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'You can only manage what you can measure'. Some cities are taking this rule of energy management one step further

UK cities take the wider view

Not so long ago, it was considered a huge achievement to audit the energy efficiency of a building - let alone a city. But recent years have seen bold monitoring efforts by some of Britain's most important towns. None are bolder than the detailed two-year audit taking place in Peterborough. It is, in fact, the first city in the world to carry out a detailed examination of all aspects of energy consumption.

The fundamental aim of the audit is to reduce energy use by almost a third by the year 2010, and the city's Energy Advice Centre has already counselled over 5,500 households on energy-saving measures. It believes that if households act on this advice then a collective annual saving of £400,000 can be achieved.

VarityPerkins Ltd, manufacturer of diesel and gas engines, has backed the audit to the tune of £30,000 and believes the results in the public sector will have a positive effect on industry.

Chief Executive Mike Baunton said: "We believe that we will be able to learn from the results of this audit and make real cost savings which will more than pay for our investment in the study."

Peterborough was the fourth UK city to be declared an Environment City, after Middlesbrough, Leeds and Leicester (*see page 14*), but the message appears to be penetrating the European mainland.

Earlier in the year, *EIBI* reported how the City of Berlin was awarding contracts which could slash energy consumption in public sector buildings by over 30 per cent. Projected saving are truly impressive. By the time work is finished in 2005, it is expected that energy worth DM450m (£165m) will have been saved.

However, not all big cities are finding it so easy. A five-year review of Newcastle's City Energy Strategy, published last month, showed that in spite of "considerable achievements made in energy efficiency," growth in demand - particularly in the transport sector - has wiped out savings made elsewhere.

Adrian Smith, assistant head of planning, does not mince his words and his frankness is refreshing. He said: "All the energy savings achieved over five years have been wiped out by traffic growth. Newcastle is not yet on track to achieve the considerable improvements the 1990 based Strategy showed to be possible.

"This is a disappointing conclusion which indicates that 'business as usual' is the prevailing scenario rather then 'new initiatives.' "

However, this rather gloomy picture has not dampened the council's will to progress towards its targets for 2010 which includes the completion of a city scale CHP project.

'A new framework for energy and the environment is required, operating at national and local levels which sets targets and commitments'

Smith explains: "Progress has been made in installing small-scale CHP, upgrading the Byker district heating scheme to CHP operation, insulating homes and developing a demonstration photovoltaics building facade.

"But a number of significant proposals have not been implemented, notably large scale city scale CHP and traffic growth has been relentless in spite of improved public transport services and traffic calming measures.

"Privatisation of electricity supply has led to consortia interest in larger scale CHP. In Newcastle it has not proved possible to progress this beyond initial feasibility stage, because of customer resistance in the face of perceived long term low gas price contracts, even though CHP heat can be pegged to gas prices," said Smith.

The report concedes that given a relatively low cost of energy on the world market, new mechanisms are required to initiate capital intensive projects such as CHP and public transport infrastructure improvement.

Smith is also disappointed in the relatively minor role played by renewables in supplying Newcastle's energy. But he feels this could begin to change if the city specified in its purchase contracts that a proportion of electricity should come from renewable sources.

He said: "Guidelines are needed for passive solar design and a change in planning legislation would assist in their implementation."

But the overwhelming impression of the review is that achievements made in energy efficiency have been eaten up by growth in electricity and gas use.

Smith concludes: "A new framework for energy and the environment is required, operating at national and local levels which sets targets and commitments, identifies key policies and measures to be used, and builds in accountability." **EIBI**

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