



Carbone Disclosure Project Questionnaire

May 2008

Risks and opportunities

Risks

1 How is your company exposed to regulatory risks related to climate change?

As a manufacturer of electrical materials, Schneider Electric is not concerned by the emissions quotas set by the national governments and the European Commission. **Schneider Electric neither generates nor distributes electricity.** Its business primarily relies on assembly and monitoring techniques and includes very few processes with a more significant environmental impact, such as metal processing and treatment. Our manufacturing and logistics consume relatively little energy compared to cement works, glassworks, road and air transportation, electric generation, chemistry, aluminium or steel industry.

Other regulations regarding greenhouse gas reduction have to be applied by Schneider Electric:

- EU directive 2005/32/CE – so-called Energy Using Product directive - sets a framework for eco-design of energy consuming products. Schneider Electric has to apply this directive as a components supplier.
- EU directive 1999/13/CE aims at reducing the Volatile Organic Compounds (VOC) due to the use of organic solvents in some activities and industrial sites.
- Bylaw (CE) n°842/2006 by the European Parliament and Council on some greenhouse fluoridated gas (in particular regarding SF6).

2 How is your company exposed to physical risks from climate change?

Schneider Electric is not directly exposed to climate threats.

Certainly, if climate changes dramatically in the years to come, we could have to cope with potential damages involving some of our 240 manufacturing and logistics sites all over the world. For instance sites located in the US Middle West could suffer from more tornadoes or our Indian sites from more droughts. However our industrial processes consume little water, and we need cooling system only for the comfort of our buildings

Moreover, Schneider Electric has the ability to quickly move its facilities, since they are relatively light structures and they are not required to be close to specific raw materials. The Group has successfully implemented a relocation plan to manufacture closer to its markets (one of the essential objectives of our company program New² between 2005 and en 2008).

3 How is your company exposed to general risks as a result of climate change?

Clearly Schneider Electric directly emits little carbon in the atmosphere. We could have to support an energy bill increase and an impact of the likely increase in carbon cost (through transportation, or raw materials and components). Thus we are and will be incited to save energy and reduce our carbon emissions. We include these issues in our industrial strategy. However **climate change is not a major risk for our company.**

4 Has your company taken or planned action to manage the general and regulatory risks and/or adapt to the physical risks you have identified?

Schneider Electric respects regulations regarding global warming by implementing action plans with clear objectives.

In 2007, Schneider Electric carried out a **carbon assessment (so called Bilan Carbone in France)** so that the Group could base its strategic decisions on both business and environmental indicators (Cf. Part II: GHG Emissions Accounting). After this first step, the Group has set the following action plan in 2008:

- An additional study of carbon emissions from recycling of Schneider Electric products;
- A business and environmental improvement plan for all of Schneider Electric's supply chain activities;
- Directives on business trips and alternative ways of meeting using communication technologies such as video or telephone conferences.

Moreover we think about integrating carbon management in our company program to be set up by end 2008.

5 How do you assess the current and/or future financial effects of the risks you have identified and how those risks might affect your business?

Our aim is to **reduce the carbon intensity of our business** by working on our supply chain. This work will contribute to decrease our dependence to fossil energies - that emit GHG and whom prices are expected to rocket in the future.

However our customers are more concerned by risks as a result of climate change than we are. They consume energy 1- to make their machineries, data centres and motors work and 2- to warm up, light, air-condition their buildings. Consequently we propose solutions to our customers that respond to their urging need of energy efficiency and carbon reduction. Our business is dramatically changing towards those new services.

Climate change is an enormous opportunity for our business, because energy efficiency and carbon reduction solutions will be pushed by constraints weighting on most energy-consuming and strongly emitting sectors, even in a context of an economic slowdown.

Opportunities

6 How do current or anticipated regulatory requirements on climate change offer opportunities for your company?

Up to 50% of CO2 emissions attributable to residential and commercial buildings are from electricity consumption. Moreover, as domestic appliances, computers and entertainment systems proliferate and other equipment such as air conditioning and ventilation systems increase in use, electricity consumption is rising at a higher rate than other energy usage. However, in order to reach a 20% fall in consumption by 2020 the following has to happen:

- All new buildings constructed consume 50% less energy;
- 1 out of 10 existing buildings reduces consumption by 30% each year.

As a result, governments apply an increasing regulatory pressure to meet these ambitious targets. More demanding regulations will be enforced to address all energy uses, including existing buildings and industry. Regulations impose energy performance standards, such as:

- Europe: the *Energy Performance of Buildings Directive* is expected to reach 28% energy savings in the building sector – which means a 11% reduction in the total EU final energy consumption. Other directives: EU Directive 2002/91/EC on the energy performance of buildings and the *Directive on energy end-use efficiency and energy services* (2006/32/EC) which fixes a requirement in terms of energy savings and asks that member states take measures to achieve their respective targets;
- France: following the “Grenelle de l’Environnement”, the government works on new measures to develop high energy efficient buildings: strengthening the Energy Performance Diagnosis and Energy Economy Certificates (to facilitate financing of energy reduction works), increasing bonus for high energy efficient buildings, developing taxes to reduce energy consumption, etc.
- United States: *Energy Policy Act* (2005), Building Codes, Energy Codes, State Energy program, *Energy Conservation for Consumer Goods*;
- China: *top 1000 Industrial Energy Conservation Program*, *China Energy Conservation Law*, *China Architecture law* (EE in Buildings), *China Renewable Energy Law*.

Schneider Electric highly commits in the promotion and sale of energy efficiency solutions for buildings. This regulatory context is a great opportunity for Schneider Electric.

Schneider Electric is not directly concerned by the European Union’s ETS (emissions quotas, white certificates or domestic projects) and cannot easily be granted carbon credits for our EE solutions as several intermediaries operate on a building or renovation project (architects, contractors, engineering firms, etc.).

7 How do current or anticipated physical changes resulting from climate change present opportunities for your company?

N/A



8 How does climate change present general opportunities for your company?

Climate change requires human beings to modify their production and consumption patterns: companies have 1- to propose low carbon solutions to their customers, and 2- to reduce the carbon intensity of their own activity:

1. Schneider Electric commits to reduce its customers' emissions (=energy supplied through our products). Now up to 30% savings are possible through a combination of efficient devices and installation (10 to 15%), optimized usage of installation and devices (5 to 15%) and permanent monitoring and improvement program (2 to 8%). Since 2004, **energy efficiency** has become key in the Group's development strategy: **its energy efficiency solutions have counted for 20% of its turnover in 2007 with a 15% growth**. It has adopted a comprehensive energy strategy thanks to products and solutions that reduce consumption, optimize utility costs and improve reliability and availability. In our four-step approach for energy efficiency, we:
 - Fix the basics (low consumption devices, insulation material, power quality...);
 - Measure energy use to identify potential savings and dysfunctions;
 - Install low-consumption equipment and systems;
 - Improve long-term use by deploying automation management, consulting, training and tracking resources while maintaining high performance.
2. Schneider Electric has set an objective to reduce energy consumption per production site employee by 10% by the end of 2008. We apply our solutions in our own operations through the "**Energy Action**" program to reduce consumption. It enables the Group to reduce its energy bill, and demonstrate our ability to customers and stakeholders.

9 Do you invest in, or have plans to invest in products and services that are designed to minimize or adapt to the effects of climate change?

Investment in Energy Efficiency (EE)

Cf former question.

Schneider Electric has acquired companies specialised in energy efficiency for a few years – such as TAC in 2003.

Our **R&D** teams also focus on efficiency energy management, i.e. the ability to measure, optimize and supervise electricity use. Thus Schneider Electric is the leader of the European **HOMES** residential energy efficiency program. It aims at organizing a building like a smart, networked system to reduce energy consumption by 10% to 30% and optimize comfort.

Investment in renewable energies

Schneider Electric has created in 2007 a **Business Unit** dedicated to renewable energies. It develops a range of photovoltaic UPS systems and collaborates with Solaire Direct, a company that installs residential photovoltaic panels and builds PV solar power plants. Renewable energies are expected to account for 13% of electricity generation in 2030.

The Group is also developing the use of renewable energies in its own infrastructure. For example, the corporate restaurant at the Electropole R&D Center in Eybens, France is powered by solar energy. The European Operating Division's headquarters in Barcelona, Spain is equipped with a photovoltaic system and a centralized HVAC solution that reduces energy costs by 15%. And the Group's future headquarters under construction in Rueil-Malmaison will comply with France's HQE green building standards, notably as concerns energy consumption (target: less than 50 kWh per square meter per year).

Princess Elisabeth research station: Working in partnership with the International Polar Foundation, Schneider Electric is providing electrical distribution, building management and remote control solutions for the Princess Elisabeth research station in Antarctica.

The station, which is currently under construction, is unique in that it uses only renewable energy sources. These include solar energy, harnessed by photovoltaic and thermal panels, and wind generators. As a result, the station will not emit any CO₂ into the atmosphere. Schneider Electric's participation in this exceptional adventure includes the entire station's electrical supply, as well as building management (systems to control temperature, air, pump motors and mixers), and remote control for four months out of the year. Given the site's violent winds, extreme temperatures (-40°C) and use of embedded technologies, our products and solutions will have an unprecedented opportunity to demonstrate their quality and reliability.

Schneider Electric Ventures: this fund with a capital of €50 million aims at acquiring interests in innovative start-ups, in particular in renewable energies or energy efficiency technologies.



Examples of investments in emerging markets in 2007 included:

- Solaire Direct, the first electric company in France fully dedicated to solar power. Solaire Direct builds PV solar power plants and installs residential photovoltaic panels.
- Consumer Power Line, a US-based company that helps infrastructure managers reduce electricity demand during peak periods and, when possible, re-sell unused amounts at above-market prices.

10 How do you assess the current and/or future financial effects of the opportunities you have identified and how those opportunities might affect your business?

Energy is facing a critical dilemma: the power consumption will double by 2050 with the increase of world population and the CO₂ emissions will have to be divided by 2 in the same time to avoid dramatic climate changes (according to the Intergovernmental Panel on Climate Change). We must learn to adapt and manage energy consumption to achieve this factor 4.

Schneider Electric is involved in $\frac{3}{4}$ of end user energy consumption: electricity and fuel main sources are in buildings and industry for heating, motors, lighting, electronics and appliances.

Energy efficiency is a must, better than new capacity because it is...

- Cheaper: each kWh saved avoids about 3 times the generation production & demand response programs cost about 2 to 3 cents/kWh, about half of typical electricity costs.
- Quicker: technology available today with short term investment and short term results.
- Cleaner: "negawatt" produces no environmental footprint.
- Security enhancing: EE is homegrown, it reduces dependence on imports.

Energy Efficiency solutions have already been a strong market opportunity for Schneider Electric and will continue in the future. We realised a €3,4 billion turnover in 2007 with EE products and solutions (20% of orders, +15% growth vs 2006).

GHG emissions accounting

a Accounting Parameters

Schneider Electric and its units worldwide are not required to hold CO2 emission permits. Nevertheless, a world leader like Schneider Electric who has taken determined steps to optimize energy efficiency and understand the planet's great new societal and environmental challenges felt compelled to be fully transparent about its own carbon emissions.

Even though its industrial processes do not consume huge amounts of energy, the Group wanted to carry out a carbon audit covering its own emissions, as well as those of suppliers, supply chain and other partners so that it could base its strategic decisions on both business and environmental indicators.

To be sure, a forward-looking approach is all the more necessary in today's environment of sharply fluctuating energy costs, as experts are now confirming the direct relationship between carbon emissions and the amount and type of energy consumed.

What's more, by putting itself through the audit process, Schneider Electric can also gain a better understanding of the issues and factory floor reality encountered by its large energy-consuming customers.

11 Reporting boundary

Schneider Electric's carbon audit covers:

- All of its suppliers.
- The internal supply chain.
- The upstream and downstream supply chains.
- Management of all buildings.
- All business trips.
- The Group's general operations.

12 Reporting year

Reference year: 2006

This reporting period conforms to Schneider Electric's financial reporting year.

13 Methodology

The method used corresponds to version 4 of the French Agency for Environment and Energy Management's carbon audit. This method is compatible with the ISO 14 064 norm, the GHG Protocol and the terms of the European directive n°2003/87/CE on the tradeable CO2 emissions quotas.

A vast, more than 8-month formalization program involving purchasing, supply chain, accounting, manufacturing and the Group's environmental managers was required to obtain the final results.

b Direct and indirect emissions – scope 1 and 2 of the GHG Protocol

14 Are you able to provide a breakdown of your direct and indirect emissions under Scopes 1 and 2¹ of the GHG Protocol and to analyse your electricity consumption?

Scope 1 (emissions related to our internal processes in 2006): 0,09 million of tonnes CO₂-e

Scope 2 (emissions related to our internal energy consumption in 2006, ie machineries and buildings): 0,42 million of tonnes CO₂-e

¹ **Scope 1:** direct emissions from GHG sources owned or controlled by the company, such as combustion facilities, combustion of fuels in company-owned or company-controlled transportation and physical or chemical processes.

Scope 2: indirect emissions caused through the company's consumption of imported electricity, heat, cooling or steam.



Schneider Electric's energy consumption in 2006 = 918,024 MWh-e

Please note that the reporting boundary differs for accounting energy consumption. The energy consumption of manufacturing and logistics sites are assessed in our environmental reporting. In 2006, 184 responding sites were included in our reported scope.

c Other emissions – scope 3 of the GHG Protocol

15 How do you identify and/or measure Scope 3² emissions?

Schneider Electric has tracked business trips of its employees and an outside contractor monitors invoices to map out all shipments from start to finish (origin, destination, shipping method).

Our total emissions represent around two million tons of carbon, the equivalent of 7,7 millions of tons CO₂-e. Half of these emissions are related to component materials, a third to supply chain activities and the rest to energy used by business trips, manufacturing procedures and buildings. This amount rises by including the end-of-life of our products; actually some of our products contain SF₆, a powerful GHG. Regarding products maintenance and end-of-life, Schneider Electric already proposes recycling solutions, alone or with partners, in particular to avoid SF₆ gas leakages into the atmosphere, and plans to spread this offer to all of the countries where we operate.

d External verification

16 Has the information reported been externally verified or audited or do you plan to have the information verified or audited?

CO₂ emitted by our industrial sites have been audited each year since 2005 by Statutory Auditors (please refer to Schneider Electric's 2007 Annual Report, page 100, to get the verification statement).

The calculation of our global CO₂ emissions (Bilan Carbone) has been carried out by an external agency specialised in carbon audit (Manicore).

e Data accuracy

17 Does your company have a system in place to assess the accuracy of GHG emissions inventory calculation methods, data processes and other systems relating to GHG measurement?

Cf question 13 (Accounting parameters / methodology).

f Emissions history

18 Do the emissions reported for your last accounting year vary significantly compared to previous years?

Schneider Electric has carried out a comprehensive carbon audit for the first time last year. No major change in the business structure could have influenced carbon emission compared to previous years; it evolves basically more or less as the turnover growth.

² **Scope 3:** other indirect emissions that are a consequence of a company's activities, but which arise from GHG sources that are owned or controlled by others. Examples include emissions as a result of the extraction, manufacture and production of materials it has purchased, the transportation of purchased fuels or goods, the use of products and services it has sold, and business travel and employee commuting in vehicles not owned or controlled by the company.

g Emissions trading

19 Does your company have facilities covered by the EU Emissions Trading Scheme?

No.

20 What is your company's strategy for trading or participating in regional and/or international trading schemes (eg: EU ETS, RGGI, CCX) and Kyoto mechanisms such as CDM and JI projects?

Schneider Electric's facilities are too small and consume too little energy to be concerned by trading schemes and Kyoto mechanisms.

h Energy costs

21 Please identify the total costs in US\$ of your energy consumption eg from fossil fuels and electric power.

Schneider Electric reports a global consumption (electricity, gas, fuel, gasoil, heat) of 981 000 MWh equivalent in the industrial and logistics perimeter. Taking into account commercial and administrative buildings, it could be estimated at 1 300 000 MWh.

Assuming a cost of 0.07€ per kWh (by excess), the annual cost rises to 91 M€.

22 What percentage of your total operating costs does this represent?

Around 2%.

23 What percentage of energy costs are incurred on energy from renewable resources?

It is to be underlined that:

- our energy consumption is by 2/3 from electricity;
- a significant part of our operations is still based in France;
- and electricity in France is from nuclear origin for more than 80% and from hydraulic for 15 to 18%.

Performance

Reduction plans

24 Does your company have a GHG emissions reduction plan in place?

In 2008, Schneider Electric has foreseen to implement the following actions:

- An additional study of carbon emissions from recycling of Schneider Electric products;
- A business and environmental improvement plan for all of Schneider Electric's supply chain activities;
- Directives on business trips and alternative ways of meeting using communication technologies such as video or telephone conferences.
- A program so called Schneider Energy Action to reduce direct energy consumption by 10% over 3 years (2005 -2008). This goal has been reached as soon as the second year of the program.

25 What is the baseline year for the emissions reduction plan?

2007. For energy consumption: 2005.

26 What are the emissions reduction targets and over what period do those targets extend?

The definition and implementation of our carbon reduction plan are currently in progress, and will be defined by the end of 2008 in the framework of the new Company Program that will follow the current one New2.

27 What activities are you undertaking to reduce your emissions? What targets have you set for each and over what timescales do they extend?

The company achieved following objectives in 2007:

- measure its carbon footprint (first time ever);
- deploy the United Nations Global Compact programme to each of its key transportation suppliers;
- systematically ask suppliers to provide their strategy in terms of sustainable development in all the Request For Quotations (RFQ);
- appoint an Executive Committee member, M. Hal Grant, as a point of contact for Carbon Footprint initiatives and a person in charge of implementing pilot projects to test alternative shipping system (rail, barge, short sea, etc.).

Moreover, Schneider Electric's units focused in 2007 on streamlining the supply chain, a clear source of carbon emissions. To address this issue:

- a dedicated global corporate team was set up to get an overall view of international air and sea shipments, optimize purchasing and shift air freight towards sea shipments;
- a plan to optimize pan-European flows was devised to make road haulage more effective, notably by improving the truck fill rate;
- an outside contractor monitored invoices to map out all shipments from start to finish (origin, destination, shipping method). A pilot program is under way in France and Spain, with the goal of deploying across Europe in 2008.

In terms of target, the company:

- commits to measure 90% of our transportation costs by 2012 through our Freight Cost Management system feeding a worldwide datacube with each individual shipment characteristics (mode of transportation, weight, mode of transport, origin and destination). This worldwide database can in turn measure our CO₂ contribution;
- commits to reduce its reliance to airfreight by 50% in costs by 2012.

28 What investment has been or will be required to achieve the targets and over what time period?

Targets described above have to be achieved in 2012.

29 What emissions reductions and associated costs or savings have been achieved to date as a result of the plan?

The definition and implementation of our carbon reduction plan are currently in progress.

Emissions intensity

30 What is the most appropriate measurement of emissions intensity for your company?

The most appropriate measurement is our "direct" emissions:

- Tonnage and transportation distance of raw materials, components and products, for 1€ of turnover;
- Direct energy consumption and origin (electricity, oil, gaz, renewable), for 1 person or 1€ of turnover.

31 Please state your GHG emissions intensity in terms of total tonnes of CO₂-e reported under Scope 1 and Scope 2 per \$m turnover and EBITDA for the reporting year.

Scope 1 (emissions related to our internal processes in 2007) = 5,2t CO₂-e per €m turnover; 29t CO₂-e per €m EBITDA³.

Scope 2 (emissions related to our internal energy consumption in 2007, ie machineries and buildings) = 24t CO₂-e per €m turnover; 135t CO₂-e per €m EBITDA.

32 Does your company set emissions intensity targets?

No.

Planning

33 Do you forecast your company's future emissions and/or energy use?

No.

³ 2007 turnover = 17 300 €m; 2007 EBITDA = 3 114 €m

Governance

Responsibility

34 Does a Board Committee or other executive body have overall responsibility for climate change?

2 members of the executive committee have overall responsibility for climate change:

- M. Eric Pilaud, Executive Vice President, Strategy, Customers and Technology – Services and Projects Business Unit, to whom Sustainable Development Division reports;
- M. Hal Grant, Executive Vice President, Globalization & Industry. Hal Grant is sponsor of Schneider Electric's carbon reduction plan.

35 What is the mechanism by which the Board or other executive body reviews the company's progress and status regarding climate change?

Our program "**Energy Action**" is reviewed every year in our Planet & Society barometer (objective to reduce energy consumption per production site employee by 10% by the end of 2008).

Our **carbon reduction plan** will also be reviewed thanks to regular targets reporting.

Individual performance

36 Do you assess or provide incentive mechanisms for individual management of climate change issues including attainment of GHG targets?

No

Communications

37 Please indicate whether you publish information about the risks and opportunities presented to your company by climate change, details of your GHG emissions and plans to reduce emissions through any of the following communications

Annual Report and voluntary communications such as CSR reporting: information on our 2007 carbon audit and 2008 carbon reduction plan has been published in our 2007 Annual Report (Schneider Electric has merged its CSR reporting and financial Annual Report).

Formal communications with shareholders or external parties: Schneider Electric and its subsidiary TAC (specialised in automation in buildings) have adhered to the **Clinton Climate Initiative** in August 2007 to help cities around the world to improve energy efficiency in buildings and reduce greenhouse gas emissions.

Public Policy

38 Do you engage with policymakers on possible responses to climate change including taxation, regulation and carbon trading?

No. But we take an active role in Standardization at national, European (CEN – CENELEC) and international (ISO – IEC) levels in all these matters.