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# SOCIETY OF BRITISH AEROSPACE COMPANIES

## Scope and membership of the umbrella agreement

SBAC represents the companies operating in the aerospace industry in the UK. This sector carries out a wide range of activities including the manufacture of commercial and military aircraft, ordnance, satellite equipment etc.

## Targets

The targets for this sector were originally expressed as absolute carbon (in kgC) and were subsequently changed to absolute primary energy  $(kWh_p)$  at target period 1. These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2001 baseline for this sector as originally agreed and at each target period (TP) to date.

|                               | Baseline      | TP1(2002)   | TP2(2004)     | TP3(2006)     | TP4(2008)     | TP5(2010)     |
|-------------------------------|---------------|-------------|---------------|---------------|---------------|---------------|
| Original<br>(kgC)             | 28,752,427    | 28,062,259  | 27,555,264    | 27,121,118    | 26,601,912    | 26,299,325    |
| At TP1<br>(kWh <sub>p</sub> ) | 648,242,765   | 637,700,258 | 624,258,112   | 618,500,243   | 604,834,257   | 595,927,925   |
| 2004<br>Review*               | -             | -           | -             | 1%            | 1%            | 1%            |
| At TP2<br>(kWh <sub>p</sub> ) | 1,277,548,645 | -           | 1,241,016,220 | 1,212,547,147 | 1,186,897,160 | 1,165,986,038 |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sector will be reviewed again in 2008.

# Additional adjustments to the sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- Allowances equivalent to 50 ktCO<sub>2</sub> were ring-fenced or traded.
- Allowances equivalent to 4 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in net ring-fencing or trading of 46 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of -251,452,662 kWh<sub>p</sub>. (Note - figures rounded for presentation.)

## PMO

No product mix adjustments were carried out.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was  $989,563,559 \text{ kWh}_{p}$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>1</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

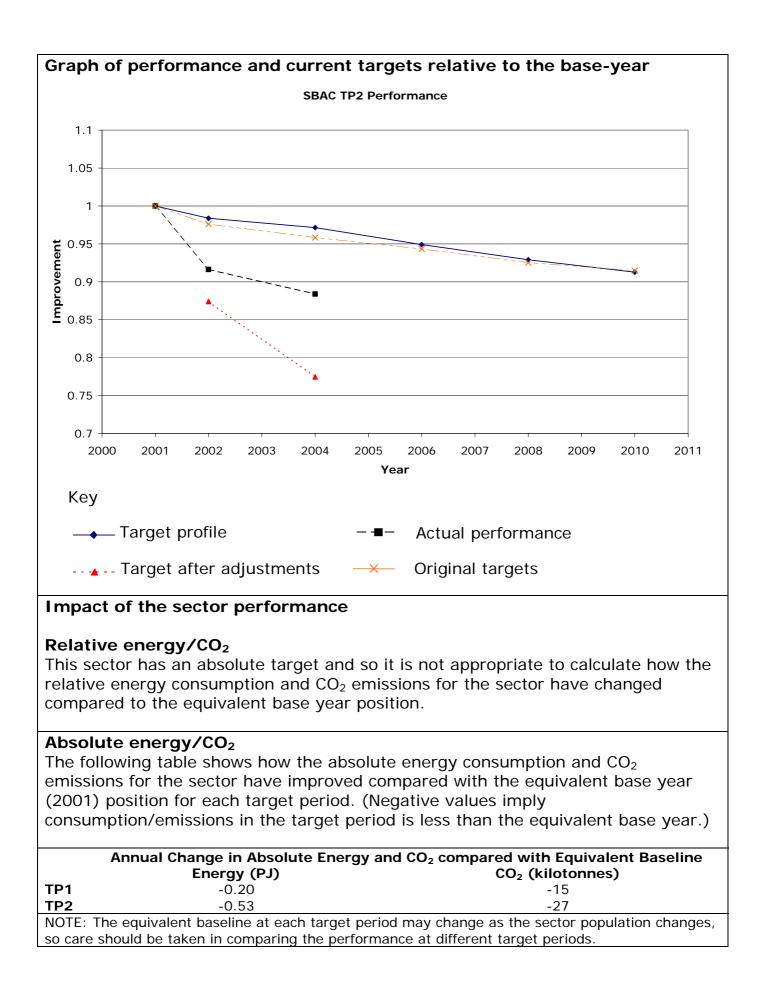
| Energy (            | Energy (kWh) |               |
|---------------------|--------------|---------------|
| <b>TP1</b> 648,242  | ,765         | 593,956,008   |
| <b>TP2</b> 1,277,54 | 8,645        | 1,129,236,627 |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (2001) position at each target period.

| Chan  | Change in energy use compared with Equivalent Baseline at each Target Period |                            |  |  |  |  |  |
|---|--|----------------------------|--|--|--|--|--|
|   | Target Improvement   | Actual Improvement         |  |  |  |  |  |
| TP1   | 1.6%   | 8.4%                       |  |  |  |  |  |
| TP2   | 2.9%   | 12%                        |  |  |  |  |  |
| NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes. |  |                            |  |  |  |  |  |
|   | es have been re-certified either be<br>gets outright, or through trading.    | ecause they have met their |  |  |  |  |  |

<sup>&</sup>lt;sup>1</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



# ALFED – Aluminium

## Scope and membership of the umbrella agreement

The Aluminium Sector has a number of subsectors, i.e. primary, secondary, rolling, extruding, aluminium finishing, magnesium and titanium. The primary aluminium producers are the largest energy consumers. Greenhouse gases other than carbon dioxide are included in the sector emissions.

### Targets

The targets for this sector are given in relative carbon measured as kgC/kWh. These targets change with time owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1990 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kgC/<br>kWh) | TP1(2002)<br>(kgC/<br>kWh) | TP2(2004)<br>(kgC/<br>kWh) | TP3(2006)<br>(kgC/<br>kWh) | TP4(2008)<br>(kgC/<br>kWh) | TP5(2010)<br>(kgC/<br>kWh) |
|----------------|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Original       | 1                         | 0.726                      | 0.705                      | 0.695                      | 0.690                      | 0.678                      |
| At TP1         | 1                         | 0.709                      | 0.688                      | 0.678                      | 0.673                      | 0.661                      |
| 2004           |                           |                            | -                          | TBA                        | TBA                        | TBA                        |
| <b>Review*</b> |                           |                            |                            |                            |                            |                            |
| At TP2         | 1                         |                            | 0.680                      | TBA                        | TBA                        | TBA                        |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

## Additional adjustments to the sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sector were carried out at the target unit (TU) level:

- Some TUs were able to ringfenced and sell due to over-performance.
- Some TUs purchased carbon to meet their target period target.

Overall, 74 ktCO<sub>2</sub> was ringfenced and a further 144 ktCO<sub>2</sub> was sold. A further 20 ktCO<sub>2</sub> were purchased. Overall, the difference between carbon purchased and the amount sold and ringfenced is equivalent to a sector target change (tightening) of -0.025 kgC/kWh. (Note - figures rounded for presentation.)

# PMO

Product mix adjustments were carried out at sector level. The PMO for the sector is equivalent to a sector target change (tightening) of -0.002 kgC/kWh.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 0.652 kgC/kWh.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>2</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|            | Equivalen                        | t baseline (199                  | 0)              | Ре                               | rformance                        |                 |
|------------|----------------------------------|----------------------------------|-----------------|----------------------------------|----------------------------------|-----------------|
|            | Energy (kWh)                     | Production                       | Energy<br>Ratio | Energy (kWh)                     | Production                       | Energy<br>Ratio |
| TP1<br>TP2 | 23,701,434,745<br>25,124,015,910 | Not applicable<br>Not applicable | 1<br>1          | 17,318,057,079<br>17,468,250,618 | Not applicable<br>Not applicable | 0.681<br>0.646  |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1990) position at each target period.

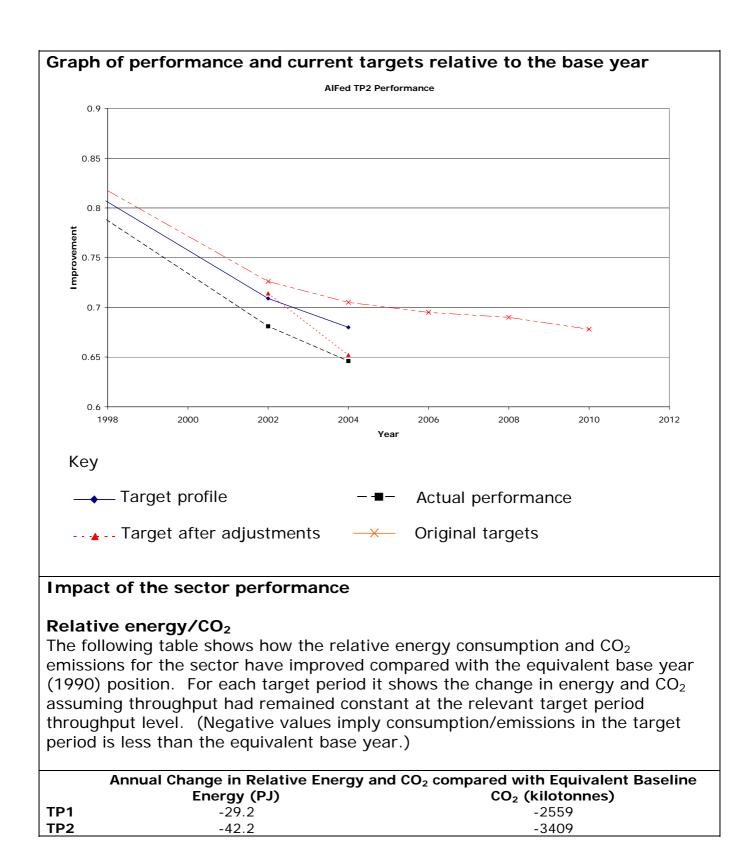
| Change in SEC compared with Equivalent Baseline at each Target period |                       |  |  |  |  |
|---|-----------------------|--|--|--|--|
| Target Improveme  | nt Actual Improvement |  |  |  |  |
| <b>TP1</b> 29%  | 32%                   |  |  |  |  |
| <b>TP2</b> 32%  | 35%                   |  |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

The sector has achieved an improvement in specific carbon consumption of 35% relative to its base year position. This compares with a target, unadjusted for trading, of a 32% improvement.

All the facilities have been recertified as the sector has exceeded its target.

<sup>&</sup>lt;sup>2</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the relevant equivalent base year (1990) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions). There is no overall throughput measure available in the sector.

|              | Energy (PJ) | CO <sub>2</sub> | Production (%) |  |  |  |
|--------------|-------------|-----------------|----------------|--|--|--|
| (kilotonnes) |             |                 |                |  |  |  |
| TP1          | -23.0       | -2017           | Not applicable |  |  |  |
| TP2          | -27.6       | -2227           | Not applicable |  |  |  |

## NAMB/SAMB – MASTER BAKERS

# Scope and membership of the umbrella agreement

The Master Bakers sector is represented by the National Association of Master Bakers (NAMB) throughout the UK, except for Scotland where the Scottish Association of Master Bakers (SAMB) represents the sector. The agreement covers the craft baking industry which is generally distinguished from industrial bakeries by a smaller scale of operation, a greater range of products produced by individual sites and the linking of bakery operations with dedicated high street shops.

# Targets

The targets for this sector are given in primary kWh per £k added value  $(kWh_p/Ek)$ . These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kWh <sub>p</sub> /<br>£k) | TP1(2002)<br>(kWh <sub>p</sub> /<br>£k) | TP2(2004)<br>(kWh <sub>p</sub> /<br>£k) | TP3(2006)<br>(kWh <sub>p</sub> /<br>£k) | TP4(2008)<br>(kWh <sub>p</sub> /<br>£k) | TP5(2010)<br>(kWh <sub>p</sub> /<br>£k) |
|----------------|--|---|---|---|---|---|
| Original       | 1664.4                                 | 1643.4                                  | 1614.0                                  | 1590.9                                  | 1561.6                                  | 1532.2                                  |
| At TP1         | 1678.9                                 | 1659.1                                  | 1631.2                                  | 1608.8                                  | 1580.7                                  | 1552.7                                  |
| 2004           | -                                      | -                                       | -                                       | 18.0%                                   | 20.0%                                   | 22.1%                                   |
| <b>Review*</b> |  |   |   |   |   |   |
| At TP2         | 1679.0                                 | -                                       | 1632.7                                  | 1320.0                                  | 1265.0                                  | 1210.0                                  |

\* The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In the case of this sector it was agreed that there should be no change to the targets. The targets for TP3, TP4 and TP5 (at TP2) take account of any entrants, exits and corrections.

## Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- A total of 26 ktCO<sub>2</sub> from over-performances was ring-fenced.
- Allowances equivalent to 2 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net surplus of 24 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of - 141.9 kWh<sub>p</sub>/£k. (Note - figures rounded for presentation.)

## PMO

No product mix adjustments were carried out.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was  $1490.8 \text{ kWh}_p/\text{Ek}$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>3</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalen       | t baseline (20     | 00)                               | Ре              | rformance          |                                   |
|-----|-----------------|--------------------|-----------------------------------|-----------------|--------------------|-----------------------------------|
|     | Energy<br>(kWh) | Production<br>(£k) | SEC<br>(kWh <sub>p</sub> /<br>£k) | Energy<br>(kWh) | Production<br>(£k) | SEC<br>(kWh <sub>p</sub> /<br>£k) |
| TP1 | 1,180,917,147   | 703,388            | 1678.9                            | 1,235,688,419   | 827,193            | 1493.8                            |
| TP2 | 1,195,096,773   | 711,777            | 1679.0                            | 1,363,756,706   | 991,595            | 1375.3                            |

### Commentary

The following table shows how the sector has improved relative to the equivalent base year (2000) position at each target period.

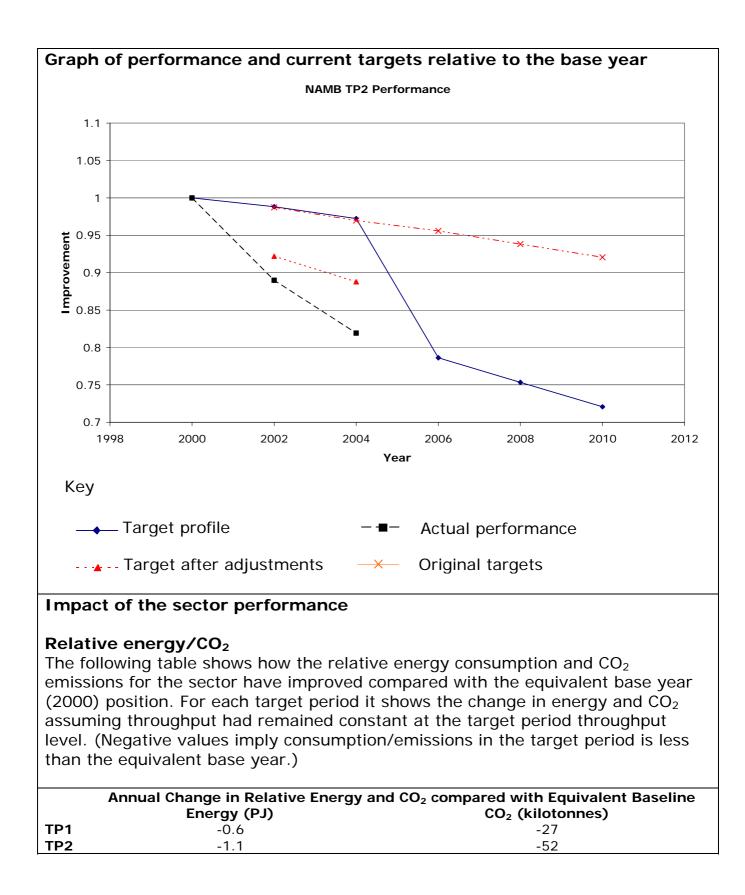
|     | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |
|-----|---|--------------------|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |
| TP1 | 1.2%  | 11%                |  |  |  |
| TP2 | 2.8%  | 18%                |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified because the sector target has been met, as adjusted for trading.

<sup>&</sup>lt;sup>3</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions).

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline  |                                 |                       |                                  |  |  |  |
|---|---------------------------------|-----------------------|----------------------------------|--|--|--|
|   | Energy (PJ)                     | CO <sub>2</sub>       | Production (%)                   |  |  |  |
| (kilotonnes)  |                                 |                       |                                  |  |  |  |
| TP1   | 0.2                             | 9                     | 18%                              |  |  |  |
| TP2   | 0.6                             | 29                    | 39%                              |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population |                                 |                       |                                  |  |  |  |
| changes   | s, so care should be taken in c | omparing the performa | nce at different target periods. |  |  |  |

# THE BRITISH BEER & PUB ASSOCIATION (BBPA)

Scope and membership of the umbrella agreement

The UK brewing industry is principally represented by the British Beer & Pub Association (BBPA). The BBPA agreement covers over 98% of UK beer production.

## Targets

The targets for this sector are expressed in primary kWh per hectolitre of product  $(kWh_p/hl)$ . These targets change with time as the composition of the agreement changes owing to exits and entrants.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>hl) | TP1(2002)<br>(kWh <sub>p</sub> /<br>hl) | TP2(2004)<br>(kWh <sub>p</sub> /<br>hl) | TP3(2006)<br>(kWh <sub>p</sub> /<br>hl) | TP4(2008)<br>(kWh <sub>p</sub> /<br>hl) | TP5(2010)<br>(kWh <sub>p</sub> /<br>hl) |
|-----------------|--|---|---|---|---|---|
| Original        | 64.44                                  | 62.50                                   | 61.11                                   | 59.72                                   | 58.33                                   | 56.94                                   |
| At TP1          | 63.57                                  | 62.19                                   | 60.80                                   | 59.42                                   | 58.04                                   | 56.65                                   |
| 2004<br>Review* | -                                      | -                                       | -                                       | 2.0%                                    | 2.0%                                    | 3.5%                                    |
| At TP2          | 63.53                                  | -                                       | 60.77                                   | 58.20                                   | 56.84                                   | 54.64                                   |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means a relaxation of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review. The 2010 target is subject to review in 2008.

## Additional adjustments to the second target period sector target

## Carbon trading

The sector operates a collective trading arrangement, which for this target period encompassed all target units within the sector, except for a few that have now left the agreement.

Over-performance equivalent to 56 ktCO<sub>2</sub> has been ring-fenced by the sector. This is equivalent to a sector target change (tightening) of -5.28 kWh<sub>p</sub>/hl. (Note - figures rounded for presentation.)

# PMO

Product mix adjustments at the sector level resulted in a change (easing) of the target by  $+1.26 \text{ kWh}_p/\text{hl}$ .

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was  $56.75 \text{ kWh}_p/\text{hl}$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>4</sup> baseline for all target periods to date.

|     | Equivalent baseline (1999) |                    |                                   | Performance     |                    |                                   |
|-----|----------------------------|--------------------|-----------------------------------|-----------------|--------------------|-----------------------------------|
|     | Energy (kWh)               | Production<br>(hl) | SEC<br>(kWh <sub>p</sub> /<br>hl) | Energy<br>(kWh) | Production<br>(hl) | SEC<br>(kWh <sub>p</sub> /<br>hl) |
| TP1 | 3,736,825,734              | 58,781,700         | 63.57                             | 3,533,012,620   | 59,378,413         | 59.50                             |
| TP2 | 3,734,327,427              | 58,781,885         | 63.53                             | 3,343,414,659   | 58,326,371         | 57.32                             |

### Commentary

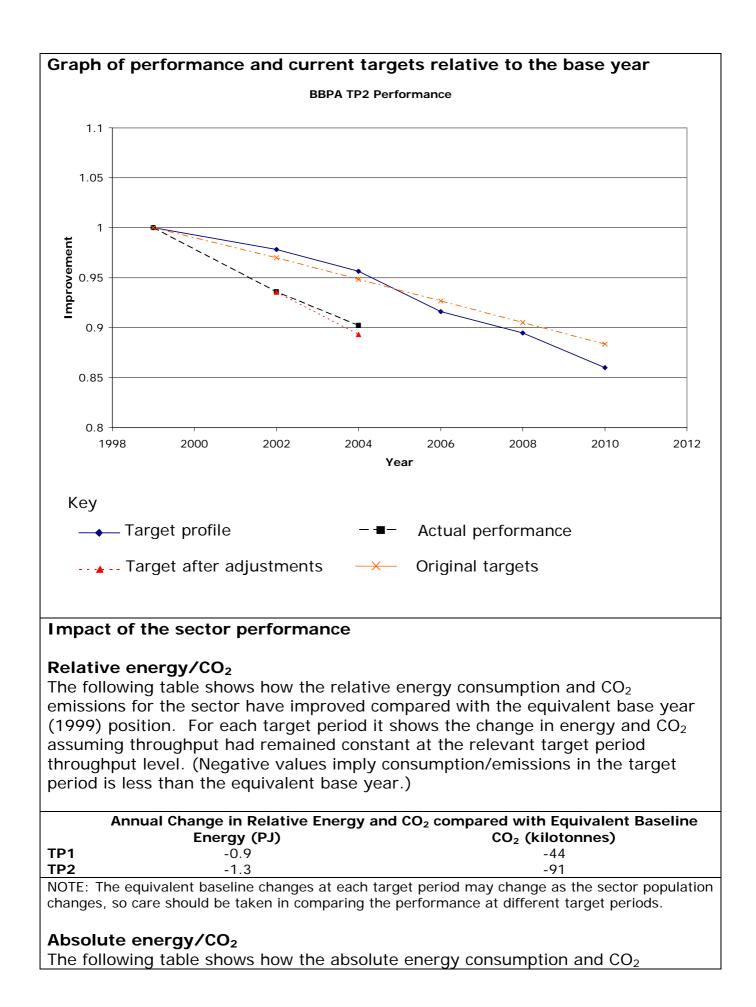
The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

|           | Change in SEC compared with Equivalent Baseline at each Target Period                         |                    |  |  |  |  |
|-----------|---|--------------------|--|--|--|--|
|           | Target Improvement  | Actual Improvement |  |  |  |  |
| TP1       | 2.2%  | 6.4%               |  |  |  |  |
| TP2       | 4.4%  | 9.8%               |  |  |  |  |
| NOTE: The | NOTE: These figures are not directly comparable since the equivalent baseline changes at each |                    |  |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

All facilities remaining in the agreement have been re-certified as a consequence of the sector trading group meeting its target.

<sup>&</sup>lt;sup>4</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline   |             |                 |                |  |  |  |  |
|--|-------------|-----------------|----------------|--|--|--|--|
|  | Energy (PJ) | CO <sub>2</sub> | Production (%) |  |  |  |  |
| (kilotonnes)   |             |                 |                |  |  |  |  |
| TP1  | -0.7        | -37             | 1              |  |  |  |  |
| TP2  | -1.4        | -98             | -1             |  |  |  |  |
| NOTE: The equivalent baseline changes at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods. |             |                 |                |  |  |  |  |

## THE BRITISH CEMENT ASSOCIATION (BCA)

### Scope and membership of the umbrella agreement

The BCA agreement currently covers the production of Portland cement from all but one works in the UK.

## Targets

The targets for this sector are expressed in primary kWh per kilogram of cement  $(kWh_p/kg)$ . These targets change with time as the composition of the agreement changes, owing to exits and entrants.

The following table shows the targets and equivalent 1990 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(kWh <sub>p</sub> /<br>kg) | TP1(2002)<br>(kWh <sub>p</sub> /<br>kg) | TP2(2004)<br>(kWh <sub>p</sub> /<br>kg) | TP3(2006)<br>(kWh <sub>p</sub> /<br>kg) | TP4(2008)<br>(kWh <sub>p</sub> /<br>kg) | TP5(2010)<br>(kWh <sub>p</sub> /<br>kg) |
|----------|--|---|---|---|---|---|
| Original | 1.678                                  | 1.457                                   | 1.408                                   | 1.298                                   | 1.282                                   | 1.249                                   |
| At TP1   | 1.685                                  | 1.463                                   | 1.414                                   | 1.303                                   | 1.287                                   | 1.253                                   |
| 2004     | -                                      | -                                       | -                                       | 0%                                      | 0%                                      | 1.5%                                    |
| Review*  |  |   |   |   |   |   |
| At TP2   | 1.685                                  | -                                       | 1.414                                   | 1.303                                   | 1.287                                   | 1.234                                   |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

# Additional adjustments to the second target period sector target

# Carbon trading

Trading and ring-fencing was carried out purely at the target unit level:

Over-performance equivalent to 260 ktCO<sub>2</sub> was converted to allowances or ring-fenced.

Overall there was a net conversion to allowances/ring-fencing of 260 ktCO<sub>2</sub>, equivalent to a sector target change (tightening) of -0.081 kWh<sub>p</sub>/kg. (Note - figures rounded for presentation.)

## PMO

No product mix adjustments were carried out.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was  $1.333 \text{ kWh}_p/\text{kg}$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>5</sup> baseline for all target periods to date.

|     | Equivalent baseline (1990) |                    |                                   | Performance    |                    |                                   |
|-----|----------------------------|--------------------|-----------------------------------|----------------|--------------------|-----------------------------------|
|     | Energy (kWh)               | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>kg) | Energy (kWh)   | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>kg) |
| TP1 | 23,150,776,000             | 13,742,000         | 1.685                             | 16,216,052,805 | 11,537,195         | 1.406                             |
| TP2 | 23,150,776,000             | 13,742,000         | 1.685                             | 15,658,781,217 | 11,784,936         | 1.329                             |

#### Commentary

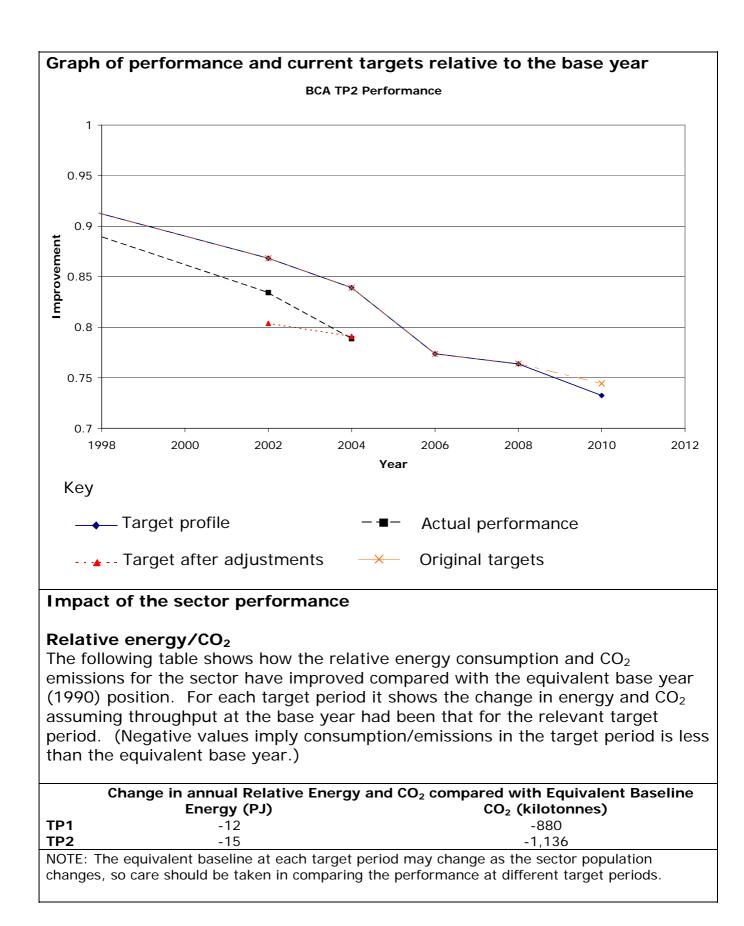
The following table shows how the sector has improved relative to the equivalent base year (1990) position at each target period.

|   | Improvement in SEC compared with Equiv | mprovement in SEC compared with Equivalent Baseline at each Target Period |  |  |  |  |  |
|---|--|---|--|--|--|--|--|
| Target Improvement Actual Improvement   |  |   |  |  |  |  |  |
| TP1   | 13%                                    | 17%   |  |  |  |  |  |
| TP2   | 16%                                    | 21%   |  |  |  |  |  |
| NOTE: Those figures are not directly comparable since the equivalent baseline changes at each |  |   |  |  |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

All facilities remaining in the agreement have been re-certified as a consequence of the sector trading group meeting its target.

<sup>&</sup>lt;sup>5</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1990) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Change in annual Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline  |                                |                         |                                  |  |  |  |  |
|---|--------------------------------|-------------------------|----------------------------------|--|--|--|--|
|   | Energy (PJ)                    | CO <sub>2</sub>         | Production (%)                   |  |  |  |  |
|   |                                | (kilotonnes)            |                                  |  |  |  |  |
| TP1   | -25                            | -1,900                  | -16                              |  |  |  |  |
| TP2   | -27                            | -2,030                  | -14                              |  |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population |                                |                         |                                  |  |  |  |  |
| changes,  | , so care should be taken in ( | comparing the performar | nce at different target periods. |  |  |  |  |

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## BRITISH CERAMIC CONFEDERATION Non-Fletton Brick Sub-sector

**Scope and membership of the umbrella agreement** BCC represents the ceramics manufacturing industry in the UK, including potteries, heavy clay products including non-fletton bricks, fletton bricks, refractories and industrial ceramics and ceramic materials.

### Targets

The targets for this sub-sector are given in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the sub-sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|----------|--|---|---|---|---|---|
| Original | 998                                    | 976                                     | 953                                     | 937                                     | 916                                     | 903                                     |
| At TP1   | 1021                                   | 1003                                    | 985                                     | 968                                     | 949                                     | 938                                     |
| 2004     | -                                      | -                                       | -                                       | 0.5%                                    | 0.5%                                    | 1.1%                                    |
| Review*  |  |   |   |   |   |   |
| At TP2   | 1021                                   | -                                       | 981                                     | 963                                     | 944                                     | 928                                     |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sub-sector will be reviewed again in 2008.

# Additional adjustments to the sub-sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sub-sector were carried out purely at the target unit level:

- Allowances equivalent to 26 ktCO<sub>2</sub> were ring-fenced or traded.
- Allowances equivalent to 14 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net ring-fencing or trading of 12  $ktCO_2$ , which is equivalent to a sub-sector target change (tightening) of -10  $kWh_p$ /te. (Note - figures rounded for presentation.)

## PMO

Product mix adjustments were carried out purely at the target unit level.

## Final adjusted sub-sector target for the second target period

As a consequence of the adjustments described above, the final sub-sector target for the second target period was 971 kWh<sub>p</sub>/te.

#### Sub-sector performance recorded

The following table shows the sub-sector performance against the equivalent<sup>6</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sub-sector changes with time.

| Equivalent baseline (2000) |               |                    | Performance                   |               |                    |                               |
|----------------------------|---------------|--------------------|-------------------------------|---------------|--------------------|-------------------------------|
|                            | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /te) | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /te) |
| TP1                        | 6,458,346,292 | 6,329,230          | 1021                          | 6,082,185,157 | 6,193,963          | 982                           |
| TP2                        | 6,447,847,970 | 6,316,708          | 1021                          | 6,053,698,015 | 6,368,491          | 951                           |

#### Commentary

The following table shows how the sub-sector has improved relative to the equivalent base year (2000) position at each target period.

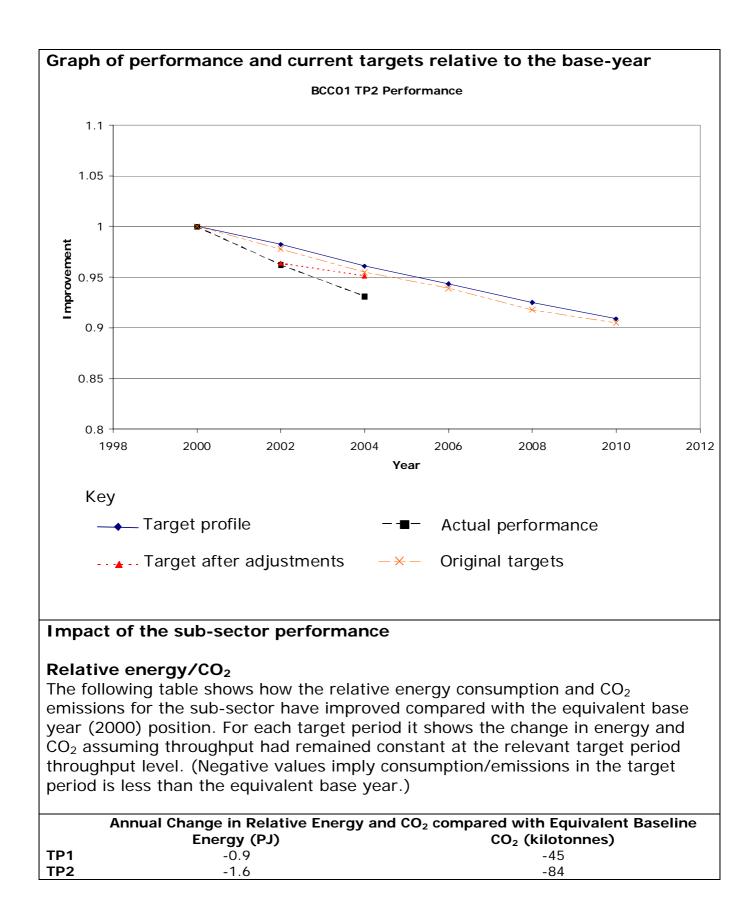
|     | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |  |
|-----|---|--------------------|--|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |  |
| TP1 | 1.7%  | 3.8%               |  |  |  |  |
| TP2 | 3.9%  | 6.9%               |  |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sub-sector population changes.

In this sub-sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified because the sub-sector target has been met.

<sup>&</sup>lt;sup>6</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sub-sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sub-sector have improved compared with the equivalent base year (2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/ emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline       |             |                 |                |  |  |  |  |
|--|-------------|-----------------|----------------|--|--|--|--|
|  | Energy (PJ) | CO <sub>2</sub> | Production (%) |  |  |  |  |
|  |             | (kilotonnes)    |                |  |  |  |  |
| TP1  | -1.4        | -71             | -2             |  |  |  |  |
| TP2  | -1.4        | -74             | 1              |  |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sub- sector population |             |                 |                |  |  |  |  |
| changes, so care should be taken in comparing the performance at different target periods.   |             |                 |                |  |  |  |  |

## BRITISH CERAMIC CONFEDERATION Fletton Brick Sub-sector

**Scope and membership of the umbrella agreement** BCC represents the ceramics manufacturing industry in the UK, including potteries, heavy clay products including non-fletton bricks, fletton bricks, refractories and industrial ceramics and ceramic materials.

## Targets

The targets for this sub-sector are given in primary kWh per 1000 bricks  $(kWh_p/1000)$ . These targets change with time as the composition of the sub-sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>1000) | TP1(2002)<br>(kWh <sub>p</sub> /<br>1000) | TP2(2004)<br>(kWh <sub>p</sub> /<br>1000) | TP3(2006)<br>(kWh <sub>p</sub> /<br>1000) | TP4(2008)<br>(kWh <sub>p</sub> /<br>1000) | TP5(2010)<br>(kWh <sub>p</sub> /<br>1000) |
|-----------------|--|---|---|---|---|---|
| Original        | 716                                      | 710                                       | 699                                       | 686                                       | 672                                       | 659                                       |
| At TP1          | 775                                      | 768                                       | 756                                       | 742                                       | 727                                       | 713                                       |
| 2004<br>Review* | -  | -   | -   | -11.5%                                    | -11.5%                                    | -11.5%                                    |
| At TP2          | 775                                      | -   | 756                                       | 828                                       | 811                                       | 795                                       |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sub-sector will be reviewed again in 2008.

# Additional adjustments to the sub-sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sub-sector were carried out purely at the target unit level:

- No over-performance was ring-fenced or traded.
- Allowances equivalent to 16.4 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net purchase of 16  $ktCO_2$ , which is equivalent to a sub-sector target change (easing) of 257  $kWh_p/1000$  bricks. (Note - figures rounded for presentation.)

PMO

Product mix adjustments were carried out purely at the target unit level.

## Final adjusted sub-sector target for the second target period

As a consequence of the adjustments described above, the final sub-sector target for the second target period was 1013  $kWh_p/1000$  bricks.

## Sub-sector performance recorded

The following table shows the sub-sector performance against the equivalent<sup>7</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sub-sector changes with time.

|     | Equivale     | nt baseline (20                |                                     | Performance     |                                |                                     |
|-----|--------------|--------------------------------|-------------------------------------|-----------------|--------------------------------|-------------------------------------|
|     | Energy (kWh) | Production<br>(1000<br>bricks) | SEC<br>(kWh <sub>p</sub> /<br>1000) | Energy<br>(kWh) | Production<br>(1000<br>bricks) | SEC<br>(kWh <sub>p</sub> /<br>1000) |
| TP1 | 250,771,080  | 323,680                        | 775                                 | 280,477,146     | 324,699                        | 864                                 |
| TP2 | 250,771,080  | 323,680                        | 775                                 | 354,153,766     | 326,351                        | 1085                                |

### Commentary

The following table shows how the sub-sector has improved relative to the equivalent base year (2000) position at each target period.

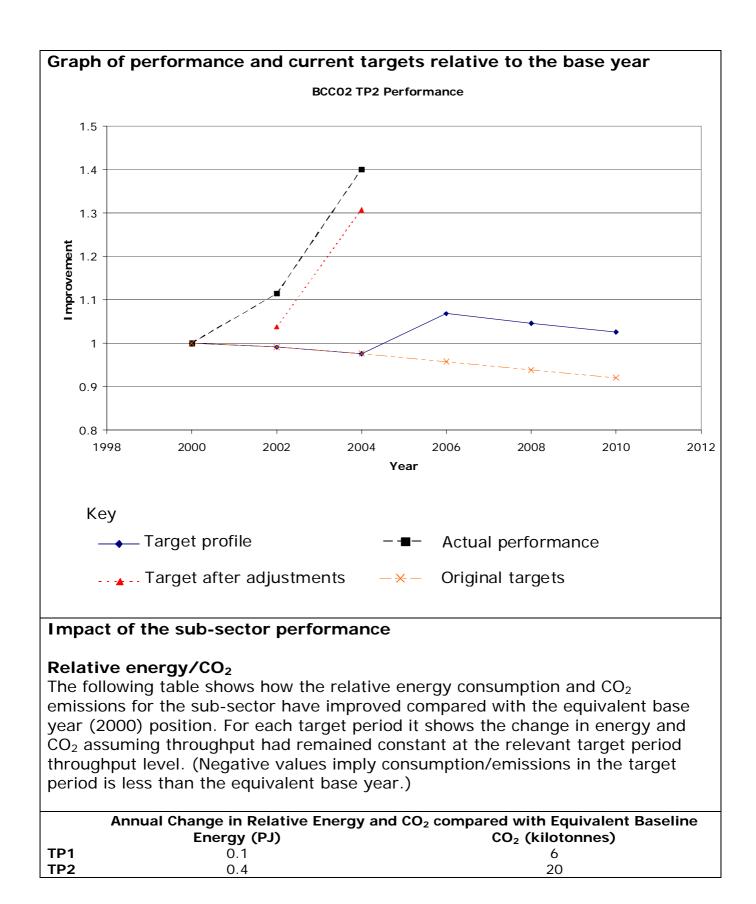
|     | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |
|-----|---|--------------------|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |
| TP1 | 0.9%  | -11%               |  |  |  |
| TP2 | 2.5%  | -40%               |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sub-sector population changes.

In this sub-sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>7</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sub-sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sub-sector have improved compared with the equivalent base year (2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions).

|         | Annual Change in Absolut        | e Energy and CO <sub>2</sub> com | pared with Equivalent Baseline  |
|---------|---------------------------------|----------------------------------|---------------------------------|
|         | Energy (PJ)                     | CO <sub>2</sub>                  | Production (%)                  |
|         |                                 | (kilotonnes)                     |                                 |
| TP1     | 0.1                             | 6                                | 0.3                             |
| TP2     | 0.4                             | 20                               | 0.8                             |
| NOTE: T | he equivalent baseline at each  | n target period may chan         | ge as the sub-sector population |
| changes | , so care should be taken in co | omparing the performanc          | e at different target periods.  |

# BRITISH CERAMIC CONFEDERATION Refractories & Industrial Ceramics Sub-sector

**Scope and membership of the umbrella agreement** BCC represents the ceramics manufacturing industry in the UK, including potteries, heavy clay products including non-fletton bricks, fletton bricks, refractories and industrial ceramics and ceramic materials.

## Targets

The targets for this sub-sector are given in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the sub-sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|-----------------|--|---|---|---|---|---|
| Original        | 3290                                   | 3196                                    | 3145                                    | 3073                                    | 3033                                    | 2974                                    |
| At TP1          | 3665                                   | 3616                                    | 3599                                    | 3559                                    | 3502                                    | 3436                                    |
| 2004            |  |   |   | 0.6%                                    | 0.6%                                    | 0.6%                                    |
| <b>Review</b> * |  |   |   |   |   |   |
| At TP2          | 3924                                   | -                                       | 3843                                    | 3786                                    | 3725                                    | 3655                                    |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sub-sector will be reviewed again in 2008.

# Additional adjustments to the sub-sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sub-sector were carried out purely at the target unit level:

- Allowances equivalent to 33 ktCO<sub>2</sub> were ring-fenced or traded.
- Allowances equivalent to 6 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net ring-fencing or trading of 27 ktCO<sub>2</sub>, which is equivalent to a sub-sector target change (tightening) of -442 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

## PMO

Product mix adjustments were carried out purely at the target unit level.

## Final adjusted sub-sector target for the second target period

As a consequence of the adjustments described above, the final sub-sector target for the second target period was 3401  $kWh_p/te$ .

#### Sub-sector performance recorded

The following table shows the sub-sector performance against the equivalent<sup>8</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sub-sector changes with time.

|     | Equival       | ent baseline (2    | 2000)                             |               | Performance        |                                   |
|-----|---------------|--------------------|-----------------------------------|---------------|--------------------|-----------------------------------|
|     | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP1 | 1,786,154,983 | 487,368            | 3665                              | 1,444,652,751 | 383,318            | 3769                              |
| TP2 | 1,915,049,883 | 488,082            | 3924                              | 1,425,440,064 | 333,524            | 4274                              |

#### Commentary

The following table shows how the sub-sector has improved relative to the equivalent base year (2000) position at each target period.

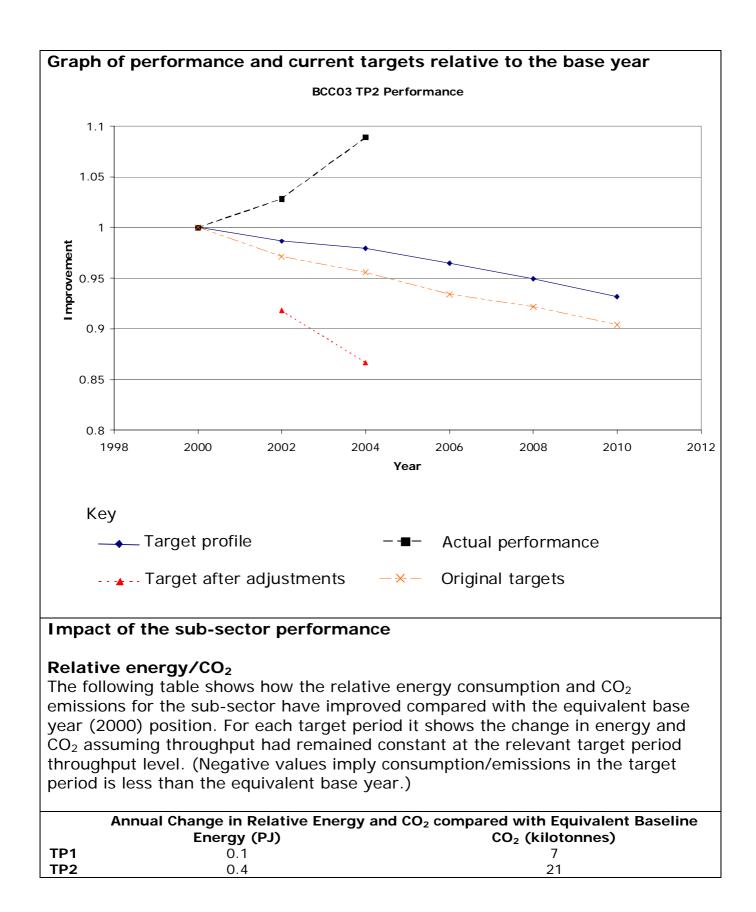
|     | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |
|-----|---|--------------------|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |
| TP1 | 1.3%  | -2.8%              |  |  |  |
| TP2 | 2.1%  | -8.9%              |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sub-sector population changes.

In this sub-sector the target improvements reflect projected throughput values over the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>8</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sub-sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sub-sector have improved compared with the equivalent base year (2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| А          | nnual Change in Absolute      | Energy and CO <sub>2</sub> com | pared with Equivalent Baseline   |
|------------|-------------------------------|--------------------------------|----------------------------------|
|            | Energy (PJ)                   | CO <sub>2</sub>                | Production (%)                   |
|            |                               | (kilotonnes)                   |                                  |
| TP1        | -1.2                          | -62                            | -21                              |
| TP2        | -1.8                          | -89                            | -32                              |
| NOTE: The  | e equivalent baseline at each | target period may char         | nge as the sub-sector population |
| changes, s | o care should be taken in co  | mparing the performan          | ce at different target periods.  |

## BRITISH CERAMIC CONFEDERATION Whitewares Sub-sector

# Scope and membership of the umbrella agreement

BCC represents the ceramics manufacturing industry in the UK, including potteries, heavy clay products including non-fletton bricks, fletton bricks, refractories and industrial ceramics and ceramic materials.

## Targets

The targets for this sub-sector are given in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the sub-sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|----------------|--|---|---|---|---|---|
| Original       | 9971                                   | 9701                                    | 9098                                    | 8979                                    | 8935                                    | 8787                                    |
| At TP1         | 10764                                  | 10362                                   | 9767                                    | 9637                                    | 9509                                    | 9385                                    |
| 2004           |  |   |   | 6.7%                                    | 6.7%                                    | 6.9%                                    |
| <b>Review*</b> |  |   |   |   |   |   |
| At TP2         | 10833                                  | -                                       | 9215                                    | 9046                                    | 8924                                    | 8789                                    |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sub-sector will be reviewed again in 2008.

# Additional adjustments to the sub-sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sub-sector were carried out purely at the target unit level:

- Allowances equivalent to 19 ktCO<sub>2</sub> were ring-fenced or traded.
- Allowances equivalent to 13.0 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net ring-fencing or trading of 6 ktCO<sub>2</sub>, which is equivalent to a sub-sector target change (tightening) of -123 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

PMO

Product mix adjustments were carried out purely at the target unit level.

## Final adjusted sub-sector target for the second target period

As a consequence of the adjustments described above, the final sub-sector target for the second target period was 9093  $kWh_p/te$ .

#### **Sub-sector Performance Recorded**

The following table shows the sub-sector performance against the equivalent<sup>9</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sub-sector changes with time.

|     | Equivalent baseline (2000) |                    |                               | Р             | erformance         |                               |
|-----|----------------------------|--------------------|-------------------------------|---------------|--------------------|-------------------------------|
|     | Energy (kWh)               | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /te) | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /te) |
| TP1 | 3,008,111,786              | 279,463            | 10,764                        | 2,689,636,559 | 284,887            | 9441                          |
| TP2 | 2,985,138,257              | 275,571            | 10,833                        | 2,196,929,837 | 248,338            | 8847                          |

#### Commentary

The following table shows how the sub-sector has improved relative to the equivalent base year (2000) position at each target period.

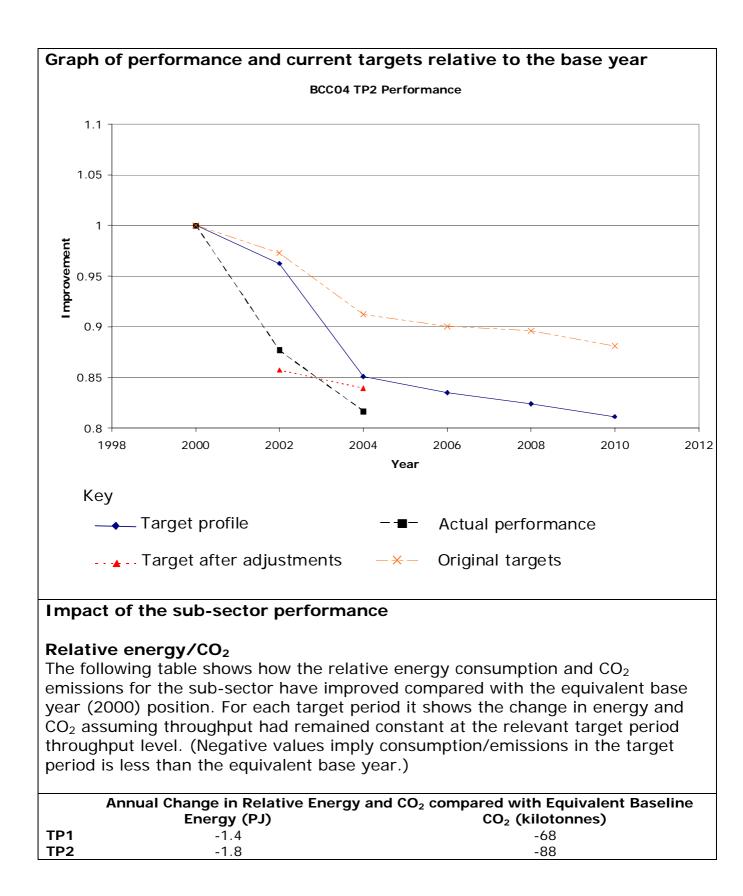
| Change in SEC compared with Equivalent Baseline at each Target Period |      |     |  |  |  |
|---|------|-----|--|--|--|
| Target Improvement Actual Improvement                                 |      |     |  |  |  |
| TP1   | 3.7% | 12% |  |  |  |
| TP2   | 15%  | 18% |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sub-sector population changes.

In this sub-sector the target improvements reflect projected throughput values over the period of the agreement.

All the facilities have been re-certified because the sub-sector target has been met.

<sup>&</sup>lt;sup>9</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sub-sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sub-sector have improved compared with the equivalent base year (2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and $CO_2$ compared with Equivalent Baseline               |                              |                            |                                  |  |  |
|---|------------------------------|----------------------------|----------------------------------|--|--|
|   | Energy (PJ)                  | CO <sub>2</sub>            | Production (%)                   |  |  |
| (kilotonnes)  |                              |                            |                                  |  |  |
| TP1   | -1.2                         | -58                        | 2                                |  |  |
| TP2   | -2.8                         | -141                       | -10                              |  |  |
| NOTE: The equivalent baseline at each target period may change as the sub-sector population |                              |                            |                                  |  |  |
| changes,  | so care should be taken in c | comparing the performation | nce at different target periods. |  |  |

## BRITISH CERAMIC CONFEDERATION Materials Sub-sector

**Scope and membership of the umbrella agreement** BCC represents the ceramics manufacturing industry in the UK, including potteries, heavy clay products including non-fletton bricks, fletton bricks, refractories and industrial ceramics and ceramic materials.

## Targets

The targets for this sub-sector are given in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the sub-sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|-----------------|--|---|---|---|---|---|
| Original        | 1264                                   | 1234                                    | 1204                                    | 1174                                    | 1155                                    | 1137                                    |
| At TP1          | 985                                    | 960                                     | 937                                     | 915                                     | 900                                     | 888                                     |
| 2004<br>Review* | -                                      | -                                       | -                                       | 12.3%                                   | 12.5%                                   | 12.7%                                   |
| At TP2          | 1053                                   | -                                       | 902                                     | 858                                     | 842                                     | 829                                     |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sub-sector will be reviewed again in 2008.

# Additional adjustments to the sub-sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sub-sector were carried out purely at the target unit level:

- Allowances equivalent to 20 ktCO<sub>2</sub> were ring-fenced or traded.
- Allowances equivalent to 0.7 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net ring-fencing or trading of 20 ktCO<sub>2</sub>, which is equivalent to a sub-sector target change (tightening) of -184 kWh<sub>p</sub>/tonne. (Note - figures rounded for presentation.)

## PMO

Product mix adjustments were carried out purely at the target unit level.

## Final adjusted sub-sector target for the second target period

As a consequence of the adjustments described above, the final sub-sector target for the second target period was 718  $kWh_p/te$ .

#### Sub-sector performance recorded

The following table shows the sub-sector performance against the equivalent<sup>10</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sub-sector changes with time.

| Equivalent baseline (2000) |              |                    | Performance                   |                 |                    |                               |
|----------------------------|--------------|--------------------|-------------------------------|-----------------|--------------------|-------------------------------|
|                            | Energy (kWh) | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /te) | Energy<br>(kWh) | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /te) |
| TP1                        | 519,839,262  | 527,970            | 985                           | 502,703,897     | 576,909            | 871                           |
| TP2                        | 578,907,261  | 549,812            | 1053                          | 459,689,951     | 583,383            | 788                           |

#### Commentary

The following table shows how the sub-sector has improved relative to the equivalent base year (2000) position at each target period.

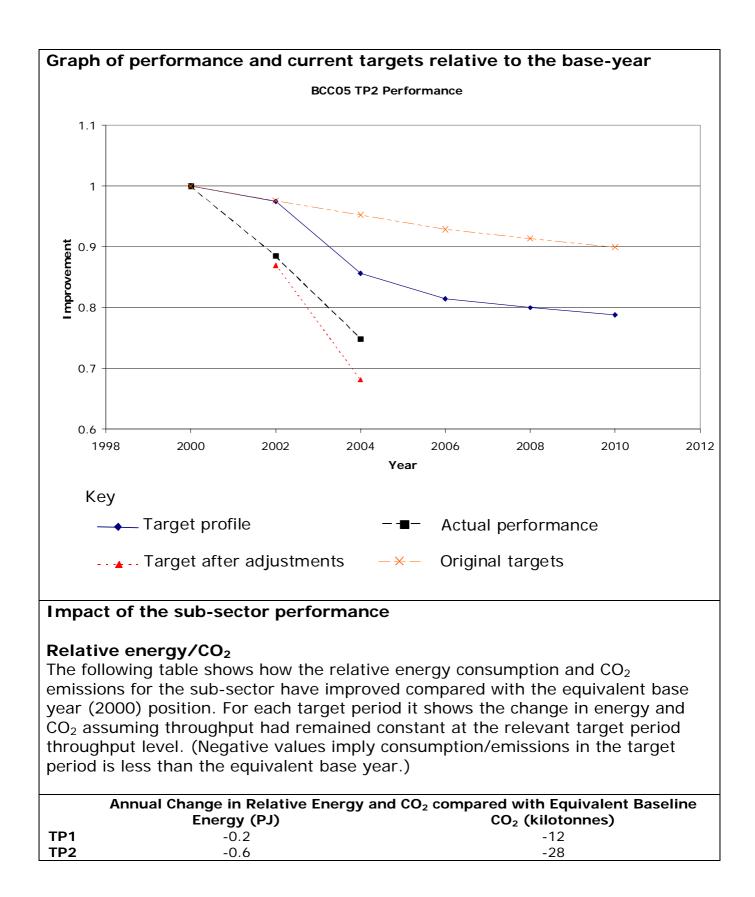
|     | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |
|-----|---|--------------------|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |
| TP1 | 2.5%  | 11%                |  |  |  |
| TP2 | 14%   | 25%                |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sub-sector population changes.

In this sub-sector the target improvements reflect projected throughput values over the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>10</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sub-sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sub-sector have improved compared with the equivalent base year (2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline      |             |                 |                |  |  |
|---|-------------|-----------------|----------------|--|--|
|   | Energy (PJ) | CO <sub>2</sub> | Production (%) |  |  |
| (kilotonnes)  |             |                 |                |  |  |
| TP1   | -0.1        | -3              | 9              |  |  |
| TP2   | -0.4        | -22             | 6              |  |  |
| NOTE: The equivalent baseline at each target period may change as the sub-sector population |             |                 |                |  |  |
| changes, so care should be taken in comparing the performance at different target periods.  |             |                 |                |  |  |

# CIA - Chemicals

## Scope and membership of the umbrella agreement

The chemicals sector covers a range of activities from continuous bulk chemical operations to small batch production of speciality chemicals. The agreement is operated through CIABATA, a wholly owned subsidiary of the Chemical Industries Association.

## Targets

Original and current target period targets for this sector are shown below as an energy efficiency improvement ratio of target performance relative to the production of the predicted throughput at base year (1998) performance. The products of the sector are diverse and so one standard throughput unit is not possible. This method relates targets to product SEC improvements. Target period targets have changed because of baseline corrections, exits and entrants.

The following table shows the targets and equivalent 1998 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>1998=1.000 | <b>TP1(2002)</b><br>1998=1.000 | <b>TP2(2004)</b><br>1998=1.000 | <b>TP3(2006)</b><br>1998=1.000 | <b>TP4(2008)</b><br>1998=1.000 | <b>TP5(2010)</b><br>1998=1.000 |
|----------------|------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Original       | 1                      | 0.877                          | 0.850                          | 0.835                          | 0.822                          | 0.817                          |
| At TP1         | 1                      | 0.908                          | 0.879                          | 0.864                          | 0.850                          | 0.845                          |
| 2004           | -                      | -                              | -                              | 3.6%                           | 3.5%                           | 4.0%                           |
| <b>Review*</b> |                        |                                |                                |                                |                                |                                |
| At TP2         | 1                      | -                              | 0.879                          | 0.832                          | 0.819                          | 0.810                          |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

The TP5 target will be reviewed again in 2008.

## Additional adjustments to the sector target for the second target period

## **Carbon trading**

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- Over-performance equivalent to 1,745 ktCO<sub>2</sub> was ring-fenced.
- Allowances equivalent to 246 ktCO<sub>2</sub> were purchased

Overall, trading resulted in a net allocation of allowances/ ring-fencing of 1,499  $ktCO_2$  which is equivalent to a sector target change (tightening) of -0.084. (Note - figures rounded for presentation.)

PMO

Product mix and throughput adjustments were carried out at the sector level and were equivalent to a change (easing) the target by 0.016.

#### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 0.811.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>11</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|        | Equivalent  | baseline (1998) |                               | Performance |                |                               |
|--------|---|-----------------|-------------------------------|-------------|----------------|-------------------------------|
|        | Energy<br>(TJ)  | Production      | Energy<br>Efficiency<br>Ratio | Energy (TJ) | Production     | Energy<br>Efficiency<br>Ratio |
| TP1    | 322,823   | Not applicable  | 1                             | 288,073     | Not applicable | 0.855                         |
| TP2    | 308,449   | Not applicable  | 1                             | 279,203     | Not applicable | 0.805                         |
| Note - | Note - The products of the sector are so diverse that a standard throughput unit is not possible. |                 |                               |             |                |                               |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1998) position at each target period.

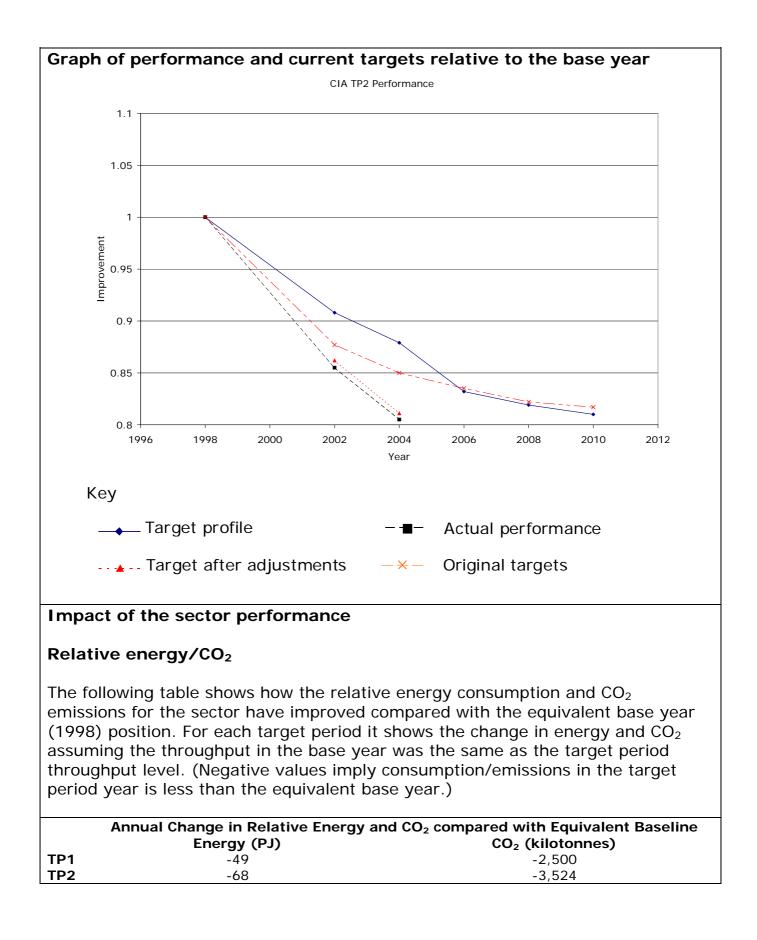
|     | Change in energy efficiency ratio compared with Equivalent Baseline at each TP |                    |  |  |  |
|-----|--|--------------------|--|--|--|
|     | Target Improvement   | Actual Improvement |  |  |  |
| TP1 | 9.2%   | 15%                |  |  |  |
| TP2 | 12%  | 20%                |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on throughput levels set when the underlying agreements were signed, but adjusted for current product mix and for throughput, where a throughput agreement is in place.

All the facilities have been re-certified because the sector has met its target.

<sup>&</sup>lt;sup>11</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1998) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline  |                                  |                        |  |  |  |  |  |
|---|----------------------------------|------------------------|--|--|--|--|--|
|   | Energy (PJ)                      | CO <sub>2</sub>        | Production (%)   |  |  |  |  |
| (kilotonnes)  |                                  |                        |  |  |  |  |  |
| TP1   | -35                              | -2,000                 | Not applicable   |  |  |  |  |
| TP2   | -29                              | -1,520                 | Not applicable   |  |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population |                                  |                        |  |  |  |  |  |
| change  | s, so care should be taken in co | mparing the performanc | changes, so care should be taken in comparing the performance at different target periods. |  |  |  |  |

## NATIONAL MICROELECTRONICS INSTITUTE (CATHODE RAY TUBES) Scope and membership of the umbrella agreement

NMI represents various electronics manufacturers in the UK, including both semiconductor and cathode ray tube (CRT) production.

## Targets

The targets for this sector are given as a ratio of target year performance to base year performance for a particular level of throughput. These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(Ratio) | TP1(2002)<br>(Ratio) | TP2(2004)<br>(Ratio) | TP3(2006)<br>(Ratio) | TP4(2008)<br>(Ratio) | TP5(2010)<br>(Ratio) |
|----------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Original | 1                   | 0.94                 | 0.87                 | 0.84                 | 0.81                 | 0.79                 |
| At TP1   | 1                   | 0.71                 | 0.65                 | 0.63                 | 0.61                 | 0.59                 |
| 2004     | -                   | -                    | -                    | 3.21%                | 3.21%                | 3.06%                |
| Review*  |                     |                      |                      |                      |                      |                      |
| At TP2   | 1                   | -                    | 0.88                 | 0.82                 | 0.79                 | 0.76                 |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the number of members of this sector has halved since 2002 and this has resulted in a significant change to the targets. The TP5 target will be reviewed again in 2008.

## Additional adjustments to the sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- Allowances equivalent to 11.4 ktCO<sub>2</sub> were ring-fenced or traded.
- No allowances were purchased.

Overall, trading resulted in a net ring-fencing or trading of  $11.4 \text{ ktCO}_2$ , which is equivalent to a sector target change (tightening) of -0.10. (Note - figures rounded for presentation.)

## PMO

Product mix adjustments were carried out purely at the target unit level.

#### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 0.78.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>12</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalent baseline (2000) |             |        | Performance |             |        |
|-----|----------------------------|-------------|--------|-------------|-------------|--------|
|     | Energy (kWh)               | Production  | Ratio* | Energy      | Production  | Ratio* |
|     |                            | (kg)        |        | (kWh)       | (kg)        |        |
| TP1 | 1,039,936,000              | 136,467,133 | 1.0    | 918,457,845 | 177,980,382 | 0.58   |
| TP2 | 543,600,000                | 104,835,353 | 1.0    | 505,033,280 | 122,456,168 | 0.79   |

\*Ratio of target year to base year for actual target period throughput.

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (2000) position at each target period.

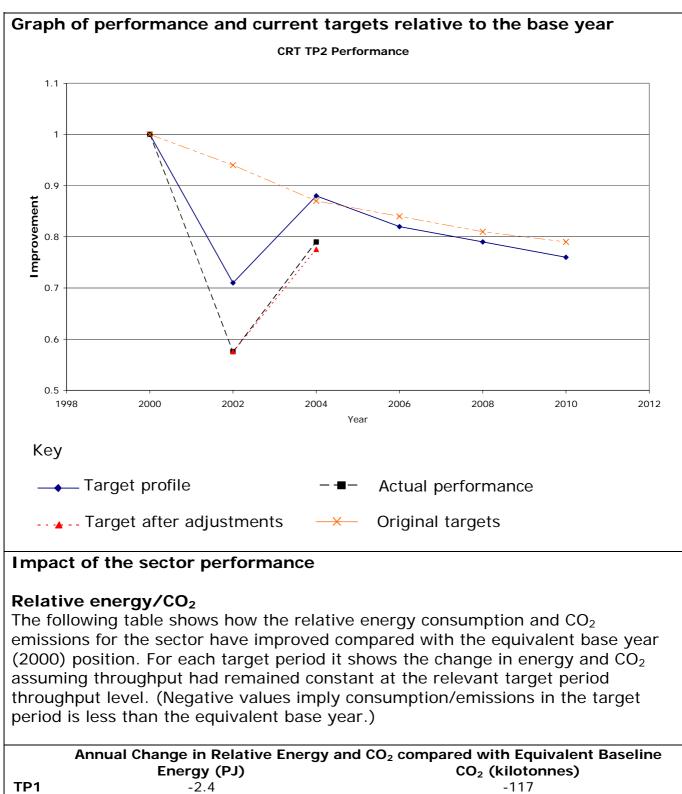
|      | Change in performance compared to Equivalent Baseline at each Target Period |     |  |  |  |
|------|---|-----|--|--|--|
|      | Target Improvement Actual Improvement                                       |     |  |  |  |
| TP1  | 29%   | 42% |  |  |  |
| TP2  | 12%   | 21% |  |  |  |
| NOTE |   |     |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on projected throughput values for each target period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>12</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



|   | Energy (PJ) | CO <sub>2</sub> (kilotonnes) |
|---|-------------|------------------------------|
|   | -2.4        | -117                         |
| 2 | -0.8        | -36                          |

TP2

NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline |  |                 |                |  |  |  |  |  |
|--|--|-----------------|----------------|--|--|--|--|--|
|  | Energy (PJ)  | CO <sub>2</sub> | Production (%) |  |  |  |  |  |
| (kilotonnes)   |  |                 |                |  |  |  |  |  |
| TP1  | -0.4   | -21             | 30             |  |  |  |  |  |
| TP2  | -0.1   | -7              | 17             |  |  |  |  |  |
|  | NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods. |                 |                |  |  |  |  |  |

## DAIRY UK

## Scope and membership of the umbrella agreement

The agreement with the dairy industry is with Dairy Energy Savings Ltd (established by Dairy UK, previously the Dairy Industry Association). The agreement covers the majority of the UK production of dairy produce from raw milk and raw milk products.

## Targets

The targets for this sector are expressed in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the agreement changes owing to exits and entrants.

The following table shows the targets and equivalent 1995 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|-----------------|--|---|---|---|---|---|
| Original        | 553.16                                 | 469.57                                  | 458.89                                  | 454.41                                  | 449.65                                  | 444.76                                  |
| TP1             | 552.86                                 | 478.22                                  | 466.88                                  | 462.03                                  | 456.81                                  | 451.46                                  |
| 2004            | -                                      | -                                       | -                                       | 2.25%                                   | 3.5%                                    | 4.5%                                    |
| <b>Review</b> * |  |   |   |   |   |   |
| TP2             | 554.85                                 | -                                       | 484.52                                  | 470.18                                  | 459.20                                  | 449.48                                  |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets at the second target period for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing was carried out purely at the target unit level:

- Over-performance equivalent to 100 ktCO<sub>2</sub> was converted to allowances or ring-fenced.
- 44  $ktCO_2$  of allowances were purchased to offset under-performance.

Overall there was a net conversion to allowances/ring-fencing of 56 ktCO<sub>2</sub>, equivalent to a sector target change (tightening) of -28.82 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

## PMO

Product mix adjustments were carried out purely at the target unit level.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was  $455.70 \text{ kWh}_p$ /te.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>13</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivale      | ent baseline (1    | 995)                              | Performance   |                    |                                   |
|-----|---------------|--------------------|-----------------------------------|---------------|--------------------|-----------------------------------|
|     | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP1 | 5,035,411,314 | 9,107,919          | 552.86                            | 4,738,092,300 | 10,329,975         | 458.67                            |
| TP2 | 4,709,490,251 | 8,487,856          | 554.85                            | 4,606,223,806 | 10,049,414         | 458.36                            |

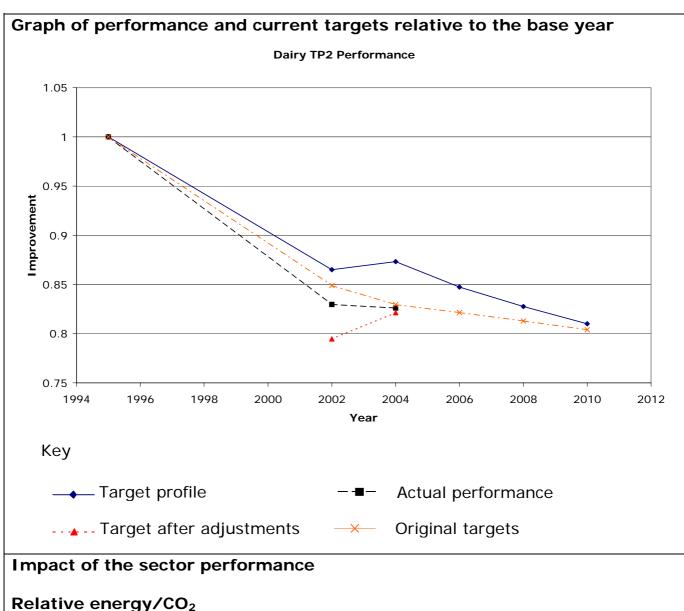
#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1995) position at each target period.

| C              | Change in SEC compared with Equivalent Baseline at each Target Period           |  |  |  |  |  |  |
|----------------|---|--|--|--|--|--|--|
|                | Target Improvement  | Actual Improvement                     |  |  |  |  |  |
| TP1            | 13.5%   | 17.0%                                  |  |  |  |  |  |
| TP2            | 12.7%   | 17.4%                                  |  |  |  |  |  |
|                | igures are not directly comparable since t<br>as the sector population changes. | he equivalent baseline changes at each |  |  |  |  |  |
| Most facilitie | es have been re-certified having me   | et their individual targets either     |  |  |  |  |  |

Most facilities have been re-certified having met their individual targets either outright, or through trading or product mix adjustments.

<sup>&</sup>lt;sup>13</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



The following table shows how the relative energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1995) position. For each target period it shows the change in energy and  $CO_2$  assuming throughput had remained constant at the relevant target period throughput level. (Negative values imply consumption/emissions in the target period is less than the equivalent base year.)

| Annual Change in Relative Energy and CO <sub>2</sub> compared with Equivalent Baseline<br>Energy (PJ) CO <sub>2</sub> (kilotonnes) |   |   |  |  |  |  |  |  |
|--|---|---|--|--|--|--|--|--|
|  |   |   |  |  |  |  |  |  |
| TP1  | -3.5  |   | -190   |  |  |  |  |  |
| TP2  | -3.5  |   | -186   |  |  |  |  |  |
| NOTE: The eq   | uivalent baseline at each   | target period may char  | nge as the sector population   |  |  |  |  |  |
|  | -   | • •   | ce at different target periods.                                      |  |  |  |  |  |
| Absolute e   | energy/CO <sub>2</sub>  |   |  |  |  |  |  |  |
|  |   | he absolute energy  | consumption and $CO_2$   |  |  |  |  |  |
|  | 8   | 0.5   | •  |  |  |  |  |  |
| emissions fo   | or the sector have im   | proved compared w   | vith the equivalent base year  |  |  |  |  |  |
| (1995) posi  | tion for each target p  | period. It also show  | s the percentage change in   |  |  |  |  |  |
| · · ·  | <b>e</b> .  |   | throughput. (Negative values imply a fall in consumption/emissions.) |  |  |  |  |  |
| tin ougriput.  |   |   | INHON/AMISSIONS I  |  |  |  |  |  |
|  | . (Negative values in   | npry a fair in consum   | iption/emissions.)   |  |  |  |  |  |
| Ann  | ual Change in Absolute  | Energy and CO <sub>2</sub> com  | pared with Equivalent Baseline                                       |  |  |  |  |  |
| Anni   | · · ·   | Energy and CO <sub>2</sub> com<br>CO <sub>2</sub>   |  |  |  |  |  |  |
| Ann  | ual Change in Absolute  | Energy and CO <sub>2</sub> com  | pared with Equivalent Baseline                                       |  |  |  |  |  |
| Annu<br>TP1  | ual Change in Absolute  | Energy and CO <sub>2</sub> com<br>CO <sub>2</sub>   | pared with Equivalent Baseline                                       |  |  |  |  |  |
|  | ual Change in Absolute<br>Energy (PJ)   | Energy and CO <sub>2</sub> com<br>CO <sub>2</sub><br>(kilotonnes)   | pared with Equivalent Baseline<br>Production (%)                     |  |  |  |  |  |
| TP1<br>TP2   | ual Change in Absolute<br>Energy (PJ)<br>-1.1<br>-0.4                               | Energy and CO <sub>2</sub> com<br>CO <sub>2</sub><br>(kilotonnes)<br>-58<br>-20                           | pared with Equivalent Baseline<br>Production (%)<br>13<br>18         |  |  |  |  |  |
| <b>TP1</b><br><b>TP2</b><br>NOTE: The eq   | ual Change in Absolute<br>Energy (PJ)<br>-1.1<br>-0.4<br>juivalent baseline at each | Energy and CO <sub>2</sub> com<br>CO <sub>2</sub><br>(kilotonnes)<br>-58<br>-20<br>target period may char | pared with Equivalent Baseline<br>Production (%)                     |  |  |  |  |  |

# THE BRITISH EGG PRODUCTS ASSOCIATION (BEPA)

Scope and membership of the umbrella agreement

The BEPA agreement covers all the major producers of egg products. Production includes liquid and frozen egg, mayonnaise, boiled eggs and other cooked egg products.

## Targets

The targets for this sector are given in primary kWh per kilogram of product  $(kWh_p/kg)$ . These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent baseline for this sector as originally agreed and at each target period (TP) to date. (Participants have different baselines from 1995, which is used here as the nominal baseline year.)

|                 | Baseline<br>(kWh <sub>p</sub> /<br>kg) | TP1(2002)<br>(kWh <sub>p</sub> /<br>kg) | TP2(2004)<br>(kWh <sub>p</sub> /<br>kg) | TP3(2006)<br>(kWh <sub>p</sub> /<br>kg) | TP4(2008)<br>(kWh <sub>p</sub> /<br>kg) | TP5(2010)<br>(kWh <sub>p</sub> /<br>kg) |
|-----------------|--|---|---|---|---|---|
| Original        | 1.119                                  | 1.041                                   | 1.022                                   | 1.007                                   | 0.990                                   | 0.970                                   |
| At TP1          | 1.245                                  | 1.118                                   | 1.096                                   | 1.079                                   | 1.061                                   | 1.038                                   |
| 2004<br>Review* | -                                      | -                                       | -                                       | ТВА                                     | ТВА                                     | TBA                                     |
| At TP2          | 1.024                                  | -                                       | 0.946                                   | TBA                                     | TBA                                     | TBA                                     |

\* The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- A total of 4 ktCO<sub>2</sub> from over-performances was traded.
- A total of 2 ktCO<sub>2</sub> from over-performances was ring-fenced.
- Allowances equivalent to 1 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net surplus of 5 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of – 0.305 kWh<sub>p</sub>/kg. (Note – figures rounded for presentation.)

# PMO

No product mix adjustments were carried out.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was  $0.641 \text{ kWh}_p/\text{kg}$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>14</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalent baseline (1995) |                    |                               |                 | Performance        |                               |
|-----|----------------------------|--------------------|-------------------------------|-----------------|--------------------|-------------------------------|
|     | Energy (kWh)               | Production<br>(kg) | SEC<br>(kWh <sub>p</sub> /kg) | Energy<br>(kWh) | Production<br>(kg) | SEC<br>(kWh <sub>p</sub> ∕kg) |
| TP1 | 87,104,013                 | 69,981,317         | 1.245                         | 76,870,542      | 95,611,282         | 0.804                         |
| TP2 | 72,159,168                 | 70,433,832         | 1.024                         | 74,059,388      | 93,372,494         | 0.793                         |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1995) position at each target period.

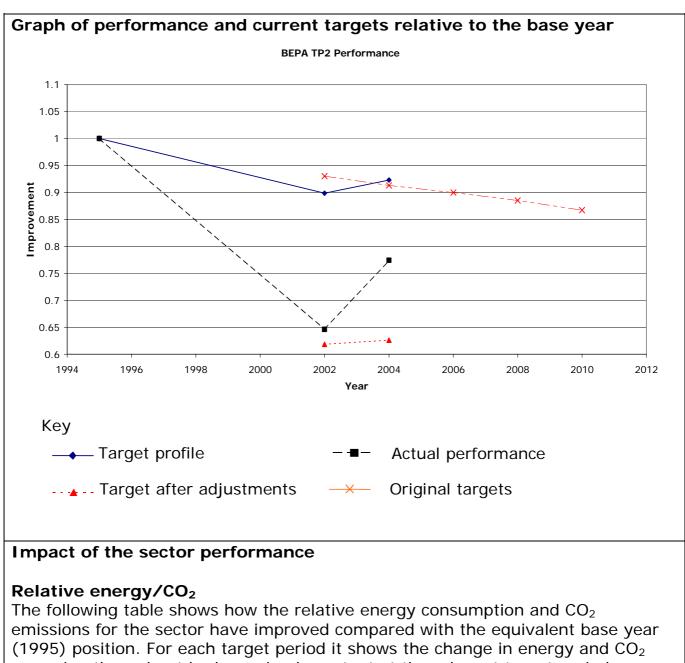
| С   | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |  |
|-----|---|--------------------|--|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |  |
| TP1 | 10%   | 35%                |  |  |  |  |
| TP2 | 8%  | 23%                |  |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through trading.

<sup>&</sup>lt;sup>14</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



(1995) position. For each target period it shows the change in energy and  $CO_2$  assuming throughput had remained constant at the relevant target period throughput level. (Negative values imply consumption/emissions in the target period is less than the equivalent base year.)

| Annual Change in Relative Energy and CO <sub>2</sub> compared with Equivalent Baseline<br>Energy (PJ) CO <sub>2</sub> (kilotonnes) |   |   |  |  |  |  |  |
|--|---|---|--|--|--|--|--|
| TP1  | -0.2  |   | -8   |  |  |  |  |
|  | 0.2   |   | -0   |  |  |  |  |
| TP2  | -0.1  |   | -4   |  |  |  |  |
| NOTE: The equivalent baseline at each milestone may change as the sector population changes,                                       |   |   |  |  |  |  |  |
| so care should be taken in comparing the performance at different target periods.  |   |   |  |  |  |  |  |
| <b>A k a a k i t a</b>   |   |   |  |  |  |  |  |
|  | energy/CO <sub>2</sub>  |   |  |  |  |  |  |
| The followi  | ng table shows how t  | the absolute energy o   | consumption and $CO_2$   |  |  |  |  |
| emissions f  | for the sector have in  | nproved compared w  | ith the equivalent base year   |  |  |  |  |
|  | (1995) position for each target period. It also shows the percentage change in                                  |   |  |  |  |  |  |
|  |   |   |  |  |  |  |  |
| -  |   | -   |  |  |  |  |  |
| -  | t. (Negative values in  | -   |  |  |  |  |  |
| throughput   | t. (Negative values in  | nply a fall in consump  | otion/ emissions.)   |  |  |  |  |
| throughput   | t. (Negative values in<br>nual Change in Absolut  | nply a fall in consump  |  |  |  |  |  |
| throughput   | t. (Negative values in  | nply a fall in consump<br>e Energy and CO₂ com  | otion/ emissions.)   |  |  |  |  |
| throughput   | t. (Negative values in<br>nual Change in Absolut  | nply a fall in consump<br>e Energy and CO <sub>2</sub> comp<br>CO <sub>2</sub>                                  | otion/ emissions.)   |  |  |  |  |
| throughput<br>Anr  | t. (Negative values in<br>nual Change in Absolute<br>Energy (PJ)  | nply a fall in consump<br>e Energy and CO <sub>2</sub> comp<br>CO <sub>2</sub><br>(kilotonnes)                  | otion/ emissions.)<br>Dared with Equivalent Baseline<br>Production (%)                           |  |  |  |  |
| throughput<br>Anr<br>TP1<br>TP2  | t. (Negative values in<br>nual Change in Absolute<br>Energy (PJ)<br>-0.04<br>0.01                               | nply a fall in consump<br>e Energy and CO₂ comp<br>CO₂<br>(kilotonnes)<br>-1.8<br>0.3                           | otion/ emissions.)<br><b>Dared with Equivalent Baseline</b><br><b>Production (%)</b><br>37<br>33 |  |  |  |  |
| throughput<br>Anr<br>TP1<br>TP2<br>NOTE: The ed  | t. (Negative values in<br>nual Change in Absolute<br>Energy (PJ)<br>-0.04<br>0.01<br>quivalent baseline at each | e Energy and CO <sub>2</sub> comp<br>CO <sub>2</sub><br>(kilotonnes)<br>-1.8<br>0.3<br>n target period may chan | otion/ emissions.)<br>pared with Equivalent Baseline<br>Production (%)<br>37                     |  |  |  |  |

#### NATIONAL FARMERS UNION (NFU) – EGG PRODUCTION Scope and membership of the umbrella agreement

The NFU egg agreement covers sites undertaking the production of eggs from birds under cage, barn and free-range production systems. The agreement was developed with the close involvement of the British Egg Industry Council.

## Targets

The targets for this sector are given in primary kWh per dozen eggs ( $kWh_p/doz$ ). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data. (However, at TP1 only, the sector targets were not adjusted.)

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>doz) | TP1(2002)<br>(kWh <sub>p</sub> /<br>doz) | TP2(2004)<br>(kWh <sub>p</sub> /<br>doz) | TP3(2006)<br>(kWh <sub>p</sub> /<br>doz) | TP4(2008)<br>(kWh <sub>p</sub> /<br>doz) | TP5(2010)<br>(kWh <sub>p</sub> /<br>doz) |
|-----------------|---|--|--|--|--|--|
| Original        | 0.410                                   | 0.390                                    | 0.380                                    | 0.370                                    | 0.362                                    | 0.354                                    |
| At TP1          | 0.410                                   | 0.390                                    | 0.380                                    | 0.370                                    | 0.362                                    | 0.354                                    |
| 2004            | -                                       | -  | -  | TBA                                      | TBA                                      | TBA                                      |
| <b>Review</b> * |   |  |  |  |  |  |
| At TP2          | 0.480                                   | -  | 0.440                                    | TBA                                      | TBA                                      | TBA                                      |

\* The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

#### Additional adjustments to the sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- A total of 3 ktCO<sub>2</sub> from over-performances was ring-fenced.
- Allowances equivalent to 2 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net surplus of 1 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of -  $0.0075 \text{ kWh}_p/\text{doz}$ . (Note - figures rounded for presentation.)

## PMO

No product mix adjustments were carried out.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was  $0.433 \text{ kWh}_p/\text{doz}$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>15</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|      | Equivalent baseline (1999) |                     |                                    |                 | Performance         |                                    |  |
|------|----------------------------|---------------------|------------------------------------|-----------------|---------------------|------------------------------------|--|
|      | Energy (kWh)               | Production<br>(doz) | SEC<br>(kWh <sub>p</sub> /<br>doz) | Energy<br>(kWh) | Production<br>(doz) | SEC<br>(kWh <sub>p</sub> /<br>doz) |  |
| TP1* | 349,642,976                | 804,715,349         | 0.434                              | 293,815,082     | 873,972,712         | 0.336                              |  |
| TP2  | 296,220,626                | 617,543,595         | 0.480                              | 271,323,266     | 883,576,085         | 0.307                              |  |

\* This is the equivalent baseline for those target units that reported at TP1, although the sector target at TP1 was not adjusted for entrants and exits.

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

|     | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |  |
|-----|---|--------------------|--|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |  |
| TP1 | 4.9%  | 18%                |  |  |  |  |
| TP2 | 8.2%  | 36%                |  |  |  |  |

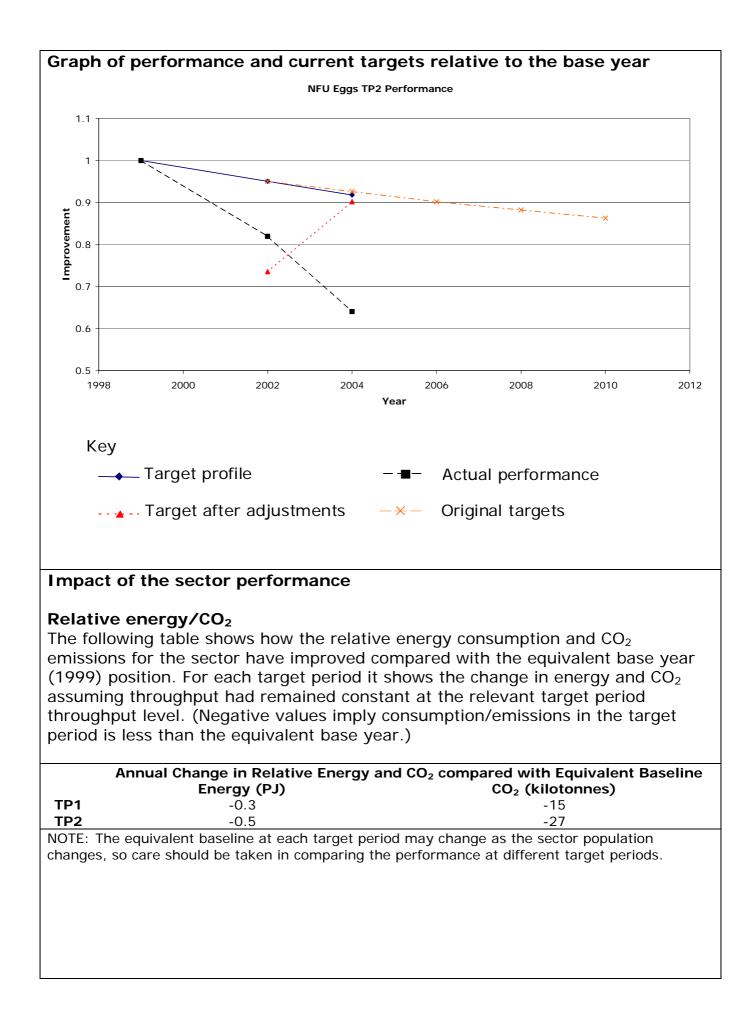
NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

\* The TP1 figures here are relative to the unchanged target and its baseline, rather than the baseline equivalent to those that reported.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified because the sector target has been met, as adjusted for trading.

<sup>&</sup>lt;sup>15</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/ emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline   |             |                 |                |  |  |  |  |
|--|-------------|-----------------|----------------|--|--|--|--|
|  | Energy (PJ) | CO <sub>2</sub> | Production (%) |  |  |  |  |
|  |             | (kilotonnes)    |                |  |  |  |  |
| TP1  | -0.2        | -10             | 8              |  |  |  |  |
| TP2  | -0.1        | -4              | 43             |  |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods. |             |                 |                |  |  |  |  |

# MINESCO (EURISOL) – MINERAL WOOL

## Scope and membership of the umbrella agreement

MINESCO (the Mineral wool Energy Savings Company) represents the mineral wool insulation manufacturers' trade association, Eurisol, for the CCL agreement. The member companies produce glass and mineral wool insulation material for building fabric, pipe insulation, specialist applications and high temperature industrial applications.

## Targets

The targets for this sector are given in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|-----------------|--|---|---|---|---|---|
| Original        | 5344                                   | 4874                                    | 4691                                    | 4610                                    | 4512                                    | 4485                                    |
| At TP1          | 5341                                   | 4954                                    | 4767                                    | 4682                                    | 4582                                    | 4551                                    |
| 2004<br>Review* |  |   |   | 0%                                      | 0%                                      | 1%                                      |
| At TP2          | 5347                                   | -                                       | 4773                                    | 4688                                    | 4587                                    | 4511                                    |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sector will be reviewed again in 2008.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sector were carried out by a target group comprising the entire sector:

- Allowances equivalent to 24 ktCO<sub>2</sub> were ring-fenced or traded.
- No allowances were purchased.

Overall, trading resulted in a net ring-fencing or trading of 24 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of -387 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

## PMO

Product mix adjustments at the sector level resulted in a sector target change (tightening) of  $-18 \text{ kWh}_p$ /te.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 4368  $kWh_p/te$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>16</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

| Equivalent baseline (1999) |                 |                    | Performance                   |                 |                    |                  |
|----------------------------|-----------------|--------------------|-------------------------------|-----------------|--------------------|------------------|
|                            | Energy<br>(kWh) | Production<br>(te) | SEC<br>(kWh <sub>p</sub> ∕te) | Energy<br>(kWh) | Production<br>(te) | SEC<br>(kWh₀∕te) |
| TP1                        | 1,209,693,772   | 226,492            | 5341                          | 1,167,690,221   | 240,205            | 4861             |
| TP2                        | 1,215,243,163   | 227,263            | 5347                          | 1,257,977,062   | 290,055            | 4337             |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

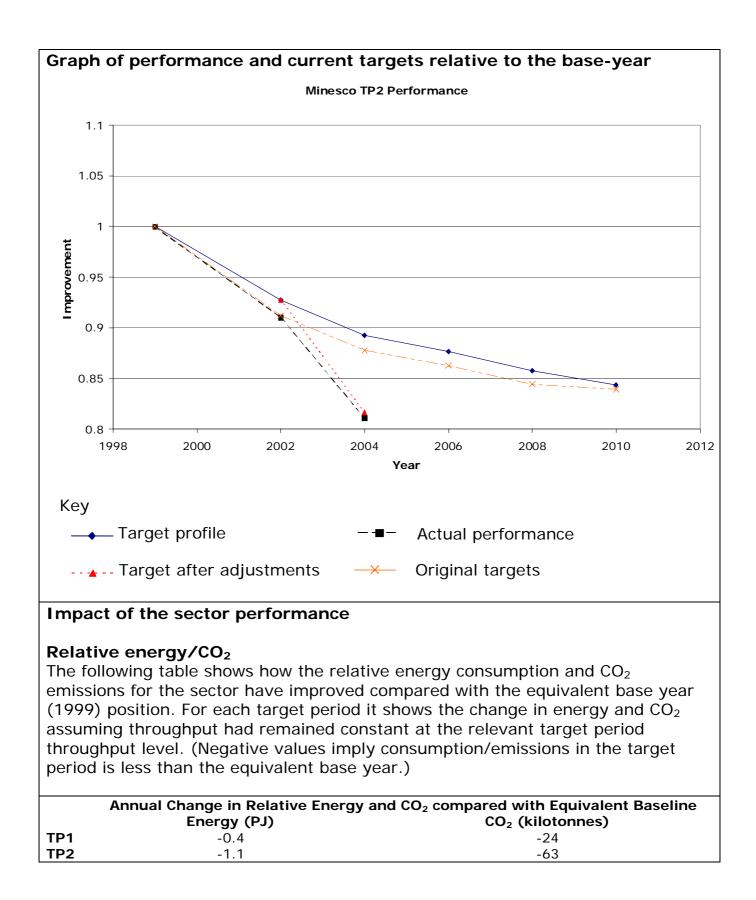
|     | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |  |
|-----|---|--------------------|--|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |  |
| TP1 | 7.3%  | 9.0%               |  |  |  |  |
| TP2 | 11%   | 19%                |  |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements reflected the impact of projected increases in throughput over the period of the agreement.

All the facilities have been re-certified because the sector target has been met, as adjusted for trading and sector level product mix.

<sup>&</sup>lt;sup>16</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline |                                 |                         |                                   |  |  |  |  |
|--|---------------------------------|-------------------------|-----------------------------------|--|--|--|--|
|  | Energy (PJ)                     | CO <sub>2</sub>         | Production (%)                    |  |  |  |  |
| (kilotonnes)   |                                 |                         |                                   |  |  |  |  |
| TP1  | -0.2                            | -9                      | 6                                 |  |  |  |  |
| TP2  | 0.2                             | 9                       | 28                                |  |  |  |  |
| NOTE:  | The equivalent baseline at eac  | n target period may cha | ange as the sector population     |  |  |  |  |
| change   | s, so care should be taken in c | omparing the performa   | ince at different target periods. |  |  |  |  |

# FDF – FOOD & DRINK

## Scope and membership of the umbrella agreement

The FDF agreement covers a substantial proportion of the UK food and drink manufacturing industry, though some specific sectors of the industry are covered by other agreements.

## Targets

The targets for this sector are given in primary kWh per tonne of throughput ( $kWh_p/te$ ). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1995 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kWh <sub>p</sub> /<br>Te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|----------------|--|---|---|---|---|---|
| Original       | 1043.7                                 | 962.7                                   | 942.8                                   | 922.9                                   | 911.6                                   | 899.6                                   |
| TP1            | 1046.5                                 | 959.3                                   | 935.0                                   | 915.0                                   | 903.3                                   | 890.9                                   |
| 2004           | -                                      | -                                       | -                                       | 2%                                      | 2.5%                                    | 3%                                      |
| <b>Review*</b> |  |   |   |   |   |   |
| TP2            | 1045.9                                 | -                                       | 945.3                                   | 910.1                                   | 895.2                                   | 875.8                                   |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- A total of 537 ktCO<sub>2</sub> from over-performances was ring-fenced.
- A total of 104 ktCO<sub>2</sub> from over-performances was sold.
- Allowances equivalent to 279 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net surplus of 362 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of - 53.6 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was  $892.3 \text{ kWh}_p$ /te.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>17</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalent baseline (1995) |                    |                                   | Performance    |                    |                                   |
|-----|----------------------------|--------------------|-----------------------------------|----------------|--------------------|-----------------------------------|
|     | Energy (kWh)               | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy (kWh)   | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP1 | 36,724,520,644             | 35,090,995         | 1046.6                            | 35,405,926,764 | 37,501,136         | 944.1                             |
| TP2 | 36,106,722,124             | 34,521,949         | 1045.9                            | 35,222,598,428 | 37,534,208         | 938.4                             |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1995) position at each target period.

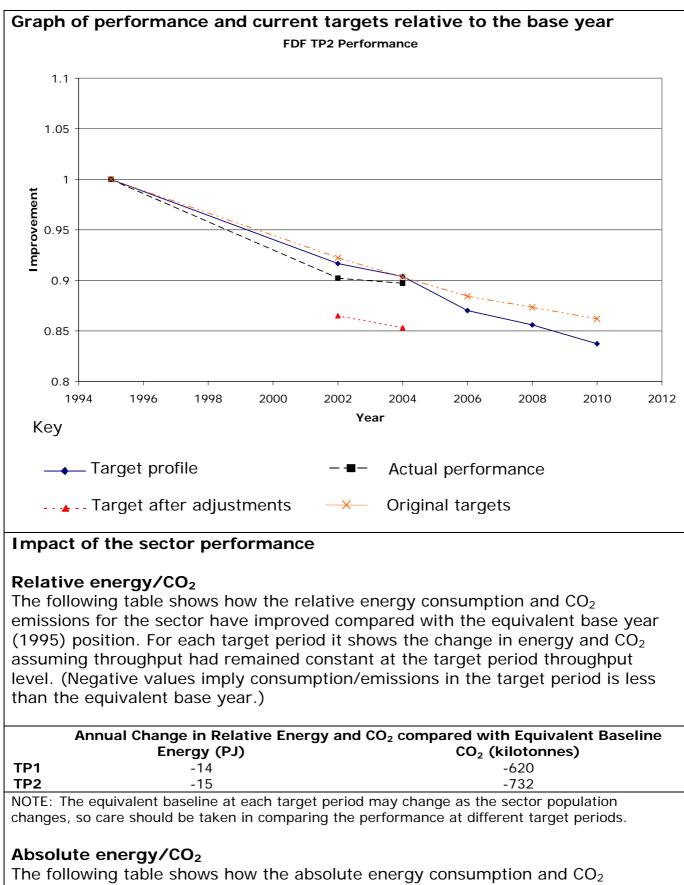
| C   | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |  |
|-----|---|--------------------|--|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |  |
| TP1 | 8.3%  | 9.8%               |  |  |  |  |
| TP2 | 9.6%  | 10.3%              |  |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

As the sector failed its overall target, facilities were tested at the sub-sector level. A number of sub-sectors also failed to meet their targets. Within these subsectors a number of facilities failed to meet their individual targets and have been de-certified. All the remaining facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix or through their sub-sector passing its target.

<sup>&</sup>lt;sup>17</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



The following table shows how the absolute energy consumption and  $CO_2$ emissions for the sector have improved compared with the equivalent base year (1995) position for each target period. It also shows the percentage change in

| through | put. (Negative values im                                       | ply a fall in consum           | ption/emissions.)              |
|---------|--|--------------------------------|--------------------------------|
|         | Annual Change in Absolute                                      | Energy and CO <sub>2</sub> com | pared with Equivalent Baseline |
|         | Energy (PJ)  | CO <sub>2</sub>                | Production (%)                 |
|         |  | (kilotonnes)                   |                                |
| TP1     | -4.7   | -160                           | 7                              |
| TP2     | -3.2   | -161                           | 9                              |
|         | e equivalent baseline at each<br>so care should be taken in co |                                |                                |

# TARGET 2010 – FOUNDRIES

## Scope and membership of the umbrella agreement

Target 2010 is a company set up by the foundries industry to represent them for the purposes of the CCL Agreement. The sector covers ferrous and non-ferrous foundries in the UK.

## Targets

The targets for this sector are given in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|-----------------|--|---|---|---|---|---|
| Original        | 6622                                   | 6566                                    | 6420                                    | 6259                                    | 6100                                    | 5941                                    |
| At TP1          | 6622                                   | 6507                                    | 6371                                    | 6229                                    | 6078                                    | 5901                                    |
| 2004<br>Review* | -                                      | -                                       | -                                       | 0%                                      | 0%                                      | 0%                                      |
| At TP2          | 6773                                   | -                                       | 6520                                    | 6372                                    | 6221                                    | 6043                                    |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

# Additional adjustments to the sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- Allowances equivalent to 86 ktCO<sub>2</sub> were ring-fenced or traded.
- Allowances equivalent to 62 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net ring-fencing or trading of 24  $ktCO_2$ , which is equivalent to a sector target change (tightening) of -120  $kWh_p$ /te. (Note - figures rounded for presentation.)

## PMO

Product mix adjustments were carried out purely at the target unit level.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 6399  $kWh_p/te$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>18</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

| Equivalent baseline (2000) |               |                    | Performance      |               |                    |                  |
|----------------------------|---------------|--------------------|------------------|---------------|--------------------|------------------|
|                            | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh₀∕te) | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh₀∕te) |
| TP1                        | 8,383,063,050 | 1,266,027          | 6622             | 7,676,413,049 | 1,171,224          | 6554             |
| TP2                        | 7,427,272,587 | 1,096,659          | 6773             | 6,836,488,394 | 1,014,934          | 6736             |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (2000) position at each target period.

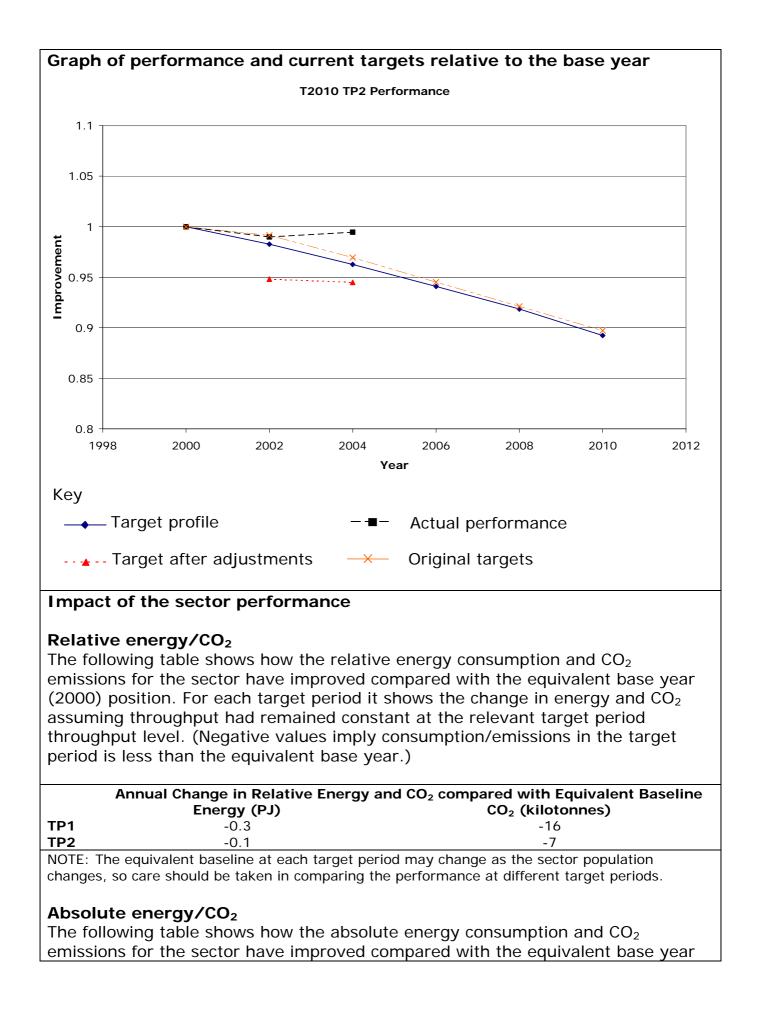
|  | Change in SEC compared with Equivalent Baseline at each Target Period |                    |
|--|---|--------------------|
|  | Target Improvement  | Actual Improvement |
| TP1  | 1.7%  | 1.0%               |
| TP2  | 3.7%  | 0.54%              |
| NOTE: Those figures are not directly comparable since the equivalent baseline chapters at each |   |                    |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>18</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



(2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

|     | Energy (PJ) | CO <sub>2</sub> | Production (%) |
|-----|-------------|-----------------|----------------|
|     |             | (kilotonnes)    |                |
| TP1 | -2.5        | -139            | -7             |
| TP2 | -2.1        | -114            | -7             |

# BRITISH GLASS

## Scope and membership of the umbrella agreement

British Glass represents the glass manufacturing industry in the UK, including all processes manufacturing molten glass from raw materials ('batch').

#### Targets

The targets for this sector are given in primary MWh per tonne of glass packed/processed ( $MWh_p$ /te packed). The targets have changed as a result of baseline corrections, entrants and exits and the result from the 2004 mandatory review of the agreements.

The following table shows the targets for this sector as originally agreed for the 1999 baseline and at each target period (TP) to date.

|          | Baseline<br>(MWh <sub>p</sub> /<br>te<br>packed) | TP1(2002)<br>(MWh <sub>p</sub> /<br>te packed) | TP2(2004)<br>(MWh <sub>p</sub> /<br>te packed) | TP3(2006)<br>(MWh <sub>p</sub> /<br>te packed) | TP4(2008)<br>(MWh <sub>p</sub> /<br>te packed) | TP5(2010)<br>(MWh <sub>p</sub> /<br>te packed) |
|----------|--|--|--|--|--|--|
| Original | 3.87   | 3.76   | 3.66   | 3.56   | 3.48   | 3.51   |
| At TP1   | 3.82   | 3.67   | 3.57   | 3.49   | 3.41   | 3.41   |
| 2004     | -  | -  | -  | 1.0%   | 2.0%   | 3.5%   |
| Review*  |  |  |  |  |  |  |
| At TP2   | 3.69   | -  | 3.48   | 3.38   | 3.26   | 3.22   |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and variations subsequent to the review.

It should be noted that the TP5 target will be reviewed again in 2008 in accordance with the provisions of the agreements.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading has resulted in a net selling/ring-fencing of approximately 108 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of - 0.18 MWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

# PMO

No product mix adjustments were carried out.

# Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was  $3.30 \text{ MWh}_p$ /te of glass packed.

The following table shows the sector performance against the equivalent<sup>19</sup> baseline for all the target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalent baseline (1999) |                    |                                   | Performance  |                    |                                   |
|-----|----------------------------|--------------------|-----------------------------------|--------------|--------------------|-----------------------------------|
|     | Energy (MWh)               | Production<br>(te) | SEC<br>(MWh <sub>p</sub> /<br>te) | Energy (MWh) | Production<br>(te) | SEC<br>(MWh <sub>p</sub> /<br>te) |
| TP1 | 10,791,920                 | 2,825,520          | 3.82                              | 10,584,079   | 3,122,034          | 3.39                              |
| TP2 | 10,201,009                 | 2,762,995          | 3.69                              | 10,460,729   | 3,195,070          | 3.27                              |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

|     | Change in SEC compared with Equivalent Baseline at each Target Period |   |  |  |  |
|-----|---|---|--|--|--|
|     | Target Improvement  | Actual Improvement                              |  |  |  |
| TP1 | 3.9%  | 11.3%   |  |  |  |
| TP2 | 5.7%  | 11.4%   |  |  |  |
|     | a fining and wat diverting any matching the                           | en an an Araban Arbana Bara abana an an an an b |  |  |  |

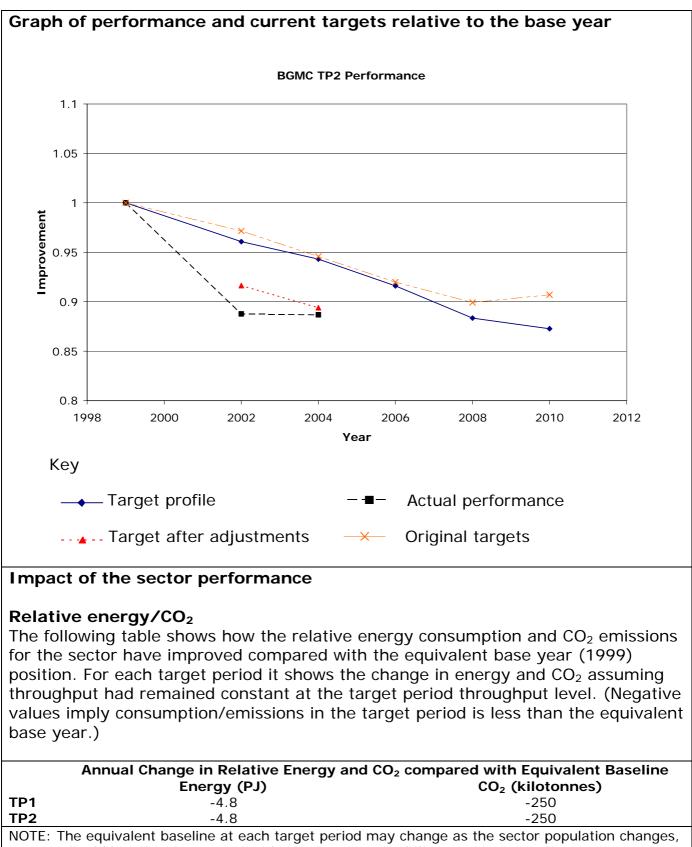
NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would increase by approximately 12% by 2010. In actuality relative to equivalent baseline throughput rose by ~10.5% by TP1 and ~15.6% by TP2, exceeding forecast sector growth.

However, mathematical effects associated with assessment procedures, agreed with government, resulted in the overall sector performance versus target (-6.0%) being much greater than the sum of the individual over and under performances at underlying agreement level.

All the facilities have been re-certified because the sector level target was met outright.

<sup>&</sup>lt;sup>19</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



so care should be taken in comparing the performance at different target periods.

# Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline           |                               |                          |                     |  |  |  |  |  |
|--|-------------------------------|--------------------------|---------------------|--|--|--|--|--|
|  | Energy (PJ)                   | CO <sub>2</sub>          | Production (%)      |  |  |  |  |  |
|  | (kilotonnes)                  |                          |                     |  |  |  |  |  |
| TP1  | -0.8                          | -39                      | 10                  |  |  |  |  |  |
| TP2  | 0.9                           | 49                       | 16                  |  |  |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population changes, |                               |                          |                     |  |  |  |  |  |
| so care sho  | ould be taken in comparing th | e performance at differe | ent target periods. |  |  |  |  |  |

# GPDA – Gypsum

# Scope and membership of the umbrella agreement

The GDPA represents the three major manufacturers of gypsum products in the UK, British Gypsum, Lafarge Plasterboard Ltd and Knauf.

## Targets

The targets for this sector are expressed as 'at an assumed level of throughput'. The sector association has agreed a procedure with Defra for this. Though the target appears to be an absolute one, it is in fact a relative target. Original and current target period targets for this sector are shown below in primary kWh (kWh<sub>p</sub>) and as percentage improvements relative to the base year. Target period target values have changed because of baseline corrections, but the percentage change is virtually identical.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(kWh <sub>p</sub> ) | TP1(2002)<br>(kWh <sub>p</sub> ) | TP2(2004)<br>(kWh <sub>p</sub> ) | TP3(2006)<br>(kWh <sub>p</sub> ) | TP4(2008)<br>(kWh <sub>p</sub> ) | TP5(2010)<br>(kWh <sub>p</sub> ) |
|----------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Original | 1,942,733,308                   | 1,921,418,337                    | 1,907,567,050                    | 1,883,290,011                    | 1,851,558,442                    | 1,826,834,050                    |
|          | -                               | 1.1%                             | 2.3%                             | 3.8%                             | 5.7%                             | 7.1%                             |
| At TP1   | 1,998,569,890                   | 1,976,700,401                    | 1,962,244,655                    | 1,937,132,444                    | 1,904,519,248                    | 1,878,921,483                    |
|          | -                               | 1.1%                             | 2.3%                             | 3.8%                             | 5.7%                             | 7.2%                             |
| 2004     | -                               | -                                | -                                | 0%                               | 0%                               | 1%                               |
| Review*  |                                 |                                  |                                  |                                  |                                  |                                  |
| At TP2   | 1,998,569,890                   | -                                | 1,962,244,655                    | 1,937,132,444                    | 1,904,519,248                    | 1,860,132,268                    |
|          | -                               | -                                | 2.3%                             | 3.8%                             | 5.7%                             | 8.1%                             |

\* The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means a relaxation of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sector will be reviewed again in 2008.

# Additional adjustments to the sector target for the second target period

# Carbon trading

The following trading and ring-fencing took place within the sector:

- One target unit purchased 13 ktCO<sub>2</sub>.
- No other trading occurred.

Overall, trading resulted in a net purchase of 13 ktCO<sub>2</sub>, which is equivalent to a sector target change (easing) of 71,232,650 kWh<sub>p</sub>. (Note - figures rounded for presentation.)

#### PMO

Product mix adjustments were carried out at both target unit and sector level. Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 2,290,795,311 kWh<sub>p</sub>.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>20</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalent baseline (2000) |                | Performance   |                |  |
|-----|----------------------------|----------------|---------------|----------------|--|
|     | KWhp                       | Production     | KWhp          | Production     |  |
| TP1 | 1,998,569,890              | Not applicable | 2,110,100,697 | Not applicable |  |
| TP2 | 1,998,569,890              | Not applicable | 2,266,915,806 | Not applicable |  |

#### Commentary

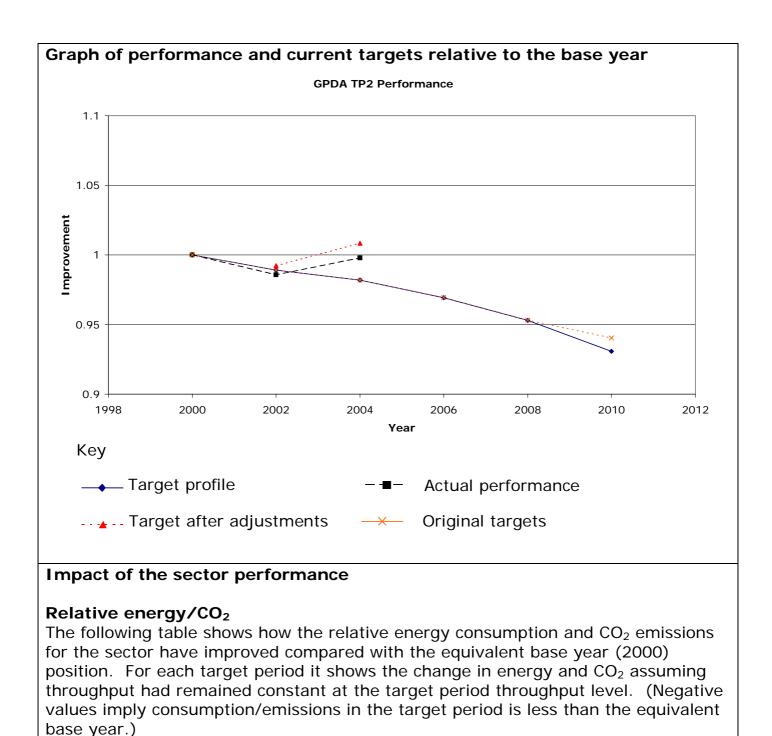
The following table shows how the sector has improved relative to the equivalent base year (2000) position at each target period.

| Change compared with Equivalent Baseline at each Target Period |                    |                    |  |  |  |
|--|--------------------|--------------------|--|--|--|
|  | Target Improvement | Actual Improvement |  |  |  |
| TP1  | 1.1%               | 1.4%               |  |  |  |
| TP2  | 1.8%               | 0.2%               |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>20</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



|     | Annual Change in Relative Energy ar | nd CO <sub>2</sub> compared with Equivalent Baseline |
|-----|-------------------------------------|--|
|     | Energy (PJ)                         | CO <sub>2</sub> (kilotonnes)                         |
| TP1 | -0.1                                | -6   |
| TP2 | -0.02                               | -1   |

NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

# Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline           |                               |   |                |  |  |  |  |  |
|--|-------------------------------|---|----------------|--|--|--|--|--|
|  | Energy (PJ)                   | CO <sub>2</sub>   | Production (%) |  |  |  |  |  |
|  |                               | (kilotonnes)  |                |  |  |  |  |  |
| TP1  | 0.4                           | 21  | Not relevant   |  |  |  |  |  |
| TP2  | 1.0                           | 50  | Not relevant   |  |  |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population changes, |                               |   |                |  |  |  |  |  |
| so care sh   | ould be taken in comparing th | so care should be taken in comparing the performance at different target periods. |                |  |  |  |  |  |

# BLC - LEATHER

# Scope and membership of the umbrella agreement

BLC represents the leather industry in the UK, carrying out various activities from tanning of hides to production of finished leather.

# Targets

The targets for this sector are given in primary kWh per  $m^2$  (kWh<sub>p</sub>/m<sup>2</sup>). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) | TP1(2002)<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) | TP2(2004)<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) | TP3(2006)<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) | TP4(2008)<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) | TP5(2010)<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) |
|----------------|---|--|--|--|--|--|
| Original       | 11.62   | 11.39  | 11.16  | 10.93  | 10.70  | 10.48  |
| At TP1         | 11.28   | 11.06  | 10.84  | 10.61  | 10.39  | 10.17  |
| 2004           |   |  |  | 0%   | 0%   | 10%  |
| <b>Review*</b> |   |  |  |  |  |  |
| At TP2         | 11.09   | -  | 10.63  | 10.41  | 10.18  | 8.96   |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sector will be reviewed again in 2008.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- No over-performance was ring-fenced or traded.
- Allowances equivalent to 438 tCO<sub>2</sub> were purchased.

Overall, trading resulted in a net purchase of 438 tCO<sub>2</sub>, which is equivalent to a sector target change (easing) of 0.143 kWh<sub>p</sub>/m<sup>2</sup>. (Note - figures rounded for presentation.)

# PMO

Product mix adjustments were carried out purely at the target unit level.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 10.77  $kWh_p/m^2$ .

#### **Sector Performance Recorded**

The following table shows the sector performance against the equivalent<sup>21</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

| Equivalent baseline (1999) |                 |                                 | Performance                   |                 |                                 |                               |
|----------------------------|-----------------|---------------------------------|-------------------------------|-----------------|---------------------------------|-------------------------------|
|                            | Energy<br>(kWh) | Production<br>(m <sup>2</sup> ) | SEC<br>(kWh <sub>p</sub> /m²) | Energy<br>(kWh) | Production<br>(m <sup>2</sup> ) | SEC<br>(kWh <sub>p</sub> /m²) |
| TP1                        | 218,266,128     | 19,349,834                      | 11.28                         | 187,029,418     | 17,897,552                      | 10.45                         |
| TP2                        | 217,735,493     | 19,627,339                      | 11.09                         | 186,850,211     | 16,868,029                      | 11.08                         |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

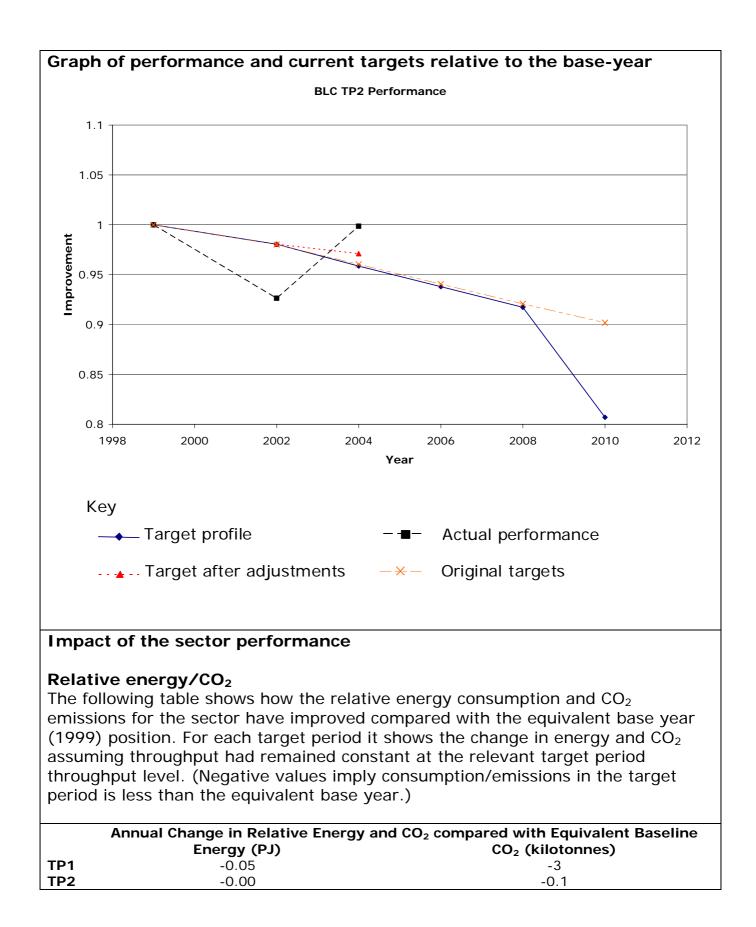
|     | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |  |
|-----|---|--------------------|--|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |  |
| TP1 | 2.0%  | 7.4%               |  |  |  |  |
| TP2 | 4.0%  | 0.15%              |  |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>21</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

# Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline  |                                 |                         |                                 |  |  |  |  |  |
|---|---------------------------------|-------------------------|---------------------------------|--|--|--|--|--|
| Energy (PJ) CO <sub>2</sub> Production (%)  |                                 |                         |                                 |  |  |  |  |  |
| (kilotonnes)  |                                 |                         |                                 |  |  |  |  |  |
| TP1   | -0.1                            | -6                      | -8                              |  |  |  |  |  |
| TP2   | -0.1                            | -6                      | -14                             |  |  |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population |                                 |                         |                                 |  |  |  |  |  |
| changes   | , so care should be taken in co | mparing the performance | ce at different target periods. |  |  |  |  |  |

# BRITISH LIME ASSOCIATION (BLA)

## Scope and membership of the umbrella agreement

The agreement embraces the vast majority of UK merchant lime production and some captive production. Lime production associated with certain other processes (mainly 'captive' lime production) is not included within this agreement.

## Targets

The targets for this sector are expressed in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the agreement changes owing to exits and entrants.

The following table shows the targets and equivalent 1998 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2 (2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|----------|--|---|--|---|---|---|
| Original | 1,018                                  | 956                                     | 952                                      | 949                                     | 940                                     | 938                                     |
| At TP1   | 1,042                                  | 976                                     | 970                                      | 964                                     | 952                                     | 949                                     |
| 2004     | -                                      | -                                       | -  | 0.0%                                    | -0.48%                                  | 1.0%                                    |
| Review*  |  |   |  |   |   |   |
| At TP2   | 1,054                                  | -                                       | 987                                      | 982                                     | 975                                     | 957                                     |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review. The TP5 target will be considered again at the formal 2008 Review.

# Additional adjustments to the second target period sector target

# Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

Over-performance equivalent to 81 ktCO<sub>2</sub> was ring-fenced. 1 ktCO<sub>2</sub> of allowances was purchased to offset under-performance.

Overall there was a net conversion to allowances/ring-fencing of 80 ktCO<sub>2</sub>, equivalent to a sector target change (tightening) of -74 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

# PMO

Product mix adjustments were carried out purely at the target unit level.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for 2004 was 913 kWh<sub>p</sub>/te.

The following table shows the sector performance against the equivalent<sup>22</sup> baseline for all target periods to date.

|     | Equivalent baseline (1998) |                    |                                   | Perf            |                    |                                   |
|-----|----------------------------|--------------------|-----------------------------------|-----------------|--------------------|-----------------------------------|
|     | Energy<br>(kWh)            | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy<br>(kWh) | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP1 | 3,223,208,000              | 3,093,645          | 1,042                             | 2,566,775,022   | 2,649,535          | 969                               |
| TP2 | 3,261,848,000              | 3,093,986          | 1,054                             | 2,774,600,000   | 2,966,092          | 935                               |

#### Commentary

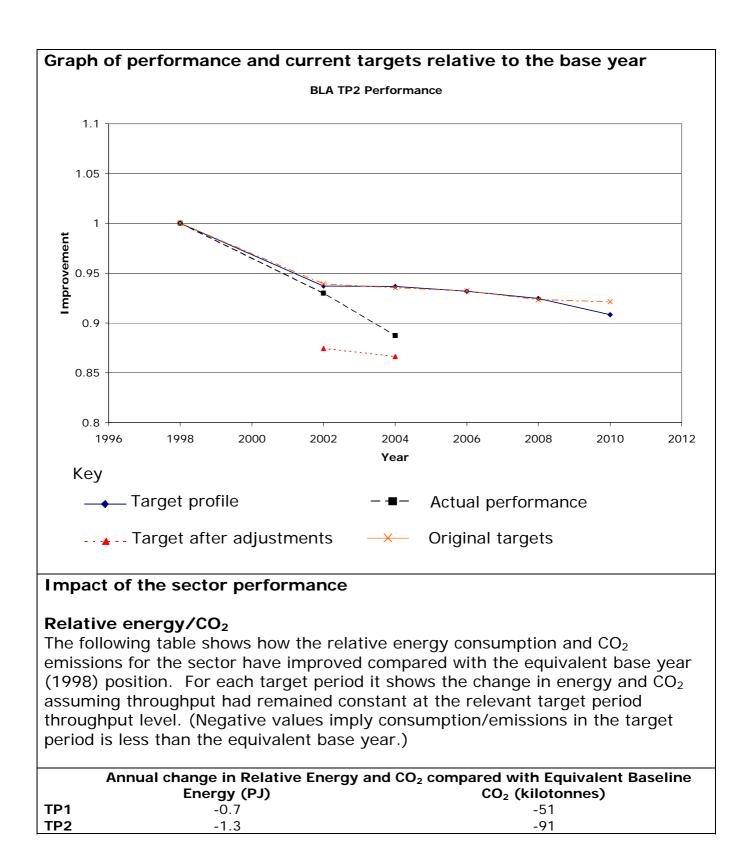
The following table shows how the sector has improved relative to the equivalent base year (1998) position at each target period.

| C   | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |
|-----|---|--------------------|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |
| TP1 | 6.3%  | 7.0%               |  |  |  |
| TP2 | 6.4%  | 11%                |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

All the facilities have been re-certified having met their individual targets either outright, or through trading or product mix adjustments.

<sup>&</sup>lt;sup>22</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

# Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1998) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline |                                 |                            |                                  |  |  |  |  |
|--|---------------------------------|----------------------------|----------------------------------|--|--|--|--|
|  | Energy (PJ)                     | CO <sub>2</sub>            | Production (%)                   |  |  |  |  |
| (kilotonnes)   |                                 |                            |                                  |  |  |  |  |
| TP1  | -2.4                            | -173                       | -14                              |  |  |  |  |
| TP2  | -1.8                            | -125                       | -4.1                             |  |  |  |  |
| NOTE: 1  | The equivalent baseline at eac  | h target period may cha    | ange as the sector population    |  |  |  |  |
| changes  | s, so care should be taken in c | comparing the performation | nce at different target periods. |  |  |  |  |

# MALTSTERS ASSOCIATION OF GREAT BRITAIN (MAGB)

Scope and membership of the umbrella agreement

The MAGB agreement covers the vast majority of the UK Malting industry.

## Targets

The targets for this sector are expressed in primary kWh per tonne of malt produced ( $kWh_p/te$ ). These targets change with time as the composition of the agreement changes, owing to exits and entrants.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(kWh <sub>p</sub> /te) | TP1(2002)<br>(kWh <sub>p</sub> /te) | TP2(2004)<br>(kWh <sub>p</sub> /te) | TP3(2006)<br>(kWh <sub>p</sub> /te) | TP4(2008)<br>(kWh <sub>p</sub> /te) | TP5(2010)<br>(kWh <sub>p</sub> /te) |
|----------|------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Original | 1,304.84                           | 1,283.30                            | 1,263.25                            | 1,243.20                            | 1,223.15                            | 1,203.10                            |
| At TP1   | 1,312.39                           | 1,290.74                            | 1,270.58                            | 1,250.42                            | 1,230.26                            | 1,210.11                            |
| 2004     | -                                  | -                                   | -                                   | 0.2%                                | 0.6%                                | 1.1%                                |
| Review*  |                                    |                                     |                                     |                                     |                                     |                                     |
| At TP2   | 1,313.32                           | -                                   | 1,271.44                            | 1,248.65                            | 1,223.24                            | 1,197.84                            |

\* The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets at for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

# Additional adjustments to the sector target for the second target period

# Carbon trading

The sector operates a collective trading arrangement, which at this target period encompassed all target units within the sector.

Over-performance equivalent to 23 ktCO<sub>2</sub> has been converted to allowances. This is equivalent to a sector target change (tightening) of -75.27 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

# PMO

No product mix adjustments were carried out.

# Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 1,196.17  $kWh_p/te$ .

The following table shows the sector performance against the equivalent<sup>23</sup> baseline for all target periods to date.

|     | Equival         | Equivalent baseline (1999) |                                   |                 | Performance        |                                   |  |
|-----|-----------------|----------------------------|-----------------------------------|-----------------|--------------------|-----------------------------------|--|
|     | Energy<br>(kWh) | Production<br>(te)         | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy<br>(kWh) | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |  |
| TP1 | 1,965,367,485   | 1,497,544                  | 1,312.39                          | 1,926,046,075   | 1,557,911          | 1,236.30                          |  |
| TP2 | 1,954,393,095   | 1,488,127                  | 1,313.32                          | 1,956,790,709   | 1,635,882          | 1,196.17                          |  |

#### Commentary

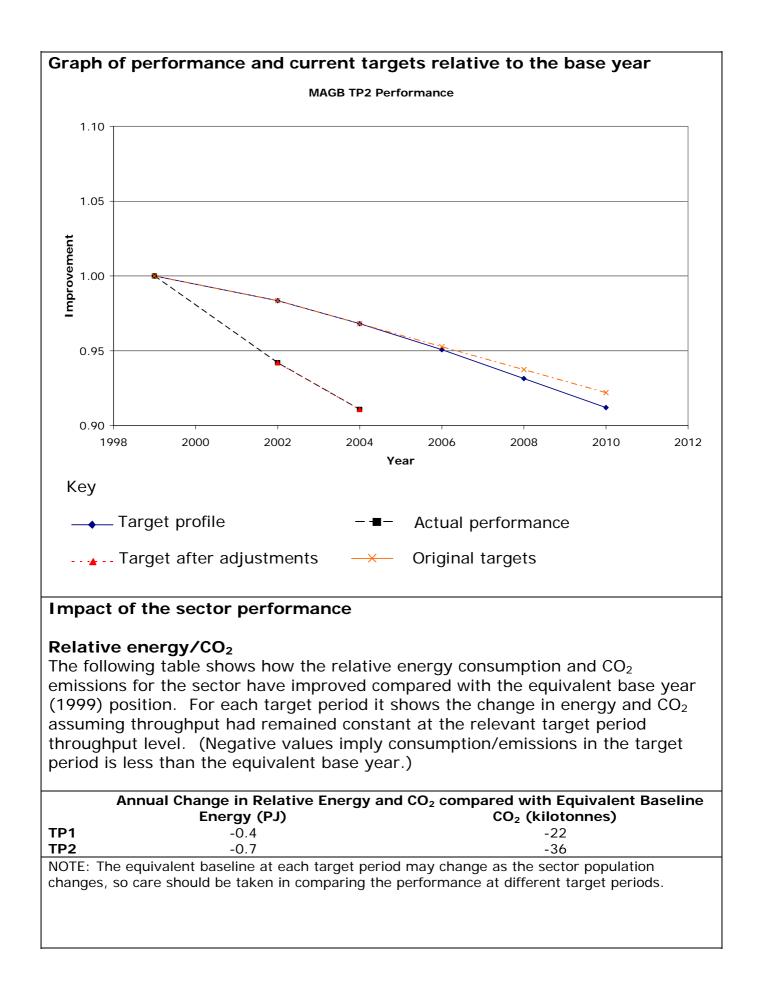
The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

|     | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |
|-----|---|--------------------|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |
| TP1 | 1.7%  | 5.8%               |  |  |  |
| TP2 | 3.2%  | 8.9%               |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

All the facilities have been re-certified as a consequence of the sector meeting its adjusted target.

<sup>&</sup>lt;sup>23</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline   |  |     |    |  |  |  |  |  |
|--|--|-----|----|--|--|--|--|--|
|  | Energy (PJ) CO <sub>2</sub> Production (%) |     |    |  |  |  |  |  |
| (kilotonnes)   |  |     |    |  |  |  |  |  |
| TP1  | -0.1                                       | -7  | 4  |  |  |  |  |  |
| TP2  | 0.01                                       | 0.5 | 10 |  |  |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods. |  |     |    |  |  |  |  |  |

## BRITISH POULTRY COUNCIL – POULTRY MEAT PROCESSING Scope and membership of the umbrella agreement

The British Poultry Council poultry meat processing agreement principally covers slaughter/meat processing plants, but also a small number of feed mills that are dedicated to serving farms within companies' integrated production structures.

# Targets

The targets for this sector are given in primary kWh per tonne of production  $(kWh_p/te)$ . These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|----------------|--|---|---|---|---|---|
| Original       | 743.3                                  | 689.7                                   | 680.1                                   | 670.5                                   | 661.0                                   | 651.5                                   |
| At TP1         | 694.3                                  | 649.8                                   | 640.6                                   | 631.5                                   | 622.6                                   | 613.6                                   |
| 2004           | -                                      | -                                       | -                                       | TBA                                     | TBA                                     | TBA                                     |
| <b>Review*</b> |  |   |   |   |   |   |
| At TP2         | 665.1                                  | -                                       | 611.6                                   | TBA                                     | TBA                                     | TBA                                     |

\* The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

# Additional adjustments to the second target period sector target

# **Carbon trading**

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- Over-performance equivalent to 53 ktCO<sub>2</sub> was converted to allowances or ring-fenced.
- 14 ktCO<sub>2</sub> of allowances were purchased to offset under-performance.

Overall, trading resulted in a net surplus of 39 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of -65.9 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

# PMO

No product mix adjustments were carried out.

# Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was  $545.7 \text{ kWh}_p/\text{te}$ .

The following table shows the sector performance against the equivalent<sup>24</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

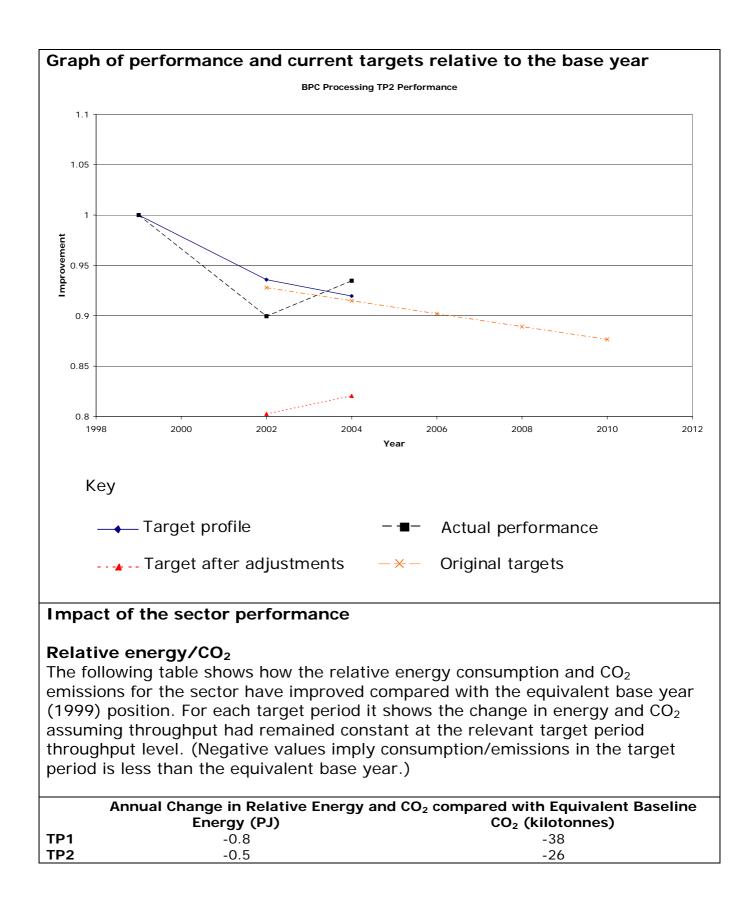
|     | Equivalent baseline (1999) |                    |                                   | Performance   |                    |                                   |
|-----|----------------------------|--------------------|-----------------------------------|---------------|--------------------|-----------------------------------|
|     | Energy<br>(kWh)            | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP1 | 1,972,981,832              | 2,841,829          | 694.3                             | 2,110,390,477 | 3,379,220          | 624.5                             |
| TP2 | 1,810,054,398              | 2,721,589          | 665.1                             | 2,029,881,235 | 3,265,232          | 621.7                             |

## Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

| Change in SEC compared with Equivalent Baseline at each Target Period  |  |   |  |  |  |
|--|--|---|--|--|--|
|  | Target Improvement   | Actual Improvement                        |  |  |  |
| TP1  | 6.4%   | 10%                                       |  |  |  |
| TP2  | 8.0%   | 6.5%                                      |  |  |  |
|  | gures are not directly comparable sinc<br>e sector population changes. | e the equivalent baseline changes at each |  |  |  |
| Most facilities have been re-certified having met their individual targets either outright, or through trading or product mix adjustments. |  |   |  |  |  |

<sup>&</sup>lt;sup>24</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

# Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions).

| Annual Change_in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline |                             |                        |                             |  |  |
|--|-----------------------------|------------------------|-----------------------------|--|--|
|  | Energy (PJ)                 | CO <sub>2</sub>        | Production (%)              |  |  |
| (kilotonnes)   |                             |                        |                             |  |  |
| TP1  | 0.5                         | 30                     | 19                          |  |  |
| TP2  | 0.8                         | 40                     | 20                          |  |  |
| NOTE: The e  | equivalent baseline at each | target period may char | ge as the sector population |  |  |

# BMPA (FORMERLY BMF) – RED MEAT

## Scope and membership of the umbrella agreement

The BMPA agreement covers abattoirs and primary processing for the red meat sector.

## Targets

The targets for this sector are given in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1995 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|----------------|--|---|---|---|---|---|
| Original       | 648.6                                  | 607.3                                   | 587.6                                   | 571.5                                   | 563.3                                   | 554.9                                   |
| At TP1         | 679.5                                  | 636.0                                   | 614.6                                   | 597.1                                   | 588.2                                   | 579.1                                   |
| 2004           | -                                      | -                                       | -                                       | 0%                                      | 0%                                      | 0%                                      |
| <b>Review*</b> |  |   |   |   |   |   |
| At TP2         | 739.4                                  | 644.2                                   | 674.4                                   | 654.9                                   | 644.8                                   | 634.7                                   |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In the case of this sector it was agreed that there should be no change to the targets. The targets for TP3, TP4 and TP5 (at TP2) take account of any entrants, exits and corrections.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- A total of 49 ktCO<sub>2</sub> over-performance was ring-fenced.
- A total of 37 ktCO<sub>2</sub> was sold.
- Allowances equivalent to 21 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net ring-fencing and selling of 66 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of -144.1 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

# PMO

No product mix adjustments were carried out.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 530.3 kWh<sub>p</sub>/te.

The following table shows the sector performance against the equivalent<sup>25</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivale      | nt baseline (19    | 995)                              | Pe            | erformance         |                                   |
|-----|---------------|--------------------|-----------------------------------|---------------|--------------------|-----------------------------------|
|     | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP1 | 1,603,882,570 | 2,360,475          | 679.5                             | 1,528,147,898 | 2,242,045          | 681.6                             |
| TP2 | 1,814,611,237 | 2,454,888          | 739.2                             | 1,904,325,410 | 2,588,094          | 735.8                             |

## Commentary

The following table shows how the sector has improved relative to the equivalent base year (1995) position at each target period.

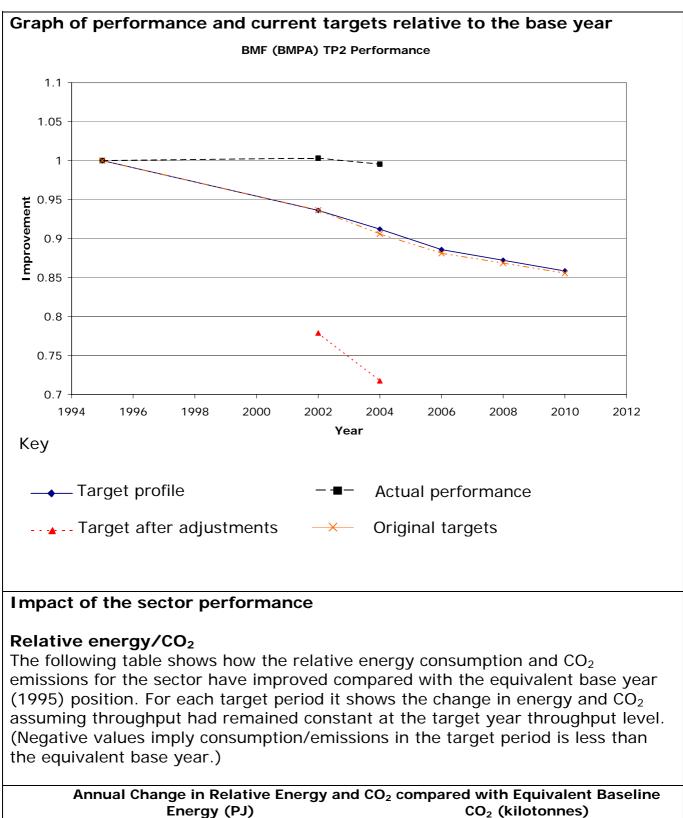
| Change in SEC compared with Equivalent Baseline at each Target Period |      |       |  |  |
|---|------|-------|--|--|
| Target Improvement Actual Improvement                                 |      |       |  |  |
| TP1   | 6.4% | -0.3% |  |  |
| TP2   | 8.8% | 0.5%  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>25</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



|     | Energy (PJ) | CO <sub>2</sub> (kilotonnes) |
|-----|-------------|------------------------------|
| TP1 | 0.02        | -12                          |
| TP2 | -0.03       | -2                           |

NOTE: The equivalent baseline for each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1995) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/ emissions.)

|     |      |              | Production (%) |  |  |  |  |
|-----|------|--------------|----------------|--|--|--|--|
|     |      | (kilotonnes) |                |  |  |  |  |
| TP1 | -0.3 | -27          | -5             |  |  |  |  |
| TP2 | 0.3  | 16           | 5              |  |  |  |  |

# **CBM - CONFEDERATION OF BRITISH METALFORMING**

## Scope and membership of the umbrella agreement

CBM represents the forging and metal forming industry in the UK. Members of the industry produce a wide range of products, chiefly for the automotive and aerospace industries.

## Targets

The targets for this sector are given in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|-----------------|--|---|---|---|---|---|
| Original        | 12,537                                 | 12,361                                  | 12,186                                  | 12,010                                  | 11,835                                  | 11,659                                  |
| At TP1          | 2,757                                  | 2,719                                   | 2,680                                   | 2,642                                   | 2,603                                   | 2,564                                   |
| 2004<br>Review* |  | -                                       | -                                       | TBA                                     | TBA                                     | TBA                                     |
| At TP2          | 2,691                                  | -                                       | 2,616                                   | TBA                                     | TBA                                     | TBA                                     |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- Allowances equivalent to 174 ktCO<sub>2</sub> were ring-fenced or traded.
- Allowances equivalent to 10 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net ring-fencing or trading of 164 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of  $-853 \text{ kWh}_p/\text{te}$ . (Note - figures rounded for presentation.)

# PMO

Product mix adjustments were carried out purely at the target unit level.

# Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 1,763  $kWh_p/te.$ 

The following table shows the sector performance against the equivalent<sup>26</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalent baseline (2000) |                    |                                   | Performance   |                    |                                   |
|-----|----------------------------|--------------------|-----------------------------------|---------------|--------------------|-----------------------------------|
|     | Energy (kWh)               | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP1 | 2,486,933,514              | 901,903            | 2,757                             | 2,351,370,405 | 947,977            | 2,480                             |
| TP2 | 2,543,308,537              | 945,225            | 2,691                             | 2,396,000,688 | 1,083,432          | 2,211                             |

## Commentary

The following table shows how the sector has improved relative to the equivalent base year (2000) position at each target period.

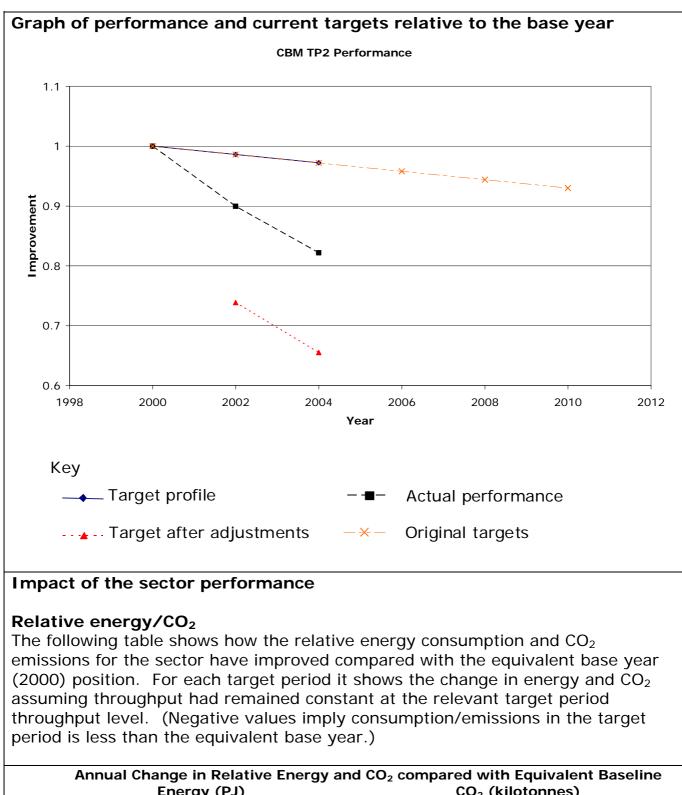
|     | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |
|-----|---|--------------------|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |
| TP1 | 1.4%  | 10%                |  |  |  |
| TP2 | 2.8%  | 18%                |  |  |  |
|     | 2.8%  | 10,10              |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement. There have been changes in production since 2002, which have led to a fall in the sector target SEC in 2004. This is the result of increased throughput since the base year and adjustments for entrants and exits since TP1, equivalent to a decrease in the sector target of 9,569.77 kWh<sub>p</sub>/te.

All the facilities have been re-certified either because they have met their individual targets outright, or through trading and/or product mix algorithms.

<sup>&</sup>lt;sup>26</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



|     | Energy (PJ) | CO <sub>2</sub> (kilotonnes) |
|-----|-------------|------------------------------|
| TP1 | -0.9        | -46                          |
| TP2 | -1.9        | -92                          |

NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

# Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/ emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline   |  |     |    |  |  |
|--|--|-----|----|--|--|
|  | Energy (PJ) CO <sub>2</sub> Production (%) |     |    |  |  |
| (kilotonnes)   |  |     |    |  |  |
| TP1  | -0.5                                       | -23 | 5  |  |  |
| TP2  | -0.5                                       | -26 | 15 |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods. |  |     |    |  |  |

# MPMA – Metal Packaging

## Scope and membership of the umbrella agreement

MPMA represents the manufacturers of various metal packing products in the UK, including beverage and food cans and closures (e.g. bottle tops).

## Targets

The sector target is expressed in terms of kgC, at a particular level of production. This target assumes no growth in production and static product mix. These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(kgC) | TP1(2002)<br>(kgC) | TP2(2004)<br>(kgC) | TP3(2006)<br>(kgC) | TP4(2008)<br>(kgC) | TP5(2010)<br>(kgC) |
|----------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Original | 82,838,675        | 79,525,128         | 78,282,548         | 77,039,968         | 76,211,581         | 75,383,194         |
| At TP1   | 80,303,988        | 77,091,828         | 75,887,268         | 74,682,709         | 73,879,669         | 73,076,629         |
| 2004     |                   |                    |                    | 1%                 | 1%                 | 2%                 |
| Review*  |                   |                    |                    |                    |                    |                    |
| At TP2   | 78,780,759        | -                  | 74,575,260         | 72,533,445         | 71,753,515         | 70,256,681         |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit (TU) level:

- Overall 25 ktCO<sub>2</sub> was ringfenced.
- Allowances equivalent 1 ktCO<sub>2</sub> were purchased.

The combined effect of ringfencing and purchasing was equivalent to an overall sector target change (tightening) of -6,340,754 kgC. (Note - figures rounded for presentation.)

# PMO

Product mix adjustments were carried out at both target unit and sector level. The sector PMO was equivalent to an easing of 4,465,432 kgC.

# Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 72,699,938 kgC.

The following table shows the sector performance against the equivalent<sup>27</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

| Equivalent baseline (1999) |            |                |          | Performance |                |          |
|----------------------------|------------|----------------|----------|-------------|----------------|----------|
|                            | Carbon     | Production     | SCC      | Carbon      | Production     | SCC      |
|                            | (kg)       | (kg)           | (kgC/kg) | (kg)        | (kg)           | (kgC/kg) |
| TP1                        | 80,303,988 | 28,943,205,391 | 0.00277  | 75,296,282  | 29,837,802,567 | 0.00252  |
| TP2                        | 78,780,759 | 25,225,035,496 | 0.00312  | 73,102,420  | 27,154,323,918 | 0.00269  |

#### Commentary

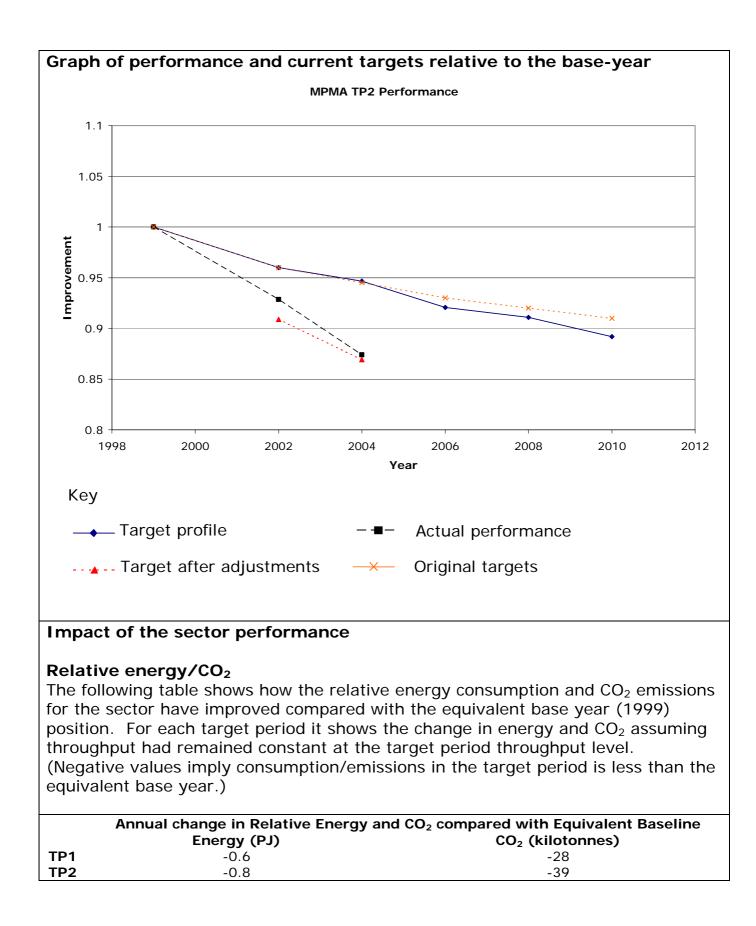
The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

|   | Change in carbon emitted compared with Equivalent Baseline at each Target Period |                    |  |  |  |
|---|--|--------------------|--|--|--|
|   | Target Improvement   | Actual Improvement |  |  |  |
| TP1   | 4.0%   | 6%                 |  |  |  |
| TP2   | 5.3%   | 13%                |  |  |  |
| NOTE: These figures are not directly comparable since the equivalent baseline changes at each |  |                    |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

All the facilities have been re-certified either because they have met their individual targets outright or passed by trading. One TU also employed a PMO.

<sup>&</sup>lt;sup>27</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



### Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

|      |              | CO <sub>2</sub> | Production (%) |  |  |  |  |
|------|--------------|-----------------|----------------|--|--|--|--|
|      | (kilotonnes) |                 |                |  |  |  |  |
| TP1  | -0.4         | -18             | 3              |  |  |  |  |
| TP 2 | -0.4         | -21             | 8              |  |  |  |  |

#### SMMT - SOCIETY OF MOTOR MANUFACTURERS AND TRADERS Scope and membership of the umbrella agreement

SMMT represents the major motor manufacturing companies in the UK, including manufacturers of cars and heavy goods vehicles.

### Targets

The targets for this sector are given in primary kWh per vehicle ( $kWh_p$ /veh). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1995 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>veh) | TP1(2002)<br>(kWh <sub>p</sub> /<br>veh) | TP2(2004)<br>(kWh <sub>p</sub> /<br>veh) | TP3(2006)<br>(kWh <sub>p</sub> /<br>veh) | TP4(2008)<br>(kWh <sub>p</sub> /<br>veh) | TP5(2010)<br>(kWh <sub>p</sub> /<br>veh) |
|-----------------|---|--|--|--|--|--|
| Original        | 3298                                    | 3036                                     | 2962                                     | 2881                                     | 2839                                     | 2792                                     |
| At TP1          | 3403                                    | 3147                                     | 3069                                     | 2980                                     | 2930                                     | 2876                                     |
| 2004<br>Review* | -                                       | -  | -  | 3%                                       | 3%                                       | 4%                                       |
| At TP2          | 3873                                    | -  | 3569                                     | 3372                                     | 3316                                     | 3225                                     |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sector will be reviewed again in 2008.

## Additional adjustments to the sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- Allowances equivalent to 324 ktCO<sub>2</sub> were ring-fenced.
- Allowances equivalent to 15 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net ring-fencing of  $309 \text{ ktCO}_2$ , which is equivalent to a sector target change (tightening) of -906 kWh<sub>p</sub>/vehicle. (Note - figures rounded for presentation.)

## PMO

Product mix adjustments were carried out purely at the target unit level.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 2662 kWh<sub>p</sub>/vehicle.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>28</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalen     | t baseline (19        | F                                  | Performance   |                          |                                    |
|-----|---------------|-----------------------|------------------------------------|---------------|--------------------------|------------------------------------|
|     | Energy (kWh)  | Production (vehicles) | SEC<br>(kWh <sub>p</sub> /<br>veh) | Energy (kWh)  | Production<br>(vehicles) | SEC<br>(kWh <sub>p</sub> /<br>veh) |
| TP1 | 4,994,721,611 | 1,467,581             | 3403                               | 4,799,434,116 | 1,708,788                | 2809                               |
| TP2 | 5,128,820,799 | 1,324,202             | 3873                               | 5,069,356,816 | 1,875,030                | 2704                               |

### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1995) position at each target period.

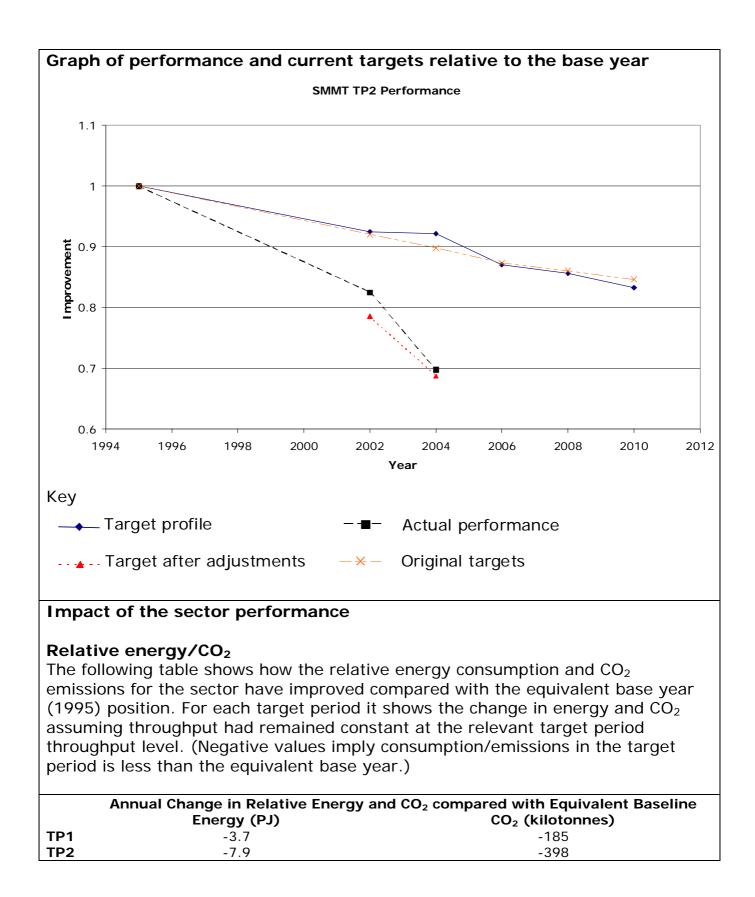
| (   | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |
|-----|---|--------------------|--|--|--|
|     | Target Improvement  | Actual Improvement |  |  |  |
| TP1 | 7.5%  | 17%                |  |  |  |
| TP2 | 7.9%  | 30%                |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>28</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



# Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared to the equivalent base year (1995) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions).

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline  |                                  |                         |                                |  |  |  |
|---|----------------------------------|-------------------------|--------------------------------|--|--|--|
|   | Energy (PJ)                      | CO <sub>2</sub>         | Production (%)                 |  |  |  |
| (kilotonnes)  |                                  |                         |                                |  |  |  |
| TP1   | -0.7                             | -36                     | 16                             |  |  |  |
| TP2   | -0.2                             | -11                     | 42                             |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population |                                  |                         |                                |  |  |  |
| changes   | s, so care should be taken in co | mparing the performance | e at different target periods. |  |  |  |

#### NATIONAL FARMERS UNION (NFU) – THE PIG INDUSTRY Scope and membership of the umbrella agreement

The NFU pigs agreement covers sites undertaking the intensive rearing of pigs.

#### Targets

The targets for this sector are given in primary kWh per kilogram of live weight (kWh<sub>p</sub>/kg). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data. (However, at TP1 only, the sector targets were not adjusted.)

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(kWh <sub>p</sub> /<br>kg) | TP1(2002)<br>(kWh <sub>p</sub> /<br>kg) | TP2(2004)<br>(kWh <sub>p</sub> /<br>kg) | TP3(2006)<br>(kWh <sub>p</sub> /<br>kg) | TP4(2008)<br>(kWh <sub>p</sub> /<br>kg) | TP5(2010)<br>(kWh <sub>p</sub> /<br>kg) |
|----------|--|---|---|---|---|---|
| Original | 1.178                                  | 1.104                                   | 1.058                                   | 1.035                                   | 1.001                                   | 0.966                                   |
| At MS1   | 1.178                                  | 1.104                                   | 1.058                                   | 1.035                                   | 1.001                                   | 0.966                                   |
| 2004     | -                                      | -                                       | -                                       | TBA                                     | TBA                                     | TBA                                     |
| Review*  |  |   |   |   |   |   |
| At MS2   | 1.281                                  | -                                       | 1.131                                   | TBA                                     | TBA                                     | TBA                                     |

\* The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

### Additional adjustments to the sector target for the second target period

### **Carbon trading**

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- No over-performance was ring-fenced or traded.
- Allowances equivalent to 2 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net purchase of 2  $ktCO_2$ , which is equivalent to a sector target change (easing) of 0.042  $kWh_p/kg$ . (Note - figures rounded for presentation.)

#### PMO

No product mix adjustments were carried out.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was  $1.174 \text{ kWh}_p/\text{kg}$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>29</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|        | Equiv             | alent baseline     |                               | Performance     |                    |                               |
|--------|-------------------|--------------------|-------------------------------|-----------------|--------------------|-------------------------------|
|        | Energy<br>(kWh)   | Production<br>(kg) | SEC<br>(kWh <sub>p</sub> /kg) | Energy<br>(kWh) | Production<br>(kg) | SEC<br>(kWh <sub>p</sub> /kg) |
| TP1*   | 449,754,685       | 366,745,044        | 1.226                         | 374,326,219     | 353,132,242        | 1.060                         |
| TP2    | 343,374,784       | 267,975,253        | 1.281                         | 271,263,380     | 270,487,096        | 1.003                         |
| * This | is the equivalent | t haseline for tho | se target units t             | hat reported at | TP1 although th    | e sector                      |

\* This is the equivalent baseline for those target units that reported at TP1, although the sector target at TP1 was not adjusted for entrants and exits.

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

|      | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |  |  |
|------|---|--------------------|--|--|--|
|      | Target Improvement  | Actual Improvement |  |  |  |
| TP1* | 6.3%  | 10%                |  |  |  |
| TP2  | 12%   | 22%                |  |  |  |
|      |   |                    |  |  |  |

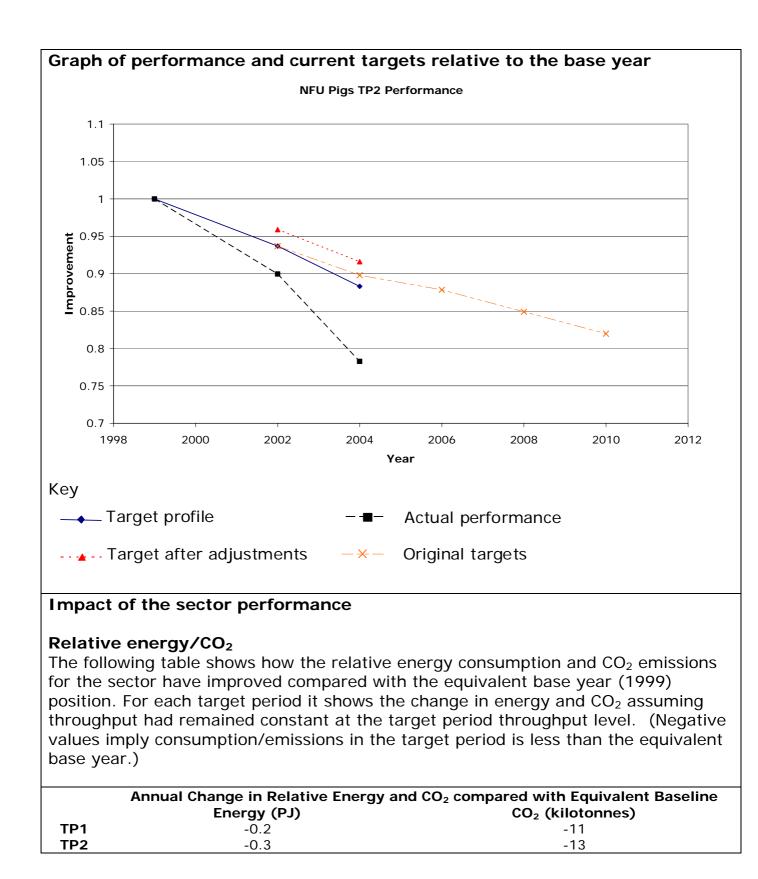
NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

\* The TP1 figures here are relative to the unchanged target and its baseline, rather than the baseline equivalent to those that reported.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified because the sector target has been met, as adjusted for trading.

<sup>&</sup>lt;sup>29</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



### Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

|  |   | (kilotonnes) |      |  |  |
|--|---|--------------|------|--|--|
|  |   |              |      |  |  |
| <b>TP1</b> -0.3  | 3 | -14          | -4%  |  |  |
| <b>TP2</b> -0.3  | 3 | -13          | 0.9% |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population changes, |   |              |      |  |  |

# NFA – NON-FERROUS METALS

## Scope and membership of the umbrella agreement

NFA represents the non-ferrous metals sector – copper, zinc, lead, nickel and in addition, galvanisers and battery manufacturers. Aluminium is the subject of a separate agreement.

# Targets

Original and current milestone targets for this sector are shown below as primary  $kWh (kWh_p)$ . The targets for this sector are expressed as 'at an assumed level of throughput' and the sector has agreed a procedure with Defra for this. Milestone targets have changed because of baseline corrections, entrants, exits and non-respondents. The improvement built into the targets is based on the target year performance at the predicted level of throughput for the target period, compared with the base year performance at that same predicted level of throughput.

The following table shows the targets and equivalent 1998 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(kWh <sub>p</sub> ) | TP1(2002)<br>(kWh <sub>p</sub> ) | TP2(2004)<br>(kWh <sub>p</sub> ) | TP3(2006)<br>(kWh <sub>p</sub> ) | TP4(2008)<br>(kWh <sub>p</sub> ) | TP5(2010)<br>(kWh <sub>p</sub> ) |
|----------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Original | 5,176,838,835                   | 5,568,437,819                    | 5,939,713,376                    | 5,976,922,362                    | 5,716,221,438                    | 5,776,580,063                    |
| At TP1   | 5,986,760,187                   | 6,345,235,016                    | 6,705,213,171                    | 6,722,001,578                    | 6,437,918,013                    | 6,470,971,972                    |
| 2004     | -                               | -                                | -                                | TBA                              | TBA                              | TBA                              |
| Review*  |                                 |                                  |                                  |                                  |                                  |                                  |
| At TP2   | 4,410,409,782                   | -                                | 4,757,303,923                    | TBA                              | TBA                              | TBA                              |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

# Additional adjustments to the sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit (TU) level:

- A total of 108 ktCO<sub>2</sub> from over-performances was ring-fenced.
- Allowances equivalent to 8 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net surplus of 100 ktCO<sub>2</sub>, which is equivalent to a sector target tightening of -496,884,029 kWh<sub>p</sub>. (Note - figures rounded for presentation.)

# PMO

A number of product mix adjustments were carried out at the TU level and the Novem method was used to adjust the overall sector target for throughput.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 3,971,606,174 kWh<sub>p</sub>.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>30</sup> baseline for all the target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

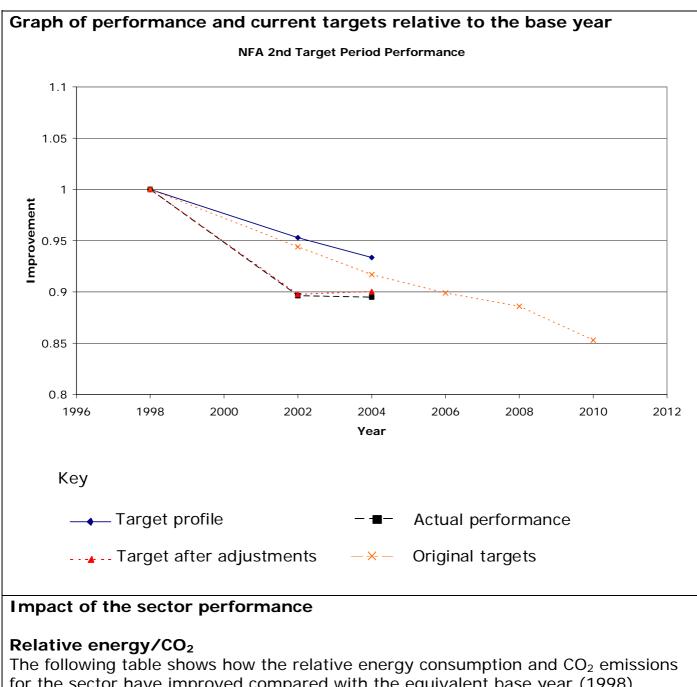
|     | Equivalent baseline (1998) |            |     |               | Performance |     |
|-----|----------------------------|------------|-----|---------------|-------------|-----|
|     | Energy (kWh)               | Production | SEC | Energy (kWh)  | Production  | SEC |
| TP1 | 5,986,760,187              | N/A        | N/A | 5,380,280,623 | N/A         | N/A |
| TP2 | 4,410,409,782              | N/A        | N/A | 3,947,755,102 | N/A         | N/A |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1998) position at each target period.

| Change compared with Equivalent Baseline at each Target Period  |   |       |  |  |  |  |
|---|---|-------|--|--|--|--|
| Target Improvement (Ratio) Actual Improvement   |   |       |  |  |  |  |
| TP1   | 4.70%   | 10.1% |  |  |  |  |
| <b>TP2</b> 6.64% 10.50%   |   |       |  |  |  |  |
| NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes. |   |       |  |  |  |  |
|   | All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix. |       |  |  |  |  |

<sup>&</sup>lt;sup>30</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



for the sector have improved compared with the equivalent base year (1998) position. For each target period it shows the change in energy and  $CO_2$  assuming throughput had remained constant at the target period throughput level. (Negative values imply consumption/emissions in the target period is less than the equivalent base year.)

|     | Annual Change in Relative Energy and CO <sub>2</sub> compared with Equivalent Baseline |                              |  |  |  |  |
|-----|--|------------------------------|--|--|--|--|
|     | Energy (PJ)  | CO <sub>2</sub> (kilotonnes) |  |  |  |  |
| TP1 | -2.2   | -137                         |  |  |  |  |
| TP2 | -1.7   | -78                          |  |  |  |  |

### Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1998) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| 1            | Annual change in Absolute  | Energy and CO <sub>2</sub> comp | ared with Equivalent Baseline                          |  |  |  |  |
|--------------|--|---------------------------------|--|--|--|--|--|
|              | Energy (PJ)  | CO <sub>2</sub>                 | Production (%)   |  |  |  |  |
| (kilotonnes) |  |                                 |  |  |  |  |  |
| TP1          | -2.2   | -134                            | N/A  |  |  |  |  |
| TP2          | -1.7   | -78                             | N/A  |  |  |  |  |
|              | equivalent baseline at each ta<br>buld be taken in comparing the |                                 | as the sector population changes,<br>t target periods. |  |  |  |  |

# CONFEDERATION OF PAPER INDUSTRIES (CPI)

Scope and membership of the umbrella agreement

The Confederation of Paper Industries (previously The Paper Federation) represents the paper industry in the UK. The CPI CCA covers all eligible facilities of the UK paper manufacturing industry.

# Targets

The targets for this sector are expressed in primary kWh per tonne of paper produced ( $kWh_p/te$ ). These targets change with time as the composition of the agreement changes, owing to exits and entrants. The baseline represents the best equivalent figure for the performance of the UK paper manufacturing industry as a whole in 1990, and consequently is not altered for any exits or entrants from the agreement. The baseline does not form part of the CCA and is used only for comparative purposes.

The following table shows the targets and equivalent 1990 baseline for this sector as originally agreed and at each target period (TP) to date.

|                   | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|-------------------|--|---|---|---|---|---|
| Original          | 6,576                                  | 4,659                                   | 4,420                                   | 4,199                                   | 4,090                                   | 3,959                                   |
| At TP1            | 6,576                                  | 4,637                                   | 4,416                                   | 4,349                                   | 4,265                                   | 4,163                                   |
| 2004              | -                                      | -                                       | -                                       | 2.78%                                   | 2.21%                                   | 2.60%                                   |
| Review*<br>At TP2 | 6,576                                  | -                                       | 4,454                                   | 4,264                                   | 4,205                                   | 4,088                                   |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sector will be reviewed again in 2008.

## Additional adjustments to the sector target for the second target period

# Carbon trading

The sector operates a collective trading arrangement, which at this target period encompassed all but one target unit within the sector.

Over-performance equivalent to 201 ktCO<sub>2</sub> were ring-fenced, which is equivalent to a change (tightening) to the sector target of -167 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

# PMO

No product mix adjustments were carried out.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 4,287  $kWh_p/te.$ 

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>31</sup> baseline for all target periods to date.

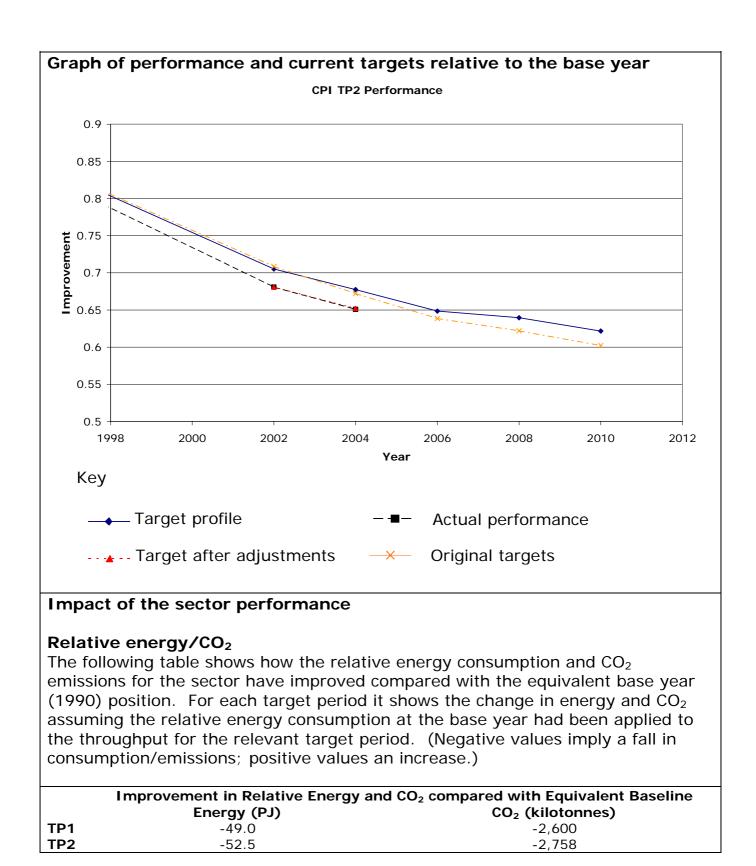
|            | Equivaler                        | nt baseline (19        | 90)                               | Performance                      |                        |                                   |
|------------|----------------------------------|------------------------|-----------------------------------|----------------------------------|------------------------|-----------------------------------|
|            | Energy<br>(kWh)                  | Production<br>(te)     | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy<br>(kWh)                  | Production<br>(te)     | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP1<br>TP2 | 25,902,356,203<br>25,902,356,203 | 3,939,080<br>3,939,080 | 6,576<br>6,576                    | 28,595,774,290<br>27,216,229,382 | 6,388,404<br>6,358,595 | 4,476<br>4,280                    |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1990) position at each target period.

| Im                          | Improvement in SEC compared with Equivalent Baseline at each Target Period  |   |  |  |  |  |  |
|-----------------------------|---|---|--|--|--|--|--|
|                             | Target Improvement  | Actual Improvement                      |  |  |  |  |  |
| TP1                         | 30%   | 32%                                     |  |  |  |  |  |
| TP2                         | 32%   | 35%                                     |  |  |  |  |  |
|                             | figures are not directly comparable since as the sector population changes. | the equivalent baseline changes at each |  |  |  |  |  |
| All the faci<br>adjusted ta |   | nsequence of the sector meeting its     |  |  |  |  |  |

<sup>&</sup>lt;sup>31</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



# Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1990) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions; positive values an increase.)

| I            | Improvement in Absolute  | Energy and CO <sub>2</sub> comp | pared with Equivalent Baseline                              |  |  |  |  |
|--------------|--|---------------------------------|---|--|--|--|--|
|              | Energy (PJ)  | CO <sub>2</sub>                 | Production (%)  |  |  |  |  |
| (kilotonnes) |  |                                 |   |  |  |  |  |
| TP1          | 9.7  | 510                             | 62  |  |  |  |  |
| TP2          | 4.7  | 248                             | 61  |  |  |  |  |
|              | e equivalent baseline at each<br>so care should be taken in co |                                 | ge as the sector population ce at different target periods. |  |  |  |  |

#### NATIONAL FARMERS UNION (NFU) – POULTRY MEAT REARING Scope and membership of the umbrella agreement

The NFU poultry meat rearing agreement covers sites undertaking the intensive rearing of poultry for meat.

### Targets

The targets for this sector are given in primary kWh per kilogram of live weight  $(kWh_p/kg)$ . These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data. (However, at TP1 only, the sector targets were not adjusted.)

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kWh <sub>p</sub> /<br>kg) | TP1(2002)<br>(kWh <sub>p</sub> /<br>kg) | TP2(2004)<br>(kWh <sub>p</sub> /<br>kg) | TP3(2006)<br>(kWh <sub>p</sub> /<br>kg) | TP4(2008)<br>(kWh <sub>p</sub> /<br>kg) | TP5(2010)<br>(kWh <sub>p</sub> /<br>kg) |
|----------------|--|---|---|---|---|---|
| Original       | 0.765                                  | 0.731                                   | 0.713                                   | 0.690                                   | 0.668                                   | 0.653                                   |
| At MS1         | 0.765                                  | 0.731                                   | 0.713                                   | 0.690                                   | 0.668                                   | 0.653                                   |
| 2004           | -                                      | -                                       | -                                       | TBA                                     | TBA                                     | TBA                                     |
| <b>Review*</b> |  |   |   |   |   |   |
| At MS2         | 1.230                                  | -                                       | 1.134                                   | TBA                                     | TBA                                     | TBA                                     |

\* The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

## Additional adjustments to the sector target for the second target period

## **Carbon trading**

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- A total of 9 ktCO<sub>2</sub> from over-performances was ring-fenced.
- Allowances equivalent to 4 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net surplus of 5 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of -0.044 kWh<sub>p</sub>/kg. (Note - figures rounded for presentation.)

## PMO

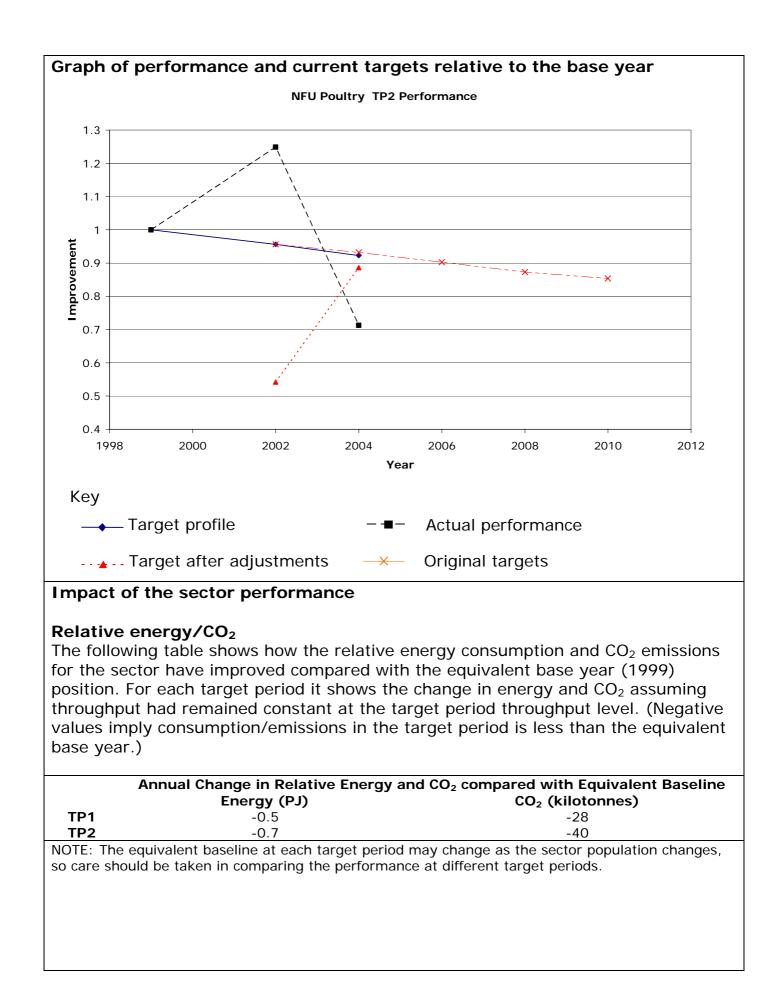
No product mix adjustments were carried out.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for 2004 was 1.090  $kWh_{p}/kg.$ 

|   | or performan   |   |  |   |  |                           |  |  |
|---|--|---|--|---|--|---------------------------|--|--|
| The fo  | ollowing table   | shows the sect  | or performar   | ice against th                                    | ie equivalent <sup>a</sup>   | <sup>32</sup> baseline    |  |  |
|   |  | s to date. The  |  |   |  |                           |  |  |
|   | ector changes  |   | ·  | -   |  | •                         |  |  |
|   | 5  |   |  |   |  |                           |  |  |
| Equivalent baseline (1999) Performance  |  |   |  |   |  |                           |  |  |
|   | Energy   | Production  | SEC  | Energy Production SEC                             |  |                           |  |  |
|   | (kWh)  | (kg)  | (kWh <sub>p</sub> /kg)                                       | (kWh)   | (kg)   | (kWh <sub>p</sub> /kg)    |  |  |
| TP1*  | 623,752,307  |   | 1.177  | 576,782,605                                       | 604,206,439  | 0.955                     |  |  |
| TP2   | 559,596,594  | 455,045,922   | 1.230  | 478,721,051                                       | 546,096,662  | 0.877                     |  |  |
| * This is the equivalent baseline for those target units that reported at TP1, although the sector target at TP1 was not adjusted for entrants and exits. |  |   |  |   |  |                           |  |  |
| target  | at TP1 was not a   | djusted for entrar  | nts and exits.   |   |  |                           |  |  |
|   |  |   |  |   |  |                           |  |  |
| Comr  | mentary  |   |  |   |  |                           |  |  |
| The fo  | ollowing table   | shows how the   | e sector has in  | mproved rela                                      | tive to the eq   | uivalent                  |  |  |
| base  | vear (1999) p  | osition at each   | target period  | I.  |  |                           |  |  |
| -   |  |   | 0.   |   |  |                           |  |  |
|   | Change   | e in SEC compare  | ed with Equiva   | alent Baseline                                    | at each Targe  | t period                  |  |  |
|   | Ta   | arget Improveme   | ent  | Act   | ual Improvem   | ent                       |  |  |
| TP1*  |  | 4.3%  |  |   | -25%   |                           |  |  |
| IP1*  |  |   |  |   |  | 1                         |  |  |
| TP1   |  | 7.8%  |  |   | 29%  |                           |  |  |
| TP2   | These figures ar   | 7.8%<br>e not directly com  | parable since the  | ne equivalent ba                                  |  | at each                   |  |  |
| TP2<br>NOTE:  |  |   |  | ne equivalent ba                                  |  | at each                   |  |  |
| TP2<br>NOTE:<br>target  | period as the sec  | e not directly com<br>ctor population cha   | anges.   |   | aseline changes  |                           |  |  |
| TP2<br>NOTE:<br>target<br>* The   | period as the sec<br>TP1 figures here  | e not directly com<br>ctor population cha<br>are relative to the  | anges.   |   | aseline changes  |                           |  |  |
| TP2<br>NOTE:<br>target<br>* The   | period as the sec  | e not directly com<br>ctor population cha<br>are relative to the  | anges.   |   | aseline changes  |                           |  |  |
| TP2<br>NOTE:<br>target<br>* The<br>equiva   | period as the sec<br>TP1 figures here<br>lent to those tha   | e not directly com<br>ctor population cha<br>are relative to the<br>t reported.   | anges.<br>e unchanged tar                                    | get and its base                                  | aseline changes<br>eline, rather tha                                   | n the baseline            |  |  |
| TP2<br>NOTE:<br>target<br>* The<br>equiva   | period as the sec<br>TP1 figures here<br>lent to those that<br>s sector the ta   | e not directly com<br>ctor population cha<br>are relative to the<br>t reported.<br>arget improvem   | anges.<br>e unchanged tar<br>nents were ba                   | get and its base<br>used on the a                 | aseline changes<br>eline, rather tha<br>ssumption the                  | n the baseline<br>at      |  |  |
| TP2<br>NOTE:<br>target<br>* The<br>equiva   | period as the sec<br>TP1 figures here<br>lent to those that<br>s sector the ta   | e not directly com<br>ctor population cha<br>are relative to the<br>t reported.   | anges.<br>e unchanged tar<br>nents were ba                   | get and its base<br>used on the a                 | aseline changes<br>eline, rather tha<br>ssumption the                  | n the baseline<br>at      |  |  |
| TP2<br>NOTE:<br>target<br>* The<br>equiva<br>In this<br>throug  | period as the sec<br>TP1 figures here<br>lent to those that<br>s sector the ta   | e not directly com<br>ctor population cha<br>are relative to the<br>t reported.<br>arget improvem   | anges.<br>e unchanged tar<br>nents were ba                   | get and its base<br>used on the a                 | aseline changes<br>eline, rather tha<br>ssumption the                  | n the baseline<br>at      |  |  |
| TP2<br>NOTE:<br>target<br>* The<br>equiva<br>In this<br>throug  | period as the sec<br>TP1 figures here<br>lent to those that<br>s sector the ta<br>ghput would re                               | e not directly com<br>ctor population cha<br>are relative to the<br>t reported.<br>arget improvem   | anges.<br>e unchanged tar<br>nents were ba                   | get and its base<br>used on the a                 | aseline changes<br>eline, rather tha<br>ssumption the                  | n the baseline<br>at      |  |  |
| TP2<br>NOTE:<br>target<br>* The<br>equiva<br>In this<br>throug<br>agree   | period as the sec<br>TP1 figures here<br>lent to those that<br>s sector the ta<br>ghput would re<br>ement.                     | e not directly com<br>ctor population cha<br>are relative to the<br>t reported.<br>arget improvem<br>emain at a cons                      | anges.<br>e unchanged tar<br>nents were ba<br>stant level th | get and its base<br>ased on the a<br>roughout the | eseline changes<br>eline, rather tha<br>ssumption the<br>period of the | n the baseline<br>at<br>e |  |  |
| TP2<br>NOTE:<br>target<br>* The<br>equiva<br>In this<br>throug<br>agree   | period as the sec<br>TP1 figures here<br>lent to those that<br>s sector the ta<br>ghput would re<br>ement.<br>e facilities hav | re not directly com<br>ctor population cha<br>are relative to the<br>t reported.<br>arget improvem<br>emain at a cons<br>re been re-certi | anges.<br>e unchanged tar<br>nents were ba<br>stant level th | get and its base<br>ased on the a<br>roughout the | eseline changes<br>eline, rather tha<br>ssumption the<br>period of the | n the baseline<br>at<br>e |  |  |
| TP2<br>NOTE:<br>target<br>* The<br>equiva<br>In this<br>throug<br>agree   | period as the sec<br>TP1 figures here<br>lent to those that<br>s sector the ta<br>ghput would re<br>ement.                     | re not directly com<br>ctor population cha<br>are relative to the<br>t reported.<br>arget improvem<br>emain at a cons<br>re been re-certi | anges.<br>e unchanged tar<br>nents were ba<br>stant level th | get and its base<br>ased on the a<br>roughout the | eseline changes<br>eline, rather tha<br>ssumption the<br>period of the | n the baseline<br>at<br>e |  |  |

<sup>&</sup>lt;sup>32</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary



### Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

|              |                                | e Energy and $CO_2$ com | pared with Equivalent Baseline    |  |  |  |  |
|--------------|--------------------------------|-------------------------|-----------------------------------|--|--|--|--|
|              | Energy (PJ)                    | CO <sub>2</sub>         | Production (%)                    |  |  |  |  |
| (kilotonnes) |                                |                         |                                   |  |  |  |  |
| TP1          | -0.2                           | -10                     | 14%                               |  |  |  |  |
| TP2          | -0.3                           | -17                     | 20%                               |  |  |  |  |
| NOTE: The    | equivalent baseline at each ta | rget period may change  | as the sector population changes, |  |  |  |  |
| so care shou | uld be taken in comparing the  | performance at differen | t target periods.                 |  |  |  |  |

#### BRITISH POULTRY COUNCIL – POULTRY MEAT REARING Scope and membership of the umbrella agreement

The British Poultry Council Poultry Meat Rearing Agreement covers sites undertaking the intensive rearing of poultry for meat. The scope of this agreement is essentially the same as the NFU Poultry Meat Rearing agreement, but participants in the BPC agreement tend to be the larger integrated producers.

### Targets

The targets for this sector are given in primary kWh per tonne of production  $(kWh_p/te)$ . These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|----------------|--|---|---|---|---|---|
| Original       | 1,498                                  | 1,425                                   | 1,392                                   | 1,351                                   | 1,310                                   | 1,283                                   |
| At TP1         | 1,490                                  | 1,414                                   | 1,381                                   | 1,340                                   | 1,299                                   | 1,271                                   |
| 2004           | -                                      | -                                       | -                                       | TBA                                     | TBA                                     | TBA                                     |
| <b>Review*</b> |  |   |   |   |   |   |
| At TP2         | 1,475                                  | -                                       | 1,296                                   | TBA                                     | TBA                                     | TBA                                     |

\* The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

# Additional adjustments to the sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- Over-performance equivalent to 40 ktCO<sub>2</sub> was ring-fenced.
- 10 ktCO<sub>2</sub> of allowances were purchased to offset under-performance.

Overall, the net result of trading was a surplus of 30 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of -126.5 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

## PMO

No product mix adjustments were carried out.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 1,170 kWh/te.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>33</sup> baseline for all the target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalent    | baseline (199      | Performance                       |               |                    |                                   |
|-----|---------------|--------------------|-----------------------------------|---------------|--------------------|-----------------------------------|
|     | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP1 | 1,701,957,155 | 1,142,494          | 1,490                             | 1,350,915,612 | 1,177,459          | 1,147                             |
| TP2 | 1,667,364,509 | 1,130,140          | 1,475                             | 1,351,750,164 | 1,170,159          | 1,155                             |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

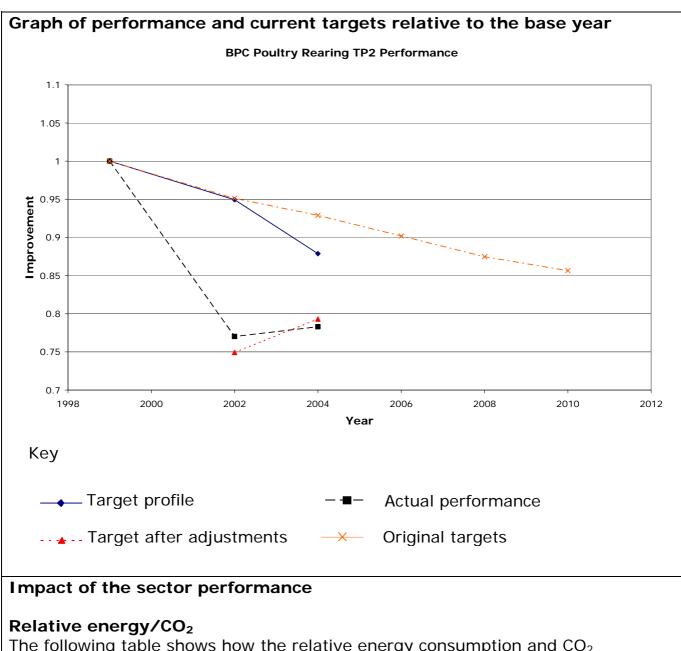
|                                      | Change in SEC compared with Equivalent Baseline at each Target Period |     |  |  |  |
|--------------------------------------|---|-----|--|--|--|
| Target Improvement Actual Improvemen |   |     |  |  |  |
| TP1                                  | 5.1%  | 23% |  |  |  |
| TP2                                  | 12%   | 22% |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified as the sector has met its target.

<sup>&</sup>lt;sup>33</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



The following table shows how the relative energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position. For each target period it shows the change in energy and  $CO_2$  assuming throughput had remained constant at the relevant target period throughput level. (Negative values imply consumption/emissions in the target period is less than the equivalent base year.)

|     | Annual Change in Relative Energy and CO <sub>2</sub> compared with Equivalent Baseline |     |  |  |  |
|-----|--|-----|--|--|--|
|     | Energy (PJ) CO <sub>2</sub> (kilotonnes)   |     |  |  |  |
| TP1 | -1.5   | -82 |  |  |  |
| TP2 | -1.3   | -77 |  |  |  |

### Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

|              | Energy (PJ) | CO <sub>2</sub> | Production (%) |  |  |
|--------------|-------------|-----------------|----------------|--|--|
| (kilotonnes) |             |                 |                |  |  |
| TP1          | -1.3        | -72             | 3              |  |  |
| TP2          | -1.1        | -65             | 4              |  |  |

# **BPIF – PRINTERS**

## Scope and membership of the umbrella agreement

BPIF represents the printing industry in the UK, including printers of newspapers, books, magazines and stationery, carrying out a range of printing activities, including lithography, letterpress, flexography, gravure and screen process.

### Targets

The targets for this sector are given in primary kWh per  $m^2$  (kWh<sub>p</sub>/m<sup>2</sup>). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) | TP1(2002)<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) | TP2(2004)<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) | TP3(2006)<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) | TP4(2008)<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) | TP5(2010)<br>(kWh <sub>p</sub> /<br>m <sup>2</sup> ) |
|----------------|---|--|--|--|--|--|
| Original       | 0.079340  | 0.078545   | 0.076959   | 0.074578   | 0.072198   | 0.069818   |
| At TP1         | 0.060310  | 0.059710   | 0.058510   | 0.056700   | 0.054890   | 0.053080   |
| 2004           | -   | -  | -  | 3.0%   | 3.0%   | 4.0%   |
| <b>Review*</b> |   |  |  |  |  |  |
| At TP2         | 0.066286  | -  | 0.064387   | 0.060589   | 0.058712   | 0.056327   |

\* The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit (TU) level:

- A total of 91 ktCO<sub>2</sub> from over-performances was ring-fenced.
- Allowances equivalent to 14 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net surplus of 76 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of -0.007809 kWh<sub>p</sub>/m<sup>2</sup>. (Note - figures rounded for presentation.)

# PMO

A number of product mix adjustments were carried out at the TU level.

## Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 0.056578  $kWh_p/m^2$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>34</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalen     | t baseline (200                 | 00)                              |                 | Performance                     |                                   |
|-----|---------------|---------------------------------|----------------------------------|-----------------|---------------------------------|-----------------------------------|
|     | Energy (kWh)  | Production<br>(m <sup>2</sup> ) | SEC<br>(kWh <sub>p</sub><br>/m²) | Energy<br>(kWh) | Production<br>(m <sup>2</sup> ) | SEC<br>(kWh <sub>p</sub> /<br>m²) |
| TP1 | 2,863,682,550 | 47,479,158,112                  | 0.06031                          | 2,848,092,064   | 49,029,657,717                  | 0.058090                          |
| TP2 | 3,264,561,008 | 49,248,992,563                  | 0.06629                          | 3,441,336,740   | 56,462,336,640                  | 0.060950                          |

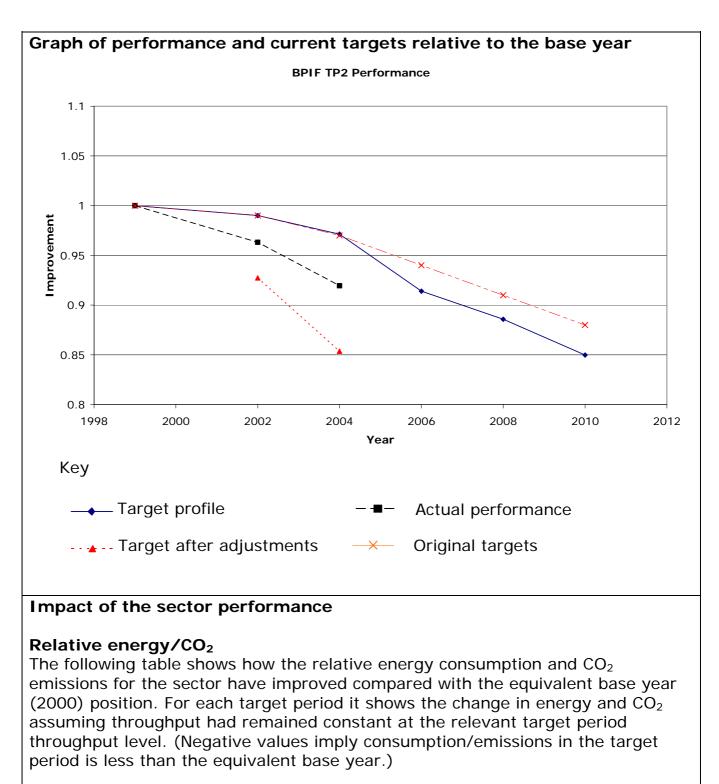
#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (2000) position at each target period.

| Change in SEC compared with Equivalent Baseline at each Target Period   |      |      |  |  |  |
|---|------|------|--|--|--|
| Target Improvement Actual Improvement   |      |      |  |  |  |
| <b>ГР1</b> 1.0%   |      | 3.7% |  |  |  |
| TP2   | 2.9% | 8.1% |  |  |  |
| NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes. |      |      |  |  |  |

A number of facilities have been decertified as they failed their individual targets. All the remaining facilities have been re-certified either because they have met their individual targets outright, or did so through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>34</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



| Annual Change in Relative Energy and CO <sub>2</sub> compared with Equivalent Baseline |  |     |  |  |
|--|--|-----|--|--|
|  | Energy (PJ) CO <sub>2</sub> (kilotonnes) |     |  |  |
| TP1  | -0.4                                     | 5.4 |  |  |
| TP2  | -1.1                                     | -52 |  |  |

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline |  |                 |                |  |  |
|--|--|-----------------|----------------|--|--|
|  | Energy (PJ)  | CO <sub>2</sub> | Production (%) |  |  |
| (kilotonnes)   |  |                 |                |  |  |
| TP1  | -0.1   | 22              | 3              |  |  |
| TP2  | 0.6  | 31              | 15             |  |  |
|  | NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods. |                 |                |  |  |

# UKRA - UK RENDERERS' ASSOCIATION

## Scope and membership of the umbrella agreement

UKRA represents plant in the UK rendering sector. A facility belongs to the Rendering Sector if it is a facility which is engaged in rendering animal material not used for human consumption by utilising heat treatment to reduce moisture content and separation of animal protein from tallow by centrifuging and pressing.

### Targets

The targets for this sector are given in primary kWh per tonne of throughput  $(kWh_p/te)$ . These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|-----------------|--|---|---|---|---|---|
| Original        | 902.0                                  | 891.2                                   | 871.4                                   | 856.0                                   | 840.7                                   | 825.3                                   |
| At TP1          | 892.1                                  | 877.0                                   | 857.5                                   | 842.4                                   | 827.3                                   | 812.2                                   |
| 2004<br>Review* | -                                      | -                                       | -                                       | 2.5%                                    | 2.5%                                    | 2.5%                                    |
| At TP2          | 936.3                                  | -                                       | 899.7                                   | 861.8                                   | 846.4                                   | 830.9                                   |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- A total of 4 ktCO<sub>2</sub> from over-performances was traded.
- A total of 19 ktCO<sub>2</sub> from over-performances was ring-fenced.
- Allowances equivalent to 5ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net surplus of 18 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of - 44.6 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

## PMO

Product mix adjustments were carried out purely at the target unit level.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 855.1  $kWh_p/te.$ 

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>35</sup> baseline for all the target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|      | Equivalen       | t baseline (19     | 99)                               | Per             | rformance          |                                   |
|------|-----------------|--------------------|-----------------------------------|-----------------|--------------------|-----------------------------------|
|      | Energy<br>(kWh) | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy<br>(kWh) | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP 1 | 1,503,914,025   | 1,685,799          | 892.1                             | 1,374,020,047   | 1,610,790          | 853.0                             |
| TP 2 | 1,465,880,543   | 1,565,615          | 936.3                             | 1,531,215,542   | 1,763,859          | 868.1                             |

### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

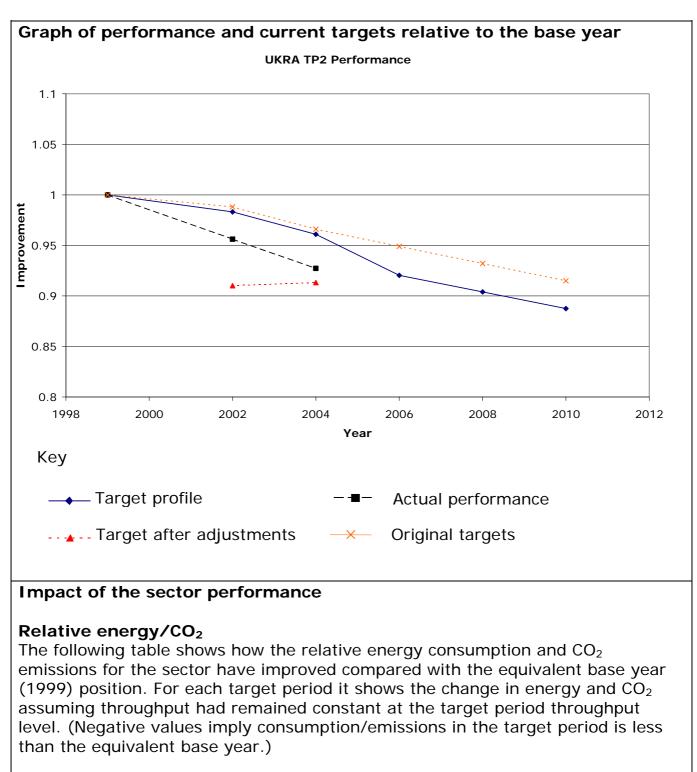
| Change in SEC compared with Equivalent Baseline at each Target Period |      |      |  |  |
|---|------|------|--|--|
| Target Improvement Actual Improvement                                 |      |      |  |  |
| TP1   | 1.7% | 4.4% |  |  |
| TP2   | 3.9% | 7.3% |  |  |
|   |      |      |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix. One target unit passed after citing a relevant constraint.

<sup>&</sup>lt;sup>35</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary



|     | Annual Change in Relative Energy and CO <sub>2</sub> compared with Equivalent Baseline |     |  |  |  |
|-----|--|-----|--|--|--|
|     | Energy (PJ) CO <sub>2</sub> (kilotonnes)   |     |  |  |  |
| TP1 | -0.2   | 0.6 |  |  |  |
| TP2 | <b>-0.4</b> -28  |     |  |  |  |

# Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/ emissions.)

| TP1 |      | (kilotonnes) |    |
|-----|------|--------------|----|
| TD1 |      |              |    |
| IFI | -0.5 | -14          | -4 |
| TP2 | 0.2  | 15           | 13 |

# BRMA – RUBBER (NEW TYRES)

### Scope and membership of the umbrella agreement

This agreement is for the manufacture of new tyres and the associated tyre compound. The companies are represented by the British Rubber Manufacturers' Association.

### Targets

The targets for this sector are given in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date. Since 2002, the sector target has changed (tightened) by -542 kWh<sub>p</sub>/te to allow for permanent changes in production within the sector. This is included in the figure in the table below.

|                             | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|-----------------------------|--|---|---|---|---|---|
| Original                    | 6775                                   | 6475                                    | 6363                                    | 6252                                    | 6136                                    | 5993                                    |
| At TP1                      | 7180                                   | 6887                                    | 6756                                    | 6651                                    | 6525                                    | 6400                                    |
| 2004<br>Review <sup>*</sup> | -                                      | -                                       | -                                       | 12.6%                                   | 12.6%                                   | 12.6%                                   |
| At TP2                      | 7245                                   | -                                       | 6214                                    | 5865                                    | 5754                                    | 5644                                    |

<sup>\*</sup>The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments.

## Additional adjustments to the sector target for the second target period

## Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit (TU) level:

- Some TUs were able to ring-fenced owing to over-performance.
- No allowances were purchased.

Overall, 74 ktCO<sub>2</sub> was ring-fenced, which is equivalent to a sector target change (tightening) of -1210 kWh<sub>p</sub>/te. (Note - figures rounded for presentation.)

## PMO

PMO adjustments are not allowed at sector level.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 5004 kWh/te.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>36</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivaler     | nt baseline (19    | 999)                          | Pe            | erformance         |                               |
|-----|---------------|--------------------|-------------------------------|---------------|--------------------|-------------------------------|
|     | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /te) | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /te) |
| TP1 | 2,676,697,323 | 372,788            | 7180                          | 1,756,485,306 | 289,215            | 6073                          |
| TP2 | 2,708,167,613 | 373,799            | 7245                          | 1,661,545,317 | 332,312            | 5000                          |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

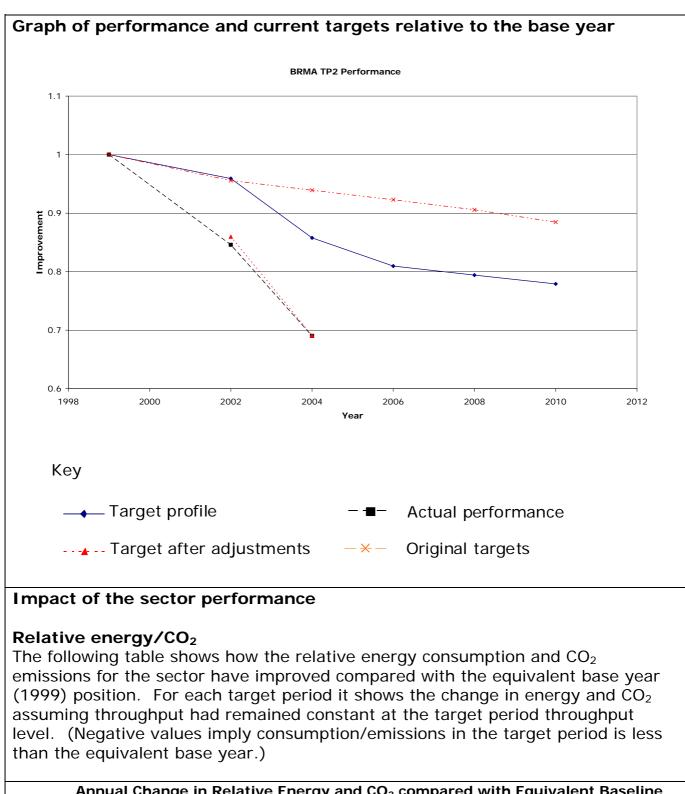
|     | Change in SEC compared with Equivalent Baseline at each Target Period |                    |  |
|-----|---|--------------------|--|
|     | Target Improvement  | Actual Improvement |  |
| TP1 | 3.3%  | 13%                |  |
| TP2 | 14%   | 31%                |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement. There have been changes in production since 2002, which has led to a distinct fall in the sector SEC in the second target period.

All the facilities have been re-certified because the sector exceeded its target.

<sup>&</sup>lt;sup>36</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



|     | Annual Change in Relative Energy and CO <sub>2</sub> compared with Equivalent Baseline |      |  |  |  |
|-----|--|------|--|--|--|
|     | Energy (PJ) CO <sub>2</sub> (kilotonnes)   |      |  |  |  |
| TP1 | -0.9   | -49  |  |  |  |
| TP2 | -2.6   | -131 |  |  |  |

NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

|  | Energy (PJ) | CO <sub>2</sub> | Production (%) |  |  |  |
|--|-------------|-----------------|----------------|--|--|--|
| (kilotonnes)   |             |                 |                |  |  |  |
| TP1  | -3.3        | -171            | -22            |  |  |  |
| TP2  | -3.8        | -192            | -11            |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods. |             |                 |                |  |  |  |

#### NATIONAL MICROELECTRONICS INSTITUTE (SEMICONDUCTORS) Scope and membership of the umbrella agreement

NMI represents various electronics manufacturers in the UK, including both semiconductor and cathode ray tube (CRT) production.

### Targets

The targets for this sector are given as a ratio of target year performance to base year performance for a particular level of throughput. These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(Ratio) | TP1(2002)<br>(Ratio) | TP2(2004)<br>(Ratio) | TP3(2006)<br>(Ratio) | TP4(2008)<br>(Ratio) | TP5(2010)<br>(Ratio) |
|----------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Original       | 1.0                 | 0.7943               | 0.5089               | 0.4784               | 0.4426               | 0.4108               |
| At TP1         | 1.0                 | 0.4664               | 0.2825               | 0.2524               | 0.2410               | 0.2308               |
| 2004           | -                   | -                    | -                    | 0%                   | 0%                   | 0%                   |
| <b>Review*</b> |                     |                      |                      |                      |                      |                      |
| At TP2         | 1.0                 | -                    | 0.2868               | 0.2557               | 0.2313               | 0.2208               |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

It should be noted that the TP5 target for this sector will be reviewed again in 2008.

### Additional adjustments to the sector target for the second target period

### Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- Allowances equivalent to 54 ktCO<sub>2</sub> were ring-fenced or traded.
- No allowances were purchased.

Overall, trading resulted in a net ring-fencing or trading of 54  $ktCO_2$ , which is equivalent to a sector target change (tightening) of -0.0774. (Note - figures rounded for presentation.)

### PMO

Product mix adjustments were carried out at the sector and target unit level, equivalent to a sector target change (easing) of 0.3432.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 0.5525.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>37</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalent baseline (2000)   |                       |        | Performance     |                       |        |  |
|-----|--|-----------------------|--------|-----------------|-----------------------|--------|--|
|     | Energy (MWh)   | Production<br>(units) | Ratio* | Energy<br>(MWh) | Production<br>(units) | Ratio* |  |
| TP1 | 2,337,092  | 148,531               | 1.0    | 1,984,513       | 196,337               | 0.8897 |  |
| TP2 | 2,395,549  | 43,257,826            | 1.0    | 2,225,245       | 169,119,018           | 0.5394 |  |
|     | TP2 2,395,549 43,257,826 1.0 2,225,245 169,119,018 0.539   *Ratio of target year to base year for actual target period throughput. |                       |        |                 |                       |        |  |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (2000) position at each target period.

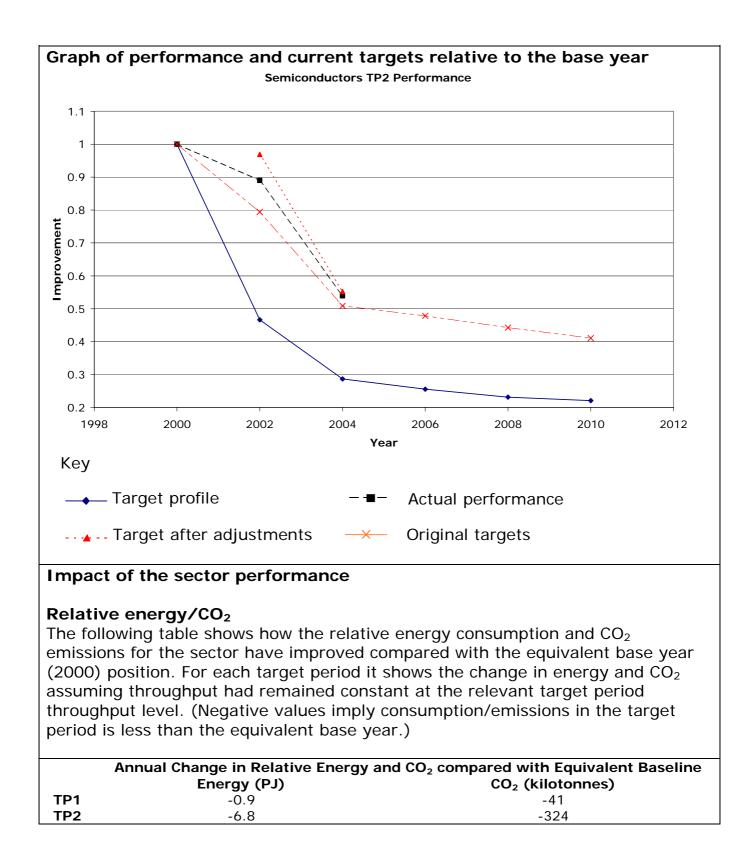
|     | Change in performance compared with Equivalent Baseline at each Target Period |     |  |  |  |
|-----|---|-----|--|--|--|
|     | Target Improvement Actual Improvement   |     |  |  |  |
| TP1 | 53%   | 11% |  |  |  |
| TP2 | 71%   | 46% |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on a predicted throughput level for each target unit at each target period.

All the facilities have been re-certified because the sector target has been met.

<sup>&</sup>lt;sup>37</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (2000) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline   |             |                 |                |  |  |  |
|--|-------------|-----------------|----------------|--|--|--|
|  | Energy (PJ) | CO <sub>2</sub> | Production (%) |  |  |  |
| (kilotonnes)   |             |                 |                |  |  |  |
| TP1  | -1.3        | -60             | 32             |  |  |  |
| TP2  | -0.6        | -29             | 291            |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods. |             |                 |                |  |  |  |

It should be noted for this sector that, although the throughput has increased since the base year, the sector product mix has also changed significantly with an increasing variety of products.

## SGS – SLAG GRINDERS

### Scope and membership of the umbrella agreement

This Sector has six sites. Five of these take granulated blast furnace slag and grind it to form products for the Construction and Glass Industries. The other site grinds metallurgical slags to produce a range of products, mainly abrasives.

#### Targets

The targets for this sector are given in primary kWh per tonne ( $kWh_p/te$ ). The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

There have been no structural changes to the sector since the last target period.

|                | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|----------------|--|---|---|---|---|---|
| Original       | 281                                    | 280                                     | 273                                     | 263                                     | 257                                     | 252                                     |
| At TP1         | 278                                    | 278                                     | 272                                     | 261                                     | 255                                     | 251                                     |
| 2004           |  |   |   | 6.1%                                    | 5.0%                                    | 4.3%                                    |
| <b>Review*</b> |  |   |   |   |   |   |
| At TP2         | 278                                    | -                                       | 272                                     | 245                                     | 243                                     | 240                                     |

\* The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets at TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

### Additional adjustments to the sector target for the second target period

### Carbon trading

Ring-fencing within the sector was carried out purely at the target unit level:

• There was net ring-fencing of 20  $kWh_p/te$ , which is equivalent to 7  $ktCO_2$ .

This results in a change (tightening) of the sector target of  $-20 \text{ kWh}_p$ /tonne. (Note - figures rounded for presentation.)

### PMO

No product mix adjustments were carried out.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 252  $kWh_p/te$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>38</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalent baseline (1999) |                    |                                   | Performance  |                    |                                   |
|-----|----------------------------|--------------------|-----------------------------------|--------------|--------------------|-----------------------------------|
|     | Energy (kWh)               | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy (kWh) | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP1 | 458,166,678                | 1,648,899          | 278                               | 438,161,040  | 1,702,775          | 257                               |
| TP2 | 458,166,678                | 1,648,899          | 278                               | 506,949,189  | 2,058,949          | 246                               |

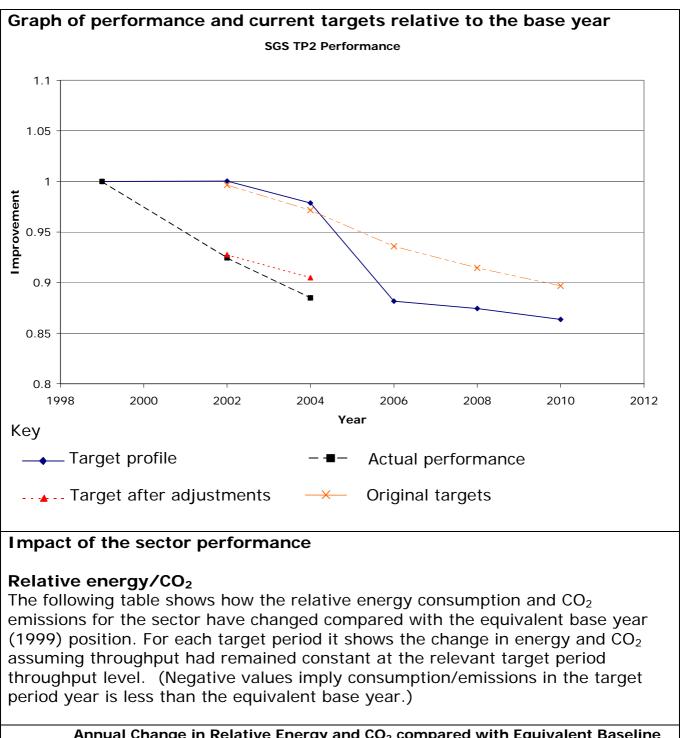
#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

|   | Change in SEC compared with Equiv  | alent Baseline at each Target Period |  |  |  |
|---|--|--------------------------------------|--|--|--|
|   | Target Improvement   | Actual Improvement                   |  |  |  |
| TP1   | 0.0%   | 7.6%                                 |  |  |  |
| TP2   | 2.1%   | 11%                                  |  |  |  |
| NOTE: These figures may not be directly comparable since the equivalent baseline changes at each target period as the sector population changes. The 0% for TP1 is a consequence of corrections and a new entrant – the individual targets are no less demanding. |  |                                      |  |  |  |
| throughpu   | In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement. |                                      |  |  |  |

All the facilities have been re-certified because the sector met its target.

<sup>&</sup>lt;sup>38</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



|     | Annual Change in Relative Energy and CO <sub>2</sub> compared with Equivalent Baseline |     |  |  |  |
|-----|--|-----|--|--|--|
|     | Energy (PJ) CO <sub>2</sub> (kilotonnes)   |     |  |  |  |
| TP1 | -0.1   | -6  |  |  |  |
| TP2 | -0.2   | -12 |  |  |  |

NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/ emissions).

|  | Energy (PJ) | CO <sub>2</sub> | Production (%) |  |  |  |  |
|--|-------------|-----------------|----------------|--|--|--|--|
| (kilotonnes)   |             |                 |                |  |  |  |  |
| TP1  | -0.1        | -4              | 3              |  |  |  |  |
| TP2  | 0.2         | 9               | 25             |  |  |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods. |             |                 |                |  |  |  |  |

## THE SPIRITS ENERGY EFFICIENCY COMPANY (SEEC)

### Scope and membership of the umbrella agreement

SEEC is jointly operated by the Scotch Whisky Association and the Gin and Vodka Association. The SEEC agreement covers the vast majority of UK spirit drinks production of around 450 million litres of pure alcohol (Ipa) per annum.

### Targets

The targets for this sector are expressed in primary kWh per litre of pure alcohol  $(kWh_p/lpa)$ . These targets change with time as the composition of the agreement changes, owing to exits and entrants.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(kWh <sub>p</sub> /<br>Ipa) | TP1(2002)<br>(kWh <sub>p</sub> /<br>Ipa) | TP2(2004)<br>(kWh <sub>p</sub> /<br>Ipa) | TP3(2006)<br>(kWh <sub>p</sub> /<br>Ipa) | TP4(2008)<br>(kWh <sub>p</sub> /<br>Ipa) | TP5(2010<br>)<br>(kWh <sub>p</sub> /<br>lpa) |
|----------|---|--|--|--|--|--|
| Original | 7.72                                    | 7.70                                     | 7.63                                     | 7.50                                     | 7.44                                     | 7.37   |
| At TP1   | 7.74                                    | 7.70                                     | 7.63                                     | 7.50                                     | 7.44                                     | 7.37   |
| 2004     | -                                       | -  | -  | 1.0%                                     | 1.0%                                     | 2.0%   |
| Review*  |   |  |  |  |  |  |
| At TP2   | 7.74                                    | -  | 7.63                                     | 7.43                                     | 7.37                                     | 7.23   |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means an easing of targets and a negative value means a relaxation of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

# Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing was carried out purely at the target unit level:

- Over-performance equivalent to 51  $\rm ktCO_2$  was converted to allowances or ring-fenced.
- 7 ktCO<sub>2</sub> of allowances were purchased to offset under-performance.

Overall there was a net conversion to allowances/ring-fencing of 44 ktCO<sub>2</sub>, equivalent to a sector target change (tightening) of -0.53 kWh<sub>p</sub>/lpa. (Note - figures rounded for presentation.)

# PMO

Product mix adjustments were carried out purely at the target unit level.

**Final adjusted sector target for the second target period** As a consequence of the adjustments described above, the final sector target for the second target period was 7.10 kWh<sub>p</sub>/lpa.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>39</sup> baseline for all target periods to date.

|     | Equivale        | nt baseline (19     | 999)                               |                 | Performance         |                                    |
|-----|-----------------|---------------------|------------------------------------|-----------------|---------------------|------------------------------------|
|     | Energy<br>(kWh) | Production<br>(Ipa) | SEC<br>(kWh <sub>p</sub> /<br>Ipa) | Energy<br>(kWh) | Production<br>(Ipa) | SEC<br>(kWh <sub>p</sub> /<br>Ipa) |
| TP1 | 3,427,811,485   | 443,136,231         | 7.74                               | 3,199,898,534   | 424,758,520         | 7.53                               |
| TP2 | 3,427,811,485   | 443,136,231         | 7.74                               | 2,983,994,186   | 424,618,313         | 7.03                               |

#### Commentary

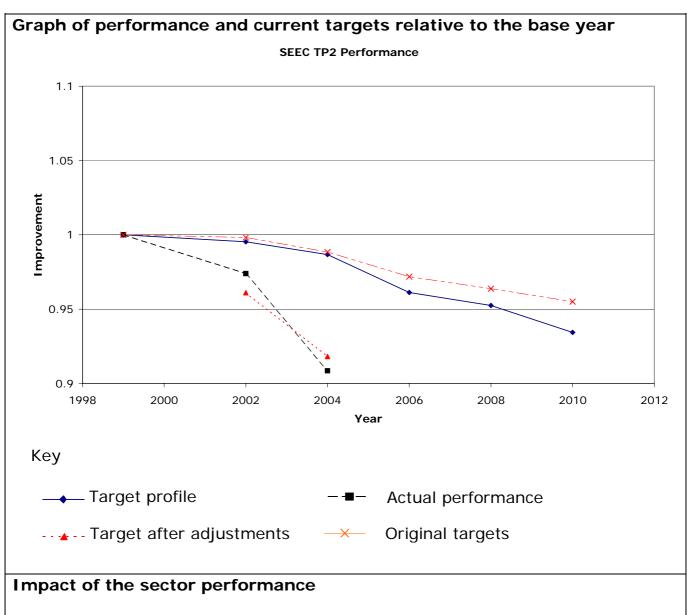
The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

|           | Change in SEC compared with Equivalent Baseline at each Target Period |   |  |  |  |
|-----------|---|---|--|--|--|
|           | Target Improvement  | Actual Improvement                      |  |  |  |
| TP1       | 0.5%  | 2.6%                                    |  |  |  |
| TP2       | 1.3%  | 9.2%                                    |  |  |  |
| NOTE: The | se figures are not directly comparable since                          | the equivalent baseline changes at each |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

All the facilities have been re-certified having met their individual targets either outright, or through trading or product mix adjustments.

<sup>&</sup>lt;sup>39</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



### Relative energy/CO<sub>2</sub>

The following table shows how the relative energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position. For each target period it shows the change in energy and  $CO_2$  assuming throughput had remained constant at the relevant target period throughput level. (Negative values imply a fall in consumption/emissions; positive values an increase.)

|     | Annual Change in Relative Energy and CO <sub>2</sub> compared with Equivalent Baseline |                              |  |  |  |
|-----|--|------------------------------|--|--|--|
|     | Energy (PJ)  | CO <sub>2</sub> (kilotonnes) |  |  |  |
| TP1 | -0.3   | -17                          |  |  |  |
| TP2 | -1.1   | -64                          |  |  |  |

NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

#### Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

|              | Energy (PJ) $CO_2$ Production (%) |     |    |  |  |  |  |
|--------------|-----------------------------------|-----|----|--|--|--|--|
| (kilotonnes) |                                   |     |    |  |  |  |  |
| TP1          | -0.8                              | -45 | -4 |  |  |  |  |
| TP2          | -1.6                              | -94 | -4 |  |  |  |  |

## UKSEL – Steel Sector

### Scope and membership of the umbrella agreement

The sector consists of six steel-making companies and a larger number of downstream companies. The UK Steel Association is the sector body that represents about 98% of the sector by energy use. The agreements are managed through UK Steel (Environmental) Ltd.

### Targets

The targets for this sector are given in primary petajoules (PJ). The sector agreement is an absolute energy agreement, though some facilities have a relative energy agreement. The sector has changed owing to restructuring, exits and significant entrants.

The following table shows the targets and equivalent 1997 baseline for this sector as originally agreed and at each target period (TP) to date. The TP1 target was adjusted at the 2002 evaluation, but the forward sector targets were not reset at that time. This was because the low performance in 2002 was anomalous and there was significant restructuring planned in the industry. The TP2 target was established in 2004 using the latest estimates of predicted throughputs and adjusted in 2005 using actual throughputs where required.

|          | Baseline<br>(PJ) | TP1(2002)<br>(PJ) | TP2(2004)<br>(PJ) | TP3(2006)<br>(PJ) | TP4(2008)<br>(PJ) | TP5(2010)<br>(PJ) |
|----------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Original | 407.6            | 388.3             | 376.6             | 368.8             | 365               | 360.8             |
| At TP1   | 407.6            | 304.3             | -                 | -                 | -                 | -                 |
| 2004     | -                | -                 | -                 | 0.8%              | -1.4%             | -2.5%             |
| Review*  |                  |                   |                   |                   |                   |                   |
| At TP2   | 406.9            | -                 | 326.5             | 365.9             | 370               | 370               |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP and TP5 (at TP2) take account of these adjustments. There were no entrants, exits and corrections subsequent to the review.

The targets for this sector will be reviewed again in 2008.

### Additional adjustments to the sector target for the second target period

### Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- 891 ktCO<sub>2</sub> was ring-fenced but none was traded.
- Allowances equivalent to 14 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net allocation of 877 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of -22.1 PJ. (Note - figures rounded for presentation.)

### PMO

Product mix adjustments were used at site level, by two target units. Product mix adjustments are not allowable at the sector level.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for 2004 was 304.4 PJ.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>40</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

| Equivalent baseline (1997) |                |                    |                | Performance    |                    |                |
|----------------------------|----------------|--------------------|----------------|----------------|--------------------|----------------|
|                            | Energy<br>(PJ) | Production<br>(te) | SEC            | Energy<br>(PJ) | Production<br>(te) | SEC            |
| TP1                        | 408            | 19,971,750         | Not applicable | 281            | 14,483,574         | Not applicable |
| TP2                        | 407            | 18,340,025         | Not applicable | 308            | 17,024,282         | Not applicable |

### Commentary

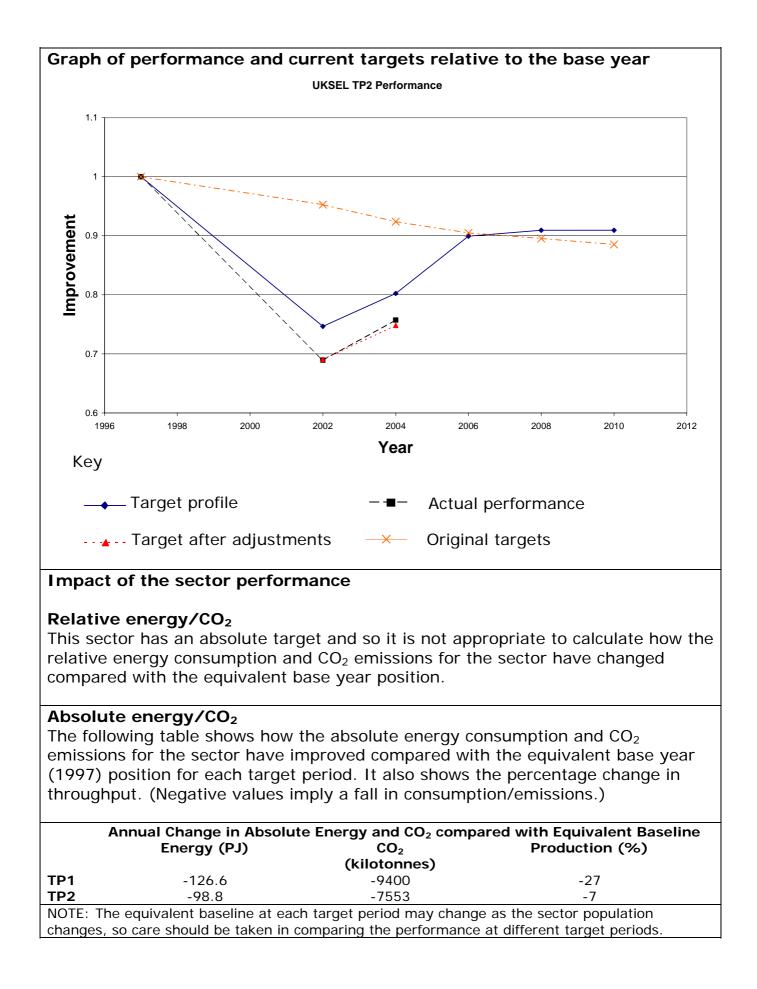
The following table shows how the sector has improved relative to the equivalent base year (1997) position at each target period.

|     | Change in energy compared with Equivalent Baseline at each Target Period |                    |  |  |  |
|-----|--|--------------------|--|--|--|
|     | Target Improvement   | Actual Improvement |  |  |  |
| TP1 | 25%  | 31%                |  |  |  |
| TP2 | 20%  | 24%                |  |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>40</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



#### SUPERMARKETS

#### Scope and membership of the umbrella agreement

The supermarkets' agreement, under the auspices of the Food & Drink Federation, covers in-store bakeries and other relatively minor food processing activities. A total of 1,112 stores, from Asda, Sainsbury, Safeway/Morrison and Tesco are currently participating in the agreement.

### Targets

The targets for this sector are expressed in primary kWh, i.e. in absolute  $kWh_p$ . These targets change with time as the composition of the agreement changes, owing to exits and entrants.

The following table shows the targets and equivalent 2000 baseline for this sector as originally agreed and at each target period (TP) to date. Note that for TP1 only, because the target period was shorter than the full 12 months of the other four target periods, there is a separate and lower pro-rata baseline figure.

|                 | Baseline<br>(kWh <sub>p</sub> ) | TP1(2002)<br>(kWh <sub>p</sub> ) | TP2(2004)<br>(kWh <sub>p</sub> ) | TP3(2006)<br>(kWh <sub>p</sub> ) | TP4(2008)<br>(kWh <sub>p</sub> ) | TP(2010)<br>(kWh <sub>p</sub> ) |
|-----------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---------------------------------|
| Original        | 306,998,030                     | 304,228,156                      |                                  |                                  |                                  |                                 |
| Original        | 799,351,145                     |                                  | 773,935,798                      | 762,586,016                      | 747,879,965                      | 733,173,913                     |
| At TP1          | 306,998,030                     | 288,957,043                      |                                  |                                  |                                  |                                 |
| ALIPT           | 799,351,145                     |                                  | 730,470,310                      | 719,738,653                      | 705,820,677                      | 691,902,700                     |
| 2004<br>Review* | -                               | -                                | -                                | ТВА                              | ТВА                              | ТВА                             |
| At TP2          | 661,559,280                     | -                                | 640,383,206                      | TBA                              | TBA                              | TBA                             |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

### Additional adjustments to the sector target for the second target period

### Carbon trading

Trading and ring-fencing was carried out purely at the target unit level:

Over-performance equivalent to 3.7 ktCO<sub>2</sub> was ring-fenced.

3.9 ktCO<sub>2</sub> of allowances were purchased to offset under-performance

Overall, there was a net purchase of 0.2  $ktCO_2$ , equivalent to a sector target change (easing) of +1,340,667  $kWh_p$ . (Note - figures rounded for presentation.)

### PMO

No product mix adjustments were carried out.

**Final adjusted sector target for the second target period** As a consequence of the adjustments described above, the final sector target for the second target period was 641,723,873 kWh<sub>p</sub>.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>41</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalent baseline (2001)<br>Energy (kWh) | Performance<br>Energy (kWh) |
|-----|--|-----------------------------|
| TP1 | 306,998,030                                | 272,986,625                 |
| TP2 | 661,559,280                                | 667,259,766                 |

#### Commentary

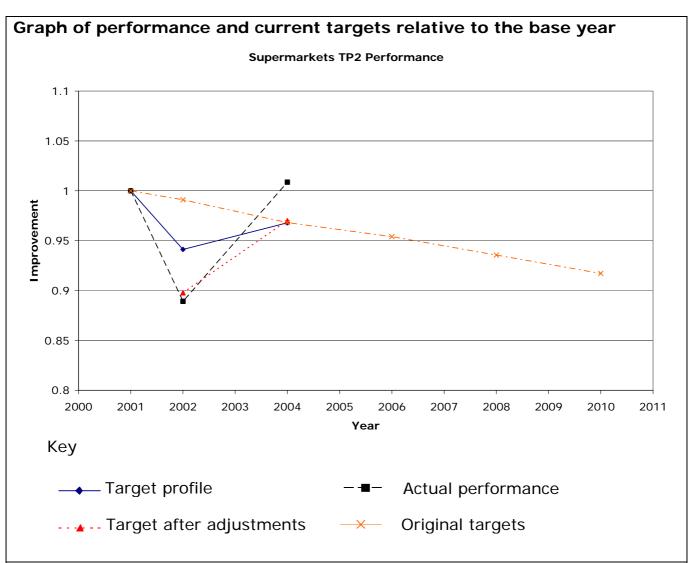
The following table shows how the sector has improved relative to the equivalent base year (2001) position at each target period.

|       | Change in energy use compared with Equivalent Baseline at each Target Period                  |       |  |  |  |
|-------|---|-------|--|--|--|
|       | Target Improvement Actual Improvement   |       |  |  |  |
| TP1   | 5.9%  | 11%   |  |  |  |
| TP2   | 3.2%  | -0.9% |  |  |  |
| NOTE: | NOTE: These figures are not directly comparable since the equivalent baseline changes at each |       |  |  |  |

target period as the sector population changes.

All the facilities have been re-certified having met their individual targets either outright, or through trading.

<sup>&</sup>lt;sup>41</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



### Impact of the sector performance

### **Relative energy/CO<sub>2</sub>**

This sector has an absolute target and so it is not appropriate to calculate how the relative energy consumption and  $CO_2$  emissions for the sector have changed compared to the equivalent base year position.

### Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (2001) position for each target period. It also shows the percentage change in throughput. (Negative values imply consumption/emissions in the target period is less than the equivalent base year.)

|        | Annual change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline  |  |  |  |  |  |
|--------|---|--|--|--|--|--|
|        | Energy (PJ)   | CO <sub>2</sub> (kilotonnes)                 |  |  |  |  |
| TP1    | -0.3  | -15  |  |  |  |  |
| TP2    | 0.02  | 1  |  |  |  |  |
| NOTE:  | NOTE: The equivalent baseline at each target period may change as the sector population |  |  |  |  |  |
| change | es, so care should be taken in comparing  | the performance at different target periods. |  |  |  |  |

# SEA – SURFACE ENGINEERING

### Scope and membership of the umbrella agreement

SEA represents the metal finishing sector, carrying out processes including electroplating, and anodising. SEA is a subsidiary part of the British Jewellery and Giftware Federation, which is the formal signatory to the agreement.

### Targets

The targets for this sector are given in primary kWh at a given level of throughput  $(kWh_p)$ . These targets change with time as the composition of the sector changes, due to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kWh <sub>p</sub> ) | TP1(2002)<br>(kWh <sub>p</sub> ) | TP2(2004)<br>(kWh <sub>p</sub> ) | TP3(2006)<br>(kWh <sub>p</sub> ) | TP4(2008)<br>(kWh <sub>p</sub> ) | TP5(2010)<br>(kWh <sub>p</sub> ) |
|----------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Original       | -                               | 2,023,331,546                    | 1,985,927,438                    | 1,982,247,644                    | 1,954,811,334                    | 1,928,896,664                    |
| At TP1         | 2,971,679,789                   | 2,890,361,508                    | 2,905,688,604                    | 2,881,610,368                    | 2,833,907,376                    | 2,786,494,745                    |
| 2004           | -                               | -                                | -                                | TBA                              | TBA                              | TBA                              |
| <b>Review*</b> |                                 |                                  |                                  |                                  |                                  |                                  |
| At TP2         | 3,947,262,281                   | -                                | 3,855,317,182                    | TBA                              | TBA                              | TBA                              |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

### Additional adjustments to the sector target at the second target period

### Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit (TU) level:

- A total of 51 ktCO<sub>2</sub> from over-performances was ring-fenced.
- Allowances equivalent to 22 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net surplus of 29 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of -164,274,413 kWh<sub>p</sub>. (Note - figures rounded for presentation.)

### PMO

A number of product mix adjustments were carried out at the TU level and the Novem method was used to adjust the overall sector target for throughput.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 4,018,308,695 kWh<sub>p</sub>.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>42</sup> baseline for all the target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivaler     | nt baseline (1999           | )   | F             | Performance                 |     |
|-----|---------------|-----------------------------|-----|---------------|-----------------------------|-----|
|     | Energy (kWh)  | Production<br>(mixed units) | SEC | Energy (kWh)  | Production<br>(mixed units) | SEC |
| TP1 | 2,971,679,789 |                             | N/A | 2,828,683,776 | 1,621,951,740               | N/A |
| TP2 | 3,947,262,281 |                             | N/A | 3,707,304,772 | 2,551,937,819               | N/A |

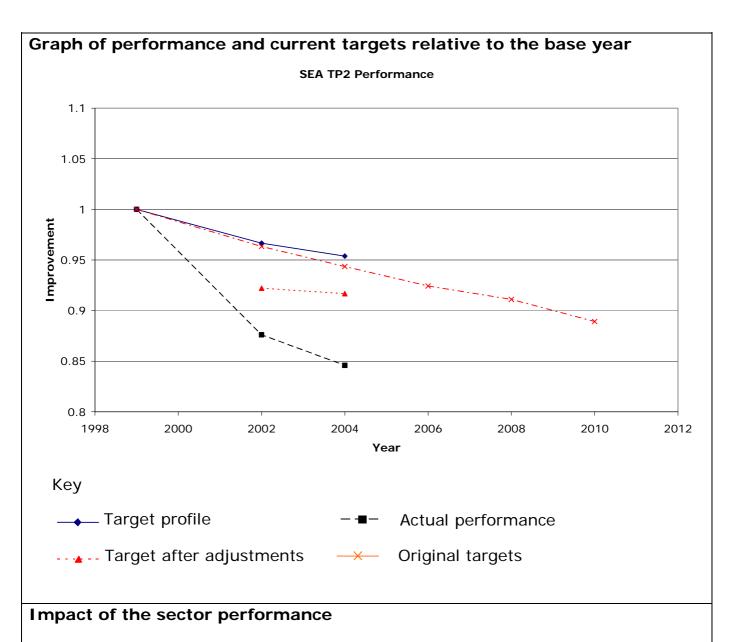
#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

| Cha   | Change in relative energy compared with Equivalent Baseline at each Target Period |                    |  |  |
|---|---|--------------------|--|--|
|   | Target Improvement  | Actual Improvement |  |  |
| TP1   | 3.0%  | 12%                |  |  |
| TP2   | 4.6%  | 15%                |  |  |
| NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes. |   |                    |  |  |

All the facilities have been re-certified as the sector passed overall.

<sup>&</sup>lt;sup>42</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



### Relative energy/CO<sub>2</sub>

The following table shows how the relative energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position. For each target period it shows the change in energy and  $CO_2$  assuming throughput had remained constant at the target period throughput level. (Negative values imply consumption/emissions in the target period is less than the equivalent base year.)

| Ar  | Annual change in Relative Energy (at TP2 throughput) and CO <sub>2</sub> compared with<br>Equivalent Baseline  |                                |                                |  |  |
|---|--|--------------------------------|--------------------------------|--|--|
|   | Energy (PJ)  | 1                              | CO <sub>2</sub> (kilotonnes)   |  |  |
| TP1   | -1.4   |                                | -75                            |  |  |
| TP2   | -2.4   |                                | -119                           |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.  |  |                                |                                |  |  |
| <b>Absolute energy/CO<sub>2</sub></b><br>The following table shows how the absolute energy consumption and CO <sub>2</sub><br>emissions for the sector have improved compared with the equivalent base year<br>(1999) position for each target period. It also shows the percentage change in<br>throughput. (Negative values imply a fall in consumption/emissions.) |  |                                |                                |  |  |
| Ar  | nual change in Absolute  | Energy and CO <sub>2</sub> com | pared with Equivalent Baseline |  |  |
|   | Energy (PJ)  | CO <sub>2</sub>                | Production (%)                 |  |  |
|   |  | (kilotonnes)                   |                                |  |  |
| TP1   | -0.5   | -29                            | 9                              |  |  |
| <b>TP2</b> -0.9 -42 11  |  |                                |                                |  |  |
|   | NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods. |                                |                                |  |  |

# BATC - TEXTILES

### Scope and membership of the umbrella agreement

BATC represents the textile and clothing industry in the UK, carrying out various activities in textile dyeing, finishing and scouring.

### Targets

The targets for this sector are given in primary kWh at a given level of throughput  $(kWh_p)$ . These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(kWh <sub>p</sub> ) | TP1(2002)<br>(kWh <sub>p</sub> ) | TP2(2004)<br>(kWh <sub>p</sub> ) | TP3(2006)<br>(kWh <sub>p</sub> ) | TP4(2008)<br>(kWh <sub>p</sub> ) | TP5(2010)<br>(kWh <sub>p</sub> ) |
|----------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Original | -                               | 3,773,360,985                    | 3,705,460,831                    | 3,635,353,875                    | 3,555,113,619                    | 3,474,799,992                    |
| At TP1   | 3,726,083,555                   | 3,693,676,535                    | 3,624,881,861                    | 3,554,357,028                    | 3,471,562,685                    | 3,388,313,526                    |
| 2004     | -                               | -                                | -                                | 3.0%                             | 3.0%                             | 3.0%                             |
| Review*  |                                 |                                  |                                  |                                  |                                  |                                  |
| At TP2   | 3,040,420,110                   | -                                | 2,950,479,118                    | 2,803,061,758                    | 2,735,992,681                    | 2,667,631,254                    |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

# Additional adjustments to the sector target at the second target period

# **Carbon trading**

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- A total of 65 ktCO<sub>2</sub> from over-performances was ring-fenced.
- Allowances equivalent to 4 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net surplus of 61  $ktCO_2$ , which is equivalent to a sector target tightening of -322,231,739  $kWh_p$ . (Note - figures rounded for presentation.)

### PMO

A number of product mix adjustments were carried out at the target unit (TU) level and to adjust the overall sector target for throughput.

**Final adjusted sector target for the second target period** As a consequence of the adjustments described above, the final sector target for the second target period was 2,895,201,522 kWh<sub>p</sub>.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>43</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivaler     | nt baseline (1999           | )   | P               | erformance                  |     |
|-----|---------------|-----------------------------|-----|-----------------|-----------------------------|-----|
|     | Energy (kWh)  | Production<br>(mixed units) | SEC | Energy<br>(kWh) | Production<br>(mixed units) | SEC |
| TP1 | 3,726,083,555 | 766,435,746                 | N/A | 3,141,386,873   | 790,518,197                 | N/A |
| TP2 | 3,040,420,110 | 724,797,294                 | N/A | 2,435,380,254   | 770,849,107                 | N/A |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

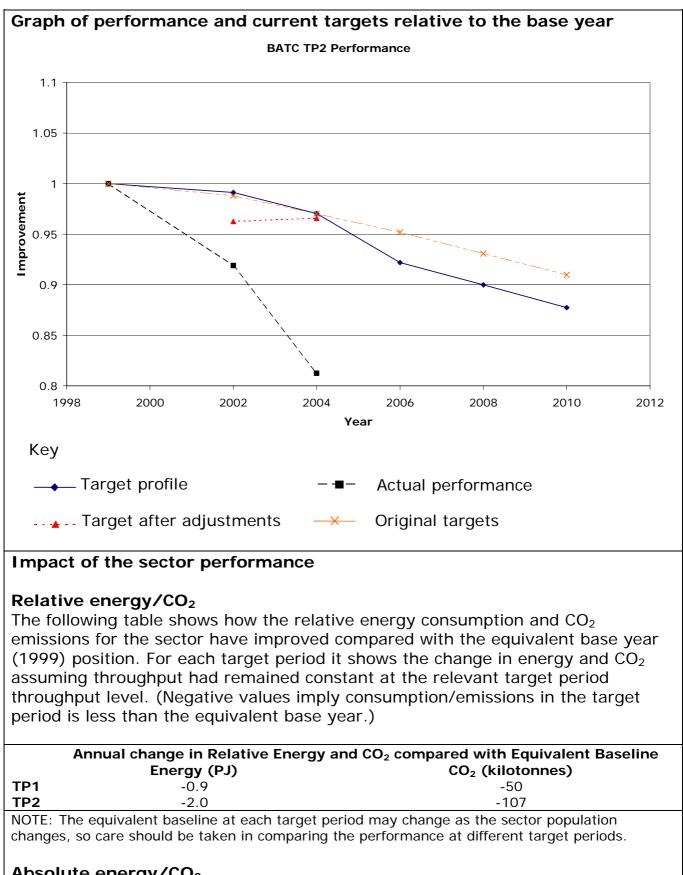
|      | Change in energy use compared with Equ            | ivalent Baseline at each Target Period   |
|------|---|--|
|      | Target Improvement                                | Actual Improvement   |
| TP1  | 1.1%  | 8%   |
| TP2  | 3%  | 19%  |
| NOTE | These firmines are not directly some makely sizes | the state of the s |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector, the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix.

<sup>&</sup>lt;sup>43</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



# Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and CO<sub>2</sub>

emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

|     | Energy (PJ) | CO <sub>2</sub> | Production (%) |
|-----|-------------|-----------------|----------------|
|     |             | (kilotonnes)    |                |
| TP1 | -2.1        | -114            | 3              |
| TP2 | -2.2        | -115            | 6              |

## AIC (formerly UKASTA)

Scope and membership of the umbrella agreement

The AIC (UKASTA) agreement covers the majority of UK animal feed production.

#### Targets

The targets for this sector are given in primary kWh per tonne ( $kWh_p/te$ ). These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|          | Baseline<br>(kWh <sub>p</sub> /<br>te) | TP1(2002)<br>(kWh <sub>p</sub> /<br>te) | TP2(2004)<br>(kWh <sub>p</sub> /<br>te) | TP3(2006)<br>(kWh <sub>p</sub> /<br>te) | TP4(2008)<br>(kWh <sub>p</sub> /<br>te) | TP5(2010)<br>(kWh <sub>p</sub> /<br>te) |
|----------|--|---|---|---|---|---|
| Original | 163.7                                  | 160.2                                   | 157.0                                   | 154.5                                   | 153.3                                   | 152.1                                   |
| At TP1   | 170.7                                  | 167.0                                   | 163.6                                   | 161.1                                   | 159.8                                   | 158.6                                   |
| 2004     | -                                      | -                                       | -                                       | 3.0%                                    | 3.5%                                    | 4.0%                                    |
| Review*  |  |   |   |   |   |   |
| At TP2   | 172.4                                  | 168.7                                   | 165.2                                   | 157.8                                   | 155.8                                   | 153.7                                   |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means an easing of targets and a negative value means a relaxation of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review.

### Additional adjustments to the sector target for the second target period

### Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- A total of 81 ktCO<sub>2</sub> was ring-fenced.
- A total of 2 ktCO<sub>2</sub> was sold.
- Allowances equivalent to 15 ktCO<sub>2</sub> were purchased.

Overall, the net result of trading was a surplus of 68  $ktCO_2$  this is equivalent to a sector target change (tightening) of -15.6  $kWh_p$ /te. (Note - figures rounded for presentation.)

### PMO

Product mix adjustments were carried out purely at the target unit level and only at one site.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 149.7 kWh<sub>p</sub>/te.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>44</sup> baseline for all the target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivaler       | nt baseline (19    | 99)                               | P             | erformance         |                                   |
|-----|-----------------|--------------------|-----------------------------------|---------------|--------------------|-----------------------------------|
|     | Energy<br>(kWh) | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) | Energy (kWh)  | Production<br>(te) | SEC<br>(kWh <sub>p</sub> /<br>te) |
| TP1 | 3,390,170,196   | 19,857,252         | 170.7                             | 3,248,544,075 | 20,519,724         | 158.3                             |
| TP2 | 3,297,955,281   | 19,125,693         | 172.4                             | 3,292,906,057 | 21,200,430         | 155.3                             |

### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

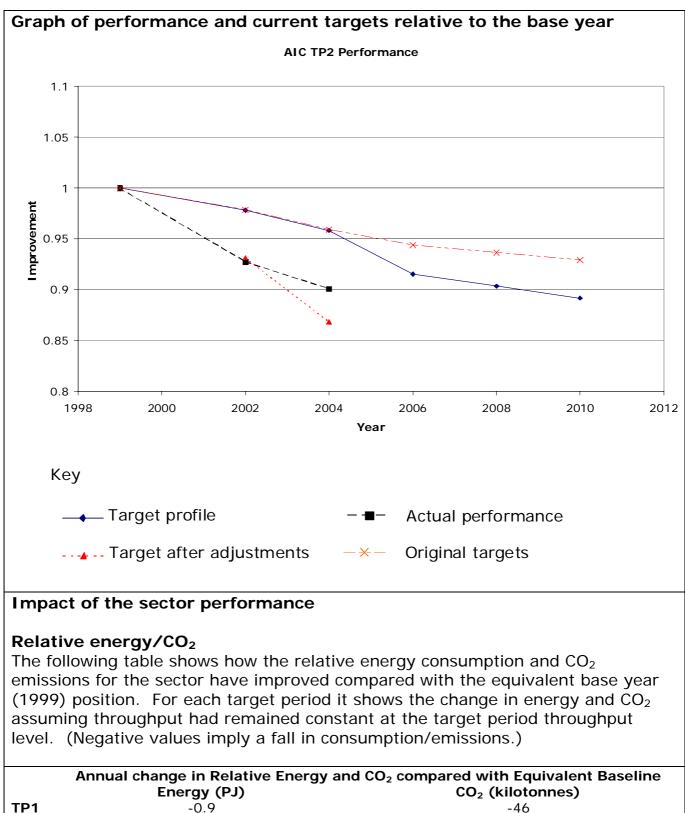
|      | Improvement in SEC compared with Equivalent Baseline at each Target Period |                                    |  |  |
|------|--|------------------------------------|--|--|
|      | Target Improvement   | Actual Improvement                 |  |  |
| TP1  | 2.2%   | 7.3%                               |  |  |
| TP2  | 4.2%   | 9.9%                               |  |  |
| NOTE | These figures are not directly compara                                     | able since the equivalent baseline |  |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the agreement.

All the facilities except one have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix. In addition, one facility cited a relevant constraint that was accepted by Defra.

<sup>&</sup>lt;sup>44</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



|     | Energy (PJ) | CO <sub>2</sub> (kilotonnes) |
|-----|-------------|------------------------------|
| TP1 | -0.9        | -46                          |
| TP2 | -1.3        | -74                          |

NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions).

| Annual change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline |  |                 |                |  |  |
|--|--|-----------------|----------------|--|--|
|  | Energy (PJ)  | CO <sub>2</sub> | Production (%) |  |  |
| (kilotonnes)   |  |                 |                |  |  |
| TP1  | -0.5   | -23             | 3              |  |  |
| TP2  | -0.02  | -1              | 11             |  |  |
|  | NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods. |                 |                |  |  |

# ASSOCIATION OF WALLCOVERING MANUFACTURERS

Scope and membership of the umbrella agreement

Companies in this sector manufacture wallcoverings and related products.

### Targets

The original targets for this sector were in terms of primary kWh ( $kWh_p$ ). These targets have changed as a result of baseline corrections, entrants and exits and reductions for changes in throughput.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|                | Baseline<br>(kWh <sub>p</sub> ) | TP1(2002)<br>(kWh <sub>p</sub> ) | TP2(2004)<br>(kWh <sub>p</sub> ) | TP3(2006)<br>(kWh <sub>p</sub> ) | TP4(2008)<br>(kWh <sub>p</sub> ) | TP5(2010)<br>(kWh <sub>p</sub> ) |
|----------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Original       | 602,755,838                     | 593,353,219                      | 566,783,703                      | 558,013,278                      | 553,424,653                      | 548,564,629                      |
| At TP1         | 783,561,216                     | 698,383,887                      | 673,517,244                      | 662,753,550                      | 656,290,427                      | 649,708,821                      |
| 2004           | -                               | -                                | -                                | TBA                              | TBA                              | TBA                              |
| <b>Review*</b> |                                 |                                  |                                  |                                  |                                  |                                  |
| At TP2         | 453,414,278                     | -                                | 332,696,272                      | TBA                              | TBA                              | ТВА                              |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. In this case "TBA" means that these figures are still to be agreed.

As this sector has absolute targets and because throughput of the sector fell by more than 10% in target period 2 relative to the base year the sector target was subject to a CCA16 adjustment. CCA16 adjustments were also applied to three target units (TUs) within the sector. The targets for TP3, TP4 and TP5 (at TP2) take account of the sector adjustment, and of any entrants and exits, but not the facility CCA16s that were only applied to the TP2 targets.

### Additional adjustments to the sector target for the second target period

### Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- No over-performance was ring-fenced or traded.
- Allowances equivalent to 6 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net purchase of  $6,108 \text{ tCO}_2$ , which is equivalent to a sector target change (easing) of  $33,720,025 \text{ kWh}_p$ . (Note - figures rounded for presentation.)

# CCA16

The sector had a CCA16 applied to its targets because throughput had fallen by greater than 10% relative to the base year. In addition, three target units had their targets adjusted because their throughputs had fallen by more than 10% of their agreed reference value.

### PMO

No product mix adjustments were carried out.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 366,416,297 kWh<sub>p</sub>.

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>45</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

| Equivalent baseline (1999) |                             |     | Performance     |                             |     |
|----------------------------|-----------------------------|-----|-----------------|-----------------------------|-----|
| Energy (kWh)               | Production<br>(mixed units) | SEC | Energy<br>(kWh) | Production<br>(mixed units) | SEC |
| <b>TP1</b> 783,561,216     | 839,166,599                 | N/A | 627,286,792     | 797,641,520                 | N/A |
| <b>TP2</b> 453,414,278     | 395,930,194                 | N/A | 347,708,947     | 405,285,339                 | N/A |

#### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

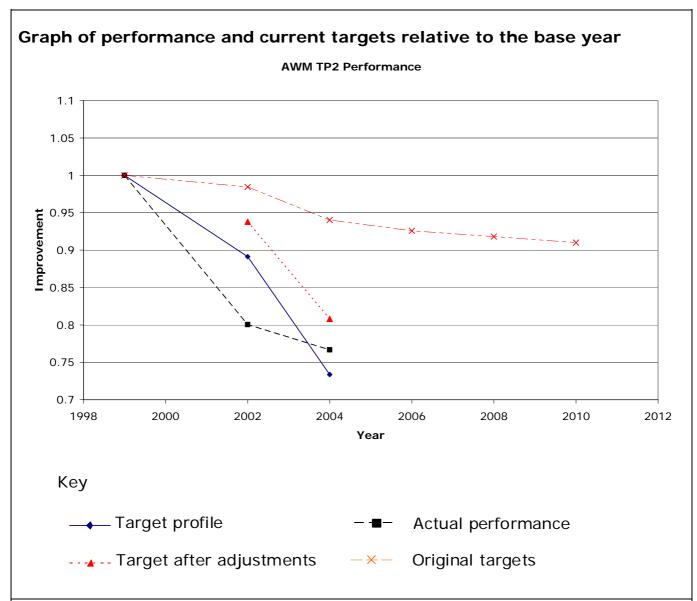
|     | Change in energy use compared with Equivalent Baseline at each Target Period |                    |  |
|-----|--|--------------------|--|
|     | Target Improvement   | Actual Improvement |  |
| TP1 | 11%  | 20%                |  |
| TP2 | 27%  | 23%                |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector, the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through trading.

<sup>&</sup>lt;sup>45</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



### Impact of the sector performance

### Relative energy/CO<sub>2</sub>

This sector is has an absolute sector and so it is not appropriate to calculate how the relative energy consumption and CO<sub>2</sub> emissions for the sector have changed compared to the equivalent base year position.

### Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply consumption/emissions in the target period is less than the equivalent base year.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline  |                              |                       |                                 |  |  |
|---|------------------------------|-----------------------|---------------------------------|--|--|
|   | Energy (PJ)                  | CO <sub>2</sub>       | Production (%)                  |  |  |
|   |                              | (kilotonnes)          |                                 |  |  |
| TP1   | -0.6                         | -28                   | -5                              |  |  |
| TP2   | -0.4                         | -19                   | 2                               |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population |                              |                       |                                 |  |  |
| changes, s  | o care should be taken in co | mparing the performan | ce at different target periods. |  |  |

## WOOD PANEL INDUSTRIES FEDERATION

## Scope and membership of the umbrella agreement

WPIF represents the manufacturers of wood panels in the UK, including chipboard, Oriented Strand Board and MDF. A separate company, WPIF Environmental Ltd, is established to act as the "Sector Association". For the purpose of the CCL agreement, WPIF is the contracted manager to WPIF Environmental Ltd.

### Targets

The targets for this sector are given in primary kWh per cubic metre  $(kWh_p/m^3)$ . These targets change with time as the composition of the sector changes, owing to exits and entrants, and as a result of corrections to baseline data.

The following table shows the targets and equivalent 1999 baseline for this sector as originally agreed and at each target period (TP) to date.

|                 | Baseline<br>(kWh <sub>p</sub> /<br>m <sup>3</sup> ) | TP1(2002)<br>(kWh <sub>p</sub> /<br>m <sup>3</sup> ) | TP2(2004)<br>(kWh <sub>p</sub> /<br>m <sup>3</sup> ) | TP3(2006)<br>(kWh <sub>p</sub> /<br>m <sup>3</sup> ) | TP4(2008)<br>(kWh <sub>p</sub> /<br>m <sup>3</sup> ) | TP5(2010)<br>(kWh <sub>p</sub> /<br>m <sup>3</sup> ) |
|-----------------|---|--|--|--|--|--|
| Original        | 952   | 940  | 919  | 899  | 890  | 882  |
| At TP1          | 972   | 959  | 938  | 917  | 909  | 900  |
| 2004<br>Review* | -   | -  | -  | 1.87%  | 3.92%  | 6.02%  |
| At TP2          | 972   | -  | 938  | 981  | 953  | 925  |

<sup>\*</sup> The row "2004 Review" shows the percentage change of targets resulting from the review of targets in 2004/5. Note that a positive percentage value means a tightening of targets and a negative value means an easing of targets. The targets for TP3, TP4 and TP5 (at TP2) take account of these adjustments and of any entrants, exits and corrections subsequent to the review. In addition, in this sector the revised targets for TP3, TP4 and TP5 refer to a new baseline figure of 1055 kWh/m<sup>3</sup>.

It should be noted that the TP5 target for this sector will be reviewed again in 2008.

### Additional adjustments to the sector target for the second target period

# Carbon trading

Trading and ring-fencing within the sector were carried out purely at the target unit level:

- Allowances equivalent to 64 ktCO<sub>2</sub> were ring-fenced or traded.
- Allowances equivalent to 5 ktCO<sub>2</sub> were purchased.

Overall, trading resulted in a net ring-fencing or trading of 60 ktCO<sub>2</sub>, which is equivalent to a sector target change (tightening) of -91 kWh<sub>p</sub>/m<sup>3</sup>. (Note - figures rounded for presentation.)

PMO

Product mix adjustments were carried out purely at the target unit level.

### Final adjusted sector target for the second target period

As a consequence of the adjustments described above, the final sector target for the second target period was 847  $kWh_p/m^3$ .

#### Sector performance recorded

The following table shows the sector performance against the equivalent<sup>46</sup> baseline for all target periods to date. The equivalent baseline changes as the composition of the sector changes with time.

|     | Equivalent baseline (1999) |                    |                                   | Performance     |                                 |                                   |
|-----|----------------------------|--------------------|-----------------------------------|-----------------|---------------------------------|-----------------------------------|
|     | Energy<br>(kWh)            | Production<br>(m³) | SEC<br>(kWh <sub>p</sub> /<br>m³) | Energy<br>(kWh) | Production<br>(m <sup>3</sup> ) | SEC<br>(kWh <sub>p</sub> /<br>m³) |
| TP1 | 3,049,768,069              | 3,138,392          | 972                               | 3,170,074,284   | 3,230,814                       | 981                               |
| TP2 | 3,049,768,069              | 3,138,392          | 972                               | 3,130,272,007   | 3,609,403                       | 867                               |

### Commentary

The following table shows how the sector has improved relative to the equivalent base year (1999) position at each target period.

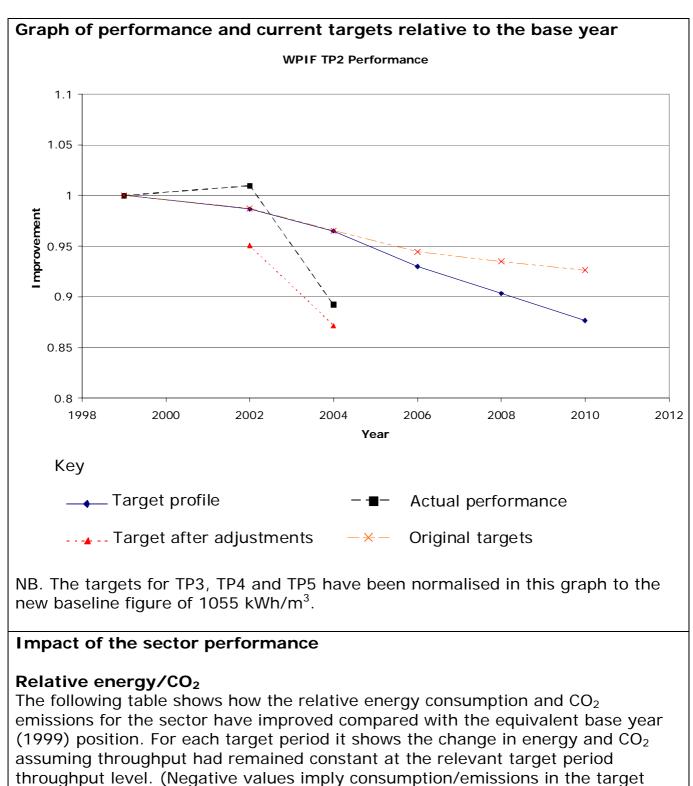
|                                      | Change in SEC compared with Equivalent Baseline at each Target Period |       |  |
|--------------------------------------|---|-------|--|
| Target Improvement Actual Improvemen |   |       |  |
| TP1                                  | 1.3%  | -1.0% |  |
| TP2                                  | 3.5%  | 11%   |  |

NOTE: These figures are not directly comparable since the equivalent baseline changes at each target period as the sector population changes.

In this sector the target improvements were based on the assumption that throughput would remain at a constant level throughout the period of the agreement.

All the facilities have been re-certified either because they have met their individual targets outright, or through a mixture of trading and/or product mix or by proving a relevant constraint.

<sup>&</sup>lt;sup>46</sup> Please see Annex 2 of the main report for an explanation of the format and terminology of this summary.



| I | in oughput level. (Negative values in pry consumption |
|---|---|
|   | period is less than the equivalent base year.)        |

|     | Annual Change in Relative Energy and CO <sub>2</sub> compared with Equivalent Baseline |     |  |
|-----|--|-----|--|
|     | Energy (PJ) CO <sub>2</sub> (kilotonnes)   |     |  |
| TP1 | 0.1  | 6   |  |
| TP2 | -1.4   | -68 |  |

NOTE: The equivalent baseline at each target period may change as the sector population changes, so care should be taken in comparing the performance at different target periods.

## Absolute energy/CO<sub>2</sub>

The following table shows how the absolute energy consumption and  $CO_2$  emissions for the sector have improved compared with the equivalent base year (1999) position for each target period. It also shows the percentage change in throughput. (Negative values imply a fall in consumption/emissions.)

| Annual Change in Absolute Energy and CO <sub>2</sub> compared with Equivalent Baseline  |                               |                       |                                 |  |  |
|---|-------------------------------|-----------------------|---------------------------------|--|--|
| Energy (PJ)   |                               | CO <sub>2</sub>       | Production (%)                  |  |  |
|   |                               | (kilotonnes)          |                                 |  |  |
| TP1   | 0.4                           | 22                    | 3                               |  |  |
| TP2   | 0.3                           | 15                    | 15                              |  |  |
| NOTE: The equivalent baseline at each target period may change as the sector population |                               |                       |                                 |  |  |
| changes,  | so care should be taken in co | mparing the performan | ce at different target periods. |  |  |