

**OECD EXPANSION AND THE GLOBAL IMPORTANCE
OF ITS WORK ON
FREEDOM OF INVESTMENT, CLIMATE CHANGE, AND INNOVATION**

Discussion Paper for the Consultation with the OECD Liaison Committee

7 DECEMBER 2007

BIAC is pleased to submit this discussion paper to the 2007 Liaison Committee Meeting with Representatives of the Business and Industry Advisory Committee to the OECD.

BIAC appreciates this opportunity to engage in discussion with OECD Ambassadors on this paper's three areas of focus: Investment, Climate Change, and Innovation.

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EXECUTIVE SUMMARY

The strength of the OECD can be seen by its leadership on policy issues, three of which are the focus areas for BIAC's Consultation with the OECD Liaison Committee – Freedom of Investment, Climate Change, and Innovation. These topics are of particular interest today because of their global significance. They are also key areas relating to the OECD's Enlargement and Enhanced Engagement with five major emerging economies.

Promoting freedom of investment continues to be a top priority for BIAC and should be for the OECD. Business and the countries in which we operate benefit enormously from cross-border investment and what it brings in terms of new capital, technology transfer, management skills and innovative business practices. The leadership of the OECD has been vital to open markets to foreign investment. There is however, a worrying trend in many countries pulling in the other direction. Developments in 2007 confirm that matters have changed with respect to cross-border investment.

With this submission we provide our assessment of recent policy developments and offer suggestions regarding the substantive of the next phase of OECD's work programme on freedom of investment. This includes BIAC thoughts on questions and issues that arise from the emergence of state-sponsored foreign investors in particular sovereign wealth funds. BIAC appreciates the OECD's commendable work on freedom of investment so far. We believe that the OECD must now become more visible and vocal in warning about the potential dangers of tightening procedures applied to foreign investment and in promoting more informed policy discussions. These discussions must not any longer be confined to the technical experts only but the organisation must become more involved in the public debates held in capitals. High level advocacy efforts should start now rather than later given that in many countries policy discussions on tightening foreign investment rules are well underway. If the OECD does not promote its commendable technical work more effectively we face the real risk that this work will not be noticed by policy decision makers and that more countries will tighten rules on foreign investors to the disadvantage of the global economy.

The second part of the paper focuses on climate change, which is one of the most prominent themes in modern international political discourse and has made its way into discussions and negotiations at the highest levels. Addressing climate change will require substantial efforts and policy development over many decades and must be responsive to evolving scientific and technical understanding as well as experience with policies.

By fostering an understanding of the choices available and the environmental, economic and social consequences these choices will bring to bear on both the global and national scale, the OECD and IEA can help in the creation of an efficient and effective policy framework to help address climate change. Improving energy efficiency and fostering innovation and technology to address climate change must be a top priority for policy makers and benefits from international dialogue.

The third chapter of our paper discusses innovation, which is the central force creating 21st century knowledge-based and globally connected societies and is an essential prerequisite for sustainable development. Many changes are taking place that affect the processes and sites of

innovation, the balance between competition and co-operation as instruments for progress, and national and individual expectations of growth within the local and global economies. Adequate indicators based on adequate data are important to reflect these changes.

In particular, the BIAC paper will look at four closely-related factors which are central to economic growth and social development of knowledge-based societies operating within the global networks and trade flows connecting people and businesses: continued innovation; good education on a lifelong basis; robust property rights; and, the effective combination of competition and co-operation. It is essential to incorporate these changes into our models of how knowledge-based economies function if we are to understand the framework conditions that will ensure greatest effectiveness.

RECOMMENDATIONS TO AMBASSADORS:

- The OECD needs to be seen in a leadership position in promoting open markets for foreign investment. We recommend that Ambassadors support the OECD leadership in moving the OECD into a more visible and vocal promoter of open policies towards foreign investment, inform their capitals pro-actively about any intermediate results of OECD work on freedom of investment as they emerge, and discuss the interim results of the work on freedom for investment at the next Ministerial Council Meeting.
- To address the challenges brought on by climate change, BIAC encourages policy makers to promote stable and transparent regulatory frameworks with due regard for consequences of excessively rapid changes and fluctuations; cost-effective approaches that minimize trade barriers; clarity on the regulatory process; a focus on innovation and energy efficiency; opportunities for business to contribute by providing practical input and views; and increased co-operation with non-member countries. The OECD and IEA are central to understanding both current climate change policies and post-2012 rules and actions.
- BIAC encourages Ambassadors to actively support horizontal and cross-cutting work on innovation. Work by the OECD in this area can shed further light on factors influencing the innovation performance of nations, assist in identifying the pre-requisites for high-quality systems to effectively protect property rights in knowledge-based economies, look at the effective combination of competition and co-operation, and monitor and assess trends in education and institutional roles. BIAC recommends that these matters also form an integral part of OECD's engagement with key non-member economies.

FREEDOM OF INVESTMENT

INTRODUCTION

1. OECD business and the countries in which we operate benefit enormously from cross-border investment and what it brings in terms of new capital, technology transfer, management skills and innovative business practices. The leadership of the OECD has been vital to open markets to foreign investment, to commit governments to treat foreign investors fairly, and on a non-discriminatory basis by promoting adherence to OECD investment instruments¹.
2. There is however, a worrying trend pulling in the other direction. Recent developments have shown that matters have changed with respect to cross-border investment. At the December 2006 Consultation with the Liaison Committee, BIAC expressed concern over increasing government intervention in cross-border investment which has the potential to slow down investment flows and through this harm our economies. We called on the OECD to take a leading role in promoting the benefits of foreign investment and in fighting against all forms of protectionism that restrict cross border investment and also trade. BIAC provided a number of concrete suggestions as to how the OECD could effectively promote freedom of investment through fact-based analysis, development of policy guidance and through high-level public outreach.
3. Promoting freedom of investment continues to be a top priority for BIAC and should be for the OECD. In June, the G8 leaders confirmed their commitment “to minimise any national restrictions on foreign investment”.² The political leaders noted that “... any such restrictions should apply to very limited cases which primarily concern national security. The general principles to be followed in such cases are non-discrimination, transparency and predictability. In any case, restrictive measures should not exceed the necessary scope, intensity and duration. Applicable treaties relating to investment remain unaffected.” The G8 leaders encouraged “... the OECD to continue its work on these issues ...” and to help developing a “common understanding of transparency principles for market-driven cross border investment of both private and state-owned enterprises.” BIAC supports this process.
4. With this submission we want to draw the OECD’s attention to our assessment of recent policy developments related to freedom of investment. This includes BIAC thoughts on the emergence of state-sponsored foreign investors in particular sovereign wealth funds. Further, we will provide suggestions for the next phase of OECD’s work programme on freedom of investment. We would hope that this submission makes it clear that OECD business community is very concerned that the trend towards more restrictive government approaches has continued to grow throughout 2007 and that it may even gain momentum as countries become increasingly wary of welcoming state-sponsored foreign investors. BIAC urges the OECD to work swiftly towards policy guidance on how to achieve the legitimate policy objective of protecting national security in a way that keeps markets as open to foreign investment as possible.

¹ OECD Declaration on International Investment and Multinational Enterprises and its annexes; Codes of Liberalisation of Capital Movements and of Current Invisible Operations; Council Decisions on Conflicting Requirements, National Treatment, Guidelines for Multinational Enterprises, and International Investment incentives and Disincentives.

² Growth and Responsibility in the World Economy, Paragraph 11, G8 Summit Declaration, 7 June 2007

DEVELOPMENTS IN 2007

More countries are tightening rules

5. In April the OECD completed most of the first part of its programme entitled, “Freedom for Investment”. BIAC highly appreciates the good quality of the thorough stocktaking exercise that was conducted to shed more light on governments’ approaches towards regulating cross-border investment. We find it important that the Investment Committee also agreed on guiding principles (regulatory proportionality, predictability, and accountability) for sound investment policies. Further, BIAC was very pleased that the good OECD work was recognized by the G8 and that political leaders expressed strong support for continuing its work focusing more on the normative policy implications arising from its analysis.
6. However, the OECD business community is very concerned that despite the commendable OECD efforts to advance the discussion on freedom for investment, the trend towards tighter rules on foreign investment continues. Action by some countries, for example, France, predated the BIAC discussion with the Liaison Committee in last December. Since then, several countries tightened regulations or started to consider doing this. These countries include Canada, Germany, Japan, Korea, United States, China, Indonesia and Russia as well as the European Union. The annex to the freedom of investment part of this paper provides more information about recent developments in individual countries. The list of examples provided in the annex covers only the period of the past six months. It is neither complete in terms of country coverage nor does it mention all the actions taken and plans underway in the countries that are mentioned. BIAC finds it particularly disconcerting that the trend towards tighter rules and procedures applied to foreign investment, which previously re-emerged in economies where government support for open trade and investment policies has always been rather tacit, spilled over to countries that once used to be leading examples in promoting open markets and reaping the benefits from foreign investment.
7. The tightening of rules is driven by different motivations. Its main purpose is not always to protect domestic industries from international competition. Legitimate national security concerns may play an important role. However, the impact that the tightening of rules on foreign investment may have on cross-border investment, growth and job creation is usually negative regardless of the reasons why the tighter rules were established. BIAC believes that in some cases where rules were tightened for national security reasons, governments had not seriously explored all possible alternative measures. The OECD has an important role to play in encouraging countries to seek ways to protect legitimate national security concerns without reverting to tighter rules and procedures on investment. Where, after careful consideration of all alternative policy options, the tightening of investment rules is deemed necessary, the OECD must advise countries on how to address the issues at stake in ways that are least restrictive and allow countries to benefit as much as possible from international investment.

Increasing focus on state-sponsored investors

8. In the past months increased activity by foreign investors that are state-sponsored has further fuelled discussions on how foreign investment may impact on governments’ abilities to ensure national security and how to restrict foreign investor activity in sectors perceived to be of strategic importance.
9. Many policy makers are uncomfortable about the role that foreign governments play in cross-border investment deals. For several years governments have been concerned about increasing cross-border activities by state-owned and/or state-controlled foreign investors. More recently, **Sovereign Wealth Funds (SWFs)** have received increased attention by policy makers and concern about their activities has been a driver behind the recent tightening of foreign investment rules. These funds represent investment pools which differ in several respects including purpose, size, structure, investment policies, transparency and

accountability. What SWFs have in common is that they are backed by governments in- and outside the OECD which channel money into the funds that is usually earned through exports of natural resources (e.g. oil and gas) or foreign exchange reserves built up to keep their currencies cheap.

10. SWFs have been around for decades and until recently they did not receive much attention by policy makers in OECD countries. This has changed because of the growing number and size of SWFs. Before 2000, few sovereign funds existed and they had rather limited assets under management. SWFs mushroomed in recent years and Deutsche Bank Research estimates that today they have about US\$ 3.1 trillion under management. This is twice the size of the global hedge fund industry³. Within the next decade, assets under SWFs management may soar further to US\$ ten trillion⁴ as foreign exchange reserves are expected to continue to grow. The influx of huge amounts of foreign exchange compels the receiving governments to reflect about their investment strategies. Investing a part of their foreign exchange in overseas businesses is likely to be an important element of diversification and risk-return optimisation strategies.
11. For OECD economies there are opportunities as well as potential challenges associated with foreign investment from SWFs. For their home countries SWFs perform important functions that may include shielding the economy against volatility in commodity markets of critical value for the country, diversifying national wealth, optimising governments' risk-return profile on national wealth, and increasing transparency as well as accountability by enhancing scrutiny of public finances.⁵ For host countries great opportunities emerge as SWFs' portfolio and direct investment offers additional capital that helps OECD businesses to thrive, boost investment and create jobs. The financial sector, for example, clearly benefits from the extra injection of cash that is coming mostly from SWFs from outside OECD. Since early 2006, SWFs have invested US\$ 35 billion in strategic stakes in financial organisations, with US\$26 billion coming in the last six months alone⁶. It is also important to note that many OECD companies from other industries have had very positive experiences with sovereign funds that have shown themselves to be reliable and long-term oriented investors.
12. As to the potential challenges, issues have been raised which include the following:
 - Financial stability: Questions have been about the potential impact those SWFs and other emerging investment vehicles such as hedge funds and private equity may have on the stability of financial markets.
 - Political vs. commercial objectives: There is a risk that some sovereign funds may not only be driven by commercial but also by political considerations. Foreign investment of such SWFs may represent a threat to host countries' national security objectives as well as to the protection of assets and know-how that are perceived to be of strategic interest.
 - Unfair competition: SWFs draw on budget revenues and official reserves, i.e. their funds are neither refinanced at market rates nor do they originate from market activities. This may represent an unfair distortion of the level playing field private and state-controlled market participants if the special role of SWFs cannot fully be justified by services which they provide (e.g. stabilisation of government revenues) and which would be provided by markets without SWFs.

³ Deutsche Bank Research, September 10, 2007: Sovereign wealth funds – state investments on the rise

⁴ ibid

⁵ ibid

⁶ The Economist, September 27, 2007: Sovereign Wealth Funds – The New Rothschilds

- Re-nationalisation: Some have raised the question whether the acquisition of private companies by state-owned funds will result in a creeping re-nationalisation of parts of the economies which may squander some of the benefits derived from previous privatisations of state-controlled industries.

13. Most of these potential challenges and issues have also raised policy makers' concern about the cross-border activities by state-sponsored investors other than SWFs, in particular state-owned and state controlled companies.

BUSINESS EXPECTATIONS FOR OECD ACTION

14. In the past two decades the global economy has witnessed significant reduction of the barriers to foreign investment. Governments have welcomed foreign investors to bring their capital, technology, and management expertise and rising cross-border investment has positively contributed to economic growth, job creation and rising living standards. The positive trend of opening markets to foreign investors has come to a halt with more and more economies heading into the opposite direction by tightening rules on foreign investors. For business it is critical that the benefits of open markets for cross-border investments be safeguarded by a strong commitment by governments, in words and in deeds, to avoid regulation that is either unnecessary to ensure legitimate national security objectives or even outright protectionist.

15. The OECD must take **stronger leadership** in keeping markets open for investment. The official recognition that OECD work in several areas including investment received by G8 leaders at the Heiligendamm Summit cannot mask the fact that the OECD continues to be hardly heard in the ongoing policy debates about the tensions between freedom of investment and tightening of rules. In BIAC's view the OECD needs to be more visible and vocal in warning about the potential dangers of new barriers to foreign investment and in promoting more informed policy discussions. The discussions must not be confined to the technical experts in the OECD Investment Committee but the organisation must become involved in the public debates held in capitals.

16. Business encourages the OECD leadership to advocate open investment policies in an equally visible way as the WTO leadership advocates open trade regimes. BIAC would like to stress the business community **sense of urgency**. High level advocacy efforts should start now rather than later given that in many countries policy discussions on tightening foreign investment rules are well underway. Yet, the OECD does not plan to conclude its work on freedom of investment before March 2009. We suggest that political leaders in OECD and non-OECD countries that are considering the tightening of rules on foreign investors be proactively informed by the OECD that the issues at stake are more complex than they may appear at first glance. They also need to be informed that the OECD is working towards policy guidance that may help to achieve certain policy objectives while at the same time benefiting from open markets. Political leaders should be encouraged to support their country's active involvement in this OECD initiative. If the OECD does not promote its commendable technical work more proactively we face the real risk that this work will not be noticed by policy decision makers and that more countries will tighten rules on foreign investors to the disadvantage of the global economy.

17. As to the substance of the work programme on freedom for investment, the OECD now needs to move from its stocktaking of governments' approaches towards regulating cross-border investment to the more challenging task of identifying and spelling out the policy implications. BIAC recommends the OECD to focus on the following tasks:

- Best practices: The OECD needs to identify best practices regarding procedural aspects of investment regulation which would be based on the principles of regulatory proportionality, transparency and predictability, and accountability. These best practices must indicate how to craft foreign investment procedures that are fully consistent with the

word and the spirit of the existing OECD investment instruments and actions of OECD governments over the years to open markets for foreign investment.

- Alternatives to investment restrictions: The OECD needs to highlight that in many cases the protection of national security does not provide a convincing justification for foreign investment restrictions as: a) it is often unclear how and to which extent the individual investment at stake poses a genuine threat to national security, and because: b) there are often other instruments that are far better suited to ensure protection of national security than foreign investment restrictions. In addition, foreign investment offers benefits to national security which should be discussed at the OECD level.
- OECD country peer reviews: BIAC sees a need for country specific peer reviews which assess overall policy approaches towards foreign investment which individual countries pursue. At the present time, the OECD conducts country specific investment policy reviews only on non-member countries. In our view, the credibility and potential impact of the organisation's promoting of freedom of investment would be enhanced through country specific peer reviews that focus on OECD members investment policies.

18. BIAC believes that the OECD has an additional important role to play in advancing the international policy debate on **state-sponsored foreign investors**. Relatively little is known about most SWFs and about other state-sponsored investors. Thus, the increased concern about this category of foreign investors has the potential to prompt hastily prepared and rather ill-conceived new regulation that may on the one hand limit inward investment and the benefits derived from it while on the other it may fail to effectively address the real issues that state-sponsored foreign investors may pose.

19. Business calls on the OECD to provide, through fact based analyses and the sharing of policy experiences, a more fertile ground for informed discussions. The OECD must help governments to identify and effectively address any real issues that state-sponsored foreign investors may pose while at the same time encourage them to keep their markets as open as possible for international investment. We suggest that future OECD work includes the following topics and questions:

- Who are the relevant state-sponsored foreign investors? What are their structures, objectives and business models? How important will they likely be in the future?
- What is the potential positive impact of state-sponsored foreign investment activities on the host countries?
- How relevant are concerns of host countries related to financial market stability, national security, the protection of strategic assets/know-how, unfair competition and creeping re-nationalisation?
- How can home countries of foreign investors alleviate existing concerns in OECD countries about their state-sponsored foreign investors (e.g. by increasing transparency of state sponsored investors and by keeping their own markets open to foreign investment)?
- How can host countries ensure national security and other essential interests in the least restrictive way (e.g. by using non-discriminatory competition and financial market regulation)?

20. The effective involvement of non-OECD countries into the discussions is important not only but in particular with regard to the issue of state-sponsored investors as non-member economies are home to most of the SWFs and other state-controlled investors that many OECD governments are concerned about.

21. BIAC would like to emphasise the importance of coherence in the policy advice developed by different organisations. For example, we understand that the International Monetary Fund (IMF) plans to promote transparency and accountability of SWFs and we urge the OECD to co-

ordinate closely with the IMF in order to ensure that each organisation focuses on what it can do best and that the policy messages developed are fully consistent.

22. SWFs are the type of state-sponsored foreign investment that may have received most of investment policy maker's attention of late. However, concern about cross-border activities by state-owned companies also continues to be a key factor behind the tightening of foreign investment procedures. Not all but many of the questions raised in paragraph 18 are also relevant in the context of foreign investment by state-owned/controlled companies and need to be discussed by the OECD.

BIAC RECOMMENDATIONS TO OECD AMBASSADORS

23. BIAC would like to recommend the following to the Ambassadors to the OECD:

- The OECD needs to be seen in a leadership position in promoting open markets for foreign investment. We recommend that Ambassadors support the OECD leadership in moving the OECD into a more visible and vocal promoter of open policies towards foreign investment.
- In particular countries where the debate about tightening investment procedures is ongoing, there needs to be greater encouragement to keep markets as open as possible. We recommend that Ambassadors inform their capitals pro-actively about any intermediate results of OECD work on freedom of investment as they emerge.
- Given that many OECD countries have tightened foreign investment procedures or are considering doing so, we believe that it is urgent that the merits of keeping markets open for investment be discussed at the highest political level in the OECD. We recommend that interim results of the program on freedom of investment be discussed at the next Ministerial Council Meeting.

Annex: Freedom of investment – Recent developments in selected countries⁷

- Canada: In July, a Competition Review Panel was established to review the Competition Act and the Investment Canada act, including the treatment of state-owned enterprises and the possibility of a national security clause.
- European Union: In July, the EU Commission launched an inquiry into whether sovereign wealth funds threaten the single market. In August, a confidential Commission paper was leaked, which suggested restricting foreign companies' access to the EU's energy sector.
- Germany: In June, Government officials aired plans to establish a review body which could block foreign direct investment deemed to be a threat to national security. In July, Chancellor Merkel called for common EU approaches for vetting corporate acquisitions by foreign state-controlled investors.
- Japan: In September, the Government toughened regulations aimed at preventing foreign investors from taking over Japanese firms that possess advanced technologies that could be used for weapons (including machine tools and batteries).
- Korea: The government is preparing to introduce a presidential decree that could place foreign investors under greater scrutiny. Plans include the establishment of a committee that would determine whether foreign acquisitions threatened national security⁸.
- United States: In June, the US tightened its investigation procedures under the CFIUS process.
- China: In August, the anti-monopoly law was passed which confirms that cross-border M&A must undergo national security reviews. Guidance on how the national security review of foreign acquisitions of domestic enterprises will be applied in practice has not yet been developed⁹.
- Indonesia: In July, the negative investment list of local industries to which foreign investment is partially or wholly restricted was expanded to include 338 business sectors up from 83 previously.
- Russia: In July, a draft law was presented to the state Duma which introduces a list of 39 strategic sectors in which foreign investment will be closely controlled.

⁷ Where not stated otherwise these examples are taken from the OECD paper (DAF/INV/WD(2007)14/REV1) which covers developments until the end of September. The information provided in the OECD paper is based on official as well as unofficial sources.

⁸ Source: Financial Times, 23.10.07.

⁹ Source: Clifford Chance, Client Briefing August 2007: "Chinese antitrust: Let the games begin"

CREATING EFFECTIVE POLICIES FOR ADDRESSING CLIMATE CHANGE

INTRODUCTION

24. Climate change is one of the most prominent themes in modern international political discourse and has made its way into discussions and negotiations at the highest levels. The G8 group of industrialised countries made climate change one of the top priorities in 2007, agreeing to take strong action. The European Union is looking at emissions cuts beyond those required in the 1997 Kyoto Protocol. The September 2007 APEC meeting highlighted the importance of addressing economic growth, energy security and climate change as fundamental and interlinked challenges. Shortly afterwards, the United States organised a meeting on climate change and energy security to share ideas among the largest greenhouse gas emitting nations in promoting climate change mitigation. Much of the discussion is driven by the imminent negotiations for an international agreement to replace or extend the Kyoto Protocol. The UN Conference and Meeting of Parties (COP-MOP 3), which is being held in Bali 3-14 December, will be a critical meeting for post-2012 discussions.
25. The problem is one of the most multi-faceted challenges in history, and as such bears immense consequences on modern economies. Nearly every economic sector, from energy to agriculture and finance, affects and is affected by the environmental, economic and social dimensions of the problem and the policies for managing it. The OECD's constituency represents the most developed nations in the world, each with massive individual stakes in the design of such a regime. In the view of BIAC, the OECD and its sister organisation, the International Energy Agency (IEA), are central institutions to understanding the practical policy realities and opportunities of both current climate actions within OECD nations and post-2012 rules and actions in developed and, perhaps, developing countries. More broadly, OECD and IEA have provided a solid and rigorous foundation in environmental and energy policy, and the realities and opportunities of horizontal integration of sustainable development. The OECD's Nuclear Energy Agency promotes international co-operation on nuclear energy, an option which is given increased attention in some countries in the context of the climate change debate. Business is committed to tackling climate change and looks forward to contributing constructively to intergovernmental discussions in this area.

TAKING A LONG-TERM VIEW

26. Climate change is not a problem that will disappear with a few policy changes, as it is by its very nature a long-term issue. Mitigation will require a well-informed and thoroughly designed long-term policy response to create effective and lasting change. In this context, business welcomes the important work on environmental and energy outlooks by both the OECD and the IEA, which is indispensable in the formation of long-term policy frameworks. Solid and complete data and their thorough analysis is essential to the formulation of a longer-term perspective taking into account resource availability, the potential of modern technology, uncertainties, policy linkages and alternatives.
27. The long-term view is particularly important in establishing a favourable framework for investments in the energy sector, where equipment lifetimes can range between 30 and 50 years. Business therefore requires a stable long-term framework where investment decisions can be made with a high degree of certainty. The challenges are considerable. The IEA estimates over \$20 trillion in investment through 2030 in energy and related infrastructure. The planning basis for business development, investment decisions, and cost-recovery may be profoundly affected by governmental commitments and changes in the international framework in the longer term. Likewise, the issue of adaptation will be a critical part of the international

policy response, and underlines the importance of taking a long-term view. The economics of adaptation should therefore be given due attention in future work by the OECD.

28. Uncertainty about longer-term policy and markets are already having an impact on important decisions faced now to ensure adequate and affordable energy supply in coming years. Differing policy regimes affect national economic competitiveness and have the potential to exacerbate tensions in world trade. Consequently, efforts should be made to develop co-operative, mutually reinforcing frameworks and markets, while allowing credit for early action where possible. At the same time, “one size fits all” policies would be unable to take into account differing national situations, such as different economic, industrial and energy structures. Co-operation is especially important to establish a flexible framework that encourages broad participation. We look to the OECD and IEA to take a balanced, long-term view and to continue the dialogue with business on how to find synergies between the need for addressing climate change with broad participation and a stable and affordable energy supply.

PROMOTING GLOBAL DIALOGUE ON CLIMATE CHANGE

29. Global problems require global solutions. Climate change is a problem that will affect everyone on the planet, and thus everyone is a stakeholder. In order to effectively abate the negative consequences of the problem, the OECD should continue to foster the engagement of key non-member countries in the resolution. BIAC believes that environmental issues, including climate change, should therefore be an integral part of the discussions the OECD is having with key non-member countries in the context of enlargement and enhanced engagement.
30. Even in a framework where all OECD countries would reduce their GHGs to a minimum, the concentrations of GHGs in the atmosphere will climb to increasingly dangerous levels due to increases in non-OECD countries, which will account for a large majority of the rise in global CO₂ emissions between now and 2030. Improving the emissions performance of all major emitters is thus a crucial factor in alleviating the looming issue of global climate change. Future work should seek to understand the tradeoffs between poverty reduction, adaptation and mitigation policy approaches, and what mix of these policies would be most appropriate. Multinational companies that are active in both OECD and non-OECD countries also have an important role to play with regard to the spread of technologies and environmental management practices to non-OECD countries.
31. Business applauds the OECD’s efforts in trying to promote increased dialogue with key non-member countries, of which environmental issues and climate change should be an integral part. The publication of the 2007 OECD Environmental Performance Review of China was an important step in that direction. The report lists China’s contributions to addressing key environmental challenges and provides recommendations, including the preparation of a coherent national policy and implementing strategy. This kind of initiative should be encouraged for other major non-member countries as well, particularly those that are currently experiencing a rapid rise of their greenhouse gas emissions. Follow-up on the implementation of the recommendations made will be essential. BIAC also welcomes the focus on China and India in this year’s IEA World Energy Outlook and thanks the IEA for the opportunity to organise a joint meeting on this topic.

ENERGY EFFICIENCY AND CLIMATE CHANGE

32. As illustrated by a number of IEA studies, one of the best ways to achieve both short and long-term goals in greenhouse gas reduction is through the improvement of energy efficiency. Improving energy efficiency in the major consuming sectors, including buildings, appliances, transport and industry must be a top priority for policy makers, particularly in areas where there is still major potential for greenhouse gas reductions through the application of more efficient

processes and technologies. Policies should seek to boost energy efficiency through the encouragement of investment in more efficient technology in each of these sectors.

33. Improving energy efficiency is a complex challenge, which involves, among others, taking a close look at the use of energy sources and technologies, including waste generation, transport, requirements in the area of heating, and lighting. Recognizing that energy efficiency is an issue for all parts of society, efforts to accelerate progress should target production and distribution as well as the range of consumers, including industry, transport and private households. Continued research and development as well as education on energy efficient behaviour are crucial to make real progress happen. For rapidly growing economies, the right investments in production processes and using the best available technology will be particularly important to ensure that emissions do not increase at the same pace as economic growth.
34. The G8 leaders at their June 2007 Heiligendamm Summit recognized the deliverables the IEA has already achieved under the Gleneagles Plan of Action and proposed several new tasks for the IEA aimed at improving energy efficiency and accelerating the deployment of new energy technologies. Business greatly appreciates the work done in this area as it provides important guidance to help governments in the formation of viable climate change strategies and encourages governments to consider energy efficiency as a high priority on their policy agenda. In the next steps, it will be important to involve businesses of all sizes and sectors in this response through the provision of incentives and information that improves understanding of the potential financial and competitive benefits of investment in energy efficiency.

FOSTERING INNOVATION AND TECHNOLOGY TO ADDRESS CLIMATE CHANGE

35. The development and global utilisation of both existing and new, cost-effective, safe and efficient energy technologies with lower greenhouse gas emissions in all sectors is the most effective way to improve access to energy, to promote energy efficiency and to reduce greenhouse gas emissions. Therefore, OECD member states should be attempting to provide a dynamically efficient policy framework that would help drive down the costs of more efficient technologies. Creating a policy environment that encourages innovation, technology and deployment in both the public and private sectors should thus be the cornerstone of any strategy for climate change mitigation.
36. Governments have a key role to play both in supporting basic research and creating fundamental knowledge on which private investments can build to create applied innovative solutions. Public funding is particularly important for fundamental and pre-competitive aspects of R&D and its deployment. International co-operation in this area is essential as co-ordination of public spending on energy R&D will avoid duplicative investments. Greater emphasis on international collaboration, such as through the IEA network or the OECD Global Science Forum, is important to foster R&D in the various technology fields while avoiding duplication and maximizing opportunities for international co-operation in basic scientific research.
37. BIAC recommends that governments avoid choosing winners and losers among technological innovations, and look at efficiency improvements along the broad range of energy sources, taking into account costs, risks and benefits over the entire energy chain. Consideration of the various options should be based on cost-benefit analysis, taking into account country-specific characteristics. A diverse set of energy production technologies needs to be available to reduce greenhouse gas emissions, including clean fossil fuels, renewables and nuclear. Recently, a lot of attention has focused on bioenergy, an area in which the OECD is very active and can add value by analysing the complex relationship between biofuels, food production and environmental and economic considerations.
38. Private sector R&D and innovation will be particularly important as most of the funding for more climate friendly options will originate in the private sector. Public policies need to take into account the potential and complexities of environmentally beneficial innovations, as well as the flexibility, support and incentive structure that encourages firms to innovate. A scheme based

on encouraging private investment and allowing for competition leads to better outcomes both ecologically and economically. Therefore, public policies should be flexible and incentive-based and be designed to stimulate dynamic efficiency. Fiscal policies in particular can provide incentives for firms to invest and innovate, rewarding research, development and implementation of new and existing technologies in areas such as energy conservation and emission reduction. Incentives, such as tax breaks or rebates, R&D concessions, and changes to depreciation regimes can play an important role in stimulating environmental innovation. The links between energy innovation and innovation in other sectors, such as nanotechnology, areas on which the OECD has extensive work programmes, should also be given due attention.

39. Another key element of a policy regime for encouraging technological development and innovation is the encouragement of global spread of innovative technologies, especially as developing nations are becoming larger emitters. The main vehicle for this will be the private sector, through its day-to-day business activities of technology development, foreign direct investment and technology sales and dissemination. OECD countries should continue to work with non-member countries to establish appropriate incentives to encourage private investment in energy technology and foster trade and investment liberalisation.
40. Fostering energy technology innovation is and needs to remain a central part of international co-operation. Business welcomes collaborative efforts of both IEA and OECD, and encourages the OECD to include climate change as a key area in its work on innovation. At the same time, the evolution in industries with more indirect roles in mitigating climate change, such as banking or insurance, should be given due attention. This could be done by supporting research and data collection necessary to develop a better climate change related risk assessment of different sectors and enterprises.

SEEKING MARKET FLEXIBILITY

41. While the environmental effects of climate change need to be given due attention, policy responses to climate change can also come at a cost to both business and society as a whole. For this reason, mechanisms and policies responding to the issue should be carefully examined with regard to their impacts on economic activity, ensuring minimal cost to those affected. Approaches that optimise market forces and flexibility while maximising the dynamism of the private sector are tantamount to achieving this goal.
42. Different prices for carbon in different markets may be expected, just as a number of political and market realities lead to varying prices for other commodities. OECD governments should maximize efforts to address mitigation and adaptation through flexible market-based mechanisms that account for national priorities and circumstances. International carbon markets should permit maximum fungibility for trading of verifiable emission reduction credits across geographical boundaries, including innovative approaches to crediting carbon offsets. With regard to tradable permit systems, the early experience of the EU emissions trading scheme demonstrates the need for very careful design and a sound set of baseline data. Business stresses the importance of giving due attention to the administrative costs of implementation and competitiveness impacts. Trading schemes and offsetting mechanisms should remain complimentary to other more effective mechanisms.
43. Of particular concern to business are policy effects on competitiveness. Taxes, for example, if unilaterally introduced, have the potential to alter competition in an unconstructive way and create negative effects on growth and jobs in the most affected sectors. Business questions the certainty of the notion that new tax revenues would be effectively recycled to the affected sectors and that tax-border adjustments would be a viable solution. Tax-border adjustments and other such trade barriers will be counter-productive to the co-operative technological innovation and dissemination that will be essential to respond to long-term climate change. These kinds of measures could often serve only to invite counter-measures targeting

economies that use them. BIAC therefore encourages a careful, case-by-case examination of these instruments - a task for which the OECD as an economic organisation is well suited. In the case of additional imposition of taxes, revenue-neutral solutions should be designed that correct market failures without distorting markets, that encourage international co-operation and that can be implemented flexibly and cost-effectively.

44. To this end, business expresses strong support for voluntary measures in combating greenhouse gas emissions and encourages the OECD to look at ways and best-practices to foster such initiatives. There are a wide range of voluntary instruments that can be tailor-made for the highly heterogeneous conditions and circumstances that exist in the affected countries and industries. These mechanisms can include the processes of goal-setting and achievement through monitoring and communication, while providing a setting that encourages creativity through flexibility. In the debate on ways to fight climate change, sectoral approaches, such as the International Aluminium Institute's initiative, have recently gained increased attention. Reaching out beyond national and regional borders, they can play an important role in getting developing countries involved. Though we do not claim that voluntary approaches should be applied to every situation, such approaches, initiatives, partnerships and agreements can offer cost-effective action, allowing for flexibility to suit the different conditions and circumstances of different industries.

IMPACT OF POST-2012 POLICIES

45. The OECD and its sister organisation, the IEA, are central to understanding the practical realities of both current climate change policies inside the OECD and post-2012 rules and actions. The formation of post-2012 policy regimes will depend on studies done today in understanding the impacts of policies in the post-Kyoto era. The OECD, as a multidisciplinary organisation with strong economic expertise, can provide a comprehensive understanding of the issues and consequences at play in these regimes. OECD studies on this time frame could make an important contribution to the formation of an environmentally, socially and economically beneficial policy framework that is acceptable to all stakeholders, and as such, warrant careful consideration.
46. Such studies should seek to understand the best ways that objectives can be achieved, and in doing so should take into account the extensive consequences and linkages of the policies that this entails. This should be done with a view to promoting economic efficiency and should be aimed at reconciling both economic and environmental improvement goals. In particular, future work in this area should seek to determine how to encourage participation by non-member countries in post-2012 international efforts and what specific incentives should be in place for their engagement in international discussions. BIAC would welcome a contribution by the OECD of the impact on post-Kyoto policies, analysing the economics of environmental policy options, providing a solid economic basis for the post-2012 architecture, and shedding further light on the most effective strategies to tackle climate change.

CONCLUSION

47. Addressing climate change will require substantial efforts and policy development over many decades and must be responsive to evolving scientific and technical understanding as well as experience with policies. BIAC encourages policy makers to promote stable and transparent regulatory frameworks with due regard for consequences of excessively rapid changes and fluctuations; cost-effective approaches that minimize trade barriers; clarity on the regulatory process; opportunities for business to contribute by providing practical input and views; and increased co-operation with non-member countries.
- 48.

49. By fostering an understanding of the choices available and the environmental, economic and social consequences these choices will bring to bear on both the global and national scale, the OECD and IEA can help in the creation of an efficient and effective policy framework to help address climate change. Business understands that it must play a key role in effecting the kind of change that is necessary and is committed to be an active participant in addressing climate change. BIAC looks to work with OECD and IEA as they provide integrated energy, economic and environmental assessment and findings, including insights into the enabling conditions for increased investments and technological innovation and dissemination for cleaner energy pathways.

FOUNDATIONS FOR EFFECTIVE KNOWLEDGE-BASED SOCIETIES:

Innovation, Education, Property Rights and Competition

INTRODUCTION

50. In May 2007, the OECD Council at Ministerial Level decided to launch a horizontal innovation strategy and to strengthen co-operation with key non-member economies. The innovation strategy will provide new insights into the effectiveness of countries' environments for innovation and develop a comprehensive and forward-looking policy framework for promoting innovation in support of economic growth. Non-member co-operation includes agreeing to start accession talks with selected countries and to enter into enhanced engagement with five major economies.
51. BIAC has strongly supported and now welcomes these developments, believing that innovation is the central force creating 21st century knowledge-based and globally connected societies and is an essential prerequisite for sustainable development. A better understanding of factors aiding or hindering the transition towards more knowledge-oriented economies must run through all aspects of OECD's work. Many changes are taking place that affect the processes and sites of innovation, the balance between competition and co-operation as instruments for progress, and national and individual expectations of growth within the local and global economies. It is essential to incorporate these changes into our models of how knowledge-based economies function if we are to understand the framework conditions that will ensure greatest effectiveness.
52. The purpose of this paper is to explore the interconnected areas mentioned in the title, and thereby to raise questions for discussion with Ambassadors and possible elaboration within OECD work programmes. BIAC does not attempt here to propose clear answers to what are complex and open-ended subjects. Rather, the aim is to emphasise the importance of taking a broad and cross-cutting approach to these matters, which in our opinion is the only way to achieve the required depth of understanding that takes full advantage of OECD strengths in benchmarking and statistical and economic analysis.
53. Four closely-related factors seem to us to be central to the economic growth and social development of knowledge-based societies operating within the global networks and trade flows connecting people and businesses:
- Continued innovation, stimulated and supported by advances in science and technology and by new forms of organisation and institutional approach, which provide the means to create new products and services and thus new wealth and establish better ways to meet human needs;
 - Good education on a lifelong basis, which endow people with the skills, experiences and understanding to participate fully in the economy and in public debate about approaches and objectives;
 - Robust property rights, including intellectual property rights, which make it possible to invest time and capital with reasonable assurance that the efforts will be protected and rewarded in the event of success; and
 - The effective combination of competition and co-operation, which ensures that better solutions can be identified quickly and less effective solutions eliminated.
54. It is important to strengthen all of these factors, yet each presents important questions of understanding and approach for the knowledge economy. For example, in recent years, a fairly straightforward model of the link between R&D and economic growth has been to the forefront

in parts of the world. This can be broadly (perhaps unfairly) characterised as a model where innovation was seen as the outcome of a sequential process: public sector R&D is built on by private sector R&D which leads to better economic performance. This model suggested a direct link between levels of public R&D investment, numbers of public sector researchers and subsequent economic growth.

55. Without in any way downplaying the importance of high-calibre public sector R&D and institutions, it is clear that this model is not a sufficient basis for effective policymaking. It fails to reflect, for example, the role of the marketplace, the need for efficient and effective regulation, and the dynamic interplay between inputs and outcomes and among economic actors. The role played by services in supporting economic growth and job creation is growing and tectonic shifts are taking place in the balance of the global economy. These developments challenge some existing models and understanding of innovation-related growth, and highlight the inadequacy of some of the statistical data being used to probe these points and assess performance.
56. In a similar vein, while the principles of fair competition and sound property rights remain valid today, new questions regarding harmonisation of laws and enforcement efforts across borders call into question the best way to apply these principles in the current global context. In many cases, it will be appropriate to translate existing experience and understanding directly into the new situation. BIAC believes, in these cases, the basic principles have already been well-established, and do not need to be re-invented. But there will be situations where gaps exist in our understanding and approaches; for example, when there are issues of consistency across legislative IPR regimes because of different assumptions and traditions and colliding economic and social priorities, or when determining how these principles apply within increasingly service-oriented economies.
57. Forty years ago, the national approaches taken by OECD member states could be characterised by emphasis on government-led initiatives, focus on national champions, and strong belief (by the citizen and by governments) in technology as key economic driver, but standard theories of economic growth treated this technology as an exogenous factor. Twenty years later, the major economies had shifted towards more liberal, market-oriented regimes, in which the principles of competition and anti-trust were paramount, the revolutions in IT and biotechnology had begun, and economic growth models began to incorporate technology as an endogenous factor. Widespread public questioning of political and commercial motives on an international scale was, however, in its infancy.
58. Today, such principles and theories still act as the foundations, but, as a result of increased globalisation and the scale and nature of key policy objectives within the major regions of the global economy, there is renewed interest in “Grand Challenges”: creating sustainable platforms to support national and regional industrial strengths; providing better health care in changing demographics; responding to the threat of climate change and other environmental issues; dealing with the actual growth of major non-member economies; and enabling the prospective growth of sub-Saharan Africa. Each of these challenges goes hand-in-hand with questions about the best approach: how to engage civil society and the private sector; what is the correct role for government; what will be the consequences of using large-scale public-private partnerships to implement the chosen solutions. Thus corporate responsibility and its pillars of economic, social and environmental sustainability are becoming increasingly important to business strategies.

CONTINUED INNOVATION

59. Innovation is increasingly seen as key for strengthening income and productivity growth, an indispensable part of addressing global challenges such as climate change, energy security and health, and an important area for improved co-operation with major non-member countries. Trade and investment serve to increase competition in product and service-based markets and

human mobility (“brain circulation”) facilitates the transfer of the technologies, know-how and management techniques which provide the basis for innovation. The role of the service economy is becoming more important. Achieving consistent, favourable policy frameworks depends upon taking into account many interactions.

60. However, while there has been a proliferation of initiatives and schemes intended to promote innovation (often involving the establishment of intermediary support organisations at regional and local level) it is not yet clear how effectively these initiatives are working or how best to measure their effectiveness. This is why we have encouraged the OECD to address innovation in a more integrated manner, looking also at dimensions such as the following:
- Achieving strong standards and effective enforcement of intellectual property protection
 - Ensuring effective competition and contestable markets
 - Maintaining open trade and investment
 - Securing strong and sustainable infrastructures for fundamental research and development
 - Maintaining efficient and transparent regulatory systems
 - Respecting ethical concerns and rule of law
 - Supporting lifelong learning and education at all levels
 - Fostering sufficient entrepreneurial spirit, creativity and innovative problem-solving
 - Providing policies that are appropriate to the social context and dynamic human interactions
 - Fostering effective international co-operation in innovation.
61. Due attention should be given to opportunities provided by the growing cross-border interaction of public and private sector research and development and international networking of research schemes to combine local strengths with specialisations available on a global scale.

THE EFFECTIVE COMBINATION OF COMPETITION AND CO-OPERATION

62. Scientific and technological advances have created new waves of innovation, and innovation processes themselves have become less centred on individual firms and more dependent on interactions among global networks of actors in public and private sectors. The nature of innovation has changed, from dependency on local R&D towards the global movement of knowledge, and from centralised to more collaborative approaches. Non-member economies are playing important roles in this process. As a result, the balance between competition and co-operation is changing. However, it is important to keep in mind that competition and co-operation are tools used to achieve desired goals, rather than objectives in their own right.
63. Patterns of innovation are becoming increasingly open in many sectors of economic activity, involving greater collaboration and creating more strategic interdependencies between companies and partners in the public sector. Phrases such as “Open Innovation” capture the growing interdependencies among economic actors, brought about first by globalisation, pervasive communications, and market liberalisation, leading to changes in business processes and institutional roles, and a tremendous complexity of products and services. The emergence of these more open models of innovation is characterized by greater knowledge exchange among firms and between firms, public research organisations and universities. We encourage the OECD to help countries shape their innovation policies in ways that capitalize effectively on globalisation and international collaboration in the knowledge domain.

GOOD EDUCATION

64. The role of universities and the more general process of reforming education systems are high on the agenda in most OECD member states. At first, this was because of the need to prepare more people, through higher education, to play active roles in modern societies. Many countries are now close to achieving the desired levels of participation in tertiary education. The question is whether the education provided at primary, secondary levels, and particularly at tertiary level and on a life-long basis, is fit-for-purpose, and will result in a sufficient supply of trained talent and a properly informed and motivated society. The reform of education systems is clearly important, especially as governments and companies discover a shortage of talent (accompanied, in some cases, by a serious shortage of interest by younger people) in key areas. Recent international studies, such as the ROSE¹⁰ project, have provided important insight into these questions.
65. Policymakers should ensure that the tertiary education sector retains and encourages sufficient diversity so that it can respond to future needs in the innovation system. This requires clear recognition that innovation involves more than just technology, and depends on other key skills in areas such as service design, marketing and social sciences. A balance should be sought between supporting basic and applied research. Furthermore, strong efforts should be made to encourage high-quality vocational education and training with a strong link to practical application in the future job.
66. There is also a desire by governments in many countries to link more directly their large investment of taxpayers' money in public education and research to visible local economy benefits, which is taking university systems down the "third mission" road of licensing technology and creating spin-off companies. There is much still to understand concerning the best ways to do this and the (intended and unintended) consequences of particular approaches to legislation, such as the Bayh Dole Act in the US.
67. The OECD makes an important contribution into our understanding of education, first by offering a statistical basis for policy debate and then by developing a long-term perspective on education, and thereby improves our understanding the impact of education on economic growth. We also welcome continuous effort by the OECD to promote the quality of and access to tertiary education.

ROBUST PROPERTY RIGHTS

68. Just as innovation and globalisation are leading to major changes in the world economy, the role of intellectual assets has taken an increasingly central role. The objectives of property rights systems are to encourage investment and innovation while at the same time fostering diffusion and use of knowledge. Without the incentive provided by the various forms of IPR protection, businesses will not have sufficient incentives to invest in risky R&D. The exclusive rights granted to a patent holder for a certain time encourage the investment needed to develop an idea and subsequently a marketable product or technology. Even within increasingly knowledge-oriented societies, some sectors of the economy will continue to face lengthy periods of development and testing and substantial capital investment before receiving market approval. Productive innovation, particularly in service-oriented economies, requires more than a good patent regime, and there has perhaps been too much emphasis placed on patents as measure of innovative performance.
69. Current IPR systems have successfully promoted the disclosure of inventions, which in turn has stimulated innovation across and within industries. The public disclosure of information is a key function, encouraging further innovation and creating a climate of competitiveness which

¹⁰ Relevance of Science Education, <http://www.ils.uio.no/english/rose/>

provides the basis for additional progress and economic growth. At the same time, IPRs facilitate the operation of markets and help create new ones as they are tradable and transferable. They encourage both companies and public research organisations to transfer knowledge through voluntary licensing and other contractual arrangements, but also through the promotion of technology development, direct investment, technology sales and public-private partnerships.

70. These principles now have to be translated into the new context. As demonstrated by the rapidly rising number of patents, trademarks and copyright protected material, the use of IPRs has rapidly expanded. This, however, also demonstrates the need for giving sufficient attention to the quality aspects of IPR protection so that poorly considered patent grants do not create barriers to innovation. At the same time, the ability to benefit from knowledge and technology flows, the need for compatibility between IPR regimes, and the affordability of widespread IPR protection become central pillar issues for productivity growth. The role of government policy must be to create a sound legal and policy framework, in which investment takes place, and innovation drives economic growth. We encourage the OECD to address issues of effectiveness, including in its work with non-member countries, where the protection of local economic interests is often to the fore.

COMBATING COUNTERFEITING AND PIRACY

71. The global trading system depends on the international recognition and dissemination of proprietary knowledge. The large and growing problem of counterfeiting and piracy, however, is a serious threat to legitimate commerce, consumer trust and government income through lost taxes, and can in many cases have serious implications for public health and safety. It was in response to these rising concerns both within governments and the business community that the OECD launched a project that assesses the effects of counterfeiting and piracy on economies.
72. BIAC has congratulated the OECD on the findings of its study on product counterfeiting and piracy, the results of which were highlighted at the G8 summit in Heiligendamm. The study revealed that international trade in counterfeit and pirated tangible products could be up to USD 200 billion for 2005. While this assessment of the value of goods moving across national borders alone is considerable, it would be much higher if the value of domestically produced and consumed counterfeit and pirated products and the value of pirated digital goods were included. Furthermore, product counterfeiting and piracy impact upon virtually every product category and economy, with increasing flows of these illicit goods across international borders.
73. BIAC considers this study a significant advancement in understanding the scope and scale of the problem stemming from product-related counterfeiting and piracy, which should be considered as a first step that requires substantially more work by governments, industry and other stakeholders to fully understand the impact of this growing problem. Strong political efforts will be needed to combat counterfeiting and piracy and to effectively deter infringements in order to set a predictable framework for innovation. BIAC welcomes OECD's follow-up plan of outreach workshops in different parts of the world building on the results of the study. BIAC also encourages the OECD to work with non-member countries to highlight the negative consequences of counterfeiting and piracy for the local economies.
74. To effectively involve non-members, IPR enforcement should be given a continued high profile in OECD outreach activities. Additionally, the OECD should highlight its successful work with non-member countries aimed at creating an attractive investment environment. Peer reviews and outreach to non-members are an integral part of OECD work and can be used to monitor IPR enforcement. We recommend that communication efforts give particular attention to health and safety implications, tax and revenue losses to governments, effects on local industry, and links to criminal activities, as well as lost business revenue.

ADEQUATE INDICATORS BASED ON ADEQUATE DATA

75. Today, the quality of national statistical systems for tracking progress in the knowledge economy is uncertain. There is always tension between the need for useful forward-looking indicators and statistically-reliable data, and this tension is greatest when the nature of the desired indicators is changing. We lack useful, internationally-agreed ways to monitor activities (for example, of companies) that span national boundaries; and to move the focus from national benchmarking to inter-regional and international integration, and from linear models of research and development to innovation performance, intangibles, procurement and the effectiveness of major public-private initiatives. There are some important questions to be reviewed concerning responsibilities for driving and performing such work, for example between individual nation states, supra-national groups of nations and the OECD.
76. The OECD has supported efforts over the years to standardise these systems and methods of data collection, for example with the Frascati and Oslo Manuals. BIAC believes that OECD should again take the lead, and we ask member states to encourage and support this approach. Moreover, the OECD has already carried out pioneering work on measuring the impact of various technologies on productivity, such as through the OECD Growth Project and studies of the impact of the ICT sector on productivity and growth. Building upon this work, we encourage the OECD to continue such analysis, including for innovative sectors such as healthcare, biotechnology and nanotechnology.

WORKING WITH NON-MEMBER COUNTRIES

77. A number of major economies have maintained strong economic growth, but now face the challenge of ensuring that such growth will be more sustainable. This requires paying increased attention to innovation. The major non-member economies are making an increasing contribution to the world's knowledge pool, which will positively impact the long-term global innovation performance. Dialogue and constructive co-operation between OECD and non-OECD countries will be key to integrating all economies successfully in the global innovation system. Such co-operation, including in the area of innovation and IPR, will be more effective than measures that impede capital and knowledge flows.
78. In the framework of its work with non-member countries, the OECD has jointly organised events on innovation with the Chinese government authorities. BIAC welcomed these events, which provided an excellent opportunity for direct dialogue with Chinese decision-makers. In August of this year, the OECD presented the key results of its first review of China's national innovation system. The review identifies a range of measures required to maintain and enhance the country's attractiveness for knowledge-intensive foreign direct investment and to increase the propensity of domestic firms to innovate. The approach, based on close engagement of the international business community with practical experience of working in different regimes, proved effective and is, we believe, a model that should be continued.
79. Other examples of OECD engagement with non-member economies in innovation-related work are OECD's active outreach in its work on nanotechnology (which BIAC believes will further strengthen the value of OECD's leadership on this topic), and the strong support demonstrated by non-member countries for OECD's work on biotechnology environmental risk assessment at the 'Blue Book' 20th anniversary events in Korea last year. BIAC congratulates the OECD on these initiatives and calls on the Organisation to further work with non-member countries to share its experience on innovation policy and effective governance.

CONCLUSION

80. BIAC believes that the horizontal structure and economic focus of the OECD continues to make it uniquely positioned to add value to international policy discussions on economic growth and sustainable development. Introducing the horizontal innovation strategy has been an important step forward. Work by the OECD in this area can shed further light on factors influencing the innovation performance of nations, assist in identifying the pre-requisites for high-quality systems to effectively protect property rights in knowledge-based economies, understand the effectiveness of alternative approaches to competition and co-operation, and monitor and assess trends in education and institutional roles. BIAC strongly recommends that these matters also form an integral part of OECD's increased engagement with key non-member countries.