**French emission trading scheme**

The European emission trading scheme (ETS) has officially started on the 1st of January 2005. The French registry is online since the 18th of May 2005. Firms covered by the scheme are in the energy intensive sector and energy production (electricity, urban heating, cogeneration, refineries).

**Overall allowance quota**

The total amount of permit allocated is **156.51 MtCO₂** (there is a set aside for new entrants of 5.69 MteCO₂). The total amount of permit allocated represents only 28% of French emissions, this is due to the fact that French emissions from the energy sector are much lower than in other countries because France’s electricity is mainly produced from nuclear power. Allowances have been allocated for free, according to a grandfathering method.

Out of the overall allowance quota (excluding reserves) of 150.82 MteCO₂, **58.26 MtCO₂** will be allocated to the industry sector, **64.98 MtCO₂** to the energy sector, and **27.57 MtCO₂** to the “other energy industries sector” which comprises the chemical industries, food and drink industries and other combustion installations but excludes any process emission. The envelope of allowances is incentive-based, since it requires an effort to reduce emissions by -2.43% compared to the business as usual scenario which has been assessed according to progress rates.

**Sector by sector allocation**

Each sector received a quantity of allowances (taken from the total amount of allowances either for energy or industry depending upon the case), based (pro-rata) on the result of the following calculation: Distribution key = {ESₚｒｏｃｅｓｓ + ES� /////ₚｒｏｃｅｓｓ + (ESfuels*coefficient of progress)} *{production 2005-2007} where ES = specific emissions of that sector, ie: emissions per unit produced 
The base years for specific emissions are the years 1998/2001 (average).

The progress rates were established on the basis of a study carried out by CEREN for the ADEME. The study was carried out using the identification of high-performance techniques; the rate of penetration observed; the average rate of equipment renewal and past dissemination rates. These progress rates therefore represent the potential for technological improvements which are judged to be achievable at accessible cost for each branch, determined after extensive examination by the different professions and the ADEME.

**Table 4: specific emissions 1998—2001 (in tCO₂ per tonne produced) progress factor and target specific emissions 2005 to 2007 by industrial sector**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Iron and Steel</strong></td>
<td>1.138</td>
<td>0.975</td>
<td>1.116</td>
</tr>
<tr>
<td><strong>Steel industry gases</strong></td>
<td>0.930</td>
<td>1.000</td>
<td>0.930</td>
</tr>
<tr>
<td><strong>Cement</strong></td>
<td>0.678</td>
<td>0.916</td>
<td>0.656</td>
</tr>
<tr>
<td><strong>Limestone</strong></td>
<td>1.023</td>
<td>0.996</td>
<td>1.021</td>
</tr>
<tr>
<td><strong>Glass</strong></td>
<td>0.669</td>
<td>0.961</td>
<td>0.647</td>
</tr>
<tr>
<td><strong>Paper and pulp</strong></td>
<td>0.386</td>
<td>0.968</td>
<td>0.374</td>
</tr>
<tr>
<td><strong>Ceramics</strong></td>
<td>0.548</td>
<td>0.984</td>
<td>0.540</td>
</tr>
</tbody>
</table>
The growth forecasts were estimated by comparing the forecasts of the industrial federations with those produced by various studies (the MEDEE model (Commissariat au Plan), the PRIMES model (European Commission). A similar method was applied to the energy sectors.

Table 1: results of the sector-by-sector allocation (MtCO$_2$)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Iron and Steel</th>
<th>Cement</th>
<th>Limestone</th>
<th>Glass</th>
<th>Paper</th>
<th>Ceramics</th>
<th>Tiles / bricks</th>
<th>CF$^1$</th>
<th>Industry total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MtCO$_2$ allocation</td>
<td>28.71</td>
<td>14.22</td>
<td>3.24</td>
<td>3.98</td>
<td>5.16</td>
<td>0.04</td>
<td>1.34</td>
<td>1.57</td>
<td>58.26</td>
</tr>
</tbody>
</table>

$^1$ externalised combustion facilities in industry

<table>
<thead>
<tr>
<th>Energy</th>
<th>Electricity production</th>
<th>Urban heating</th>
<th>CF$^2$</th>
<th>Refining</th>
<th>Gas transport</th>
<th>Coke works</th>
<th>Energy total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MtCO$_2$ allocation</td>
<td>35.92</td>
<td>7.91</td>
<td>0.59</td>
<td>19.36</td>
<td>0.88</td>
<td>0.32</td>
<td>64.98</td>
</tr>
</tbody>
</table>

$^2$ Externalised combustion facilities in energy

Allocation to individual facilities

The sector-by-sector envelopes are distributed on the basis (pro-rata) of historic emissions of CO$_2$ for each facility. A single reference year or period is used for all facilities in the same sector other than special cases. Operators should provide emission data going back to 1996. The federations concerned were invited to make their preference known for the choice of the sectorial base years.

For the installation in the sector called “other combustion installations”, the allocation is based (pro-rata) on the result of the following calculation.

Distribution key = { average emission over the 3 years with the highest emission between 1996 and 2002) * 0.95*production growth* ⋆ 0.9757

New entrants and closure

The option chosen by France for new entrants is to freely allocate allowances from a reserve so as to ensure equal treatment between new entrants and existing facilities.

A facility which ceases to operate will trigger the suspension of allowance allocation. Allocations which have been allocated but not issued will be transferred to the reserve for new entrants.

In the event of the activity being moved, the operator may ask to keep some or all of the allowances allocated to the facility which has been closed down, in proportion to the amount of
activity being moved. This exception is incompatible with the issue of any allowances for new entrants.

Kyoto mechanisms

The linking directive has not yet been transposed in French law. However, it is clear that the French government does not envisage to put more restrictions on the use of project base mechanisms than the one that are already in the linking directive.

The French government is planning to purchase CDM/JI credits. The prime minister has announced that a carbon fund of 50 M€ will be created in the coming months.

Websites:

http://www.europa.eu.int/comm/environment/climat/home_en.htm where all the information on the EU ETS is available
http://www.ecologie.gouv.fr/IMG/doc/PNAQ_definitif.doc where the last French national allocation plan (2005) can be downloaded
www.legifrance.gouv.fr where the French laws and decree can be downloaded:
- Ordonnance n° 2004-330 du 15 avril 2004 portant création d’un système d’échange de quotas d’émission de gaz à effet de serre,
- Décret n°2004-1412 du 23 décembre 2004 relatif au registre national des quotas d’émission de gaz à effet de serre et le montant des quotas affectés,
- Arrêté du 25 février 2005 fixant la liste des exploitants auxquels sont affectés des quotas d’émission de gaz à effet de serre et le montant des quotas affectés,
- Arrêté du 25 février 2005 modifiant le décret no 2004-832 du 19 août 2004 pris pour l’application des articles L. 229-5 à L. 229-19 du code de l’environnement et relatif au système d’échange de quotas d’émission de gaz à effet de serre,
- Arrêté du 9 mars 2005 portant approbation des modèles de la convention mentionnée à l’article 2 du décret n°2004-1412 du 23 décembre 2004 relatif au registre national des quotas d’émission de gaz à effet de serre prévu par l’article L.229-16 du code de l’environnement,
- Arrêté du 27 mai 2005 portant modalités d’agrément des organismes vérificateurs dans le cadre du système d’échange de quotas d’émission de gaz à effet de serre.