

FEBELCEM's comments and remarks

1. General remarks about the study

We feel that globally the study answers correctly to the question raised i.e.. the difference between environmental of incineration and co-incineration in cement kiln in Belgium.

We feel that the results of the study are robust: two LCA methods and two methods of aggregation have been used, a nearly-complete representativeness of the waste used as fuel in cement kiln in Belgium is assured and the sensitivity tests confirm the main conclusions.

However, we would like to highlight the fact that in many respects this study considers the worst case for the cement kilns, a.o.:

- The way of calculating NO_x emissions (as mentioned in chapter 3.3);
- Presentation of a non representative scenario for solvent (supportive fuel in a rotary kiln);
- Sensitivity tests present unfavorable situation for the cement kiln: a.o. on shadowprice on CO₂ and SO_x and on transfer coefficients for waste incineration. Besides, from our point of view, the values used in this later test are poorly justified.
- The selection of the incineration techniques for each of the five waste streams is made on the basis of technical considerations. We accept that choice but we stress this does not necessary correspond to the actual practice (one single installation (rotary kiln) in Flanders is currently allowed to treat hazardous waste). The scenario for hazardous sludge's is therefore favorable to the incinerators.

We feel that the report and its conclusions are conservative and that these elements are to be kept in mind for any interpretation of the results.

2. General remarks about OVAM's contribution to the study

TNO, Neosys and/or Febelcem have already answered most of remarks of OVAM. Among others, this is the case for: the substitution scenarios (use of petcoke and coal), difference between dry and wet processes, NO_x emissions, capitation of heavy metals, methods of marginal change, representation of the incineration plants, information about the waste streams.

We deplore the fact that OVAM does not want to accept the scientific answers previously given and never gave any scientific basis justifying these refusals.

3. Energy performance (OVAM's remarks 2 and 3)

We never had the opportunity to answer the question about the energy performance. The mail of OVAM state the following:

- *"The letter of the Minister of 30.01.2007 [...] suggested that both emissions and energy performance should be researched."* and
- *"The fact that the amount of used energy/ton produced clinker is signifanctly different and the fact that there is a lot more loss of energy in the cement industry in comparison with the incineration plant have not been discussed."*

We feel that these statements are not correct:

- It has never been suggest that this study should analyze the energy performance but the sustainability of two processes. The letter of the Minister states indeed the following:

“Ik kan instemmen met uw voorstel om gezamenlijk een college van international erkende deskundigen aan te duiden om een analyse te maken van de globale duurzaamheidsbalans van enerzijds de verbranding van afvalstoffen en anderzijds de meeverbranding als nuttige toepassing in de Belgische cementovens” (§5)

The only reference to the energy performance is related to an OVAM’s advice and not to the study.

- The energy loss is independent of the use (or not use) of waste in a cement kiln.

Consequently, the energy loss issue is not relevant in this debate.

In addition we would be interested to know what are the basis that allow OVAM to state that *there is a lot more loss of energy in the cement industry in comparison with the incineration plant.*

4. INDAVER (OVAM’s remark 6)

This has already been answered in the beginning of the study.

The study has been commissioned in order to tackle a controversy between the Flemish Region and FEBELCEM about the environmental performance of incineration and co-incineration.

The review panel is composed of scientific bodies and of the two parties (OVAM standing for the Flemish region as stated in the letter of Minister Peeters of January 30 2007). There is no need to extend this panel to other parties.

In addition, we note that

- The participation of INDAVER is not needed in regard with the ISO standards (as mentioned during our first meeting)
- TNO took contact with Indaver in order to collect the data’s (unfortunately with no success)
- OVAM did not agree to approach Indaver in order to ask them to cooperate to the data acquisition, despite our request.

5. Data asked by OVAM (OVAM’s remark 8)

The information requested is of confidential nature. In addition, it is not required in order to perform an LCA analysis (as confirmed by TNO) nor to assess the representativeness.

We therefore do not understand the rational behind this request and do not see the relevance of disclosing such information.

We also stress that OVAM did not sign any confidentiality clause that is an additional reason to not disclose this information.