



The Voice of OECD Business

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Addressing global challenges through innovation:

The importance of competitiveness, partnerships and international cooperation

A BIAC perspective

Introduction

The Business and Industry Advisory Committee to the OECD (BIAC) thanks Keidanren for the opportunity to participate in the G8 Business Summit. This paper summarises our views on addressing global challenges through innovation, including our suggestions as to how the OECD could usefully contribute to the G8 process. It is BIAC's hope that the G8 leaders will call upon governments and the OECD to develop strategies that encourage innovation in response to global challenges and to seek innovative solutions that take advantage of the power of the marketplace, enhance competitiveness and use global partnerships and international collaboration to ensure effectiveness.

Addressing global challenges effectively and innovatively

The scale and urgency of global challenges related to sustainable development, energy security, poverty alleviation and health have become increasingly apparent. Solutions to these challenges can only be found in the widespread application of innovative approaches, derived from better understanding and effective scientific and technological breakthroughs linked to social needs and driven by market forces. Governments around the world can expect most rapid progress when there are framework conditions in place that encourage these linkages and reflect the new global dimensions of science and innovation.

As an illustration, with climate change high on the policy agenda of countries within and beyond OECD, innovation in energy technology is receiving major attention as a way to address concerns about climate change and the security of affordable, reliable energy supplies. Considering rapidly-rising energy consumption and accompanying greenhouse gas emissions worldwide, it will not be possible to decouple emissions from economic growth unless the best available technologies are implemented widely, cognizant of possibilities for further improvement and the long lifetimes of capital infrastructures.

Likewise, recognising the challenges posed to effective and broadly available health care, in developing as well as developed countries, and the unsustainable expenditure trends in many OECD countries, innovation will be essential to increase the efficiency of the system, achieve overall better health care outcomes and provide effective solutions to the needs of poorer societies.

Governments, civil society and the business community each have key roles to play in developing these solutions. Without widespread trust in the approach, the public's acceptance and adoption of innovative solutions is likely to be limited. Companies provide much of the investment, skills and resources required to develop and implement solutions. By seeking solutions that work with the marketplace, governments can hope to reflect societal demand and most rapid learning. High-quality education and coherent, credible regulatory systems are the necessary starting point for achieving the creative workforces and informed customers who can deliver and demand these solutions.

A key role for the OECD

Innovation currently features high on the policy agenda of both BIAC and the OECD. The OECD identified innovation as one of its key priorities going forward, exemplified by the launch of a horizontal Innovation Strategy that was endorsed by the May 2007 OECD Council Ministerial. In June 2007, the OECD mandate was reinforced by the G8 Summit in Heiligendamm, where heads of state endorsed a new role for the OECD in the area of protecting and promoting innovation and called upon the OECD to help strengthen international research cooperation. The G8 Heiligendamm process was launched, hosted by the OECD, addressing innovation and its protection as one of its four key pillars of action.

In parallel, the OECD has opened accession talks with five countries and is pursuing enhanced engagement with five major economies, including China and India. BIAC welcomes these developments and believes that accession and enhanced engagement discussions provide an excellent opportunity to raise the innovation profile when exploring the priorities of key non-member countries. We hope that, as G8 leaders agree on a forward-looking agenda designed to enhance competitiveness, they will recognise the important role that the OECD can play to support these efforts, both in G8 countries and beyond, and empower OECD to work accordingly.

The fundamental importance of innovation

Innovation is seen as one of the key drivers for productivity and growth in knowledge-based societies, and innovation performance as a crucial determinant of continued competitiveness. In light of some evidence that productivity growth is losing momentum in many OECD countries despite the great potential offered by globalisation and new technologies, building the international foundations that enhance innovation – non-technological as well as technological – is timely and indispensable.

Today, our understanding of innovation has moved beyond the traditional notions of R&D and material intellectual property. Innovation can occur in forms that are not visible using traditional metrics. The optimisation of innovation is no longer conducive to methods which separate supply from demand, so connections across the whole of government are important. Gaining full benefit from innovation depends on providing effective and consistent policies across a wide

range of public affairs. But a sound macro-economic framework as well as enabling competition, tax and regulatory policies, coupled with high quality intellectual property rights and a predictable system for their enforcement, remain prerequisites.

As economies develop new mixes of skills and resources required within the changing global situation, the role played by intellectual assets and property rights, human capital, research and development, information technologies, organisational procedures, and intangibles such as brand value, reputation and firm-specific knowledge, continue to evolve as foundations for value creation.

Fostering the roles of the private sector and society through policy coherence

Policy coordination is essential. Only a comprehensive and multi-disciplinary approach will effectively strengthen innovation, thus increasing competitiveness and laying the foundation for sustainable economic growth. Purely mandatory approaches are unlikely to be effective in achieving the desired goals. Recognising that businesses and customers are main drivers for innovation, it is essential to obtain the conditions whereby firms can justify the risks of investing in breakthrough innovations. Such innovations require support and action across ministries at national and sub-national levels as well as international cooperation between business, governments, research bodies and other organisations and the public at large.

The engagement of society, both as suppliers and consumers of innovative solutions, depends in part upon the development of human talent through top-quality education at all levels from primary school to higher education and beyond, and on achieving effective public debate. The education system must be challenged to provide the right talent for the future.

Governments can help by working to improve the effectiveness of public sector activities such as basic research, by setting sound, predictable and enabling policy frameworks for the market system to work, and by acting as responsible, demanding customers in their use of public procurement. OECD can help governments to develop effective cross-cutting approaches, which avoid duplication and ensure policy coherence. The challenge is that approaches that may have worked well in the past now need to be adapted to respond in a forward-looking manner to today's requirements. This requires comprehensive efforts to understand, assess and promote innovation within the framework of an increasingly complex global situation.

Globally-connected, increasingly open approaches to innovation

The changing nature of innovation also needs to be well understood. Otherwise, attempts to resolve the major global challenges concerning the G8 are unlikely to be effective. BIAC believes that the OECD has a major role to play in this area. There has been a shift away from well-defined linear processes, in which universities and companies developed and translated knowledge to create products, towards complex webs of relationships, in which public and private actors compete and cooperate among and between each other. The changes are a consequence of complexity in the global economy: of science, technology, products and markets. The balance between competition and cooperation has changed and the fruits of research are often shared among firms.

We have witnessed increased internationalisation of public- and private-sector research and development and of innovation more broadly. Firms increasingly rely on knowledge developed from global centres of expertise. New technologies, including information and communication technologies, have enabled new ways of cooperation to emerge, and led to the increased specialisation that we see today. Multilateral, regional and bilateral trade and investment liberalisation, which keeps pace with technological and organisational change, provides the channels for innovation to be widely applied. The scale and extent of foreign direct investment are reflections of the qualities of these channels.

Human resources and scientific cooperation are also globalised. This raises important questions for policy makers whose interests are largely still national in scope. While addressing local fears about the consequences of outsourcing and the country's role as compared to its bigger competitors, it is essential that policy responses also take into account the global nature of the innovation process, thereby helping countries to obtain the innovation ecologies that can maintain or enhance attractiveness for investments and capitalise upon specific local strengths and priorities. This requires good understanding of the mechanisms that underpin effective Open Innovation and international scientific cooperation, including, for example, the continued need for effective intellectual property protection.

The importance of Asian economies

Asia is a specific focus of this year's G8 business summit. Major non-member economies, including China and India, are becoming increasingly involved in global developments towards knowledge-based growth. While presenting major opportunities, this also challenges OECD economies in the process. An increased understanding of the challenges and opportunities is thus essential. We therefore welcome increased cooperation with China, India and other major economies in the framework of OECD discussions on enlargement and enhanced engagement as well as the Heiligendamm process. OECD's groundbreaking recent analysis of China's national innovation system was an important step towards cooperation with Asian countries. We encourage similar efforts with regard to India and other major economies.

While becoming increasingly prominent in the global knowledge-based economy, these countries still require major changes to become fully innovation-oriented. Such changes will include coherent policy strategies at the structural and institutional levels, sound processes for decision-making and implementation, and a transparent regulatory environment with minimum arbitrariness or administrative inefficiency.

The trend towards more global and open forms of innovation is strong and, we believe, permanent. There is common interest in identifying and implementing those policy approaches that can benefit local economies and encourage international cooperation in order to deliver sustainable economic development on a global scale. In emerging economies, specific challenges that need to be addressed relate to effective and high-quality approaches for improving education and vocational training, enhancing cooperation between the private sector and the education system, protecting intellectual property and building upon international standards.

We see recent developments in the area of enhanced engagement and the Heiligendamm process as a significant opportunity to strengthen cooperation with major Asian countries and

other emerging economies. We hope that further efforts in this area will be recognised and encouraged by this year's G8 summit.

Strengthening cooperation

Cooperation needs to be further strengthened on many fronts: between companies, between public and private actors, and between OECD and non-OECD countries, which include major emerging economies. Increased cooperation will allow us to use the potential of a broader range of experts and knowledge, share costs, and benefit from the latest scientific developments. Cooperation will thus be crucial to speed up the innovation process and address global challenges more effectively and in a truly global manner.

Moreover, it needs to be ensured that business is aware of developments in university research and can use them in a way that is of mutual benefit. The barriers that exist, including unrealistic expectations, lack of mobility of human resources, management methods and difficulties to work within this new paradigm need to be addressed, and the players need to learn to cooperate effectively. If possible, industry should be involved in the management of relevant R&D programmes. Public-private partnerships can play a major role in promoting cooperation and in building knowledge infrastructure.

There is a growing need for international cooperation to leverage national efforts and avoid duplication in areas that are of broad-based concern. In this context, the OECD Global Science Forum makes an important contribution to fostering international cooperation in the global research infrastructure, an issue which was duly recognised at last year's G8 Summit in Heiligendamm. At the same time, the International Energy Agency (IEA) plays a key role by fostering cooperation in the area of energy technology and energy efficiency, which BIAC greatly supports.

It is our hope that these efforts will be duly highlighted and further supported by heads of state at the 2008 summit. Such challenges are generally too large and too complex to be solved alone. Approaches based on cooperation and partnership are necessary, and should be encouraged as tools for delivering the desired outcomes in a cost-effective and timely fashion.

Concluding remarks

BIAC welcomes the focus on innovation at the G8 Business Summit. Gaining full benefits of innovation requires an effective and efficient framework across a wide range of policy areas, calling for an integrated approach and support across ministries as well as international cooperation between business, governments and society. We believe that the OECD can play a major role in this area and make a constructive contribution to the G8 process, including in the following areas:

- Developing the appropriate indicators, statistics and empirical evidence which reflect the new dimensions of the innovation process, thus helping policy makers base their decisions on up-to-date information.
- Helping countries respond to new dimensions of increasingly global innovation and ensure that policies reflect the changing nature of innovation processes, by documenting these processes at the micro and macro levels and providing solid conceptual frameworks for understanding what is happening.

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- Providing a platform for increased international cooperation in science, technology and innovation, both among and between public and private entities, and include major non-member economies for the mutual benefit of all.
 - Identifying ways of using innovation to address major global challenges.
 - Reinforcing efforts to help governments combat global counterfeiting and piracy.
 - Enabling governments to develop the strong political leadership required to implement reforms that boost innovation.

Such activities have the potential to make an important contribution to the G8 process as well as towards increasing cooperation between OECD countries and major emerging economies. BIAC stands ready to partner with the Organisation to work towards the objective of creating a favourable innovation environment in increasingly globalising knowledge economies. We call upon G8 leaders to help demonstrate that, via sufficient public communication and education, science and technology are important to everyone. We also encourage national governments and G8 leaders to cooperate closely with each other and with other governments in order to maximise the mutual benefits to be gained from increased global innovation.