

SDIMI 2003, Closing Remarks

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When two years ago I discussed the idea of a workshop or a conference with my colleague Prof. Michael Karmis, we felt it was about time for a venue of the international community of those involved with sustainable development in the minerals industry. The idea was to provide interested parties with an overview of what was going on internationally, in particular in the field of SD-indicators. This would enable the community to discuss the present status and discuss further developments and steps to be taken. After these 2 days of heavy "conferencing," and to make a long story short, I think the conference has not only done very well, it has been a great success. This has also been proven by the great interest it found both on the international and on the regional and local level. This success can be attributed to various individuals, companies and institutions.

First of all I would like to thank you, the participants for finding your way to Milos more or less easily. Special thanks go to the authors of the presentations.

The work of the International Steering Committee and the Organizing Committee is greatly appreciated. I would like to thank the organizers : The Department of Mining and Minerals Engineering and the Center of Coal and Energy Research at Virginia Tech, USA; The Institute of Mining Engineering 1 and the CRC 525 at Aachen University, Germany; The Department of Mineral Resources Engineering, Technical University of Crete, Greece; The School of Mining Engineering and Metallurgy, National Technical University of Athens, Greece; The Silver and Baryte Ores Mining Company, Greece; The Society for Mining, Metallurgy and Exploration, USA; and The Society of Mining Professors, as well as the conference secretariat, Heliotopos Professional Congress Organizers.

Much of the success can also be attributed to: Silver and Baryte Ores Mining Company, Rio Tinto plc, G.M.M. Larco. S.A., Titan Cement Co. SA, The Greek Public Power Corporation SA, and The Greek Ministry of Environment, Physical Planning and Public Works. We greatly appreciate the opportunity to hold this conference at the Milos Conference Center - George Eliopoulos under the Honorary Chair of Mrs. Kitty Kyriacopoulos.

In particular, I feel indebted to my colleague Prof. Zach Agioutantis and his crew of students for the work and effort that went into local coordination and organization, as well as into the editing of the conference proceedings.

During the last two days we dealt with concepts to develop SD-indicators under various conditions and circumstances. We got to know the views, the efforts and first results achieved by industry, governmental organizations, multinational institutions, and associations, as well as of research and academia. Furthermore, presentations showed case studies of different sectors of the minerals industry dealing with aspects and implementation of the idea of sustainable development. Some sessions were devoted to technology development, others to rehabilitation and waste management.

Not necessarily always during the sessions, but all the more during breaks and in the evenings, intensive discussions took place fostering new ideas and progress on the subject.

Now, what is the road ahead?

We have spent two quite intensive and very constructive days together. And I think that one of the major achievements of this conference is that the common level of information and knowledge was greatly enhanced. But questions, if not to say challenges, remain. We have to realize that discussion and understanding will necessarily evolve over time.

Let me give you some examples of the immediate questions arising from this conference according to my opinion:

1. We have been introduced to at least three different frameworks for SD-Indicators. These are the United States Montreal-based criteria (Sustainable Roundtable), The Canadian continuously-well-being assessment framework, and The EU Pressure - State - Response Framework.

Missing, for example, are the Australian, Chilean and UK points of view. Other countries like Germany and France are in the process of developing their own sets of indicators for the minerals sector.

There is a risk that these different bodies/groups may develop certain fixed standards unique to their region of the world. Such standards could be difficult to harmonize worldwide or in international projects with different partners. Just look at US GAAP versus European accounting principles. What is needed is a smaller set of core indicators held in common across nations.

2. A question in connection with this is product stewardship and accountability along the supply chain. Would for example copper rated against Canadian standards be better copper than the same metal coming from the same source rated according to EU-standards?

3. As a logical consequence of this again, the question as to monitoring and auditing arises. Will there be a voluntary exercise like the ISO auditing scheme, or would there be an authorized or even a governmental body imposing mandatory sustainability reporting on companies? And a corollary is, who will audit the auditors?

4. How far does one have to carry the assessment? Will the scope of view be limited to mining and processing over the whole life-span of an operation (CDN approach) or will one have to carry ones assessments up and down the process chain (LCA) or will it have to become a fully holistic approach incorporating both approaches?

5. Then there is the question of data availability and gathering. Reliability and comparability of data in between different sectors of the extractive industry and between different countries is vital. Standardization will eventually become important and necessary. In my point of view, one of the crucial factors is acquisition and availability of the necessary required data of relevant quality. Very little has so far been said to this point, maybe with the exception of the pragmatic approach of the EU GD Enterprise.

6. During the keynote session the question of trust arose. Do the target groups have confidence in these indicators and the supporting data? Will there be a legal body or organization to certify the credibility of such reports? Who is going to be in charge of this institution? How can communities of interest get more engaged in this process?

7. Another question is that of better communicating the results achieved in the field of sustainable development. Depending on the sector and size of the industry we find some examples of very good reporting. Some are lagging behind while others are doing very well, but fail to communicate this to the communities of interest in the right way.

Yet another aspect of communication is interaction between those of us who are familiar with the subject of sustainable development and other individuals within our professions who do not have the same depth of knowledge. In addition, we have to intensify communication with individuals from the biological-, social- and geo-sciences.

8. One last question is on operationalisation. How can we implement the idea of sustainability into our daily work? How can we improve management practices in the sense of sustainability without losing the view for the operational profit? How can SMEs handle the issue of sustainability?

These are the major questions that emerged from the presentations and discussions at this meeting; however, a number of other important issues in the context of Sustainable Development Indicators will need to be addressed in the near future.

There will be some excellent opportunities to follow developments by participating in the following events:

- The SWEMP 2004 meeting on 17 to 20 May 2004 in Antalya, Turkey
- The 32nd. International Geological Congress on 20 to 28 August 2004, in Florence, Italy
- The "Monitoring Science and Technology Symposium" on 20 to 24 Sept. 2004, in Denver, USA

And when we meet again for the SDIMI 2005 - Conference it will be incumbent upon us to report progress on the questions raised above.

One step ahead has definitely already been taken here at Milos. This is the announcement of the "Milos Statement", a document, which has been signed by - The Australasian Institute of Mining and Metallurgy - The Canadian Institute of Mining, Metallurgy and Petroleum - The Society for Mining, Metallurgy and Exploration - The Society of Mining Professors - The South African Institute of Mining and Metallurgy - The Asociacion Iberoamericana de Ensenanza Superior de la Minería - Die Gesellschaft für Bergbau, Metallurgie, Rohstoff- und Umwelttechnik

Other professional organizations are expressing their desire to be among those organizations who formally endorse this Statement.

The document represents the commitment of the Minerals Professional Community to Sustainable Development. It states our belief in the essentialness of minerals to meeting the

needs of the present while contributing to a sustainable future, a goal we will support by applying the scientific, technical, educational and research skills of this community.

I have no doubt that this Milos Declaration will become as well known as the Venus of this island within a short time.

And with this I would like to conclude the SDIMI 2003 Conference not without thanking you for attending and wishing you all a safe trip home.