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## **Mining, Minerals and Human Welfare: The Tasks Ahead**

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Responsible for Mining  
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# **Mining, Minerals and Human Welfare: the Tasks Ahead**

## ***FIRST MEETING OF APEC MINISTERS RESPONSIBLE FOR MINING***

ANTOFAGASTA, June, 16<sup>th</sup> 2004

"SUSTAINABLE DEVELOPMENT IN MINING INDUSTRY" SESSION  
Presentation by Mr. Luke Danielson

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### ***Introduction***

We come from many different cultures, and often face different pressures and priorities. But we are all consumers of minerals, and passengers on the same small blue planet. We share a common future.

One of our shared goals is the sustainable development of our societies and economies. Most of the economies here represented signed the Rio Declaration and Agenda 21; even those few who have not signed have endorsed these fundamental blueprints. The results of the Johannesburg Summit have received overwhelming endorsement. We share a commitment to its vision of sustainable development. Those principles are once again strongly endorsed by this gathering of ministers in your Declaration. There is therefore a common agenda.

There are also common frustrations. One of the most frequent frustrations is that progress has been uneven. Some economies have shown robust growth, and have delivered the opportunity for a better life for many. But not everyone has shared in these advances. In some cases advances have come at a real cost to our environment. The very poor often have less opportunity to take advantage of growth and less ability to cope with the dislocations created by rapid change; sometimes they have paid the price of development which has primarily benefited others. Thus, while the successes are

very real and quite encouraging, we also continue to face challenges of inefficient use of resources, ongoing degradation of ecosystems, and the daily lives of poverty lived by too many.

This presentation is offered in the spirit of dialogue. My late friend Dr. Jay Hair, Secretary General of the International Council on Mining and Metals, was fond of saying that the Earth is a tiny lifeboat in a vast universe that didn't seem to have very many nice places to live. He used to say that "only fools start fights in a lifeboat."

At the same time, we can't move forward if we are unable to talk candidly about our concerns, in a constructive way. The task of improving human welfare therefore means we need to find better ways of talking to each other, without fighting, especially where we disagree. At the end of the day, we are all still passengers in the same lifeboat, and need to find ways to work together, even where we have different perspectives. I therefore ask your forbearance. We must keep on talking, even where no one yet has the answers.

### ***Improving the Well Being of People***

Achieving sustainable development on a global level, or for individual economies, or even for towns and provinces is not the sole responsibility of the mining and minerals industries. Others must share in that task. No one succeeds without working in partnership.

The mining and minerals industries must be a ready and willing partner. They do have a role in the agenda the world has set for itself. And they must be a responsible contributor to achieving that agenda. If they are not, they are at best

irrelevant. At worst they would be a positive obstacle to getting where most of us want to go.

I do not suggest that mining companies, or mining ministries, should suddenly stop focusing on mining and become charities, or social welfare agencies.

But business is fundamentally about meeting human needs. The more this industry meets human needs and the better it meets them, the more value it creates. The more value it creates, the more abundance there is for everyone – national economies, communities, consumers, employees and shareholders. The more people benefit from this industry, the more stake they have in its success and the more welcome it will be.

This is fundamentally opposed to the idea that improving human welfare is irrelevant, that we should focus exclusively on our own short-term needs, and just hope – or assume -- that somehow this creates benefits. We have seen enough of this approach to know where it leads. It leads to an unacceptable legacy of social instability and erosion of natural capital. It leads to an industry that finds its projects and its products less and less welcome in too many places. It leads us away from sustainable patterns of development.

We need to be systematic and scientific about demonstrating the existence of benefits and the absence of severe negative impacts. Research, trying to learn the facts, is our friend, not our enemy. And where the facts show things that are troubling, we have to get better results, not try to massage the facts.

### ***How Does Industry Support Development?***

There are two basic ways that this industry creates benefits – through the economic and social development created by its **projects**, and by the many extremely useful **products** it creates.

The minerals industries can and do produce an infinity of products that meet human needs. These products help us all. There is much opportunity to use resources more efficiently. There is a great deal of opportunity for the rich to consume more wisely and moderately. But there is simply no way for the poorest to achieve a better standard of living without at least some increase in the amount of materials they use. Everyone needs some basic things like a metal pot for boiling water. Too many lack them.

A second way that minerals industries have the opportunity to take a part in promoting sustainable development is **through their projects** and the benefits these can provide: employment, infrastructure, export earnings, building of human capital through training, stronger government revenues and the like. They can often provide these things in regions that have little success attracting any other kind of economic activities.

Both the **product cycle** and the **project cycle** are important opportunities to support sustainable forms of development.

### ***Opportunities to Support Sustainable Development In The Product Cycle***

The minerals product cycle creates many opportunities for supporting sustainable development. It also presents us with real challenges. While there are many things worth our attention, I will touch on three issues. First, the importance of product stewardship and supply chain assurance, second, dealing with the problems of energy, and third, meeting the needs of the poor.

## *Product Stewardship and Supply Chain Assurance*

In the past, most of us have rarely seen the whole product cycle. We tend to see only our own part of it.

- Economies with large mining sectors have too often seen an industry that ends when the concentrates are loaded on a ship and sail over the horizon. There are some excellent organizations that have done very good research on the 'downstream' part of the cycle and intervened actively where the interests of mining were at stake. But too many times too many of us have been only vaguely aware of major changes downstream, until the day the markets are closed to our products.
- Economies with major processing and fabricating sectors have seen those same ships full of concentrate appear over the horizon without knowing much about who filled them and how. The processors then work the technical magic of refining materials and making them into ingenious products and load them on ships, to sail back across the horizon to other destinations. Again, we may have limited knowledge of who is using these goods, what they do with them, and what kinds of problems and opportunities that creates.
- There are economies whose primary role in this process is as consumers of final products. Too often they have not been fully conscious either of where all these wonderful products came from, or – after their useful life -- what is their fate as recycled material or waste.

We are experiencing an information revolution up and down this product chain. Increasingly, we see both intended and unintended effects ripple down from raw materials producers or ripple back up the chain from consumers, or even from environmental problems in final disposal. If people at the end of the chain wind up with materials that they cannot dispose of legally and responsibly, cannot afford to store, and cannot recycle, they are going to find substitute products. If people at the beginning of the supply chain cannot produce products that transparently meet expectations for environmental management and positive social impacts, customers will look elsewhere. Certification is already with us; it will grow.

Consumers of diamonds, concerned that their purchases were paying for insurrection and conflict in Africa, now have the Kimberly Process to certify the origin of diamonds. NGOs concerned about

environmental impacts of mining have launched a major campaign to convince consumers not to buy gold. The proposed new European chemical policy which you have been considering is another example, as well as government purchasing standards in the EU and elsewhere.

Demand for mineral concentrates will increasingly be affected by concerns about the impacts of end uses of products – lead in paint or gasoline, carbon dioxide from coal burning, or cadmium in cell phone batteries accumulating in ground water at land fills – or clay minerals preventing ground water from entering land fills.

Those who care about the future of this industry increasingly understand the need for dramatically improved communication, better understanding and common action up and down the supply chains of individual commodities. I note and applaud the progress you have reached in promoting the APEC Non-Ferrous Metals Dialogue, which will I am sure be very helpful in this regard.

We need *a stronger concept of materials stewardship* – to know where the materials we produce are going, and what is being done with them. As producers, this means we need to realize that those who may misuse our products may be customers in the short term, but major problems in the long term. We need to educate consumers about how to use these products before environment agencies or others have to do the job for us.

We also need to support and guide, rather than resist, the inevitable trend toward stronger systems of *supply chain assurance*. None of us as individuals wants to buy products that are produced in irresponsible ways. As these systems of supply chain assurance are put in place, the ministers here assembled can help insure that they address legitimate concerns and are free of any taint of protectionism. An essential element is cooperation in scientific and technical research, which you have in your declaration agreed to promote.

*Energy*

I am not rash enough to tell you I can predict energy markets, or see our energy future. Certainly, in the Energy Working Group, you have distinguished experts who can give you better advice than I can on this subject.

But I do suggest that our energy future much depends on conscious choices we make, rather than impersonal forces over which we have no control. The sooner we start implementing the necessary changes, the more options we will have. In that sense, even if we express concerns about its recommendations, we should see the Extractive Industries Review as a wake up call: if our economies do not accelerate efforts to diversify energy supplies and shift to a more sustainable mix, we will eventually have the choices forced on us in ways that leave us with fewer alternatives.

Any sustained increase in energy prices, or concern over energy availability, will have impacts all up and down the minerals product chains:

- Some projects heavily dependent on large inputs of petroleum energy may be reevaluated;
- Larger motors, with increased amounts of copper winding, are more energy efficient, and we can therefore predict increased copper demand;
- The advantages that recycled materials, notably aluminum, enjoy over virgin materials, may increase.

The mining and smelting stages together seem to account for somewhere between 3 and 7 percent of world commercial energy consumption. They are thus extremely energy intensive industries.

Whether we talk about concern over climate, rising prices, insecurity of supply, or forces, this industry will be very deeply affected by any changes in energy markets.

The minerals industries are not simply part of the problem. They are part of the solution, whatever that solution may be. And the solution is likely to be different in different places. If it is better insulation, the insulation may come from a mine. If it is wind energy, the wind machines will be made of metal. If it is photovoltaic systems, the minerals industry will supply the silicon. If it needs batteries, the lead or other materials will come from a mine. The wiring will be copper, or aluminum. If it is coal, or something else, the minerals industries will be at the center of the solution.

We will all be better off if the minerals industries play a key role in providing the intellectual and political leadership for the transition, rather than simply reacting to events.

### *The Needs of the Poor*

We all know that poverty is much more than lack of material goods. It is lack of health and education, lack of the social structures for cooperative action, and lack of a sense of control over the forces that affect us. But there is a part of the equation of poverty that cannot be solved without the minerals industries. And it is in the interests of all of us to solve it.

There are hundreds of millions of people without access to some minimum amount of electricity. This electricity lets children read and study in the evening. It lets people learn over the radio or the television what is going on in the broader world. It runs pumps for water and relieves people of some terribly burdensome work.

We share an obligation and a commitment, expressed in Rio, Johannesburg and Antofagasta, to meet these needs. There is no way to meet these needs without copper for wires, lead for batteries, steel for turbine blades, or aluminum for wind machines. And here are interests we all share -- to find the ways to get the products of our industries into the hands of those who need them most of all, where they can have a decisive impact for improved human welfare.

As so often, it turns out that there is a gain here for everyone, so long as this task is done in environmentally acceptable ways. For when you ask the poor what they need and want for a better life, two things become evident:

- That the things they want – lights, radios, telephones, televisions, computers and more – often work with electrical energy; and
- That the things they want are largely made from the products of our minerals industries.

Again, the needs of the poor do not stop with electrification. And there is no one way to electrify – every economy must find its own way. But the case for electrification for the poor is overwhelming in

terms of justice, a better life, and the self interest of those who would be in a position to supply the things the poor would buy if they had the electricity to run them. And if we go in this direction, as we should, it will increase the vital importance of product stewardship – making sure that the things bought and used by the poor are safe and can be used and recycled without degrading our common environment.

### ***The Project Cycle: Management Challenges at Three Levels***

Projects that are successful for investors, communities and for host national economies are managing three sets of requirements well. To be successful, and support sustainable development, projects must:

- ❑ Be successful in complying with ***national legal and regulatory frameworks***.
- ❑ Successfully manage ***emerging international policies***, which are becoming clearer and more important with each day.
- ❑ Be successful in coping with the very real ***expectations of local people and communities***.

Let us look at each of these in turn.

#### **National legal requirements.**

Projects exist within a framework of laws, institutional requirements and expectations. You as Ministers have a leading role in creating and managing that framework.

There has been a tremendous attention in recent years to creating modern frameworks that will encourage and attract investment. Most of us have been down that road. Where has it taken us?

What we are finding is that attracting investment, as necessary as it is for development, does not automatically make people better off. In some cases, it has worked and has clearly made national

economies and communities better off. In others, it is very hard to demonstrate that investment has resulted in an increase in well-being, especially one with lasting benefits. There exist cases where the result has actually been harmful. In the most troubling cases, the cost of development has fallen on the poor, who have the least ability to absorb it.

These outcomes are not random. We are learning what approaches increase the chance of positive outcomes, and how we can greatly reduce the chance of failure. We have taken the first step, to attract investment. We need to take the second step, to increase the likelihood that investment in this sector makes people better off, both at the national level and in the localities where projects exist.

In taking this second step, we must make sure that we are not undoing the gains achieved in the first step, by burdening investment with so many requirements that investors cease to invest. But there is a very broad sentiment in host national economies that there need to be more benefits, more clearly visible. And many of the necessary steps are supported by much if not all of industry, on one condition – that we be moving toward a level playing field under which all are playing by the same kinds of rules. Let me focus on a few concepts: the not for export sector, mine closure planning, how we frame future legislation, and government revenues.

### *Capturing Benefits from Value Added: The Not for Export Sector*

There have been many efforts by mining countries – many of them unsuccessful – to ensure that more of the value is added to products domestically. I believe there is a way to capture more benefits of value added. This is to increase our focus on the one quarter of the world mining industry we almost never hear about – construction materials. Since most of them never leave their country of origin, essentially all value added is added domestically.

Today these industries are typically facing a host of problems, that heavily affect the societies that depend on them –

- Construction is slowed as material became unavailable or expensive
- The poor have decreasing access to adequate shelter
- Poor quality or even unsafe construction from poor quality materials and poor quality control are a real obstacle
- Informality and inadequate legal framework prevent attempts to improve conditions
- Vital materials are being lost to poorly managed urban development
- Unacceptable environmental impacts and unsafe working conditions are prevalent

We need to balance the focus on export industries with a focus on the materials needed by our own economies.

### *Mine Closure Planning*

Mine closure planning is at bottom a way to make sure that the benefits from mining will outweigh the costs. We need to start moving toward an integrated vision of mine closure that recognizes that unplanned closure tends to place heavy burdens on the state for dealing with social dislocation, unemployment, and environmental stabilization, precisely at the point when government revenues from this activity are falling dramatically. Beware those who resist efforts to manage or plan for closure, for this is a key approach for ensuring that this minerals industry is in fact increasing our welfare.

### *Government Revenues: Paying for Capacity Building*

Everyone now recognizes increased capacity in government to be fundamental to success of development. But government will not have adequate numbers of well-trained specialists, or operate efficiently, until it has reasonable levels of revenues. The minerals industries must carry, through taxes, a fair and equitable share of the cost of building capacity in government.

Our host country, Chile, is rightly regarded as one of a number of success stories in development based on mining. One of the most prominent and attractive features of the Chilean landscape is a capable and well administered state apparatus and strong rule of law. Some of this state apparatus has been paid for through the earnings of a state owned copper sector.

I am not here to tell you the proper role of state owned companies. But just as many are questioning whether tax reduction has gone too far, many are questioning the idea that there is never anywhere, any role for the state sector – the viewpoint of the recent unfortunate Poverty Reduction Strategy Paper for this industry. Perhaps we need to look at what state enterprises are or are not accomplishing for development and come to pragmatic conclusions, rather than see the issue through a lens of ideology.

### *What Do Investors Want? What Do Others Want?*

Most of the mining code reform by focused heavily on what mining investors say they need and want. This is understandable, and necessary. But if we are going to expect that investment to bring sustainable development benefits, we have to start listening as well to other social elements as laws and regulations are conceived and implemented. These issues will be a key to the remainder of this presentation.

- What are the key development objectives of communities in which this activity occurs?  
What are communities telling us?
- What are the key problems of inefficient use of resources on damage to the environment? What are our researchers and citizens saying?
- What infrastructure do we need? What do local people think they want?
- How do we try to promote lasting sustainable gains in health, education, housing, or human skills? What do workers say?

I have already said that creating lasting benefits requires working in partnership. All of these groups need to be partners in that process. Partners listen to and respect each other.

## **Emerging International Policies**

Many policies that form an important part of the framework are now being formulated at the international level. Even where mining is welcomed by the legal framework of an individual economy, and is fully complying with national requirements, projects can still get in trouble if they fail to comply with international policies.

The body of international requirements is still in the process of formation. Much of it is unclear and subject to change – for example what if anything will result from the various recommendations of the Extractive Industries Review. But the direction of movement toward stronger and clearer rules to be applied globally by lenders, insurers, investors, or customers is unmistakable.

Where are these international expectations and standards coming from? In part from public opinion, largely but not entirely in the wealthiest economies. In part by the concerns and needs of the local communities most affected by mining and minerals. Some of this is driven by the rapid increase in available information through telecommunications and the Internet. It is also driven by the desires of governments, banks, consumers, investors and others not to want to appear to be responsible for unsustainable or unjust forms of development.

My prediction is that in less than a decade, there will be in place much clearer guidance on standards for investment.

- Some current standards will disappear.
- Other current norms will be very broadly adopted and extremely important to investors
- They will be in almost universal use by mainstream lenders
- They will be used by most insurers as one tool for evaluating risk
- They may be used by major customers for supply chain assurance, and will become increasingly relevant to choices of individual consumers.

One principal question will be whether national authorities – particularly those in of developing economies – have a significant role in articulating and applying these rules. Recent experience has not been encouraging. I know that many ministries are very concerned about the Extractive Industries review and some of its recommendations.

We are hearing some of the same things about this that we heard about the earlier World Commission on Dams: “ where were governments when this was being born?”

That is a good question: where were the governments? Some individual ministries were trying to be heard. But there were others that did not really react until the process was done. And it is difficult, expensive and of limited impact when individual ministries pursue these issues on their own. Maybe what is needed is stronger vehicles for governments collectively to participate in what I am completely convinced will be more and more important processes at the global level. Maybe this group assembled here for the first time will decide to assume this role. I for one hope so.

Public processes, development of investment standards, and guidelines on the global level are not going to go away. The pressures that create these things will grow, not diminish. Those who simply reject them will be increasingly isolated.

At the same time, there has to be a space in these processes for the legitimate representatives of government. This means finding ways consistent with the dignity and sovereignty of government to sit in dialogue with organizations which have not been chosen or elected by anyone, but who nevertheless often express views it is important to hear.

The question is not whether we will have stronger and more complex international standards. It is whether this results in eroding national authority, or whether individual ministries or groups of ministries find ways to participate effectively, and help guide where this process is going. This will lead us to much better results but will require:

- Understanding which of these processes to intervene in and how;
- Understanding how to become increasingly effective in that participation,

perhaps through organizations such as this one;

- Finding a way for government to sit in dialogue with those who are not the legitimate representatives of sovereign peoples;
- Realizing that there is an important rationale for dedicating government resources, such as ministerial level attention, and staff time to research and understand issues.

This is a very complex subject and I will leave you with this thought: simply resisting the trend toward stronger international standards will not work. And when such standards are properly done, they can be beneficial to individual economies.

A common framework – a convergence of approaches among economies -- can have many benefits in making it easier to adopt policies that ensure more effective development without being told “you will lose the competition for investment.” The need is not to resist, but to participate effectively and help guide this process. Perhaps this first forum of APEC ministers will decide to move in that direction.

## Local Views and Expectations

This is the hardest of the three sets of requirements to generalize about, because it comprehends such a wide variety of experience. Some of the more prominent issues are:

- ***Informal occupants*** of land who may lack legal title but have clear expectations that their occupancy will somehow be recognized. They may have a deep sense of injustice if they are removed, especially without agreement on compensation.

- Communities who regard themselves as ***indigenous***, and have strong traditional attachment to certain lands, even if they have no legal land tenure and no legal recognition as an indigenous group.
  
- ***Artisanal or small-scale miners***, who may have no other livelihood, but may lack legal recognition of a right to operate where they are.
  
- ***Traditional communities***, for which the abundance of nature – for example fish, wild game, gathered plants, or fuel wood – plays a critical role in subsistence livelihoods, but who may lack legal recognition of any right to use these resources
  
- ***Local leadership***, which may expect that local people will somehow be better off as a result of project development even where they have no legal right to any specific benefits. This is an important point. I have often heard it said that “the minerals belong to the nation as a whole; these local communities have no greater right to benefit from them than anyone else. The revenues belong to the nation, and the authorities will see that they are spent where they are most needed, which is not necessarily here.”

Let me respectfully suggest that what this view misses is that sustainable development succeeds where there is partnership. And effective partnership for development at a project site requires that there be resources available to government at a local level. Here is where the opportunities for shared infrastructure exist, not at the far end of the country. Here is where an influx of outsiders increases the chance that infectious diseases will spread. Here is where people can be trained for increased human skills. Here is where housing supply and potable water can be managed well or badly for development.

We need to respect national sovereignty and law. But we also need to realize that on the positive side, the active cooperation of communities is necessary to achieve the full benefits of development. And on the negative side, if their expectations are frustrated and they are treated in ways they regard as unfair, this can result in failure of projects that can hurt all parties.

We also have to acknowledge that there have at times been some alienation between some local community groups and national authorities. When they have not got what they want from their own authorities, some community groups have turned to the international processes and standard-setters. For example, there is now a major push, through the Extractive Industries Review and other means, to enshrine the concept of 'prior informed consent' as an international standard. If this is applied in appropriate ways, it might be quite acceptable to many economies. If it is a slogan without content or definition, it is bound to be regarded as a threat.

The alliance of international institutions, sometimes showing lack of respect for sovereignty, with local interests, willing to seek foreign support to obtain what they cannot achieve within their own countries, has sometimes been very disturbing to ministries. But the way forward is not to attempt to deny these interests exist, any more than we can pretend the international pressures do not exist.

Their interests are real interests. Their concerns are sometimes valid concerns. They are often the poor, who are supposed to be benefiting from the process of development. They are our fellow passengers in the lifeboat. We need to learn how to work toward common objectives.

We cannot let local communities make all the decisions to the exclusion of everyone else. But if we cannot accommodate many of their expectations, projects will tend to be difficult, expensive, unprofitable and not very good for development. If national authorities are absent when the difficulties need to be resolved, it is not surprising if grievances are taken somewhere else to be resolved.

The challenge of the next wave of mining legislation is to ensure there is a way to have this dialogue at the national level within the framework of national law and policy. This is the best way to reduce the need, or the temptation, to take these issues to global institutions. And it puts national leadership where it needs to be – in the middle of the process. If the state is not leading the process, it does not mean local interests will cease to exist. It means they will simply go elsewhere to be recognized.

## ***Conclusion***

Where we see projects that are good for the investor, good for the host country, good for local communities, good for the environment, -- good for everyone -- it is because *they are successfully managing at all three of these levels.*

This is a real challenge. National legal requirements are not always clear. But they are much clearer than the emerging international policies. And even these are very clear compared to local expectations.

So increased clarity of requirements is an important objective. Investors like clarity.

Another thing that investors like is not to be put in impossible positions: where national law requires one thing, but international standards or the expectations of local communities require something quite different. Therefore, *increased convergence* among national legal standards, international policies and local expectations is also important.

This means being able to say legitimately three things:

- *at the international level* that national legislation is aware of and responding to the concerns that have led to the development of international standards;
- *at the national level*, that we are ensuring that the voices of our economies are being heard in a constructive way, in the development of international standards; and
- *at the local level*, that our legislation, our procedures, and our officials are all geared to ensuring that affected communities will in fact have some voice in their future, and that they will benefit from development, rather than simply being sacrificed to some presumed greater national good.

I again thank you for your attention and for the opportunity to be once again in Chile.