



AT THE HEART OF EUROPEAN INNOVATION

Euromines Annual Report **2012**

FOREWORD



Europe has reached a crossroads. So has our industry. The prosperity that both had enjoyed for more than a decade has been replaced painfully both by uncertainty and the return of old challenges.

Europe 2020 articulates an aim to return to Europe's leading role in industrial production. Raw materials are essential to that and more, to Europe's very survival as one of the world's leading economies.

Our citizens prosperity, our ability to invest, our very future as expressed most profoundly by the terrible difficulties faced by ordinary people in several Member States today depends on the success of our economic recovery. And without mining that is not possible.

North America has seen the Shale Gas Revolution and dramatically reduced energy costs that Europe cannot match today. Member States, like our own members see the European Union as both a common market and a means to collective social and economic security. Increasingly institutional debates within the EU reflect a culture where deeper regulation and harmonization are manifest goals but are often inarticulate or even alien to ordinary citizens.

We must go beyond this. Our industry is global in all respects; prices, funding, resources, opportunities, skills, all are ultimately mobile. Only geology does not move.

The European Innovation Partnership ('EIP')¹ on Raw Materials is an important attempt to build on Europe's strengths. Our companies lead the world in modern mining and technology and deploy those strengths worldwide. Despite our still negative press we are an example of a modern, responsible, sustainable and transparent industry. Euromines members' participation in the EIP is thus both welcome and essential and I urge all members to support that loudly.

Therein lie our real challenges. Europe faces a dwindling pool of skills that is true, but outstandingly mining can and does invest in training rather than import or outsource. However we must communicate the benefits of what we do much more effectively. We need to make our voice heard to ensure much more systematic inclusion of the extractive industries in land use planning and access to land. We must applaud all efforts to overhaul what is now widely perceived as the arbitrary and entirely subjective approach to permitting of new projects in Europe. But without a social licence our arguments will remain academic and distant from the layman. As an industry we have not yet equipped ourselves with the same toolbox as our opponents or even other industries and that must change.

The "Circular Economy" remains an indulgent theory today however its adherents espouse it as an alternative to primary production. It is not.

New EU policy initiatives deserve our participation and support. We must be part of shaping their outcomes. Innovation, research and resource efficiency are themes at the core of what we do. We are long-term investors, creating jobs and skills and paying taxes, often in the regions of Europe that need them most.

Europe is rich in natural resources. Our future is one where technological advances lead our industry, where regulation compliments growth and is born from a hard-won consensus for a better future.



Mark Rachovides
President of Euromines

¹ European Innovation Partnership
http://ec.europa.eu/enterprise/policies/raw-materials/innovation-partnership/index_en.htm

THIS IS WHO WE REPRESENT - EUROMINES IN

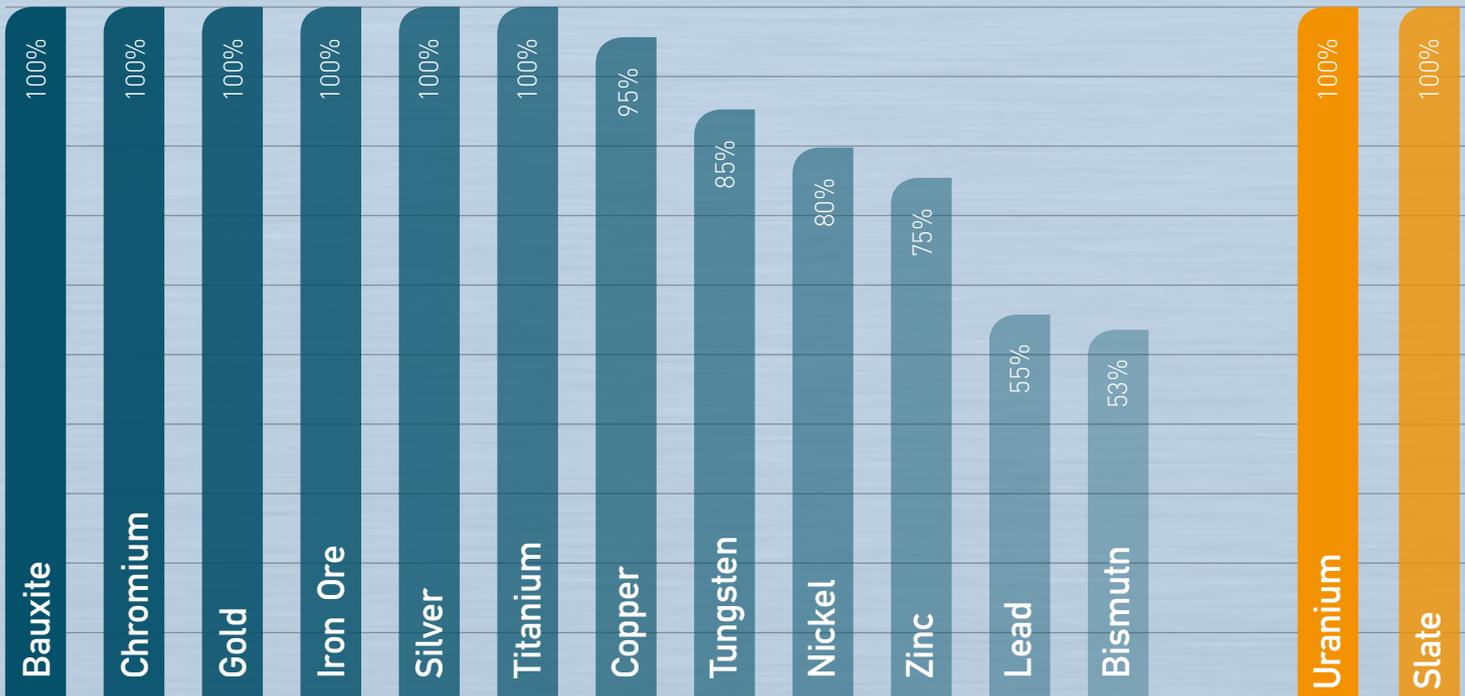
Euromines is the recognized representative of the European metals and minerals mining industry. The members's main objective is to promote the industry and to maintain their relations with European institutions at all levels.

Euromines provides services to its members with regard to EU policy and form a network for cooperation and exchanging information throughout the sector within Europe. The association also supports contacts with the mining community throughout the world.

Euromines Representativity

Euromines Representativity in Metals Mining
in % of EU production

Euromines Representativity
in % of



N BRIEF

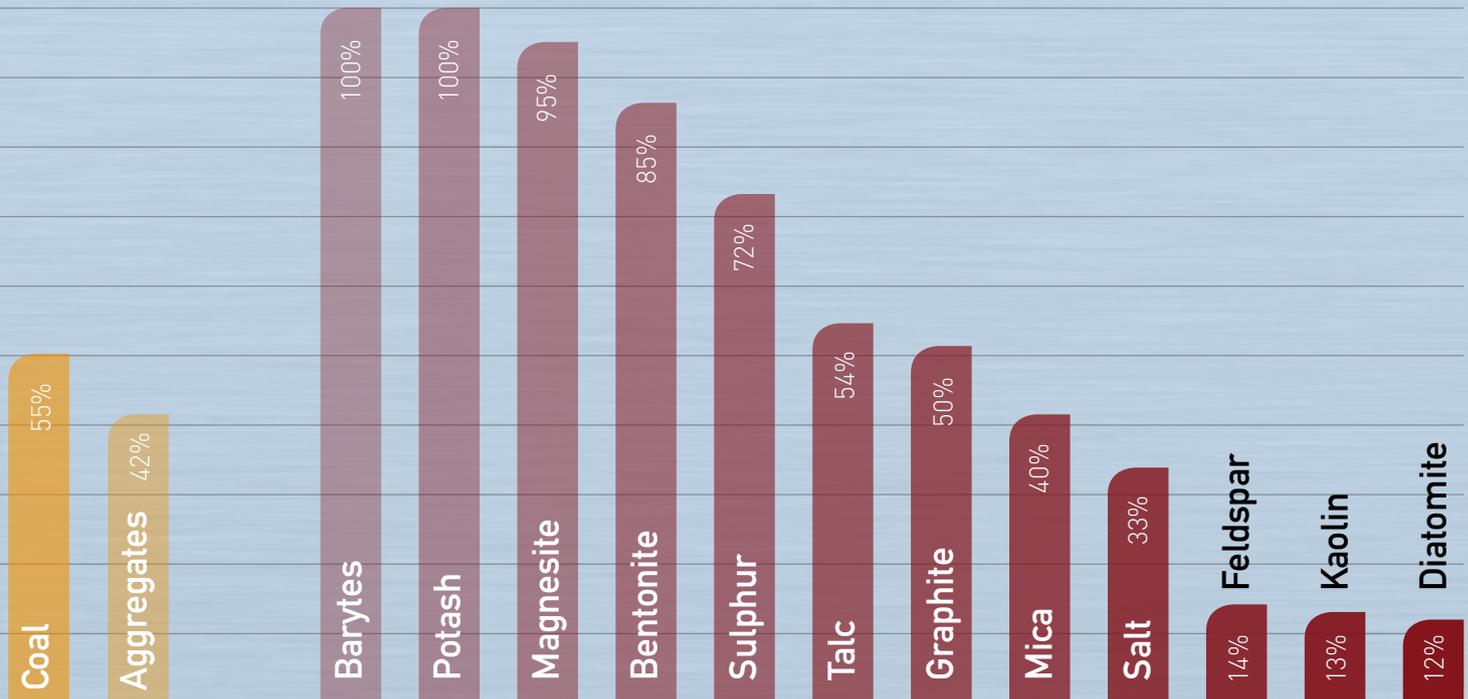
Euromines members are large and small companies and their subsidiaries in Europe and in other parts of the world provide jobs to more than 350,000 people. Their activities and operations produce more than 42 different metals and minerals.

For some metals and minerals, Europe is the world's leading producer.

The association is based in Brussels and holds membership meetings twice a year. Its working committees and groups meet regularly throughout the year. Euromines also follows trade and investment issues for the mining industry both inside and outside of Europe.

in other Minerals
EU production

Euromines Representativity in Industrial Minerals
in % of EU production



EUROMINES MEMBERS' MISSION

Euromines' mission is to promote sustainable and prosperous mining in Europe through operational excellence;

As the recognized representative of the European extractive industry, serves as a network for cooperation and for the exchange of information throughout the sector within Europe;

Fosters contacts with the mining community throughout Europe and the world and wherever appropriate to achieve its objectives.

Vision for European mining companies

Be a viable and responsible minerals and metals industry which provides the essential economic, social and environmental assets for society's sustainable development.



EUROMINES STEERING COMMITTEE

President

Mark Rachovides

Eldorado Gold Corporation

Vicepresident

Jan Moström

Boliden

Member

Göran Bäckblom

LKAB

Member

Thorsten Diercks

Vereinigung Rohstoffe und Bergbau

Member

Thomas Drnek

Austrian Mining and Steel Association

Member

Nicolas Gangutia

Magnesitas Navarras S.A.

Member

Vicente Gutierrez Peinador

Iberpotash, S.A.

Member

Ingmar Haga

Agnico-Eagle, FinnMin

Member

Henryk Karas

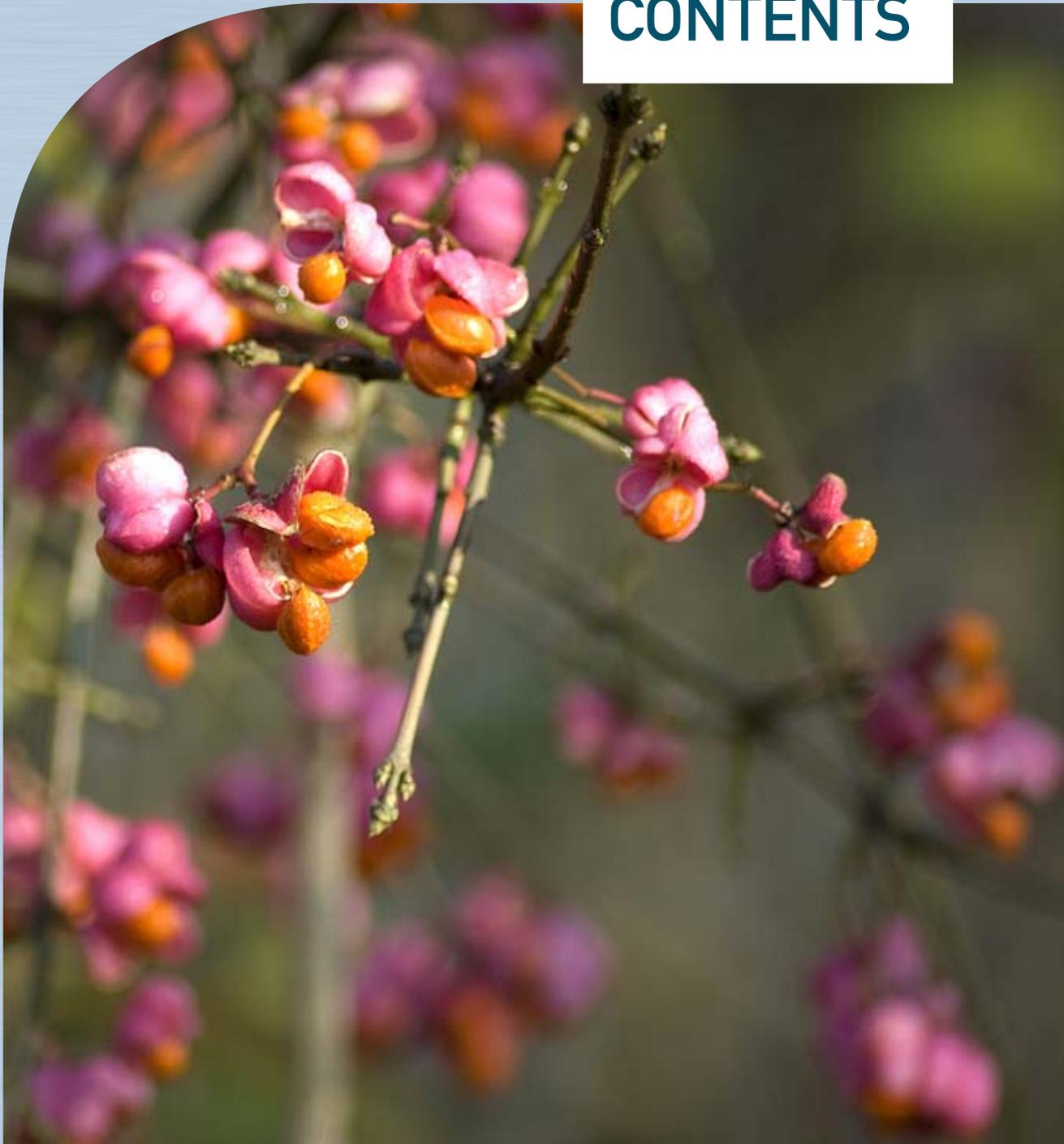
KGHM Polska Miedź

Member

Vasili Nicoletopoulos

Natural Resources GP

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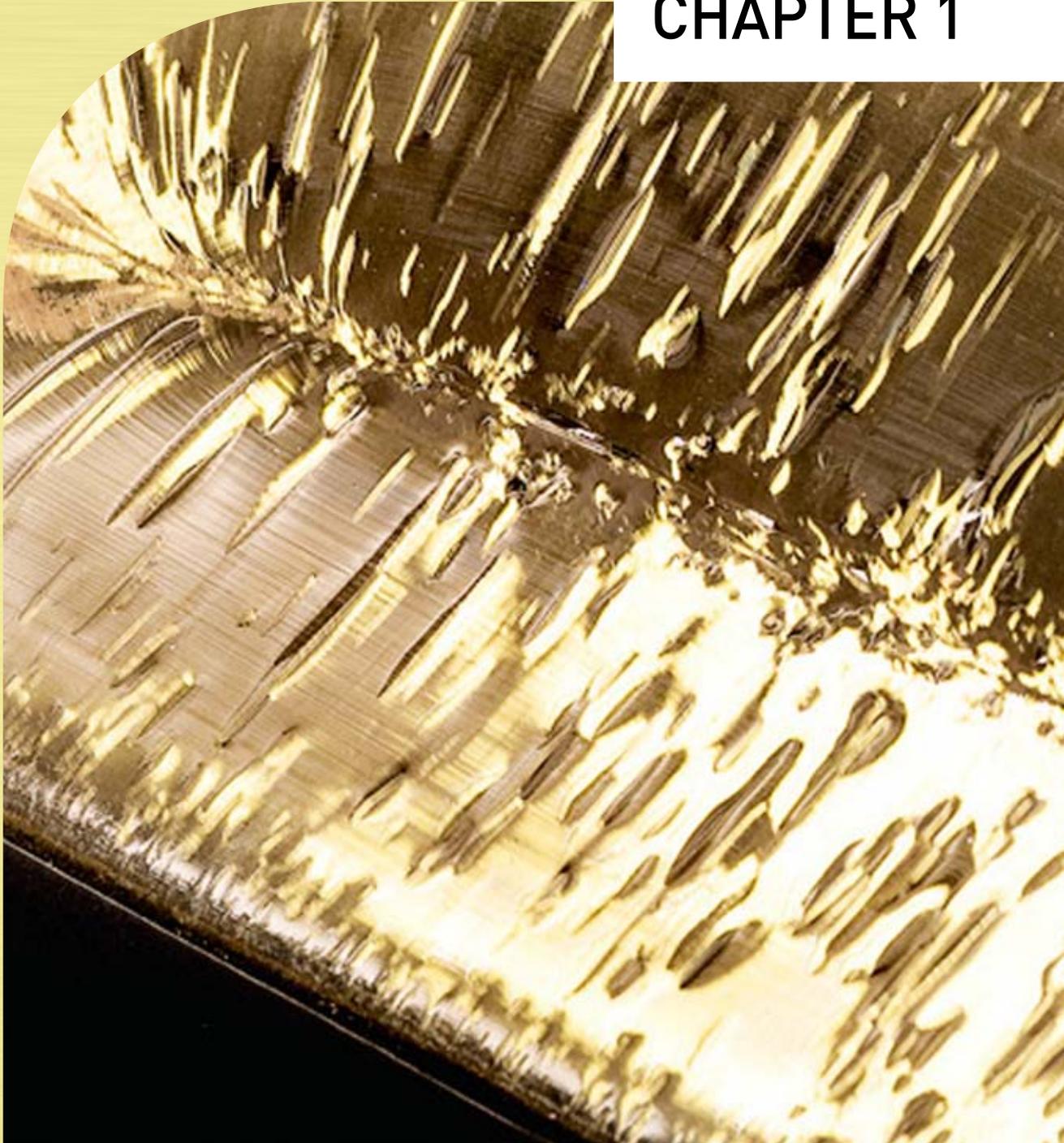
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CHAPTER 1



UNLOCKING

**EUROPEAN POTENTIAL
THROUGH INNOVATION**

Photo: Boliden



Modern mining is already a major contributor to Europe's recovery and an example of a modern, responsible, sustainable and transparent industry.

Interview with Mark Rachovides, President of Euromines

How do you see the role of Euromines in 2012?

We are the recognized point of reference for the mining industry in Europe. Active participation in the most important issues and fora in Europe today demonstrates the depth and breadth of our contribution in such a challenging time. From chairing the EPT SMR², to dealing with specifics such as the attempt to ban the use of cyanide in mining, we continue to make our voice heard.

Could you define some conditions that are crucial to achieve innovation in the extractive sector?

Effective communication. Hitherto market mechanisms and regulatory initiatives have vied to guide the direction for the sector and today the imperatives are unambiguous. Unless Europe modernizes and takes a firm step into the future it will be left behind. Until all the stakeholders to our sector embrace that, innovation will be handicapped. We have the skills, the knowledge, the people and the capital. We need to move beyond partisan dialogue and seize a clearer consensus to make EU 2020 work and take us beyond.

Why is innovation in our industry so important for Europe?

There remains a large number of valuable raw materials deposits in Europe. Their sustainable exploitation can increase Europe's supply of mineral resources, help to ease imports from third countries usually applying lower environmental, corporate and social standards, foster the socio-economic growth of Europe's Regions as well as provide raw materials that are crucial for the competitiveness of several industry sectors and the development of green technologies.

How do you see Euromines contribution to the European innovation Partnership?

The European extractive industry carries out its activities in a highly-regulated and ever-evolving EU regulatory framework and, at the same time, faces a fierce and, sometimes, unfair competition at international level. We promote the implementation of best practices for the continuous improvement of the industry's high environmental as well as health & safety performances and for the well-being of local communities benefiting from our activities. We can support the EIP in promoting research into new and more resource efficient resource access and management and a constructive review of regulatory requirements.

The innovations in our industry are important but could they help Europe meet its ambitious environmental and economic goals?

Mining has been around for a very long time, Europe-based companies mine worldwide and are leaders in modern mining and technology. Mining offers real jobs, real taxes and an alternative to import dependency. Europe offers relative political and fiscal stability, skilled jobs and excellent infrastructure. Modern mining can be a much more substantial contributor to Europe's recover and be an example of a modern, responsible, sustainable and transparent industry. To offer hope to some of Europe's most deprived areas.

² ETP SMR <http://www.etpsmr.org/>

1.2. Euromines activity 2012

1.2.1.

European Innovation Partnership (EIP)

The supply of raw materials, the lifeblood of today's high-tech industry, is increasingly under pressure. With a view to increasing the availability of raw materials for Europe, the European Commission has set up the European Innovation Partnership on Raw Materials.

Innovation can be a powerful vehicle in meeting Europe's challenges in the field of raw materials. For example, new technologies can help in discovering hidden deposits, contribute to safer, more efficient mining and to low energy mining.

Action is also needed to develop substitutes for critical raw materials and to improve recycling of, amongst others, the 17 kg electric and electronic equipment waste that each EU citizen produces annually.

The current situation calls for targeted innovation and research efforts, breakthrough technologies and multidisciplinary approaches, as well as demand-side interventions (e.g. product standards, public procurement and regulatory measures etc.).

Euromines, ETP SMR³ (European Technology Platform on Sustainable Mineral Resources) and their members are represented at all levels of the Partnership (High Level Group, Sherpa Group, and Working Groups).

A Strategic Implementation Plan is expected mid-2013 and the implementation should begin before the end of the year. ETP SMR has a significant contribution to make: ETP SMR Roadmap for the Work Packages.

Euromines members are also actively contributing ideas in the field of non-tech innovation (e.g. fitness-check of legislations, land-use planning and permitting, capacity building and skills development, resource diplomacy, etc.).

Statement of the President of the European Commission,
José Manuel Barroso

„We need to innovate to get Europe back on the path to growth and jobs, and to tackle major challenges such as access to raw materials, sustainable agriculture and our ageing society. European Innovation Partnerships will break down silos, remove bottlenecks and focus our efforts on results that matter to our citizens and our businesses.“

1.2.2.

Raw Materials: Study on Innovative Technologies and Possible Pilot Plants

In the framework of the proposed European Innovation Partnership on Raw Materials, the European Commission has commissioned a study to identify and assess possible pilot plants and innovative technologies in the area of raw materials along the entire value chain.

A consortium, led by TNO⁴ (and as partners Euromines, d'Appolonia⁵, BRGM⁶, Ifremer⁷, NTUA⁸, the University of Leoben⁹, CIKTN¹⁰) (and endorsed by the ETP-SMR) has been tasked to collect information and suggestions on innovative technologies and pilot plants throughout the EU-27, and propose criteria and indicators to come to a prioritization among these suggestions.

The final results will be published mid-2013.

³ ETP SMR <http://www.etpsmr.org/>

⁴ TNO www.tno.nl

⁵ d'Appolonia <http://www.dappolonia.it/>

⁶ BRGM <http://www.brgm.fr/>

⁷ Ifremer <http://wwwz.ifremer.fr/institut>

⁸ NTUA http://www.ntua.gr/index_en.html

⁹ University of Leoben <http://www.unileoben.ac.at/index.php?lang=en>

¹⁰ CIKTN <https://connect.innovateuk.org/web/chemistryinnovationktn>



More information:

www.euromines.org/study-pilot-plants-and-innovative-technologies

1.2. Euromines activity 2012

1.2.3.

Conference on a Swedish and Polish Contribution to the EU Raw Materials Initiative

The conference on Swedish and Polish Contribution to the EU Raw Materials Initiative was held in Brussels on 27 November 2012. It was organized by KGHM Polska Miedź, LKAB, ZGH Bolesław and Boliden with the support of Euromines members. It was held under the auspices of the Permanent Representations of Sweden and the Republic of Poland to the EU. More than 50 participants attended.



The event was opened by the two Ambassadors of Poland and Sweden to the EU, who highlighted the importance of the mining industry in their countries as well as the need for cooperation between them. The representatives of the Polish and Swedish ministries presented the country's approach to the minerals strategy and the European Commission presented the developments with regard to the implementation of the Raw Materials Initiative.

Demand for metals is increasing as more and more of the population of emerging nations worldwide move to cities, increasing the need for new housing and investments in infrastructure.

In the growing global metal market Sweden and Poland, with the countries' natural resources and experienced extracting industries, can make an important contribution to safeguard Europe as a lead player according to the intentions of the Raw Material Initiative.

Today, mining companies in the two countries together with Finland contribute strongly to European growth and increased raw material supply. Between the years 2007 and 2011 more than 7 billion Euros were invested in various expansion projects. Furthermore, over the last 7 years, the Polish and Swedish metal industries have cooperated intensively when it came to Innovation programs, with the overall goal of creating a greener, leaner and safer metals industry for the future.

1.2.4.

Gold Mining in Europe: Unlocking growth in the EU

On 28 November 2012 Euromines organized the conference on “Gold Mining in Europe: Unlocking growth in the EU”. The aim of this conference was to present the numerous benefits of sustainable gold mining within Europe, such as:

- Attracting investment and boosting the development of Europe’s Regions with gold projects by providing stable employment opportunities and high quality jobs;
- Underpinning Europe’s economic recovery through the sustainable long-term production of valuable precious metal;
- Fostering the supply of raw materials within Europe, through sustainable mining both environmentally and socially thanks to Europe’s high standards.

Speakers presented concrete examples of the multiple positive contributions to sustainable development of both operating gold mines and new gold projects across Europe. They also provided an expert look at both traditional and innovative applications of gold.



**Gold Mining in Europe:
Unlocking growth in the EU**

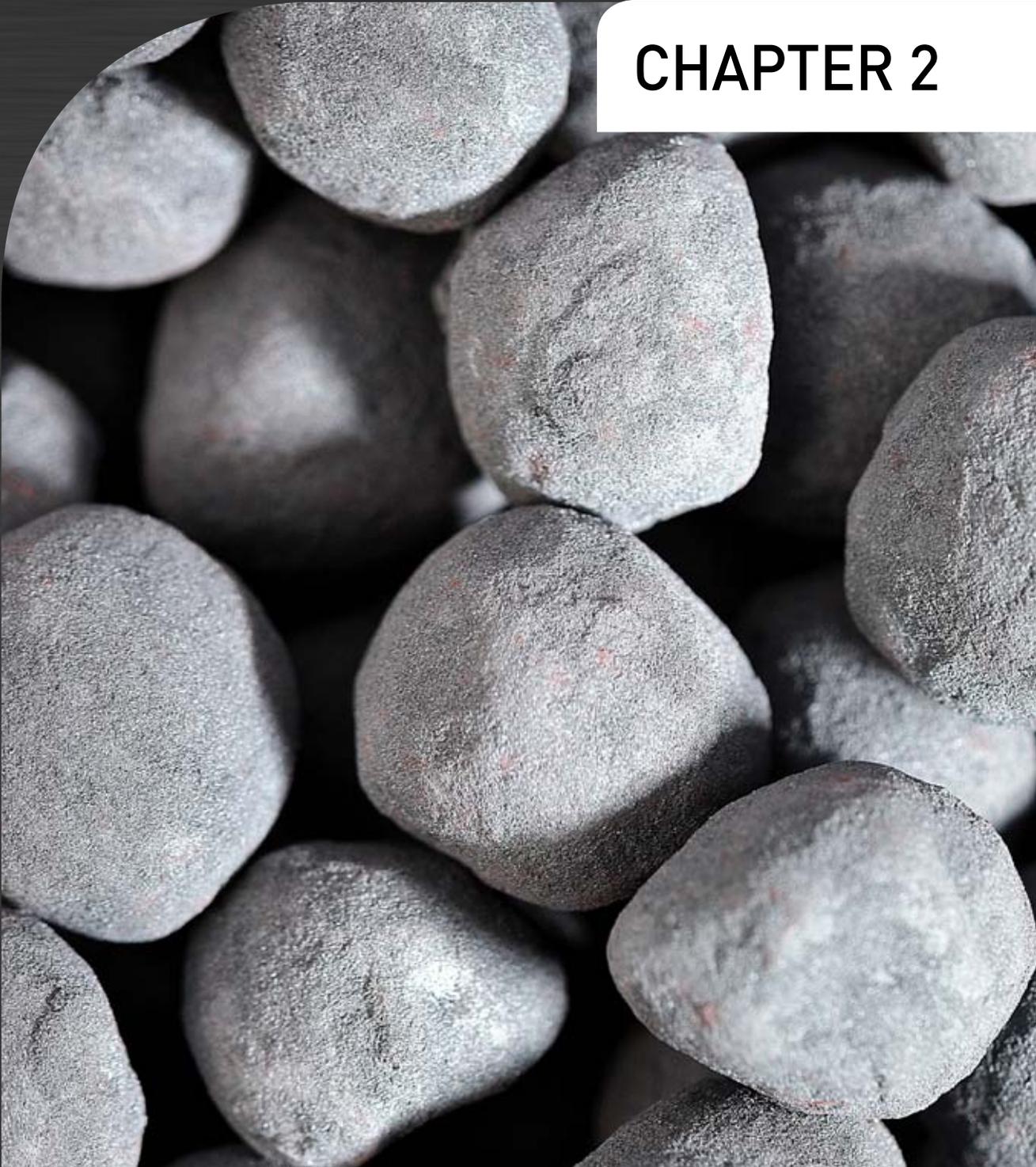
euromines

28 November 2012

Bibliothèque Solvay
Leopoldpark
Rue Belliard 137
B-1040 Brussels

More information:
www.euromines.org/conference/gold-mining-europe-unlocking-growth-eu

CHAPTER 2



LEADING BY EXAMPLE (POLICY)



Photo: LKAB



Europe's environmental goals are very ambitious and give the European Industry the leading role in the world environmentally, but often threaten to exceed the limits of competitiveness.

Interview with

Roman Stiftner, Chairman of the Policy Committee

Director of Austrian Mining and Steel Association

What were the main activities of Euromines Policy Committee in 2012 and what do you consider as a success?

2012 was a year of consolidation and restructuring of the former Resource Access Committee. Nevertheless, in 2012 we finalized and published two brochures on Resource Efficiency in the mining industry. On European level as well as in the member states these brochures served as an excellent support in discussions about the Commission's Road Map on Resource Efficiency. The main success, however, was the decision to recast the Resource Access Committee into the Policy Committee with the focus on raw materials policy.

What are the requirements to achieve innovation in the mining sector?

The main requirements to achieve innovation can be found in the Raw Materials Initiative of the EU: To boost innovation, barriers in external trade and in access to resources within the EU have to be eliminated to have access to the relevant resources. Furthermore the legal framework has to be adopted accordingly, e.g. concerning access to resources but also concerning fiscal allowances for exploration. Finally fundings have to be dedicated to raw materials innovation projects as e.g. EIT¹¹ and SPIRE¹².

How do you see your committee's contribution to the European Innovation Partnership?

The main task of the Policy Committee in 2013 will be the preparation of the contributions for the High Level Steering Group and the relevant working groups of the EIP. Nevertheless it is also of utmost importance that Euromines members share the main points with the national representatives of their member states and their ministries involved.

Are innovations really so important for Europe?

Innovation is the key driver for the European extractive industry. Without innovation the European extractive industry will lose its competitiveness and the industry will be closed down in Europe and be forced to move to other parts of the world.

What is the role of innovation in reaching European environmental and economic goals?

Europe's environmental goals are very ambitious and give the European Industry the leading role in the world environmentally, but often threaten to exceed the limits of competitiveness. Therefore innovation is key to reach Europe's environmental goals. To reach the economic goals industry has to stay in Europe. As mentioned before, without innovation industry will be forced to leave Europe to other parts of the world and Europe will not reach its economic goals.

¹¹ European Innovation Partnership http://ec.europa.eu/enterprise/policies/raw-materials/innovation-partnership/index_en.htm

¹² SPIRE <http://www.spire2030.eu/>

2.2. Euromines activity 2012

2.2.1.

Resource Efficiency Indicators and Targets

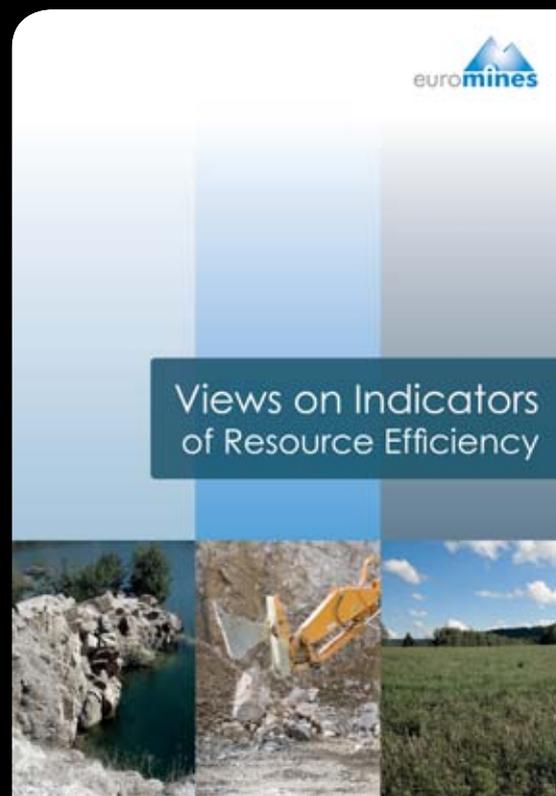
Following publication of the European Commission's Roadmap for a Resource Efficient Europe, Euromines members published their Views on Indicators of Resource Efficiency.

This, and their position on Resource Efficiency have enabled members to efficiently contribute to the European Parliament's own initiative report on resource efficiency and to discuss the related proposals with the European Commission.

Meanwhile, various international bodies have been drawing together their views on resource efficiency in the wake of Rio+20.. Recent work of the OECD and the UNEP has not fully recognised that resource-based industries will continue to be essential for the well-being of all. The mining industry still has a significant way to go, therefore, in bringing its own success story to EU policy-makers.

Statement of the Vice-President
of the European Commission,
Antonio Tajani

"We need to join forces to tap Europe's enormous own potential of raw materials. Intensified action is required to make Europe the world leader in the capabilities related to exploration, extraction, processing, recycling and substitution by 2020. It will be the key to Europe's ability to develop today the technologies of tomorrow. Such innovation is decisive for Europe's competitiveness, sustainable growth and new jobs."



*More information on this topic can be found in the brochure **Views on Indicators of Resource Efficiency***

2.2.2.

Long-term availability of mineral resources

The issue of the long term availability of metals and how it can be accounted for in public policy making has arisen in several fora recently.

The OECD¹³ as well as UNEP¹⁴ and the EU are advocating a reduction in material inputs to society (de-materialisation), often focussing on concrete and metals – partly as a response to the belief that sources are depleted and that the total global resource is insufficient. Furthermore, the issues of resource depletion and environmental impact are being increasingly linked – supported by the perception that managing the impacts of primary production is either impossible or not worth the benefits that the materials bring.

The OECD Green Growth and Sustainable Development Forum (Paris, Oct 2012) concluded that decoupling economic growth from resource depletion is a key environmental and economic challenge for society. The depletion concept is also being embedded into life cycle assessment (LCA) type evaluations, which are in turn being used to make decisions that affect access to capital, access to land and especially access to market.

These debates are potentially significant in determining how society assesses the long-term sustainability of minerals and metals and how they should be used. It is clear that there is room for greater awareness within key policy bodies of the complexity of evaluating mineral resource levels for policy making.

In twenty-twelve, Euromines members actively and widely promoted their view, that with the advent of

new market-based policies to encourage resource-efficiency, it is time to re-visit existing indicators and models used to predict the long-term availability of mineral resources and to develop a uniform model that adequately reflects the full range of depletion potentials (from extremely low to high), so that efforts are not diverted away from more acute pressures on our environment.

¹³ OECD <http://www.oecd.org/>

¹⁴ UNEP <http://www.unep.org/>



2.2. Euromines activity 2012

2.2.3.

Euromines Conference on Critical Materials

On March 9, 2012 Euromines members organised a Conference on Critical Materials in Brussels. About 130 delegates attended. The event was stimulated by the European Union Report on Criticality and aimed at providing input for the 2013 review of results achieved so far, the fine-tuning of the methodology, presenting specific case studies, benchmarking with similar work outside the EU and taking into account what had already been done at UN and OECD level.

The programme started with the definitions of 'Critical' and 'Essential' raw materials, emphasising the issues of economic importance and supply risk. Presentations that followed included two by the European Commission (DG Enterprise and DG Trade) and several others by the EU industry and associations that are active in mining and processing, utilising and recycling of Critical Raw Materials. Among the companies and agencies that presented their views were BRGM, DaiEcon Advisors, Euroalliances, The Geological Survey of Finland, Hewlett Packard, LKAB, Natural Resources GP, PwC, Renault, RHI AG, and Umicore.

In addition, there was extensive participation from outside the EU, notably from Canada, Japan and the USA. Talks included those from American Elements, The Basel Convention, The Metal Economics Research Institute of Japan, Natural Resources Canada, Tasman Metals and the U.S. Foreign Military Studies Office, U.S.

The conclusions of the Conference were presented by Euromines President Dr. Thomas Drnek, and were as follows:

- There should be no 'per-se' exclusion of minerals or intermediate products from the review which could be of relevance for the value chain;
- The assessment methodology should be refined; there should be an assessment of the impact of current EU legislation on the competitiveness of the mining and resources sector and the economy as a whole;
- Developing a 'checklist' for future EU legislative impact assessments with regard to the long-term impact of all EU policies on the sustainable access to raw materials is highly desirable;
- A long-term strategy is needed for diversification and integration of environmental costs also into imports, whilst not jeopardising the competitiveness of the EU economy;
- There is need for support on joint research and the European Innovation Partnership on Raw Materials.



CHAPTER 3



GETTING THE MESSAGE

ACROSS:

COMMUNICATION,
COMMUNICATION, ...

(COMMUNICATION)





We are the main supplier to every industrial value chain all over Europe – and we need them to know who we are and what we are able to manage together with them.”



Interview with

Hanne Markussen Eek, Chairwoman of the Communication Committee President of the Norwegian Mining Association, Owner and HR Director of Franzefoss Minerals AS

What would you highlight as the main activities of your committee in 2012?

In 2012 we have created and launched new Euromines website. Having the right wrapping for our day-to-day communication is crucially important for our industry. Traditionally, we have never been good in selling ourselves. The society need our products likewise as we need the society, but people do not know why they need our products. We have forgotten to tell them. That is why our new website is so important; it is one of the best tools to meet all the different society groups who want to know about us and learn about us.

As general public do not recognize the role the industry plays in society and the importance of the extractive industry to the European economies there is a need of pro-active communication. Therefore a well-structured website is necessary in order to achieve a number of communication objectives which are crucial to promote and protect the industry's public image.

And not to forget, Euromines website is also an extremely important tool for internal communication among Euromines members. We need each other more than ever, it's time to build positive visibility around mining and it is time to promote our approach to CSR activities. Therefore we need to exchange experiences, knowledge and best practices about H & S, Environment, ETS and other topics that are crucially important for all of us involved in the extractive industry.

As another important activity I can highlight the organisation of an international conference in Cyprus in October 2012. It is important to build the understanding among the politicians and the society to the fact that mining industry can live together with all other industries, and a sustainable society depends on an active and innovative extractive industry.

Do you evaluate these activities as a success?

The Conference was a success, but I have to admit that I have expected a lot more participants from both sides. More European politicians and also more Euromines members. Again I have to stress the fact that it is important to recognize the value of learning from each other. This is an area where we can be better!

The success of the new website doesn't depend on the Secretariat of Euromines, they really do an excellent job. The success depends on Euromines members, the Steering Committee and all our committees. We have to use the website to communicate with each other, with the society, with the politicians. It is up to us, we have a really great tool.

Would you recommend some activities to achieve innovative European mining industry?

Communications, Communications and Communications. We need to know what is going on at the other end of the value chain. Is it possible to use our products in a new way?

Is it important to be a part of the European innovation Partnership?

We really need to be there, we are the main supplier to every industrial value chain all over Europe – and we need them to know who we are and what we are able to achieve together with them.

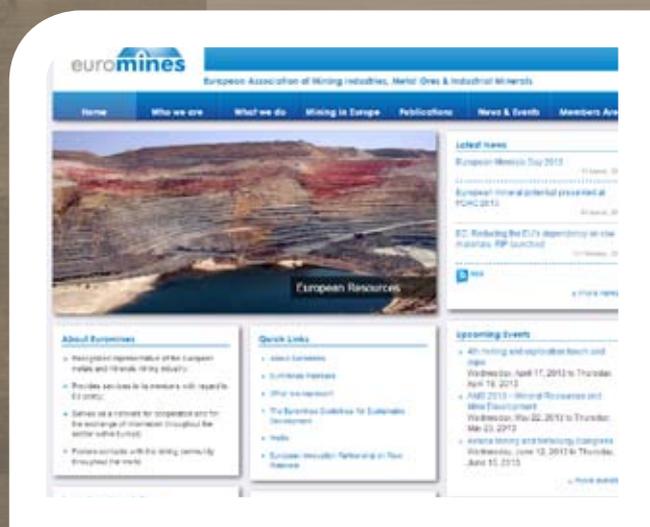
There is a need to create integrated communication approach, educate general public, improve the image of the industry as environmentally friendly, trustworthy and innovative and establish and keep good relationships with all target audiences. European innovation Partnership can be another important way of efficient and effective communication with the society.

3.2. Euromines activity in 2012

3.2.1. New website

OMining has changed in the last 20 years and so has communication. Euromines members have taken the opportunity to use new tools to promote its work and objectives as well as the mining industry as a whole. The Internet gives us the potential to communicate the message across a worldwide audience, 24 hours a day, 7 days a week.

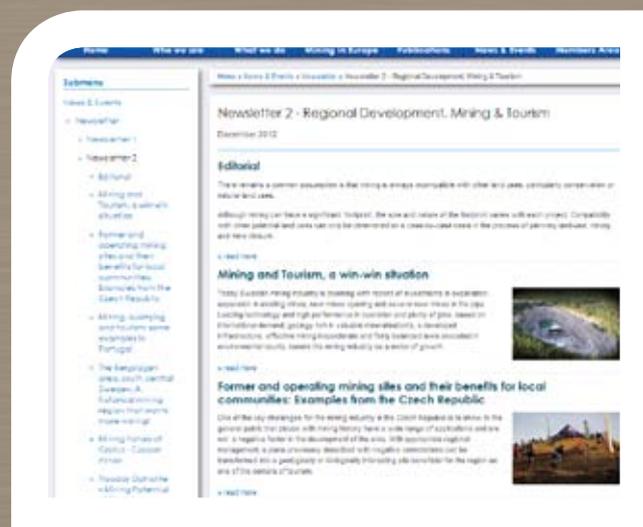
In April 2012 Euromines launched its new website which is now a vital source of information for external as well as internal audiences. The website welcomes visitors with new design and revised content. It provides information to the external and internal users. The members-only section features the discussion forum, library, photo galleries, information on activity of Euromines Committees, events etc.



3.2.2. Euromines External Newsletter

In 2012 Euromines published its first two issues of the Euromines External Newsletter. The main aim of this newsletter is to increase public awareness of the European extractive industry as a contributor to sustainable development in Europe and highlight the role the industry plays in society. It should promote the extractive industry towards the European authorities as an economically crucial sector, a responsible environmental sector, a responsible employer and an innovative sector.

The first issue focused on the exploration potential in Europe covering the overall European situation as well as particular European projects of Euromines members. The second issue was published in December 2012 and was about the Regional Development, Mining and Tourism.



3.2.3.

Social Media involvement

Along with having a website and using email, social media has rapidly become an important tool to interact with existing and potential members and targeted audience and to build rich content that attracts visitors to Euromines website. Social media platforms allow users to share and upload media content such as photographs, videos, articles and comments to the Internet quickly and easily. Social networks are one of the fast growing areas in modern communications technology and are an effective way to encourage two-way communication with stakeholders. In February 2012 it was agreed that Euromines members should get involved in social media and therefore Euromines accounts on Facebook, Twitter, LinkedIn and Wikipedia has been created.

Statement of the Minister of Agriculture, Natural Resources and Environment of Cyprus
Sofoklis Aletraris

„Economic growth and increase of per capita income through the exploitation of raw materials is usually considered as a negative effect to the environment and the quality of life at the local level. Thus, the sustainable development of mineral resources thoroughly planned and rationally implemented with respect to environmental protection, is undoubtedly the best balanced solution that may satisfy public interest and contribute to its coexistence with tourist activities.“

3.2. Euromines activity in 2012

3.2.4.

Conference 'Regions in the Forefront: Raw Materials and Tourism 2012'

With the support of the Geological Survey Department and Mines Service of Cyprus, Euromines organised an international conference entitled 'Regions in the Forefront: Raw Materials & Tourism 2012' with high level participation from the European extractive industry, governmental institutions, geological surveys and academia across Europe. The conference took place on 30th and 31st October in Limassol (Cyprus) and it was an official conference of the Cypriot Presidency of the Council of the European Union. The Conference was under the auspices of the Minister of Agriculture, Natural Resources and Environment of Cyprus, Mr. Sofoklis Aletraris.

The main aim of the conference was to demonstrate that mining and tourism industry can be developed simultaneously for the benefit of European regions. The conference presentations provided several examples of active mines in Europe and around the world that have demonstrated successful and safe operation close to national parks.

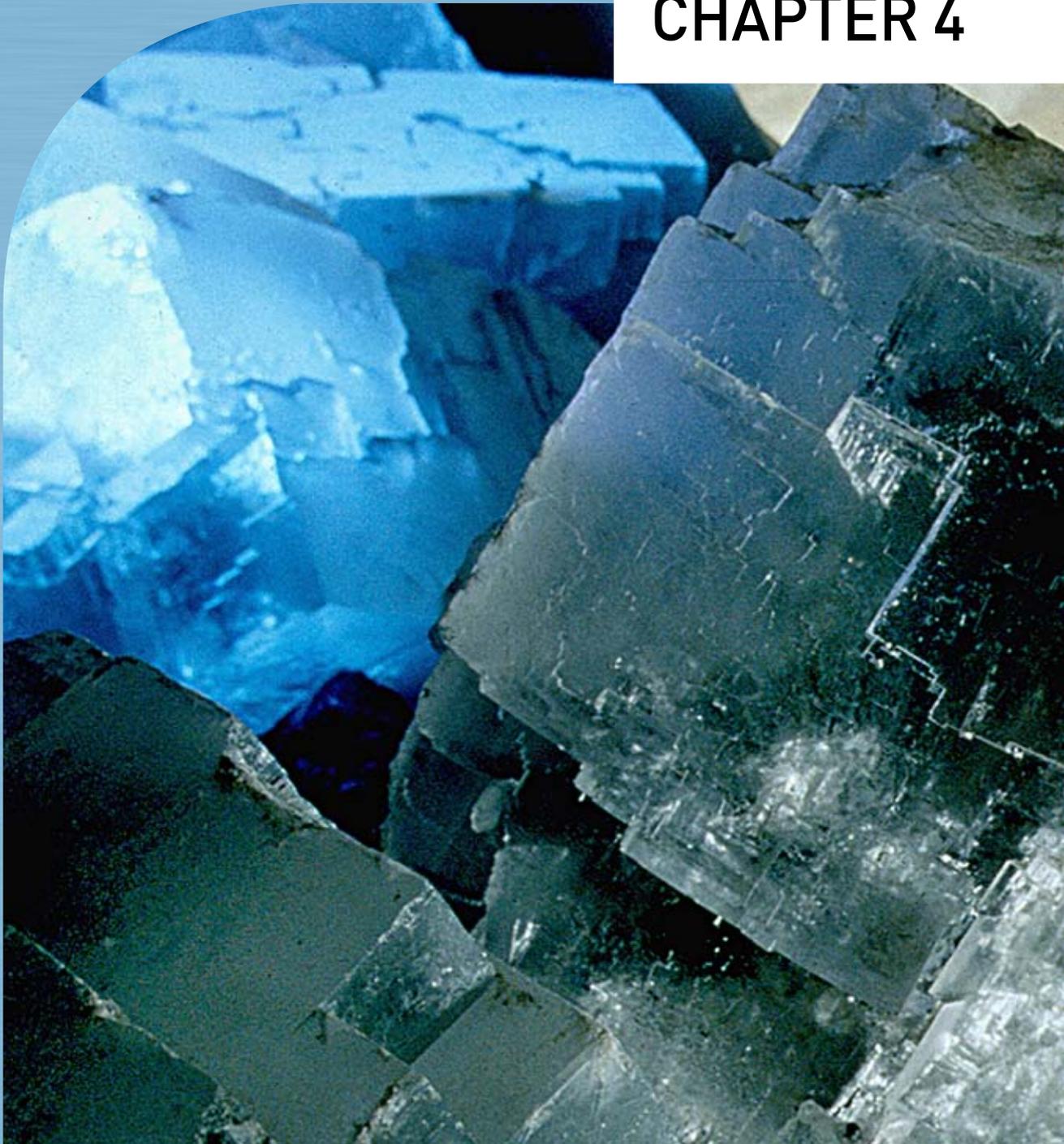
Regional development is currently ranking high on the political agenda and the conference presentations highlighted the fact that the extractive industry can play an essential role in economic and community development by acting as a catalyst for positive changes in areas that may otherwise have little, if any, opportunities for socio-economic and development.

In her closing speech, Dr Corina Hebestreit stressed that tourism and extractive industries should co-exist to foster much needed regional infrastructure and economic prosperity. She also presented the conclusions of the conference 'The Limassol Declaration' taken by the participants of the conference.





CHAPTER 4





WHERE INNOVATION

MEETS

**ENVIRONMENTAL GOALS
(ENVIRONMENT)**

Photo: K+S



Innovation is important to further decrease our environmental footprint and to increase our international competitiveness. Innovation is also necessary in education and professional training, to further develop our intellectual potential for future sustainable improvements.

Interview with

Hans-Georg Bätthge, Chairman of the Environment Committee

Environment, Safety and Quality Director K+S Aktiengesellschaft

Could you highlight the main activities of the Environment Committee in 2012?

Our main activities in 2012 were focused on substances and materials related regulations. In the field of water the European Commission proposed to amend the list of priority substances and the so called watch list of the Environmental Quality Standards (EQS) Directive.

In our opinion a transparent procedure and relevant objective criteria are needed to include or delete substances from these lists, and to ensure that only substances with a certain importance for the whole EU are regularly monitored and not substances with local importance only.

The United Nations Environment Programme (UNEP) proposed to phase-out mercury from the environment and to establish an international agreement, the UN Mercury Convention. It was important for us to illustrate that mercury is a natural constituent of certain non-ferrous raw metal deposits and a phase-out would not completely be possible as long as society needs these metals.

The International Maritime Organisation (IMO) changed their rules to prevent pollution of the marine environment by dry residues and/or wash water containing residues from ships. We support this intention, but a workable transition period should be accepted until sufficient port reception facilities for these residues are available.

Other initiatives of the European Commission are important for planning of mining activities. A review of the Environmental Impact Assessment (EIA) Directive was initiated and a new strategy "No net loss of Ecosystems and their services (NNL)" was announced. First consultations took place in 2012, but these initiatives will be our main tasks in 2013 and perhaps also in the next years.

Could you specify concrete activities that you consider as a success?

EQS (Environmental Quality Standards) Directive: Our position concerning the need for a transparent technical procedure, combined with relevant objective criteria for the selection of candidate substances for inclusion in the watch list was accepted.

Rules of International Maritime Organisation (IMO): The rules were kept sound and consistent with the Global Harmonised System on chemicals.

UN Convention on Mercury: The scope kept focused and workable.

What would be required to achieve innovation in the sector?

Research is necessary to further develop relative decoupling of resource use from industrial growth, to improve exploration and extraction processes, to increase energy efficiency of processes and recycling rates of wastes. Also further improvements of the regulatory processes are necessary to achieve a homogenous regulatory framework over all environmental media and pathways, taking into account a fair balance of economic growth, environmental protection and social improvements. Strengthening the economic basis of European countries and their companies is one of the most important tasks in the next years. This is a fundamental basis to achieve further improvements in environmental protection and societal wellbeing.

How you see your committees' contribution to the European innovation Partnership?

Innovation is important to further decrease our environmental footprint and to increase our international competitiveness. Innovation is also necessary in education and professional training, to further develop our intellectual potential for future sustainable improvements.

4.2. Euromines activity 2012

4.2.1.

Revision of the Directive on priority substances in the field of water policy

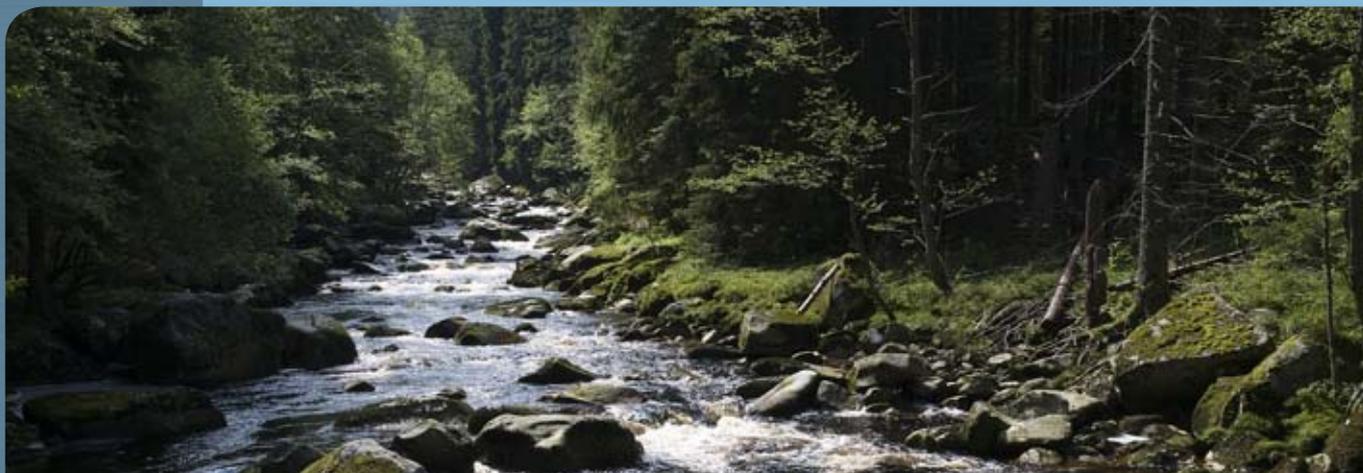
At the end of January 2012, the European Commission published the proposal¹⁵ reviewing the list of priority substances in the field of water policy. This proposal is the result of the prioritisation exercise carried out at technical level in which Euromines took part as a member of the relevant Working Groups.

The Commission proposed the inclusion of new priority substances and the introduction of a new mechanism aiming at collecting representative data on a limited number of substances included in a “Watch List” for the purpose of future prioritisation processes. Following the adoption of the report adopted by the “Environment, Public Health and Food Safety” of the European Parliament at the end of November 2012, trilogue discussions between the Council, the European Parliament

and the Commission are on-going. The adoption in first reading of the proposal is expected during the first semester of 2013.

Euromines members worked continuously, throughout the adoption process, with EU institutions as well as other industry associations in order to support a sound and scientifically-based prioritisation process. Euromines' inputs were taken into account by the European Parliament and the Council.

¹⁵ Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directives 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy http://ec.europa.eu/environment/water/water-dangersub/pdf/com_2011_876.pdf



4.2.2.

Changes to International Maritime Organization shipping rules

Amendments to IMO's (International Maritime Organization) International Convention for the Prevention of Pollution From Ships (MARPOL) Annex V came into effect on 1 Jan 2013 and mean that the residue of ores and mineral concentrates considered harmful to the marine environment can no longer be discharged to the sea.

This has raised several technical and logistical questions for the mining sector - notably in the following areas:

- Availability of facilities at the national level - it is the responsibility of port states to ensure that adequate port reception facilities (APRF) exist to handle wastes and wash water that cannot be discharged as a result of Annex V amendments. To date, knowledge of APRF has not been strong among companies or authorities.
- Reliable and consistent chemical classification of mineral ores and concentrates – our sector was successful in ensuring that the hazard classification requirements in Annex V are aligned with the UN's Globally Harmonized System (GHS). However there are still gaps – both in knowledge and in available methodologies for assessment.

Euromines members contributed to a global success in fully informing IMO decision-makers from each country about the latest science related to identification of hazards associated with inorganic material such as ores and ore concentrates and the immediate availability of facilities at bulk terminals around the World to receive and treat any hazardous hull residues. Valuable work with the IMO continues to ensure timely and workable application of the new rules.



Photo: Boliden

4.2. Euromines activity 2012

4.2.3.

United Nations Minamata Convention on Mercury

The final round of negotiations on the UN's mercury convention was completed in January 2013 with all but some minor details around implementation now agreed. The convention will be formally adopted at a Ministerial level meeting in Japan in October where it will be named the Minamata Convention.

Euromines members contributed to a global success in fully informing UN negotiators from each country about the occurrence, environmental fate

and environmental transport of naturally-occurring mercury-bearing minerals, including those that can exist as impurities in coal, ores and ore concentrates. Their knowledge and expertise was instrumental in ensuring that governments could tailor the Convention to address the most important and pressing global impacts from the production and use of mercury.

4.2.4.

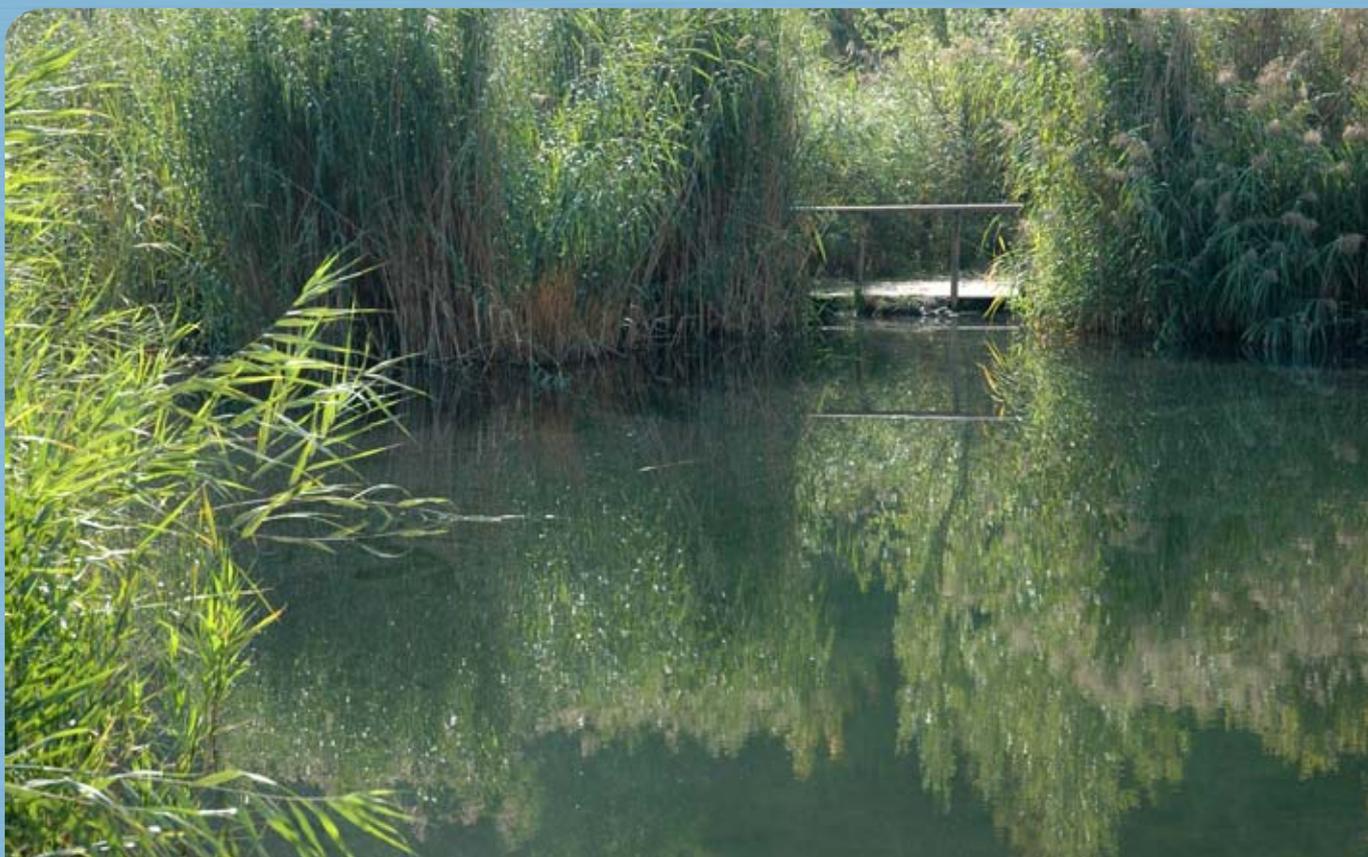
No Net Loss of Ecosystems and their Services

After many years of establishing protected areas for the conservation of biodiversity, the European Commission has determined that despite significant progress – notably in the area of protection of particularly threatened or endangered species – an overall degradation of biodiversity generally is still evident within the EU. This is evidenced by the breakdown of certain „Ecosystem Services“, which for example, has led to widespread algal blooms in the Baltic Sea.

Euromines members were invited by DG Environment in twenty-twelve to take part in a Working Group that is collecting ideas on how to better ensure no further net loss of ecosystems and their services. They have brought to the table their experience with mine-site rehabilitation and biodiversity management generally, but also insights gained from research within the mining industry globally. A Communication on Land Use is due from the European Commission in twenty-fourteen.

Statement of the European Commissioner for the Environment Janez Potocnik

„The biggest step forward has been the reinclusion of resource efficiency as a ‘flagship initiative’ in the Commission’s Europe 2020 strategy for smart, sustainable and inclusive growth. This ensures that resource efficiency has a central place in our plan for coping with the economic crisis. Sustainability has to be the foundation of our hopes for long-term success.“



CHAPTER 5



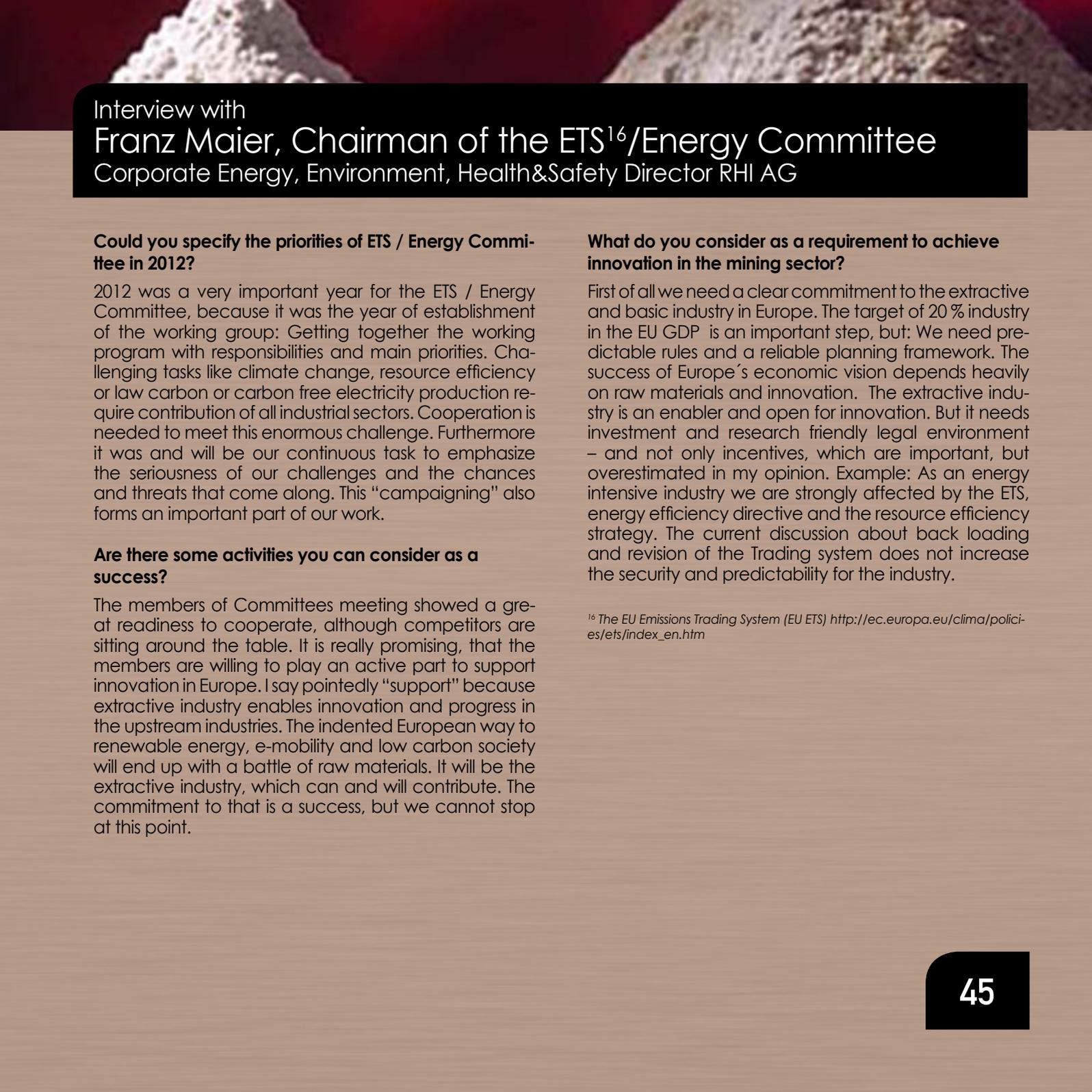


**MAINTAINING
COMPETITIVENESS
WHILST REDUCING
THE CARBON FOOTPRINT
(ETS¹⁵/ENERGY)**

Photo: RHI



The success of Europe's economic vision depends heavily on raw materials and innovation. The extractive industry is an enabler and open for innovation. But it needs investment and a research friendly legal environment – and not only incentives, which are important, but over-estimated in my opinion.



Interview with Franz Maier, Chairman of the ETS¹⁶/Energy Committee Corporate Energy, Environment, Health&Safety Director RHI AG

Could you specify the priorities of ETS / Energy Committee in 2012?

2012 was a very important year for the ETS / Energy Committee, because it was the year of establishment of the working group: Getting together the working program with responsibilities and main priorities. Challenging tasks like climate change, resource efficiency or low carbon or carbon free electricity production require contribution of all industrial sectors. Cooperation is needed to meet this enormous challenge. Furthermore it was and will be our continuous task to emphasize the seriousness of our challenges and the chances and threats that come along. This “campaigning” also forms an important part of our work.

Are there some activities you can consider as a success?

The members of Committees meeting showed a great readiness to cooperate, although competitors are sitting around the table. It is really promising, that the members are willing to play an active part to support innovation in Europe. I say pointedly “support” because extractive industry enables innovation and progress in the upstream industries. The intended European way to renewable energy, e-mobility and low carbon society will end up with a battle of raw materials. It will be the extractive industry, which can and will contribute. The commitment to that is a success, but we cannot stop at this point.

What do you consider as a requirement to achieve innovation in the mining sector?

First of all we need a clear commitment to the extractive and basic industry in Europe. The target of 20 % industry in the EU GDP is an important step, but: We need predictable rules and a reliable planning framework. The success of Europe’s economic vision depends heavily on raw materials and innovation. The extractive industry is an enabler and open for innovation. But it needs investment and research friendly legal environment – and not only incentives, which are important, but overestimated in my opinion. Example: As an energy intensive industry we are strongly affected by the ETS, energy efficiency directive and the resource efficiency strategy. The current discussion about back loading and revision of the Trading system does not increase the security and predictability for the industry.

¹⁶ The EU Emissions Trading System (EU ETS) http://ec.europa.eu/clima/policies/ets/index_en.htm

5.2. Euromines activity 2012

5.2.1.

ETS – backloading

Whilst the Member States have been delayed in allocating the CO2 rights to the different plants the Commission already started discussing the reduction of CO2 rights across Europe. In the eyes of the Commission and some parliamentarians there was an over-allocation of CO2 rights which made the price of CO2 rights drop against previous expecta-

tions. The question arises whether this is not at least partly due to a continued delocalisation of energy intensive industries and furthermore due to the economic crisis. The Commission therefore proposed a cut in the CO2 emissions rights to increase the market value of the rights.

The proposal is still being discussed fiercely in 2013.

5.2.2.

ETS – Revision of the Carbon Leakage list

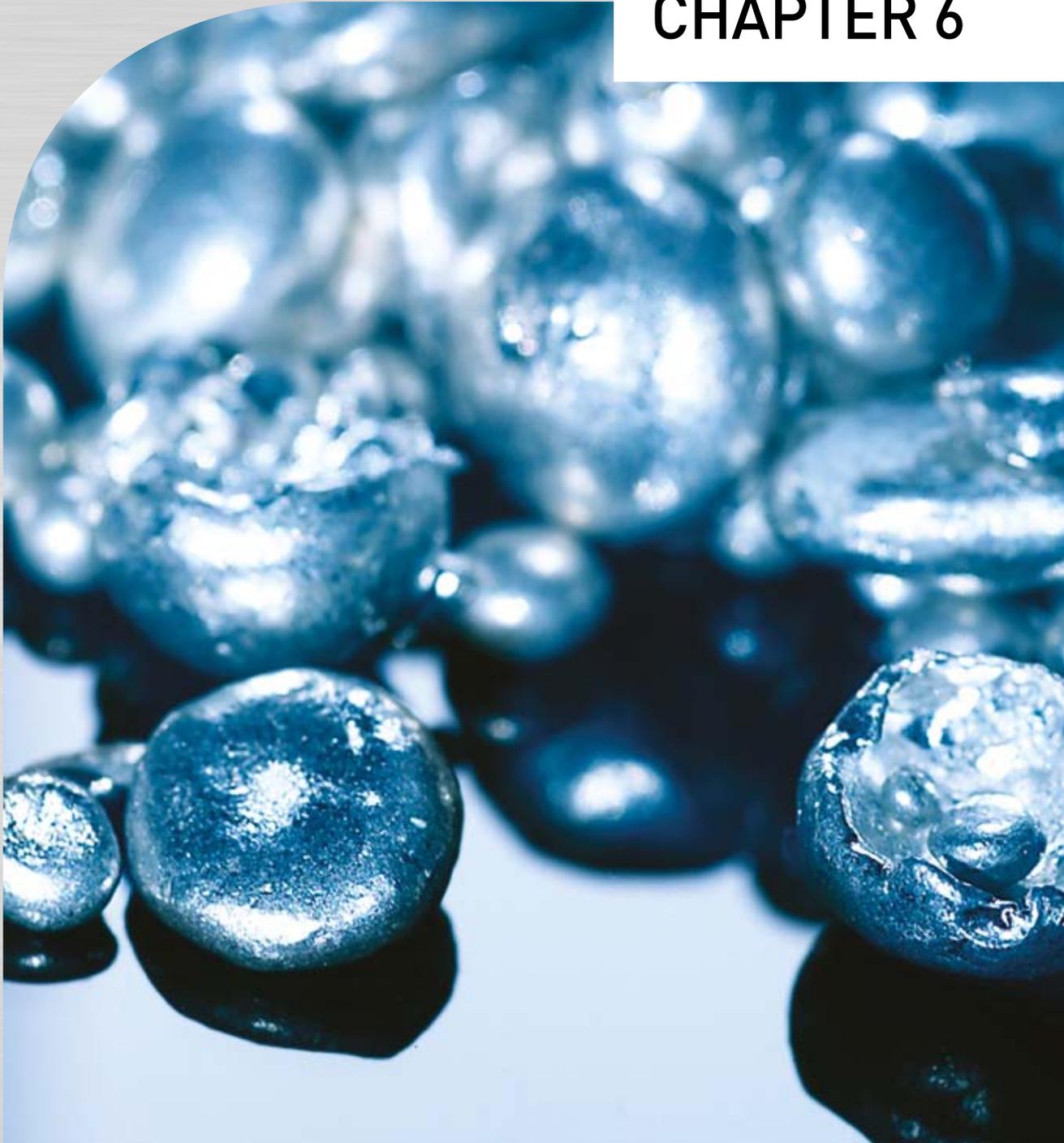
Following this debate in 2012 the Commission has launched a consultancy study to look into the improvement of the criteria for identifying those sectors that are threatened by so called carbon leakage and who would therefore be eligible for the allocation of emission rights in the next phase. In 2013 Euromines members will have to work again with the sub-sectors concerned by providing relevant information for justifying the inclusion in the so-called Carbon Leakage List.

Statement of the European Commissioner for Energy,
Günther Oettinger

„Our economic and energy strategies are based on the quality production of goods, high skills levels and professional services, secure and adequate infrastructure, high standards of Research and Development, high levels of energy efficiency, increased production of indigenous renewable energy and partnership both within Europe and externally, such as with Russia, North Africa, Central Asia, Brazil, China or the US.“



CHAPTER 6



OPERATING SAFELY AND RESPONSIBLY (H&S)

Photo: Boliden



Euromines Safety Committee actively tracks live and forthcoming issues to enable an effective industry consultation process to enable suitable representation to the Commission as appropriate.

Interview with Simon Hunter, Chairman of the Health & Safety Committee Safety, Environment and Risk Manager Cleveland Potash

What were the main activities of Health & Safety Committee in 2012?

The main activities have been the tracking of the legislative changes and their impact on the extractives in industry and where necessary coordinating a common response.

Euromines assists the members greatly by tracking all the activities that could potentially affect the European extractive industries, a particular example of this would be the voluntary reporting of crystalline silica through the NEPSI¹⁷ process. Euromines Safety Committee actively monitors live and forthcoming issues to enable an effective industry consultation process to enable suitable representation to the Commission as appropriate.

The safety committee meets on a six monthly basis where members are updated on all the European initiatives and the potential effect on the industry. Members also share the findings of significant events which have taken place within their companies to assist other members with the formulation of their risk management programs.

What do you consider as a success?

The knowledge sharing through the annual best practice workshops and through the Euromines meetings. The best practice workshop held in Sweden last year which looked at vehicle safety from all angles; the machinery itself, operator capability and fire suppression, was most informative.

Equally, providing scientific and technical arguments for the debates on setting appropriate occupational exposure limit values at EU and national level has been quite fruitful.

What would be required to achieve innovation in the sector?

Innovation on the area of safety depends largely on an interdisciplinary approach and involving machinery producers for example in the discussions can contribute substantially to making work places safer. Also looking across the fence to other industries to see how they have tackled issues and the cross fertilisation of new concepts and ideas will contribute to improve health and safety.

¹⁷ NEPSI European Network for Silica <http://www.nepsi.eu/>

6.2. Euromines activity 2012

6.2.1.

Respirable crystalline silica (RCS)

For years the sector has now engaged in European wide multi-sector agreement on implementing best practice in the management of the respirable fraction of crystalline silica. Workshops were held and documentation were translated and distributed. In 2012 all the sectors including Euromines members engaged again in a bi-annual reporting on the exposure and risk assessment measures carried out (NEPSI reporting 2012).



6.2.2.

Sharing of best practice through the annual Euromines Safety Forums

Annually the Euromines Committee conducts either its own best practice seminar or links its meeting to a corresponding national meeting. In 2012 it joined the Swedish Health and Safety Conference which increases the dialogue and information exchange between all members.

Statement of the UK Government

„The standard of health and safety in the quarrying industry has improved significantly since the introduction of the Hard Targets Initiative by the industry, but continued vigilance, by everyone in the industry, is essential to maintain the improvements.“

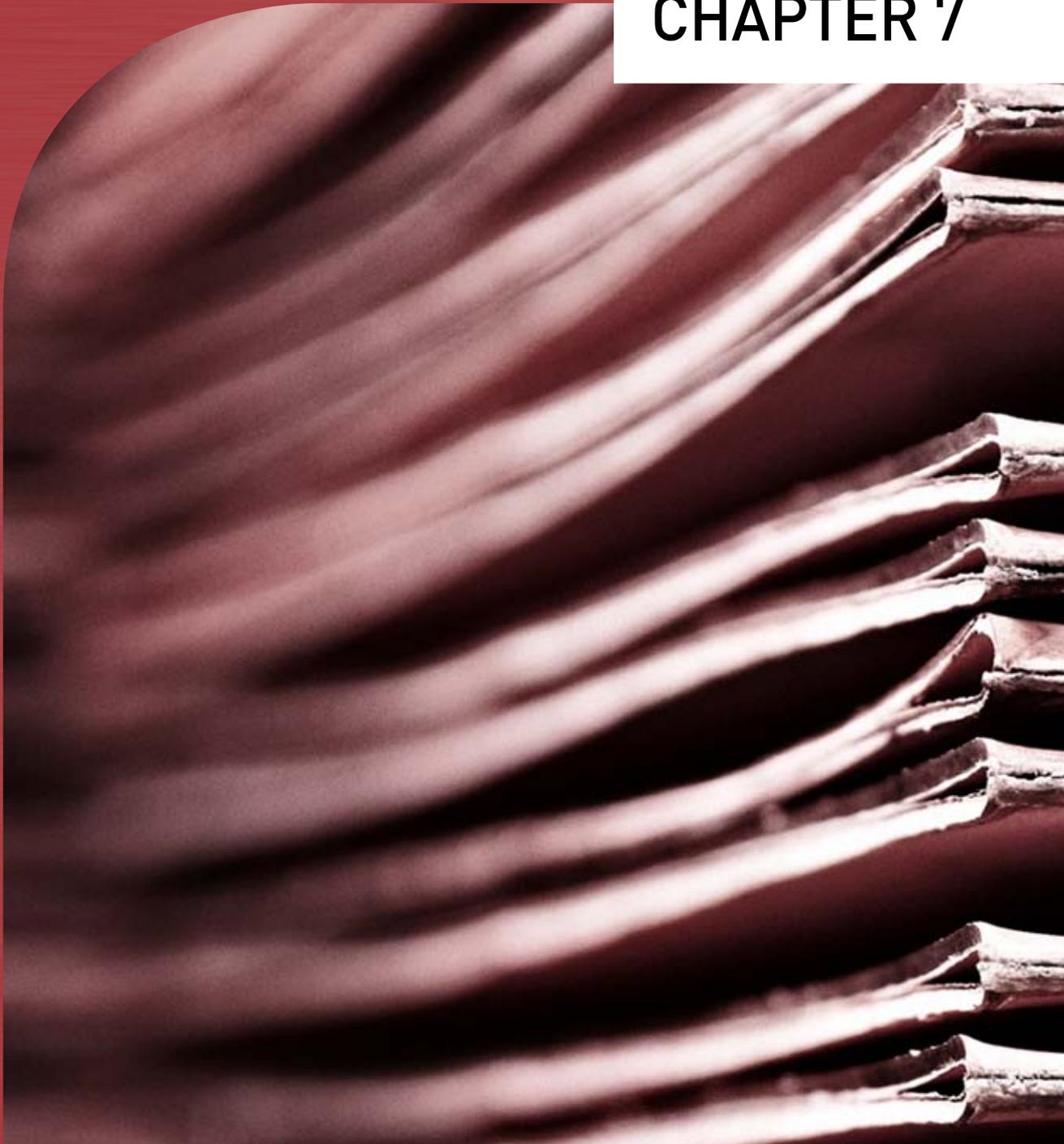
6.2.3.

Incident reporting and learning through the events of Euromines members

Equally, members are sharing incidents at their facilities with each other to increase the understanding of reasons and circumstances of accidents and incidents on the various sites across Europe. For the professionals this is an important exchange of information.



CHAPTER 7





KNOWLEDGE

**AND KNOW-HOW:
INNOVATION ACROSS
EUROPE (RTD)**



Innovation in the minerals sector is one of the solutions which could strengthen Europe's independence in supply of raw materials on the basis of its own mineral resources and scientific potential.

Interview with Henryk Karas, former Chairman of the HLG of the ETP SMR Company Advisor of KGHM Polska Miedz

What do you consider as successful activities of ETP SMR?

Consistent implementation of 10 tasks by the EU, some EU member states and European industry which were predicted in Raw Material Initiative, a new integrated EU strategy to ensure access to raw materials in Europe, announced in November 2008 by DG ENT.

What would be required to achieve innovation in the sector?

I see three important areas which need highlighting in future innovation in the mineral sector: 1. Implementing the results of some EU FP7¹⁸ funded projects in raw materials like: PROMINE¹⁹, ERAMIN²⁰ and I2Mine²¹. 2. Making the reliable Strategic Implementation Plan (SIP) which can push forward the activities of European Innovation Partnership on Raw Materials. 3. Establishing the Knowledge and Innovation Centre (KIC) in Raw Materials as a part of the European Institute of Technology policy.

How do you see the ETP SMR contribution to the European Innovation Partnership?

By active participation in the planned tasks of the EIP programme. ETP SMR members are represented in all levels of governance structure in EIP on Raw Materials.

Why is innovation in the extractive industry so important for Europe?

Innovation in the minerals sector is one of the solutions which could strengthen Europe's independence in supply of raw materials on the basis of its own mineral resources and scientific potential.

Could we propose some actions to achieve innovation in the extractive sector?

Showing the importance of raw materials in the future development of European economy would influence the image of extractive industry in European society. More innovation would be very helpful in change of perception from "dirty and hazardous" into innovative and modern sector. Extractive sector has to make more efforts in eco-innovation to get rid of the imprint as one of the main polluters of environment.

Could the innovations help Europe meet its environmental and economic goals?

Both goals can be achievable if whole EU and its members fully fulfill the Europe 2020 strategy²² and Horizon 2020²³ programme.

What can and should the EU be doing to help drive eco-innovation?

I think that can be achieved by smooth cooperation between members of entire extractive sector and three DGs: DG Enterprise and Industry, DG Environment, DG Research and Innovation.

¹⁸ EU Seventh Framework Programme (FP7) http://cordis.europa.eu/fp7/home_en.html

¹⁹ PROMINE <http://promine.gtk.fi/>

²⁰ ERAMIN <http://www.labo21.dsi.cnrs.fr/eramin/15-uncategorised/about>

²¹ I2Mine <http://www.i2mine.eu/>

²² Europe 2020 http://ec.europa.eu/europe2020/index_en.htm

²³ Horizon 2020 http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=home&video=none

7.2. Euromines and ETP SMR activities 2012

7.2.1.

Successful stakeholders meeting in Sept. 2012 highlighting all ETP SMR activities between 2005 - 2012

On 5 September 2012 the ETP SMR Stakeholders Forum was organized in Brussels. Euromines was one of the organizers. The purpose of the event was to deepen the dialogue on necessary actions needed to secure European raw materials supply. A number of successful R&D projects which involve the members of ETP SMR were presented during the event. This meeting served also as an occasion for presenting the history of the platform and its future objectives.

The ETP SMR has come a long way since its creation. It has extended its membership and responded actively to the economic and political changing circumstances.

Following previous networking programmes and the establishment of a European Minerals Research Council (EMIREC) the minerals industry and related technology and machinery providers decided to make use of a new tool and set up a European Technology Platform on Sustainable Mineral Resources to address the future technological and societal challenges.

The launch of the ETP SMR was in March 2005. It took some time until the European Commission officially recognised the ETP SMR in September 2008. The development of the Platform was positively supported by the changed public view and perception of raw materials in general. This finally resulted in the launch of the EU Raw Materials Initiative (RMI). The developments in raw materials policy caused several revisions of the Strategic Research Agenda,

which provides the strategic research efforts the sector needs to undertake in order to fulfil its vision.

The ETP SMR unites many stakeholders from minerals industry and related technology and machinery providers, the research community, regulators, consumers and civil society around the major technological challenges to the sector, in order to jointly act towards a common vision.

It is going also to contribute to achieving the goals of the Revised Lisbon Strategy and the intentions of the Gothenburg Strategy on Sustainable Development. The identified needs for Pan-European collaborative research aim at a sustainable supply of mineral resources to the downstream European industries, also taking into account the decoupling of economic growth from adverse environmental impacts.



7.2.2.

The change of the ETP SMR status - registered as an association in 2013

Having developed its activities and membership over the years, the ETP SMR members took in 2012 the decision to register the ETP SMR as an independent, fully registered non-profit organisation. All necessary administrative steps were taken towards the end of 2012 and now the members are just expecting the formal approval in 2013. In the interim Dr Hebestreit, Euromines, took over the chair. Following the registration of the association, new elections in 2013 will be held.

Members of Euromines and ETP SMR are active participants in the governance of the EIP on Raw Materials programme (2014-2020). In the context of the European Innovation partnership launched in 2012, the ETP SMR has a seat at the High Level Steering Group of the EIP. Since Innovation and Research will take a key role in the development of the EIP's strategic approach to improve the resource supply for Europe, the ETP SMR's recommendations will be a valuable input.



Statement of the European Commissioner for Research, Innovation and Science
Máire Geoghegan-Quinn

„Our future research and innovation programme Horizon 2020 will be an important break from the past, with funding grouped by societal challenges rather than the current themes. This will ensure flexibility and creativity as we tackle challenges in our ever-changing world.

Final FP7 calls build a bridge to Horizon 2020 by mirroring this challenge-based approach in a number of areas, such as Oceans of the future, Raw materials, Smart Cities and Secure clean and efficient energy.“

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