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**REPORT ON GLOBAL ENERGY SECURITY
AND THE CASPIAN SEA REGION**

Note by the secretariat

1. During its fourteenth session held in June 2005, the Committee on Sustainable Energy welcomed the Statement on Global Energy Security and the Caspian Sea Region issued by the representatives of Azerbaijan, Islamic Republic of Iran, Kazakhstan, Russian Federation and Turkey that, inter alia, referred to the future development of international cooperation on energy security with UNECE member States, the Committee on Sustainable Energy and the Energy Security Forum (ECE/ENERGY/65, para. 23).
2. The Committee welcomed, in particular, the commitment of the countries in the Caspian Sea region in their Statement to work with the Energy Security Forum to:
 - (a) prepare a study on emerging energy security risks and risk mitigation in a global context, including the potential contribution of increased energy exports of the Caspian Sea Region to provide greater diversity of energy supply sources to UNECE member States; and
 - (b) convene a seminar to examine energy transport corridors, new infrastructure, transmission systems and investment requirements for increased energy exports from the Caspian Sea Region including conclusions and recommendations on enhanced energy trade and international cooperation.

3. On 21 April 2006, the Energy Security Forum held a Seminar on Energy Security Risk Mitigation and the Caspian Sea Region. This report provides an analysis of the Seminar and summarises the results on the potential role of the Caspian Sea region in reducing global energy security risks. It provides conclusions and recommendations on enhanced energy trade and international cooperation.

INTRODUCTION

4. Energy security has re-emerged as a crucial issue for policymakers, energy industries, the financial community and the general public. There is an increased sense of unease concerning secure access to reliable supplies of reasonably priced energy.

5. Concern about energy security in UNECE countries has grown and waned over the years. This problem was uppermost in the minds of energy policymakers during the 1970s and early 1980s when energy supply and demand were tightly balanced and energy markets were rocked by two sharp oil price rises. Likewise, concerns were renewed and heightened during the Iraqi-Kuwaiti crisis of 1991.

6. Many factors have contributed to this heightened sense of vulnerability: the recent high crude oil prices and their volatility; the increased cost of developing incremental sources of supply; longer supply routes; the instability in Iraq; the tensions in the Middle East; sabotage and terrorist attacks in major oil and gas producing countries; the unfavourable investment climate in a number of producing countries; the growing energy import dependence of major consuming countries; and the corporate and policy failures, such as the Enron bankruptcy and the 2003 electric power blackouts in North America and Europe.

7. The objective of this paper is to examine the potential contribution of Caspian Sea countries, notably with respect to oil and natural gas and, to some extent coal, in mitigating global energy security risks. To provide a context for this assessment, the paper begins with a brief review of the objectives of energy policy. Then energy supply and demand trends, including the contribution of Caspian Sea countries to future fossil fuel supplies, and their consequences for energy security are examined. This is followed by a brief discussion of the implications of terrorism on energy security. The paper concludes with a brief overview of conclusions and recommendations regarding developments in the Caspian Sea countries and their potential contribution in improving the energy security of UNECE countries. This document should be read in conjunction with Emerging Energy Security Risks and Risk Mitigation: A Global Overview (ECE/ENERGY/2006/2).

I. ENERGY POLICY OBJECTIVES

8. A sustainable energy development strategy for the UNECE region must have at its core the following policy objectives:

- (a) secure access to high quality reasonably priced energy services for all individuals in the UNECE region in the short, medium and long-term;
- (b) reduction in health and environmental impacts resulting from the production, transport and use of energy;

- (c) well-balanced energy network systems across the whole of the UNECE region tailored to optimize operating efficiencies and overall cooperation;
- (d) sustained improvement in energy efficiency, in production, transport and use of energy;
- (e) steady reduction in energy-related health and environmental impacts through the development and application of environmentally-sound and economically viable technologies.

9. In many respects, energy security is the “raison d’être” for energy policy. Energy and energy industries are vital to all modern societies. They underpin economic growth and development. They contribute to the material well-being and comfort levels of populations and they touch every aspect of the daily life of individuals. As a result, governments have historically felt the need to pay special attention to energy and particularly energy security.

10. While energy security is a multifaceted concept and not easy to define, there are four dimensions of particular relevance: physical disruption of supplies due to infrastructure breakdown, natural disasters, social unrest, political action or acts of terrorism; long-term physical availability of energy supplies to meet growing demand in the future; deleterious effects on economic activity and peoples due to energy shortages, widely fluctuating prices or price shocks; and collateral damage from acts of terrorism resulting in human casualties, serious health consequences or extensive property damage.

II. DEMAND AND SUPPLY TRENDS

11. The energy marketplace is in a constant state of flux and change. There are numerous trends and developments in the regional and global marketplace that can affect the energy security of countries in the UNECE region. These include the future evolution of energy demand, the sources of future supplies to satisfy this demand, the variety and diversity of fuels and energies that might be available to consumers in the years ahead, the geographical distribution and concentration of fossil fuel production and reserves, the potential use of market power, the diversity and reliability of energy transportation infrastructure, and the level of social unrest and ethnic strife in producing and transit countries.

12. It is likely that the energy import dependence of many UNECE countries will continue to rise for the foreseeable future. In most countries, the growth in energy demand, buoyed by growth in transport and electricity use, is expected to outpace the growth in domestic energy production. The major exceptions are the fossil fuel rich countries of the UNECE region, such as the Russian Federation, Norway, Canada and countries in the Caspian Sea area, such as Azerbaijan and Kazakhstan, which will remain major producers and exporters of fossil fuels.

III. OIL

13. The increased sense of vulnerability and insecurity with respect to oil is fuelled by concerns regarding: the growing dependence of UNECE countries on imported oil; the concentration of known oil reserves in the Middle East; the growing reliance on the Middle East and, more generally, on the Organization of Oil Exporting Countries (OPEC) for oil supplies; the perceived higher costs of new incremental oil supplies; the ever increasing distance of supply

routes between producing and consuming centres; and the potential for political instability and social unrest in some of the major oil producing and transit countries.

14. The dependence of countries in western Europe on oil imports, which today stands at approximately 55%, is likely to rise to around 65% by 2010 and possibly 80% by 2020. In North America, import dependence could rise from about 35 to 45% by 2020. In the case of central and east European countries (excluding the Russian Federation), oil import dependence, which is currently more than 80%, could rise to above 90% by 2020. Hence, in the absence of measures to offset increased oil import dependence, UNECE countries could become more susceptible to world oil supply disruptions or other shocks over time.

15. Currently, the Middle East supplies about 30% of all the oil consumed in the world. By 2020, this could be around 40%. Production costs are among the lowest in the world and so are investment costs. Moreover, approximately two-thirds of the world's established reserves of crude oil are in the Middle East. With time, reliance on the region for oil is bound to rise, assuming there is no widespread introduction of alternative fuels for transport or reduced demand flowing from more efficient vehicle technologies (e.g. hybrid and plug-in hybrid vehicles).

16. Similarly, the world's dependence on oil from OPEC will continue to increase over time. Today, OPEC's share of world oil production is slightly above 35%. It is likely to rise to about 45% by 2020 and to 55% by 2030, about the same share, 54%, as reached in 1973 at the time of the first oil crises.

17. The Islamic Republic of Iran, bordering the Caspian Sea as well as the Persian Gulf, is an important member and the second largest oil producer in OPEC. Its crude oil potential is large. It currently produces about 4 million barrels per day (mb/day)¹, representing about 5% of total world crude oil production. With proven oil reserves of 138 trillion barrels¹, about 11.5 % of the world's total, the Islamic Republic of Iran is likely to be able to significantly increase its oil production in the future as it invests in both existing and new fields, including the Caspian offshore. According to some projections, for example that of the International Energy Agency, the country could possibly double its output over the next 15 to 30 years.

18. Likewise, crude oil production from the Russian Federation and the other Caspian Sea countries is expected to rise over the foreseeable future. The Russian Federation in particular has experienced a significant increase in production in recent years. Today, with oil production of 9.6 mb/day¹, the Russian Federation accounts for approximately 12% of total world production. This level is expected to rise to approximately 11 mb/day over the medium term. While much of this production is expected to come from existing fields, new greenfield projects are expected to be developed in the Caspian Sea, East Siberia and Sakhalin.

19. Oil production from the other Caspian Sea countries, that is Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan, is about 2.1 mb/day¹, accounting for 2.6% of total world production. Proven reserves and resources are substantial, particularly in Kazakhstan and Azerbaijan. With proven reserves of about 47 trillion barrels¹ combined in Kazakhstan and Azerbaijan, production is bound to rise. In addition, while proved oil reserves in Turkmenistan are small, the ultimate recoverable resources are estimated to be significant. Therefore, most

projections call for oil production from the Caspian Sea region countries (Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan) to rise over time and possibly double over the next 5 to 10 years.

20. Most oil exports from the Caspian Sea region, including those intended for west European customers, have so far transited through the Russian Federation to market. Adequate oil transport facilities from the region have in recent years been a constraint on exports.

21. In order to accommodate increased exports from this region, existing transport routes through the Russian Federation have been expanded. Similarly, new alternative routes are being planned and developed. In that regard, the Baku-Tbilisi-Ceyhan Crude Oil Pipeline (from Azerbaijan, through Georgia and across Turkey to the Mediterranean coast) began operation in the fourth quarter of 2005.

22. Another existing transportation constraint for oil from the Caspian Sea region has been congestion of the Turkish straits where about 3 mb/day of oil, some of which is Caspian Sea oil, transits from the Black Sea to the Mediterranean. The Turkish straits are relatively narrow and the Vessel Traffic and Management System has been introduced by the Turkish Government to assist in the passage of tankers through the straits for safety and environmental reasons.

23. Taking into account the current oil tanker traffic through the Turkish Straits and the potential of increasing oil exports from the Region, if maritime oil transport in the Black Sea is to grow, alternate routes that bypass the Turkish Straits will need to be developed and this is crucial for protecting the environment in the region.

24. In addition to exports to the west, increasing attention is being given to the potential of exporting oil eastward from the Russian Federation to China and Japan and from Kazakhstan and Turkmenistan to China. Asian demand for oil is growing very rapidly, particularly in China and to some extent India. The rapid pace of industrialization and economic development in both countries has meant a high rate of consumption for energy and oil. The oil producers on the eastern side of the Caspian Sea are well positioned to take advantage of market opportunities in those Asian countries if transportation routes, that is pipelines and possibly rail facilities, can be economically developed.

IV. NATURAL GAS

25. Natural gas is today's fuel of choice. It is flexible to use, environmentally friendly compared to other fossil fuels, relatively abundant, with supplies perceived to be relatively secure and reliable. Consequently, it is being used in a variety of sectors and applications, and is experiencing significant growth as a fuel for electricity generation.

26. However, the rapid growth in natural gas consumption is boosting the import dependence of many European countries. While this may not be a problem in the short to medium term, meeting demand over the longer term could become a challenge as new sources of supply become increasingly more remote and more costly to develop. Natural gas demand in the United States is also likely to continue rising during the next 10 years.

27. Total imports by west European countries (from outside western Europe) are likely to increase from about 35% of natural gas consumption to about 45% by 2010 and continue to increase thereafter even assuming a significant expansion in Norwegian production. The import dependence of central and east European countries, excluding the Russian Federation, is likely to rise from about 65% to 85% by 2010-2015. On the other hand, the situation in North America is somewhat more encouraging; up to now the market has been relatively self-sufficient, with gas supplies and transportation infrastructure well balanced and diversified. However, there are signs that increased liquefied natural gas (LNG) imports may be required over the medium to longer term. In order to accommodate these rising import needs, additional LNG gasification plants and export terminals as well as new re-gasification infrastructure in the United States will be required. Most of the LNG imported into the United States will come from sources other than the Caspian Sea region but some quantity in the longer term could be based on natural gas from the Caspian Sea, liquefied on the shore of the Baltic Sea in the Russian Federation or along the Mediterranean in Turkey.

28. The problem of import dependence is compounded when countries have to rely on a single outside source of gas. Most countries in Western Europe are now supplied from a number of sources, including indigenous sources of supply. For historical and geographical reasons, this is not generally the case for countries in central and Eastern Europe. Almost all the gas imported in these countries, to supplement domestically produced gas, comes from the Russian Federation.

29. So far, the Russian Federation has been a secure and reliable supplier of natural gas to both central and eastern as well as western European countries. Since deliveries began over 35 years ago there has been no major interruption of gas supplies. However, the recent dispute (at the beginning of 2006) between Gazprom (Russian Federation) and Naftogaz (Ukraine Republic) over natural gas prices for imported Russian gas and transit fees, and the ensuing short-term disruption of natural gas supplies from the Russian Federation transiting through the Ukraine, did raise concerns about security of natural gas supplies among downstream importing countries.

30. The traditional suppliers, like the Russian Federation, Algeria, Netherlands and Norway, are likely to have the capacity to meet Europe's growing demand for natural gas for some time to come. However, in the longer term, significant new investments in production and transportation infrastructure will be required. Moreover, supplies will increasingly have to be transported over longer distances as new production centres are developed in more remote or distant areas of the Russian Federation, the Norwegian shelf, North Africa and the Caspian Sea, and may ultimately also include supplies from the Islamic Republic of Iran.

31. The Russian Federation is the largest producer of natural gas, accounting for about 22%¹ of total world gas production. It is also the country with the largest proved gas reserves, 48 trillion cubic metres¹ or 27% of the world total. While new incremental gas supplies are likely to come from smaller fields, from more remote and harsher environments and from geologically more complex structures, Russian natural gas production is expected to expand from about 600 to 750 bcm over the next 10 to 15 years. Likewise, exports are projected to rise to Western Europe and to Eastern Europe and could perhaps even begin to Asia over the next 15 to 20 years.

32. The Islamic Republic of Iran is a major producer of natural gas, but it is not yet a major exporter. However, its proved reserves are large compared to its production. Therefore, it has

the potential to significantly increase production if economically viable markets can be developed. At the moment, there are some quantities of gas exported to Turkey and some gas imported from Turkmenistan, but the quantities involved are small relative to the resource base.

33. While proven natural gas reserves in Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan are not of the same magnitude as those in the Russian Federation and the Islamic Republic of Iran, they are nonetheless substantial. The four countries combined have 9 trillion cubic metres¹ of proved reserves, representing about 6% of total world reserves. Ultimate recoverable resources are significantly higher.

34. Currently, the gas production of about 143 bcm¹ in Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan is used mainly for internal domestic consumption. However, there are some exports to the Russian Federation and beyond, such as to the Ukraine, through the existing Russian network. Gas production in the four countries as well as exports are projected to rise over time. Gazprom has already contracted to buy 1 tcm out of the 9 tcm of proved reserves under long- term contracts.

35. In addition to exports through the Russian network, a gas pipeline is under construction from Azerbaijan to Turkey through Georgia (the South Caucasus Pipeline Project of Baku-Tbilisi-Erzurum Natural Gas Pipeline Project) that will increase export capacity from the region. There are also other projects under consideration, such as the “Nabucco Project (Turkey-Bulgaria-Romania-Hungary-Austria line)” and the “Turkey-Greece Gas Pipeline Interconnector”, which, if constructed, would provide reliable and secure transit routes for natural gas from the Caspian Sea to markets in south east and central Europe.

36. In the longer term, depending on success in proving up additional reserves, the economic situation in these countries and geopolitical considerations, additional export capacity could be built to supply western Europe and ultimately to supply China and other Asian markets, in the latter case particularly from Turkmenistan.

37. The transit of natural gas through the territories of third countries is an issue of controversy and potential tension. Transit rights, which are of concern to both gas-exporting and gas-importing countries, are sometimes the subject of intense commercial and political negotiations. The potential for disputes and misunderstandings are ever present. These considerations are present in a number of regions of the UNECE, including the Caspian Sea region and the Caucasus.

V. COAL

38. From the point of view of energy security, coal has the advantage that world coal reserves are large; sources of supplies are diversified; ample supplies are available from politically stable regions; world infrastructure is well developed; new supplies can be easily brought on stream; and coal can be stored.

39. The Russian Federation, which has 17%¹ of the world’s proved reserves, and Kazakhstan, which has 3.5% of the world total, are major coal producing countries. In the case of the Russian Federation, most of the coal produced is consumed domestically. On the other hand, in the case

of Kazakhstan, about 40% is exported. In addition to the use of an indigenous energy source, the added benefit to both the Russian Federation and Kazakhstan is that coal can be used to displace oil and natural gas from the domestic market in order to increase supplies for export markets and, thereby, maximize export revenues.

40. While coal is plentiful and secure, and its greater use both in the Russian Federation and Kazakhstan could release more oil and natural gas for export, coal is faced with environmental problems. These environmental problems can be mitigated to some extent by the use of existing, commercially viable clean coal technologies. However, for coal to completely shed its negative environmental image, the commercialization and wider use of new technologies (involving gasification, liquefaction and carbon capture and storage) will be required.

41. Therefore it is important to invest in research, development and deployment in order to find ways of using fossil fuels, including coal, in a manner that is not detrimental to human health and the environment. While improvements in energy conservation and efficiency can slow down the rate of growth of demand for energy services, they cannot eliminate this demand altogether. Energy services are and will continue to be needed to meet human needs and for economic development. Under present and projected market conditions, the bulk of these energy services will be provided by fossil fuels. Projections by a range of organizations indicate that oil, natural gas and coal are likely to remain the mainstays of global energy supply systems for the greater part of the twenty-first century. Consequently, it is important that the energy systems and energy infrastructure, including the oil, natural gas and coal resource base, of the Caspian Sea region be interconnected and integrated into the European and world energy systems.

VI. ACTS OF TERRORISM

42. Following the tragedy of 11 September 2001 in New York and Washington, the world entered into a new era of insecurity. The events of 11 September ushered in a new kind of international security risk; what used to be figments of an imaginative mind – the use of civilian infrastructure, commercial airliners as weapons by terrorists to cause mass destruction – became real and genuine.

43. The events of 11 September also raised a number of questions about the vulnerability of energy infrastructure to terrorist attack. Energy infrastructure is composed of primary energy-producing units that are connected to energy markets through a vast system of pipelines, road and water transportation, and electric power grids, including storage facilities. This complex, vast and expensive infrastructure is an appealing target for sabotage and acts of terrorism.

44. Even prior to 11 September, there were instances of acts of sabotage and terrorism on oil and gas pipelines and high-tension electricity transmission infrastructure. For the most part, however, these acts aimed at furthering economic, political or ideological objectives were usually localized and intended to disrupt the flow of energy and create economic hardship. But 11 September changed all of this. Today, one cannot dismiss the possibility of acts of terrorism on energy infrastructure aimed at generating the most extensive collateral damage possible, such as loss of life and mass destruction of property.

45. Large oil and gas production facilities (e.g. offshore platforms) and storage facilities (e.g. large liquefied natural gas storage tanks located in or near urban centres) have the greatest potential for creating collateral damage, though they may not necessarily be the most susceptible to attack. Likewise, attacks against thermal power plants and associated facilities, particularly in urban areas, can cause significant collateral damage.

46. On the other hand, oil and gas pipelines, and associated compressor stations, while more susceptible to sabotage and terrorism, are much less likely to cause widespread loss of life and property damage. Terrorist acts against these facilities, as well as electricity transmission infrastructure, can disrupt the availability and normal flow of energy, and if perpetrated against transportation hubs, can compromise the flexibility and integrity of transportation networks. But they are less likely to result in significant collateral damage and can be repaired relatively quickly.

47. There are a variety of risks associated with nuclear power ranging from theft, sabotage or illicit trafficking in nuclear material and other radioactive substances to sabotage or acts of terrorism against nuclear facilities or transport systems. There has been substantial international cooperation both to upgrade facilities around the world and to put more effective security recommendations and standards in place. Peaceful nuclear installations are often more robust and much better protected than other hazardous non-nuclear installations.

48. The security risks and consequences of an attack by terrorists on energy installations need to be assessed and taken into account in energy policy decision-making. Facilities and hazardous materials need to be protected from mass-consequence sabotage or acts of terror. Adding to the woes of the energy sector are the difficulty and expense of obtaining insurance coverage against terrorism, exposing energy companies to potentially large financial risks.

49. But it should be stressed that while the potential for acts of terrorism are real and ever present, measures taken by governments and the private sector to protect energy infrastructure have to be commensurate with risks and potential damage. In the final analysis, these measures will invariably have to be paid for, and in most cases by energy consumers.

VII. CONCLUSIONS

50. Hydrocarbon production and exports from the Caspian Sea region will significantly increase over the next ten years. This will contribute to meeting growing global energy demand as well as helping to mitigate, to some extent, global energy security risks. This, however, should be seen in the context that hydrocarbon production from the Caspian Sea region, which currently represents about 2% of total world production, is not likely to contribute much more than 3% of total world production over the next ten years.

51. To accommodate increased hydrocarbon exports from the Caspian Sea region, existing export transport capacity has been expanded, new transport corridors have been developed and new pipelines constructed. Other export transport routes are under development or consideration. Most existing and new export transport routes are oriented westward to supply western industrialized countries though some capacity is being developed to supply Asian countries, notably China. At this time, the total transport capacity, existing, under development and planned, would seem to be adequate to meet expected export requirements.

52. The Turkish Straits, linking the Black Sea with the Mediterranean, are already well congested with oil tanker traffic. About 3 million barrels of oil per day, some of it Caspian Sea oil, transits through the Straits. A major accident could cause significant environmental damage. Caspian Sea oil exports, together with oil from other sources will therefore increasingly need to bypass the Turkish Straits either by way of pipelines through Turkey and the Russian Federation and/or tranship across the Black Sea to ports in Bulgaria, Romania and Ukraine.

53. The further development of oil and natural gas transport infrastructure linking the Caspian Sea region to south east Europe will contribute to the diversification of hydrocarbon sources of supply, enhance security of supply and provide economic opportunities to countries in south east and Central Europe. Countries along the transport routes will benefit from transit fees and the cross-border infrastructure will promote greater mutual interdependency and regional integration and, thereby, further economic and social stability.

54. A legal framework for the Caspian Sea is required. While not completely constraining development of the Caspian offshore, the lack of a legal framework is nonetheless hampering the planning and development of some offshore fields where conflicting territorial claims exist. Likewise, cooperation among the littoral Caspian Sea countries on environmental matters, including biodiversity, is essential in order to protect the marine environment for future generations as resource development proceeds in the Caspian Sea.

55. While Caspian Sea hydrocarbon resources are important to the Russian Federation and the Islamic Republic of Iran, both countries have access to significant hydrocarbon resources elsewhere on their territories. As such, they have a wide portfolio or wide range of options regarding hydrocarbon development projects. The same is not true for Azerbaijan, Kazakhstan and Turkmenistan where hydrocarbon resources are largely concentrated in or adjacent to the Caspian Sea. Hence, the development of these resources and subsequent consideration of multiple export outlets are much more important for these three countries in terms of their impact and contribution to their national economies than is the case for the Russian Federation or the Islamic Republic of Iran.

56. Political differences and tensions among countries within and outside the Caspian Sea region continue to hamper cooperation among the countries for energy development and use. Likewise, inadequate economic development opportunities and social and ethnic unrest in neighbouring countries continue to trouble the region as a whole, undermining the opportunity to build a prosperous and secure future. If political, economic and social problems could be overcome, an integrated hydrocarbon production, transportation and utilization infrastructure network could be developed extending from western Europe in the west to India in the east.

57. International cooperation and producer-consumer dialogue are key elements for establishing the investment environment and regulatory framework that Caspian Sea region countries will need in order to attract the investments required to further develop their hydrocarbon reserves and resources and to extend their energy transportation infrastructure more widely.

VIII. RECOMMENDATIONS

58. The following recommendations on enhanced trade and international cooperation for the littoral countries of the Caspian Sea emerge from the preceding analysis and the deliberations of the UNECE Energy Security Forum High-Level Meeting on the Caspian Sea Region (28 June 2005) and the Seminar on Energy Security Risk Mitigation in the Caspian Sea Region (21 April 2006). In order to enhance energy trade and cooperation the countries of the Caspian Sea region are recommended to:

- (a) Cooperate on the analysis of the geological conditions, measurement and assessment of hydrocarbon deposits to more accurately determine the size, scope and nature of the energy reserves and resources in the region;
- (b) Conclude a legal framework for the Caspian Sea in order to eliminate conflicting territorial claims and ensure the protection of the marine environment for future generations as resource developments proceed in and adjacent to the Caspian Sea;
- (c) Appraise the geological conditions of proposed hydrocarbon pipeline corridors and the consequences of seaborne oil transport to ensure the public safety and environmental integrity of the region;
- (d) Establish and maintain clear, transparent and unambiguous legal requirements and regulations on investments in order to develop and transport hydrocarbon resources to international markets;
- (e) Promote the protection of investor legal rights ensuring equal treatment for domestic and foreign investors;
- (f) Stimulate direct investments into capital intensive hydrocarbon projects by promoting profitable and efficient investments and adhering fully to the terms of international contracts and agreements;
- (g) Establish joint ventures for the local manufacture and deployment of oil and gas equipment;
- (h) Work collectively to enhance existing energy transport links, evaluate new energy transport corridors, establish energy transit agreements and develop environmentally sound energy transportation systems;
- (i) Engage other UNECE member States in a dialogue on the ways and means of diversifying hydrocarbon exporting economies away from too much reliance on hydrocarbon resource exploitation and assess the investments needed to accomplish this in the context of sustainable development; and
- (j) Work with other UNECE member States to improve the political, economic and social conditions within the region and in neighbouring countries by strengthening international relations and economic cooperation, enhancing economic development opportunities and addressing the causes of social and ethnic tensions.

¹ BP Statistical Review of World Energy, June 2006