By : Keith Ferrin, Cabinet Member for Environment, Highways and Waste Pete Raine, Managing Director - Environment and Regeneration

To: Cabinet – 12 March 2007

Subject : Energy Saving – Carbon Reduction Targets for KCC

Summary

It is proposed that KCC adopt targets for reducing Carbon Dioxide emissions caused by energy use in buildings.

The proposed targets are to reduce total KCC Carbon Dioxide (CO₂) emissions from buildings by:

- 10% by 2010
- 20% by 2015

2004 emissions will be used as the baseline year for emissions. Targets for 2015 and beyond should be reviewed in 2010. The 2010 and 2015 targets are the first steps towards a long term vision for KCC of 60% reductions by 2050.

Emissions from KCC transport, streetlighting and traffic signals have not been included at this stage because we do not currently have robust baselines against which to measure reductions, but such emissions will be included in the targets from 2008/9 or as soon as possible after that.

For Decision: to endorse the targets.

<u>Drivers</u>

Energy Costs for KCC buildings have risen by an estimated 75% between 2004/5 and 2007/8 due to price increases. This kind of volatility looks set to continue. Reducing energy use generally reduces costs.

UK Government looks set to introduce **legislation** such as Energy Performance Certification for public buildings, Carbon Trading and new requirements on Councils under CPA. KCC needs to have its own house in order and to be able to demonstrate this.

Although no formal targets currently exist against which to measure success, as our **Towards 2010 objectives** make clear, we are committed to:

- ensuring that new KCC buildings set an example by delivering the best possible standards of construction, by applying a pragmatic approach to sustainability using energy-efficient, robust and built-to-last materials;
- reducing the impact of KCC's buildings and vehicles on the environment, including trialling the use of bio-fuels and other new technologies; and
- working towards introducing free travel on public transport for 11-16 year olds starting in two pilot areas.

A number of other **actions are underway or are programmed** to reduce emissions, including:

- developing Travel Plans (in schools and for KCC staff at County Hall) and introducing a Car Club (car pool/leasing scheme);
- providing a new £1million fund and levering in external funding for innovative energy saving measures across the KCC estate; and
- approving funding of £100,000 for a new post and activity budget to promote energy and water efficiency within the KCC estate

As recorded in the **Climate Change Select Committee** report, "SE England is likely to suffer more than most parts of the UK and Kent will bear the brunt". Growing public interest in, and awareness of, climate change makes it imperative for KCC to show **Community Leadership**.

The Climate Change **Select Committee report** recommended carbon reduction targets and the Cabinet response stated that new targets would be placed before the Council by Spring 2007.

Proposed Targets - rationale

10% by 2010 is achievable with actions and finances already allocated – as shown in Annex 1. This target is broadly in line with government's own estate targets and those of other Local Authorities, examples of which are in Annex 2.

20% by 2015 a continuation of Annex 1 activities from 2010 to 2015 will lead to an estimated CO_2 saving of 15% in 2015 and a total cumulative financial saving of around £7million. This coupled with the positive effect of Building Schools for Future should ensure that the 2015 target is met for buildings. However the 2015 target and actions to meet it should be reviewed in 2010.

60% by 2050 is a long term vision in line with that proposed by the Royal Commission on Environmental Pollution in 'Energy The Changing Climate' and widely adopted including by UK Government, with the intention to make it a statutory target in the forthcoming Climate Change Bill.

Emissions from streetlighting, traffic signals and travel will be included once reliable baseline data has been collected. Our intention is to incorporate targets for reductions in emissions from traffic signals, streetlighting and business travel from 2008/09 and to extend this to cover emissions from KCC staff travel to work at the earliest possible opportunity thereafter.

Recommendation

It is recommended that Cabinet endorse the targets

- 10% by 2010 and
- 20% by 2015

as absolute reductions in CO_2 emissions from energy use in KCC buildings and schools, from a baseline of 2004. It is envisaged that these targets will be met through genuine reductions in energy use, plus the use of on site renewables rather than procuring 'Green badged' electricity or 'offsetting' by investing in overseas projects.

| Project | | saving | cost to | External funds | financial saving - cumulative to 2010/11 | Comment |
|--|-------|--------|---------|-------------------|---|---|
| Expanded Energy Loan Fund | 3,143 | 3 4% | £650k | £390k | £780k | KCC funding £500k from £1million energy and water investment fund, plus existing loan fund . External funds from Carbon Trust. |
| Training 40 schools staff | 312 | 2 0.4% | £20k | | £208k | Assuming 2% saving in schools trained. |
| Energy Monitoring and Reporting - top 100 sites | 1,560 | 2% | | | £520k | Monitoring system in place |
| Awareness raising activities | 1,924 | 2.5% | | | £288k | Green Guardians, W2S environment way, ecoschools, Carbon Gym, Switch IT off campaigns |
| Biomass Boilers | 850 | 1.1% | £375k | £150k | £230k | KCC funding £375k from £1million energy and water investment fund, £450k from existing boiler replacement budgets. External funds from grants |
| Totals | 7,789 | 10.1% | £1045k | | £2,026k | |

Annex 2 – Examples of other Local Authority Targets

| | Annual emissions | 2010 | | | | Carbon |
|-------------------|---------------------|-----------|----------------|----------------|------------|---------|
| | 2002/03 | Reduction | | | Annual | savings |
| Local Authority | tonnes | Target | Energy Bill £M | Total Capex £k | savings £k | tonnes |
| | | - | | | | |
| Aberdeen | 62,100 | 10% | 5.03 | 603 | 151 | 6,250 |
| Birmingham | 177,359 | 30% | 14.65 | 5000 | 1667 | 13,500 |
| Bristol | 57,168 | 15% | 9.11 | 2010 | 84 | 8,575 |
| Caerphilly | 42,700 | 6% | 2.16 | 666 | 222 | 9,540 |
| Kent CC buildings | 76964 (2004) | 10% | 6.7 (2004) | 1045 | 506 | 7,696 |
| Neath Port Talbot | 32,582 | 6% | 3.82 | 417 | 139 | 4,617 |
| Nottinghamshire | 77,200 | 27% | 5 | 1667 | 556 | 8,000 |
| Renfrewshire | 47,484 | 10% | 6.82 | 3700 | 1200 | 5,400 |
| Southwark | 30,218 | 10% | 1.98 | 258 | 362 | 5,165 |
| Warwickshire | 52,385 | 10% | 3.9 | 1000 | 333 | 6,000 |