



Large Industry Views on Electricity Disclosure in Europe

A report prepared as part of the Altener project
"Consumer Choice and Carbon Consciousness for Electricity (4C Electricity)"





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„Consumer Choice and Carbon Consciousness
for Electricity (4CE)”**

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4CE

Consumer Choice and Carbon Consciousness for Electricity

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The 4C Electricity Project

The project “Consumer Choice and Carbon Consciousness for Electricity (4C Electricity)” is being carried out under the framework of the EU Altener programme. The aim of this project is to promote Electricity Disclosure, i.e. consumer information about the source of the electricity product they are currently buying and the implications of its generation.

By assisting consumers to make an informed choice in the liberalised market place, this project proposes to develop a label (and the information system behind it) that will provide them with details of the content of their supply mix and its resulting environmental implications.

By designing an information system which displays details about the primary energy sources used to generate a certain product, this label will provide a tool which can aid consumers and policy makers in greening Europe’s electricity supply.

The Electricity Disclosure scheme will be explored within the context of liberalisation, in order to ensure that a functional and practical scheme is proposed. An assessment of the opportunities and barriers to labelling, and especially for tracking electricity, from the changes to the European liberalised markets will therefore be undertaken.

These will be achieved through the following activities:

- Phase 1: A study of the ability of suppliers to access and provide the information needed for an electricity label within the context of liberalisation.
- Phase 2: A study of what the label will mean for consumers and what consumers want by consulting with them directly through focus groups and a telephone survey.
- Phase 3: Development of policies to maximise the impact of the label, as well as investigating the need for associated policies to ensure effectiveness. This final phase views the label as part of a policy framework towards a lower carbon future, and suggests a policy toolbox that can be employed to build on the label.

In the course of the project, two workshops will be held, which form key deliverables of the 4C Electricity project. The project final report will be available in October 2003.

This report is an outcome of Phase 2 of the project. It is based on a number of interviews with large industrial electricity users in five European countries.

For more information about the 4C Electricity project, please visit the project website: <http://www.electricitylabels.com>

Executive Summary

This report is based on a series of key informant interviews investigating views on electricity disclosure among industry and other large electricity consumers. The objective is to provide comparative information on electricity procurement, and acceptance of future disclosure schemes, in key sectors across five European countries.

The target group included managers and coordinators of electricity procurement, company executives and company environmental policy coordinators in energy intensive industry, large public consumers and electricity procurement advisers.

Key findings

- In most cases, a purchase unit of the company manages the whole electricity procurement procedure
- In many countries and sectors, a niche market for electricity procurement advising and coordination services has developed
- In Hungary, it is still the highest-ranking company executives who decide on electricity procurement. So far, none of the interviewed organisations had selected a supplier based on the competitive bidding processes available
- Large industry consumers buy a relatively small amount of electricity from abroad
- Price is by far the most important criteria in selecting a supplier
- Other evaluation criteria include administrative (billing and monitoring) streamlining, security of supply (meaning a reliable supplier that can fulfil obligations) and information on primary energy mix and environmental impact
- Most of the interviewees were positive towards a standardised information system that would simplify the electricity procurement process and give the purchaser a standardised formula for comparing different electricity products offered by suppliers

1 Introduction

The proposed European Directive on liberalisation of the European electricity market is due to be implemented in July 2004, enabling millions of households, public institutions, as well as private companies to choose their electricity supplier, in many instances for the first time ever.

Along with liberalisation of the electricity market, the European Commission has introduced the concept of electricity disclosure throughout Europe with the inclusion of a labelling provision in the proposed directive. As with liberalisation, electricity disclosure has already been introduced into a small number of European countries, such as Austria, although it is more widely established in the US. It is within this context of liberalisation and disclosure in the European electricity market that the 4CE project is being carried out.

Large electricity consumers represent a large market share, and as private and public providers of goods and services publish ever more detailed information about environmental impacts, the usefulness of electricity disclosure increases.

It is already now common practise in many countries that larger companies publish information on environmental impacts (in annual reports or separate environmental reports) from their activities, sometimes disaggregated down to the level of environmental impacts per kWh of electricity used.

The aim of this study has been to investigate the views on disclosure among large electricity users in Austria, Germany, Hungary, Sweden and UK. This has been done through a total of 26 interviews with people responsible for, or with detailed knowledge of, electricity procurement procedures within the organisation.

2 Background and objectives

2.1 Background

In order for a disclosure system to be effective, it is important to make sure that a system is designed that is perceived as useful and cost-effective to large industrial electricity consumers. Nonetheless, it is increasingly common that companies include environmental information in annual reports or other publications, sometimes with specific reference to impacts from electricity consumption. Switching electricity supplier is often one of the simplest methods available for reducing a company's environmental impact, and thus it is assumed that a reliable and standardised disclosure system would simplify this process even further.

Getting large industry interested is thus a question both of the effectiveness of disclosure as an instrument, and the credibility of disclosure as a concept. Therefore a clearer picture of the decision-making process of large industry electricity procurements and the perceived value of environmental information is needed.

It is not within the scope of this project to conduct a quantitative and representative survey of the views in all the different sectors that constitute "large industrial consumers". Rather, a limited number of interviews of a more qualitative nature were conducted to get some views on disclosure in different types of organisations with varying environmental profiles. A total of 26 interviews (see 3.1) were carried out in four EU countries (Austria, Germany, UK and Sweden) and one candidate country (Hungary).

2.2 Objectives

The overall objectives of the investigation is to provide recommendations regarding the design of an electricity information system that would be suitable for and acceptable to large electricity consumers in Europe.

The investigation will aim to generate a better understanding regarding under what circumstances and in what way large electricity users might respond to a standardised electricity disclosure system.

More specifically, the aim of the interviews was to better understand:

- The general process by which companies choose their electricity supplier.
- The types of information that large electricity consumers take into consideration when choosing their electricity supplier.
- The level of importance large electricity consumers place on different types of information when choosing their electricity supplier.
- The motives behind placing a certain level of importance on different types of information.
- The relative importance large electricity consumers place on environmental qualities of their electricity supply and the motives behind this.

- Information on an electricity label that would be potentially relevant and useful for large electricity consumers.
- Factors which might trigger large electricity consumers to place importance on the environmental qualities of their electricity supply

3 Method

The investigation of large consumer behaviour consisted of face-to-face or telephone interviews conducted by each project partner in their respective countries (Austria, Germany, Hungary, Sweden and United Kingdom). The interviewees were persons from within the company that could answer questions regarding company policy and procedures regarding purchase of electricity

3.1 Selection of interviewees

The target group selected consisted of large organisations (more than 250 employees), both private and state-owned. As the aim was to provide qualitative understanding only, the interviews were spread over a range of sectors. Five types of large electricity users were targeted including:

- Private companies with a pronounced environmental profile, very concerned about environmental qualities of their electricity supply
- Private companies, potentially concerned about environmental qualities of their electricity supply
- Private companies, with little concern about the environmental qualities of their electricity supply
- Government agencies or state-owned companies
- Business associations or procurement coordinators/facilitators.

This spread of organisations was chosen to provide further understanding of the processes and priorities of companies that buy green electricity today, those that may be considering it, those that have no interest in environmental qualities and those that adhere to public sector procurement regulations.

Table 1 Interviews by country and company profile

Country	No of inter-views	No currently buying green electricity	No of private/public/other
Austria	6	0	5/0/1
Hungary	5	0	3/1/1
Germany	4	1	3/1/0
Sweden	5	2	3/1/1
UK	6	3	4/2/0
Total	26	6	18/5/3

3.2 Questionnaire design

The questionnaire was intended to give a clearer picture of some of the procedures used for electricity purchases, and some of the underlying reasons for the type of product chosen.

The complete list of interview questions used can be found in annex A. Not all questions are relevant to all interviewees, but the same list of questions was used as a guide for the interviews across all five countries. The interviews conducted did not follow a set pattern, but the focus of the questions were on the following overall issues:

- General electricity procurement procedures
- Relative importance of criteria used when selecting a supplier
- Potential advantages of a standardised disclosure system for the consumer
- Preferred format of environmental information from suppliers

4 Findings

In this section the main findings from the interviews are outlined. It is important to remember that these findings in no way claim to be statistically representative for the wide range of large electricity consumers in Europe. However, a number of the companies interviewed belong to some of the largest electricity consuming sectors in Europe, as well as sectors purchasing a substantive share of the environmentally certified electricity available to private and public companies. Thus, while the findings are not statistically representative, they represent a range of views of actors who will be instrumental in anchoring a EU-wide electricity disclosure system in industry.

In the following section, Hungary will be treated somewhat separately from the member states investigated (Austria, Germany, Sweden and UK), as the situation regarding market liberalisation and experience with environmental criteria in electricity procurement within Hungary is not comparable to the other countries.

4.1 General electricity procurement decision making process

In the four EU member states studied, electricity market deregulation has made electricity supply procurement a natural part of operations amongst private and public large consumers.

In most cases, a purchase unit of the company manages the whole procurement procedure. The general process is as follows. The needs are identified in terms of volumes and delivery dates, technical specifications (AC frequencies for example), environmental standards, etc and put together in a tender invitation. The bids are evaluated according to a set of weighted criteria (see section 4.2) and one or more bidders are invited to negotiate the terms of a supply contract. The one with the highest ranking is awarded the supply contract, which typically run for between 1 and 5 years, though the range of 2-3 years seems to be most common. Some purchasers, mainly very large ones like railway operators, complement the long-term contract with purchases on the spot market, or short-term contracts.

In many countries and sectors, a niche for electricity procurement advising and coordination services has developed. These consist of independent consultancy companies or business associations¹ that serve several large electricity purchasers.

In Hungary, although electricity market liberalisation is not yet fully implemented², industry has been planning for the competitive electricity supply market for several years. It is still the highest-ranking company executives who decide on electricity procurement and while negotiating with several potential suppliers, none of the interviewed organisations had selected a supplier based on these competitive bidding processes. The organisations interviewed were all in favour of a competitive market. Even though a shift in supplier mentality was expected (though it

¹ For example CHEEP (Consortium for Higher Education Energy Purchases) in the UK or Kommentus (a procurement coordinator owned by the association of municipalities) in Sweden.

² From 1st January 2003, large consumers with annual demand in excess of 6.5 GWh are eligible to enter the competitive market. The liberalisation is planned to be fully implemented in 2007.

was not clear exactly what was meant by this), the long-term relationship between supplier and consumer was deemed crucial in the future as well. This may reflect caution about rushing into new agreements with unknown suppliers when the market is liberalised, or simply reflect an old code of practise that will change, at least to some extent, when suppliers start bidding for clients.

Common to all companies investigated, whether due to business profiles (energy-intensive with high demands for secure supply), imperfect cross-border market liberalisation, old habits or a sense of general good relations with domestic suppliers, relatively limited amount of electricity is bought from abroad. No interviewee, however, had any objections to buying electricity from a foreign supplier should the this prove to be the most competitive option.

4.2 Large electricity consumer procurement criteria

Even though there were some variations in the bid evaluation criteria used by electricity purchasers, these criteria and their relative ranking were fairly consistent across company profiles and countries. The four criteria for evaluation included:

- Price
- Administrative streamlining and optimisation
- Security of supply
- Primary energy and environmental information

Not all four were ranked in the above order of importance, even though this was the most common ranking among purchasers without a pronounced green profile – those with a green profile had green electricity as a prerequisite for the other criteria. Several purchasers didn't consider primary energy or environmental aspects at all. It is important to note that "security of supply" in this context refers to the supplier being a reliable company with a proven track record, i.e. not in financial difficulties. It does not refer to security in the physical supply system, as this is the responsibility of the grid operator and not the supplier.

Price was by far the single most important factor when evaluating bids from suppliers. Many interviewees, however, also noted the increasing importance attached to simplification and streamlining of the billing and metering aspects. This includes making the billing simpler (one single invoice for a number of points of consumption) and the consumption history statistics more detailed (to find areas where energy savings would be most effective).

In Hungary, interviewees stated that security of supply, as well as a good and long standing relationship with the supplier (expressed both as security of supply of the right amount of the right quality at the right time by a reliable supplier and as the supplier understanding and meeting the needs of the purchaser), were in some instances more important than price when negotiating supply contracts.

4.3 Relative importance of environmental qualities

In almost all of the interviews conducted, environmental criteria were an important issue only to purchasers who already had a green profile and a pronounced policy to also buy green electricity. For most companies, who did not have a specific environmental policy, little, if any, importance was attached to the environmental qualities of electricity. However, all companies regularly received offers for the supply of environmentally declared or environmentally labelled electricity when purchasing electricity, and most had at some point considered suppliers of environmentally labelled electricity – even if it was later rejected as being too expensive. Thus, the concept of primary energy mix and environmental disclosure would not necessarily add something completely new to the electricity procurement process, but rather give the purchaser a standardised formula and verified information for comparing different types of electricity offered by suppliers, e.g. nuclear-free, low-nuclear, fossil-free, low-fossil, high-renewable or all-renewable. Currently, most purchasers are limited to the standard mix, a few generic products and environmentally labelled electricity, sometimes making it a complicated task to compare suppliers offering varying shades of “grey” electricity for customers who intend to calculate the environmental implications of electricity consumption.

In the interviews where actual label design proposals were discussed, it seemed to be a widespread opinion that fuel mix together with greenhouse gas emissions and radioactive waste measures would be a good starting point. Many interviewees stated that this would not be enough to base either purchase decisions or environmental reports on, though.

In Hungary, environmental criteria were deemed both interesting and important, but some large consumers felt that they did not (and should not have to develop) the capacity to assess this information. Rather, this should be handled by a central organisation that issues some sort of environmentally friendly “logo” that consumers trust. Environmental information was also ranked considerably lower than other criteria.

4.4 Potential benefits of standardised and mandatory disclosure

A majority of the interviewees were positive towards a standardised information system that would either ease the burden of current evaluation procedures for suppliers or make it easier to start using environmental criteria in the evaluation process if it wasn't already. Concerns were expressed that a cumbersome information system would affect the pricing of electricity by increasing the costs at the supplier's end. Generally, though, a system for quick and simple comparison between bidders was deemed interesting – at least by the executives in the electricity procurement units and the electricity procurement facilitators/coordinators.

As for the concrete benefits a disclosure system can bring, it can make it easier for companies to a) avoid taxes and levies such as the UK Climate Change Levy, and b) market themselves as environmentally friendly/aware towards customers and investors. Three interviewees specifically mentioned that they are focusing more on certain stock market environmental rank-

ings³ to attract investors, rather than on communicating a “green” profile towards their own customers. Interesting to note is that these rankings consider a wide range of environmental impacts, such as greenhouse gas emissions, renewables, energy efficiency, acidifications and biodiversity impacts. Thus, the disclosure scheme discussed here would only be one among several components used in assessing environmental impacts from electricity use.

³ Examples include the Dow Jones sustainability indexes and the Swedish Folksam Environmental Index

Appendix A – Generic questionnaire

Note: Not all questions were relevant for every interview.

- 1 Could you please explain what steps take place in your company prior to deciding and signing a contract with a particular electricity supplier?
- 2 What sort of information does your company base its decision on?
 - 2.1 What aspects of environmental qualities of electricity supply are taken into consideration
- 3 From what sources is the information collected? How do you go about collecting the information?
- 4 What level of detail of the information is relevant to your decision making process?
- 5 What are the underlying motives for considering these criteria?
 - 5.1 What are the underlying motives for considering or for not considering environmental qualities?
- 6 Which relative weight do you place on these criteria?
 - 6.1 What relevance does your company place on environmental qualities of the electricity supply in deciding which electricity supply to choose?
- 7 What could potentially make environmental qualities of electricity supply become a more important factor in choice of electricity supply for your company?
- 8 If electricity suppliers were to provide information regarding environmental qualities of their electricity supply in a standardised format, would you find such information relevant in making choices about which electricity supplier to contract?
- 9 What kind of information concerning environmental qualities would you find sufficient for a decision to be made?
- 10 Through which channels would you prefer to access this information? [if positive answer to question 9]
- 11 Would you find it trustworthy if a company offered you an Irish [or put the right distant or island source] electricity product?

Electricity Disclosure is on the political agenda in Europe. It will provide customers with information about the electricity they are buying and therefore can facilitate informed purchasing decisions. It can be an important tool to intensify market competition and product diversification.

This paper presents an introduction to the concept of Electricity Disclosure and discusses main issues for implementation. It has been prepared as part of the Altener project „Consumer Choice and Carbon Consciousness for Electricity (4CE)“.

For more information about this project: www.electricitylabels.com