



International Chamber of Commerce
The world business organization



INTERNATIONAL CHAMBER OF COMMERCE

Policy Statement



Prepared by the ICC Commission on
Environment and Energy

Energy today and options for tomorrow

Highlights

- Background
- Needs and recommendations from private sector standpoint
- Conclusions



*“We must usher in a
global energy revolution
by improving energy
efficiency and increasing
the deployment of
low-carbon energy”*

*Nobuo Tanaka, Executive
Director of the International
Energy Agency (IEA)*

Table of Contents

Key issues for business	3
Background	5
Needs and recommendations from private sector standpoint	7
❶ Energy Management, Planning and Strategy	7
❷ Technology Innovation	8
❸ Finance and Investment	10
❹ Enabling Frameworks	11
Conclusion	13

Figures

Graphic 1: Relationship between HDI and per capita energy use, 1999/2000	5
---	---

Abbreviations

CCS	Carbon Capture and Storage
CDM	Clean Development Mechanism
FDI	Foreign Direct Investment
HDI	Human Development Index
ODA	Official Development Assistance
UNFCCC	United Nations Framework Convention on Climate Change
WTO	World Trade Organization
IGCC	Integrated Gasification Combined Cycle

Key issues for business

Access to reliable, affordable, economically viable, socially acceptable and environmentally sound energy is fundamental to economic growth and sustainable development. Energy poverty induces poor living conditions in many developing countries and global poverty. Energy contributes to meeting basic needs, such as clean water, food preservation, transportation, healthcare, sanitation, education and communications. In light of expected growth in world population and energy demand, long-term energy access and security are critical priorities.

According to the International Energy Agency World Energy Outlook (WEO) 2008, investments of \$26 trillion will be required for projects related to energy access and to diversify energy supplies, modernize infrastructure, as well as promote greater efficiency between now and 2030, under a reference scenario. If we are to see the energy revolution presented in the 2008 WEO, it is vital to address the question of investment in energy supply as well as demand side management in developing, emerging and developed economies. This will be instrumental in a move towards a future low-carbon economy.

The global economic crisis underscores the urgency of sustainable development, emphasizing a mutually reinforcing balance of economic, social and environmental progress. Moreover, it highlights the need to work efficiently and cooperatively to develop the policy and financial drivers needed to continue to delink environmental impacts from economic growth, provide energy access and security and shape a future global low-carbon economy. There is an urgency to act, and while the crisis creates new challenges, it also underscores the importance of seeking cost-effective opportunities for action to address a wide range of competing priorities around the world and within individual nations.

To facilitate and encourage new energy development, access to modern energy services and the more rapid deployment of more efficient, cleaner and lower carbon emitting technologies, global business recognises the following key issues:

- **All energy options are important as no one-size-fits-all solution exists**
All energy options must remain open in order to cater for the wide variety of national and regional circumstances and policy as well as deal with uncertainty and risk, particularly with regard to energy security.
- **Sector-wide changes can take decades**
In general, energy sectors are capital intensive and long-term in nature and thus can be slow to change. The useful life of capital stock, including public infrastructure, related to energy use can vary considerably but in some applications can be as long as 50 years. Premature retirement of useful capital is costly. Sector wide changes can therefore take decades to implement in an effective way. Institutional barriers, national realities and financing present real hurdles which can have a “ripple” effect on other industry sectors and on society as a whole. The latter issue is particularly relevant in today’s global environment.
- **Coordinated international effort is needed to ensure an enabling framework and markets**
Energy sectors are critical to economic development and many millions of livelihoods. The responses needed to address these challenges will have to be accelerated, enabling markets and policies have to be strengthened at an international level. This should include efforts to open markets for investments and technology diffusion as well as to expand open trade.
- **National policies have to take current realities and international agreements into account**
A holistic view, which includes careful consideration of energy mix and diversification, is critical to addressing long-term issues and risks, and to softening the cross-sectoral impacts of changes in price or supply. Integrated economic, energy and environmental policies, which take into account both long-term considerations and current realities and which also take into account international agreements, need to be formulated and implemented at a national level.

- **Long-term investments and public-private partnerships should be facilitated**
Consistent, enabling fiscal and regulatory frameworks which encourage and incentivise investments and public-private partnerships are essential. Stable fiscal and regulatory will facilitate and incentivise businesses and consumers in their long-term decision making processes.
- **Energy efficiency should be a key focus and needs to be further promoted**
Markets and governments should continue to promote and support energy efficiency among producers and consumers of energy as well as educating, regulating and incentivising consumers. With sound, stable fiscal and regulatory frameworks, businesses, consumers and public authorities will continue to improve the efficiency of current systems and reduce future demand requirements.
- **Technology cooperation and deployment should be fostered**
Encourage and incentivise future energy technology development, deployment and transfer by leveraging resources and partnerships. To accelerate technology innovation and cooperation, large-scale Research and Development (R&D) efforts may be required, as well as pilot programs in key countries in both the developed and developing world.
- **A variety of market mechanisms fit for national/local circumstances have to be identified**
Free and transparent market mechanisms should be promoted, strengthened or implemented as needed. Financing issues need to be addressed in order to identify a variety of mechanisms as the risk profiles of various investments will be unique, compounded by consideration of local (national) circumstances. Public funding of energy-related R&D initiatives with potential for broad-based, cross-sector applications should be considered to reduce the risk of identifying and diversifying to new “emerging” forms of energy production or consumption. A combination of flexible financing mechanisms will be required to cover the broad and growing range of new investments that are needed. In order to accelerate the development and deployment of key technologies, new financing models will be required. Carbon financing will bridge some of the gap, but multilateral development financing and other policy incentives will help accelerate deployment. Voluntary, international funding through public private partnerships can play an important role in the deployment of new technologies.

Background

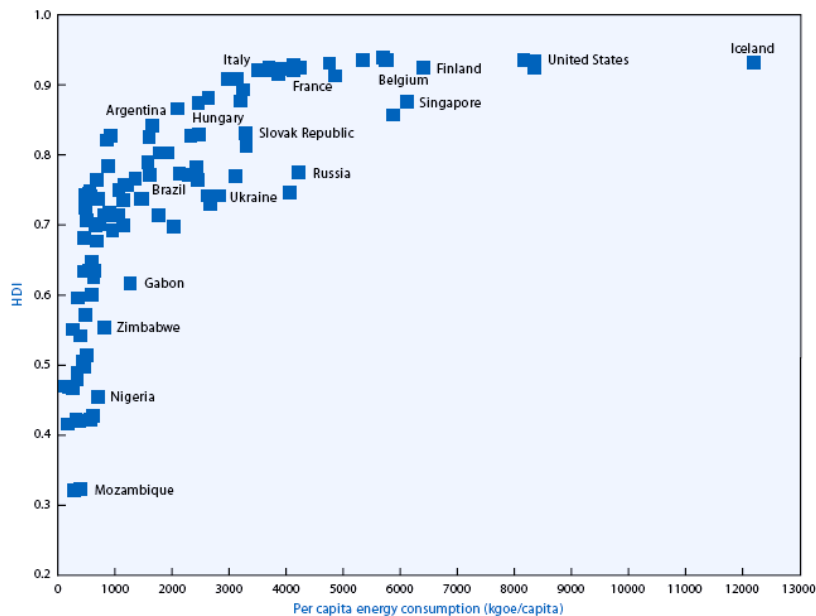
A variety of factors influence energy demand

Energy underpins the economic fabric of all countries and it is indispensable to growth and poverty alleviation, particularly in developing countries. Moreover, energy demand is increasing globally. A few issues fundamentally influence energy demand such as: population growth, economic growth, supply sources and policies on issues such as energy security and climate change. These pressures indicate the need for multiple energy sources in the mix and for energy efficiency.

Energy access contributes to economic growth and increased quality of life

As access to modern energy services increases, quality of life improves. Robust and flexible energy infrastructure is of critical importance to the provision of many services and for industry and manufacturing. We have seen that more sustainable energy pathways play a key role in ensuring that economic activity advances social development and environmental protection in developed and developing countries.

Energy, a driving force of human development



Graphic 1¹:
Relationship between
HDI and per capita
energy use, 1999/2000

Graphic 1 shows the correlation between a country's human development index² (HDI) ranking and per capita energy use, with commercial energy used as a proxy for energy services. It demonstrates that economic development and an increased quality of life are and will strongly depend on access to energy services.

Deployment and upgrading support for energy systems is a priority for the business community

Business activity in every sector depends fundamentally on energy and the international business community views international action and cooperation to support deployment and upgrading of energy systems as a priority.

¹ UNDP. *World Energy Assessment. 2004.*

² "The HDI – human development index – is a summary composite index that measures a country's average achievements in three basic aspects of human development: health, knowledge, and a decent standard of living." (UNDP, 2008)

Energy availability is heavily determined by national/ local factors

Energy resources are not equally distributed and each country has a unique set of resources, legacy investments, markets, and technological capabilities. National policy and sovereignty are also unique and each country and region may be pursuing different sustainable development priorities. In some developing countries, energy exports are a significant portion of the local economy, so global changes in energy demand can have important local impacts. Conversely, many countries depend heavily on energy imports in order to meet their energy demand and thus are equally vulnerable to global changes. Thus stable and secure energy markets benefit energy security.

A holistic view of the energy sector to soften risks and cross-sectoral impacts

In general, energy sectors are capital intensive and long term in nature and thus can be slow to change. Capital stock turnover rates and the lifetime of relevant public infrastructure can be as long as 50 years. Sector wide changes can therefore take decades to implement in an effective way, institutional barriers, national realities and financing present real hurdles. What happens in energy sectors inevitably has a “ripple” effect on other industry sectors and on society as a whole. In the view of ICC, a holistic view, which includes careful consideration of energy mix and diversification, is critical to addressing the long-term issues and risks, and to softening the cross-sectoral impacts of changes in price or supply.

International coordination and enabling frameworks to address long-term risks

Energy sectors are critical to economic development and millions of livelihoods. They have over time become more efficient, mitigated their environmental impact, while meeting the needs of growing populations. However, the challenges facing energy sectors, notably climate change and resource development are significant and long-term in nature. The response needed to address these challenges will have to be accelerated and enabling markets and policies will have to be strengthened. Deployment of resources and strategic planning at an international level is required.

Broader energy mix to alleviate sustainability challenges

Broadening the energy mix can help alleviate environmental or other sustainability challenges associated with any one form of energy, and promote other synergies to support sustainable development. For example, the introduction of renewable energies into the mix may result in increased local supply and support businesses, jobs and in some cases export markets, as well as reduce greenhouse gas emissions.

Energy access, security and efficiency contribute to a more sustainable energy mix

Previous ICC papers have underscored the inter-relationships between energy access, security and efficiency³. These three aspects in turn all contribute to the broader evolution to a more sustainable energy mix. ICC approaches energy mix and diversity from the viewpoints of both energy producers and users.

This paper will discuss needs and recommendations in 4 key areas from a private sector standpoint.

1. **Energy strategy planning and management:** diversity as a way to manage tradeoffs and uncertainty in the near and long term.
2. **Technology innovation:** further diversifying the energy mix options, resolving challenges.
3. **Finance and investment:** global markets to leverage resources, encouraging investment in broader energy mix.
4. **Enabling frameworks:** creating space for and supporting energy diversification in global marketplaces.

³ ICC Policy Statement “Energy security: a world business perspective”- May 2007
ICC Policy Statement “Energy efficiency: a world business perspective” - May 2007

Needs and recommendations from private sector standpoint

① **Energy management, planning and strategy**

Energy resource management and innovation offer potential solutions

In considering options and potential solutions, we should bear in mind both the energy resources of the planet, and the innovative capability of people. The earth has an abundance of different energy resources and these include fossil fuels such as coal, gas and oil, nuclear power and renewables such as bioenergy, geothermal, hydro (including ocean), solar and wind. Each of these energy resources presents opportunities and constraints, which may be different depending on local circumstances. Moreover, every case assessment of overall resource endowments and costs depends on the state of technology as research and development continuously change the picture.

Energy costs are key driver for energy source decisions

Depending on energy markets and costs, companies will certainly assess and weigh different energy sources to reduce and manage costs of operations and ensure supply reliability. Companies doing business in global markets will seek to minimize energy costs and therefore improve their competitiveness as much as possible. Business benefits from choices and diversification from the perspective of efficiency and risk management. The challenge is to support choices and access within the framework of international cooperation and global markets.

Energy-related decision-making is part of broader business strategy

The availability of a broader mix of energy supply options can assist companies in their daily decisions on energy choices. Addressing these challenges is an integral part of broader business strategy and planning and involves use of energy management systems to deal with risk and uncertainty in short-, medium- and long-term timeframes. Energy diversification thereby helps improve performance, provide options and opportunities to spread risk, keep costs low and seek out competitive advantage.

Energy-related decisions often go along with various tradeoffs

Due to the number and complexity of sustainability issues, energy-related decisions often involve a series of trade-offs, including a wide range of economic, social and environmental aspects. Tradeoffs can occur across environmental performance and cost, and between long-term risk and short-term needs and requirements. For example, in the European Union (EU) tradeoffs between climate change targets and accelerated diversification of the energy mix to lower carbon emitting technologies versus security of supply issues with regards to import dependency. For example, recent expansion of bioenergy⁴ has promoted debate concerning relative environmental benefits and social impacts.

Investments and energy decisions depend on diverse cross-cutting themes

When faced with decisions about energy sources and investments, businesses will consider a wide range of inter-related issues. These include technology scale and dispatchability in relation to demand, technology risk, capital and operational costs, rate of return, availability of financing, supply chain considerations, competitive edge and environmental and social impacts. National circumstances where the investment is to take place are a critical factor, as are infrastructure, regulatory frameworks and permitting requirements and investment incentives. International policy requirements across a range of disciplines (trade, environment, investment) such as those arising from UNFCCC and WTO rules also effect these business decisions regarding energy. Another critical element in decision making is where the technology is along the maturity scale. For technologies in the R&D phase, different policies, incentives or collaboration may be needed than for technologies that are near commercial or commercial.

⁴ Please see ICC Discussion paper on International bioenergy policy

Secure and reliable energy supply and infrastructure determines business operations and investments

For many energy businesses, their operations can have significant impacts on or be impacted upon by energy security considerations. To business, energy security means confidence in its ongoing ability to access reliable and affordable energy wherever it operates. Secure and reliable energy supply and infrastructure impacts the feasibility and costs of doing business from perspectives of competitiveness and productivity. Energy security is thus an important consideration, not only for day-to-day operations, but also for long-term investment. In terms of long-term security, many companies face energy mix decisions that impact not only current investments, but also R&D, investment and sourcing of future resources. Strategic choices relating to future energy mix “tracks” can have major implications on long-term competitiveness of the business due to possible future legislative frameworks and fleet strategies, where companies can standardise certain technologies and thus leverage and optimise economies of scale.

Business faces long-term energy uncertainty with impacts on its performance

Given the long-term nature of energy aspects of commercial activity, some central issues simply cannot be fully defined before a decision has to be taken, and consequently choices must be made in the face of uncertainty. The rapid pace of technological and regulatory change combined with the long-term nature of the sector exacerbates this problem; for example, a 30 year old operating plant which has not been designed for retrofitting of emerging technologies. Businesses do, where possible, incorporate elements into new plant design which may ease technological change in future. In spite of the current uncertainty around the economic viability and regulatory realities relating to carbon capture technology, this may be as simple as allowing space between operating units to allow easier incorporation of future plants. Potential climate change adaptation risks are another example of longer term energy challenges. Businesses are taking a longer term view of such risk, such as climate change and related extreme weather events, and implementing measures to cope with potential adverse conditions. In many cases these can be addressed by prudent design that minimizes future risks.

Energy-related choices for existing plants are continuously evaluated and implemented

Energy-related decision making does not stop when a plant is built, and pertains throughout the lifetime of a plant, and when periodical adjustments are made to operational practices, equipment upgraded and new technologies are incorporated. This comprises incremental improvements in performance over the lifetime of the plant, such as reducing local air pollutants or improvements in efficiency. Some circumstances which may lead to changes during the life of the plant include changes in legislation, commercialisation of new technologies and the remaining life of plant. Often, major improvements are most practical when major refurbishments or maintenance outages are scheduled.

Many companies have energy management systems in place to tackle sustainability subjects

Every company will follow its own calculus when energy decisions are made. Local regulation and enabling frameworks and resource base will certainly influence each and every decision. However, company goals, principles and management systems can guide decisions and drive performance in specific areas, such as greenhouse gas emission criteria or efficiency standards. Many companies have decision-making frameworks and energy management systems which accommodate a wide range of sustainability issues, including financial considerations, to be assessed in a consistent and measured way. This permits a wide range of issues to be considered, wider implications of decisions, such as supply chain considerations, to be assessed and holistic risk and opportunities to be identified. Such systems have mainstreamed energy efficiency as an essential component of business decision making.

② Technology innovation

R&D investments for innovative technology have to increase

While technology development and deployment is integral to achieving many global future energy objectives, ICC is concerned to note that investment in energy research has declined on a global scale

for the last few decades⁵. This trend must be reversed, as innovative technologies will be critical to improving the sustainability, access and affordability of energy options, and to resolving remaining challenges associated with various energy options.

New partnerships and collaborations will be needed to develop breakthrough technologies

The private sector is the prime developer and conduit to develop and commercialize innovative energy production technologies, yet sustainability challenges facing society are such that the private sector's efforts will likely not be adequate in and of themselves. New alliances and collaboration will therefore be needed. Leveraging resources and partnerships to develop breakthrough technologies in order to fundamentally change our energy future is an urgent priority. This entails including technologies that: reduce carbon intensity; meet growing demand and provide affordable universal access; reduce environmental impacts; improve efficiency; and provide reliable infrastructure to underpin development.

Government has a vital role to play in accelerating technological innovation

Governments can support technological innovation through enabling policies and frameworks. These policies should include developing national research programmes targeted at local barrier identification and to recognize and support opportunities. In addition, policies can include subsidies, tax incentives, workable and effective patent systems and other positive incentives for research and development (R&D). National technology development strategies must cover fundamental research as well as emerging and near commercial areas in order to ensure a pipeline of new technologies. Governments play an essential role in the education continuously needed to replenish and expand the pipeline of qualified individuals with essential technical training.

Emerging but not yet commercially available technologies should be fast tracked

Decisions are being taken today by public authorities, international decision makers and international companies to meet growing energy demands. With plant lifetimes generally in the decades, such near-term decisions increasingly lock in key elements of the energy technology mix. Emerging but not yet commercially available technologies which are key to reducing global emissions and meeting energy needs, such as IGCC, generation IV nuclear, wave power, large scale solar thermal and CCS, should be fast tracked responding to economic development, population growth and increasing energy demand in developing countries and also in developed countries where the replacement of existing plant may need to be addressed. Smart grids also have a pivotal role to play. International programmes to leverage funds and activities to fast track these key technologies should be considered.

ICC recommends analysis of the fundamental issues encountered in the large scale deployment of emerging technologies

To accelerate energy technology development and deployment on a global scale, ICC recommends analysis of the fundamental issues encountered in the large scale deployment of emerging technologies. These studies need to reflect understanding of local potential and capacity, and identify gaps and needs. Policymakers should strive to scale up successful projects and practices, and work with companies in this regard. Much of this R&D is long-term in nature and therefore requires a collaborative approach. A basket of policy options which address the various stages of technology maturities as well as national circumstances will have to be developed.

Public and private sector should jointly fund and guide research

Co-ordinated, large scale demonstration programmes for key technologies should be identified and implemented in both developed and developing countries. Issues such as the funding of incremental costs and the development of local capacity will also need to be simultaneously addressed. In this way, global learning can support shortening the time to market of key technologies – a critical factor if the pace of change is to increase. Technology innovation and development programmes should reflect the objective of energy mix diversification and assess a wide range of emerging technology options appropriate to national and local conditions, resources and policies. Business supports global

⁵ OECD/ IEA. *Energy Technology Perspectives 2008 in support of the G8 Plan of Action. Scenarios & Strategies to 2050*. Paris, 2008.

initiatives where public and private sector participants jointly fund and guide the research.

Capacity building is a key component in the dissemination of appropriate technology, cooperation and deployment

Technology cooperation and transfer occur every day in the course of thousands of commercial transactions between private sector participants and are closely linked with capacity-building, particularly in developing countries. To accelerate technology innovation and cooperation, large-scale R&D efforts may be required, as well as pilot programmes to enhance awareness of available technologies in key countries in both the developed and developing world. Many companies have a global reach through markets, joint ventures or supply chains. Business can and does partner with governments and civil society to expand global and local dissemination of appropriate technologies and to identify and remove barriers. The technology challenge is not limited to “hardware,” but should be understood to include the related management systems and the know-how and expertise to operate industrial activities in the most energy efficient way. The provision of services, skills and associated technologies to operate and maintain new technologies is essential to ensure their long-term sustainability.

③ Finance and investment

Innovative financing solutions are needed in all countries' energy sectors

Based on analysis by the IEA⁶, mobilising the energy investments required even to fund “least cost” supply plans will be a challenge for decades to come. Greater investment will be required in R&D efforts, both for new technology and in refurbishments and continuous improvement of existing facilities. Even in favourable economic climates, financing for energy investment cannot be taken for granted, and enabling conditions in any given country's energy sector will affect investment flows. Innovative financing solutions that create synergies between sources of finance will encourage energy investment. In countries with limited capital, and specifically for least developed countries, the role of private Foreign Direct Investment (FDI) should be complemented by multilateral development finance, Official Development Assistance (ODA), and local private funds. Through such innovative and combined financing solutions, project creation and implementation benefit from a variety of sources, which are mutually reinforcing, with each fund adapted to the type of investment and risks it covers.

Again, technological maturity needs to be considered along with the associated incremental costs of implementation and differing risk profiles. It is also important to consider the type of investment which will be required, some technologies will need both up-front capital investment as well as mechanisms such as the Clean Development Mechanism (CDM) to assist with cash flow for the projects whilst others may only need cash flow support. A holistic and customised approach is necessary. Government support should be broad based and enable all energy options.

Investment costs and risks depend on the objectives set and national/local conditions

Investment needs will be higher where the objectives are more ambitious, envisioning large scale change, faster evolution in energy sectors, or a wholesale change in energy technological pathways. The cost and financial risk of new technologies can be high, but as large scale uptake occurs, the costs typically will fall as designs are refined and economies of scale are realised. The financing challenge is to have sufficient funds:

- 1) Initially for a critical mass of projects to demonstrate the feasibility and commercial viability of the new technologies and,
- 2) In the longer term, to fund the incremental costs associated with large scale deployment.

Risk profiles of various investments will be unique, compounded by consideration of local (national) circumstances. Public funding could be considered to reduce the risk of diversifying to new “emerging” forms of energy production or consumption. However, any approach to public financing

⁶ OECD/ IEA. *World Energy Investment Outlook 2003*. Paris : 2003

should be limited in duration and phased out over time.

Flexible and market based financing mechanisms could facilitate technology deployment

A combination of flexible financing mechanisms will be required to cover the broad and growing range of new investments that are needed. For markets to work efficiently and effectively, prices should give customers a clear basis for their decisions while ensuring optimal resource allocation. In many energy markets, distorted signals are being sent by counter-productive subsidies. ICC believes that the market economy is the best framework for efficient deployment of energy resources. There are some encouraging market based mechanisms which could assist in facilitating technology deployment in synergy with FDI and ODA investments. The current CDM mechanism shows promise, but its restrictions prevent it from supporting, in many cases, the incremental costs of new lower carbon and other technologies, both at a commercial stage, as well as R&D efforts.

Voluntary, international public private funding can play a vital role

Given that meeting national objectives and mandates depends substantially on private sector energy investments, public private partnerships are often a logical choice for investments in infrastructure. In order to accelerate the development and deployment of key technologies, new financing models will be required. Carbon financing will bridge some of the gap, but voluntary, international public private partnerships can play an important role. Examples of this already exist where business and governments have jointly funded R&D efforts.

④ Enabling frameworks

All energy options are important as no one-size-fits-all solution exists

In light of growing energy demand and energy security concerns, all energy options should remain open especially recognizing that R&D can overcome barriers that limit some options today.

Policymakers should avoid choosing “winners” and “losers” in technologies and energy sources.

There is no one-size-fits-all solution, as a broad variety of energy resources and technologies will be required to meet the varying needs of individual countries or markets. Keeping all energy options available will enable every nation to tailor their energy solutions in the most efficient way, in alignment with their respective resource base and strategic development objectives. Whilst policy makers should generally strive for a consistent framework over the typical period of investments (15-30-50 years) policies should take both long term considerations and current realities into account.

Energy challenges call for integrated policies

Energy supply and use is an integral and cross-cutting element of economies and of interconnected global markets. Energy challenges should be addressed through integrated policies reflecting a broad range of issues including: development priorities and needs; social conditions and aspirations; trade rules; environmental policies; the promotion of innovation, technology development and transfer; and energy efficiency. The evolution of energy systems will involve considerable time and expense to alter energy and raw material inputs, operations and products and to develop and introduce technological innovations, as well as to establish the infrastructure to support them.

Energy efficiency needs to be further promoted through the right fiscal and regulatory frameworks

Business supports energy efficiency as a critical component of any comprehensive sustainable energy strategy. Governments should continue to promote and support energy efficiency among producers and consumers of energy as well as educating, regulating and incentivising consumers. Especially for integrated options such as cogeneration, regulatory reform may be required to realize otherwise economic solutions. With the right fiscal and regulatory frameworks, business can work in synergy with public authorities to improve the efficiency of current systems and reduce future demand. While this can make a major contribution to meeting and managing growth in energy demand, diversifying the range of energy supplies and improving access to them is still essential to ensure supply and manage changing markets and costs.

Long-term multi-national and multi-stakeholder cooperation is required to accelerate solutions from R&D

Accelerating energy R&D should be a global priority and with that the need to strengthen and enlarge the supply of well-trained scientists, engineers and technicians. We see an urgent need for multi national collaborative research projects on a diverse range of key energy technologies that will allow step changes in performance that will allow a wider portfolio of energy options. To be successful, these partnerships should reflect the skill sets and resources of each partner, and be developed with a long-term view appropriate to energy investment. Business will continue to play an important role in finding solutions, within its sphere of responsibility and in partnership with other stakeholders, but governments, business and civil society need to partner to leverage resources.

Novel mechanisms should be developed to address financing needs and capacity enhancement for technology deployment

New and innovative partnerships and market mechanisms should be shaped to accelerate near commercial technologies and incentivise technology leaders. Public private partnerships and sectoral based approaches such as the Asia-Pacific Partnership (APP) need to be expanded in key developing countries. CDM (including programmatic CDM) or other post 2012 off-set mechanisms need to be shaped in such a way as to not exclude any technologies that can contribute to the mitigation effort. Key methodologies to support the wide scale roll out of clean coal technologies and other low emitting technologies should be developed.

Integrated policies are critical for a large scale change

To accelerate technology development and deployment, policymakers need to better understand and factor into their decisions the manner in which business takes decisions not only on new investments, but also on where to invest R&D funds. This will promote better planning and predictability, and contribute to synergy between public and private sector decision making. If large scale change is to occur more rapidly, policies need to be considered in an integrated manner. For example, policy and legislation will be required for the timely development of regulations to site facilities and pipelines for the transport of CO₂ to support policy on the development and deployment of CCS technologies. A project-by-project approach will not address larger infrastructure requirements and may delay large scale roll out.

Conclusion

Business has a crucial and important role to play in shaping how energy is developed and utilised today, as well as the future energy options for tomorrow. There are many challenges facing the sector and it will require concerted and collaborative effort on all fronts to change the future energy mix and accelerate the pace of change. Business is willing and able to work together with all stakeholders to find appropriate solutions whilst meeting growing demand for energy.

Policy Statement based on following ICC papers:

- “Energy: A contribution of ICC to CSD 14”, May 2006
- ICC Policy Statement: “Energy security: a world business perspective”, May 2007
- ICC Policy Statement: “Energy efficiency: a world business perspective”, May 2007

The International Chamber of Commerce (ICC)

ICC is the world business organization, a representative body that speaks with authority on behalf of enterprises from all sectors in every part of the world.

The fundamental mission of ICC is to promote trade and investment across frontiers and help business corporations meet the challenges and opportunities of globalization. Its conviction that trade is a powerful force for peace and prosperity dates from the organization's origins early in the last century. The small group of far-sighted business leaders who founded ICC called themselves "the merchants of peace".

ICC has three main activities: rules-setting, dispute resolution and policy. Because its member companies and associations are themselves engaged in international business, ICC has unrivalled authority in making rules that govern the conduct of business across borders. Although these rules are voluntary, they are observed in countless thousands of transactions every day and have become part of the fabric of international trade.

ICC also provides essential services, foremost among them the ICC International Court of Arbitration, the world's leading arbitral institution. Another service is the World Chambers Federation, ICC's worldwide network of chambers of commerce, fostering interaction and exchange of chamber best practice.

Business leaders and experts drawn from the ICC membership establish the business stance on broad issues of trade and investment policy as well as on vital technical and sectoral subjects. These include financial services, information technologies, telecommunications, marketing ethics, the environment, transportation, competition law and intellectual property, among others.

ICC enjoys a close working relationship with the United Nations and other intergovernmental organizations, including the World Trade Organization and the G8.

ICC was founded in 1919. Today it groups hundreds of thousands of member companies and associations from over 130 countries. National committees work with their members to address the concerns of business in their countries and convey to their governments the business views formulated by ICC.



International Chamber of Commerce

The world business organization

Policy and Business Practices

38 Cours Albert 1er, 75008 Paris, France

Tel +33 (0)1 49 53 28 28 Fax +33 (0)1 49 53 28 59

E-mail icc@iccwbo.org Website www.iccwbo.org