



# Eneco, at the heart of society

Annual Report 2012 Eneco Holding N.V.



**Sustainable electricity production increases, but not sufficiently**

We have worked hard on expanding our sustainable electricity production in 2012. The sustainable electricity production encompasses sustainable electricity that is either produced by Eneco or supplied to Eneco under purchase contracts. The development of our own sustainable production capacity is on schedule, even though we did not achieve our objective. This is described in further detail elsewhere in this chapter. Due to the lower than expected demand for dark green products, the sustainable electricity production amounted to 12.6% of the total supply portfolio, instead of our target of 15%. With WWF, we have agreed a target of 20% for 2013, which we expect to be able to achieve.

Although electricity is produced in a sustainable manner as much as possible, we still need gas plants, especially on windless and cloudy days. Electricity generated from gas is the least polluting alternative to sustainable energy generation. In 2012, 51% of the total amount of electricity supplied by Eneco was generated by our own production facilities or purchased under power purchase agreements (2011: 59%). The main reason for the decrease compared with 2011 is that, during 2012, it was often more sensible to purchase electricity than to deploy our own gas plant production capacity. The growth of our sustainable production capacity and the start of operations at our gas-fired energy plant Encogen have resulted in an increase of our production capacity by 5% to 2,740 MW (2011: 2,623).

**CO<sub>2</sub> emissions**

The measure for the sustainability of our own production is the amount of CO<sub>2</sub> emissions per kWh of electricity produced. Fully sustainable energy does not generate any CO<sub>2</sub> emissions. At present, all our domestic and SME customers are supplied with sustainable energy, an increasingly larger part of which is generated by Eneco itself or in collaboration with partners.

We have agreed with WWF that, in 2013, the average CO<sub>2</sub> emissions per kWh of electricity generated by Eneco will not exceed 300 grams. To this end, we invest in wind, solar and biomass energy installations at the most suitable locations in the

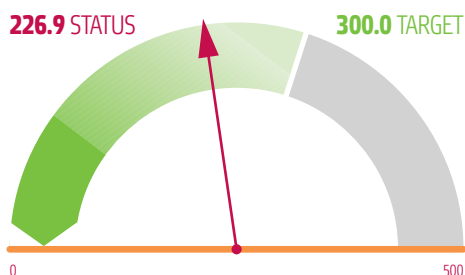
Netherlands, Belgium, Great Britain and France. As a result of these efforts, the average CO<sub>2</sub> emissions resulting from our energy production amounted to 226.9 grams/kWh in 2012 (2011: 154.1). This value does not include our purchasing contracts with production facilities of which we have less than 50% ownership. If we also take these into account, our CO<sub>2</sub> emissions per kWh amounted to 294.5 grams in 2012. The increase compared with 2011 is caused by the fact that the gas-fired Encogen energy plant came into production. As a result, the share of production from conventional resources increased at the expense of the production from sustainable resources.

**Together in wind energy**

During the course of 2012, the demand for sustainable energy production solutions increased. Wind energy is becoming a premium product that helps customers in some segments to enhance the visibility of their efforts in the area of sustainability. For a number of major customers, we meet this demand by providing customised solutions. With the combination of HollandseWind® and an SMK foundation eco-label, we offer companies the possibility to obtain a higher score on the CO<sub>2</sub> Performance Ladder. In this manner, we help them to increase their business. In order to spread our risks, we have wind energy activities in a number of different countries. The successful completion of our wind projects has resulted in a substantial expansion of our wind energy portfolio. In the Benelux, Eneco is market leader in the area of offshore wind energy. Good cooperation with the right local and non-local partners is a very important factor for the realisation of the planned growth.

Our aim is to complete different onshore wind energy projects with a total capacity of approximately 100 MW each year and to realise one offshore wind energy project about every three years. At 1039 MW, our total onshore and offshore installed wind capacity, generated by Eneco production facilities or supplied under purchase contracts, exceeded the 1000 MW mark in 2012 (2011: 913 MW).

**CO<sub>2</sub> PER PRODUCED KWH**



### Onshore wind energy

In the Netherlands, we obtained a building permit for the construction of the Laaksche Vaart wind farm in the province of Noord Brabant. Furthermore, we acquired the company WindWise, one of the developers of the Delfzijl Noord wind farm and other projects in and around the municipality of Delfzijl.

We obtained a number of permits in other countries. In Belgium, we acquired permits for projects in Molenbaix, Herentals, Boneffe, Arlon and Fauvilliers. There are still some follow-up procedures to complete, but we trust that we can start the construction of these projects in the coming years. In Great Britain we obtained permits for the expansion of the Tullo and Lochluichart wind farms.

In 2012, we completed the construction of the Dutch wind farms Accres, Hoevensche Beemden and Zwartenbergseweg. The Romerswaal and Houten projects are under construction. In Belgium, the wind farms Ciney, Perwez and Eeklo became operational. The Lochluichart project in Great Britain is under construction.

### Offshore wind energy

The next offshore wind farm that we have planned is Eneco Luchterduinen. Van Oord and Vestas are the preferred partners for this project. Early 2013, we also entered into a partnership relating to this wind farm with the Japanese company Mitsubishi Corporation (MC). MC also intends to acquire half of the Prinses Amalia wind farm. The development of the Norther offshore wind farm in Belgium is progressing according to plan. We have now obtained the permits. We have sold 50 percent of the Navitus Bay project in Great Britain to EDF. We will continue the development of this project, which will supply energy to approximately 775,000 households, together with EDF.

### Together in solar energy

Solar energy is also very important to Eneco's sustainability approach. The general expectation is that there will be a rapid increase of energy production by means of solar panels in the Netherlands and that the parties involved will investigate all the possibilities to support this expectation. Eneco's aim is to take the lead in this process and actively approach other parties. In 2012, the solar energy portfolio increased to 29.5 MWp, encompassing 140 locations, in particular, in Belgium and France.

### Eneco Zon&Zeker®

In 2012, we introduced Eneco Zon&Zeker®, a complete package for the domestic market that enables consumers to generate their own energy by means of solar panels. Eneco Zon&Zeker® is now also available for SMEs, through housing associations, as a special offer for the employees of a number of large companies in the Netherlands and for specific target groups such as members of WWF. With Eneco Zon&Zeker®, we aim to achieve a distinctive position in the consumer solar energy market in the Netherlands. To this end, we have acquired a strategic interest in the company ZonIQ and we work as a mediator with Greenloans, which is a service provided by ABN AMRO bank for green loans to consumer.

### Solar projects in the business market

The projects that we have developed at DSM (Geleen), Tata Steel (Ijmuiden) and Philips (Best) in the Netherlands were all put into operation in 2012. In Amsterdam, we are developing a project on the roofs of housing corporation Eigenhaard.

In Belgium, we realised a substantial number of projects, including nine locations at Wienerberger (stone factories), ten locations owned by the municipality of Destelbergen and nineteen locations owned by the province of Oost-Vlaanderen. In 2012, there were a number of rapid developments in Belgium in the area of subsidies on solar energy. In Flanders, subsidies were significantly reduced, as a result of which the market shifted to Wallonia and Brussels. The Walloon government aims for a five-fold increase of the installed capacity in Wallonia to 1,200 MWp in 2020.

### Investments in solar energy production capacity

Eneco has decided to expand its solar energy production capacity by developing its own production facilities and through the acquisition of existing parks. In 2012, these activities were mainly focused on Belgium and France. The first result of a thorough exploration of the French market was the acquisition of 70 installations in the south of France, with a total capacity of 11.8 MW, from the French company Fonroche Energie. We also entered into a partnership with this company aimed at investigating more suitable installations for the production of sustainable energy in France. We have entered into a similar partnership with the Swiss company Susi Partners.

### Together in biomass

Producing energy from biomass is a sustainable process. Over time, we have gained considerable experience with biomass installations. At the end of 2012, our total installed capacity of energy generated from biomass amounted to more than 10 MW. We now have over 130 MW of biomass installations in development for the production of electricity, heating and green gas.

### Investments in biomass production capacity

In 2012, we made substantial progress with the construction of 'Bio Golden Raand', the biomass energy plant in the municipality of Delfzijl. Work started in November 2011 and all major construction work was completed at the end of 2012. The plant is expected to become operational by mid-2013. This power plant, in which an amount of € 170 million has been invested, will have a production capacity of 49.9 MW. The plant will convert waste wood from, for example, construction and demolition activities, into electricity.

### Heating-cooling solutions

A large part of the energy demand of our customers relates to heating and cooling. Consequently, the propositions for heating and cooling form an important part of our sustainability strategy.