MMSD Draft Report: Chapter 11

General and policy oriented comments

- The name of chapter should be changed, for example to: "A Life-Cycle Approach to Using Metals"
 - Using the word "mineral" to cover also metals is confusing. Especially, when talking about the recycling of minerals, it gives a false impression. In practice, metals can be recycled not the "minerals".
- LCA is presented as "a comprehensive solution" for the mining industry (to improve its image). It is not feasible to request that every operation should produce own LCA for every product. LCA of minerals (metals) is only a tool, still requiring a lot of standardisation, further development and refining. Little has been told about the limitations and nothing about the work required to produce a LCA.
 - It would be better to give examples on LCA projects already performed by the metal producers' associations and companies than to complain the complexity of the issue. Referring to these studies difficulties, weak points, availability of data, etc could be presented.

 In this report LCA is presented as a part of the MMSD program. However, a real LCA covers, mining, processing of minerals to metals, refining, fabricating to products and recycling of metals. Here the reader can get the impression that LCA will cover mining and the supply chain (of concentrates) only.
- Benefits of metals for SD are not covered in the report.
- What about the market access? Are there any limits or limitations for the use of minerals and metals? What is the role of the competing materials? Are all minerals and metals acceptable in the current use? Also these issues could be discussed in the report.
- This chapter contains a lot of information. However, it is very difficult to find out the real message.
 - Shorter text, also in other chapters, would improve stakeholders' ability to read it through and find out the message.

Technical comments:

• page 11-3:

Change "mining and mineral sector" to "mining, mineral and metal sector" or to "mining and metal sector"

Paragraphs 3 and 4 could be deleted.

Who should understand the environmental and health effects, the writer or the reader?

• page 11-4:

Information of he two first chapters should be in the general introduction not here.

Fourth paragraph:can help one company exert pressure on others....

Will this be a wise message to our stakeholders?

• page 11-5:

Parargaphs 1, (3), 4 and 6 could be deleted without loosing information?

Paragraph 3: "**coltan**" should be <u>cobalt?</u> Please check the uses of cobalt. "Cobalt is a metal used in metal alloys as a hardening agent" (not in capacitors!!).

• page 11-6:

First paragraph is not very relevant?

Box 11-1: line 4 ...as an alternative = to avoid

• page 7-11:

Box 11-1 contains perhaps too detailed information. Fact sheets should not be too long!

• page 11-8:

Paragraph 3: In this context it is a little bit hypothetical to state that LCA could help "governments to develop product-related policy....."

- page 11-9 could be shorter. The last two paragraphs could be deleted.
- page 11-10:

"Pricing to Reflect True Costs" does not belong under the LCA Sufficiency of minerals depends on the development of technology and price!!!!

• page 11-12:

Paragraph 3: More simpler language could improve the message!

• page 11-14:

Paragraph after the Box 11-3 could be deleted.

• page 11-15:

Delete the second paragraph after the Box

• page 11-16,17:

Government Responses includes more philosophical than practical statements. Shorter text could improve the content.

Keys to Advances in recycling: Proposal for the first paragraph:

"There has been economic incentives to recycle metals for many hundreds of years. The recycling industry is presently an important source of livelihoods world-wide, as well as an important component of the supply of many metal commodities. Metals are often promoted as being infinitely recyclable."

Last paragraph on this page could be deleted.

• page 11-18:

Delete the uncompleted Box 11-4. It is on the next page.

Last paragraph: The UK tax on the production of aggregates has yet not been implemented??

• page 11-21: Information and Decision-Making Framework:

A table of share of recycled raw materials in global metal production could give much more positive information. This data is available if needeed

Metals can be recycled if scrap is available. For many metals, consumption exceeds the availability of recyclables.

• page 11-25:

A four page 'Conclusions and Recommendations " is absolutely too long.

Do not include general introductory discussion and new issues that have not been discussed in the main text.

Present statements and proposals in a list as short sentences. Do not explain anymore.

Does the Worldwatch vision belong to the Conclusions?????