision for the 110 kV and 150 kV grids for which it assumed management responsibility in 2009.

2.5 Developing an offshore grid

TenneT's sustainable vision includes not only ensuring a robust onshore grid, but an offshore one as well, namely in the North Sea. Such an offshore grid will provide strong infrastructure, enabling sustainably produced offshore electricity to be connected to the national high-voltage grid on land.

With an offshore grid, we will not only be able to exploit new energy sources but will also be able to optimise the use of existing (sustainable) energy sources in other countries such as Norway, Denmark and the United Kingdom. It will therefore further improve the security and security of supply. This is already of great importance, but will become even more so as sustainable energy sources continue to develop. These forms of energy, particularly wind generated, are more susceptible to external influences than conventional sources. This may pose a threat to effective supply-demand balancing. After all, wind turbines can only generate electricity if the wind is blowing. As soon as the wind stops, the turbines stop generating electricity.

If we wish to succeed in integrating large-scale wind generation into the European electricity supply, we must take appropriate measures. A power grid on the North Sea can be built to a modular design, making use of the existing transmission grid and all recent and planned expansions. The NorNed cable, for example, has been in operation since May 2008. Similar interconnections will follow. We are already in talks with the Norwegian TSO about a possible second interconnection with Norway, while our German colleagues at transpower commenced the NordLink project some time prior to TenneT's acquisition of the company. We are also discussing the possibility of a BritNed cable (between the United Kingdom and the Netherlands) with our British counterparts at National Grid. Last but not least, preparations for the laying of the COBRA cable between the Netherlands and Denmark are now at an advanced stage.

The Dutch government wishes to play a leading role in (sustainable) energy provision in north-west Europe. TenneT has taken the first step towards achieving this ambition by making the initial preparations for the locations (at Borssele and IJmuiden) at which the energy generated offshore will be brought onto the mainland.

Maritime connections to bolster the North Sea offshore grid structure

NorNed • is the connection running between Norway the Netherlands via a 580-kilometre undersea cable at a depth of up to fifty metres. The cable is the longest in the world and has a transmission capacity of 700 MW, enough to meet the electricity requirements of a medium-sized town. The NorNed project was conducted in partnership with the Norwegian TSO Stattnet and took ten years to complete.

BritNed • is a joint venture between TenneT and its British counterpart National Grid, and will interconnect the Maasvlakte industrial zone near Rotterdam with the Isle of Grain in northern Kent, a total distance of 260 kilometres. The cable, due to be completed by early 2011, will have a transmission capacity of 1,000 MW.

COBRA • is the project name for a connection between the Netherlands and Denmark. TenneT is currently working on the preparations alongside Danish TSO Energinet.dk. The project was officially launched in June 2009 and it is intended that the cable will come into service by 2016/2017. The planned transmission capacity is 700 MW.


“Society expects us to innovate quickly”

Interview with Ron van den Thillart, Innovation Facilitator

TenneT has devoted considerable attention to innovation and CSR in recent years. According to Ron van den Thillart, TenneT's Innovation Facilitator, there is good reason to do so. "In terms of the energy supply, there are major changes on the horizon. Anyone who is too slow or too conservative will miss the boat."

"In the past, our focus was firmly on technology and reliability. Of course, these were and remain very important. However, you can see a clear shift in that we now devote far greater attention to the social implications of our work." Ron believes that TenneT has come to realise that social wishes can only be met through timely innovation. Moreover, the public expects TenneT to address those wishes promptly and effectively. As a result, the company is introducing high-voltage pylons with a vastly reduced magnetic field, as well as finding ways to reduce the number of birds which fly into power lines, often with fatal results. TenneT is also installing the world's longest underground 380 kV connection in order to minimise disruption to the landscape. "And that's in addition to energy transition, which will certainly call for far-reaching innovations," Ron continues. "The transition itself arises from a social demand, namely that for more sustainable energy."

Of course, TenneT is very much involved in the energy transition, as Ron knows very well. He represents the Transmission Operations business unit in TennovuM, the team founded in 2008 to promote innovation. "Of the twelve innovative projects which our business unit is currently supervising, several are directly connected to energy transition. The most well-known is probably the 'Socket at Sea' project, a feasibility study for the integration of wind energy generated offshore. However, we are also conducting studies into innovative methods of energy transmission such as superconductors and Gas Insulated Lines (GIL)." Low-noise lines and transformers are further innovations which TenneT is pursuing with vigour.

Innovation demands cooperation, not least with external parties. TenneT therefore works alongside various research institutes and organisations such as ProRail (the company which manages and maintains the Netherlands' railway infrastructure) and Rijkswaterstaat, the Department of Public Works and Water Management. "We brainstorm about the future and possible cooperation in areas such as the integration of infrastructure, joint purchasing and planning."

Supply chain responsibility

Alongside the growing number of innovative projects prompted by social demands, Ron has noticed increased support for CSR throughout TenneT. "It has now permeated areas such as purchasing and supply chain responsibility," he notes. He has also been buoyed by the positive response to his proposed study into the social and environmental impact of low, medium and high-voltage cables. TenneT has agreed to conduct a full study in association with the grid operator Alliander. As Ron explains, this study will comprise both a life cycle analysis and a social impact analysis. "It will not merely focus on the use of raw materials, but on aspects such as the working conditions of the people who actually produce the cables." Ron hopes that the results of the study will form the basis of a new and fully responsible purchasing policy. One of the points to be examined in the study is the use of lead. Though the metal has advantages, including its waterproofing and anti-corrosive properties, it also has a distinct disadvantage in that it is a neurological toxin. "It will be useful to identify the alternatives to lead, not only in the interests of CSR but because it is important to know all the options."

2.6 Knowledge development and innovation

At TenneT, innovation and Corporate Social Responsibility are very much intertwined. Innovations in the electricity grid are almost always a response to the requirements of society as a whole. A good example is the demand for infrastructure which causes less impact on the human environment (e.g. in the form of electromagnetic fields or 'visual pollution' of the landscape), particularly in more densely populated areas. Another requirement of society is that our energy supply is made more sustainable, which similarly calls for major innovations. TenneT fully acknowledges the importance of knowledge development and of providing ample opportunity for innovation. We therefore actively participate in various knowledge platforms and have our own innovation support team.

TenneT has a number of internal knowledge platforms dedicated to the advancement of technology in various aspects of our operations, including components (wires, cables, transformers and switchgear), construction design and safety. In late 2009, a new knowledge platform devoted to environmental matters was established. Its members, drawn from all sectors of the organisation, exchange knowledge and experience on a regular basis. It is intended for the platform to help identify environmental problems and potential solutions at an early stage. Ideally, it will do so while the new project or maintenance programme is still in the planning phase. All knowledge platforms at TenneT also participate in various activities and projects as part of national and international networks.

TenneT's innovations are to be seen in five key areas which have a strong social component: the transition to sustainable energy; environment, health and safety; quality assurance and security of supply; effectiveness and efficiency; and service provision and market facilitation. In 2009, the company formed a special in-house team – 'TennovuM' – to help bring innovative ideas to maturity more quickly. The team includes representatives of the various business units and will initiate and support innovative projects.

Innovation also requires external input, for which TenneT seeks cooperation with various organisations and individuals in the field. As such, the international TenneT Innovation Advisory Board was established in 2009. It comprises four external experts of different backgrounds who will convene twice a year to assess TenneT's plans for innovation against governmental and social developments in the supply of energy both at home and abroad.

Another way in which we invite external involvement in our innovation projects is through our contacts with the Department of Public Works (*Rijkswaterstaat*) and ProRail. Regular informal meetings are held with these organisations, both of which bear certain similarities to TenneT itself, in order to exchange ideas and explore opportunities for cooperation.

Innovation creates new opportunities, as amply demonstrated by the development of the COBRA cable, a new interconnection between the Netherlands and Denmark. As part of the preliminary process, we studied how wind farms close to the route of the cable could be connected to it. COBRA will then not only interconnect countries, but also different forms of production to include wind energy. However, doing so calls for an innovative technology. To date, this technology has only been applied on a very limited scale worldwide.

The importance of ‘smart grids’

A ‘smart grid’ is one designed in such a way as to regulate the local supply and demand for electricity in the most efficient manner possible. This is becoming ever more important as the number of local (sustainable) energy producers increases. There will soon be electric vehicles, for example, which not only consume electricity when charging but produce electricity when in motion. It should be possible to introduce that ‘spare’ electricity to the national grid. Similarly, solar cells and heat exchangers installed in private homes could supply electricity to the grid. In order to facilitate such developments, grid operators face the enormous challenge of adapting both the physical infrastructure and the way in which systems are managed. In fact, it will largely be the operators of the low-voltage grids who face this particular challenge. The high-voltage grid managed by TenneT is already ‘smart’. The use of the ring structure enables new (sustainable) sources of energy to be integrated with relative ease. TenneT is nevertheless closely involved in the developments which affect the low-voltage grids due to its active participation in research and advisory bodies such as E-laad (which is specifically concerned with electric vehicles). Working closely alongside our partners, we ensure that a fully sustainable energy supply will indeed become a reality.

Prominent examples of TenneT’s innovation include the aforementioned Wintrack pylon, the Bird Flight Diverters to prevent unnecessary bird deaths, and the installation of high-voltage connections by means of underground cabling.

3. Measures and performance

3.1 Organisational background

In 2009, TenneT assumed management responsibility for three regional high-voltage grids. These acquisitions affect our overall CSR performance, particularly with regard to environmental aspects ('Planet'). The expansion of the high-voltage grid has resulted in greater environmental impact in absolute terms, since we are now responsible for a significantly larger number of components. Moreover, we transmit a greater quantity of electricity, meaning that our grid losses have also increased in absolute terms.

TenneT is doing everything possible to establish the environmental data relating to the acquired assets and to integrate this information into existing operational processes. This process was still ongoing at the time of producing the current report. As a result, it is not possible to provide concrete results for some of the performance indicators relating to the new grids.

Aspect	Objectives achieved in 2009
Organisational embedding	• CSR targets have been included in the business units and departments' annual plans for 2010
KPI development and data gathering	• The KPIs used by other TSOs have been identified • The KPIs on which TenneT will report were selected • All available CSR-related information was sourced • For each KPI, as much information as possible was collected
Reporting	• Preparations were made for the first TenneT CSR report

The two main objectives for 2009 were the organisational embedding of CSR and the development of Key Performance Indicators relevant to the company's CSR policy. Both objectives were attained. Organisational embedding has been achieved by various means, including the incorporation of CSR objectives and targets into the annual plans of the various business units and departments. Performance in relation to these objectives will be reported by means of the regular internal management reports, with accountability provided by the same means.

TenneT intends to use 2009 and 2010 - the first full year in which it is responsible for the entire Dutch high-voltage grid – as the 'baseline' for the further development of CSR targets and performance indicators. Performance in 2010 will determine the quantitative targets to be applied to each of the KPIs thereafter. For example, reductions in energy use and waste production will be subject to defined percentages.

The table below shows the aspects covered by this first CSR Report. The selection is based in part on the results of a study into the social issues considered to be of importance within the sector as a whole and a number of internal workshops with stakeholders. For a more comprehensive account of the selection process, please see Appendix 2.

PEOPLE	PLANET (ENVIRONMENT)	PROFIT (THE MARKET)
• Staff	• Grid losses and 'greening'	• Security of supply
• Regulations	• SF_6 emissions	• Customer satisfaction
• Health and absenteeism	• CO_2 footprint	• Financial performance
• Safety in the workplace	• Volatile Organic Compounds (VOC)	
• External safety	• Waste and paper usage	
• Telecommuting	• Soil quality	
• Talent development	• Polychlorinated biphenyls (PCBs)	
	• Asbestos	
	• Environmental incidents	
	• Electromagnetic fields	
	• Physical assimilation of infrastructure	
	• Biodiversity	
	• Sustainable catering	

3.2 Attention for social aspects

Staff

TenneT is enjoying rapid growth. By late 2009, the company had 934 employees, of which 20.1% are female. The number of staff had risen by 11.5% over the preceding year. Staff turnover (existing employees leaving the company) was 3.8%.

In 2009, the average age of the TenneT workforce was 43.1. The breakdown by age is shown in the table below. The average length of service with the company was 10.6 years. (This figure includes employment with TenneT's legal predecessors).

Age	Number of employees (2009)	Percentage
Under 25	12	1.3%
25-30	65	7.0%
30-35	135	14.5%
35-40	146	15.6%
40-45	141	15.1%
45-50	160	17.1%
50-55	155	16.6%
55-60	95	10.2%
Over 60	25	2.7%


“TenneT is growing, but has not lost its focus on people”
Caroline

Caroline van Dalen, Safety & Security policy staff

Caroline van Dalen has been with TenneT for over twenty years, during which time she has seen many changes. She sees the Committed Power sports programme as one of TenneT's crowning achievements. "It is the constant factor in our changing culture," she suggests.

Caroline's work is concerned with safety awareness. Her focus is therefore on people, and that applies equally to TenneT itself, she believes. "Health, safety and integrity have been key values for as long as I have worked here. Those values are anchored in the Corporate Code of Conduct." But TenneT also shows due concern for individual employees' wishes, as demonstrated by the ongoing attention it devotes to ensuring a comfortable, ergonomically responsible workplace. "TenneT is willing to listen to people's ideas rather than laying down the law," Caroline says. During her two decades with TenneT, concern for the human aspect has remained a constant. Nevertheless, there have been some changes, especially of late. "TenneT is growing rapidly. Many new people have joined the company and they all have to find their place within it. With so many different people with so many different needs, we may see a further shift in our culture." Caroline nevertheless welcomes growth. "The influx of fresh blood will ensure new insights and more market orientation. We may have been too tied up in rules in the past."

Caroline sees Committed Power as an important binding factor within the company, bringing all staff together on an equal footing. The programme offers the opportunity to take part in running, cycling or Nordic walking under the guidance of professional trainers. Caroline admits she is an enthusiastic participant in the programme. She regularly goes for an energetic run after work, and sometimes in her lunch break as well. "You return to your desk feeling refreshed and invigorated." Committed Power is unique in terms of its participation rate. No fewer than 530 people, both employees and partners, participated in 2009. This figure represented more than half of the workforce. In Caroline's view, Committed Power is more than just a way of keeping fit. "It is a useful and enjoyable way to do some networking within the company. You meet people from all across the organisation, allowing you to make new contacts easily. I think this is important now that TenneT is growing so quickly." Caroline thinks that the programme also does much to foster team spirit. "Taking part in sports together creates an entirely different atmosphere. This is particularly noticeable during the annual trip abroad. For the runners, that involves a weekend away with a half marathon on the programme. In past years, we have been to Budapest, Paris, Lisbon and Ljubljana. The cyclists generally head off into the Alps." Last but not least, Caroline thinks that thanks to Committed Power, employees would rather leave their cars at home. "You see many more people coming to work by bike or on foot. That has to be good for the environment!"

Pioneers

Every modern organisation needs an ambitious CSR policy. "Corporate Social Responsibility has really taken off and will continue to grow in importance. What began as a pioneering move is now a fully-fledged area of policy in its own right." Caroline believes that it is absolutely crucial to involve all staff in CSR. "It is a question of mentality. Take purchasing, for example. There are many gains to be made simply by devoting attention to a few practical aspects. We now use fair-trade coffee and have greatly reduced our use of paper and printer ink by introducing centralised printers." Is there still room for improvement? "Oh, definitely. And there should be more women in senior positions!"

In 2009, approximately 4.8 percent of staffing expenditure was devoted to training. The time allocated for training purposes averaged 101 hours per employee.

A survey conducted in 2009 prior to the election of a new Works Council revealed that approximately 12% of employees are members of a trade union. All staff employed directly by TenneT fall under the Collective Labour Agreement (CAO) for the energy sector.

Further information about staffing can be found in our regular annual report which can be downloaded from http://jaarverslag.tennet.org.

Regulations

To protect the interests of our staff and of the organisation as a whole, a number of formal regulations are in force within TenneT. They include the Corporate Code of Conduct, which sets out key standards and values to be observed at all times. For example, the Code addresses situations in which there is a potential conflict of interests, and sets out formal procedures dealing with any form of harassment in the workplace. The rules apply not only to staff employed directly by TenneT but to all external personnel working under contract. TenneT also has a 'Whistleblower's Charter', whereby staff may report (suspected) irregularities without fear of recrimination or reprisals. Both the Corporate Code of Conduct and the terms of the Whistleblower's Charter are in the public domain and may be accessed at www.tennet.org.

Health and absenteeism

TenneT encourages its employees to take responsibility for their own health and fitness. An official policy is in place which aims to address the individual requirements of employees wherever possible. As such, it is possible to request specially adapted office furniture. We also offer employees the opportunity to purchase ergonomic computer accessories to promote responsible computer usage.

In 2008 and 2009, TenneT offered all its employees the opportunity to undergo a voluntary Preventive Medical Examination. Examinations were performed by KEMA Arbo, our occupational health service. The examination included various tests and measurements, (blood, hearing, BMI, general fitness), followed by a discussion of the results with a qualified physician. Employees subsequently received advice or, in some cases, referral to a medical specialist. KEMA Arbo also conducted a number of collective assessments, the results of which will be followed up in 2010.

Staff has access to the company physician and other medical staff at all times. TenneT offers collective health insurance cover at preferential premiums, and contributes towards health-related expenses incurred by employees. Staff wishing to report certain types of undesirable conduct, such as bullying or sexual harassment, have access to 'confidential counsellors' appointed for this purpose.

Partly due to our active prevention policy, the sickness absence rate at TenneT has been relatively low for years. In 2009, the absence rate was 3.2%. In the preceding three years, it fluctuated between 3.1% and 3.5%.

As sport is relaxing, keeps employees fit and promotes team spirit, TenneT encourages staff to partake in sports-related activities. As such, we offer employees the opportunity to take advantage of the

'company sports' system. Under this system, TenneT partially reimburses the membership costs of a sports club.
The idea behind our 'Committed Power' programme is to encourage staff to take part in sports as a group. They then enjoy the opportunity to socialise with each other in their free time and in a particularly informal setting. Partners and external staff are also welcome to take part. One of the few conditions for participation is a medical check. For a small contribution, participants in the programme currently become proficient in cycling, running or Nordic walking. With assistance from a professional trainer, participants work towards a personal goal e.g. competing in a half marathon. Employees can request a personal training programme with guidance from a 'Health Manager' to tackle any weight problems, or to start leading a healthier lifestyle. The highlight of the Committed Power programme is the annual staff excursion: a sociable weekend trip abroad, which includes a half marathon or an alpine cycling race.

Safety in the workplace

Safety is the foremost priority for TenneT. We naturally aim to avoid accidents at all times. Safety rules and guidelines are in place and must be observed by all staff and external contractors. We publish a number of comprehensive safety manuals which can be found at www.tennet.org (under 'Publications').

If, despite all precautions, there is some accident involving a TenneT employee or contractor, it must be reported and carefully recorded. TenneT requests accident statistics from all other contractors with which it does business. In 2009, there were no fatal incidents involving TenneT staff or contractors of the Transmission Operations businesses units. There were four accidents resulting in time off work, of which three involved contractors' employees. The information provided by other contractors reveals that there were only two accidents serious enough to prevent those involved returning to work immediately.

In addition to registering accidents, TenneT also records the details of any hazardous situations which are reported by staff and contractors. In 2009, 91 such reports were received, of which 12 related to the office environment, 39 to project sites and 40 to high-voltage substations. Immediate action is taken where necessary to resolve the situation or prevent any recurrence. Subcontractors have been requested to provide information regarding hazardous situation reports. Unfortunately, this information is either unavailable or is in a form which is not compatible with our own classification system.

Hazardous situation reports in 2009	Number	Percentage
Office environment	12	13%
Project sites	39	43%
High-voltage substations	40	44%
Total	91	100%

External safety

TenneT attaches similar importance to external safety. In 2009, we commissioned the Netherlands Organisation for Applied Scientific Research (TNO) to conduct a study examining the external risks associated with one 150 kV and four 380 kV high-voltage substations. The study focused on two specific types of risk: external influences which may pose a threat to the substations themselves (e.g. hazardous substances) and the potential adverse impact on the surroundings. The initial study report reveals a

small number of instances in which temporary building constructions were situated with 'effect radius' of the substations. TNO will produce its final report in 2010. If necessary, we will then take suitable preventive measures e.g. protective provisions and more stringent access requirements to sites.

Telecommuting

In 2009, TenneT conducted a 'telecommuting' trial with a view to gaining an insight into opportunities for more flexible working practices. Telecommuting can have positive social effects, including a reduction in car usage (with the concomitant reduction in fuel consumption and CO_2 emissions) and a better balance between the working and private lives of employees, who will spend less time travelling between home and their place of work. The initial trial involved ten staff members who worked at home for one day each week. By doing so, they saved a total of 35,000 car-kilometres, 2,649 litres of fuel, and 944 hours which would otherwise have been spent driving back and forth. Both the staff concerned and their line managers deemed the trial extremely successful, not least because it actually increased efficiency and productivity. Preparations are now being made for a follow-up project in which telecommuting will be rolled out throughout the organisation in 2010.

Recruitment and talent development

A rapidly expanding organisation has to devote extra attention to new talent and to the ongoing training of existing staff. TenneT is no exception to this. TenneT therefore has a trainee programme for recent graduates from Dutch universities of technology. The two-year programme is specifically geared to young talent with a background in electrical engineering or energy management. Those who complete it successfully will be ready to take up positions of responsibility within the company. In 2009, there were four trainees on the programme (one of whom had joined in 2008).

The reporting period also saw the establishment of the 'TenneT Academy' which will provide training and lifelong learning opportunities tailored to the requirements of individual employees. Staff of the Finance department was the first to be introduced to the new scheme. At the end of 2009, the TenneT Academy had eighty registered students. It is hoped that all staff will be able to avail themselves of the new opportunities in 2010.

Another noteworthy initiative is the 'Power Minor' programme for students in higher vocational education, co-developed by TenneT in association with The Hague University of Applied Sciences, HAN University and Windesheim University. The curriculum includes modules examining the production and distribution of electricity. In the first year of the programme, twenty-two students successfully completed these modules. Although recruitment is not a specific aim of the programme, seven of these students were subsequently employed by TenneT.

3.3 Monitoring and reducing environmental impact

Grid losses and 'greening'

It is inevitable that some electricity will be lost in transit when it is transmitted. This is known as 'grid loss'. TenneT strives to minimise the grid losses, doing so through effective maintenance, appropriate material choices, optimum infrastructure and 'smart' switching practice. In 2009, total grid losses on the 220 kV and 380 kV distribution grids amounted to 510 GWh. We are currently attempting to quantify the grid losses on the 110 kV and 150 kV grids. This is a complex undertaking, since there are many more connection points between these lower-level distribution grids.

As in previous years, TenneT compensated for the grid losses by purchasing 'Guarantee of Origin' certificates for a volume of electricity equivalent to the losses from the high-voltage grids over 220 kV. These certificates guarantee that the electricity in question has been produced in a sustainable manner. The practice is known as 'the greening of grid losses'. In 2010 and beyond, TenneT will also 'green the grid losses' on the 110 kV and 150 kV transmission grids.

What are 'Guarantees of Origin'?
A Guarantee of Origin certificate is proof (and is actually the only legally valid proof) that electricity has been produced in a sustainable manner, whether from wind, hydroelectric generation, solar power or biomass. The certificates are issued to the producers of sustainable energy by CertiQ, a subsidiary of TenneT. The certificates can be traded between producers. Suppliers who offer 'green' electricity to end users must hold a certificate to establish their entitlement to charge the differential tariffs for such electricity.

SF_6 emissions

TenneT uses sulphur hexafluoride (SF_6) gas as an insulating gas in its high-voltage switchgear. SF_6 is one of the 'greenhouse gases'. Unfortunately, there is currently no safe alternative. SF_6 is only used in closed systems. However, some leakage can occur, particularly during maintenance activities. It goes without say that we make every effort to prevent the escape of SF_6 into the atmosphere by ensuring proper maintenance and detecting any leaks as soon as possible. In all new investment projects, components with a very low leakage potential are selected wherever possible. TenneT is currently implementing a standardised monitoring and registration programme for the entire grid, including the 110 kV and 150 kV distributions grids it has recently acquired. In 2009, we joined other organisations in the industry in carrying out a full-scale inventory of all Dutch grid operators' SF_6 emissions in 2007 and 2008. The emissions are reported collectively by branch organisation NetBeheer Nederland. Emissions in 2009 will be quantified in the same way during the first half of 2010.

CO_2 footprint

Various means have been applied to quantify TenneT's CO_2 footprint. They include closely monitoring energy consumption in our offices and fuel consumption by company vehicles (which can be readily established since all fuel is purchased using a credit-card system). Additionally, our grid losses and air travel (insofar as they were booked through our central booking office) were included in the assessment.

In calculating the CO_2 footprint, we have excluded electricity consumption used for heating and other purposes in our high-voltage substations. This consumption is not always subject to ongoing monitoring due to the costs involved. In fact, it is likely to represent a relatively small proportion of the company's total energy consumption, particularly when compared to the grid losses.

	CO_2 (tonnes) in 2009	Proportion of total
Grid losses	210,630	96%
Offices	6,068	3%
Transport	2,250	1%
Total	218,948	100%

TenneT's CO_2 footprint is equivalent to 218,948 tonnes. As expected, grid losses account for the largest proportion by far. In other words, our CO_2 footprint corresponds to the average energy consumption of around 24,881 domestic households.

Volatile Organic Compounds (VOCs)

Volatile Organic Compounds (VOCs) are released into the atmosphere during the process of painting the high-voltage pylons. These VOCs can harm the ozone layer. Painting pylons is a particularly difficult task. They can reach heights of up to 130 metres and may be spaced between 300 and 400 metres apart.

TenneT outsources all painting work out to specialist contractors. The Transmission Operations business unit maintains a detailed record of the type and quantity of paint used by each contractor. In 2009, the total quantity used was 171.453 litres, accounting for VOC emissions of 81,131 kilograms. The VOC content of the paint used may therefore be seen to be relatively high. In order to reduce emissions, TenneT is opting to use new types of paint which emit less VOCs thanks to improved composition. An additional advantage is that this paint has higher resistance to the effects of ultraviolet radiation and therefore lasts longer. At present, TenneT has its pylons painted every ten to twelve years. With the new paint, the interval can be extended to fifteen years or perhaps even longer. Another way in which we shall reduce VOC emissions is to reduce the quantity of paint required for each pylon. This can be achieved by ensuring a better finishing of the basic materials, as in the smooth structure of the new WinTrack pylon.

TenneT does not record details of the paint used on structures other than the pylons, such as offices, workshops, storage sheds or the high-voltage substations. It is reasonable to assume that the quantity of paint used on these structures is significantly lower than that required for the pylons.

Waste and paper usage

Most of the waste produced by TenneT is non-hazardous. Adequate storage and disposal facilities for both hazardous and non-hazardous waste are available at offices and substations. All waste is collected and processed by certified operators.

We separate waste as much as possible. Rules and guidelines for doing so are in place. For example, used disposable coffee cups are collected in dedicated containers before being sent to be recycled.

As shown by the table below, the total quantity of waste produced by TenneT is equivalent to 435 kilograms per employee. This figure relates both to waste produced in the offices and to waste as a result of the construction and maintenance of the high-voltage grid.

Waste category	Total (kilograms) 2009	Total per employee
Operational waste	150,515	185
Waste containing oil (derivatives)	78,117	96
Paper and cardboard	48,640	60
Oil	26,871	33
Construction and demolition waste	22,750	28
Scrap metal	7,680	9
Wood	7,040	9
Soil	3,295	4
Discarded cable	3,000	4
Small Chemical Waste	2,173	3
Glass	1,600	2
Large domestic waste	1,500	2
Miscellaneous	585	1
TOTAL	**353,766**	**435**

TenneT's paper consumption is calculated on the basis of the total quantity of paper purchased for internal use (notepaper, copying paper etc.) and the printing work contracted out to third parties (the Annual Report, customer information brochures etc.) as reported by the relevant suppliers. The total paper usage in 2009 was 50,834 kilograms, equivalent to 62.5 kilograms per employee.

In 2009, the regular Annual Report was printed on unbleached, untreated, FSC-certified 'Mixed Sources' paper. FSC-certified paper accounted for 5.6% of the total used by TenneT in 2009.

Soil and groundwater

TenneT's transformers contain oil which is pumped round in a closed system as a means of insulation and cooling. As TenneT has taken appropriate measures to protect the soil around the transformers, the likelihood of this oil leaking or leaching into the soil and groundwater is extremely small. The run-off of rainwater around the transformers passes through oil/water separators which are subject to regular maintenance. The spoil ('sediment') retrieved from the separators is treated as hazardous waste in accordance with current legislation, and is collected and processed by accredited specialist operators.

Cables can be a potential source of soil and groundwater contamination. Unlike new, synthetically insulated cables, many older cables contain oil: their insulation is actually a layer of oil-soaked paper. If damaged, there is a risk that the oil will leach into the soil and/or groundwater. TenneT carefully records the quantity of new oil which is used in underground cables so that we can promptly identify any leakages. In 2009, the total 'top up' required was 2,225 litres.

In 2009, TenneT commissioned soil and/or groundwater remediation projects at eleven locations. All such projects concerned oil leaks, mostly from old and damaged cables. In each case, the contamination could be completely removed with relative ease. All eleven projects proceeded entirely to plan, with no irregularities noted.

High-voltage overhead lines and fine particulate matter

High-voltage overhead lines do not emit particulate matter. However, particles already in the atmosphere can become electrically charged by the electro-magnetic field around the cables. In a purely physical sense, this charge could alter the physical properties of particulates and exacerbate their potential to cause adverse health effects. In 2007, the Ministry of the Environment commissioned the National Institute for Public Health and the Environment (RIVM) to investigate this issue. The results of the RIVM study reveal that the electrical charge has absolutely no effect on particles' ability or propensity to enter the lungs or airways, or to settle on the skin. These findings confirm those of the Health Council (2001) and the World Health Organisation (2007). For further information, please refer to the position paper *Particulate Matter and High-voltage Lines*, which can be downloaded from www.tennet.org.

A further seven instances of oil leakage were identified in 2009. The causes varied from underground cable damage to a leak in a hydraulic crane. In each case, prompt and effective clean-up action was taken in accordance with legislative requirements. A report was submitted to the competent authorities, followed by an evaluation once the problem had been resolved.

Ongoing monitoring of residual oil contamination was undertaken at nine sites during 2009 as part of various long-term programmes. The interim results were submitted to the relevant authorities.

Polychlorated biphenyls (PCBs)

Oil containing polychlorated biphenyls has long been used in heavy-duty machinery and certain types of electrical component. Safer substitutes are now available. Some components of the high-voltage grids may also contain PCBs. TenneT replaced all oil with a PCB content in its transformers some years ago, doing so in line with the national and European legislation at the time. That legislation has since been updated, whereupon TenneT has made a new inventory of all its grid components. The results reveal that only a very low percentage of components – no more than four percent – may still contain PCBs. Considering the closed system in question, this cannot be accurately verified without damaging components. From a cost point of view and due to the limited risk to the environment, we will only replace these components when it is necessary to do so. TenneT has yet to make an inventory of the recently acquired grids. We have joined other TSOs, the branch organisation Netbeheer Nederland and the government in order to devise an appropriate response to the presence of residual PCBs.

Asbestos

Further to its responsibility for Health and Safety, TenneT keeps a record of all materials containing and suspected of containing asbestos. Wherever possible, these materials are then marked accordingly with warning stickers before being removed safely. Asbestos inventories have now been conducted at approximately half of TenneT's operational sites, including those of the recently acquired transmission grids. In planning the remainder of the inventory, the priority will be those 'suspect' sites at which maintenance activities are scheduled. Under no circumstances will TenneT allow regular maintenance work to proceed until all asbestos has been removed by accredited contractors and the sites proclaimed safe.

Environmental incidents

An 'environmental incident' is an unforeseen event which has the potential to cause adverse environmental impact. TenneT keeps a record of all such incidents involving our own employees or the staff of contractors. We have also requested other information from other contractors, which has been duly received. Unfortunately, it is in a form which is incompatible with our own classification systems.

In 2009, TenneT recorded 21 environmental incidents. All could be adequately resolved through prompt action such as the use of absorption pellets, cleaning, removal of contaminants and immediate repair of leakages.

	Number (2009)	Percentage
Soil contamination	14	66.7%
Asbestos	4	19%
Discharges into surface water	1	4.8%
Frozen pipes or cables	1	4.8%
Burst water pipes	1	4.8%
Total	**21**	**100%**

Electromagnetic fields

Electromagnetic fields form around the high-voltage lines, cables and substations. We can distinguish between an 'electric' field, the strength of which is expressed in kilovolts per metre (kV/m), and a 'magnetic' field, the strength of which is expressed in micro-Tesla (µT). More detailed information is provided in our corporate brochure Electric and Magnetic Fields, which can be downloaded from www.tennet.org.

In 2009, TenneT commissioned NOVEC to measure the intensity of the EM fields to which staff and contractors are exposed at a number of its substations. In a few isolated cases, the results were found to exceed the recommended norms. A follow-up investigation will take place in 2010.

Integration of infrastructure

High-voltage pylons are a conspicuous feature of the landscape. It comes as no surprise then, that local residents frequently prefer cables to be installed underground wherever possible. The expansion of the national 110-150 kV grid will indeed adopt this approach. In all grid expansion projects, TenneT tries to make full use of existing high-voltage overhead lines. By means of technological innovations, or by simply adding extra lines, we can make more intensive use of the existing above-ground infrastructure. Great care is taken to ensure that the intensity of magnetic fields remains unaltered.

Utilising extensive underground routes within the 220-380 kV grid can endanger the security of supply. Current technology means that 220 kV and 380 kV connections can be installed underground to a maximum distance of twenty kilometres.[1] The Randstad 380 kV project is the first to use 380 kV high-voltage underground cables over this distance. We are therefore 'pushing the envelope' of what is technically feasible, but are doing so without endangering the security of supply.

1 This restriction applies only to the transmission of alternating current (AC). Undersea cables can be used over far greater distances because they carry direct current (DC) which is then converted to AC on land using 'inverters'.

Underground cables	Total length in kilometres
110-150 kV	738
220-380 kV	2*

Above-ground lines	
110-150 kV	3,631
220-380 kV	1,372

* Excluding the undersea NorNed cable, which is 580 km in length

The government's Third Electricity Provision Structure Plan (SEV III) proposes an arrangement whereby TenneT is expected to compensate for its construction of new high-voltage lines of 220 kV and above if these lines cannot be combined with existing overhead routes. In practice, this will entail moving the existing 110 kV and 150 kV lines underground or combining them with a 380 kV connection. TenneT was not required to do so in 2009, since no new overhead high-voltage connections were installed.

Biodiversity

When installing new connections, TenneT takes the presence of plants and animals into consideration as much as possible. As such, in our current construction and expansion projects in the Randstad conurbation, we try to include so-called 'green corridors' or dedicated 'flora and fauna zones' where possible in the planning process.

The underlying idea of green corridors is to preserve or create ideal habitats for certain plant and animal species. In order to keep abreast of the current state of nature in the Netherlands, we are one of the first companies in the country to have subscribed to the Dutch National Databank for Flora and Fauna, which gives us access to current and reliable information about biodiversity. We also contribute information to the database about the flora and fauna we encounter near our high-voltage routes.

TenneT devotes particular attention to birdlife. We suspend all activities during the brooding season and only remove birds nests from pylons if they have been abandoned. We must, however, make an exception in the case of work which is essential to ensure the security of supply or for reasons of safety.

In 2009, we trialled so-called 'Bird Flight Diverters'. These are flags which are suspended from the highest earth wires between high-voltage pylons situated in the polders around Hazerswoude, an area notable for its large migrating bird population. It is hoped that the flight diverters will discourage birds from their (often fatal) habit of flying headlong into the cables. If the trial proves successful, we will install Bird Flight Diverters in other areas with a high concentration of birds.

Catering

TenneT's catering is outsourced to Vitam, which states that 24.5% of all products in its range in 2009 were either organic or 'fair trade'.

In 2009, we imposed no further requirements in terms of sustainable catering. However, we intend to do so in mid-2010, when the current contract expires and the catering services are once again opened to tender. Our new conditions will include a number of sustainability criteria, including the obligation

to produce an annual environmental management plan. Caterers must state exactly how they intend to reduce the amount of waste they produce and how they will ensure effective separation of waste flows such as packaging materials and organic waste.

TenneT will also produce a set of Key Performance Indicators covering the proportion of both sustainable products (e.g. organic and 'fair trade') and healthy products (e.g. fruit and salads) within the caterer's overall range of menu options. In the first year, the KPI for sustainable products will be ten percent. The KPI for healthy products has yet to be determined. The intention is that the percentages will be increased each year.

3.4 Security of supply, customer satisfaction and financial performance

Security of supply

One of TenneT's key tasks is to guarantee the security of the electricity supply via the high-voltage grid. Our responsibility in this regard informs all investment decisions.

The security of supply offered by the Dutch high-voltage grid is extremely high. From 2007 to 2009, the annual outage duration of the 220-380 kV grid was zero minutes. The outage duration and frequency of service interruptions on the 110-150 kV grid were also marginal. In some cases, the frequency of service interruptions and the outage duration per connection has been rounded down to zero due to discounting the number of parties connected to the grid.

	2007	2008	2009
Frequency of service interruptions (no. per connection)			
110-150 kV	0.000	0.023	0.050
220-380 kV	0.000	0.000	0.000
Average outage duration (minutes)			
110-150 kV	9	14	50
220-380 kV	0	42	0
Annual outage duration (minutes per connection)			
110-150 kV	0.00	0.32	2.52
220-380 kV	0.00	0.00	0.00

Customer satisfaction

TenneT attaches great importance to customer satisfaction. Each year, we ask our customers to evaluate our services by means of a questionnaire. In 2009, customers awarded TenneT's basic service provision a score of 7.1, an improvement on the 6.9 in 2008. However, we are not yet satisfied: we are aiming to achieve a 7.5 or higher in 2010. We are striving to attain this by improving our services e.g. shortening the response time for questions, complaints and requests for new connections. Performance indicators will measure to what extent these methods succeed.

Financial performance

A summary of the financial statements for 2009 is given below. More comprehensive information can be found in the regular Annual Report, which may be downloaded from http://jaarverslag.tennet.org.

Key figures 2009[1]	**2007** IFRS	**2008** IFRS	**2009** IFRS
Financial statements (EUR x million)			
Revenue	546.6	460.3	398.8
Operating result (EBIT)	137.4	80.9	70.4
Net profit after tax	73.1	52.2	54.9
Tangible fixed assets	2,417.70	1,470.00	1,263.00
Equity	727.3	665.4	645.6
Balance sheet total	3,570.40	2,886.40	2,913.00
Ratios[2]			
Solvency	30.10%	46.10%	45.90%
Return on average equity	10.50%	8.00%	8.70%
Interest cover	3.9	5.5	4.2
Loans/EBITDA	5.6	3	4

1) Key figures relate to TenneT Holding B.V.

2) Balance sheet total minus financial assets not at free disposal, accounts payable and receivable, energy exchange transactions and investment contributions received in advance.

4. On course to a sustainable future

4.1 Organisational embedding

TenneT has taken the first steps in formulating and implementing a Corporate Social Responsibility policy. We realise that there is still much to be done. Organisational embedding is an essential precondition to success. TenneT has therefore set a number of firm objectives for 2010, as shown in the table below.

Aspect	Objectives for 2010
Organisational embedding	• New CSR goals and targets are to be included in the annual plans for 2011. All must lead to an improved CSR performance. • Awareness of CSR is to be increased throughout the organisation by various means, including campaigns targeting staff.
Data gathering and streamlining	• The manner in which information for each KPI is to be collected will be defined. Additional measures, such as adapting the registration systems or imposing reporting requirements on contractors, will be taken as necessary.
Quantitative targets	• Target figures will be established for each KPI based on actual performance in 2010. They will come into effect in 2011.
Reporting	• A CSR report for 2010 will be produced.
Research	• We will determine whether the current Corporate Social Responsibility Report 2009 meets stakeholder expectations (staff, customers, advocacy groups etc.).

Last but not least, we shall take the opportunity to assess the degree to which this, our first Corporate Social Responsibility Report, meets the expectations of the various target groups. Wherever possible and appropriate, we shall act upon any suggestions for improvement.

4.2 Aspects to be addressed in 2010

In 2010, TenneT will once again address Corporate Social Responsibility under the three main headings of People, Planet and Profit.

TenneT wants to continue to be an attractive and committed employer, demonstrating due regard for the human component: **'People'**. We will accomplish this by:

- Encouraging staff to participate in new training and instruction programmes. During the course of 2010, the tailor-made courses offered by the TenneT Academy will be made available to the staff of all departments
- Promoting the fitness and health of employees. In 2010, those taking part in the Committed Power sports programme will once again enjoy professional guidance as they work towards their challenging personal targets
- Offering all staff healthy and socially responsible menu options in the company's catering outlets. The tender procedure for catering services will include a KPI establishing the proportion of 'healthy' products to be made available

In terms of **Planet**, TenneT wants to minimise the negative environmental effects caused by its activities, thus making a positive contribution to the quality of the human environment. We will accomplish this by:

- Reducing and 'greening' grid losses. In 2010, we shall also compensate for the losses on the recently acquired 110-150 kV grids by purchasing electricity of certified 'sustainable' origin
- Encouraging the development of knowledge and innovations which contribute to a decrease in negative environmental effects, such as the WinTrack pylon. During 2010, our innovation support team TennovuM will submit a number of new project proposals to the external experts who make up our Innovation Advisory Council
- Taking into consideration the impact of our activities on the landscape. When constructing new high-voltage connections, such as those of the Randstad 380 kV project, TenneT will strive to protect biodiversity to the greatest extent possible. We shall exploit every opportunity to reduce the negative impact of our activities e.g. by creating 'green corridors', leaving birds' nests undisturbed and suspending activities during the brooding season.

In terms of **Profit**, TenneT wants to actively contribute to the market developments currently ongoing in the Netherlands and throughout Europe. We will accomplish this by:

- Upgrading the 'ring' structure of the onshore high-voltage grid. The current Randstad 380 kV project and the planned North-West 380 kV and South-West 380 kV projects will make a significant contribution in this context
- Developing interconnections with neighbouring countries. In 2010, TenneT will continue to develop its plans for a high-voltage connection between Doetinchem and Wesel, and for the BritNed cable between the Netherlands and southern England. We shall also continue the preparations for the planned COBRA cable linking the Netherlands and Denmark. A feasibility study for a second interconnection with Norway will be conducted
- Making it possible to link offshore wind energy sources to the national high-voltage grid. As noted in Paragraph 2.3, TenneT has commenced these preparations in anticipation of the government's formal instructions
- Actively contributing to national and international discussions regarding various issues e.g. as part of the ENTSO-E North Sea Group which has been formed to facilitate the large-scale offshore production of wind energy.

In pursuing Corporate Social Responsibility, we shall constantly remind ourselves that all investments must be in the interest of an effective, efficient, sustainable and reliable electricity supply.

Appendix 1 GRI content index

This Appendix provides cross-references between the information in this Corporate Social Responsibility Report and the 'indicators' and 'disclosures' prescribed by the Global Reporting Initiative guidelines (version G3), including the 'Electric Utility Sector Supplement'.

	GRI[1]	Description [2]	Paragraph / Section / Chapter[3]	Page	Notes
Strategy	1.1	Statement by the most senior decision–maker of the organisation (e.g. CEO, chair, or equivalent senior position) about the relevance of sustainability to the organisation and its strategy	Foreword	6	
	1.2	Description of key impacts, risks and opportunities	Foreword, 1.4, 2.1-2.6, 4	6,14,16-18, 21-27	
Profile	2.1	Name of the organisation	1.1	8	
	2.2	Primary brands, products and/or services	1.1, 1.2, 2.1	8-10,17	For further information, see the regular Annual Report at http://jaarverslag.tennet.org.
	2.3	Operational structure of the organisation, including main divisions, operating companies, subsidiaries and joint ventures.	-	-	
	2.4	Location of headquarters	1.1	8	
	2.5	Number of countries in which the organisation operates	1.2	9	
	2.6	Ownership structure and legal form	1.1	8	The only shareholder is the Dutch government, represented by the Ministry of Finance. TenneT TSO is a company with limited liability.
	2.7	Sales market(s)	1.2	9	
	2.8	Scale of the organisation	3.2	29	
	2.9	Significant changes in structure, scale or ownership during the reporting period	1.1, 1.6, 3.1	8, 15,28	
	2.10	Awards received during the reporting period	-	-	N/A
	EU1	Installed capacity, broken down by primary energy source and by regulatory regime	-	8	N/A (see para. 1.1)
	EU2	Net energy output broken down by primary energy source and by regulatory regime	-	8	N/A (see para. 1.1)
	EU3	Number of residential, industrial, institutional and commercial customer accounts	2.2	19	Examples of the various types of customer connection are given.
	EU4	Length of underground and above-ground transmission lines, by regulatory regime	3.3	39	Subdivided into 110-150kV and 220-380 kV connections
	EU5	Allocation of CO_2 emissions allowances or equivalent, broken down by carbon trading framework	-	-	N/A
Scope	3.1	Reporting period	1.5	15	1 January 2009 to 31 December 2009
	3.2	Date of most recent previous report	-	-	N/A (this is TenneT's first CSR report)
	3.3	Reporting cycle	-	-	Annually
	3.4	Contact point for questions	1.6	15	
	3.5	Process for defining report content.	1.5, Appendix 2	15, 52	
	3.6	Boundary of report	1.5, Appendix 2	15, 52	
	3.7	Any specific limitations on the scope or boundary of the report	1.5, Appendix 2	15, 52	
	3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations and other Entities	1.5, Appendix 2	15, 52	
	3.9	Methods and calculation principles	3.4, Appendix 2	29-42, 52-53	
	3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	-	-	N/A
	3.11	Significant changes from previous reporting periods	-	-	N/A
	3.12	GRI Content Index	Appendix 1	45-51	
	3.13	Independent verification	1.5	15	None

	GRI[1]	Description [2]	Paragraph / Section / Chapter[3]	Page	Notes
Corporate governance, commitment and impartiality	4.1	Governance structure of the organisation	1.1	8	
	4.2	Operational decision-making authority of highest governance body	1.1	-	The most senior governance body within TenneT is the Supervisory Board, whose responsibility is to supervise the activities of the Board of Management. The Supervisory Board has no operational decision-making authority in its own right.
	4.3	Indicate whether the Chair of the highest governance body is also an executive officer. State the number of members of the highest governance body who are independent and/or non-executive members.	1.1	-	Neither the chairman nor any other member of the Supervisory Board holds a management position within the TenneT organisation
	4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	1.1, 1.2, 2.2	8, 9, 20	TenneT does not have 'shareholders' but an 'shareholder' in the form of the Dutch Ministry of Finance. Staff is able to exert influence through the formal co-determination body, the Works Council.
	4.5	Executive compensation: remuneration of directors and senior management in relation to operational performance (including social and environmental performance)	-	-	Remuneration and bonuses are linked to the Accident Frequency Index. For further information, see the regular Annual Report at www.tennet.org.
	4.6	Procedures whereby the highest governance body can preclude conflicts of interests.	1.2	9	TenneT observes the Netherlands Corporate Governance Code in full. For further information, see the regular Annual Report at www.tennet.org.
	4.7	Procedure for determining the qualifications and expertise of the members of the highest governance body for guiding the organisation's strategy on economic, environmental, and social topics.	-	-	This aspect is not addressed by the current CSR report. For further information, see the regular Annual Report at www.tennet.org.
	4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	1.2, 1.3, 1.4, 2.2	9-4, 20	This report describes the governance structure, the CSR policy and various regulations and provisions (e.g. the Corporate Code of Conduct) intended to protect employees' interests.
	4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles. Include frequency with which the highest governance body assesses sustainability performance.	1.4	11	A central CSR coordinator has been appointed and forms part of the senior management team.
	4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	1.4	11	Responsibility for CSR rests with the line management functions and performance is evaluated in the same manner as other operational aspects.
	4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organisation.	2.3, 2.4	21-23	To ensure security of supply, TenneT has proactively begun preparations for the future connection of offshore wind farms to the national grid. TenneT also observes the preventive guidelines issued by the Ministry of the Environment with regard to (exposure) to electromagnetic fields. Further information is to be found in the corporate brochure 'Electric and Magnetic Fields', available for download from www.tennet.org.
	4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organisation subscribes or endorses.	2.2, 3.3	18-21, 39	TenneT is a member of various initiatives, including the Dutch National Databank for Flora and Fauna
	4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organisations	2.2	21	TenneT is a member of the Dutch industry federation Netbeheer Nederland and the European industry federation ENTSO-E
	4.14	List of stakeholder groups engaged by the organisation	2.2	18-21	
	4.15	Basis for identification and selection of stakeholders with whom to engage.	2.2	18	

	GRI[1]	Description [2]	Paragraph / Section / Chapter[3]	Page	Notes
	4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	2.2	18-21	Engagement is both incidental (e.g. further to an event or service interruption) and ongoing (e.g. within consultation platforms).
	4.17	Key topics The main topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting.	2.2, 2.3, 2.4, 2.5, 3.3	19-20, 22, 23	Upgrading the ring structure of the onshore high-voltage grid and (preparations for) the connection of offshore wind farms are both driven by social interests. TenneT further takes various stakeholder interests into account with regard to the physical integration of its infrastructure.
Management approach	EU6	Management approach to ensure short and long-term electricity availability and reliability	Foreword, 1.4	6, 11	
	EU7	Demand-side management	2.1	16, 17	This is primarily the responsibility of energy suppliers. The supply and demand as requested by the suppliers is balanced by TenneT. See also para. 2.1 (insert)
	EU8	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development	2.6	26	
	EU9	Provisions for decommissioning of nuclear power sites	-	-	N/A (TenneT does not generate electricity and does not operate nuclear power stations).
Economic performance	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	3.4	42	For further information, see our regular Annual Report at www.tennet.org.
	EC2	Financial implications and other risks and opportunities for the organisation's activities due to climate change.	2.4	21-23	The necessity of incorporating alternative energy sources into the transmission grid is recognised to be due in part to the climate discussion.
	EC3	Coverage of the organisation's defined benefit plan obligations.	-	-	By law, all TenneT employees are insured against unemployment and accrue pension entitlements which may be claimed when reaching retirement age. The pension fund is administered by the ABP. Social plans are produced in the event of any redundancies resulting from the acquisition of regional transmission grids.
	EC4	Significant financial assistance received from government	1.1	8	The State is TenneT's sole shareholder. For further information, see our regular Annual Report at www.tennet.org.
	EC5*	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation..	-	-	Not reported: not relevant to our organisation.
	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	-	-	Not reported.
	EC7	Procedures for local recruitment and proportion of senior management hired from the local community at significant locations of operation	-	-	Many staff members, including senior managers in the various regions, live in the local community. No further attention has been devoted to this aspect.
	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	1.2	9	Investment in the electricity grid is one of TenneT's key tasks. For further information, see our regular Annual Report at www.tennet.org.
	EC9*	Understanding and describing significant indirect economic impacts, including the extent of impacts.	1.2	9	Improvement and expansion of the high-voltage grid promotes economic activity. The effects are quantified in the 'business case' for each new project. The report devotes no further attention to this aspect.
	EU10	Planned capacity against projected electricity demand over the long-term, broken down by energy source and regulatory regime	2.3-2.5	21-23	Although TenneT does not generate electricity, it takes a proactive approach in determining the various sources of sustainable energy which can and should be connected to the transmission grid.
	EU11	Average generation efficiency	-	-	N/A (see foregoing)
	EU12	Transmission and distribution losses as a percentage of total energy	3.3	34	The grid losses for the 220 kV and 380 kV-transmission grids are stated in the report.

	GRI[1]	Description [2]	Paragraph / Section / Chapter[3]	Page	Notes
Environmental performance	EN1	Materials used by weight or volume, including those containing PCBs	3.3	37-38	A register of all materials containing PCBs is kept.
	EN2	Percentage of recycled raw materials	-	-	N/A (in TenneT's primary processes).
	EN3	Direct energy consumption	3.3	35	Included in the CO_2 footprint
	EN4	Indirect energy consumption	3.3	35	Included in the CO_2footprint
	EN5*	Energy efficiency programmes	3.3, 4	35, 44	Include ongoing efforts to reduce grid losses
	EN6	Initiatives to promote the use of products or services which are energy efficient and/or rely on renewable energy sources	2.2-2.5	18-23	The strengthening of the high-voltage grid will do much to enhance opportunities to incorporate renewable energy sources. In 2009, we opted to purchase an energy-efficient conductor (see para. 2.2).
	EN7	Initiatives to reduce indirect energy consumption	2.2, 3.3	19, 35	Include a 'green' car leasing policy. Suppliers will be selected on the basis of various CSR criteria in future.
	EN8	Total water consumption	-	-	TenneT's primary process does not account for significant water consumption.
	EN9*	Water sources significantly affected by withdrawal of water.	-	-	N/A (see foregoing)
	EN10*	Percentages and total volumes of water consumption and recycled water	-	-	N/A (see foregoing)
	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	-	-	Not specified in this report.
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	3.3	39, 40	
	EN13*	Habitats protected or restored	3.3	39, 40	In the Randstad 380 kV-project, the possibility of creating 'green corridors' is to be investigated.
	EN14*	Strategies, current actions, and future plans for managing impacts on biodiversity	3.3	39, 40	TenneT is a member of the Dutch National Databank for Flora and Fauna, drawing relevant information and supplying new data.
	EN15*	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	-	-	Not reported.
	EN16	Total direct and indirect emissions of greenhouse gases	3.3	35	Included in CO_2 footprint
	EN17*	Other relevant greenhouse gas emissions by weight	3.3	35	CO_2 footprint and SF_6 emissions
	EN18*	Initiatives to reduce emissions of greenhouse gases	3.3	35	
	EN19	Emissions of substances which erode the ozone layer	3.3	35, 36	VOC emissions
	EN20	NOx, SOx and other significant atmospheric emissions	-	-	All other air emissions further to TenneT's primary process may be regarded as minimal.
	EN21	Total volume of discharges into (surface and ground) water	-	-	N/A (see also EN8, above)
	EN22	Total weight of waste by type and disposal method, including materials containing PCBs	3.3	36	
	EN23	Total number and volume of significant spills	3.3	37	Spills are cleaned up immediately and are recorded as environmental incidents. Leakages from oil pressure cables are also registered.
	EN24*	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	-	-	N/A to primary processes
	EN25*	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff.	-	-	N/A (see also EN21 above)
	EN26	Initiatives to prevent or mitigate environmental impact	3.3	35	Include the 'greening' of grid losses

	GRI[1]	Description [2]	Paragraph / Section / Chapter[3]	Page	Notes
	EN27	Percentage of sold products from which packaging materials are reclaimed.	-	-	N/A to the primary processes
	EN28	Monetary value of significant fines and total number of non–monetary sanctions for non–compliance with environmental laws and regulations	-	-	Not reported.
	EN29*	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce.	-	-	Not reported.
	EN30*	Total environment-related expenditure and investments	-	-	Not reported.
	EU14	Training programmes and procedures for staff	2.2, 3.2	20, 32	Include the TenneT Academy
	EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region	-	-	Not reported.
	EU16	Health & Safety policy with regard to staff and (sub) contractors	2.2, 3.2	20, 32-33	
	LA1	Total workforce by employment type, employment contract, and region, to include (sub)contractors	3.2	29, 32	TenneT does not record this information in respect of external (sub) contractors.
	LA2	Total number and rate of employee turnover by age group, gender, and region	3.2	29	The breakdown of staff by age and sex is reported.
	EU17	Days worked by (sub)contractors	-	-	This information is not recorded separately
	EU18	Percentage of (sub)contractors to have received Health & Safety instruction	2.2, 3.2	20, 32-33	Standard operational practice.
	LA3*	Benefits enjoyed by fulltime staff but not by part-time employees	-	-	All benefits are calculated pro rata wherever possible
	LA4	Percentage of employees who fall under a Collective Labour Agreement	-	-	100% (excluding senior management)
	LA5	Minimum notice period(s) further to significant organisational restructuring	-	-	In accordance with provisions of the Collective Labour Agreement and national legislation
	LA6*	Percentage of total workforce represented in formal joint management–worker health and safety committees.	-	-	Not reported.
	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region, to include (sub)contractors	3.2	32, 33	This information is not recorded separately in the case of (sub)contractors
	LA8	Education, training, counselling, prevention, and risk-control programmes to assist workforce members, their families, or community members regarding serious diseases.	-	-	In 2009, an active prevention policy was implemented in respect of Influenza N1H1 ('swine flu').
	LA9*	Health and safety topics covered in formal agreements with trade unions	-	32	As per CAO agreements (qv). The Works Council has the formal right of consultation on Health & Safety policy.
	LA10	Average time devoted to training, per employee	3.2	20, 34	TenneT records only the costs of staff training.
	LA11*	Programmes for 'lifelong learning'	2.2, 3.2	-	Include the TenneT Academy
	LA12*	Percentage of employees receiving regular performance and career development reviews.	-	-	All staff members attend regular interviews to discuss performance and career development.
	LA13	Composition of governance and co-determination bodies, and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	-	-	Not reported.
	LA14	Ratio of basic salary of men to women by employee category	-	-	Not reported.
Terms and conditions of employment					

	GRI[1]	Description [2]	Paragraph / Section / Chapter[3]	Page	Notes
Human rights	HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	-	-	Not relevant to TenneT's activities because they are conducted exclusively in the Netherlands and are governed by Dutch legislation.
	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	-	-	See HR1 (above). In 2009, the first steps were taken to develop assessment criteria for suppliers, whereupon this aspect can be more adequately addressed in future.
	HR3*	Total hours of employee training on policies and procedures concerning aspects of human rights.	-	-	Not reported. This is not a topic on which separate training is given.
	HR4	Total number of incidents of discrimination and action taken.	-	-	TenneT has a committee charged with investigating all allegations of sexual harassment, violence or aggression. No complaints were made to the committee in 2009.
	HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights	-	-	Not reported
	HR6	Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour.	-	-	Not relevant to TenneT's activities since they are conducted exclusively in the Netherlands and are governed by Dutch legislation.
	HR7	Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour.	-	-	Not relevant to TenneT's activities since they are conducted exclusively in the Netherlands and are governed by Dutch legislation.
	HR8*	Percentage of security personnel trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations.	-	-	Not relevant to TenneT's activities since they are conducted exclusively in the Netherlands and are governed by Dutch legislation.
	HR9*	Total number of incidents of violations involving rights of indigenous people	-	-	N/A given that TenneT is active only in the Netherlands and northern Europe.
Society	EU19	Stakeholder participation in the decision making process related to energy planning and infrastructure development	2.1-2.3	16-21	
	EU20	Approach to managing the impacts of displacement	-	-	In any reorganisation, staff wishes and preferences are taken into account to the greatest degree possible.
	EU21	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans	3.2, 3.3	33-34, 37-38	In accordance with current legislation, all TenneT locations have a contingency plan in accordance with current legislation. Attention is devoted to external safety and all environmental incidents or hazardous situations are resolved as quickly as possible.
	SO1	Programmes and practices to assess and manage the negative impact of operations on communities.	2.2, 3.2	18-21, 39-40	A full dialogue with stakeholders is pursued. Compensatory measures are put in place wherever necessary.
	EU22	Number of people physically or economically displaced, and compensation provided, broken down by type of project.	-	-	N/A
	SO2	Percentage and total number of business units analyzed for risks related to corruption	-	-	There is no ongoing evaluation of the organisation with regard to risks related to corruption.
	SO3	Percentage of employees trained in the organisation's anti-corruption policies and procedures	-	-	Measures to prevent corruption form part of TenneT's Corporate Code of Conduct.
	SO4	Action taken further to reported incidents of corruption.	-	-	Not reported.
	SO5	Public policy positions and participation in public policy development and lobbying	2.2, 2.3	18, 19, 21	
	SO6*	Total value of financial and in-kind contributions to political parties, etc.	-	-	TenneT does not support any political party.
	SO7*	Total number of legal actions for anti-competitive behaviour, anti-trust and monopoly practices, and their outcomes	-	-	N/A, given TenneT's formal position as the sole national TSO for the high-voltage grid
	SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	-	-	Not reported.

	GRI[1]	Description [2]	Paragraph / Section / Chapter[3]	Page	Notes
	EU23	Programmes, including those in partnership with government, to improve or maintain access to electricity and customer support services	2.1, 2.3-2.5	18-19, 21-23	TenneT is not subject to any legal obligation to provide customer connections.
	EU24	Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services.	2.1	17	TenneT does not differentiate between customer groups on any grounds whatsoever.
	PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	3.2, 3.3	29-40	Environmental and health impact is always taken into account in investment decisions relating to assets such as pylons (e.g. the new WinTrack) and transformers.
	PR2*	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	-	-	Not reported.
	EU25	Number of injuries and fatalities to the public	3.3	33	There were no incidents involving the injury or death of a member of the public in 2009.
	PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	-	-	Not reported. TenneT has a Compliance Officer who ensures that all relevant requirements are met. The Office of Energy Regulation further ensures compliance with legislation relating to information provision.
	PR4*	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes.	-	-	Not reported.
	PR5*	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	3.2	41	
	PR6	Programmes for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion and sponsorship.	-	-	Not reported. See PR3 (above).
	PR7*	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	-	-	Not reported. See also PR 3 (above).
	PR8*	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	-	-	Not reported. TenneT keeps all customer complaints on record.
	PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	-	-	Not reported. See PR3 (above).
	EU26	Percentage of population unserved [i.e. with no access to the services provided] in the licensed distribution or service areas.	-	-	Not reported. TenneT has a statutory responsibility to supply connections on request, whereupon in principle all parties have access to the high-voltage grid in principle.
Product responsibility	EU27	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime.	-	-	Not applicable: TenneT does not supply domestic customers.
	EU28	Power outage frequency	3.4	40-41	
	EU29	Average power outage duration	3.4	40-41	
	EU30	Average plant availability factor by energy source and by regulatory regime	-	-	Not applicable: TenneT does not produce electricity itself.

1) Indicator or disclosure required by the Global Reporting Initiative, version G3, including the 'Electric Utility Sector Supplement' (see: www.globalreporting.org)

2) For further information, please refer to the full text of the relevant guideline.

3) The section of this CSR report dealing with the indicator or disclosure.

* = voluntary indicators (as stated by GRI G3).

Appendix 2 Report scope and process

Identification of relevant issues

In 2008 and 2009, TenneT conducted a full-scale study to identify the expectations of both its internal and external stakeholders. This process was assisted by the external consultancy DHV.

The expectations of external stakeholders, which include other international TSOs such as Elia, National Grid (UK) and RTE, electricity producers, advocacy groups, suppliers, local residents and the general public, were identified by means of a desk study of websites, annual reports and other documents. The most important internal stakeholders are TenneT's staff, whose opinions about Corporate Social Responsibility were sought by means of an extensive survey. The expectations of the Dutch Office of Energy Regulation, and TenneT's responsibilities towards that body, were also taken into account. The differences and similarities between the various internal and external stakeholders were analysed, whereupon two internal workshops were held to determine the CSR issues relevant to TenneT's operations and the appropriate indicators.

Definitions and scope of the CSR indicators[1]

Except where otherwise stated, all indicators in this report relate to performance in 2009.

Waste

'Waste' is defined as the the total volume of hazardous and non-hazardous waste, which is produced as a result of TenneT's operational processes. The subdivision into various waste flows, as described in Chapter 3, relates to both the office environment and locations at which maintenance falls under the responsibility of the Transmission Operations business unit. This encompasses the largest part of the high-voltage grid.

CO_2 footprint

The total emissions of all greenhouse gases expressed as CO_2 equivalents. The footprint has been quantified on the basis of fuel consumption by grid losses (220 kV and 380 kV), company vehicles (according to the invoices received), air travel booked through our central booking office (estimated to be approximately 70% of the total number of flights) and the energy consumption of our offices (excluding the gas used by one of the three office buildings in Arnhem). The data has been extrapolated where necessary. Because SF_6 emission figures were not available at the time of preparing this report, they have not been included in the CO_2 footprint.

Hazardous situation

A hazardous situation is an event or an ongoing set of circumstances which poses some risk to the health and/or safety of one or more persons. TenneT records all hazardous situations, as reported by staff or external contractors. Other contractors have been requested to submit information relating to safety in 2009 if available.

1 For more details on the definitions and scope of the various CSR indicators, please refer to Chapter 3 of this report.

Customer satisfaction

Customer satisfaction is evaluated annually by means of a questionnaire. In addition, the 'customer processes' are subject to monthly internal evaluation whereby attention is devoted to the promptness with which new connection applications, invoicing queries etc. are processed.

Environmental incident

An environmental incident is an unforeseen event which has the potential to cause adverse environmental impact. TenneT records all environmental incidents, as reported by staff or by external contractors engaged by the Transmission Operations business unit. Other contractors were requested to submit information relating to environmental incidents in 2009, where available.

Grid losses

'Grid losses' denote the energy which is lost during the transmission of electricity over the high-voltage grid managed by TenneT. The grid loss figures stated in this report relate to the 220 kV and 380 kV high-voltage grids only.

Oil leakage from underground cables

The quantity of oil lost from underground cables is calculated according to the total volume of oil which must be reintroduced to those cables. TenneT maintains detailed records of its own 'top ups'; external contractors were requested to notify the quantity of oil used for this purpose in 2008 and this information has been incorporated into the total figure.

Power outage frequency

The 'power outage frequency' is calculated by dividing the total number of connections by the number actually affected by one or more outages. The power outage frequency is therefore an indication or how often each connection has suffered an interruption to service during the year in question.

Power outage duration

The power outage duration is calculated by aggregating the total duration of all outages (in minutes) and dividing the result by the total number of connections affected.

SF_6 emissions

Sulphur hexafluoride (SF_6) is an important greenhouse gas. It is used as an insulating gas in high-voltage switchgear, and only in closed systems. However, some losses may occur due to leakage and during regular maintenance. The 'SF_6 emission' refers to the total volume of SF_6 gas released into the atmosphere due to incidental losses. This figure is calculated according to the volume of the replacement gas purchased during the year. Volumes are reported to the government by Netbeheer Nederland, acting on behalf of all grid operators. The collective figures for 2009 were not available at the time of going to print.

Outage duration

This is the total number of outage minutes divided by the total number of connections, including the underlying electricity grids. The result is expressed in minutes per connection per year.

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