

## How will the global downturn hit the big six?

The UK is now in the midst of a recession that, according to the International Monetary Fund (IMF), may last longer than in any of the world's other major economies. In the following article, Jose A. Lopez and Kim Keats-Martinez\* look at the possible impact of this recession and the accompanying financial and liquidity crisis on the domestic electricity supply activities of the big six UK residential energy suppliers, namely Centrica, EDF, Eon, RWE, Scottish and Southern Energy (SSE), and Scottish Power (SPW).

Residential electricity demand has not grown during the past five years. The latest full yearly statistics from the UK Department for Business, Enterprise and Regulatory Reform (BERR) show that in 2003-2007, residential consumption actually fell by 0.6%.

The most recent figures for 2008 coincidentally also point to a drop in residential demand of 0.6%. Notwithstanding the possible impact of unusual weather patterns, we expect domestic electricity consumption to weaken further in 2009. Lower growth rates in the take-up of high energy consuming goods by UK households (i.e. plasma screens), lower net migration into the UK, and greater use of energy efficiency measures at the household level all help support this view.

### Households under pressure

Despite domestic electricity consumption remaining relatively flat between 2003 and 2007, total residential expenditure on electricity actually increased by almost 60% from £7.2 billion in 2003 to £11.5 billion in 2007.

This has not gone unnoticed by politicians and regulators. With tariff increases averaging 15% in 2008, total residential electricity costs may have

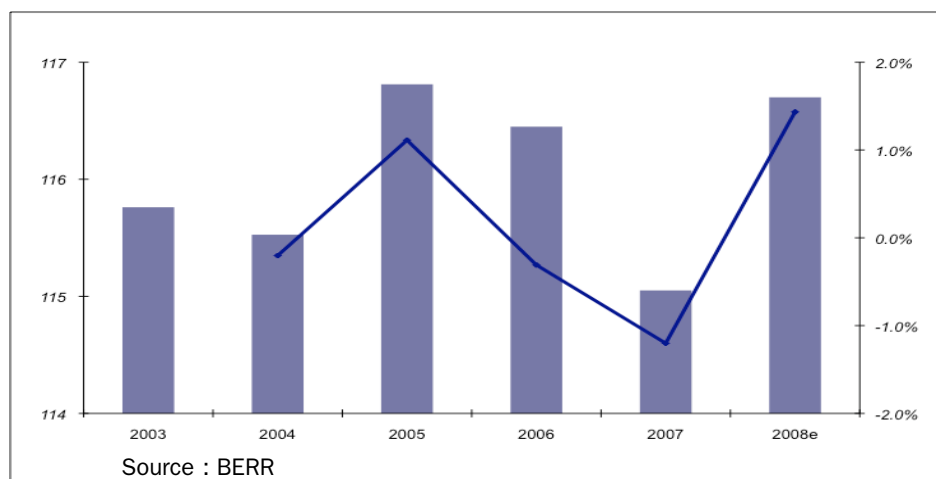
risen to c. £13.1 billion by the end of 2008. Already in 2009, as a result of the fall in wholesale energy prices (notably gas), suppliers have reduced their tariffs, by an average of 6%. Among the big six, Centrica was the only company not to reduce its electricity tariffs. Scottish Power announced an electricity tariff reduction of only 3% with everyone else introducing reductions of between 8% and 9%.

This clustering could be explained by the fact that the companies in question had similar level of contract cover, hedging policies and generation portfolios and therefore similar cost structures.

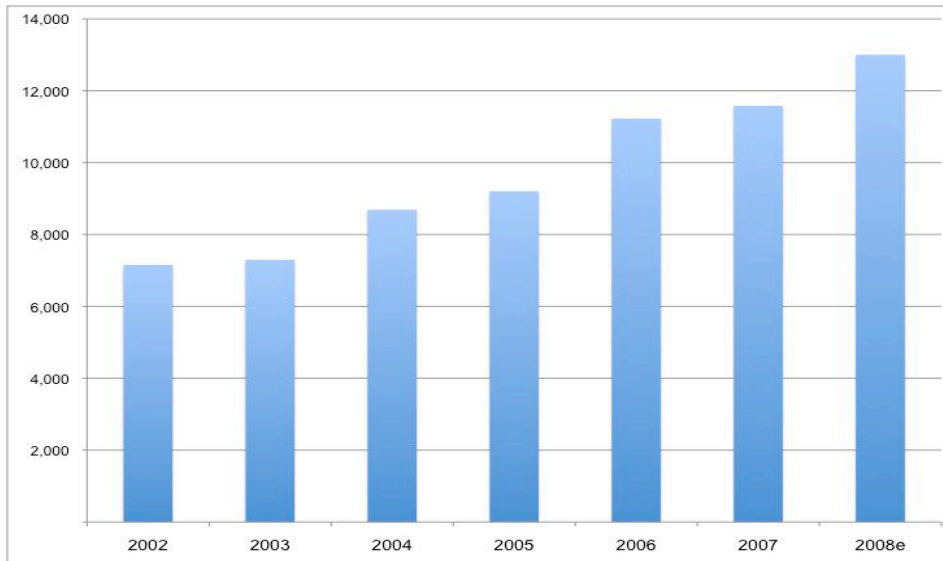
Centrica is different in that it lacks sufficient generation assets with which to physically hedge its downstream residential position and the generation assets it does own are all gas-fired CCGTs. It may therefore not be able to unwind its power purchase arrangements – used to cover for its lack of own generation – as quickly as other companies.

It is also worth noting that the other 'electricity tariff laggard', Scottish Power was recently acquired by Iberdrola who has one of the highest net debt to EBITDA (Earnings before Interest, Taxes, Depreciation, and Amortization) ratios amongst the big six electricity suppliers. Iberdrola

### UK residential consumption of electricity (TWh) and growth rate (%)



**Total UK domestic expenditure on electricity (£m)**



Source : BERR

may therefore be willing to sacrifice market share in the short term to boost its cash position.

**Customer bad debt set to rise**

Bad debt has been a relatively minor issue for UK utilities accounting for only 2.4% of total electricity sales by the big six. However, this is likely to increase as the recession and liquidity crisis bite.

First, there will be a lag between the tariff increases implemented in 2008, billings and bad debt numbers both in terms of the number of delinquent accounts and the average debt per delinquent account.

Already between Q3 2007 and Q3 2008, the latest data available from Ofgem shows that while the average number of customer in debt had remained stable at roughly 5% of total UK accounts, the

**Table 1 : Electricity price reductions during Q1 2009**

Company	Date effective	Electricity	Own generation /sales
Centrica	Feb 09	0%	<1
EDF Energy	Mar 09	-9%	>1
Eon	Mar 09	-9%	>1
Npower (RWE)	Mar 09	-8%	>1
SSE	Mar 09	-8%	>1
SPW (Iberdrola)	Mar 09	-3%	>1

Source : Press/company announcements/IPA calculations

**Table 2 : Rising domestic customer debt**

Period	Electricity customers	Average debt
Q3 2007	1.3 million	£223
Q3 2008	1.3 million	£236 (+5.8%)

Source : Ofgem

average debt level had increased by 5.8% for electricity customers.

Rising levels of unemployment will also put pressure on household finances. The ONS states that the unemployment rate was 6.5% for the three months to January 2009, up 0.5 percentage points over the previous quarter and up 1.3 percentage points over the year. The number of unemployed people has reached 2.03 million. The number of vacancies has fallen and the growth in average earnings, both including and excluding bonuses, has fallen.

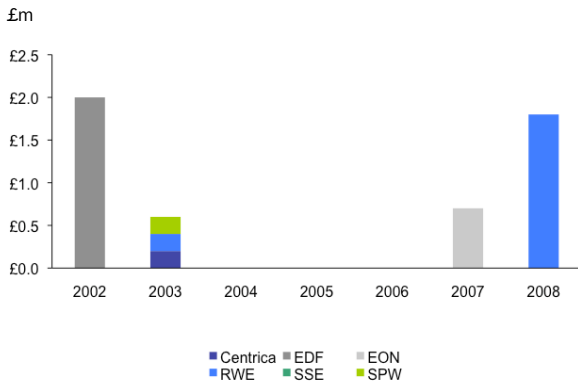
Furthermore, the contraction in consumer credit will no longer allow customers to borrow to repay bills. We suspect that the true problem of bad debt in the domestic sector may have been hidden by the household sector easy access to credit in the past.

It is therefore not surprising then that the big six have been increasing the number of installation of pre-payment meters (PPM) for consumers with payment difficulties (see chart 4). Chart 5 illustrates the percentage of electricity customers on PPMs by supplier as of Q3 2008.

**An end to the benign regulatory environment?**

Political pressure on the sector was on the rise during 2008 with Ofgem opening an inquiry into the sector following a parallel inquiry by Parliament's BERR Select Committee. There has been a coincidental "token" increase in the level of fines imposed on suppliers following a relatively quiet period between 2004 and 2006. But with

**Chart 3 : Fines imposed on suppliers by Ofgem**



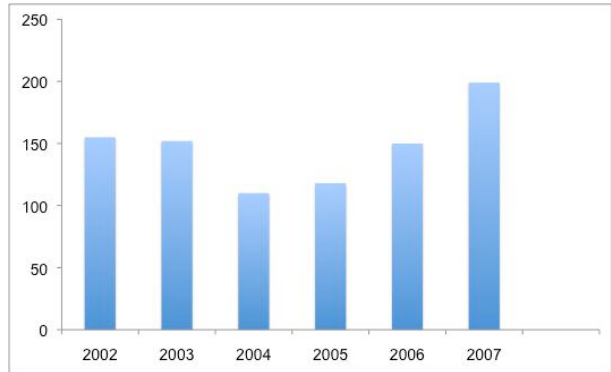
Source : Ofgem

total fines being less than 100th of a percent of total domestic energy sales in 2008 (c. £20 billion), the total level of fines on suppliers remains relatively low (£2 million in fines in 2008 vs. £13 billion in electricity sales). Nevertheless, in the face of a worsening economic crisis, we expect Ofgem to err on the side of caution and seek to protect consumers. As a consequence, the regulatory environment may become tougher for the utilities.

Already older, disabled and chronically ill customers cannot be disconnected during winter months (October to March) and the regulator has repeatedly stated that it wants to see the number of disconnections remain low. Ofgem expects suppliers to “proactively tackle debt problems at an early stage to avoid the build up of unmanageable debt levels”.

It therefore looks as if the residential energy supply sector may have to indirectly provide short-term financing to UK households as the UK goes through the recession.

**Chart 4 : Installation of PPMs due to debt (000s)**



Source : Ofgem

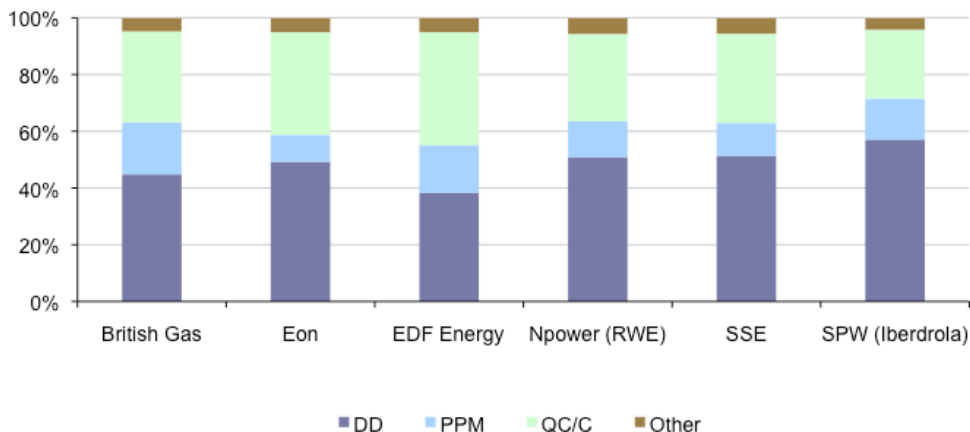
**Impact on electricity suppliers**

The subsequent increases in late payments and bad debt will increase the working capital requirements (WCR) of the big six precisely at a time when credit conditions are tight and they are being required to undertake major capital expenditure (capex) investments in the area of renewable energy, energy efficiency and building new capacity.

In the renewable area, for example, Centrica and SSE have announced investment plans in excess of £4 billion over the next four years. While the recent fall in commodity prices of steel and aluminium may help reduce renewable capex costs in the future, it is possible that some investments may be quietly postponed.

In a period of falling operating cash flows, suppliers are expected to increase their capex, maintain their dividend and are constrained in their ability to take on new debt. It may be likely that companies will begin to re-adjust their capex plans (during Q1, both Eon and ENEL announced major

**Chart 5 : Residential electricity portfolio by payment method**



Source : Ofgem

reductions in their capex plans). Dividend targets maybe next in the firing line. But shareholders have been applying pressure on utilities not to cut dividends since capital gains have evaporated in the face of general stock market troubles. Whether it is capex, dividends or credit ratings, something will have to give.

*i According to the BERR Energy Retail Price Index over the 2007-08 period electricity prices rose by +15.56% and gas prices by +19.73%*

*ii Figure excludes fine imposed on NGT*

*\* Jose A. Lopez and Kim Keats-Martinez both work for IPA Economics.*

## Who should care about the Carbon Reduction Commitment?

The UK Government has introduced a number of schemes to tackle climate change over the years – from the Climate Change Levy to the Renewables Obligation. Keeping up with the detail and possible impact of these schemes is a gargantuan task. In the following feature, Lucille De Silva, Thomas Willan and Antonia Robinson\* provide an update on the government's latest environmental policy to hit businesses – the Carbon Reduction Commitment – a policy measure aimed at plugging the gap that other measures have not filled.

The Carbon Reduction Commitment (CRC) is a new UK emissions trading scheme which is aimed at both indirect and direct emissions of a certain group of "participants" in the UK.

The test for whether or not an organisation is a participant is:

- Does the organisation consume an electricity supply?
- Is any part of that supply metered by a settled half hourly meter?
- Is the threshold level of supply reached – that is 6,000MWh of electricity (for 2008).

It is thought that participants will include large groups of companies, such as high-street retailers, supermarket and pub chains, banks and manufacturers. However, public sector organisations, such as schools, hospitals, and even central and local government departments will be caught. The aim is to capture organisations which are non-energy intensive.

The CRC is proposed to operate in five-year phases, except for the first phase which will begin on 1 April 2010 and end on 31 March 2013. The scheme will be a "cap and trade" scheme. Participants will have to purchase emission allowances, initially via the government and in due course, via an auction or, if it develops, a secondary emissions market, to cover 90% of their emissions arising from electricity and gas usage. During the first phase of the scheme, no cap will be set. Instead there will be two fixed price sales of allowances (at £12/tCO<sub>2</sub>).

From April 2013, the government will place a 'cap' on the number of emissions allowances released

into the market for purchase. This is in effect intended to limit the total emissions of participants in the CRC scheme over a period of time.

The CRC is intended to be "revenue – neutral", in that the government will not make any money from the scheme. Instead the revenue raised through the sale or auction of allowances will be paid back to participants. The revenue that a participant receives will be calculated in proportion to their 2010/11 emissions and the bonus/penalty that they receive with regards to the performance league table (see *below*).

### Who does it impact?

Defra has issued a practical user guide which will help organisations comply with the scheme.

In the summer of 2009, the scheme administrator will contact all UK billing addresses which qualify for the scheme. This is most likely to be the organisation which has the electricity supply contract with an electricity supplier. Each organisation must then pass information on its electricity consumption to its highest UK parent. If the total electricity consumption of the group exceeds the threshold of 6,000MWh, the parent organisation will have to participate in the CRC on behalf of the group, by registering their total 2008 electricity consumption with the scheme administrator. This registration must be carried out by 30 September 2010.

During this time organisations will need to monitor all energy sources and use this data to prepare an emissions "footprint report" for submission via an