



"Sustainability - a Role for Labour, a Role for the ICEM"

CONTENTS

2	FORWARD
3	OVERALL INTRODUCTION and BACKGROUND
5	MINING including DIAMOND, GEMS, ORNAMENT AND JEWELLERY PRODUCTION
7	ENERGY including OIL, GAS, NUCLEAR and ELECTRIC POWER GENERATION
10	CHEMICALS (including PHARMACEUTICALS and PLASTICS) and RUBBER
12	PULP / PAPER and FORESTRY
15	MATERIALS including GLASS, CERAMICS, and CEMENT
16	SUSTAINABILITY and GENDER
18	CONCLUSION
26	SELECTED REFERENCES
29	EXPLANATION of TERMS, PHRASES and SUSTAINABILITY CONCEPTS

APPENDICES:

32	Appendix I - Sustainable Jobs / Green Jobs
33	Appendix II - Just Transition
36	Appendix III - Corporate Social Responsibility
36	Appendix IV - Economic Instruments and GHG Emissions Permits and Trading
38	Appendix V - Clean Coal Technologies and Carbon Capture and Storage/Sequestration
38	Appendix VI - United Nations Universal Declaration of Human Rights
42	Appendix VII - ILO Core Labour Standards
43	Appendix VIII – Indicators for Social Sustainability
45	Appendix IX – ICEM Motion on Sustainable Development (from at 4 th World Congress)

FORWARD

SUSTAINABILITY: A LABOUR VIEW

This paper describes how the International Federation of Chemical, Energy, Mine and General Workers Unions (ICEM) understands or interprets sustainability.

Furthermore, it recommends actions and policies that the ICEM can implement, to assist its affiliates and the world to move towards a sustainable future.

Sustainability includes environmental protection, human rights and labour rights, and economic development. It is the balance between the environmental and the social imperatives of sustainability that gives the labour movement its credibility on sustainability matters. It is the integration of environmental, social, and economic concerns that will move the world to a sustainable future. Identifying some of the challenges and finding the way forward, while keeping a labour perspective, is the goal of this paper.

The paper is about sustainability broadly, and not climate change specifically. However, since climate change is perhaps the most pressing question of our time, it is inevitable that it is discussed in some detail here.

In 2008, responding to a resolution passed at its World Congress (see appendix IX), the ICEM initiated the development of a sustainability plan that will allow the ICEM to weigh in sustainability issues in a positive and progressive manner. The timing of our re-entry into this debate could not be better. We are at the threshold of a new stage of global economic development. Environmental fears and the global financial crisis of 2008 create an opportunity to reinvent our current patterns of production and consumption along more sustainable lines. We have a real possibility of debating some of the economic dogma of deregulation, privatization, and globalization that has dominated our political leaders' thinking for so long. It is up to us to prevent the financial and environmental crises from being used as an excuse for further cost- and job-cutting. The so-called free market will not find solutions by itself. Cost-cutting and job-cutting will not put us on the right path, nor can we shop our way to sustainability.

SUSTAINABILITY – A ROLE FOR LABOUR; A ROLE FOR THE ICEM

OVERALL INTRODUCTION and BACKGROUND

Representing some twenty million members worldwide, the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM) is the leading Global Union Federation for unions representing workers in the energy, mining, chemical, rubber, pulp and paper, cement, glass, ceramic, and related processing industries. As such, the ICEM is the Global Union Federation whose affiliates will be most directly affected by sustainability debates. We are a federation of industrial unions. Our point of view is distinct from that of employers and distinct from that of environmental NGOs. The industrial sectors that employ our members are frequently blamed for creating the problems. It is within these sectors that many of the solutions for a sustainable future must be found. Those solutions should benefit workers and society through the creation of sustainable jobs.

Potentially catastrophic environmental concerns, economic crises, and the urgent need for human development have pushed discussions about sustainable development, or sustainability, to the top of the political agenda. As an organization representing working people, we must either engage in these debates or quietly accept the decisions of others.

Sustainable development has been simply defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is upon examination of the meaning of the word "needs" that this simple definition becomes more complex. Today's needs include energy, materials, and other industrial products - and the jobs they create. Tomorrow's needs include a clean environment and a stable climate.

If we fail to protect the environment, there is a risk that we will eventually face economic catastrophe and social disintegration. On the other hand, if we consider only narrowly defined environmental or economic issues in isolation from their social links and impacts, we may destroy cultures, societies, communities, enterprises, and individual working peoples' lives and have nothing to offer them in return. Balancing and integrating all of these concerns is the essence of sustainability. Solutions need not necessarily be "one size fits all". Different countries and sectors may need to focus on different aspects of the problem.

Sustainability addresses three broad areas of needs: environmental, social, and economic. These needs interrelate in complex ways. The interfaces (social-economic, social-environmental, environmental-economic) are blurred and indistinct, and there is great difficulty in separating one from the other. Within each component exists a myriad of subsidiary interfaces. Sustainability requires an integrative, rather than the traditional compartmentalized, way of thinking. For example, unionized workplaces are generally safer, healthier and more considerate of the environment than similar non-unionized workplaces. Therefore it is perfectly consistent with environmental protection to demand that International Labour Organization (ILO) Core Labour Standards be respected.

Nevertheless, it is useful to consider these three broad areas separately, to get an initial understanding of what they might contain.

SOCIAL SUSTAINABILITY

Social sustainability begins with respect for human rights, cultures, communities.

As human beings we value most highly our creativity, our intelligence (both as individuals and as cultures), our abilities to interact, form families and communities, and care for one another. Social

sustainability insists that we pay due attention to all of those things that protect and enhance communities and help ensure the well-being and fulfilment of individual human beings. The social dimension includes concerns for fairness, equity and justice.

As a prerequisite to social sustainability, the labour movement demands respect for human rights (see appendix VI: United Nations Universal Declaration of Human Rights), and labour rights (see appendix VII, ILO Core Labour Standards, and ILO International Labour Standards by Subject).

In addition, the labour movement understands that sustainability will never be achieved without paying attention to problems such as: limiting disparities in wealth and income; access to education; population health (including occupational health) and health care; law and justice; equality of opportunities within society; environmental justice (including opposition to environmental and social dumping); indigenous peoples' rights, "Just Transition" measures (see appendix II); corruption, and militarism, war, and all sorts of violence (see appendix VIII). High standards of social protection will facilitate the transition to a sustainable world.

ECONOMIC SUSTAINABILITY

Global economic sustainability broadly refers to the overall smooth functioning of the global economic system; including opportunities for growth of the economy of less-developed nations. From the point of view of enterprises, economic sustainability means the continued financial viability of the enterprise. From the point of view of trade unions, economic sustainability implies decent work and income sufficient to provide for good shelter, health care, education, community infrastructures, and protection of the environment. The attainment of such income must not depend upon an unreasonable number of hours of labour per day, per week, per month, per year or per lifetime. A sustainable economy will increasingly provide quality jobs that enhance environmental sustainability, and communities where people have the opportunity to develop their full human potential. For example, contract and agency labour are generally incompatible with long-term sustainability, and is a particular problem for women and other disadvantaged groups. Therefore, the ongoing ICEM campaign on contract and agency labour is a good example of how we strive to create sustainable, quality jobs.

People already struggling to survive are not able to make sacrifices to preserve tomorrow's environment.

Recent events have highlighted just how unstable the global economic system, based on a dogma of deregulation, privatization, and globalization, has become. It has justifiably been described as "casino capitalism". A sustainable world cannot be built on such uncertain foundations. If there is a positive side to the financial collapse of 2008, it is that opportunities for change that have been created. Governments need to promulgate public policy in the public interest. Corporate decision-making needs to embrace sustainability as a goal, and corporate governance systems need to include unions.

ENVIRONMENTAL SUSTAINABILITY

Activities tend to be environmentally sustainable when they: use energy and resources efficiently (not wastefully); use materials in continuous cycles; use continuously reliable sources of energy; and do not require resources in quantities that would be unavailable to the majority of people on the planet.

Activities are probably not environmentally sustainable when they: require continual inputs of non-renewable resources (but note that the use of a non-renewable resource can be considered

"sustainable" if alternatives are foreseen that would provide future generations with equivalent opportunities); use renewable resources faster than their rate of renewal; cause cumulative degradation of the environment; or lead to the extinction of species.

A sustainable environment requires that materials, energy and natural resources be used in a manner that provides for both present and future generations. The availability of many resources, including fresh water, must be protected. It also requires the maintenance of biodiversity and human health. It requires the protection of air, water and soil and the preservation of animal and plant life. Cleaner industries benefit both workers and the environment. Without the preservation of the natural environment, neither social nor economic sustainability is possible.

CHALLENGES and OPPORTUNITIES for KEY ICEM INDUSTRY SECTORS

MINING

MINING - INTRODUCTION

Without the materials supplied by mining and the wealth it creates, modern economic development would be impossible. Yet, by definition, the mining industry extracts non-renewable resources from the earth. It is not surprising that the mining industry has a major environmental impact. The social record of the mining industry, particularly in the developing world, has been generally erratic.

MINING - ENVIRONMENTAL CHALLENGES

Mining is often in competition with other land uses, habitats, or indigenous land claims. Aggressive mechanized methods of mining, such as "mountain top removal", permanently and radically disturb the landscape where they are used. Mining operations use or contaminate large amounts of water. Disposal areas for waste and tailings are frequently the targets of complaints of visual pollution and dust, or if in the form of tailings ponds, risk of release to water courses. Erosion and dust can result from mining operations, especially open pits and/or tailings areas. The discharge or run-off of chemicals used in the mining process, as well as dissolution of contaminants from tailings, can result in high concentrations of arsenic, sulphuric acid, heavy metals, or other pollutants in ground water and surface water. Abandoned mines are sometimes safety hazards, continuing sources of pollution, or the cause of dangerous sinkholes. Modern mining operations utilize heavy equipment, and the transport of materials, equipment and ore over longer and longer distances; all requiring intensive energy inputs and therefore contributing to greenhouse gas emissions.

In recent years, some mining companies have made efforts to improve their environmental performance and image through more efficient methods, better management of waste and tailings, and stronger efforts to restore sites.

MINING - ECONOMIC CHALLENGES

In terms of "wealth creation", the mining industry plays an important, even crucial, role in many economies. These industries also provide the materials without which many aspects of economic development would be unthinkable, both in terms of the products manufactured and the employment thereby created.

Developing countries tend to rely on the export of natural resources for a greater percentage of their national wealth than developed countries. This wealth, if well distributed by means of taxes and wages and properly managed by national governments, could encourage economic diversification

and progress. However, developing countries that rely heavily on oil or mineral exports suffer higher rates of poverty and child mortality, and spend more on their militaries than similar countries with more diverse economies.

Financial bonds for the "perpetual care" of mining sites, including restoration, reclamation or conversion of lands for eventual re-use have become more common and reliable but are far from the norm. These considerations should be considered part of a "Just Transition" for mining sites and the workers and communities that depend on them. Too frequently, mining companies consider the communities that grow up around mines to be temporary conveniences and fail to plan or build for the longer term - beyond the life of the mine.

Powerful multinational mining companies are becoming even more powerful through mergers and takeovers; there is a growing global concentration of ownership in this industry.

MINING - SOCIAL CHALLENGES

In terms of occupational health and safety, the global mining industry is consistently one of the most lethal industries for workers. This is why the ICEM campaigns for the full implementation of ILO Convention 176 on Safety and Health in Mines are so important. In many parts of the world, the mining industry has an unfortunate reputation for its ruthless treatment of workers, local populations and indigenous peoples, violations of human rights and labour rights. The same multinational mining companies sometimes present quite a different face in the developed world than they do in their operations in the developing world.

Mines are frequently located in isolated areas where they can exert a great deal of control over their host communities, and are less likely to be subject to outside scrutiny. The voice of workers, through their unions, may be the only voice able to challenge the practices of the employer.

Corporate Social Responsibility (CSR) (see appendix III) statements by some mining companies can be little more than words on paper. The phrase "blood diamonds" is used to refer to diamonds (or, by extension, other precious stones) that have their origins in a war zone and/or are used to finance armed conflicts or illegal activities. Similarly, gold mining implicated in environmental and human rights transgressions produces "dirty gold".

There is a strong link between a company's labour relations practices and its treatment of the environment and communities in which it operates. However, in the absence of a strong and independent trade union it is difficult to obtain credible information on whether a company is attempting to respect labour rights, provide decent work conditions, or adhere to environmental best practices and standards. The increasing use of contract or agency labour at mines undermines the very notion of sustainable development.

MINING - CONCLUSION

Resources and energy will continue to be obtained through mining. Despite this crucial role, the mining industry's environmental and social performance threatens its economic sustainability. An effective mix of voluntary and regulatory instruments is essential if this sector is to meet the challenges of the twenty-first century. In the face of these challenges, the ICEM believes that some sort of international regulatory framework for extractive companies is needed. Voluntary corporate social responsibility initiatives are not enough, there must be third party verification of behaviour, along with rewards and penalties for good, or bad, behaviour. In addition, host countries to multinational mining companies (especially developing countries) need to have mechanisms to ensure that best practices and standards are followed, and a dispute resolution process if they are not. The ICEM believes that mining companies must be held accountable for their labour, environmental and human rights practices through strong systems of national regulation and

international conventions (such as those of the ILO) that include the right to organize.

ENERGY, including OIL, GAS, NUCLEAR and ELECTRIC POWER

ENERGY - INTRODUCTION

Energy must be considered as more than just another industry or service, but an essential human need. Energy is the top priority sustainability issue and the basis of all future development. The generation and distribution of energy contributes significantly to global environmental problems. On the other hand, consistent access to affordable energy is the essential prerequisite for both social economic (especially industrial) development. Future development of renewable energy may be based on a more decentralised model of power generation than the heavily centralised system we have now.

ENERGY - ENVIRONMENTAL CHALLENGES

The energy industries are deeply implicated in environmental issues, and in particular climate change. Energy will always have an environmental impact, but the impact can be minimized and localized if we choose to do so. Because the world continues to rely on fossil fuels for much of its energy needs, the production, transportation and use of fossil fuels for energy is responsible for the majority of man-made carbon dioxide emissions. It is within this sector that many of the solutions will have to be found, despite relentless resistance from a few energy companies.

As easily accessible and inexpensive oil, gas, coal and uranium are depleted, future production will be heavily focused on resources in hostile and environmentally sensitive environments such as deep offshore regions and the Arctic, and expensive-to-recover resources such as bituminous sands (popularly referred to as "tar sands" or "oil sands"), oil shales and heavy oil deposits.

The effects of global warming in the Arctic region could mean that oil and mineral deposits which have until now been impossible to get at may soon become accessible. For example, there are large quantities of methane hydrates on the cold ocean floor and locked into arctic permafrost. These could prove to be a new source of energy, if a viable and safe means of exploiting these deposits can be found. Alternatively, they could turn out to be a new means of environmental destruction since methane is a far more potent greenhouse gas than carbon dioxide. If methane hydrate deposits become unstable as a result of ocean warming and release their methane rapidly to the atmosphere, the effects on the earth's climate would be even more sudden and catastrophic than what we are already facing.

Coal remains the fossil fuel that is associated with the most serious environmental problems and is therefore at the centre of our challenges. Coal-burning accounts for about forty percent of energy production-related global greenhouse gas emissions, or about twenty-five percent of total global GHG emissions. This makes it imperative that the world develops carbon mitigation strategies, such as carbon capture and storage or sequestration (CCS). Of great environmental concern is that new coal-fired plants are being built almost every week in India and China, most of which use conventional technology that is not readily or efficiently adaptable to CCS. We must ensure that at the very least, new plants being built today are high-efficiency plants that can be equipped with CCS systems as soon as possible.

Biofuels were seen by many as having the potential to diversify energy and reduce emissions. Unfortunately, much of that hope has turned out to be misplaced as energy inputs to grow and convert crops turn out to be much higher than initial estimates. The grain it takes to fill an SUV tank with ethanol could feed a person for a year. Using land to grow fuel leads to the destruction of forests, wetlands and grasslands that store enormous amounts of carbon often through a subtle chain reaction effect. In Brazil, for instance, a great deal of Amazonian forest is cleared annually for cattle

pasture. This is at least in part because existing pasture lands have been taken over by soybean growers who are profiting from soaring prices caused by the conversion of US soybean acreage to corn production for ethanol. Brazil's bioethanol from sugar cane is often mentioned as a good example of sustainable biofuels but it is unclear whether its proponents have properly accounted for all of the effects of the program, particularly social impacts and competition for land space (with resulting loss in biodiversity). Furthermore, if Brazilian bioethanol is as environmentally efficient as claimed it is because of the prolific growth rate of sugar cane in Brazil's tropical regions and cannot be compared with the production of ethanol from corn grown in temperate climates.

Solar energy is a relatively clean energy source (despite being responsible for some emissions attributable to the manufacture of solar panels) and is starting to make significant capacity gains as relative costs come down.

Nuclear power could play a major role in mitigating the impact of carbon dioxide emissions although significant resistance to increased nuclear power capacity exists in the public mind and in political circles. Despite public scepticism, on a global basis there will be new nuclear stations built and nuclear plants presently on stream but reaching the end of their projected life will be replaced by new nuclear capacity, often on existing sites.

Worldwide wind generation capacity presently approximates one-hundred gigawatts. Globally, it remains a small component of energy generation but in a few European countries it supplies significant percentages of total electricity generation. It is expected to grow rapidly in coming years.

Large scale hydro-electric generation has been developed to its maximum capacity in several countries, although potential still exists in some parts of the world. Small-scale plants may become more important as energy costs rise.

Utility workers will be affected by decisions about how best to supply the world's energy needs. For example, not all energy sources are equally capable of responding quickly to changes in demand. Solar and wind power may ultimately be more successfully adopted through a more decentralized model than our current one. There are fairly complex interactions between different energy sources that need to be considered in the design of the electric power grid. Finally, it must be remembered that large parts of the world are still not reliably supplied with electric power.

ENERGY - ECONOMIC CHALLENGES

Worldwide primary energy consumption continues to grow by over two percent per year and fossil fuels continue to be our most important energy source. Current softening demand for energy as a result of the 2008 financial crisis, will be temporary. Oil remains the world's leading fuel but over the last six years has consistently lost global market share – principally to coal. The United States remains by far the world's largest overall energy consumer, but the rate of consumption increase is greatest in China and India.

BP's "Statistical Review of World Energy" provides the most widely used estimate of world oil reserves. According to BP, there are sufficient "proven" oil reserves and expected discoveries to meet demand for decades to come. However, the BP report is a summary of estimates published by oil companies and governments. Reported "proven" energy reserves, in the case of all fossil fuels but especially in the case of oil, are subject to many political and economic incentives that encourage misrepresentation (in most cases, over-reporting). They should therefore be treated with caution. In addition, the size of energy reserves is somewhat dependent upon price. Resources that are not worth exploiting at low prices can become economically viable to extract at high prices. For example, Canada's large stated reserves of crude oil are significantly based on potential synthetic crude that can be manufactured from bituminous sands ("tar sands" or "oil sands"). These reserves

are only available if the price of crude oil exceeds the cost of manufacturing synthetic crude.

Reports that express energy reserves in terms of “years of supply at current rates of consumption” should be viewed with particular scepticism. Even if accurately estimated, they fail to mention that even modest increases in consumption will compound, like interest on a loan. A five percent annual growth in consumption can cause today's "one-hundred-year supply" to actually run out in about thirty-five years.

Ultimately the exploitation of any non-renewable energy resource will reach a point where the energy input equals energy output. For example, if finding and recovering a barrel of oil requires as much energy as the barrel of oil contains, then it would ordinarily be uneconomical to recover it at any price. (There may be exceptions to this rule based on different energy sources in different locations varying in transportability and utility of use) Even before that point is reached, the resource may become uncompetitive with other energy sources and therefore uneconomical to extract. Oil exploration, development, and production costs (in economic and environmental terms, and also in terms of energy inputs) have soared as production is increasingly dependent on hard to get at resources. "Peak oil" is defined as the moment in time when the maximum rate of petroleum extraction is reached, after which the rate of production will plateau and finally begin an irreversible decline. Peak oil does not predict a sudden end of oil supplies (as it is sometimes misunderstood). However, it does predict that we will soon see peak global production of "cheap" oil reserves that cost only a few dollars per barrel to produce - if we have not already. One can also define "peak gas", "peak coal", and "peak uranium" in analogous ways, with estimates of when the exploitation of these resources will "peak" ranging from two or three decades in the future for gas, to many decades for uranium and coal.

Like many emerging energy technologies, including most renewables, carbon capture and storage or sequestration (CCS) has still to prove itself commercially viable. Although there are a number of small demonstration CCS projects in Europe and the US at early stages, most have either failed to make progress or face very high cost overruns. This only emphasizes the point that full-scale CCS equipped coal plants must be built - and soon - to prove the technology. CCS-adaptable plants may cost around ten to twenty percent more to build than conventional plants in the long run. The first few built will probably cost much more. This explains in part why only a handful of such plants are being built today in Europe and virtually none in the rapidly growing economies of India and China.

Alternative forms of energy often require significant economic subsidies. Corn ethanol has turned out to be both economically and environmentally misguided. Solar energy remains expensive compared to other means of making electricity and is unlikely to become a major global source of energy within the present structure of the electric power industry. Nuclear energy as a source of electrical energy may grow, but financing the upfront investment cost and insurance/liability costs will remain a challenge.

The notion that regulation is largely unnecessary and that the free market will solve most of the problems of energy supply, must be considered thoroughly discredited in the aftermath of Enron, WorldCom, and the global financial collapse of 2008. The unregulated free market is neither the most efficient nor the most just way to provide essential energy needs. The energy industries have generated and accumulated enormous wealth, but that wealth has only in a few countries been well distributed to the benefit of society. Good global energy decision-making will depend upon finding the right legislative and regulatory framework, the right economic instruments (carbon credits, auctioned or tradable permits, or a carbon tax) and finding the right price or cost levels for these instruments (see appendix IV).

ENERGY - SOCIAL CHALLENGES

Oil and gas are “extractive industries” and share with mining a bad public image, particularly in their behaviour towards developing countries in which they operate. Concerns range from violation of worker rights, poor industrial relations practices, environmental damage, triggering of civil conflict, collusion with dictatorships, corruption and criminality.

In the developed world the experience with deregulation and privatization has been overwhelmingly negative. Besides eroding the concept of the common good, it has been used by some multinational enterprises to weaken labour rights, erode working conditions, and break unions. The circumstances in other regions and markets can be quite different; as can the experiences unions have with state-run enterprises under various legislative and regulatory frameworks.

On the other hand, this sector has created some of the best examples of joint trade union-employer cooperation. These are the Global Framework Agreements that have been signed by the ICEM and several multinational companies in this sector.

ENERGY - CONCLUSION

The world will continue to rely heavily on fossil fuels for the foreseeable future. Throughout the world new coal-fired power stations are moving from the planning stage to the construction phase and as yet there is no power station routinely operating CCS. Other sources of energy so far have demonstrated economic, environmental, or capacity limitations, but we need to determine whether these can be scaled up.

The ICEM supports a balanced energy future. Meeting the Intergovernmental Panel on Climate Change (IPCC) targets for carbon dioxide reduction will be difficult to say the least. Exploring all energy options, including CCS, nuclear, wind, solar, and other - is our only hope if the world is to avoid catastrophic climate change.

CHEMICALS (including PESTICIDES, PHARMACEUTICALS, and PLASTICS) and RUBBER

Note: the ICEM regards Chemicals and Rubber as separate industrial sectors. It is only for the purposes of this report that they have been combined, as the challenges to their sustainability are similar.

CHEMICALS and RUBBER - INTRODUCTION

The chemical, pesticide, pharmaceutical, plastic and rubber industries are value-adding industries that compete for their feedstock with industries that simply want to burn them. While many people associate pollution, industrial disasters and other environmental problems with these industries, they have arguably contributed and continue to contribute greatly to social and economic development. The chemical and rubber industries provide many of the materials out of which a sustainable infrastructure will be built.

CHEMICALS and RUBBER - ENVIRONMENTAL CHALLENGES

The chemical and rubber industries are widely criticized (sometimes unfairly) for their emissions, wastes, and secondary environmental effects resulting from the use and disposal of their products (for example, plastic containers and used tires). Public opinion tends to hold that chemicals and chemical products are much more a part of the problem, than a part of the solution.

The chemical and rubber industries have introduced some seventy thousand chemicals into widespread industrial use since the Second World War. Many more could be counted if small scale use were included. While some of these are relatively inert, others are persistent, bio-accumulative and/or toxic chemicals. The media are full of words that were rarely used or unknown a generation

ago: "carcinogen", "mutagen", "teratogen", "endocrine disruptor", "hormone mimicker" and "reproductive toxin", for example. For only a handful of chemicals do we have even limited toxicological or human health data. Environmental effects are even less well understood.

This is an environmental problem with an occupational aspect. Many environmental chemical problems were first identified as the result of occupational illnesses.

Local authorities are frequently only minimally aware of, or concerned by, the kinds of industries in their midst, and are utterly unprepared for a major industrial accidents.

To their credit, chemical companies have implemented programs such as "Responsible Care" to try to "work together to continuously improve their health, safety and environmental performance, and to communicate with stakeholders about their products and processes" (from Responsible Care website). Even though "Responsible Care" is not an unqualified success, especially in its ability to engage workers and in its performance in the developing world; it has shown promise.

In developed countries, this industry grouping has in general a fairly good record of adherence and compliance with national and international regulations and environmental agreements. This record is not as good in developing nations. Frequently, the industry has changed its behaviour and its attitudes towards regulations as a result of trade union pressure, or following an industrial disaster such as Sandoz' 1986 spill of chemicals into the Rhine, or Union Carbide's methylisocyanate disaster at Bhopal.

Although vulcanization makes it virtually impossible to re-process tire rubber into new tires, the rubber industry has enormous opportunities for recycling and re-use of rubber products. Tires can be retreaded rather than scrapped. Scrapped tires can be directly used in certain types of construction, or to make other products such as ground rubber which has many potential uses. Finally, scrap tires can be burned for their fuel value in controlled conditions, such as cement kilns.

Opportunities for recycling and re-use of other chemical products are an under-explored field.

CHEMICALS and RUBBER - ECONOMIC CHALLENGES

Over the last two or three decades, chemical and rubber industries have grown rapidly in the developing world, and especially in emerging economic powers such as China and India. A significant percentage of this growth has been the result of domestic investment, but investment by multinational chemical companies has also been important. Safety and environmental standards vary widely, with some sites (especially smaller, local production) failing to implement even basic environmental controls. Developing and emerging economies therefore now harbour a disproportionate share of toxic production and toxic waste disposal sites, sometimes at the expense of investment and jobs in developed countries. Both the chemical and rubber industries, but especially the rubber industry, have been increasing their use of contract and agency labour, rather than permanent, work forces.

These industries compete for access to non-renewable resources that are also used as fuels. Value-added production and job creation should be considered preferable to burning this resource. In some parts of the world, the viability of the chemical and rubber industries has been threatened by a shortage of affordable feedstock, while at the same time that same feedstock is being burned in increasing quantities as fuel.

CHEMICALS and RUBBER - SOCIAL CHALLENGES

The chemical and related industries have an uneven track record of relations with their unions. In developed countries the industry often has a mature relationship with its unions. In both developed

and developing countries, the industry could do more in contributing to social progress through apprenticeship training, adult literacy and education programs, public health programs, and the like. Trade unions can be effective partners in these social initiatives.

It should also be noted that good examples exist in this sector of companies that have entered into Global Framework Agreements and have been willing to participate in social dialogue with the ICEM and its affiliates, within regional and global networks.

CHEMICALS and RUBBER - CONCLUSION

Much more, and better, information about the human and environmental effects of chemicals is needed. Programs such as Europe's Registration, Evaluation, Authorization and restriction of Chemical substances (REACH) program are to be applauded even though care must be taken that regional industries are not unfairly disadvantaged. Banning certain chemicals may be justified in some cases, such as dioxin or asbestos, but it is a "supply side" chemicals management strategy that should be used judiciously - the benefits of a particular chemical may outweigh its risks. Equally, there must be recognition that there is no such thing as "clean production" if by that is meant zero discharge of all pollutants (including heat and carbon dioxide) simultaneously. There is, however, the promise of "cleaner production". The industry should commit to much more research into so-called "green chemistry". In brief, this is the search for synthetic routes, processes and products that have, inherently, less potential to damage the environment.

The chemicals industry is justly proud of its "Responsible Care" initiative although it has not been entirely effective in engaging either the majority of the industry, or perhaps more importantly, a large segment of the public (including its workers). "Responsible Care" will never be fully credible until there is formal participation of trade unions. The industry and the ICEM should resume dialogue about the role of workers in the "Responsible Care" program.

The pharmaceutical industries could, and should, contribute to improved healthcare systems. One particular example is the HIV/AIDS epidemic which could be mitigated through the supply of low- or no-cost drugs, especially in developing countries.

PULP / PAPER, PACKAGING and FORESTRY

PULP / PAPER and FORESTRY - INTRODUCTION

Challenges to the environmental, economic, and social sustainability of this industry group include resource management practices, pollution, trade issues, energy usage and technological change, and contract and agency labour. In addition the industry has found itself the victim of trade disputes, commodities and currency speculators, and escalating energy costs. The social impacts of its operations are very important since many of these are in regions where there are few other economic activities and the fate of entire communities may hang from a single industry.

PULP / PAPER and FORESTRY - ENVIRONMENTAL CHALLENGES

This industry group has an enormous impact on the environment, from its forestry practices to the end-use of paper and packaging. This industry grouping has the advantage of relying on a potentially renewable resource. The word "potentially" must be added, since current forestry practices are characterized by inappropriate cutting methods, insufficient replanting, and damage to forest soils (including damage due to compaction from heavy equipment, and road building), lakes, waterways, and ecosystems. Truly sustainable forest harvest levels would be based on the ability of a forest to regenerate indefinitely. Since data on both forest inventories and regenerative abilities are sparse, the precautionary principle should apply.

A key environmental issue for this industry group is deforestation and forest degradation. Forests

provide biodiversity, carbon sequestration, and watershed stabilization. World demand for wood rose by over sixty percent between 1960 and 2000, and will grow by another thirty percent between 2000 and 2010. Much of this increased demand is likely to be supplied from tropical rain forests and northern (especially Siberian) forests, both problematic. Only a minority of wood production comes from "managed" forests with sustained yield plans in place.

Typically, pulp and paper mills are located on major rivers or on tidal waters. Pulp and paper mills require large amounts of wood fibre, fresh water and electricity. Pulp and paper mills are also significant users and dischargers of toxic pollutants, including general organic content in effluent, organochlorines as the result of bleaching, air emissions, solid waste and sludge, and greenhouse gasses. Optimal utilization of all resources: fibre; chemicals and auxiliaries; energy; and water, must be the industry's goal.

Emissions attributable to deforestation account for roughly one fifth of the world's total man-made greenhouse gases. Some have argued that the value of undisturbed forests is greater than that of the fibre, paper, or finished wood products they might supply. This is a simplified view that ignores, for example, recycling and the businesses built around recycling which have become massive industries in themselves.

Climate change is both a cause, and an effect, of stresses on forests. With rising average temperatures forest ecosystems will become increasingly degraded, which will reduce their effectiveness as carbon sinks and climate moderators, which will in turn increase the stress that they are under. Breaking up this destructive cycle has been identified as a comparatively low-cost solution in the fight against climate change.

PULP / PAPER and FORESTRY - ECONOMIC CHALLENGES

The pulp, paper, and packaging sector, as well as the forestry sector, are currently experiencing high and escalating costs of raw materials, as well as high energy costs. This is especially true in the OECD countries, where fibre (including recycled fibre) has experienced steep price increases; exacerbated by speculation in commodities and currencies. European, Nordic, and North American pulp/paper companies have sought the lowest-cost fibre sources possible, and frequently sourced from illegal logging operations. An estimated one fifth of all EU timber imports stem from illegal logging. Each cubic meter of illegal timber means a loss of employment for at least four workers in the production chain.

Migration of capital has also resulted, with major investments being made in regions where large, fast-growing tree plantations can be created, alongside which are often constructed modern, high-tech pulp mills and paper mills.

Misguided agricultural subsidies encourage the conversion of productive forest land to other uses, including biofuels.

Paper machine and total mill shutdowns have become common in Nordic, European, and North American countries, costing thousands of well-paying jobs that are the life blood of the rural communities where pulp and paper mills are located. At the same time, growth and investment in the global south has been phenomenal. Even in the developing world, the trend has been to substitute capital for labour and the labour intensity of pulp and paper products has dropped to about a third of what it was twenty years ago. The carry-over effect in the trade union arena is very evident. Pulp and paper trade unions in the north remain on the defensive; resisting cuts to workers' social packages, preserving jobs, or negotiating redundancy packages. Unions in the south are seeking ways to increase wage and benefit levels in light of a booming pulp, paper, and forest products industry.

The UN's Reduced Emissions from Deforestation and Forest Degradation (REDD) program (among other instruments) is intended to draw attention to and mitigate these effects, but there are many loopholes and a lack of capacity for monitoring and enforcement. It matters how the REDD scheme is implemented. The desired outcome - reducing or eliminating real rates of deforestation - must define the regime. The time required to grow a tree from planted seedling to harvestable tree must be properly accounted for, and the calculations to estimate carbon sequestered versus carbon released from e.g. a managed woodlot are complex and somewhat controversial. The right price tag for forest resources and eco-system services has to be established. Pure market-based mechanisms would most likely lead to a flooding of the carbon market with cheap REDD certificates. The carbon price in the REDD market has to reflect the actual net carbon effect, the value of conserved resources, opportunity costs, compensation and incentives to forest dependent communities and land holders. The price of a REDD unit must be at least equal to the price of an equivalent unit of other carbon emissions permits or offset to prevent dumping and generate revenue to fund the REDD program.

Pulp and paper companies are already active in the carbon market, and the price of a unit of carbon emissions can affect competitiveness.

PULP / PAPER and FORESTRY - SOCIAL CHALLENGES

Forest-dependent jobs are often found in small communities and remote areas where there are few other economic opportunities. The social impacts of this industry group's operations are thus very important in many regions. The fate of entire communities may hang from a single industry.

Given changing patterns of supply and production capacity, issues of inequity and payment of wages and benefits, and a tendency to seek to replace regular workers with capital, or with contract and agency labour who have lower levels of social protection. The forest industries will continue to be a challenge for global trade union action.

Land claims, communities, and cultures of indigenous peoples sometimes conflict with commercial forest use. In other cases indigenous groups have been willing partners, operators, or owners of forestry companies.

The harvesting of forests for lumber and fibre may compete with agricultural, recreational, conservation and other interests. They also provide materials, energy, food, and economic income for many communities; often in regions without obvious economic alternatives. The extremely poor of the world tend to be those most dependent upon their forests. Successful forest protection has to address the various drivers of deforestation and forest degradation.

The ICEM works closely with the Building and Wood Workers' International (BWI) in evaluating, and deciding whether to support, various forest certification schemes. There are a number of forest certification schemes in existence to try to ensure that purchasers of forest products know whether best environmental practices have been followed in the harvest of the trees used. Some of the certification schemes also touch on the social dimension of sustainability. Social sustainability of forest lands should include respect for indigenous, traditional or customary land tenure, benefit sharing with affected communities, compensation for displaced workers and their communities, education and training in forest stewardship, respect for human rights and the ILO conventions, and so on.

PULP / PAPER and FORESTRY - CONCLUSION

It is clear that a fragmented trade union approach to the pulp, paper and forestry industries will not be able to make the case for sustainability. Even within the areas of traditional trade union interests,

there is a need for greater cooperation, solidarity, and union-building projects to build a level of parity among pulp and paper workers worldwide, as well as to put pressure on multinationals - wherever they are operating - to better defend wages, working conditions, and sustainable jobs.

Perhaps the greatest challenge to the sustainability of the pulp / paper and forestry sector is the short planning horizon of its company executives. The principle resource may require many years to reach harvestable size, but planning consists of maximizing profits and share values in the next quarter. Restructuring has resulted in a separation of pulp and paper mills from their forest base. Relying on the free market to provide source fibre has encouraged poor forestry practices.

MATERIALS, including GLASS, CERAMICS, and CEMENT

MATERIALS, including GLASS, CERAMICS, and CEMENT - INTRODUCTION

The materials sector is an energy-intensive group of industries and the cement industry, in particular, is a significant contributor to global carbon dioxide emissions. On the other hand, high-quality materials have the potential to play a major role in energy efficient construction and retrofitting. The economic and social benefits of these industries are relatively well distributed geographically, compared to many other industries.

MATERIALS, including GLASS, CERAMICS, and CEMENT - ENVIRONMENTAL CHALLENGES

The cement industry produces five percent of total worldwide carbon dioxide emissions. This compares to the transport industry which accounts for twenty percent or the power industry which accounts for thirty-five percent. Additionally, almost forty percent of total emissions comes from the building sector (heating, cooling, lighting), part of which can be attributed to choices of materials.

Almost half of the total carbon dioxide emissions associated with the use of cement and concrete can be attributed to the chemical transformations undergone by limestone as it is converted to Portland cement clinker. These are inherent to the process and therefore cannot be improved through increasing the energy efficiency of the kiln (although in the future they may be amenable to some form of carbon capture and storage) although new cements based on different chemistry (e.g. Ecocem's magnesium silicate cements) may avoid this limitation. The remainder of carbon dioxide emissions result from energy used to heat the kiln, quarrying, transport, etc. that can be improved through increased efficiency and alternate fuels.

The cement industry would benefit from an effective emissions permit or trading scheme (allowing emissions from cement plants to be offset by carbon dioxide reductions elsewhere).

Cement kilns have been offered as safe waste disposal sites, because of the high operating temperatures and long residence times in the kilns. It is true that operating temperatures of cement kilns are extremely high – considerably higher than a typical municipal waste incinerator, and high enough in theory to safely dispose of many problematic waste materials if carefully and consistently operated. However, there is little evidence to prove that cement kilns are operated to a standard that would be expected of a facility handling extremely toxic materials, and hazardous emissions may be released to the environment. If they are to be used in this fashion, strict operating controls and an inspection and enforcement framework need to be established.

The glass and ceramics industry sectors are high energy consumers and thus contribute to GHG emissions. They also discharge a range of pollutants from metals to dyes.

Heating, cooling, and otherwise operating buildings account for a great deal of total carbon dioxide

emissions. High-quality, energy efficient building materials therefore could make a significant contribution to controlling greenhouse gas emissions.

MATERIALS, including GLASS, CERAMICS, and CEMENT - ECONOMIC CHALLENGES

The bulk of global cement production capacity is now located in developing regions. The major cement multinationals such as Lafarge, Holcim, Heidelberg and Cemex have approximately thirty percent of their production capacity located there. With a production increase of ten percent in 2007, China now accounts for over half of global cement production.

In addition, there are several Asian-based cement multinationals, rapidly expanding in China from Hong Kong and Taiwan. These include: Chia Hsin Cement Group; Taiwan Asia Cement Group; Taiwan Cement Corporation; Rui An Hong Kong; Conch Group; Hua Xin Group; Shan Shui Group; Zong Lian Group; and the Hua Run Group.

The economic sustainability of (especially) the fine ceramics and crystal glass industry is threatened by counterfeiting. In Europe, for example, labour costs account for fifty percent of the finished product cost. In some of the countries where counterfeiting takes place, the raw materials costs are a third, energy costs a fifth, labour costs a tenth and packaging costs half of European Union industry levels.

MATERIALS, including GLASS, CERAMICS, and CEMENT - SOCIAL CHALLENGES

Materials industries could be an important engine of social and economic development, both directly and indirectly, especially if unionization creates decent wages and working conditions in this sector.

Chrysotile Asbestos continues to be used, mainly as a reinforcing additive in concrete, and mainly in the developing world. The hazardous nature of all forms of asbestos, including chrysotile, is beyond dispute. Even if it could be handled safely, as the asbestos industry continues to claim, there is strong evidence that in actual practice workers, and often their family members, are heavily exposed. As there are effective and less hazardous substitutes for asbestos, the material should be banned from use (with appropriate Just Transition measures for those workers employed in its production).

MATERIALS, including GLASS, CERAMICS, and CEMENT - CONCLUSION

While the sector faces significant environmental challenges, it also promises to be part of the solution in our quest for sustainability. Carbon dioxide emissions from cement kilns may in the future be able to be controlled with carbon capture technologies, or benefit from other technological change.

SUSTAINABILITY and GENDER (and HUMAN RIGHTS)

SUSTAINABILITY and GENDER - INTRODUCTION

The ICEM has for some time focussed special attention on women's issues. Sustainability issues cannot be considered while ignoring gender issues. Closely linked to the gender issue are issues such as poverty and health. While not the only focus of the social dimension of sustainability, gender, and more generally human rights, should be considered as particularly relevant to an understanding of that dimension.

SUSTAINABILITY and GENDER - ENVIRONMENTAL CHALLENGES

In most parts of the world, women control their household's direct and indirect energy consumption: the use of heating, cooling, hot water, and electrical appliances; the choice of time of use (and therefore of peak use); household purchases, which may be more or less energy-intensive;

and the use of household transport – women are more frequent users of public transport and pedestrian walkways than men.

Environmental degradation and climate change disproportionately affect women. The empowerment of women is indispensable for sustainability. Gender-sensitive approaches will have to be taken to enable women to compensate for their more difficult situation.

SUSTAINABILITY and GENDER - ECONOMIC CHALLENGES

Women's consumption decisions often set household patterns. These in turn determine the value a community places on environmental conservation, fair trade, purchase of locally produced products, respect for indigenous and women's and human rights, and poverty reduction.

Access to affordable energy is a barrier to development. Women are disproportionately victims of high energy prices and expenditures, especially female-headed households that make up a large portion of the poor. Rural women (and their children) are the primary collectors of wood and residue fuels, which account for eighty percent of all household energy use in many developing countries. The proportions of rural women affected by fuel and wood scarcity range from sixty percent in Africa, to nearly eighty percent in Asia, and nearly forty percent in Latin America. Time spent in fuel collection in fuel-scarce areas can range from one to five hours per household per day.

The current food crisis is also a reminder of the feminization of poverty. Women's livelihoods are more dependent on natural resources that are being threatened by climate change. About seventy percent of people without sustainable access to enough food are females. Women constitute the largest percentage of people living in absolute poverty (less than one dollar per day) - often despite working long hours.

SUSTAINABILITY and GENDER - SOCIAL CHALLENGES

There is a strong inverse correlation between a mother's education level and child mortality. Women are also the primary educators and formers of their children's future energy conservation and consumption habits.

Women are disproportionately victims of environmental pollution, due to energy use patterns. Frequently, women have household responsibility for cooking. More than half the world's households cook daily with wood, crop residues, dung, or untreated coal. Women in developing countries often use these fuels in old, improperly maintained equipment - or without equipment of any kind. They are thus exposed to high concentrations of combustion products. Known reproductive hazards are contained in such combustion products (although reproductive hazards are not exclusively a women's issue, women's greater exposure to them is).

While some workplace hazards may affect women differently than men, it is a trade union principle that workplaces should be made safe for all workers to prevent health and safety being used as an excuse to discriminate.

It is an urgent need to increase the level of women's participation in trade unions, both as members and as leaders.

In many cultures, women do not inherit property as readily as men and typically do not own land. The global HIV-AIDS epidemic has exacerbated the plight of women both as victims and as widows of victims.

SUSTAINABILITY and GENDER - CONCLUSION

Among the grim statistics relevant to sustainability and gender issues, are the following:

- Food prices rose by fifty-five percent between June 2007 and March 2008, including an eighty-seven percent increase in the cost of rice in March.
- Households in developing countries spend on average seventy percent of their income on food, a marked contrast to the fifteen to eighteen percent spent by households in industrialized countries.
- Even before exacerbated by the food crisis, it was estimated that seven out of ten people who suffer from hunger in the world are women and girls.
- Rural women produce half the world's food and between sixty and eighty percent of food in most developing countries, but receive less than ten percent of loans to farmers.

SUSTAINABILITY and DISADVANTAGED GROUPS

Some of the arguments relevant to sustainability and women can be applied to other disadvantaged groups, such as: minorities; indigenous peoples; lesbian, gay, bisexual and transgendered persons. It merits consideration that the ICEM should, at least in the case of sustainability issues, broaden its focus to include all issues of human rights, social sustainability, fairness, justice and peace.

SUSTAINABILITY and YOUTH

Any discussion of sustainability is really a discussion of what kind of world we will leave for our children. From a trade union perspective, a special problem relates to youth unemployment and underemployment. While the United Nations "Universal Declaration of Human Rights" (see appendix) Articles 23 and 24 state that decent work is a human right, the reality is that many young people are finding it more difficult to earn a living than their parents, due to population demographics (the post-world war II "baby boom" generation continues to hold most of the best jobs and is only starting to reach retirement age), industry restructuring, increased use of contract and agency labour, and the current economic crisis.

SUSTAINABILITY, HUMAN RIGHTS, and CULTURAL DIFFERENCES

The United Nations Universal Declaration of Human Rights, along with the ILO Core Labour Standards, are fundamental principles that must be adhered to. "Human rights" tend to emphasize individual freedoms, caring for disadvantaged members of society, and justice. Some cultures, while acknowledging these, may place a greater emphasis on values such as group loyalty, respect for authority and tradition, and concepts of purity or sacredness. A lack of mutual understanding can be a barrier to achieving sustainability. Without compromising on human rights, the importance of diverse cultural values must be acknowledged and understood. Our increasingly diverse workplaces are a good place to start.

CONCLUSION - A SUSTAINABLE FUTURE

For the ICEM, the question of sustainability is fundamentally a question of public dialogue and consensus. Who bears, and who pays the costs, of actions taken to protect the environment? Sustainability is a "soft" issue on which we can engage a company and enter into talks that would not take place on most other issues. It is likewise a dialogue that we must have with our governments. This dialogue, in which the ICEM can play a special role, will take place on at least three levels: (1) at the level of a single company - which may be a multinational operating in several regions; (2) at the level of industry associations or national governments; (3) at the level of international institutions.

Every industrial sector and every region has its own particular challenges and concerns, with considerable variation between and within them. Sustainability can only be achieved when each of those challenges and concerns is dealt with in a consensus- seeking, integrative fashion that attempts to balance the environmental, economic, and social imperatives of sustainability.

Environmental non-governmental organizations (ENGOs) and business have significant expertise and are powerful advocates for the environmental and economic components of sustainability, respectively. Unions, too, have a particular expertise regarding the environment and the economy that differs from that of ENGOs and business. However, the social component of sustainability is the component that unions feel has been rather neglected in the sustainability debate; and coincidentally is an area in which we are uniquely qualified. It falls therefore upon labour to speak up for social needs - as it has so often in the past.

Global Framework Agreements are a powerful tool available to the ICEM to make clear the relationship between poverty, the environment, and patterns of development. The ICEM is ready to take up the challenge of discussing with global businesses such broad issues as human rights, labour rights, poverty, disease, environmental refugees, peace and conflict, and the creation of a "Green New Deal". Surely the 2008 collapse of the deregulated model of "casino capitalism" provides the moral imperative to do so.

Sustainability requires research. In order to determine those activities that are sustainable, we must increase our base of knowledge and understanding. Obviously, part of the answer to the principle of sustainability is a commitment to research and development. However, that research and development must be positively directed. Corporate and public money spent trying to disprove, e.g. global warming, is hardly a productive use. Research and development must be directed towards problem solving, not liability avoidance. There needs to be much greater attention given and more resources directed to research and development. This is true for all areas of industrial production, but especially the energy sector.

An example of the urgent need for research and development work is in the area of carbon capture and storage or sequestration. Carbon capture and storage/sequestration is now incorporated in most climate-saving scenarios as an essential "wedge" despite there being not a single large-scale power plant, anywhere in the world, using it. The ICEM supports the G8 countries' pledge to have twenty industrial-scale CCS projects underway by 2010. We must invest in some large scale demonstration projects, and we must do so soon.

Another enormous barrier to the broad implementation of new technologies, is the increasingly restrictive interpretation of "intellectual property" and its extension to non-traditional areas such as genetics. A good case can be made for the entire question of "intellectual property" to be re-examined in terms of who benefits, and who pays the price, from current intellectual property rights protections. The chemical industry, pharmaceutical, entertainment, and software industries, are amongst the most enthusiastic supporters of the concept of "intellectual property" and presently control how it is defined for everyone else. Intellectual property, in turn, is one of the most serious barriers to technology transfer and cooperation, particularly between the developed and the developing world. This has been demonstrated, tragically, by the difficulties that several countries have experienced, while attempting to providing medicine to victims of the HIV/AIDS epidemic, at reasonable costs.

If current patterns of production and consumption must change for environmental reasons, there will be an impact upon employment patterns. The only way to manage such an impact, without simply letting the affected workers pay one-hundred percent of the cost of change, is through "Just Transition" programs. Why has business not researched ways of managing a Just Transition through, e.g. employment credits, as it has researched the management of emissions through emissions credits? With a Just Transition, we can build a public consensus to move towards more sustainable production. Without a Just Transition, such a consensus will be impossible.

The ICEM, as an important stakeholder, stands ready to assist in the debate on how to build a sustainable future.

An ICEM Policy on Sustainable Development should keep in mind the following goals:

1. A Leadership Role

ICEM affiliates and their members should proudly accept the fact that workers can contribute to excellence in environmental performance in their work. We have a duty to our members, their families, and the general public, to do so. The ICEM will:

- make specific sustainability proposals for each industry sector
- take the initiative and point the way towards sustainability
- engage in dialogue at the workplace, local, national and international levels
- promote efficiency, productivity and safety of work through worker education
- promote conservation by example, even in such small ways as carpooling, and inspire others

2. Union building

First and foremost, the ICEM and its affiliates are labour organizations. As such, we must speak for the world's workers and represent their interests. The ICEM will:

- encourage and help its affiliate unions to proactively organize emerging new "sustainable" (or "green") jobs
- pursue Global Framework Agreements, a primary goal of which must be Union and ICEM recognition by MNEs, including collective bargaining rights
- build capacity in national union affiliates to negotiate and service GFAs
- demand that employers respect workers' rights, and integrate principles of social sustainability, especially the ILO Core Labour Standards and the United Nations Universal Declaration of Human Rights, into union-management agreements
- build labour cost parity, especially between developed countries, developing countries, and countries in transition
- continue its campaign to reduce or eliminate union-harming contract & agency labour
- create equal opportunity and fair representation from women, minority, indigenous, and other disadvantaged and equity seeking groups
- ensure high standards of health, safety, and environmental protection
- continue to organize union-building projects

3. Relevant Global Standards for a Globalized Economy

The world today is increasingly globalized, and despite the current economic turmoil seems likely to continue in this trend. The ICEM will:

- campaign for the worldwide adoption of ILO Conventions and international standards, particularly in key areas such as the ILO Core Labour Standards and the ILO c176 Convention on Safety and Health in Mines
- seek improved global standards such as ILO Conventions (especially in the areas of labour rights) and the wide range of industry-specific standards such as (to list only a few):

ILO Core Labour Standards

ILO c.3 - Maternity Protection Convention, 1919

ILO c.115 - Radiation Protection Convention, 1960

ILO c.139 - Occupational Cancer Convention, 1974

ILO c.148 - Working Environment (Air Pollution, Noise and Vibration) Convention, 1977

ILO c.162 - Asbestos Convention, 1986

ILO c.169 - Indigenous and Tribal Peoples Convention, 1989

ILO c.170 - Chemicals Convention, 1990

ILO c.176 - Safety and Health in Mines Convention, 1995

ILO c.174 - Prevention of Major Industrial Accidents Convention, 1993

ILO c.183 - Maternity Protection Convention, 2000
 ILO r.82 - Labour Inspection (Mining and Transport) Recommendation, 1947
 ILO r.104 - Indigenous and Tribal Populations Recommendation, 1957
 ILO r.114 - Radiation Protection Recommendation, 1960
 ILO r.147 - Occupational Cancer Recommendation, 1974
 ILO r.156 - Working Environment (Air Pollution, Noise and Vibration) Recommendation, 1977
 ILO r.172 - Asbestos Recommendation, 1986
 ILO r.183 - Safety and Health in Mines Recommendation , 1995
 ILO r.177 - Chemicals Recommendation, 1990
 ILO r.191 - Maternity Protection Recommendation, 2000
 ILO r.181 - Prevention of Major Industrial Accidents Recommendation, 1993
 United Nations Universal Declaration of Human Rights
 WHO Global Plan of Action on Workers' Health
 - remain engaged with other international standards such as the International Organization for Standardization (ISO), various forest certification practices, RIO Conventions (biodiversity, climate change, and desertification), etc.

4. Government Regulation

For many years the predominant neo-liberal ideology has tried to convince working people that we need less government regulation and control. As a result, the trend has been one of deregulation and privatization of the "commons". One of the primary roles of governments is to make and enforce laws. The ICEM will:

- fight for appropriate, effective, and enforceable legislation, regulation, and standards (e.g. pollution prevention, forestry practices). These must be drafted in a process of consultation with stakeholders and address sustainability in all of its dimensions
- seek comprehensive and enforceable occupational health and safety laws, including an immediate asbestos ban
- seek to prevent social and environmental (and economic) "dumping"
- press its employers to meet or exceed regulations and standards in letter and spirit.
- re-visit the structures, rights and responsibilities of corporations, including building specific responsibilities for the greater social good into charters of incorporation, and urge governments to exercise society's right to dissolve corporations that degrade the common good
- re-examine the international principles of so-called "intellectual property"

5. Governmental Economic Intervention and Planning

The ICEM contends that there is a role for governments beyond merely legislation and regulation. Governments can provide direct leadership in the marketplace. The current economic crisis should be seen as a failure of the deregulated paradigm of global capitalism and an opportunity to open debate on, and engineer, a sustainable recovery. Proposals from the USA's "Blue-Green Alliance" make some of the best arguments for this, and similar approaches should be put in place world-wide. The ICEM will press governments to put in place national and international industrial, financial and social strategies such as:

- sustainable (or "green") job creation and "Just Transition" programs
- a re-commitment to ending global poverty
- a Tobin Tax on international financial transactions (currency speculation)
- social sustainability strategies that recognize that human rights, human development, and peace are as essential to a sustainable future as environmental protection and economic stability
- auctioned and/or tradable carbon permits that are both international & inclusive to prevent or reduce "border leakage". (If a proper and fair global scheme cannot be implemented, then "border adjustments" may be necessary).
- support for the Kyoto principle of "common but differentiated responsibilities" in whatever instrument follows from COP-15 in Copenhagen, 2009

- major support for research, development, implementation and transfer of advanced environmental technologies (e.g. CCS, green chemistry, environmental "best practices", non-wood fibres, silviculture, energy efficient materials, environmentally and social sustainable transport systems)
- full life-cycle analyses of e.g. energy systems, buildings, and mines, gas and oil fields, etc.

6. Voluntary Initiatives

It is as unrealistic to expect that the corporate world will become "self-policing" as it is to expect that the citizenry as a whole will become "self-policing". Yet, efforts to build consensus within industry to "do the right thing" are important since there will never be sufficient enforcement.

Engaging some of these initiatives requires a very significant commitment of time and resources.

The ICEM supports voluntary initiatives as a supplement to, and not a substitute for, legislative and regulatory frameworks. The ICEM will support continuing participation in the Global Compact as well as certain industry-specific and other voluntary initiatives.

7. Coalition Building for Stakeholder Participation in Global Decision Making

The ICEM needs to remain engaged in sustainability debates. It is too important to our affiliates and their members to leave the decision making to others. We will work with other unions, civil society, governments, and employers as the situation demands to better ensure that our points of view are properly represented. It should be noted that working with other stakeholders and organisations on various issues does not require us to agree with them on all issues. We will:

- work with groups representing workers, unions, women - and wherever appropriate with other stakeholders such as indigenous peoples, equity-seeking groups, host communities, energy consumers (industrial and individual), and (E)NGOs. Some organizations that the ICEM has worked with and will continue to work with, include: International Trade Union Confederation (ITUC); Trade Union Advisory Committee to the OECD (TUAC); Global Union Federations (GUFs); non-governmental organizations (NGOs), especially industry-specific ones such as Mining Watch; environmental non-governmental organizations (ENGOs) such as WWF, Environmental Defence, Earthworks, the Blue-Green Alliance; shareholder action groups such as SHARE; human rights, social justice, peace and development NGOs such as Oxfam, Amnesty International
- create a better working relationships internally within ICEM (joint programs of work between industrial sectors) and externally with global union organizations, other labour organizations (e.g. EMCEF, national centres, national unions) (E)NGOs, scientists, governments, industry and other stakeholders.

8. Pressure Employers to Adopt Best Environmental Practices

The ICEM will pressure its employers to implement best environmental practices, including (but not limited to) process safety management, "green chemistry", CCS and renewable energy, transport of more concentrated ores and products over shorter distances, recycling and re-use of industrial products and materials (including plastics and rubber - especially used tires), and pollution prevention.

9. Pressure Employers to Adopt Best Labour and Human Rights Practices

Beyond recognition of ILO Core Labour Standards, best practices would include a good industrial relationship with constructive social dialogue between employers and their unions.

10. Support Research into Technologies and Mitigation Solutions

Technologies will undoubtedly play a major role in sustainable solutions. Most countries and most companies spend far too little on research and development. ICEM should speak out on this.

Research is also needed into best practices, such as pollution prevention and process safety, new environmentally efficient materials, and the full range of social and environmental indicators and metrics.

11. Involve Unions in Monitoring and Reporting of Company Behaviour

We are uniquely placed to interpret corporate social responsibility statements and determine whether they reflect actual practice.

12. Hire and Advance Women

Unions could do more, not only in urging our employers to hire more women but by hiring and advancing more women within the labour movement. Also, the level of representation from other disadvantaged and equity-seeking groups including indigenous and minority populations should be considered.

SPECIFIC MINING OPPORTUNITIES:

Sustainable mining practices benefit both workers and employers in the long run. The goal of the ICEM is a mature union-management relationship in which dialogue can replace a culture of conflict. In addition, the ICEM and its affiliates will expect mine operators to:

1. seek adherence to mining stewardship standards that place real accountability on mining companies and force them to accept responsibility for mining-created environmental, economic and social costs
2. condemn corruption, violent conflict, and other social ills
3. demand long term environmental stewardship of mining and other resource extraction sites
4. guarantee a just distribution of mining-generated wealth (e.g. shareholders, workers, community)
5. build and care for communities for the long term, not just for the life of the mine
6. demand that companies recognize the Union and the ICEM (especially multi-national enterprises (MNEs)), including recognition of collective bargaining rights
7. campaign for the adoption of ILO Convention 176
8. utilize the GRI mining industry guidelines.

SPECIFIC ENERGY OPPORTUNITIES:

A sustainable energy industry is key to both development and environmental protection. It will benefit both workers and employers in the long run. The ICEM and its affiliates will urge the energy industry to:

1. seek adherence to strong sustainability standards for the upstream oil industry that place real accountability on oil and gas companies that force them to accept responsibility for the environmental, economic and social costs of resource extraction
2. condemn corruption, violent conflict, and other social ills
3. provide for long term environmental stewardship of resource extraction sites
4. guarantee a reasonable and just distribution of wealth (e.g. to shareholders, workers, community)
5. build communities for the long term, not just for the lifetime of the resource
6. collaborate in, and include worker participation in relevant voluntary agreements and CSR initiatives

The ICEM and its affiliates will urge governments to:

7. adopt energy strategies that treat energy supplies as more than just another commodity; but a human need and a human right
8. adopt energy strategies that support truly sustainable sources of energy
9. rapidly deploy best available CCS technologies as fossil-fuel based generation will continue for the foreseeable future, and therefore everything that is possible must be done to make these energy

sources as environmentally benign as possible.

10. not rule out nuclear energy as a low-emitting energy source, although the nuclear industry must answer serious questions (particularly regarding wastes) and win public support.

SPECIFIC CHEMICALS and RUBBER OPPORTUNITIES

A very wide range of opportunities exist for the chemicals and rubber industries to advance global knowledge of best practices in environmental protection and sustainability. The ICEM and its affiliates will urge the global chemical industry to:

1. engage in a global social dialogue with employers in the chemical, rubber, and related industries using the European experience (dialogue between European Mine Chemical and Energy Workers' Federation and the European Chemical Employers' Group) as a model, to promote Process Safety Management (PSM), green chemistry, and other best practices in health, safety and sustainability
2. demand that these industries accept responsibility for the environmental, economic and social costs of chemical and rubber production
3. demand that the industry fully engage workers, their unions, and the ICEM in their "Responsible Care" program, at the local, national, and international levels. The ICEM should renew its efforts for a role at the international level with the International Council of Chemical Associations (ICCA)'s "Responsible Care" program

The ICEM will urge governments to

4. adopt energy strategies that recognize the dual role of gas and oil as feedstock for value-added chemicals production as well as fuels
5. enact chemicals regulations that place the burden of proof of human and environmental safety on those proposing to manufacture chemicals
6. fully implement global programs on chemical safety such as SAICM, GHS, REACH, ILO Chemicals programs, and the WHO Global Plan of Action on Worker Health.

SPECIFIC PULP / PAPER and FORESTRY OPPORTUNITIES

Forestry and pulp and paper are potentially sustainable industries that are presently plagued by a number of unsustainable practices. The ICEM, working with the BWI, should utilize one or more of the existing forestry certification schemes to involve itself at the governance or oversight level of forestry practices. At the moment, the BWI works most closely with the Forestry Stewardship Council, based in Bonn, Germany; and the Program for the Endorsement of Forest Certification, based in Geneva, Switzerland. Both of these include strong support for core labour standards. The Sustainable Forest Initiative should be treated with caution since it is not as supportive of labour standards. Other opportunities include participation in global efforts to implement and monitor REDD principles. The ICEM should attempt to broaden these certification initiatives into the pulp and paper sector.

The ICEM and its affiliates will urge forestry, pulp and paper companies to:

1. recognize that these are "potentially" sustainable industries but presently use unsustainable practices. Sustainable forestry practices, and sustainable industry practices, create sustainable jobs.
2. utilize forestry certification schemes and engage workers, their unions and the ICEM more fully in them. The ICEM will continue to collaborate with BWI on forestry certification.
3. accept responsibility for the impacts of its business decisions on forestry communities, which are often dependent upon one industry and one or two major employers for survival

4. engage workers, their unions, and the ICEM more fully in relevant industry-sector voluntary agreements

The ICEM will urge governments to adopt:

5. forestry strategies that base harvest levels on verifiable renewal rates

SPECIFIC MATERIALS SECTOR OPPORTUNITIES

This industry grouping includes some of the greatest challenges to, as well as many of the potential solutions to, a sustainable future. The ICEM and its affiliates will work to secure sustainable jobs in this sector.

The ICEM and its affiliates will urge employers in the materials and related industry sectors to:

1. adopt sustainable materials production practices
2. invest in the development and implementation of materials, technologies and solutions that mitigate environmental impacts, especially in the case of cement. High-quality and energy-efficient materials will help the world achieve sustainability
3. engage workers, their unions, and the ICEM in relevant industry-sector voluntary agreements such as the Cement Sustainability Initiative (CSI), adopting best practices in the areas of:
 - climate protection and carbon dioxide management
 - responsible use of fuels and materials
 - employee health and safety
 - emissions monitoring and reporting
 - local impacts on land and communities
 - reporting and communications

SPECIFIC OPPORTUNITIES RELATED TO GENDER and HUMAN RIGHTS

The ICEM seeks a world of fairness, justice, and peace. ICEM understands that sustainability cannot be achieved while ignoring human rights and social justice. Specifically, the status of women and other under-represented and disempowered stakeholders in society must be advanced. The ICEM identified women's issues as deserving of special attention. Neither should we ignore other disadvantaged groups such as visible minorities, indigenous peoples, and equity-seeking groups.

The ICEM demands that employers acknowledge the link between human rights and social sustainability. Employers must acknowledge and include women, minorities, indigenous peoples, and other equity-seeking groups in its business plans; not just as employees but as members of the host community of their enterprises.

The ICEM will:

1. demand human rights, peace, social justice and equity in sustainability discussions and through relevant voluntary agreements, including but not limited to the Global Compact
 2. engage human rights and equity issues and speak out when these principles are being violated
 3. remind decision-makers of the special vulnerability of women, particularly in the developing world
 4. urge affiliates to recruit, encourage and promote more women and minorities
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EXPLANATION of certain TERMS, PHRASES, and SUSTAINABILITY CONCEPTS

BIAC: the Business and Industry Advisory Committee to the OECD (q.v.)

Carbon Tax:

A proposed tax on the fossil fuels that produce carbon dioxide when burned, in proportion to the quantities of CO₂ emitted. Ideally, the revenue from the tax would at least equal the cost of the harm done by the CO₂ emissions in question, but if harm is to be calculated it would need to include environmental and social harm which are difficult to quantify.

Corporate Social Responsibility:

The concept that corporations should voluntarily adopt best standards of behaviour in environmental, social and economic areas of activity. Some of the best known include the GRI, SAI, United Nations Secretary-General's "Global Compact" initiative (see notes for each of these); and industry voluntary initiatives generally set goals or standards of behaviour, but with a few exceptions, do not specify indicators.

Cost-Benefit Analysis:

Decision-making systems that attempt to balance the costs, versus the benefits (usually measured in currency), of a particular course of action. This form of decision making tends to undervalue those things that cannot be quantified in units of currency. What is the cost-benefit analysis of raising a child to maturity - an activity that everyone has played a role in, if not as a parent then certainly as a child? Many human activities cannot be costed in traditional economic terms; including many of the activities upon which a healthy society is based.

Environmental Non-Governmental Organization (ENGO):

A non-governmental organization focussed on environmental or sustainability issues.

Ethical Trading Initiative (ETI):

Although based in one country, the UK, ETI deals with the conduct of UK-based enterprises overseas. It is governed by a board composed of three representatives each of companies, unions, and NGOs.

European Trade Union Confederation (ETUC)

Umbrella organization for labour unions at the European Union level. ETUC has been active on sustainability issues and has generally taken a fairly progressive stand on environmental issues while emphasizing the need to build strong social protections into European environmental initiatives.

G8

A forum for discussions between eight major national economies: Canada, France, Germany, Italy, Japan, Russia, the United Kingdom, and the United States. The European Union is represented but cannot chair meetings. The "G8 plus 5" adds Brazil, China, India, Mexico, and South Africa. Egypt is being considered for addition to this latter group.

Global Framework agreement:

Global unions, including the ICEM, are negotiating 'framework agreements' with multinationals. The number of such agreements has grown rapidly in recent years. These agreements include trade

union and other workers' rights. In some cases, they cover other issues as well, including health, safety, and sustainability.

Global Reporting Initiative (GRI):

A private effort, though supported by the United Nations Environment Programme (UNEP), working to establish common international standards to be followed by corporations in reporting on social and environmental sustainability. Efforts are made to ensure that the common standards are consistent with international labour standards and the OECD Guidelines.

Global Union Federation (GUF):

Umbrella organizations for labour unions at the international level, organized by industry or employment sector. The ICEM is one of these.

Green Chemistry

An approach to chemistry that seeks to reduce environmental harm by choosing chemical processes that are intrinsically less hazardous. Green chemistry research and development focuses on waste reduction, less toxic chemicals and products, safer and more efficient synthesis, the use of renewable feedstocks, safer solvents and less extreme reaction conditions.

Greenhouse Gas (GHG):

Any gas in the atmosphere that contributes to the "greenhouse effect", trapping solar radiation energy and thus contributing to global warming. There are natural and human-made sources of greenhouse gases, but human activities have greatly increased the concentration of some greenhouse gases since the industrial revolution. The principle greenhouse gases that have increased as a result of human activity are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Of these, carbon dioxide has been the worst offender because of its volume, mainly the result of burning fossil fuels, and it is responsible for an estimated eighty percent of the problem.

Informal Sector:

Economic activity that is not monitored, regulated, or taxed by a government. All countries have an informal sector, although in some developing countries it may account for more economic activity than the formal, or recognized sector. Informal activities, while providing some measure of income, are typically low paid, temporary and insecure. Loss of taxation income can limit a nation's ability to provide a social safety net. Not infrequently, informal economic activities are illegal, demeaning, dangerous and unhealthy. Violations of human rights and labour standards are common within the informal sector, including the use of child and/or forced labour, and anti-union violence. Sustainable jobs cannot be created within the informal sector.

International Council of Chemical Associations (ICCA):

A non-governmental organization that represents the interests of chemical manufacturers at the international level.

International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM):

A Global Union Federation for unions in the sectors described by its name, and related sectors such as materials, rubber, gold and jewellery, etc.

International Labour Organization (ILO):

A specialized agency of the United Nations, dealing with labour and workplace issues. Unique amongst United Nations agencies, the ILO has a tripartite governance structure, with representatives from business and labour unions as well as governments. The ILO issues many standards relevant to the world of work, the most important of these for unions are often referred to as the ILO Core Labour Standards (see appendix VII). The ILO's Bureau of Workers' Activities works closely with

trade unions on a number of issues.

ILO Tripartite Declaration of Principles on Multinational Enterprises and Social Policy:

A non-binding instrument which covers employment issues, training, working conditions and industrial relations. The Declaration includes references to the ILO's core labour standards.

International Trade Union Confederation (ITUC):

An umbrella organization for all labour unions, worldwide.

Kyoto Protocol:

A binding agreement drafted in 1997 that came into force in 2005 that is intended to set mandatory targets for greenhouse gas emissions to control climate change through emissions trading, a clean development mechanism, and joint implementation.

Multinational Enterprise (MNE):

Usually a corporation, that operates in more than one country.

Non-Governmental Organization (NGO):

Any organization that represents some group or interest of civil society, that is not an arm of government.

Organization for Economic Cooperation and Development (OECD):

The OECD is an association of highly developed nations. The OECD has permanent advisory committees from business (BIAC), and labour (TUAC) (q.v.).

OECD Guidelines for Multinational Enterprises:

The Guidelines are part of the OECD Declaration on International Investment and Multinational Enterprises. The Guidelines include all of the ILO core conventions, but they also promote good industrial relations and other good practices that go beyond the bare minimum standards.

Precautionary Principle

An alternative decision-making system to Risk Management and Risk Assessment (q.v.) for situations where an action or policy might cause severe or irreversible harm to the public or to the environment, but the data is insufficient to judge the level of risk. The precautionary principle holds that there is a responsibility to intervene and protect the public from exposure to harm. Where there is doubt, the burden of proof of safety falls upon those who stand to benefit from the action or policy. It should be noted that simply building conservative assumptions into a risk assessment - risk management system does not make it conform to the precautionary principle.

Process Safety Management (PSM)

An approach to safety that considers accident prevention to result from the correct functioning of a number of management systems. These could include plant engineering design, job and task design, purchasing standards for materials tools and equipment, human resources, preventative equipment maintenance, training and education, and the maintenance of a good work environment. PSM starts with management commitment and accountability; to which is added engineering knowledge, risk assessment and control, management of changes, assurance of process and equipment integrity, adherence to standards codes and regulations, acknowledgement of human factors (e.g. using good ergonomic design), education and training, and accident/incident investigation.

Registration, Evaluation, Authorisation and restriction of Chemicals (REACH)

REACH is a European Union Regulation that places the burden of proof on chemical manufacturers and suppliers to establish the toxicity of chemical substance in commercial use.

Rio Conventions

The three Rio Conventions (Biodiversity, Climate Change and Desertification) derive from the 1992 Earth Summit in Rio de Janeiro. One of these three, the United Nations Framework Convention on Climate Change (UNFCCC) sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. The Kyoto Protocol is linked to the UNFCCC.

Risk Assessment:

Methodology that attempts to calculate an overall risk of an activity or course of action based on the likelihood and nature of undesirable consequences. (See Risk Management; Precautionary Principle).

Risk Management:

An activity that follows Risk Assessment. In Risk Management, measures are put in place to minimize the risk or mitigate the outcomes. (See Risk Assessment; Precautionary Principle).

Strategic Approach to International Chemicals Management (SAICM)

SAICM is an international policy framework for the safe management of chemicals. It is an outcome of the UN's 2002 World Summit on Sustainable Development. Signatory countries are expected to ensure that chemicals are produced and used in ways that minimize harm to human health and the environment.

Tobin Tax:

A suggested tax on international currency trades, named after economist James Tobin. By putting a small penalty on currency transactions, it was expected to reduce harmful, speculative trades and stabilize currencies while at the same time raising enormous revenues that could, for example, be used to fund the United Nations and related international institutions. It has never been implemented.

Appendix I

Sustainable Jobs

Notes:

- (1) This segment draws heavily on work done by the USA's "Blue-Green Alliance" and needs more input and discussion and other perspectives from other ICEM affiliates at the Sustainability Working Group.
- (2) Many discussions of this topic use the terminology "green jobs". In Australia, some of this discussion is captured under the heading "Clean Energy". The ICEM prefers the terminology "sustainable jobs" as being more accurate.
- (3) There may be more opportunities for job creation in the transformation of existing jobs, rather than in the creation of brand-new ones.

Sustainable Jobs ("Green" Jobs)

In the public mind, "sustainable jobs" are very directly related to environmental protection, renewable energy, reforestation, and the like. In reality, however, as the USA's Blue-Green Alliance executive director David Foster notes, "green jobs" are about "both product and process."

What is meant by this statement is that sustainable jobs are not only jobs in renewable energy or

recycling. A green job is any job that is part of an activity that creates a net benefit for the environment, or helps to drive society towards sustainability.

Many traditional jobs will evolve towards sustainable jobs. Utility workers delivering cleaner energy, chemical plant worker producing fertilizers or pesticides with fewer environmental side effects, or an energy worker in a coal plant that uses advanced "clean coal" technologies and carbon capture and storage, could be considered "sustainable jobs". Potentially, jobs in the hydro-electric, and even nuclear industries, could be considered sustainable. Although a green, sustainable economy will create many jobs that are different from today's (for example, energy services and consulting), most sustainable jobs will involve workers using the same skills they use today, in support of production that is more environmentally friendly and sustainable.

As explained in "Green Recovery - A Program to Create Good Jobs and Start Building a Low-Carbon Economy" by Robert Pollin et al (Center for American Progress, Sept. 2008), green investments can create massive numbers of high quality jobs. In most cases, these jobs will utilize workers with existing skills, in existing industries.

The economic crisis of 2008 has clearly illustrated a failure of the deregulated "free" market. Business as usual has created an environmental crisis, and at the same time it has not even been particularly good at creating jobs in recent years. The areas of greatest economic growth: information technologies, financial services, retail and food services, for example, create relatively few jobs or relatively low-quality jobs in relation to the wealth they generate. It is not sustainable to try to re-inflate the old economic bubbles. It is time for governments to consider public investments in the public interest, with an industrial strategy aimed at the creation of a sustainable economy.

If the economy up until now has failed to create large numbers of high-quality jobs and led to an ever increasing disparity between rich and poor, it cannot be considered sustainable. Instead, we should consider the economic crisis an opportunity to re-evaluate the underlying social contracts of society and plan a green industrial strategy that will create large numbers of high-quality unionized jobs.

Appendix II

Just Transition

Society can, and must, make decisions for the protection of the environment. The concept of a Just Transition is that workers, their families, their communities and their unions should be kept whole, if their employment is affected by as a result. Workers did not choose jobs that damaged the environment, they simply chose to work. It is profoundly unfair that the entire cost of changes towards sustainability should be borne by working people. In the absence of a Just Transition program, workers will almost certainly bear the costs.

While the concept of a Just Transition could be applied to any number of employment impacts, it is intended mainly for those situations where society implements regulations or policies designed to protect the environment, that will negatively affect employment in some sector. The "visible hand of regulation" to protect the environment will always be experienced by workers in a different way than the "invisible hand of the marketplace".

The Just Transition concept has been criticized as a "nice funeral". Nothing could be further from the truth. If that is how it is perceived by workers, then by definition it is not "Just". It is up to us to

define what would be needed for the transition to be perceived by workers as a Just Transition, and then fight to achieve that standard.

Just Transition will never be labour's first choice. Our first choice will always be find out whether our present jobs are, or can be made to be, sustainable. A sustainable (or "green") job is not always what comes to an environmentalist's mind. Even the manufacture of solar panels and windmills requires fuel, energy, steel, and plastics that must come from somewhere. These, then, could be considered sustainable jobs.

Sustainability requires that investment in the social infrastructure be recognised as legitimate and necessary for a prosperous future in the same way as investment in environmental protection or economic development.

Fear prevents movement towards sustainability. Just Transition is meant to reduce the level of fear. Industrialists fear their facilities becoming obsolete overnight, with the stroke of the regulators' pen. Workers - and the families and communities that depend upon them - fear for their jobs or, more correctly, future employment and/or security. Their fears are not unfounded. We have seen plenty of examples of unjust transitions. If a transition is coming, it cannot be left to the marketplace. The only way to ensure a Just Transition is to create structured programs to facilitate it and to deal with its consequences.

If workers are blackmailed with their jobs, the environment will lose. Therefore workers must not be asked to make this choice. Trade unions must avoid becoming the "last defender of the indefensible". There are many, particularly in the corporate world, who would be happy to have us fight that battle for them, while they prepare their own transition program – a transition for millionaires and billionaires. When the safety of their wealth is assured, they will have no hesitation in abandoning their workers, as they have so many times in the past. Fighting for the continuation of sunset industries buys no loyalty from the owners of those industries.

A Just Transition program is meant to be an all-encompassing, flexible approach to helping workers, their families, and their communities. Just Transition is not a suicide pact. It is not merely an enhanced unemployment program. It must involve workers in its design, and it must be customized to each situation. And it must keep workers and their unions whole.

Traditional labour market adjustment programs have often been top-down programs with the needs and goals defined by business, although there are examples of more inclusive processes in Europe. Labour market adjustment programs should take account of individual, family, and community needs and wants. Some workers might want enhanced early retirement. Others might want to go to a college or university and study a field unrelated to what they were doing. Some might want to enter an apprenticeship program. If new jobs are being created in the transition to a sustainable economy, those displaced from disfavoured jobs should have the right of first refusal, with moving and other assistance if necessary. It is important for workers that their rights as union members be protected, as well, and it is entirely reasonable for unions to demand institutional stability – protection for the union as an institution – through the transition period, as well. This could mean, for example, voluntary recognition of the union where new jobs are being created in more sustainable industries.

A Just Transition program might even, plausibly, assist in the creative restructuring of obsolete industrial sites.

The question is fundamentally who pays for, and who benefits from, a transition to sustainability.

It would be very much easier to sell sustainability to trade unionists, especially trade unionists in dirty, toxic, or resource-depleting industries if there were any really good examples of Just Transition to point to. There are not. There are some example that are fairly good, like the programs that were put in place for German coal miners and steelworkers as these industries withered in Germany over the last couple of decades. They were successful in that no unionized worker lost his or her job involuntarily, but less successful in creating new employment in affected regions and communities. There are no perfect examples where workers and their communities were fully protected. Until there are, sustainability will be a tough sell to many workers.

The absence of good examples does not mean we stop believing in Just Transition, or demanding Just Transition Programs from our governments. It means we have to build those examples and entrench their principles in our progress towards sustainability. Just like the fact that no large scale coal plant currently practices Carbon Capture and Sequestration does not prevent us from demanding that more money be invested in CCS and hoping that it will work. In fact, needing it to work. But Just Transition is the key to breaking down the barriers and the resistance to the quite radical changes in current patterns of production and consumption that will be needed if we are to avoid sterilizing the planet.

One opportunity for an absolutely excellent, gold-plated Just Transition program that we are currently missing is for Canadian asbestos miners. Massive subsidies keep this obviously sunset industry alive. These could easily fund an absolutely first class transition for these workers, their families, and their communities, if we can only find the vision and the will to make it happen.

Just Transition is the essential prerequisite of environmental change and the only way to prevent unnecessary conflict - and perhaps violent conflict - in society as that change takes place. Workers whose livelihoods, families and communities are threatened in the short and medium terms, and the unions that represent them, will resist change with all of their strength, if acceptable alternatives are not offered. Such resistance will prevent effective and consensual action on environmental issues, at least in the short term. Unions cannot and will not promote the kind of change that excludes workers from the process if their job security issues are not addressed effectively and explicitly or if the transition for their members is to a low-income non-union work environment. Our members do not need and will not tolerate their unions promoting the elimination of their jobs; and they do not need and will not tolerate union complicity in moving them into low-wage, non-union jobs. Union members are sympathetic to the cause of environmentalists, but are dependent upon their employers' abilities to continue their jobs. If environmental change is forced in the absence of Just Transition arrangements, workers and their unions will inevitably end up on the "con" side of the environmental change debate. We should not blame them, if the debate on environmental issues becomes framed in terms of jobs versus the environment rather than jobs and the environment. They will have no choice.

One final thought. Cost is not the issue. There are plenty of opportunities to fund adaptation, development, and Just Transition with money left over. Setting aside the enormous amounts of money that were conjured out of nothingness to support corrupt bankers, or the potential funds that could be raised from a tiny tax on international currency speculation (the Tobin Tax), the amount of oil directly consumed by the worlds militaries is truly staggering, but if you add in the military contractors, subcontractors, and the so-called "defence industry", it is absolutely obscene. Not only would cutting back on this madness instantly achieve a dramatic and significant reduction in carbon dioxide emissions, but would release truly almost unimaginable amounts of money for green technologies, development, Just Transition and all the rest. The labour movement has historically been proud to have links to the peace movements. Perhaps this is the time to renew and strengthen those links. Economic and social development, poverty and inequality eradication, human rights, labour rights, democracy and environmental protection are all directly linked to demilitarization and

peace.

Appendix III

Corporate Social Responsibility

Corporate Social Responsibility (CSR) is generally taken to mean a philosophy by which corporations consider the broader interests of society at large, rather than solely their shareholders. Broader society includes workers, customers, suppliers, host communities, and other stakeholders. It also includes normally externalized impacts, such as the impact of a corporation's operations on the environment. It implies more than simply complying with the appropriate laws.

Various CSR schemes exist. Almost all of them can be described as "voluntary initiatives". This means that corporations choose to subscribe to them, or not, according to their internal social values. Some of the critics of CSR schemes, and voluntary initiatives in particular, have claimed that instead of such initiatives stronger legislation, regulation, and enforcement are needed. In truth, we need both.

There are a number of CSR standards and voluntary initiatives that are relevant to the ICEM. Among these are those related to responsible mining, forestry certification, "Responsible Care" in the chemicals industry, the Global Reporting Initiative, Social Accountability (SA8000), and of course the United Nations' Global Compact. Unions can play an important role in ensuring that good CSR standards being complied with.

There are opportunities for labour participation in many of them, at the local, national, and international level. These will have to be individually evaluated by the ICEM before agreeing to become deeply involved, since historically some of them require time and resource commitments beyond the capacity of the labour movement to maintain. Furthermore, in some industry sectors there is clearly one main initiative to be addressed (for example, the global chemical industry's "Responsible Care" program); in other industries there are several competing schemes. For example, there are a number of forestry certification programs (Forestry Stewardship Council, Programme for the Endorsement of Forest Certification, Sustainable Forest Initiative, Canadian Standards Association; Sistema Brasileiro de Certificacao Florestal Brazil (CERFLOR), Malaysian Timber Certification Council (MTCC), and Lembaga Ekolabel Indonesia (LEI). For the ICEM to play a productive role in forestry certification, it would be necessary to evaluate these and decide where we could gain the most benefit from participation.

Appendix IV

Economic Instruments and GHG Emissions Permits and Trading

(Note: this segment draws heavily on work done in the USA by the AFL-CIO in particular, and needs more input and discussion and other perspectives from other ICEM affiliates at the Sustainability Working Group.)

Economic Instruments and GHG Emissions Permits and Trading

Much work has been done, especially by free-market economists and business groups, on the

development of market-based or economic instruments to achieve sustainability. Specifically, economic instruments play heavily in discussions on controlling greenhouse gas emissions.

Economic instruments can include such things as auctioned emissions permits; tradable emissions permits, or even a so-called carbon tax. The Kyoto Accord originally envisioned a global system of tradable emissions permits for carbon dioxide. This was quickly subverted by politicians who found that they could score political points by playing to narrow national sentiments and promising "national solutions" instead of "paying foreigners".

Nevertheless, there are serious and legitimate concerns about the effects of any emissions permitting or auctioning system.

The USA's AFL-CIO has this to say about the potential effects of an unequal application of economic instruments, or indeed of any environmental regulation:

"Carbon Leakage

"We are concerned that International regulation on carbon emissions unless binding and applied evenly will lead to carbon leakage (the movement of heavy industries such as steel from countries who respect or try to implement International governance to countries with weaker or no measures). We believe any climate change legislation must contain strong provisions dealing with International competitiveness in order to ensure that nations that lack a strong emissions program do not receive an unfair advantage. Such provisions should include border adjustments in energy intensive products when they are produced for export markets.

"Carbon leakage, a euphemism for the offshoring of production, is more than a theoretical concern. Over the past decade the U.S has lost four million manufacturing jobs and seen thirty-five thousand manufacturing facilities close. A recent study by the Economic Policy Institute estimates 2.3 million United States' jobs have been lost to China production and trade since 2001. China is identified as a developing nation but their manufacturing sector rivals that of the most developed nations. It is where their energy production is directed. An estimated seventy percent of China's foreign direct investment is in manufacturing, with heavy concentration in export-oriented companies and advanced technology sectors. China, and other rapidly developing countries are already a magnet for manufacturers seeking illegal subsidies and undervalued currencies while avoiding labour, environmental and other standards. The USA's AFL-CIO strongly supports the ability us use a border adjustment mechanism as part of a climate change regime. The Federation supports a new industrial policy, an environmental economic development policy, which places manufacturing and trade at the centre of a green economy program. New investment in a sustainable energy infrastructure must be structured to create good jobs and ensure stable energy prices. These must also be supported by effective trade policies.

"Shared Interests

"It is no ones interest to have the efforts of developed nations to reduce carbon emissions become another advantage used by developing nations to attract business. However, it is in the world's interest to have developing nations become part of the solution because the problem cannot be solved without them. Any climate change legislation or international agreement must contain strong provisions dealing with international competitiveness in order to ensure that nations that lack strong emissions control programs do not receive an undue advantage for polluting more."

In the area of emissions regulations or permitting, it is as legitimate to discuss "border adjustment mechanisms" as it is in any other area of trade. Unless and until the regulation or permitting scheme can be truly and fairly applied internationally, border adjustments (tariffs) may be necessary to prevent production (and pollution) simply being transferred from countries where enforcement

takes place, to those where it does not.

To take another example, the United Nations' "Reduced Emissions from Deforestation and Forest Degradation" (REDD) program considers a number of enforcement mechanisms, among them economic instruments. Yet a pure market-based mechanism would most likely lead to a flooding of the carbon market with cheap REDD certificates and thereby undermine not just REDD, but the entire carbon emissions market.

Appendix V

Clean Coal Technologies and Carbon Capture and Storage/Sequestration

Fossil fuels will continue to be heavily relied upon for many decades to come. Carbon capture and storage/sequestration is the technology (actually, technologies) that could, if successful, "decouple" carbon dioxide emissions from fossil-fuel based energy production.

1. The ICEM supports continued research and development on carbon capture and storage/sequestration.
2. ICEM supports the G8 goal of twenty full-scale plants underway by 2010 (to be operational no later than 2015). Rapid implementation of full-scale demonstration sites on commercial-scale power plants is needed in order to determine whether the technology will actually work (cost-effectively) at that scale. Society must do this as soon as possible because we need to know whether it will work in time to plan for the consequences, if it does not.
3. The necessary infrastructure (and proper maintenance programs for them) such as pipeline networks and storage facilities, must also be a high priority.
4. At the same time, ICEM supports continued investment of research and development money into other energy technologies, including (or especially) renewables.

Other emissions from coal use must be considered besides those occurring at the site of energy production. Considerable carbon dioxide is emitted by equipment used in mining and transporting coal, and coal mines themselves are sources of methane and carbon dioxide; even more so in exceptional cases such as coal seam fires.

Appendix VI

United Nations Universal Declaration of Human Rights

More broadly than simply the workplace, the question remains "what is both necessary, and sufficient, to define a sustainable society" from a trade union point of view. This is a subject for further development.

However, one starting point is the United Nations Universal Declaration of Human Rights; and the additional declarations, treaties, resolutions and other documents which the United Nations has produced in support of it.

In addition to the following document, other United Nations documents may be of interest:

- United Nations Charter, the International Covenant on Economic, Social, and Cultural Rights
- International Covenant on Civil and Political Rights, the Convention on the Rights of the Child

- Convention on the Elimination of All Forms of Discrimination Against Women
 - Declaration on the Elimination of Violence Against Women
- All of these may be easily found on the internet.

Universal Declaration of Human Rights

Adopted and proclaimed by General Assembly resolution 217 A (III) of 10 December 1948

PREAMBLE

Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world,

Whereas disregard and contempt for human rights have resulted in barbarous acts which have outraged the conscience of mankind, and the advent of a world in which human beings shall enjoy freedom of speech and belief and freedom from fear and want has been proclaimed as the highest aspiration of the common people,

Whereas it is essential, if man is not to be compelled to have recourse, as a last resort, to rebellion against tyranny and oppression, that human rights should be protected by the rule of law,

Whereas it is essential to promote the development of friendly relations between nations,

Whereas the peoples of the United Nations have in the Charter reaffirmed their faith in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women and have determined to promote social progress and better standards of life in larger freedom,

Whereas Member States have pledged themselves to achieve, in co operation with the United Nations, the promotion of universal respect for and observance of human rights and fundamental freedoms,

Whereas a common understanding of these rights and freedoms is of the greatest importance for the full realization of this pledge,

Now, Therefore THE GENERAL ASSEMBLY proclaims THIS UNIVERSAL DECLARATION OF HUMAN RIGHTS as a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance, both among the peoples of Member States themselves and among the peoples of territories under their jurisdiction.

Article 1.

All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

Article 2.

Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. Furthermore, no distinction shall be made on the basis of the political, jurisdictional or international status of the country or territory to which a person belongs, whether it be independent, trust, non self governing or under any other limitation of sovereignty.

Article 3.

Everyone has the right to life, liberty and security of person.

Article 4.

No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.

Article 5.

No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment.

Article 6.

Everyone has the right to recognition everywhere as a person before the law.

Article 7.

All are equal before the law and are entitled without any discrimination to equal protection of the law. All are entitled to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination.

Article 8.

Everyone has the right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted him by the constitution or by law.

Article 9.

No one shall be subjected to arbitrary arrest, detention or exile.

Article 10.

Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him.

Article 11.

(1) Everyone charged with a penal offence has the right to be presumed innocent until proved guilty according to law in a public trial at which he has had all the guarantees necessary for his defence.

(2) No one shall be held guilty of any penal offence on account of any act or omission which did not constitute a penal offence, under national or international law, at the time when it was committed. Nor shall a heavier penalty be imposed than the one that was applicable at the time the penal offence was committed.

Article 12.

No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks.

Article 13.

(1) Everyone has the right to freedom of movement and residence within the borders of each state.

(2) Everyone has the right to leave any country, including his own, and to return to his country.

Article 14.

(1) Everyone has the right to seek and to enjoy in other countries asylum from persecution.

(2) This right may not be invoked in the case of prosecutions genuinely arising from non political crimes or from acts contrary to the purposes and principles of the United Nations.

Article 15.

(1) Everyone has the right to a nationality.

(2) No one shall be arbitrarily deprived of his nationality nor denied the right to change his nationality.

Article 16.

(1) Men and women of full age, without any limitation due to race, nationality or religion, have the right to marry and to found a family. They are entitled to equal rights as to marriage, during marriage and at its dissolution.

(2) Marriage shall be entered into only with the free and full consent of the intending spouses.

(3) The family is the natural and fundamental group unit of society and is entitled to protection by society and the State.

Article 17.

(1) Everyone has the right to own property alone as well as in association with others.

(2) No one shall be arbitrarily deprived of his property.

Article 18.

Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance.

Article 19.

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

Article 20.

(1) Everyone has the right to freedom of peaceful assembly and association.

(2) No one may be compelled to belong to an association.

Article 21.

(1) Everyone has the right to take part in the government of his country, directly or through freely chosen representatives.

(2) Everyone has the right of equal access to public service in his country.

(3) The will of the people shall be the basis of the authority of government; this will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.

Article 22.

Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.

Article 23.

(1) Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment.

(2) Everyone, without any discrimination, has the right to equal pay for equal work.

(3) Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.

(4) Everyone has the right to form and to join trade unions for the protection of his interests.

Article 24.

Everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pay.

Article 25.

(1) Everyone has the right to a standard of living adequate for the health and well being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.

(2) Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

Article 26.

(1) Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.

(2) Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.

(3) Parents have a prior right to choose the kind of education that shall be given to their children.

Article 27.

(1) Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.

(2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

Article 28.

Everyone is entitled to a social and international order in which the rights and freedoms set forth in this Declaration can be fully realized.

Article 29.

(1) Everyone has duties to the community in which alone the free and full development of his

personality is possible.

(2) In the exercise of his rights and freedoms, everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society.

(3) These rights and freedoms may in no case be exercised contrary to the purposes and principles of the United Nations.

Article 30.

Nothing in this Declaration may be interpreted as implying for any State, group or person any right to engage in any activity or to perform any act aimed at the destruction of any of the rights and freedoms set forth herein.

If we truly view the above rights as important, then of course special attention must be paid to the protection of the rights of those whose rights are most frequently violated, including: women; children; indigenous peoples; and displaced persons/refugees.

Appendix VII

ILO Core Labour Standards

The necessary foundation of a socially sustainable workplace is respect for the dignity and human rights of workers. The minimum criteria for that dignity and respect for human rights are articulated in the International Labour Organization's (ILO) Core Labour Standards (sometimes referred to as Fundamental ILO Conventions.)

There are eight ILO Conventions that have been identified by the International Labour Organization in their "Declaration of Principles on Fundamental Rights at Work" (1998) as being essential to the rights of working people. They are intended to apply to all workers, whether the country of work is a developed nation or a developing one. All other workplace rights are considered to build upon these fundamental rights, in that they provide the tools and the conditions necessary for workers to strive to improve their individual and collective working conditions.

Freedom of association

1. Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87)
2. Right to Organize and Collective Bargaining Convention, 1949 (No. 98)

The abolition of forced labour

3. Forced Labour Convention, 1930 (No. 29)
4. Abolition of Forced Labour Convention, 1957 (No. 105)

Equality

5. Discrimination (Employment and Occupation) Convention, 1958 (No. 111)
6. Equal Remuneration Convention, 1951 (No. 100)

The elimination of child labour

7. Minimum Age Convention, 1973 (No. 138)
8. Worst Forms of Child Labour Convention, 1999 (No. 182)

All of these should be very nearly self-explanatory; however, complete text and detailed explanations are available from the ILO (<http://www.ilo.org>) if desired.

There are also a long list of other ILO Labour Standards, on a variety of subjects. Some of these are referenced, above, following the discussion on each industry sector. Here is a list of some of the subject areas of ILO International Labour Standards:

- Freedom of association, collective bargaining, and industrial relations
- Forced labour
- Elimination of child labour and protection of children and young persons
- Equality of opportunity and treatment
- Tripartite consultation
- Labour administration and inspection
- Employment policy and promotion
- Vocational guidance and training
- Employment security
- Wages
- Working time
- Occupational safety and health
- Social security
- Maternity protection
- Social policy
- Migrant workers
- Indigenous and tribal peoples
- Specific categories of workers

Appendix VIII

Indicators for Social Sustainability

The ICEM calls for better tools to analyze both the impacts and opportunities created within the social dimension of sustainability. Reference to the United Nations Universal Declaration on Human Rights, or the ILO Core Labour Standards, is necessary but not sufficient to define the social dimension.

An indicator is something that shows (often indirectly) the effectiveness of something else. For example, it can be difficult to directly “measure” an entire country’s educational system but literacy levels might be an indicator of the overall effectiveness of a nation's educational system. Changes in the area of forest cover could be an indicator of the effectiveness of a forestry policy. Indicators can be quantitative (able to be measured and assigned a numeric value - usually in dollars or some other currency); or qualitative (difficult to assign a numeric value to). Economic indicators are usually quantitative; environmental indicators can be quantitative or qualitative; and social indicators are quite often qualitative. Qualitative indicators are not less important than quantitative ones. While it is relatively easy to identify economic indicators, and even environmental indicators, choosing indicators of sustainability has proven to be a difficult exercise. Choosing the appropriate indicators for social sustainability can be difficult. A few examples follow, below.

Indicators of Economic Disparity:

Economic disparity can mean:

- Disparity of wealth and income between rich and poor (ratio of inequality): between nations and

within nations; between regions, and within regions; between communities and within communities.

- Disparity between genders
- Disparity between ethnic groups

Economic activity is unsustainable if it creates unacceptable economic disparity.

Indicators for Education:

Education should produce informed, engaged citizens and the attainment of knowledge and skills necessary for productive, rewarding, and freely chosen employment. Thus, a sustainable society ensures:

- Universal access to quality education
- Minimum basic literacy levels for all citizens
- A high level of average educational achievement

Indicators of Health of Population; and Health Care:

Human health, both physical and psychological, lies somewhere near the boundary between the social and environmental dimensions of sustainability. A sustainable society should strive to:

- Maximize life expectancy
- Minimize infant mortality
- Minimize harmful drug use
- Minimize the suicide rate
- Provide adequate and equitable access to health care, both preventative and restorative

Indicators for Law and Justice:

Several articles of the Universal Declaration on Human Rights refer to the law enforcement system; from police enforcement through trial and sentencing procedures to punitive and correctional actions imposed by society. A sustainable society will have:

- Access to a fair justice process
- Low real crime rates
- Small prison populations
- Effective rehabilitation and reintegration schemes
- Low rates of re-offence

Indicators of Equal Opportunity to Participate:

A sustainable society engages, rather than excludes, the full participation of its citizens by:

- Eliminating all forms of discrimination
- Ensuring the existence of free and healthy media sector that is not beholden to a narrow base of owners or interests

Indicators for Environmental Justice:

"Environmental Justice" is meant to describe fairness and equity in society, particularly in connection to decisions and actions taken or avoided to protect (or fail to protect) the environment. Therefore, a sustainable society is one in which:

- The costs and benefits of society are shared fairly between and within communities, regions, and nations
 - Social dumping and runaway production are minimized
 - Corporate decision-makers recognize that shareholders are not their only stakeholders
 - Corporations and the wealthy make direct contributions to the social fabric
 - "Just Transition" programs exist to protect those most adversely impacted by necessary environmental change (see explanation of "Just Transition" in Appendix II).
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Appendix IX

FOURTH ICEM WORLD CONGRESS
Bangkok, Thailand, 22-24 November 2007

Resolution 9: Sustainable Development

(Proposed by the ICEM Executive Committee)

AS ACCEPTED BY THE 4th ICEM WORLD CONGRESS

Whereas the ICEM World Conference for the Energy Industries, held in Trinidad & Tobago in November 2006, resolved that a sustainability/acceptability policy be submitted to the next ICEM World Congress;

Whereas the ICEM Executive Committee, at its May 2007 meeting in Brussels, while agreeing with the general approach of the abovementioned action plan, proposed for the forthcoming World Congress to decide to, as a first step, set up a working group, which would need to submit proposals on policy and action;

Whereas the ICEM World Congress is expected to decide for the ICEM to enter into closer, systematic and meaningful cooperation with the IMF and the ITGLWF, and, possibly, with other Global Union Federations;

Whereas all abovementioned organisations directly deal with the subject matter on an almost daily basis;

Whereas, in spite of the fact that there appears to be a world-wide trend to emphasise the importance of the service-sector as a key segment for economic growth, the role of the industrial sector for a country's economic future and the important role this sector can and should play in the area of sustainable development can not be minimised;

Whereas the ICEM and its affiliates should offer to the industry, as a whole, as well as to individual companies, in particular, to cooperate on sustainable development policies and initiatives;

Whereas the recognition of workers' and trade union rights by the employer would need to be a clear pre-condition to any such offers;

Whereas, even though valid economic arguments by companies cannot be ignored in any debate on sustainable development, questions need to be raised on serious concerns in this area, such as the problems related to private equity investment and the policies of hedge funds;

Whereas, as workers have an obvious interest in the future of their and other industries, trade unions need to continue challenging companies to be as progressive as possible in regard to environmental challenges;

Whereas governments and international institutions need to make sure that the voice of workers and their unions, including international organisations such as the ICEM, is not ignored in the ongoing global debate on climate change and other environmental issues;

Whereas the social aspect is often overlooked in debates on sustainable development;

The ICEM Fourth World Congress resolves that

the ICEM will encourage affiliates to promote greater awareness of the behaviour of multinational corporations concerning global warming and sustainable energy policies and thereby promote greater corporate responsibility.

the development of a joint multi-GUF policy on sustainable development be a key priority for the immediate future, and that joint multi-GUF initiatives in this area need to be taken;

the ICEM and its affiliates, together with other Global Union Federations, the ITUC and TUAC, need to insist, within the framework of the ILO and other international institutions,

that, for any meaningful sustainable development effort to be successful, it needs to, in addition to global poverty eradication, assist in creating decent work for all and respect for the basic human and social rights, including trade union representation;

a working group be established to develop an ICEM policy on sustainable development and make proposals on future initiatives;

the working group be composed of the chairpersons, or other nominated representatives, of the various ICEM industrial sectors, a representative of the women's group, and the President and the General Secretary of the ICEM;

the working group needs to prepare for a global ICEM conference on sustainable development, which should take place in May 2008, at the time of the regular statutory meetings of ICEM;

the ICEM proposes to the IMF and the ITGLWF, as well as to other interested Global Union Federations, to cooperate on developing a joint strategy on sustainable development and organise a joint conference, later in 2008;

Global Framework Agreements and other areas of work are brought into play to achieve more cooperation, and possibly joint initiatives, in the area of sustainable development with companies and international industry federations.