



Sustainability in the Dutch Power Sector

Fact Sheet Series

Electricity Supply

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Fuel mix of electricity supply in the Netherlands

1 Introduction

This series of fact sheets is designed to investigate the Dutch power sector and raise public awareness about the sustainability of power companies operating in the Netherlands. The series consists of ten company fact sheets and four thematic fact sheets, for a total of 14. The ten company fact sheets focus on ten of the Netherlands' leading power companies: DELTA, Electrabel, Eneco, E.ON, Essent, Greenchoice, Nuon, Oxxio, RWE, and Windunie. For each company, the fact sheet will contain information on four measures of sustainability: the company's current fuel mix for installed electricity generation capacity in Europe, current fuel mix of electricity supplied in the Netherlands, investments in new generating capacity in Europe, and initiatives to encourage consumers to become more sustainable in their energy use by conserving energy and reducing overall use (demand-side initiatives) in the Netherlands. The thematic fact sheets focus on these same four areas and compare the ten companies' performance in each area. Information for the fact sheets has been gathered from news articles and databases; company sources such as websites, annual reports and CSR reports; and personal interviews with the companies. All of the companies were given and used the opportunity to review a draft of their fact sheet, provide comments, and correct any factual errors. Funding for the fact sheets was provided by Greenpeace. All fact sheets in this series are available on the SOMO website at www.somo.nl.

This fact sheet compares the ten companies regarding the renewable energy they supply to consumers in the Netherlands.¹ Contrary to the factsheets on current generation capacity and planned investments, this factsheet does not look at the situation in other European countries.²

2 Renewables vs non-renewables in electricity supply

Figure 1 illustrates the fuel mix of electricity supplied by the various companies in the Netherlands, and makes it clear that the smaller 'green' companies, such as Greenchoice and Windunie, are in fact the most renewable. For both companies 100% of their supplied electricity is renewable. Oxxio, the other company with only supply activities, also supplies more renewable than non-renewable energy. Of the seven companies with their own generation capacity, Essent supplies the most renewable energy. Electrabel, which owns the most renewable capacity (see Generation Factsheet) in Europe, actually supplies the least renewable energy to its Dutch customers.

Figure 1: Percentage of renewable and non-renewables in electricity supplied in NL, 2007

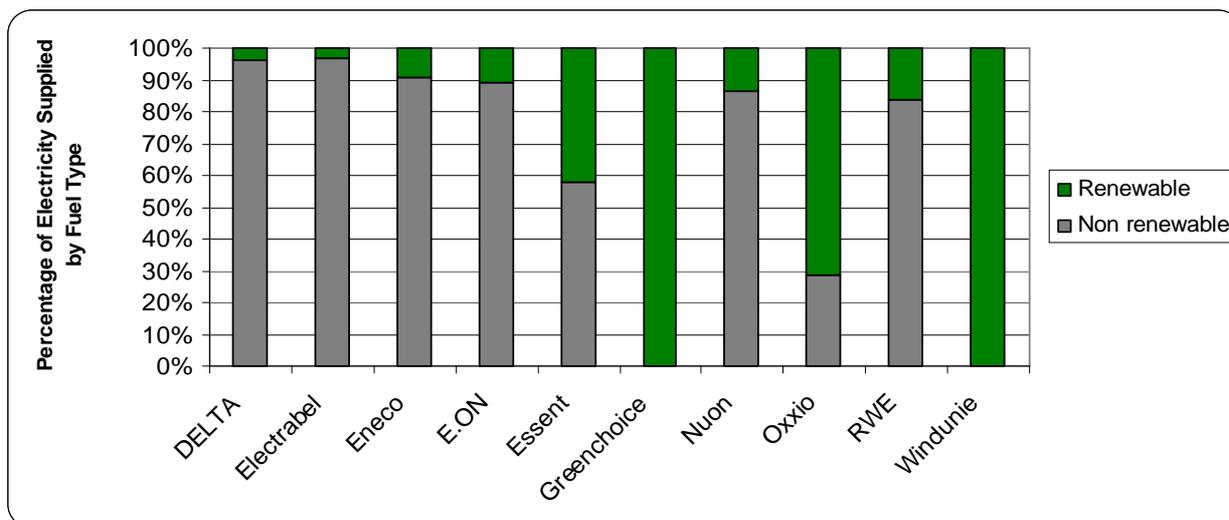


Table 1: Fuel mix of supplied electricity supplied in the Netherlands, 2007

Fuel type (%)	Delta	Electra bel	Eneco	E.ON	Essent	Green choice	Nuon	Oxxio	RWE	Wind unie
Renewable	3.9	3.4	9.3	10.6	42.0	100.0	13.7	71.3	16.3	100.0
Gas	48.4	67.7	61.2	51.9	33.0	0	48.0	16.6	54.0	0
Coal	26.2	22.5	19.7	25.1	17.0	0	25.5	8.1	15.8	0
Nuclear	18.9	4.9	7.3	9.2	6.0	0	8.0	3.0	5.8	0
Other	2.6	1.5	2.5	3.2	2.0	0	4.8	1.0	8.1	0

3 CO₂ emissions and radioactive waste from electricity supplied

The figures for the CO₂ emissions and radioactive waste resulting from the electricity supplied by the companies in the Netherlands reflect the fuel mix of their supply. The energy supplied by Greenchoice and Windunie does not cause any CO₂ emissions. Oxxio's large share of renewables in its supply mix also results in low CO₂ emission figures. The supplier with the least sustainable supply mix, Electrabel, is also the largest emitter of this greenhouse gas.

Radioactive waste produced as a result of electricity supplied by the companies correlates to the presence of nuclear energy in each company's fuel mix for supply. DELTA, a company with a large share of nuclear energy in both its generation and supply mix, generates the most radioactive waste. E.ON and Nuon are the second and third largest producers of radioactive waste. Again, the suppliers of green energy, Greenchoice and Windunie, do not generate any.

Figure 2: CO₂ emissions and radioactive waste resulting from companies' power supply, 2007

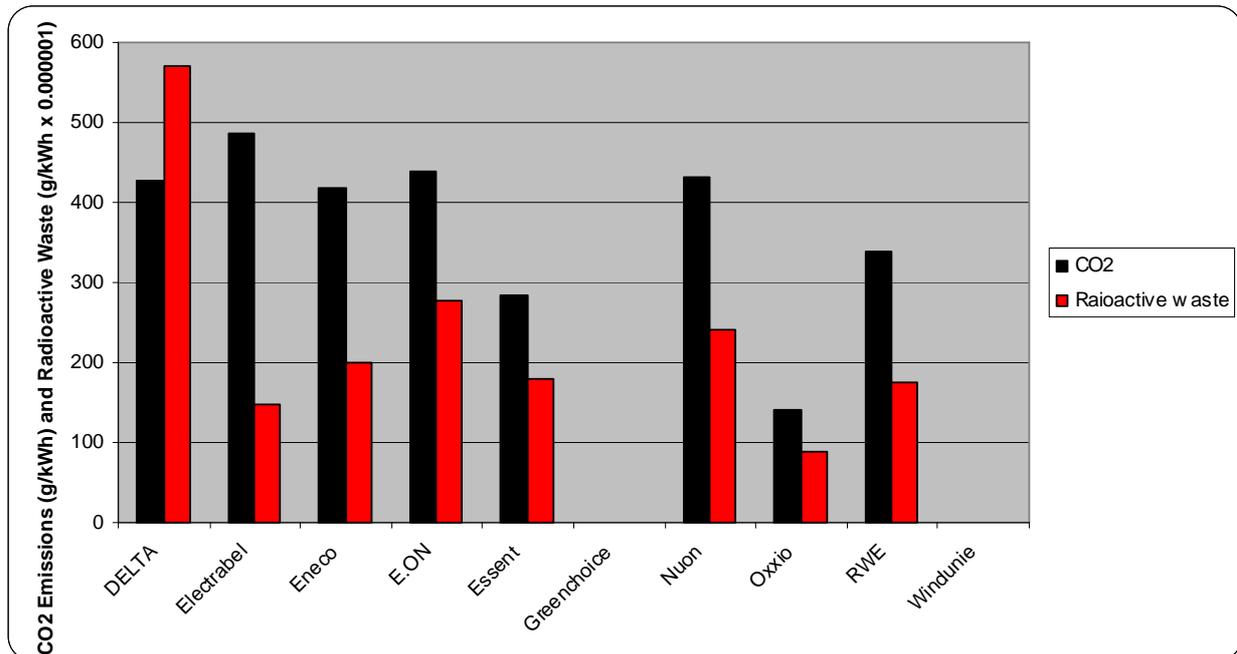


Table 2: CO₂ emissions and radioactive waste resulting from companies' power supply, 2007

	Delta	Electra bel	Eneco	E.ON	Essent	Green choice	Nuon	Oxxio	RWE	Wind unie
CO ₂ emissions g/kWh	427.6	485.8	419	438.1	284	0	431.8	140.4	339.7	0
Nuclear waste g/kWh (x0.000001)	570	148	200	277	180	0	240	89	174	0

¹ With the exception of E.ON, for which figures given represent E.ON's electricity supply in the Benelux region since E.ON does not release any figures on supply only in the Netherlands. This means that these figures are the consolidated figures of E.ON's supply throughout the Benelux countries, not just the Netherlands as is the case with the other companies in this fact sheet series. It is likely, however, that E.ON's supply in the Netherlands is similar in fuel mix to its consolidated Benelux supply.

² The data and figures found in this fact sheet are based on information in the individual company fact sheets, a draft of which was reviewed and commented on by each company. Visit www.somo.nl for all fact sheets.