

# **Revision of the Ecolabelling Criteria for Tissue Paper**

## **Comments and background to the second draft proposal**

**May 4 2006**

### **SIS Ecolabelling**

#### **Scope:**

The scope of the criteria was discussed during the first Ad Hoc Working group meeting. No changes were proposed during either the first AHWG meeting or the EUEB meeting in December 2005. However, at the second Ad Hoc Working group meeting it was proposed that it should be clarified in the text that the tissue paper laminated with paper is included the scope.

#### **Criteria:**

To check to levels of the proposed criteria in the first draft criteria for tissue paper, emissions and energy levels have been studied at 24 kraft pulp mills and 23 tissue paper mills. The information was collected mostly from environmental reports and other official statements.

Most of the pulps are market pulps from Europe, however, a couple of them from South and North America. All the pulps investigated can be used in the production of tissue paper. The Tissue paper mills are producers of recycled fiber based or/and virgin fiber based tissue. The studied tissue mills are located in Sweden, Germany, UK, Italy, France, Netherlands, Belgium, Portugal, Spain and Slovakia

#### ***Emissions to water and air:***

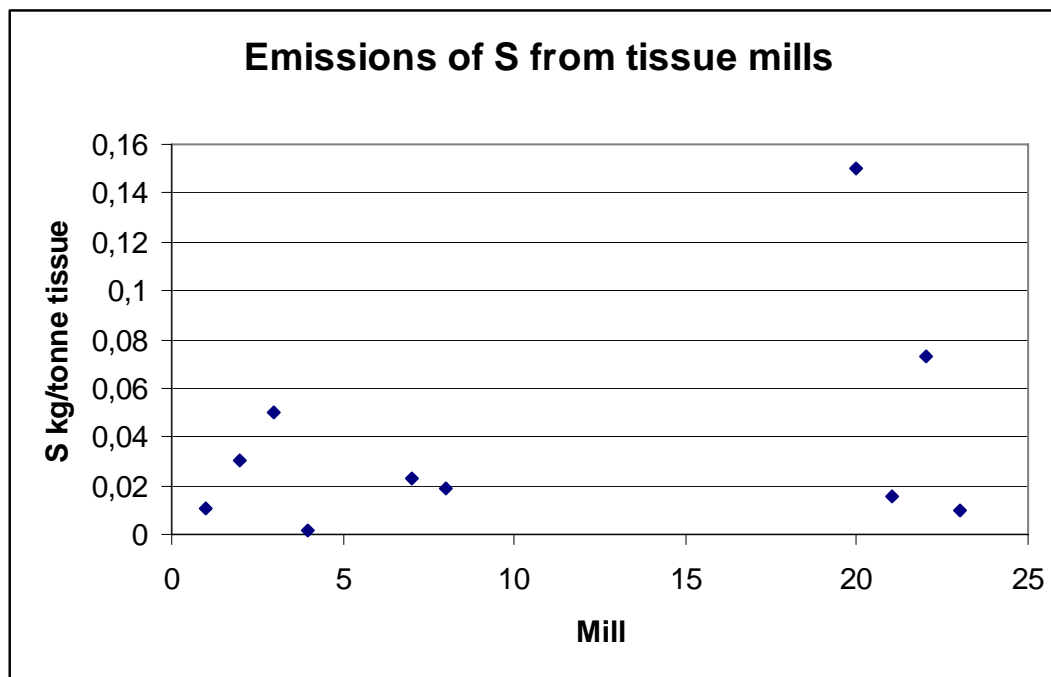
##### **1a) The reference value for the COD emission from the recycled paper production**

The reference values for the COD emissions from the recycled paper production has been reduced from 4 to 2 to meet the comments received at the second Ad Hoc Working group meeting that the limit should be made more stringent.

##### **1a) The reference value for the emissions of S from the tissue mills**

The reference values for the sulphur emissions have been reduced from 0.3 kg/tonne to 0.03 kg/tonne for recycled fiber and tissue production. The background for this can be seen in the figure 1. Obviously natural gas is used for the energy generation in several tissue paper mills in the central and southern Europe, while biofuels are more common in the Nordic countries. The use of both these fuels reduce the sulphur emission from the tissue paper mills. In the figure 1, the mills 11-21 have reported 0 emissions of S. The mean value for the mills is 0.04 kg/tonne tissue.

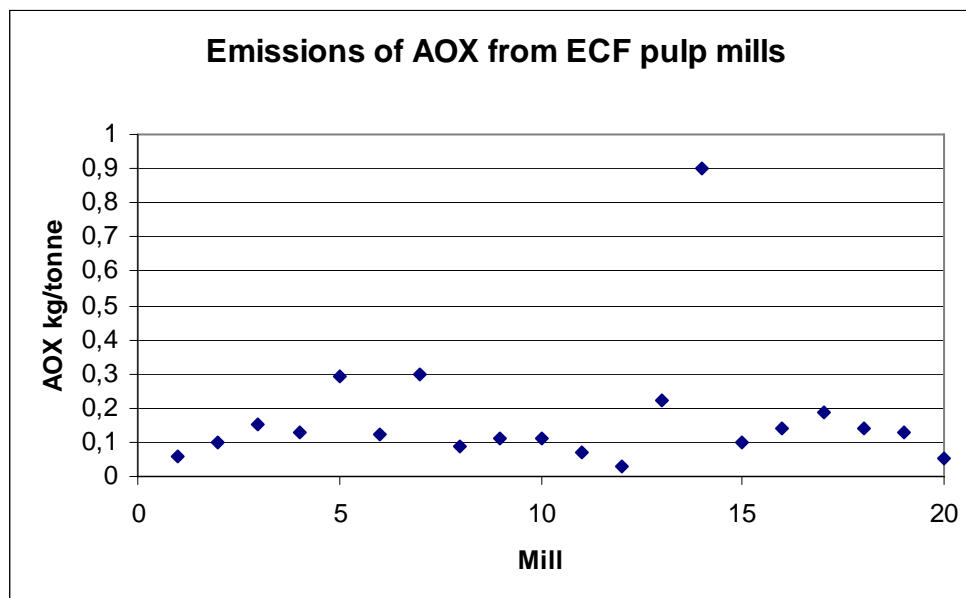
Figure 1



**1b) The reference value for the AOX emission from the pulp production**

At the second Ad Hoc Working group meeting it was proposed that the the limit for the emission of AOX from the ECF pulps should be reduced. The limit in the first draft, 0.25 kg/tonne, was the BAT value in the BREF. In the figure 2 values are shown for AOX emissions from 24 ECF pulp mills. The mean value is 0.17 kg/tonne. The new structure for the requirement is to offer flexibility. A pulp with higher emissions of AOX than 0.12 kg/tonne can be used in a pulp mix if another pulp with lower AOX emissions is used to compensate for it. In a pulp mix where 50% of the pulps have the AOX emissions of 0.25 kg/tonne, 50% of the pulps must therefore be TCF pulps with no AOX emissions.

**Figure 2**



**1 c) Requirement on the emission of CO<sub>2</sub>**

The limit for the emissions of CO<sub>2</sub> has been raised to 1300 kg/tonne from 1100 kg/tonne to meet the comments received at the second Ad Hoc Working group meeting that the proposed limit was too stringent. The figure 3 shows emission values for 23 tissue mills in Europe. The mean value is 1034 kg/tonne. Most of them are producing recycled fiber based tissue. It seems that as the whole of it there is no significant difference if the pulp is made of recycled fibres or virgin fibres. In the figure 4 is shown CO<sub>2</sub> emissions from 22 kraft pulp mills. The mean value is 148 kg/tonne. Together the average CO<sub>2</sub> emission values for the pulp and paper production is 1182 kWh/tonne.

Figure 3

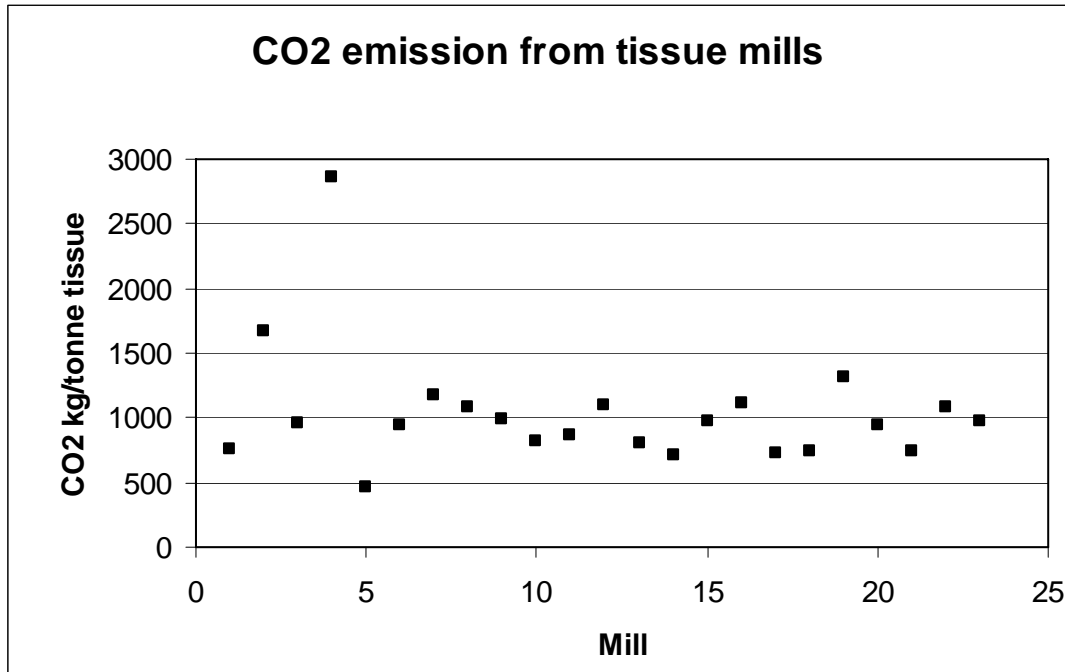
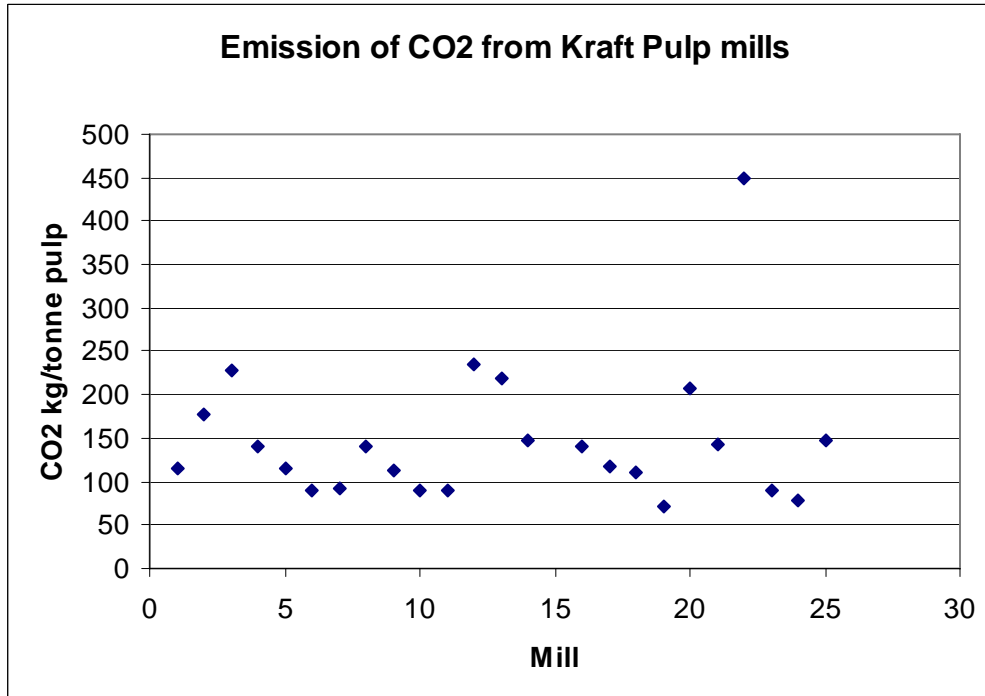


Figure 4

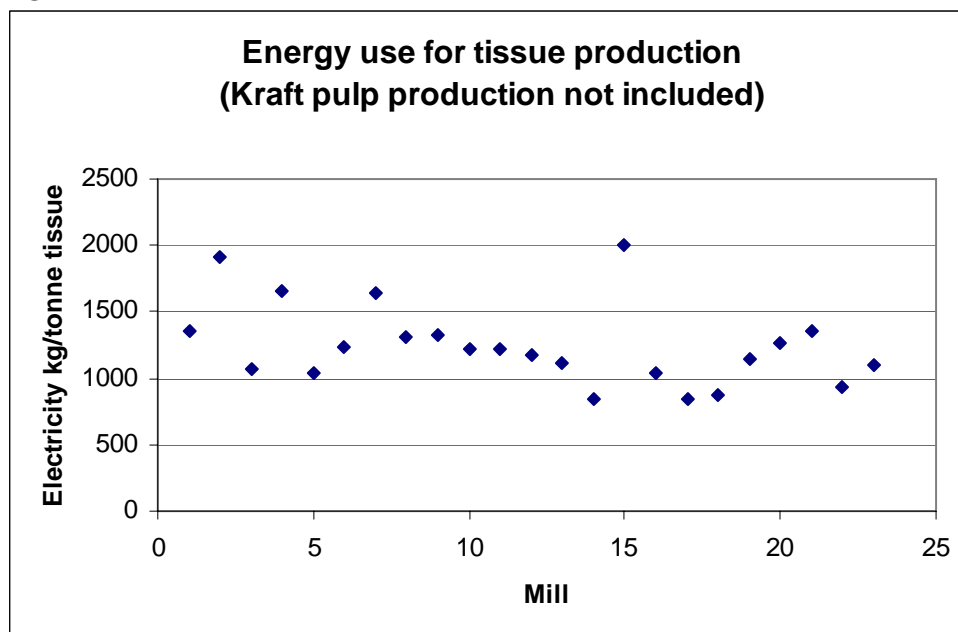


## 2. Requirement on the Energy Use:

The limit for energy use has been raised 2200 kWh/tonne from 2000 kWh/tonne to meet the comments received at the second Ad Hoc Working group meeting that the limit was too stringent. In figure 5 is shown the electricity consumption of 23 tissue mills in Europe. The average value is 1246 kWh/tonne tissue. Unfortunately in some cases it has not been clarified if the value refers both to the tissue paper production and recycled fiber production. However, there seems to be no significant difference between the virgin fiber producing mills and tissue mills based on recycled fiber. If the BAT higher limit for the electricity use for kraft pulp production, 800 kWh/tonne pulp, is added to the average value, 1246 kWh/tonne for the tissue production, the average for both pulp and paper is 2046 kWh /tonne.

Therefore the new level has been proposed to be 2200 kWh/ADT tissue, calculated as the sum of the weighted energy consumptions of the different pulps and the electricity consumption of the tissue paper production.

*Figure 5*



### 4f) Softeners, lotions and additives of natural origin:

The discussion at the second Ad Hoc Working group meeting pointed out the complexity to set a criterion on softeners, lotions and additives of natural origin mainly because of the lack of relevant standard analysing methods. However, the additives that are used in eco-labelled tissue paper, should not be allergenic, carcinogenic or mutagenic.