The language of overlapping consensus:

a discussion

Prepared for

The Integrity of Creation Working Group and the

Pontifical Council for Justice and Peace

R. Anthony Hodge, PhD, P.Eng.

30 March 2014

Contents

1. Introduction

Background

On Saturday, 7 September 2014, the Pontifical Council on Peace and Justice convened a day of reflection on mining involving some 25 from the mining world and 15 from the church and related civil society. The following Monday, 9 September 2014 the Integrity of Creation Working Group convened a meeting of some 20 individuals representing 15 religious orders of the Catholic Church. In and around both of these events, rich discussion ensued.

However, a central issue arose. It seemed that as hard as all tried, many examples of "speaking passed each other" occurred – as if ideas and concepts seemed to be simultaneously discordant and concordant – even though the common language of English was in use.

Part of this phenomenon is because of a divergence in culture and values between those "church" and those "corporate mining." Not surprisingly, mistrust or suspicion was evident though a high degree of diplomacy was exercised showing a deep desire to listen and to hear.

The idea of overlapping consensus

The language we use and the spirit which drives it either facilitates or limits our capacity to share culture and values and find common ground. By sensitizing each to what is important to the other, respect is strengthened, integrity engendered, and alternative courses of action arise that are rooted in common understanding and the overlap of values that exists between participating interests. This is John Rawls idea of "overlapping consensus" in action (Rawls, 1971, 1987).

The following quote and discussion are drawn from Wenar, 2013 and serve to further explain Rawl's idea.

> The Vatican Council declared that the human person has a right to religious freedom. (1965, art. 2). Thus, Catholic doctrine supports the liberal right to religious freedom for reasons internal to Catholicism. A reasonable Islamic doctrine, and a reasonable atheistic doctrine, might also affirm this same right to religious freedom, each for its own reasons. In an overlapping consensus all reasonable comprehensive doctrines support not just this particular right, but a complete political conception of justice, each from within its own point of view.

Rawls proposed an overlapping consensus as the most desirable and feasible basis of democratic stability. It is superior to a mere balance of power among citizens who hold contending worldviews.

Any balance of power (or *modus vivendi*) might shift, and social stability then be lost. In an overlapping consensus, citizens affirm a political conception wholeheartedly from within their own perspectives and so will continue to do so even should their group gain or lose political power. Rawls says that such an overlapping consensus is stable for the right reasons because each citizen affirms a moral doctrine for moral reasons. Doing so is in fact each citizen's first-best option given their own beliefs – not a citizen's second-best compromise in the face of the power of others.

Clearly, such an overlapping consensus may not always occur or once established, endure. For example, citizens in some societies may have too little in common and/or extreme doctrines may overwhelm societal institutions. However, there are certainly examples in history which show both deepening trust and convergence in beliefs among citizens demonstrating that an overlapping consensus can be possible. When it is possible, policy, decision-making and action based on overlapping consensus is the best route to social stability that a free society can hope to attain.

Reciprocity

There is another key ingredient. By sharing, we may hope to change another's perspective. For example, the mining or banking industries may hope to share a particular perspective in the hopes that society becomes less critical and more positively inclined. Such a result may occur – change

in public attitude – but only if the mining and banking industries are prepared to be changed by what they learn from others. For example having heard a community's perspective, a company's sense of what is "fair" may be expected to shift towards greater alignment with the community's sense of what is "fair."

However, the opposite is also to be expected – if communities and indigenous people hope to share their perspectives and in so doing, change the attitude of those in the mining industry in terms of what is "fair" for citizens, they must be prepared to factor into their assessment the realities of the mining industry. These attitudinal changes are always two-way – it is a kind of natural reciprocity.

To achieve this kind of convergence, processes of interaction are required that are free, honest, and not controlled or manipulated. When this is experienced, a deep sense of authenticity emerges and can be felt.

Mining in transition

Just as society, the mining and metals industry continues to change dramatically. Population growth, urbanization, climate change, the rise of emerging economies, continuing growth in society's environmental and social concerns and the change in the world's communication system, are all key factors.

A key step for the industry occurred during the period 2000 – 2002 when an unprecedented project was undertaken called "Mining, Minerals, and Sustainable Development." Though funded by the mining and metals industry, it was managed and led by an independent not-for-profit civil society organization – The International Institute for Environment and Development.

During the two-year project life, some 50,000 individuals participated. They came from all corners of the world and represented a broad range of interests: communities, large and small companies, service providers, governments (local, regional, national), international donor organizations, civil society organizations, academia, unions, indigenous people etc.   An action plan for change in the mining industry resulted and the International Council on Mining and Metals (ICMM) was created to facilitate the implementation of that action plan.

Now over a decade later the adjustment going on in the industry continues – and this note is a small reflection of the on-going transition that is underway.

Purpose of this discussion

The purpose of this note – motivated by the ideas of overlapping consensus and reciprocity as described above – is to spark an exploration of the common ground between the perspectives and values of the Catholic Church and those of "corporate mining" culture.

The starting point of this exploration is provided by four elements of language that lie at the heart of the social doctrine of the Catholic Church. They are: *integrity of creation; universal destination of the world's goods; the common good; and solidarity*.

None of these language elements would be typically used in the mining industry. In fact, their use might well illicit looks of consternation and confusion on the part of some, perhaps even disdain on the part of others. And yet the ideas beneath these words are very much alive and well in some parts of the mining industry, even gathering momentum.

Throughout this discussion, values and ethics play a prominent role. Thus, in a closing discussion, a short comment is offered on the idea of developing and using an "ethical lens" for assessment of human activities including mining. This proposal draws on insights developed during design of Canada's approach to the long term management of used nuclear fuel – a delicate, controversial, but very real life topic.

Personal note

The ideas described in this note are personal and deeply held. However, they do not necessarily reflect those held by any others involved in this dialogue, or indeed, the ICMM.

2. The integrity of creation

In his remarks to the Fourth European Congress of JPIC Animators held in 2010, Fr. José Rodríguez Carballo, ofm, Order of Friars Minor (OFM) Minister General noted:

> The world is the home where we are invited to live in profound fraternal communion with the men and women of our time, as well as with all of creation. However, it must be cared for and built up in such a way that it is transformed into a home of universal fraternity, where all have a place and where fraternal relations, marked by deep respect, exist between humanity and creation.
>
> The 2003 General Chapter placed "the preaching of reconciliation, peace and justice, and respect for creation" among the essential elements of our form of life . . . . thus (entrenching) . . . justice, peace and integrity of creation (JPIC) as values that form part of what we could well call our Franciscan DNA.

Thus the idea of "integrity of creation" captures the perspective that human society is part of a larger ecosystem and that it is this whole of creation that deserves our deep care and respect.

For those of the Catholic faith, an essential aspect of creation is the spiritual dimension, interpreted in the way of the Catholic Church. Other faiths may interpret this spiritual dimension differently; yet others may not recognize it at all. This reflects the diversity of the human family.

3. Synchronicity between applied sustainability and the integrity of creation

There is much synergy with the concept of "integrity of creation" and the linked ideas of sustainable development and sustainability.

A systems perspective

Figure 1 below offers a systems perspective underlying the idea of sustainability. It shows people as an integral part of the broader ecosystem.

Starting from the above systems perspective, a number of important conceptual underpinnings provide the foundation for applied sustainability, underpinnings that are utterly consistent with the perspective expressed by José Rodríguez Carballo, ofm, above in his comment on the integrity of creation.. These underpinnings are summarized below. They found earlier expression and are summarized from Hodge and Taggart, 1992; Hodge, 1995; MMSD North America, 2002; and Hodge, 2006.
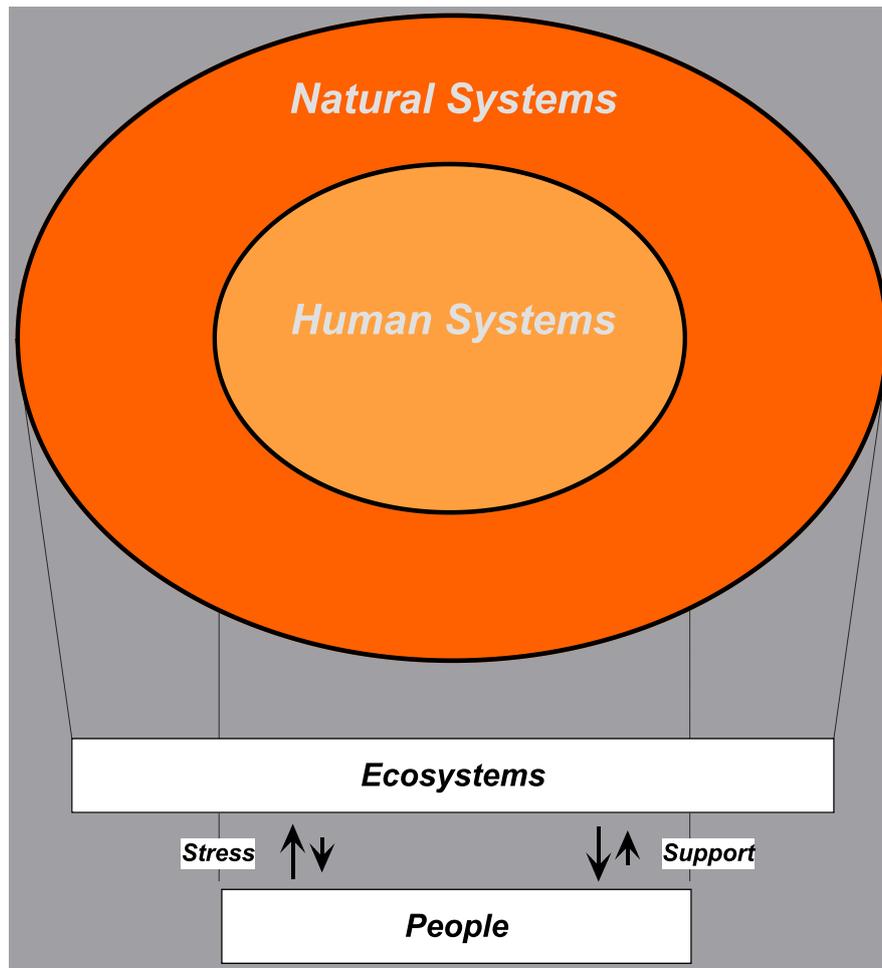
Figure 1. A systems perspective underlying the idea of sustainability (Hodge, 1995)

Three key definitions

The following definitions are used in this discussion.

> **Sustainability:**   the persistence of certain necessary and desired characteristics of both people and the enveloping ecosystem (of which people are a part) over a very long time – indefinitely (modified from Robinson et al., 1990).

Note that use of the words "necessary and desired" means that this definition is values-based and therefore "open" in the sense that what will be identified as "necessary and desired" in any given case will depend on the values being exercised. For example, what a Tanzanian might identify as "necessary and desired" will not necessarily be the same as what a Peruvian or Korean might identify.   Such a values-based, open definition is sometimes very difficult for numerate businessmen, economists, engineers and scientists to deal with. Their world is dominated by closed definitions whose interpretation does not depend on the values of the observer.

Because "sustainability" involves the maintenance of certain necessary or desired characteristics of human society and/or the ecosystem, decisions must be made about what is necessary or desired. Making such decisions is value-based and depends on the values of who is deciding.   When more than one set of values is implicated, the process of resolving value-based differences becomes critically important. Therefore, in bringing ideas of sustainability from theory to practice, the process of application (how decisions are made and implemented) is as critical as the substance or focus of the decision (the what).

In the mining industry, the above fact underlies the critical need for collaboration and dialogue: it is only through collaboration and dialogue that alternative values can be respected and brought to bear on mining system design, operation and closure. When it comes to values, the experts are the people who hold them whether that be community members, indigenous people, members of civil society organizations, company employees, or public servants.

This lesson has cropped up again and again over the last several decades. Addressing values differences requires process of collaboration and the identification of common ground. Here again, Rawls' idea of overlapping consensus emerges.

Development: to expand or realize the potentials of; bring gradually to a fuller, greater, or better state. (modified from Daly, H., 1989). Development has both qualitative and quantitative characteristics and is to be differentiated from growth which applies to a quantitative increase in physical dimensions. (National Round Table on the Environment and the Economy, 1993)

Sustainable Development: the human and, most importantly, the ACTION part of the above idea set – it covers what and how people do. The results is not a "fixed state of harmony." Rather, it is an on-going process in which people take actions leading to development (as described above) that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable development is thus a continuous quest for certain necessary and desired characteristics of both people and the enveloping ecosystem over a very long time – indefinitely.

At the same time, actions that reduce the ability of future generations to meet their own needs should be minimized and if deemed essential to continue with today, at least done so with the explicit recognition of and sensitivity to future implications. (modified from: World Commission on Environment and Development, 1987).

Underlying value base

Figure 1 above is the starting point of all discussions of applied sustainability: at its core lies a value set that is best stated as "parallel care and respect for the ecosystem and people within." Not surprisingly, this is no different than the value base entrenched in the "integrity of creation."

Furthermore, the entire concept of sustainable development is structured around the proposition that every decision has ripple effects and, just as when we throw several pebbles into a pond, when the ripples intersect, they produce still different ripples. In other words, sustainable development deals with interrelationships and linkages. In simple terms, everything is connected to everything else, something well understood by ecologists. In practice, it necessitates looking at decisions in a holistic way where there is a parallel care and respect for people and for the enveloping ecosystem of which everyone is a part (Hodge et al., 1995). In the business world, this is simply a different way of expressing a need for comprehensive risk assessment and management – something that is well understood by every mining company.

Goal of applied sustainability and related assessment criteria

From this value set follows the goal of sustainability: to achieve human and ecosystem well-being together. From the perspective of "results-based management" these are the results – human and ecosystem well-being that are to be sought, designed, implemented, and tested for.

In other words, the success of a mine (or any human activity) should be judged in terms of its contribution to human and ecosystem well-being over the long term – both. This assessment criterion – contribution to human and ecosystem well-being over the long term – represents a fundamental shift if approach to management of human activities and is further discussed below.

Recognizing "ends" and "means" – they are <u>not</u> the same

A mistake that is often made is that "ends" are often mixed up with "means." From a sustainability perspective, human and ecosystem well-being are "ends." In contrast, the pursuit of human activities – within or outside the market economy – and the creation and operation of our governance systems are "means." This is illustrated below in Figure 2.
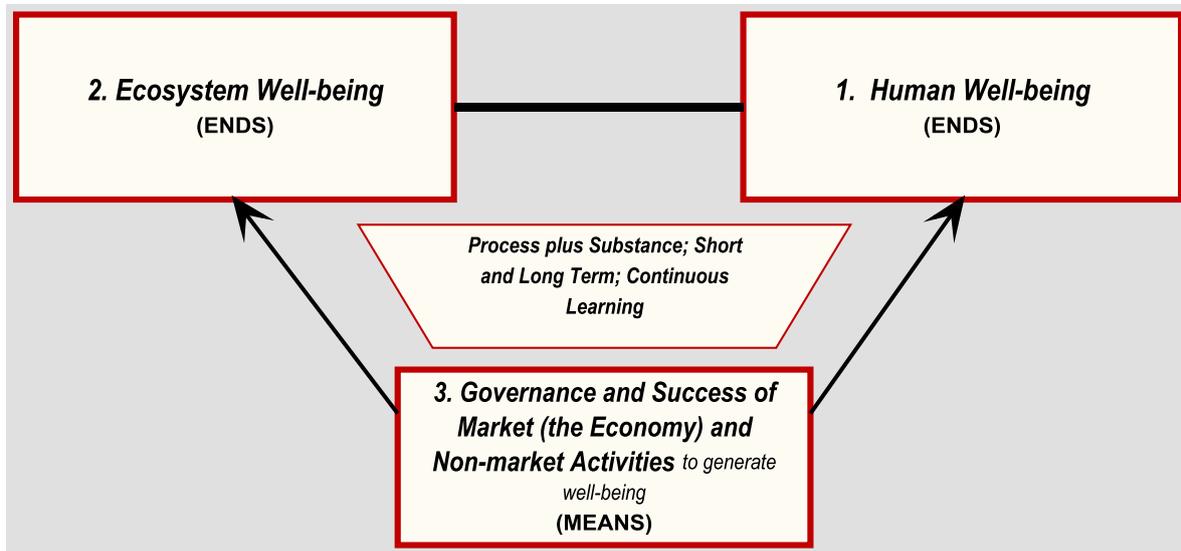

Figure 2. Differentiating ends and means from a sustainability perspective.

In his opening message to the 2014 World Economic Forum in Davos, Pope Francis called for the world economy to serve all people and not for people to be slaves to the economy. This is a profound recognition that enhanced economic activity, though a significant need, should be seen as a means to and end and not an end in itself.

The "positive contribution" criteria

The "positive contribution to sustainability" criterion noted above is different from, though built upon, the "mitigation of adverse effects" criterion that is the focus of traditional environmental, social, and economic impact assessments. There are two important implications.

First, it may be tougher to demonstrate positive contribution than to identify and mitigate impacts. However second, by taking this approach, a fairer treatment of both positive and negative implications is facilitated than has typically been encouraged through traditional social, environmental, and economic impact analyses (see Gibson, 2000 for a full discussion of this change) and better decision-making results.

Seen in this way, the concept of sustainability is much more than environmental protection in another guise. It is a positive concept that has as much to do with achieving well-being for people and ecosystems as it has to do with reducing stress or impacts (Hodge and Taggart 1992, NRTEE 1993, Hodge et al.1995, Hodge 1995, Prescott-Allen 2001).

Moving away From an environment vs. people perspective

The ideas expressed above veer sharply away from thinking in terms of a "trade-off" between human and ecosystem well-being. There are obviously many small trade-offs in any practical application: between interests, between components of the ecosystem, across time, and across space. However, in an overarching sense, the idea of sustainability calls for both human and ecosystem well-being to be maintained or improved over the long term. Maintaining or improving one at the expense of the other is not acceptable from a sustainability perspective because either way, the foundation of life is undermined.

In the language of engineers, achieving a net contribution over the long term to these two "end results" – both human and ecosystem well-being – serves as a universal, two-dimensional design criterion that should be applied to all human activities. Given this design criterion, engineers are fully capable of designing accordingly. In the past, it has not been applied and not surprisingly, it has not been achieved.

This is really about achieving security – for people and for ecosystems

The approach to implementing sustainability concepts reflected in this discussion aims to re-establish a sense of confidence that:

- o people can and will have an opportunity to participate in the decisions that affect their future;
- o resources will be made available to ensure individuals and communities will have the capacity and resources to participate in the decisions that affect their future;
- o acceptable outcomes will be achieved not only during a mine operation but also after closure;
- o all interests including companies, communities, governments and others will fulfil the commitments that they make regarding human (social, cultural, economic) and ecological conditions; and
- o expectations across interests can and will be more effectively aligned throughout the full project life cycle from exploration through post-closure.

Together, the above elements amount to creating a sense of security and faith in the future – whether it is from the perspective of a company, a community, or the ecosystem. This is in stark contrast to the condition when people lose faith in their ability to influence their own future, leading to despondency, lose of community resilience, and in the extreme to conflict and violence.

Seeing and designing mining as a "bridging" activity

At any given site, mining (or smelting, refining, and primary metals manufacturing) has a beginning and an end. In that context, no mine/mineral activity is in itself, sustainable. However, the implications of that activity go on indefinitely – not only as a direct result of the activity but also through the product that is produced. When we choose to make those implications positive by design, mining serves as a powerful engine for society to achieve the ends it wishes and that are consistent with the values at play.

In that sense, mining/mineral activities serve as a bridge to the future. Mines and mining are not ends in themselves but a critical part of achieving longer term ends. Mine design should be undertaken with this bridging role as an explicit part of project design. Setting such a context explicitly broadens and lengthens the planning and decision-making conditions that govern mine implementation.

Synchronicity between applied sustainability ideas and the "integrity of creation"

In short, there is full synchronicity between practical application of sustainability/sustainable development ideas and the concept of "the integration of creation." And over time, this synchronicity will almost inevitably find greater explicit expression in the mining industry.

4. The "universal destination of the world's goods" – the distributional challenge

A fundamental tenant of the Christian world-view is that God created earth for everyone. The Compendium (Pontifical Council, 2005) draws from the Second Vatican Ecumenical Council (1966): "God destined the earth and all it contains for , , , all peoples so that all created things would be shared fairly by all mankind under the guidance of justice tempered by charity." So this idea touches on the fair distribution of "created things."

In fact the distributional issue goes beyond "goods."[1] Distribution of costs, risks, benefits, responsibilities and accountabilities are all critical parts of the distributional issue. And today, the mining and metals industry is being challenged by those who believe that the distribution of these implications is not fair.

This concern is deeply seated and not limited to mining and metals activities though the mining focus is serving as a lightning rod for many peoples' concerns. In fact, the growing inequity in the world between rich and poor – another dominant theme of Pope Francis – is a massive contemporary challenge.

In the ideal, this entire family of distributional elements would be fairly distributed (whatever that means). And clearly if one part gets all the benefits and another carries all the costs and risks and simultaneously responsibilities are either unclearly assigned or not at all – and no-one is being held to account for the responsibilities they carry, the situation is untenable and utterly unfair.

But there is an extremely difficult challenge here. Fairness too is a value-based concept. There is no recipe that applies in all cases.

When alternative values lead to different interpretations of what distribution of costs, risks and benefits, responsibilities and accountabilities could be considered "fair," tensions can arise. Such tension might lead to gentle disagreement at one end of a spectrum physical violence at the other with death at the most extreme end.   These differences can arise, for example, when different values are held by a community, an adjacent mine, an indigenous population on whose traditional territory mine and community are now found, a national government (charged with caring for many communities), and global interests (who, for example, might be concerned about an environmental, cultural, or social phenomenon that they consider of global significance).

Ironically, it may be easier to identify something that is "unfair" or "unjust" than it is to clearly identify what might be "fair" when multiple values are brought to bear. And unfortunately, to simply demand that a distributional issue be resolved in a way that is "fair" (such as a mine operation nested in a community in an emerging nation) is all very well and good – but may not be helpful all on its own.

The real insight is not for an external interest to demand fairness and even less so to pronounce on what is fair (be it a foreign government, the Church, a civil society organization, a company, or whomever). Rather, it is to offer a means for the parties themselves whose values are at play, to find a process that will work in their particular mix of cultures to define what a fair distribution is in their given particular case and link to that, a means to understand, track, assess, and publically report progress over time so those who are affected and know what is going on.

Here again, a need for dialogue and collaboration pops up for all the same reasons as has been previously described. It is the "process" dimension of applied sustainability at work. And this part of applied sustainability is just as complex and subtle as the substantive part – because it must come from the heart, be deeply base on integrity and respect, and give rise to a sense of authenticity.

---

[1] There is an added complication here that leads to considerable confusion.   In Church literature, "good" is varyingly used as a "good" as in physical object and a "good" as something desirable.

5. Synchronicity between "the common good" and "development"

The Pontifical Council (2005, para 164) describes the "common good" as the sum total of social conditions which allow people . . . to reach their fulfilment more fully and more easily (Pontifical Council, 2005, para 164).

In Section 3, the concept of development was defined as "to expand or realize the potentials of; bring gradually to a fuller, greater, or better state." It was argued that development has both qualitative and quantitative characteristics and is to be differentiated from growth which applies to a quantitative increase in physical dimensions.

Surely there is a high degree of synchronicity here. An analogy may be useful.

> Some years ago I was born and began to grow. I went to school for formal learning and life's lessons continued throughout. Many don't realize that sometime in our mid-30's, we start to physically shrink. But life goes on and from there until the end of life, each of us can continue – to the extent that we choose – to continue the learning process and ever more hone the particular gifts that are ours. Thus, the development process never ends even though physical growth may diminish and eventually end.

A mine project follows this exact trajectory and the challenge of applied sustainability is to find a recipe for doing that in a way that leads over the long term to a positive contribution to human and ecosystem well-being. Or in the language of the church, this is the way that mining contributes to the common good – as a contribution to people to reaching their fulfilment more fully and more easily.

6. "Solidarity's" link to applied sustainability

In Section 3, the idea was introduced that sustainable development is "an on-going process in which people take actions leading to development (as described above) that meets the needs of the present without compromising the ability of future generations to meet their own needs." So by this (and any definition), sustainable development is a concept that demands care for not only today's population and ecosystem, but also tomorrow's. A temporal dimension is entrenched.

For the church, "solidarity" is a word that neatly captures a commitment to caring for those marginalized and less able to address their own needs – the poor and disenfranchised for whatever reason. Or applied in a temporal sense, to have solidarity with future generations is to similarly care about those not yet born. In this case, there is a synchronicity in the temporal sense.

Until very recently, mining has not assumed a stance of caring for the marginalized – today or tomorrow. However, this situation is rapidly changing.

Through the last several decades an increasing number of mining and metals companies have turned their attention to addressing the social and environmental concerns of society – moving ever closer to full implementation of the concepts of applied sustainability described in Section 3. Today, this is reflected in the push for "corporate social responsibility." At stake is a company's "social licence" to operate. To be sure, within the industry there is a spread from leaders to laggards from a performance perspective.

Furthermore, their remains an overall reticence to enter in to a "social" domain that is not the expertise of mining and for most, very much the responsibility of government. Never-the-less, there is significant movement on this front.

While this change is on-going inside the industry, outside the mining industry the world is experiencing even greater and more rapid change. In particular, a dominant aspect of this change

is the world's communication system which now provides an easy means for communities (in concert with civil society) across the world to interact, to share technical and legal knowledge, and to gain confidence. More and more this is happening and in short, communities on the periphery are becoming empowered.

With this confidence, they are no longer prepared to accept corporate and/or government approaches that are arrogant and prescriptive and that remove a communities ability to influence its own future. Communities are asking to be heard, to have their vision of the future play in how events unfold, and to actively participate in creating that future, receiving a fair share of benefits generated. If this does not seem possible, if an uncertain and un-palatable future seems to be forcing its way onto them, they are more and more resisting. Across the world, the number of mining operations is increasing and in step with that, there are an increasing number of cases of real conflict – where public demonstration occurs and in more extreme cases, physical violence and even death is seen. For everyone, the goal posts are moving.

There are an increasing number of examples of very successful operation – community interaction. In all of these cases, the key success factor is the creation of relationships between mining operations and host communities and countries that are characterized by authenticity, respect, integrity, inclusiveness and transparency. Creating such relationships cannot be legislated. Rules are not enough though they are likely essential to control the weakest performer. Rather, such relationships come from the attitude of the parties involved. These attitudes are reflected in action based on patient dialogue and collaboration. It is this kind of attitude and action that drives successful mining companies today. And it is this kind of attitude and action that is deeply entrenched in the ICMM principles, commitments, and standards.

At the same time, more and more people are recognizing that if managed effectively and in a way that leads to a net positive contribution to people and ecosystems over the long term, mining activities can be a tremendous engine of positive change and a significant delivery agent for the follow-up to the millennium development goals (MDGs) – the sustainable development goals (SDGs) or whatever label is ultimately applied. So there is an explicit trend for mining activities to enter into the space of "solidarity" as defined by the Church.

However, here too there is a major challenge: the common lack of definition of the boundaries of responsibility – between company, community, and government – that apply in any case. In carrying for the marginalized, when does a mining company's role enter into the responsibilities of government or of community? And over time, how and when might these boundaries change? These questions, which are central to any interests assessment of its future (for a company these are key risk-related questions with significant implications for financial planning) are currently not well addressed and certainly not openly discussed by company, community, and government.

7. Towards an ethical lens for mining

This last short discussion draws on insights generated during the development of Canada's long term management plan for high-level radioactive waste – used fuel from nuclear reactors. The issue is highly contentious and has been subject to broad public engagement since the 1970s.

This initiative pioneered a leading-edge approach to addressing that particular challenge that brings together:

1. a sense of values that are important to Canadians – drawn from extensive direct discussions with Canadians;

2. a set of universal principles of ethics – developed by a blue-ribbon panel of ethicists; and

3. a set of engineering design objectives – developed by a multi-interest advisory panel charged with applying a comprehensive multi-attribute utility analysis to weigh technical alternatives for long term management of the used nuclear fuel..

Figure 3 below summarizes each of these three elements in the form of an analytic "lens" equally useful for citizens who wish to reflect on the issue and engineers for designing, costing and implementing solutions. Underneath each element of Figure 3 lies a deep well of understanding and reflection. It is offered here as a starting point for developing such a lens for mining and metals projects.
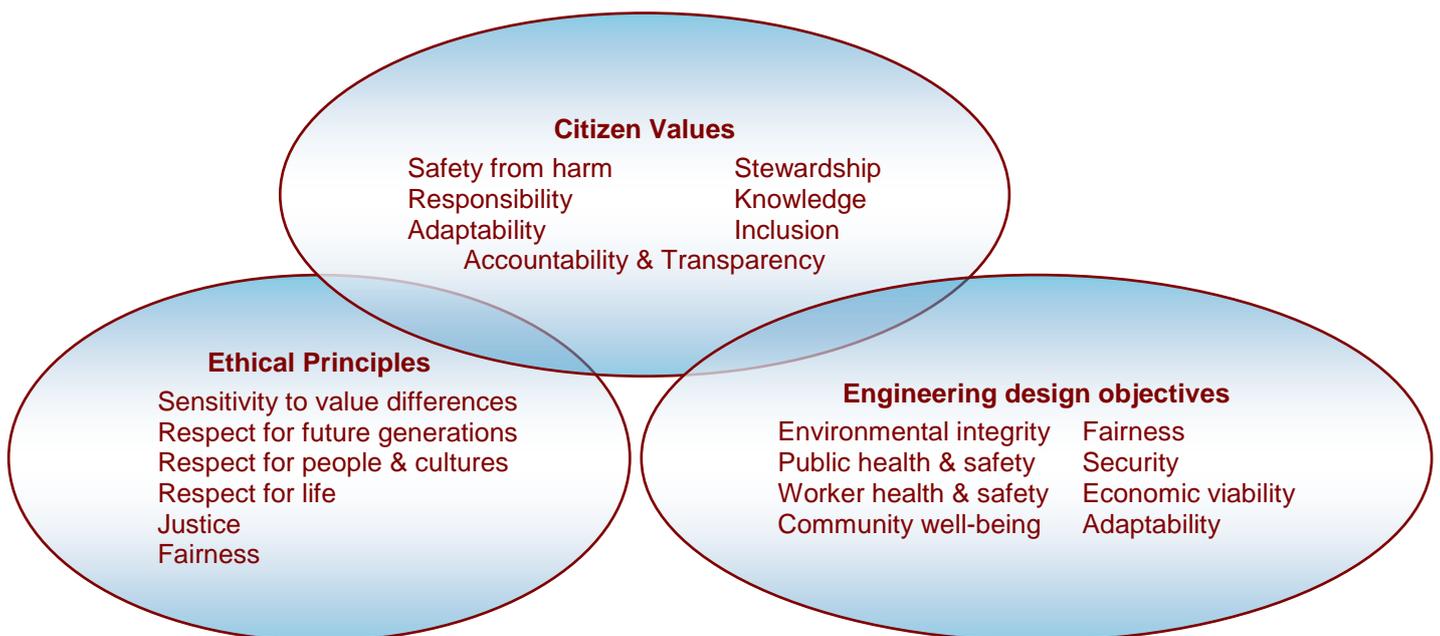
Citizen Values

Safety from harm   Stewardship
Responsibility   Knowledge
Adaptability   Inclusion
Accountability & Transparency

Ethical Principles

Sensitivity to value differences
Respect for future generations
Respect for people & cultures
Respect for life
Justice
Fairness

Engineering design objectives

Environmental integrity   Fairness
Public health & safety   Security
Worker health & safety   Economic viability
Community well-being   Adaptability

Figure 3. Towards an ethical lens for considering mining and metals activities
(adapted from Canada's Nuclear Waste Management Organization)

References

Carballo, Fr. José Rodríguez ofm, 2010. "Justice, peace, and the integrity of creation and plan for life and mission in a Franciscan perspective. Fourth European Congress of JPIC Animators, (Saint Anna, Poland, April 29, 2010). See http://www.ofm.org/01docum/jpic/MGpolandEN.pdf, last visited 4 Feb 2014 by Tony Hodge.

Daly, H., 1989. "Sustainable Development: from concept and theory towards operational principles." Pp. 241 - 260 in H. Daly, 1991. *Steady State Economics*, 2nd ed. Washington D.C.: Island Press.

Gibson, Robert B., 2000. Favouring the Higher Test: Contribution to Sustainability as the Central Criterion for reviews and decisions under the Canadian Environmental Assessment Act. J*ournal of Environmental Law and Practice*. 10:1, 39 – 54.

Hodge, R.A., and I Taggart, 1992. Reporting on Sustainability: Human Wellbeing within Ecosystem Wellbeing. Unpublished Report prepared for the Policy and Research Committee, Ontario Round Table on Environment and Economy, Toronto, Ontario.

Hodge, R. A., 1995. Assessing Progress Toward Sustainability: Development of a Systemic Framework and Reporting Structure. Ph.D. dissertation, School of Urban Planning, Faculty of Engineering, McGill University, Montreal.

Hodge, Tony, Susan Holtz, Cameron Smith, and Kelly Hawke Baxter, 1995. *Pathways to Sustainability: Assessing our Progress*. Ottawa: National Round Table on the Environment and the Economy. p. 12

Hodge, R. Anthony, 2006. Mining, Minerals and Sustainability. Chapter 9 (pp. 151 – 175) in Ray Cote, James Tansey, and Ann Dale (eds.) *Linking Industrial and Ecology – A Question of Design*. Vancouver: University of British Columbia Press.

MMSD North America, 2002. *Seven Questions to Sustainability – Assessing the Contribution of Mining and Minerals Activities*. Final Report of the Task 2 Work Group, Mining Minerals and Sustainable Development North America. Winnipeg: International Institute for Sustainable Development. Also available on the web at www.iisd.org/mmsd

NRTEE, 1993. Toward Reporting on Progress Toward Sustainable Development in Canada – Report to the Prime Minister. Ottawa: National Round Table on the Environment and the Economy. (Included as Part I in Hodge et al., 1995.)

Pontifical Council for Justice and Peace, 2005. *Compendium of the social doctrine of the church*. Washington D.C.: United States Conference of Catholic Bishops

Pontifical Council for Justice and Peace, 2013. *Water, an essential element for life*. Vatican City: Pontifical Council for Peace and Justice.

Pontifical Council for Justice and Peace, 2014. *A Day of Reflection – a collaborative review of mining issues by the Pontifical Council for Justice and Peace, representatives of world mining and other organizations*. Vatican City: Pontifical Council for Peace and Justice.

Prescott-Allen, Robert, 2001. *The Wellbeing of Nations: A Country-by-Country Index of Quality of Life and the Environment*. Washington: Island Press.

Rawls, John, 1971, 1999. *A Theory of Justice*. (Revised Ed.) Harvard University Press, p. 340.

Rawls, John, 1987. "The Idea of an Overlapping Consensus." *Oxford Journal of Legal Studies,* Vol. 7, No. 1, (Spring, 1987), pp. 1–25.

Robinson, J.G., G. Francis, R. Legge, and S. Lerner, 1990. "Defining a sustainable society: values, principles, and definitions." Alternatives 17.2: 36-57

Second Vatican Ecumenical Council, Pastoral Constitution Gaudian et Spes, 69: AAS 58 (1966), 1090

Wenar, Leif, "John Rawls", *The Stanford Encyclopedia of Philosophy* (Winter 2013 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/win2013/entries/rawls/>.

World Commission on Environment and Development, 1987. *Our Common Future*. London: Oxford University Press.)