

The **elephants** are coming

Germany's energy giants have announced massive investments in renewable energy – a complete turnaround after years of virtual inaction. The renewables sector is making money – and the likes of RWE and Eon are now determined to grab a piece of the pie. Not everybody is happy about that.

| by *Stefan Nicola*

Once Jürgen Großmann is on fire, it's hard to stop him. Last October, RWE's new chief executive spoke to German bankers about the 'historic progress' the large German utilities would have to make when it comes to sustainable energy production. He likened the task to the early Apollo programme, the US plan to send a man to the moon; realistic only if an entire nation was behind it.

Großmann's rhetoric can be overblown but it seems to be true that the four large utilities dominating the German market (RWE, Eon, ENBW and Vattenfall) have finally understood that they have to change. While the big four still generate nearly 80% of Germany's electricity with coal, oil, gas and nuclear power, their market share is doomed to decrease in a business-as-usual scenario. The German government wants renewables to account for 40% of the country's electricity generation by 2030, and climate protection measures are on the agenda of the EU and every other major government in the world.

'It was somewhat obvious that the big utilities would one day have to invest in renewables,' says Claus Beneking, chief

executive of Ersol Solar, one of Germany's leading photovoltaics companies and a pioneer of the German renewable energy sector. 'The electricity that was generated in 2007 with renewables was already 17% of Germany's entire consumption. In a few years, it may be 25%, and a few years later, 37%. So the share of fossil fuels will further decrease. The big four simply have to enter the renewables market to secure their future.'

Turning green |

Fittingly, RWE has launched a corporate overhaul programme called RWE New Energy and founded RWE Innogy. The daughter company was officially launched on February 1, 2008 and intends to lead the Essen-based utility into a greener future with renewables investments of at least €1 billion per year until 2012. Focusing on- and offshore wind projects, hydropower and biomass, RWE Innogy wants to triple its renewable capacity to 4,500MW by 2020. 'In roughly ten years, we will be among the five leading suppliers of renewable energy in Europe,' Großmann said.

RWE's competitors have similar plans. Eon will invest €6 billion in renewables

until 2010. The Düsseldorf-based utility launched its daughter company Eon Climate & Renewables on January 1 2008, which plans several on- and offshore wind projects in southern Europe and the US. By 2015, Eon hopes to produce 19% of its electricity from wind, hydro, solar and biomass sources. It has already bought wind parks in Spain and Portugal and recently entered the promising US market with the acquisition of wind park operator Airtricity North America. Eon has agreed to build some 1,100MW worth of wind power there by the end of 2009, with plans for another 1,000MW.

Vattenfall Europe founded Vattenfall Europe New Energy in May 2007. Its portfolio includes plant assets and investment projects (an offshore wind park project off the German North Sea coast, and a few biomass and geothermal plants) worth roughly €1 billion. Vattenfall Europe is also trying its hands at what it calls a CO₂-free coal power plant. The pilot unit at its Schwarze Pumpe location near Berlin is a lignite-fired power plant based on the oxyfuel process, and it aims to test whether it's feasible to store CO₂ underground.



Photo: Getty Images

Jürgen Großmann, ceo of RWE AG



Photo: Kai Senf

Dr. Claus Beneking, chief executive of Ersol Solar, one of Germany's leading photovoltaics companies and a pioneer of the German renewable energy sector.



Photo: Kai Senf

Stefan Dietrich, spokesman of Q-Cells, Germany's largest producer of solar cells.

ENBW runs 3.3GW worth of hydropower plants and earlier this year launched the construction of the first geothermal power plant in Baden-Wuerttemberg. ENBW wants to generate at least 20% of its power from renewables by 2020 but the steps needed to live up to that pledge have not yet been taken.

Experts warn that RWE and Eon's investments may come too late. European competitors like Endesa and Electricité de France have long invested in renewables and today own pricey assets and valuable expertise. In Germany, the market is dominated by small and medium-sized companies like Enercon and Repower (wind energy), or Q-Cells, Solarworld and Ersol Solar (photovoltaics). These companies have started an industry from scratch that leads the world when it comes to green expertise. Naturally, the likes of Enercon and Q-Cells enjoy a considerable technological head start. 'I don't doubt that the big utilities will succeed, but they now have to spend a lot of money to reach the status that others have already acquired over the past years,' says Beneking, and he should know: Ersol Solar was launched in 1997 by a handful of people and now is one of the strongest players in the field.

Merely 'greenwashing'? |

There are critics who say the utilities are investing in renewable energy projects primarily to "greenwash" their tarnished image. Greenpeace has pointed out that Vattenfall and RWE still bank on lignite plants that spew huge quantities of carbon dioxide. RWE, for example, remains Europe's biggest emitter of greenhouse gases (granted, the company has announced several measures to reduce its CO₂ footprint), and Eon intends to build at least eight more coal-fired power plants in Europe and Russia. Eon's coal and gas investments are expected to reach €30 billion over the same period it plans to spend €6 billion on renewables. German weekly Die Zeit has accused Eon of greenwashing its image with their TV advertisement claiming that it is pursuing the construction of a tidal power station. The project, Die Zeit said, exists only on paper. 'There is no building permit, and only the test run of a turbine is planned for this year,' it writes. 'Experts say it is impossible that Eon will indeed produce clean power from the seas by 2010.' And then there is the utilities' past behaviour. For years, the big four lobbied in favour of nuclear power and coal. They have tried to block the rise of renewables

in Germany, making life hard for the small and medium-sized companies that have pioneered the German renewable energy sector. Some of those firms are now 'irritated' by the utilities' sudden turnaround, a spokeswoman for the Information Campaign for Renewable Energies, a German industry group, told EER.

Officials at RWE can't understand why. 'We have the most experience of all plant operators in the field of offshore wind energy,' an RWE spokeswoman told EER. 'We have an installed offshore capacity of 60MW in the UK, with another 90MW to be added this year.' The spokeswoman admits that 'RWE has long neglected' wind energy in Germany. 'But with RWE Innogy, we want to change that.'

In doing so, RWE Innogy places its hope in growing markets in Eastern Europe, which will be propelled by EU decisions to increase the share of renewables in all of its 27 member states. On March 26, RWE Innogy announced it had secured access to wind power projects in Poland with a total capacity of 200MW. The first permits are expected to be granted before the end of the year, the company said, with the systems due to come on stream in 2010.

'They are serious' |

RWE Innogy also plans to hand innovative and promising green start-ups some €50 million and has partnered up with UK-based Marine Current Turbines Ltd, the world leader in the development of new technology for exploiting tidal currents for large-scale power generation.

'RWE Innogy wants to make long-lasting improvements on the CO₂ position of our company, expand RWE's business activities and open up new possibilities for growth in Europe,' the spokeswoman added. 'We also want to set new standards when it comes to future technologies.'

Of course Eon has made similar pledges. Its chief executive Wulf Bernotat recently told German newspaper Die Welt his company was taking its responsibility towards climate protection 'very seriously'.

Most experts agree that the big four want to go beyond greenwashing and indeed intend to alter their portfolio to make money with renewables. One established green company happy about RWE's entry into the renewable market is German wind technology firm Repower. The Hamburg-based player has signed a Memorandum of Understanding with RWE Innogy to negotiate the delivery of 250 offshore and 200 onshore wind power units with a

total capacity of up to 1,900MW.

The deal, which is to be finalised by the end of the year, has Repower deliver the units over the course of four to six years starting in 2010. It would be the company's biggest order ever. No wonder

'If Eon and RWE invest in renewables, then we were right all these years'

Repower's chief executive Per Hornung Pedersen is excited about RWE's new willingness to invest in renewables. 'The memorandum with RWE is an example of the positive outlook for our industry,' Pedersen says in a telephone interview with EER. 'The CO₂ reductions that have been agreed upon at the political level will push renewable energy sources, and of those, wind will have the biggest share.'

Yet RWE and Eon certainly would have the cash and the incentive to acquire one or two of the mid-sized firms active in Germany. The likes of Repower and Ersol Solar have valuable expertise and an established customer base. 'I explicitly won't rule out selective

acquisitions,' Fritz Vahrenholt, board member of Repower, said recently. To some, that may sound like a threat, but not to Pedersen. 'Of course the large players will increasingly invest in wind power,' he says. 'But that only supports

the further development of our industry because it demonstrates to suppliers that our growth is backed by large, financially strong corporations.'

Even most other established renewable energy companies regard the big four's planned investments as an opportunity rather than a threat. 'One might argue that this is goodbye to decentralised renewable energy generation but on the other hand, one can also take this as a positive sign,' says Stefan Dietrich, spokesman of Q-Cells, Germany's largest producer of solar cells. 'After all, if Eon and RWE invest in renewables, then we were right all these years.' Beneking agrees. 'The entry of the big four doesn't bother us at all,' he says. 'On the contrary, they are our customers of the future.' ■

On the rooftop of Q-Cells at Thalheim, Germany. Photo: Kai Senf

