

# Sustainable ... together !

The  
2002  
ETNO  
Environmental  
Report



  
etno  
EUROPEAN TELECOMMUNICATIONS  
NETWORK OPERATORS' ASSOCIATION

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# Foreword

Over the past 30 years, the EU has developed an extensive and comprehensive environment policy based on some 200 pieces of legislation. Implementation of existing legislation is essential to improving environmental trends. However, equally important is finding new ways of working with a wide cross-section of society, and in particular business. Only a combined effort from governments and businesses will allow us to move towards sustainable development.

This approach lies at the heart of the recently adopted Commission's 6th Environment Action Programme (6th EAP) "Environment 2010: Our future, our choice", our roadmap for EU environment policy in the next decade. The 6th EAP encourages the publication of rigorous and independently verified environmental reports by companies as one of the actions to improve the environmental performance of industry.

I therefore welcome the publication of the third biannual report of the European Telecommunications Network Operators' Association (ETNO), "Sustainable...together". The number of companies that regularly publish environment reports is steadily increasing. For these reports to realise their full potential, they must be further harmonised, based on common sets of indicators, thus allowing for benchmarking. This has been achieved by the ETNO initiative: the 25 signatory companies measure their performance against common indicators and thereby make a fuller contribution to the overall picture in the industry.

This third ETNO report demonstrates the telecommunications sector's ongoing concern for the environment and sustainable development. It also confirms the benefits of a cross-border approach to environmental issues in the telecommunications sector. By its very nature, the telecommunications sector cuts across national boundaries and an adequate response to the environmental challenges it faces must therefore be part of a wider European and international effort. In this context, ETNO's initiative is particularly valuable.

Finally, the ETNO initiative shows that competitiveness and environment protection can go hand in hand. Increasingly we are finding ways of fostering economic growth that brings broader benefits while minimising environmental damage. Highlighting opportunities and concrete actions to achieve these "win-win" solutions is central to the Commission's environment policy. It is very satisfying to see that the telecommunications industry has embraced this approach as illustrated by its involvement in promoting the development of cleaner technologies through ETNO's participation in the Global e-Sustainability Initiative.

Continued commitment to disseminating best practices and harmonising reporting will place the telecommunications sector at the forefront of industry in the environmental field. I can only encourage other telecommunications companies to join the effort and other industries to follow a similar path.

*Catherine Day,  
Director General, DG Environment,  
European Commission*

# Introduction: Building a more sustainable business ...together.

This is ETNO's 3<sup>rd</sup> biannual Environmental Report, covering the 2000-2001 period. Our combined performance shows steady improvement over time. This stems not only from the successful efforts of individual companies but from the dedication by all the charter's signatories to work together. Though we compete against each other for the supply of telecommunications products and services, we believe there is no competition between us regarding the environment. This presents us with a unique opportunity to work in close partnership.



This report is demonstrable proof that Europe's telecommunications industry is leading the way toward achievement of a sustainable future. But any company, any industrial sector can follow our example. There is no "magic formula" for sustainable development. All that is required is a company's commitment, goodwill, sharing of best practice, networking and development of the requisite managerial tools. Together, these will bring benefits to any organisation willing to make the effort to continuously improve performance.

## ETNO's CSR Pledge

ETNO's sustainability effort began in 1996 when its member companies recognised sustainability as a global environmental goal and endorsed the "Environmental Charter of European Telecommunications Operators". (See page 4) It was felt then, as now, that protecting the environment is a tenet of good corporate governance. But there was also a realisation that new and challenging business opportunities could be exploited if approached in the right way environmentally.

The world's economy and political agenda regarding sustainability have seen great changes from six years ago. The deflated enthusiasm and expectations of the "dot-com" era has had harsh repercussions for the ICT sector, for example. At the same time, global solutions to climate change and air pollution, now reaching serious levels, demand strong commitment by all parties. As the recent World Summit on Sustainable Development in Johannesburg clearly demonstrated, economic activity must conflate with sustainability. Yet meaningful agreements are still rare.

Sustainability means building society's future quality of life now. While the "business of business" remains the primary goal for corporations worldwide, of course, the way that business is carried out can make a real difference. Globalisation does offer the possibility to fulfill humankind's basic economic needs, respecting human rights, while fostering creative opportunities for development. This is the basic corporate social responsibility (CSR) stance that ETNO has adopted.

ETNO understands the importance of building a sustainability agenda. It has now opened up its Environmental Charter to all non-member companies operating in Europe's telecommunications sector. Moreover, ETNO aims to go a step further, eventually sharing its experience at the global level.



## **Telecommunications: Rich in Sustainability Potential**

Along with energy, ICT is a sector with high potential to deliver sustainable results. The explosion of communication technologies and consequent growth of the digital economy have created a wholly new environment for business where space and time are "annihilated". Indeed, there are high hopes that ICT-enabled processes may allow a decoupling of economic growth from material consumption by up to a factor of 10, thanks to improved resource and transport efficiency. ICT companies are now investigating their real potential to strengthen economic development with less pressure on the environment.

In this regard, ETNO's members are key players in making Europe "the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth", as declared by EU heads of state at their Lisbon European Council in March 2000.

ETNO member companies desire to co-operate actively with policy-makers and governments to help them attain both environmental and economic development goals. ETNO looks forward to a clear legislative framework that fosters deployment of infrastructure and thus creates a truly competitive market. Working together, industry and the legislators can make a difference.

## **The ETNO Environmental Charter**

ETNO's Environmental Charter of European telecom operators is widely recognised. Its 25 signatories, whose aggregate turnover exceeds 197 billion euros, have worked hard toward their commitments. They have developed environmental management systems, improved reporting of environmental performance to stakeholders; assigned high priority to waste- and natural-resource management, and striven to optimise energy consumption patterns.

ETNO's biannual environmental reports are the tool for promoting and marketing this effort. The reports also serve to gather feedback and constructive criticism. ETNO will encourage more operators to sign the Charter, thus adding their experience to the collective pool.

We also aim for more involvement in decisions and policy-making at European and local levels whenever sustainability is the focus. As has been demonstrated, when given the opportunity, we can help.

To conclude, ETNO considers that the foundations for ever-improving environmental performance have been laid. This is the right time for industry in general, and ETNO in particular, to meet the challenge of the "triple bottom line": environmental, economic and social growth for the EU and the world. This is our future path... towards sustainability. And we want to do it together—with our work forces, customers, suppliers and competitors, with policymakers and with all stakeholders affected by our activities and operations.

*Dorothy Smith, ETNO Executive Board Chair  
Danilo Riva, ETNO WG Environment & Social Responsibility Chair*

# Managing our business

## ICT and Globalisation

Though ICT developments have contributed to globalisation, that concept has unfortunately acquired a poor image, one viewed more as a risk than an opportunity.

But globalisation offers positive opportunities. And if we want to make use of them, we have to consider business from the perspective of sustainability and act accordingly. "Act" in this sense means taking action by reviewing our business concerns and impacts in advance, by taking them into account in everything we do. It also means pondering today what may affect future generations, and tackling the problems right away.

The ecology and economy are not mutually exclusive; they can positively reinforce one other. But this requires a strategy: business must offer society environmentally compatible services and solutions. It must establish "green" practices in the workplace and monitor compliance with those standards.



## Sustainable Solutions

ETNO believes that our industry's communications services and solutions can offer new opportunities to the world's less-favoured societies and regions. For example:

- The Internet can be used to deliver online education in virtual classrooms.
- Telecommunication networks can allow people in remote areas to achieve financial independence by marketing their products worldwide.
- Doctors in remote or developing areas can use telecommunications to consult with specialists about complex medical procedures.
- IT and communications services cannot prevent natural disasters, but they can greatly reduce their impact.
- Telecommunications gives people with disabilities a constant link to assistance, while offering senior citizens a new medium of social interaction.

In the same vein, telecommunications services and solutions can exert a positive impact on the environment. For example:

- Audio and video conferencing reduce travel, and decrease traffic levels, thus shrinking CO<sub>2</sub> emissions.
- By "dematerialising" certain products (books, music, answering machines, etc.) for use online, resources are conserved on a significant scale while reducing consumer and commercial traffic.
- Energy conservation and CO<sub>2</sub>-emission reductions thus achieved by the above help mitigate the greenhouse effect.

However, such "e-activities" (e-products, e-government, e-trading, etc.) are useful technologies for the future only if they are in keeping with sustainability principles.

## Our Industry's Responsibility

Sustainability cannot function without a solid foundation of environmental protection and economic growth for our companies. Therefore, conservation of resources is paramount. It applies both to the equipment we use and to the equipment and services we provide to customers.

As a result, we must be keenly aware of the potential environmental burden our products and services may create, as well as the social consequences of how our services are used:



### Conferencing

Video, internet and phone-conferencing are vital ways to reduce travel and commuting.

Research carried out by one ETNO Charter signatory shows that its use of conference calls alone avoided 95 million car-kilometres in 2000/2001 and around 240 million trip-kilometres for all modes of transport (rail, air, etc.). This yielded an equivalent reduction in vehicular CO<sub>2</sub> emissions of approximately 34,000 tonnes and a saving of 7 million litres of car fuel worth almost € 9 million.

Additional benefits included increased productivity and quality-of-life benefits for individuals in terms of lower travel.

Another Charter signatory analysed primary energy consumption for a typical business trip based on different transport modes (rail, diesel-powered car, petrol-powered car) and compared this to the primary energy consumption of a 4-hour video-conference.

The video-conference was by far the more environmentally-friendly approach compared to a conventional face-to-face meeting based on any of the other transport means: it fostered savings of up to 1000 MJ of primary energy consumption per conference.

### ICT Products

*Network (or virtual) answering machines offer services that do not require any new consumer hardware: voice and fax storage, a family "box," messaging features, free message retrieval and call-back. Thus, they eliminate the substituted products' impact on the environment.*

*One Charter signatory demonstrated that if only 20 percent of the total boxes available at network level were used, energy consumption would plunge by a factor of 27. Waste production could shrink by a dramatic 66 times, compared with the use and disposal of household answering machines.*

*Another signatory's example of de-materialisation relates to use of electronic documentation. Its operational and maintenance manuals for switching equipment were traditionally produced in paper form.*

*But by turning to an e-business solution and switching to provision of all documentation via the Intranet, the company has reduced its annual paper consumption by approximately 19 million sheets of paper compared to two years ago. In addition, it has avoided consumption of another 4.5 million sheets of paper each year that were previously needed for manual updates and inserts.*



“ ICT is a tool that constitutes a new infrastructure that will change the way our societies function, and its technical applications will give us totally new opportunities to both preserve the best elements of our society, and develop new and better solutions.

As a whole, ICT is best viewed as a catalyst that can speed up current trends or contribute to a shift towards sustainable development. No one knows specifically what role it will play in the future, but we know that it will be significant and that our decisions today will influence the direction in which it will develop. ”

- Prof. Lars Kristoferson, *Secretary General WWF, Sweden*  
- Dr. Claude Martin, *Director General, WWF International*

From the foreword to "Sustainability at the Speed of Light: Opportunities and Challenges for Tomorrow's Society", edited by Dennis Pamlin.

## Energy Conservation and CO<sub>2</sub>-emission Reductions

Charter signatories continued to make environmental progress in this very concrete area.

In 2000/2001, one signatory invested €1.5 million in its energy conservation programme, which led to cost savings of almost €7.5 million.

Another Charter signatory has managed to reduce its electricity consumption by 23 percent since 1991. This has led to cost savings of €180 million.

And by negotiating new electricity supply contracts for renewable and low-CO<sub>2</sub> electricity, another signatory has avoided some 230,000 tonnes of CO<sub>2</sub> emissions. It has reduced its total CO<sub>2</sub> emissions by around 1.2 million tonnes over the last decade.





# Encouraging co-operation

Our industry's environmental impact spreads further than is perceived by the general public. But pressure on our sector from governments and society to become more eco-efficient is on the rise.

## Value for Charter Signatories

Previously, Charter membership was restricted to ETNO members. However, the tangible benefits of membership have led us to open up participation to all telecommunications operators, whether ETNO members or not. Signing the Charter and an adhesion agreement are pre-requisites, however, if a company wishes to participate in the activities of ETNO's Working Group on Environment and Social Responsibility.

No specific entry level is needed to become a Charter signatory. All that is required is a commitment and desire to improve environmental performance. ETNO's environmental working group was established specifically to help Charter signatories achieve this.

The Charter has already offered its 25 signatories:

- Better dialogue with European legislators
- Access to a strong information network of like-minded companies and individuals
  - Access to industry best practices
  - Reduction of time and effort required to digest complex environmental issues
  - Increased transparency and provision of benchmarking opportunities
  - Enhanced reputation and credibility
  - Increased shareholder value through rating agencies and 'green' investment funds
- Closer cooperation with third parties (UN agencies, EICTA, GSME, etc.)



## Best Practice: Examples

Sharing best practice and experience allows each signatory to compare research and development projects in a non-competitive environment. Examples of recent projects are:

- Environmental Impact Matrix  
*A roadmap for companies embarking on environmental management.*
- Environmental Indicators  
*A useful guide for companies striving for continuous improvement.*
- Climate Change  
*Guidance for companies committed to greenhouse gas reduction.*
- Eco-Rating of Telecommunication Operators  
*An effective system of self-assessment of corporate environmental performance.*
- Assessing Technical Solutions For Improved Energy Efficiency in ICT  
*Practical help for operators aiming to reduce energy consumption.*
- Environmental Procurement Guidelines  
*A useful tool to assess environmental performance of suppliers and products.*
- Telephone Pole Purchase and Management  
*Guidelines for signatories to reduce the environmental impact of telephone poles.*

## Conferences and Workshops

Conferences and workshops are regularly organised to promote ETNO activities and allow members (and other invited guests) to discuss subjects of mutual environmental concern, such as:

- internal environmental management approaches;
- recent European legislation and activities;
- new ways of promoting the environmental benefits of telecommunications products and services.

At our latest workshop, held in the German capital in June 2002, specialists from the University of Bradford, UK, the Potsdam Institute on Climate Impact Research in Berlin and the Öko-Institute of Freiburg examined climate change and smart energy management techniques.

## ETNO's Links to International Environmental Organisations

Internationally, ETNO is a founding member of the Global e-Sustainability Initiative (GeSI) launched in Turin, Italy in 2001. Developed by the ICT industry with support of the United Nations Environment Programme (UNEP) and the International Telecommunications Union (ITU), GeSI involves operators and suppliers from Europe, North America, Australia and Asia. Offering a global perspective, it is practical forum for promoting co-operative dialogue with all environmental stakeholders.

## Encouraging constructive dialogue

ICT solutions directly contribute to the economic and social development of regions interconnected by telecom networks. Not surprisingly, the European Union for years has played a leading role in supporting the roll-out of networks and the development of ICT technologies.

Although not a major source of pollution, European telecommunications operators support a constructive dialogue with all stakeholders and are key actors in implementing sustainable development strategies.

This dialogue must be conducted at every level. Operators firmly believe that the European Union has a catalytic role to play in building links between all industrial sectors, and in encouraging European companies to create their own sustainability agendas.

Regarding environmental policy and regulations, ETNO has followed very carefully proposals by the European Commissions' DG Environment, commenting on those that directly affect the telecommunications industry. These include the EU's draft Waste of Electronic and Electrical Equipment directive, and climate change policies.

### Mobile Telephony and Health

One issue of critical importance for the telecommunications industry is the potential impact of electromagnetic fields (EMF) on human health. The European recommendation that fixes maximum exposure limits, based on the available scientific evidence, has been instrumental in clarifying this debate and providing objective guidelines for all actors.

ETNO and its members participate in studies commissioned by DG Information Society and DG Health and Consumers to measure the potential impact of mobile technologies. Together with the Mobile Manufacturers Forum and GSMe, ETNO holds regular dialogue with all interested parties, organising information sessions with Members of the European Parliament to keep up a flow of objective research results on EMF, for instance.

### Getting Wired; Getting Informed

*Wireless communications have an economic and social role that goes well beyond the simple concept of wireless telephony. The positive contribution of mobile communications to business efficiency and the daily life and safety of citizens are important factors when planning the deployment of supporting networks, which includes installation of base stations and antennas.*

*ETNO members are well aware of public concern about the potential health effects of exposure to electromagnetic fields (EMFs) generated by telecommunications equipment: protection of human health is a primary objective of their business. Not only are ETNO members committed to compliance with relevant legislation at EU and local levels, but they stay abreast of new EMF-related knowledge in the scientific community and communicate this to the public.*



## ***Sustainable Development and Corporate Social Responsibility***

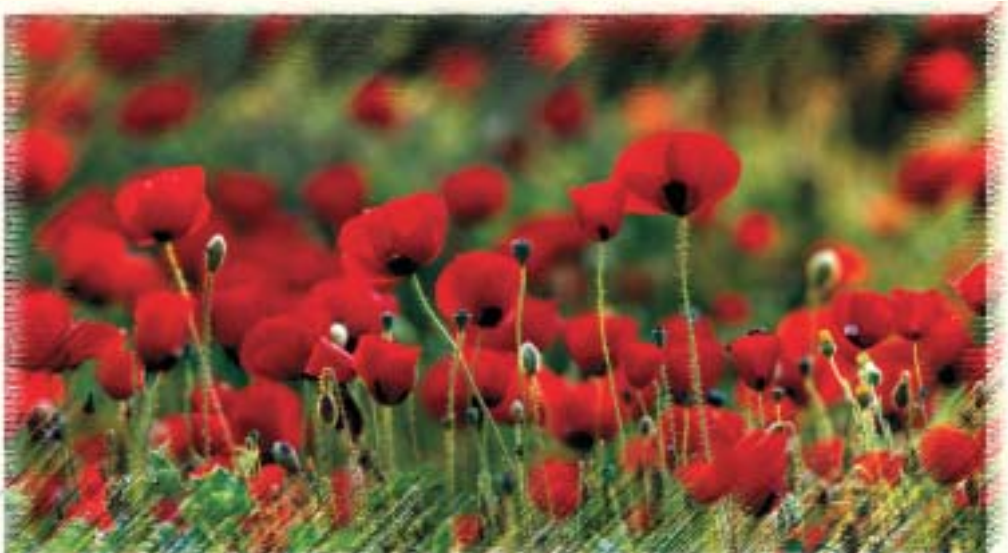
ETNO has contributed to the European Commission's Green Paper and participated in preliminary meetings of the European Multi-stakeholder Forum under aegis of DG Employment and Social Affairs.

ETNO also supports DG Enterprise's awareness-building program to demonstrate the positive impact of ICT on sustainable development (based on the annual 2002 report published by EITO). Via its membership in GeSI, ETNO is engaged in research projects within the European Commission's IST research programme, monitored by DG Information Society.

## ***The International Context***

Internationally, Europe's voice must be asserted in all multilateral fora. In that regard, telecommunication operators welcome initiatives by the European Commission, in particular efforts by DG Trade, regarding the WTO's Doha conference and the Johannesburg Summit. And, given that our member companies are drawn from the breadth of Europe, ETNO fully supports DG Enlargement's efforts to help accession candidate countries achieve high environmental and social standards.

But policymakers must realise that because so many ETNO members operate on a pan-European basis, they need a harmonised business environment across the EU. This means avoiding over-regulation that would hamper competitiveness on the world market.



# Environmental Performance, 1997–2001

ETNO has been measuring the environmental performance of Charter signatories since 1997. Starting with 21, the number of signatories has grown to 25 today.

The below indicators are based on Charter principles. They encompass qualitative factors—related mainly to policies and organisational issues—as well as quantitative ones directly related to impact. To provide a more complete picture, several new quantitative indicators have been introduced since the last report.

*NOTE: The reporting mechanism used is irrespective of the number and size of the companies: signatories should be viewed as a group, since their aim is to improve performance working together.*

Certain trends reveal unusual patterns or behaviour. This lies in the fact that newer signatories may have a negative effect on the collective trend since they are just starting down the "green path". Also, environmental activities and policies may have been cancelled due to a company's reorganisation, only to be re-applied to new organisational units later on.

## Environmental Awareness

A company's awareness of the environmental consequences its activities must include both the impact of its own operations and that of the telecommunications products and services it offers to the public. It calls for analysing those effects, and providing employees with the tools to implement the company's environmental policy. This can be achieved via training programmes and communication initiatives. Two indicators are used to assess whether environmentally focused communication and training programmes are in place within the signatory companies.



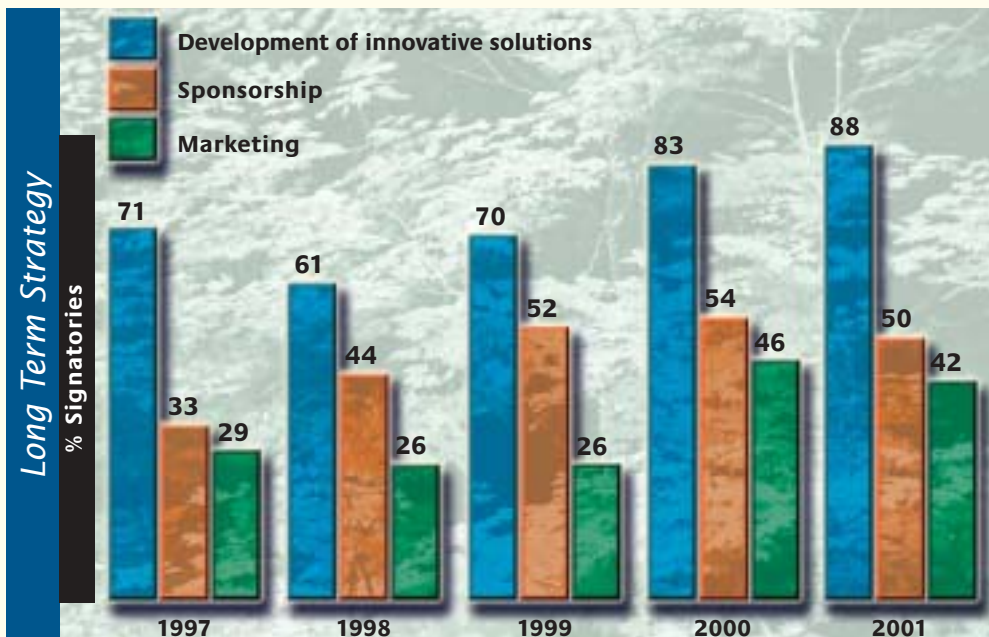
More than 90 percent of Charter signatories have developed or are developing environmentally focused communication campaigns and training programmes. Respectively, these are company-wide efforts in 30 percent and 12 percent of the cases.

## Long-term Strategy

Development of innovation solutions in terms of new telecommunications products and services should take environmental considerations into account. The positive contribution of telecommunications to environmental protection should be quantified and highlighted in a signatory's marketing activities. Sponsorship—funding and supporting environmental organisation and initiatives—also builds a positive corporate reputation and demonstrates commitment to environmental protection beyond normal business considerations.

How ETNO Charter signatories take environmental considerations into account is assessed in three areas: developing innovative solutions, sponsorship activities and marketing strategies.

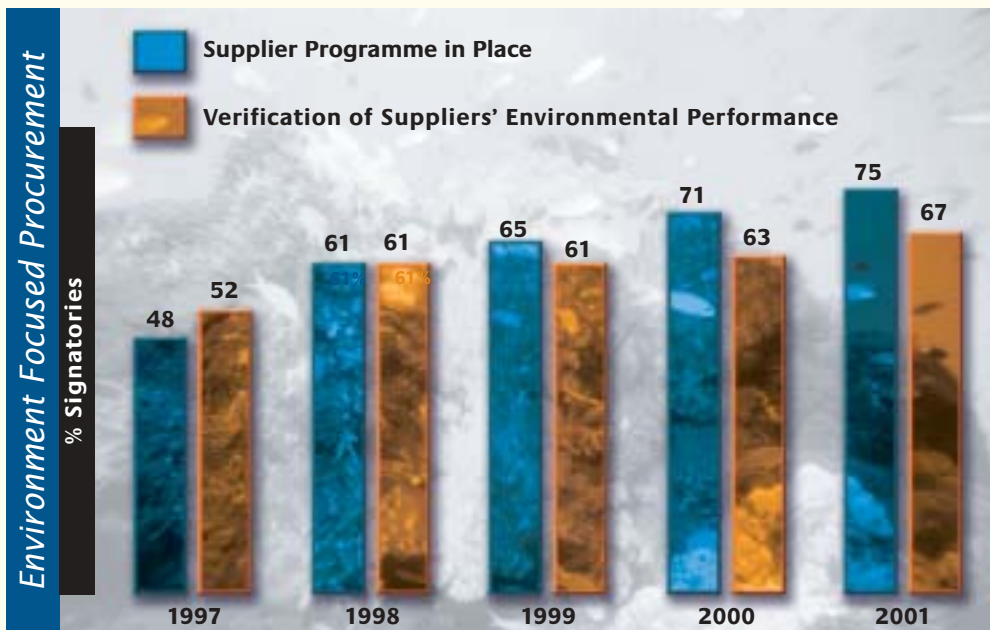
Eighty-eight percent of signatories have tried to innovate by minimising impact on the environment, and 21 percent of them do it systematically. Fifty percent take environmental consideration into account for sponsorship activities and 42 percent of signatories market products that emphasise a positive environmental impact.



## Procurement

Due to the industry's large spending and purchasing power, environmental policies applied to products and suppliers can affect the entire supply chain. An Environment Focused Supplier Programme goes from a simple exchange of information to establishing effective co-operation in the form of partnership or co-stewardship agreements with suppliers. These aim to inject environmental analysis and decisions into the entire procurement process.

The assessment of suppliers' environmental performance is an important step in raising environmental awareness within the supply chain, thanks to its influence on supplier selection.

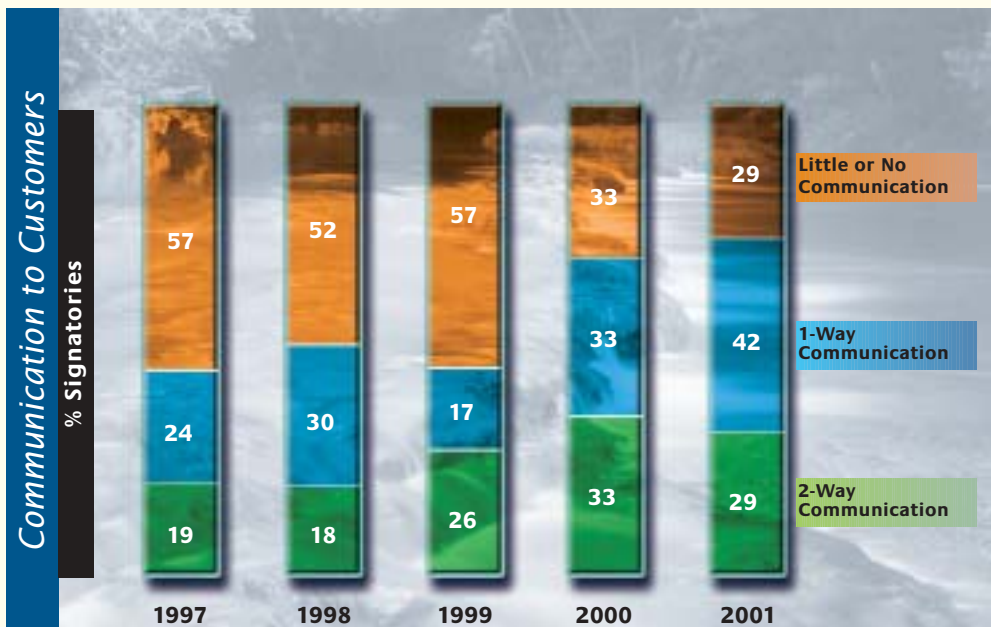
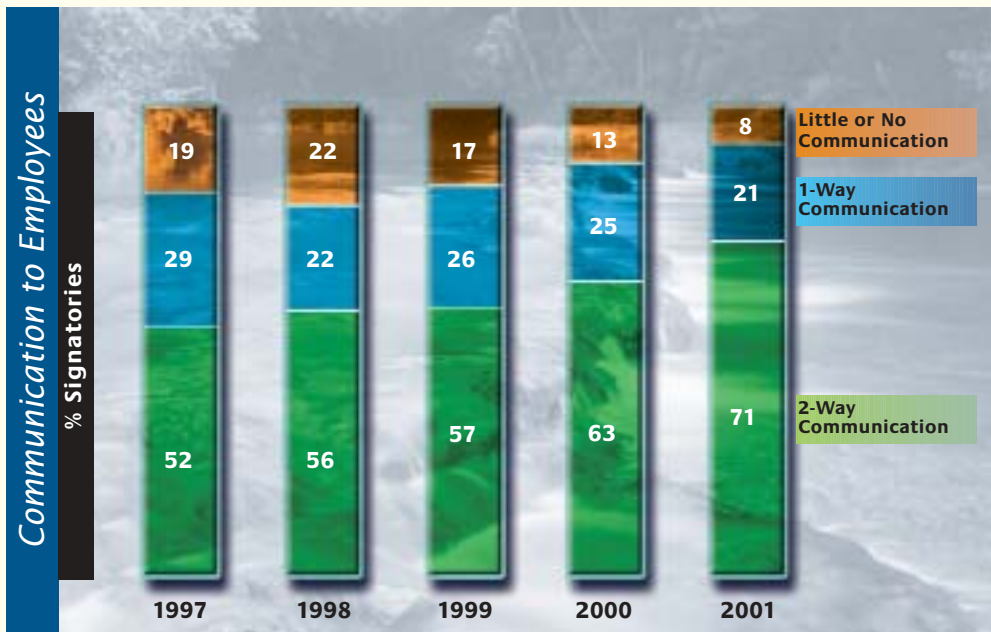


Seventy-five percent of signatories have an environment-focused supplier programme in place, with one-third reporting that such a programme covers more than half of their purchases. About 17 percent have established effective cooperation with suppliers in order to minimise the environmental impact of products. Two-thirds of them verify the environmental performance of suppliers.

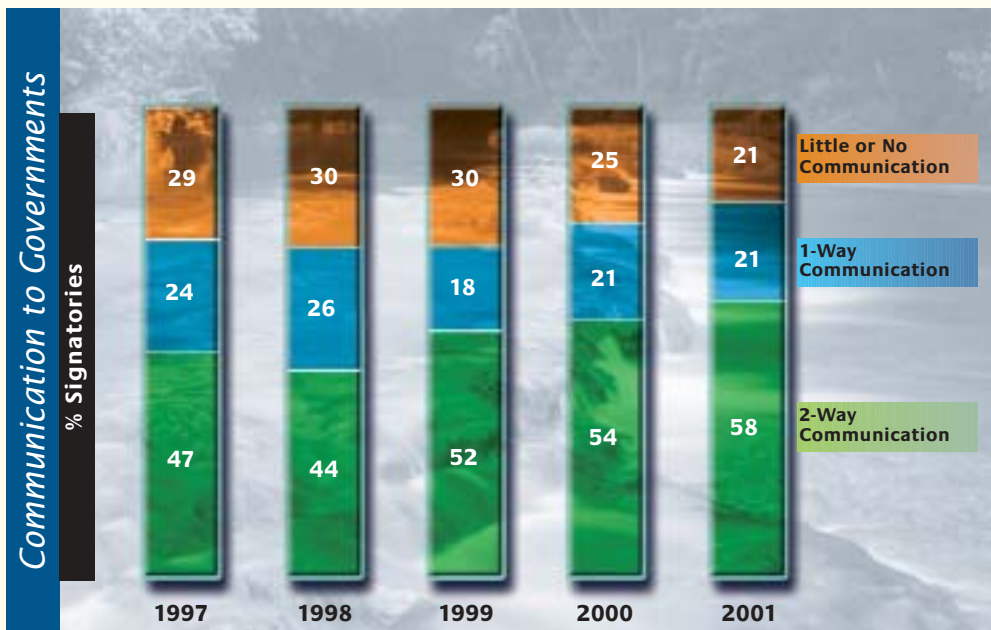
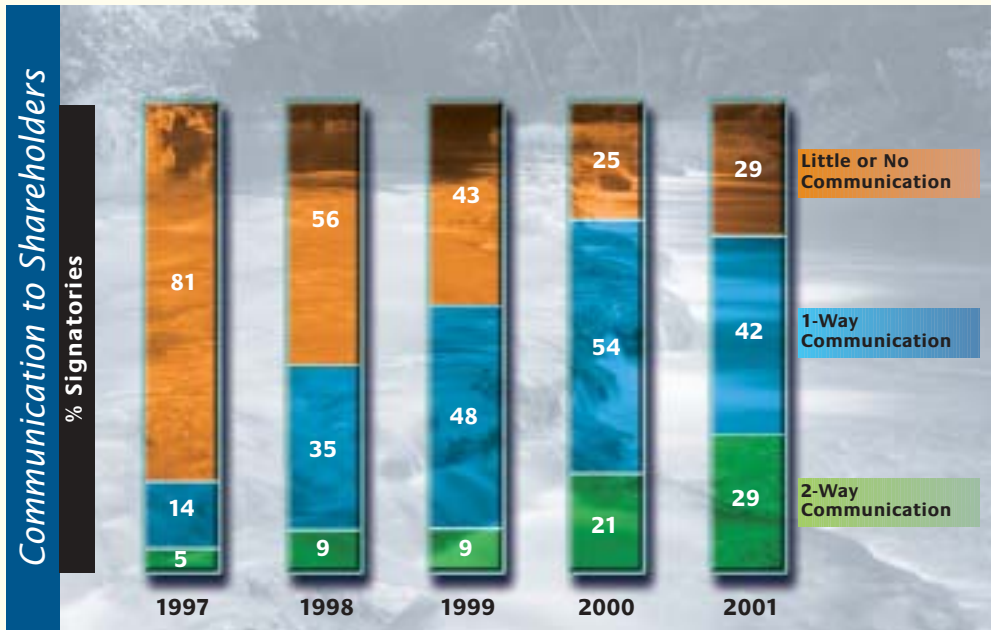
## Providing Information

Dialogue with customers, employees, shareholders and governments is the most direct way for a company to gather information about stakeholder expectations. This supports environmental progress.

Signatories' communication to and with stakeholders among signatories is improving. Companies are focusing dialogue especially on customers, whose environmental awareness is expanding, and on shareholders, who are increasingly interested in a company's environmental performance. Indeed, there interest is reflected in financial-performance indices where the stock of companies with green policies tends to perform better on stock exchanges.







## **GREEN POLICY: GOOD STOCKHOLDER VALUE**

*Collective commitment to sustainability makes it possible to achieve corporate goals with a high acceptance from society, without compromising a company's ability to deal successfully with critical issues such as the environment.*

*Collective reporting implies an increased awareness of the sector's responsibility towards society and the environment. I believe that any effort in this direction is welcomed by all stakeholders.*

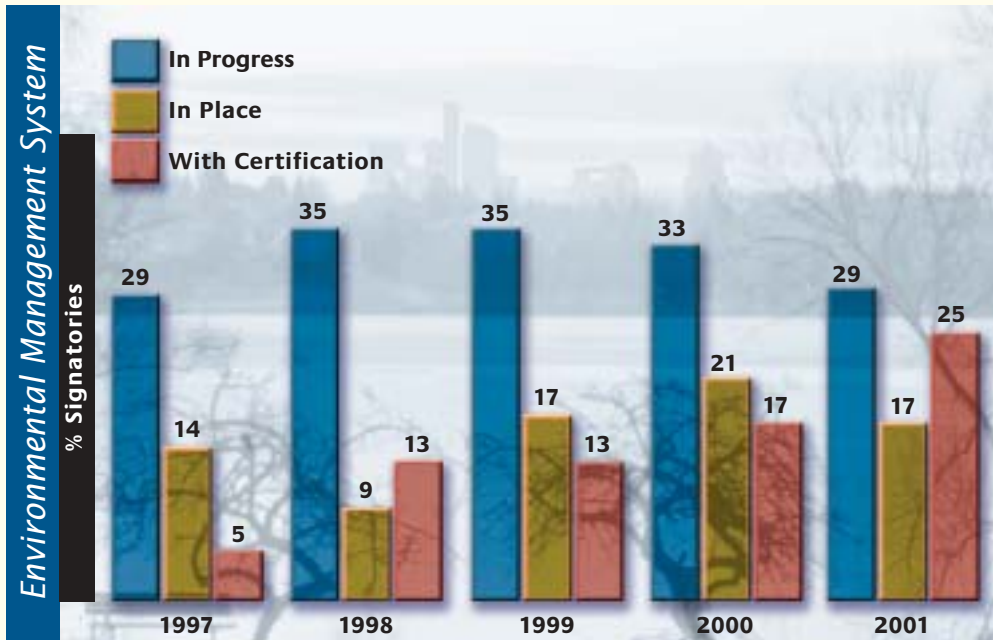
*Solid environmental reporting often equates good management. Due to the importance that telecommunications has for all sectors of society, any sharing of this sector's finding can only accrue to the benefit of society. As for investors, the more the sector shifts to common standards of green reporting, the more transparent and easy it becomes to compare performance between companies. The investment world would especially welcome such a development.*

*- Edoardo Gai, Sustainability Analyst, Sustainable Asset Management, Zollikon, Switzerland ([www.sam-group.com](http://www.sam-group.com))*

## **Environmental Management Systems**

One of the Charter's commitments is implementation of an environmental management system (EMS) to promote environmental protection. All signatories should aim to have an environmental policy statement, clearly stating the company's objectives.

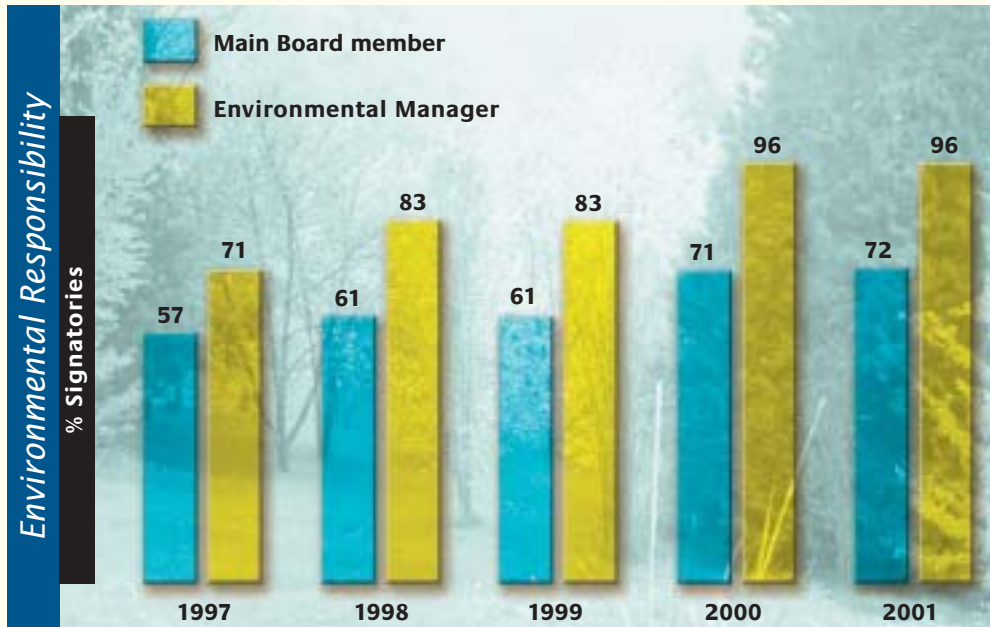
A strategy should be developed and endorsed at the highest level, and then converted into practical actions supported by management. These objectives are best achieved by companies that specifically assign responsibility to a board member for environmental policy, and to managers for co-ordinating programmes based on continuous environmental improvement.



Forty-six percent of signatories are building an EMS or have one in place, and 25 percent have a certified one. ISO 14001 is the standard most applied for developing these systems. The number of ISO-certified systems is increasing, and more are expected in the near future. Sixty-two percent have an environmental audit process in place and, in 12 percent of these cases, it covers the whole company.



The number of signatories with an environmental policy endorsed by top management has steadily increased and is now at 83 percent. Of these, 62 percent make their policies available to the public. Two-thirds of signatories have translated their environmental policy into identifiable objectives for business planning.



Nearly all signatories have appointed an environmental manager, while 72 percent have assigned environmental responsibility to top levels of management, clearly showing that care for the environment is high on their corporate agenda.

## Energy Use and Climate Change

Operating telecommunications networks requires large amounts of electrical energy to power and cool equipment. Telecom companies also need large amounts of fuel to heat buildings and to run vehicle fleets. As networks and the up-take of services such as the Internet expand, many sector analysts expect this will lead to dramatic rises in electricity consumption.

Consumption of fossil fuels does, of course, produce greenhouse gas (GHG) emissions. But Charter signatories have committed themselves to keeping their overall energy consumption as low as possible by identifying appropriate technical solutions, and sharing experience of their application.

*For the first time since ETNO began reporting on signatories' performance, a comprehensive picture of their energy consumption and impact on climate change has emerged. It shows how companies are reconciling their increasing energy demand with improved energy efficiency objectives.*

## Electricity

Two indicators are used to track electricity use. The first one,  $I_{1,1}$ , is defined as follows:

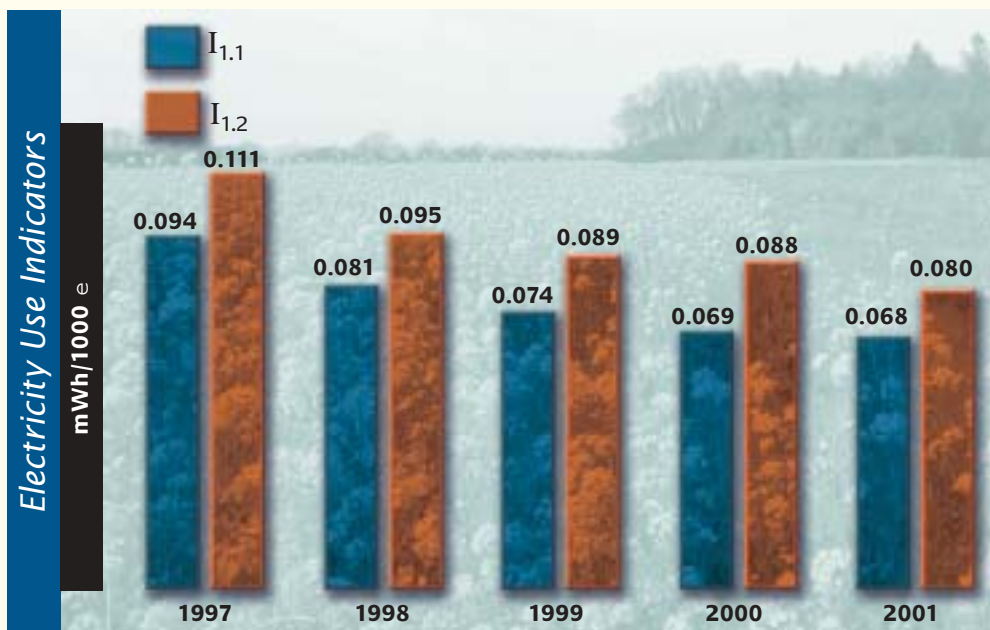
$$I_{1,1} = \frac{\text{Overall Amount of Electricity Used}}{\text{Overall Turnover}}$$

This indicator shows the trend of overall electricity management efficiency. Signatories are considered as one single company, with collective turnover.

The second indicator ( $I_{1,2}$ ) is defined as follows:

$$I_{1,2} = \frac{\sum (\text{Amount of Electricity Used by each Company}/\text{Company Turnover})}{\text{Number of Signatories}}$$

This indicator tracks average individual electricity management efficiency, which can vary considerably among signatories as a group.



In the above example, overall electricity management efficiency ( $I_{1,1}$ ) seems to be stabilising, while average individual electricity management efficiency ( $I_{1,2}$ ) is improving. In general, the trend is positive and shows that, despite network expansion, companies are managing to increase energy efficiency.

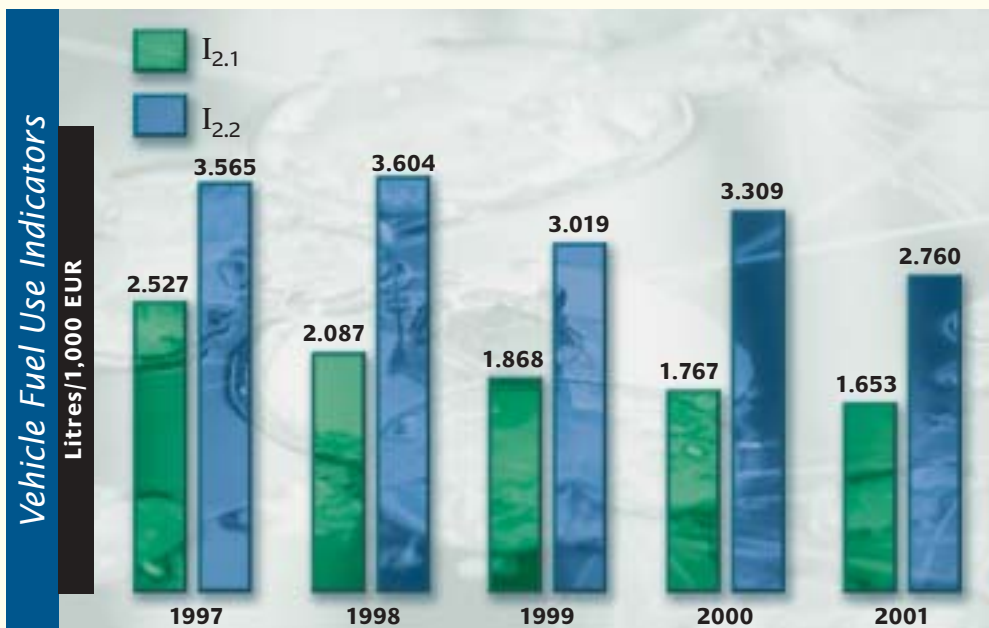
## Vehicle Fuels

The same approach has been followed to provide a picture of the management of signatories' vehicle fleets. The indicators used are:

$$I_{2.1} = \frac{\text{Overall Amount of Vehicle Fuels Used}}{\text{Overall Turnover}}$$

$$I_{2.2} = \frac{\sum (\text{Amount of Vehicle Fuels Used by Each Company}/\text{Company Turnover})}{\text{Number of Signatories}}$$

Again, these indicators provide the same kind of information as for electricity consumption but concern the efficiency of fuel-use in vehicle fleet management.



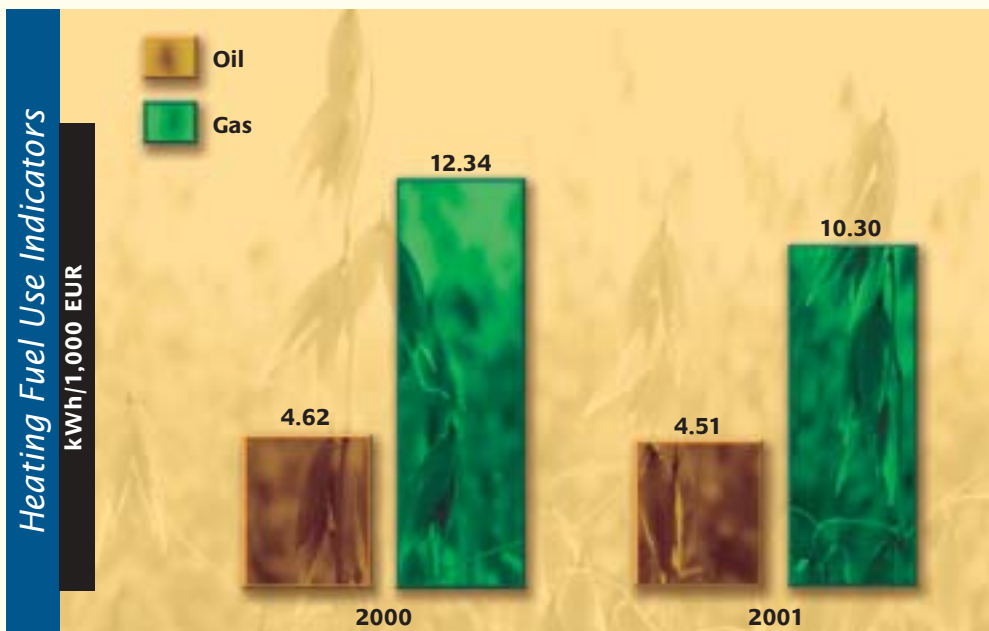
The overall trend is improvement in both indicators. Many companies have outsourced management of their vehicle fleets, which has boosted efficiency. They are also replacing old vehicles with new ones that offer lower fuel consumption and reduced particulate emissions. Finally, certain companies are optimising their vehicle routes via more sophisticated logistics planning.

## Heating Fuels

Use of heating fuels may vary a lot, depending upon a company's geographic location and the kind of facilities it operates. Also, some of the companies make extensive use of district heating, thus further reducing their environmental impact.

Again, the results pertain to the "one single company" collective model. The indicator used is energy per unit turnover, where energy is measured in kWh and turnover in thousand EUR.

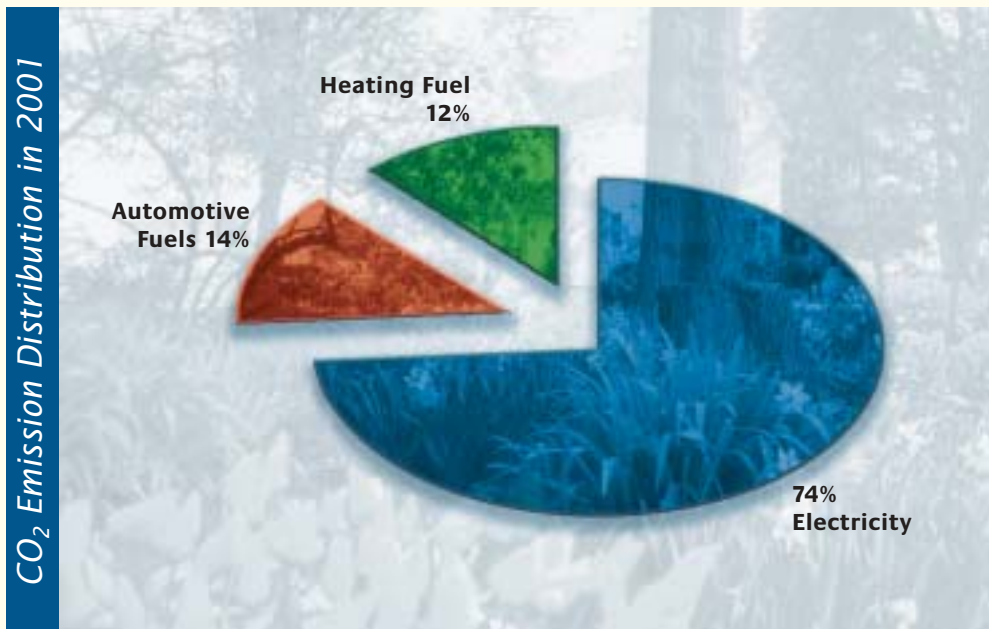
Data on heating fuel consumption have been collected only since 2000. Therefore charts show signatories' performance only for the past two years, though the efficiency trend shows improving performance during this short reference period.



## CO<sub>2</sub> Emissions

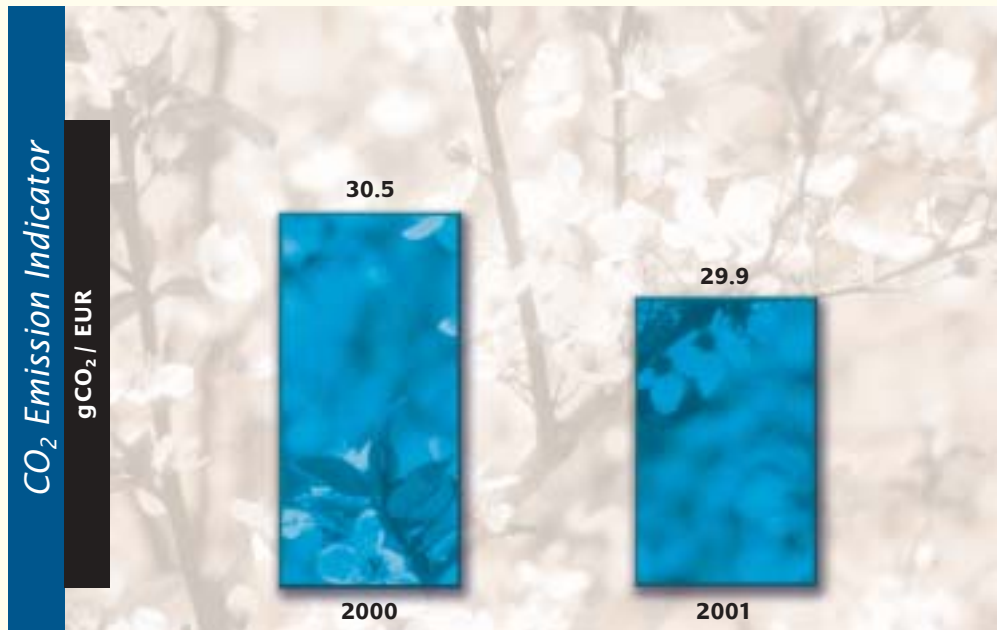
The following chart shows the breakdown for 2001. Calculations were made according to "The GHG Indicator: UNEP Guidelines for Calculating GHG Emissions for Businesses and Non-Commercial Organisations" and to guidelines developed by ETNO for its own climate change project.

Aside from the few European countries reliant on high levels of nuclear or hydroelectric power, the main source of CO<sub>2</sub> emissions lies in electricity, still largely produced by burning fossil fuels. Some of the signatories are investigating the use of alternative and renewable energies to reduce their environmental burden.



Signatories' combined performance regarding CO<sub>2</sub> emissions is shown in the following chart, based on the amount of CO<sub>2</sub> produced in grammes per euro of turnover. Their overall efficiency has slightly improved.





## Conclusion

The Charter's 25 telecommunications companies range from very large multinational enterprises to small operators. Despite this disparity in size, they can cooperate to improve their environmental performance. This cooperation is reflected by this report's indicators: they demonstrate the value of participating in the Environmental Charter of European Telecommunications Operators.

Despite the success so far, much work remains to be done, of course. Sustainability requires an ever-widening involvement of the business world.

ETNO's environmental campaign continues apace: two more companies have signed the Charter since the previous report. The journey starts out rough, but the more who walk it, the easier it becomes for all involved. It is, indeed, sustainability...together!

# The Future

Working together, all can advance. But we cannot rest on our laurels. The environment and society will not stand for it.

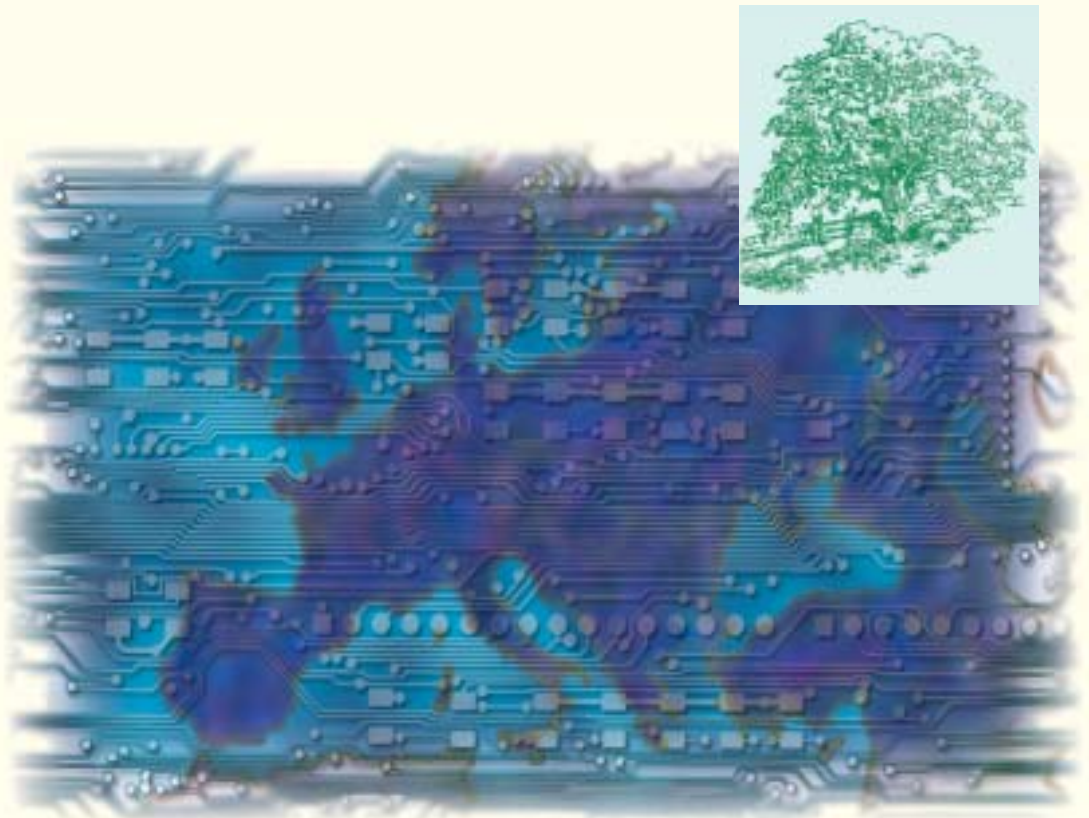
To reinforce commitment with existing signatories and recruit new ones for our next report, we plan to broaden the Charter's scope by including new CSR and sustainable development aspects.

The European Commission is proposing a sustainable development strategy to cover six themes. ETNO companies can contribute to this strategy's debate and help achieve its goals.

Climate change and clean energy are one of the strategy's pillars, for instance. Charter members are keen to explore how we can make better use of clean, renewable energy supplies to power our networks, even if the cost premium and lack of available renewable supplies in some countries does hamper our options.

Elsewhere, we are contributing to Europe's CSR policy debate with a paper submitted to the European Commission that offers our perspective on the issue. We are also making every effort to participate in a Commission stakeholder panel on the issue in order to present the views of Charter signatories.

Internationally, best-practice sharing and ETNO's involvement in activities such as GeSI will play a more and more important role.



## Supply Chain

We intend to focus more attention on our supply chain. It is not always easy to monitor an entire supply chain regarding sustainability, but we have identified problem areas that demand attention. These cover a wide spectrum, including materials used, environmental compatibility of production, conditions in the workplace and the issue of child labour. It is incumbent on us to establish relevant ethical values for purposes of purchasing guidelines, while monitoring compliance with them.

## Products and Services

ETNO companies believe that our products and services can only be economically successful in the long term if they are sold in a sustainable manner. But we must also ensure that each of our companies is profitable. Therefore, economic considerations must be placed on a par with social and ecological concerns: society must accept that "making money is not a crime", provided it is made ethically.

For instance, the services we provide can play an important part in offsetting GHG emissions as linked to travel. But unless there is access to renewables at a reasonable cost, our own indirect emissions will add to the climate change challenge.



Similarly, how do we anticipate and track events when an existing or new technology is suddenly introduced into a region, especially if it interferes with the region's social structure? The European Commission's sustainable development strategy, for instance, targets social exclusion and the "digital divide". But our industry can make a difference in bridging this divide through our services.

Finally, we believe that the Internet is the key to the future and thus crucial to our industry. In future, content must be restricted more carefully to the specific groups for which it is intended. Online-payment systems must offer better protection. Improved access-protection mechanisms are required to protect young people and regional ethical sensibilities.

## *To the Electronic Communications World: Join Us*

In the coming years we will boost efforts to increase efficiency and enhance co-operation among signatories. We also want potential investors in our companies to view Charter membership as a positive sign of a company's commitment to sustainable development. A first step in this direction was to open up the Charter to non-ETNO companies.

But success will come only if we clearly demonstrate the benefits of working together... which is, after all, this report's *raison d'être*.

Therefore, we invite all our colleagues across the electronic communications sector to join us in building our industry's blueprint for a sustainable future.



“ *There has been an almost exclusive focus on harnessing the economic potential of the Internet, and hardly anything said about its wider social and environmental opportunities... If companies can demonstrate that they can contribute to true improvement in quality of life for all, they stand a much higher chance of surviving the dot-com shakeout.* ”

Jonathon Porritt, Director, Forum for the Future

# The Environmental Charter of the European Telecommunications Network Operators' Association

## Our Vision

Sustainable development is a strategic global environmental goal. It describes development that takes into consideration the need to conserve both the natural environment and the world's scarce non-renewable resources for future generations. It is our belief that we can play an important part in making this happen.

This Charter describes our commitment to sustainable development through:

- the provision of products and services that provide significant environmental benefits; and
- a determination to manage our own operations in a way that minimises negative environmental impact.

## Our Approach

We recognise that the universal presence of telecommunications in today's society places on us a social obligation to be good corporate citizens. A responsible attitude to environmental issues is an important part of meeting that obligation.

As a collective group of companies, our combined turnover represents a significant proportion of European trade and this puts us in a unique position to make a real difference.

## Our Commitment

Whether together, or individually, we are committed to continuous improvement through action in the following areas:

### 1. AWARENESS

We shall aim to ensure recognition and acknowledgement of all relevant environmental impacts, including the positive and negative impacts of our products and services. In particular we shall build the environment into our training programmes and company communication programmes.

## 2. REGULATORY COMPLIANCE

We shall strive to achieve full compliance with all relevant environmental legal requirements, and to exceed these requirements where appropriate.

## 3. RESEARCH AND DEVELOPMENT

We shall support research and development into the contribution new telecommunication services can make to sustainable development.

## 4. PROCUREMENT

We shall build environmental considerations into our procurement processes. Special attention will be paid to: energy-consumption, waste management, process and product requirements, the use of hazardous materials.

## 5. PROVIDING INFORMATION

We shall provide relevant data and information about our environmental performance to employees, customers, shareholders and governments.

## 6. ENVIRONMENTAL MANAGEMENT SYSTEMS

We shall implement environmental management systems which support the development of appropriate and well-structured environmental protection.

All companies signing the Charter should aim to have an environmental policy statement, a management board member with specific environmental responsibility, and environmental manager(s) with designated responsibility for co-ordinating programmes of continuous environmental improvement.

All European telecommunication operators are encouraged to support the Charter and, as a demonstration of their commitment, all companies are individually invited to sign up to the Charter principles.



# *The Signatories*

Belgacom  
BT (British Telecom)  
Cable & Wireless  
Český Telecom  
Croatian Telecom  
Cyprus Telecommunications Authority  
Deutsche Telekom  
Elisa Communications  
Finnet Group  
France Telecom  
KPN  
Matáv  
Portugal Telecom  
Rom Telecom  
Slovenské Telekomunikácie  
Sonera  
Swisscom  
TDC  
Telecom Italia  
Telecom Slovenije  
Telefónica  
Telekom Austria  
Telenor  
Telia  
Türk Telekomünikasyon



## About ETNO

Based in Brussels, ETNO—the European Telecommunications Network Operators' Association—is the industry's leading policy voice. It represents 42 major European telecommunications companies in 33 countries, including all major EU, Central European and EU candidate-country operators.

ETNO's work is organised around 15 specialised working groups, composed of experts from member companies, who produce common viewpoints on a wide range of subjects: regulatory, technical standards, trade issues, e-commerce, broadband, mobile telephone and other critical telecom-related topics. ETNO is deeply involved in these areas, helping shape EU telecom policy and proposals to meet the needs of our industry.

## Useful Links

Digital Europe	<a href="http://www.digital-eu.org">www.digital-eu.org</a>
Dow Jones Sustainability Indexes	<a href="http://www.sustainability-index.com">www.sustainability-index.com</a>
ETNO	<a href="http://www.etno.be">www.etno.be</a>
European Environment Agency	<a href="http://www.eea.eu.int">www.eea.eu.int</a>
European Union On Line	<a href="http://www.europa.eu.int">www.europa.eu.int</a>
FTSE4Good	<a href="http://www.ftse4good.co.uk">www.ftse4good.co.uk</a>
Global e-Sustainability Initiative	<a href="http://www.gesi.org">www.gesi.org</a>
Global Compact	<a href="http://www.unglobalcompact.org">www.unglobalcompact.org</a>
Global Reporting Initiative	<a href="http://www.globalreporting.org">www.globalreporting.org</a>
GSM Europe	<a href="http://www.gsmworld.com/gsm europe">www.gsmworld.com/gsm europe</a>
International Telecommunications Union	<a href="http://www.itu.int">www.itu.int</a>
Mobile Manufacturers Forum	<a href="http://www.mmfaai.org">www.mmfaai.org</a>
Sustainable Asset Management	<a href="http://www.sam-group.com">www.sam-group.com</a>
United Nations Environment Programme	<a href="http://www.unep.org">www.unep.org</a>
World Business Council for Sustainable Development	<a href="http://www.wbcsd.org">www.wbcsd.org</a>
World Health Organisation	<a href="http://www.who.int/en">www.who.int/en</a>



# Abbreviations

CO <sub>2</sub>	Carbon Dioxide
CSR	Corporate Social Responsibility
DG	Directorate General
EICTA	European Information and Communication Technology Association
EITO	European Information Technology Observatory
EMS	Environmental Management System
EmF	Electromagnetic Fields
ETNO	European Telecommunications Network Operators' Association
EU	European Union
GeSI	Global e-Sustainability Initiative
GHG	GreenHouse Gas
GSMe	GSM Europe
ICT	Information & Communications Technologies
ISO	International Standards Organisation
ITU	International Telecommunications Union
UNEP	United Nations Environment Programme
WTO	World Trade Organisation

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