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**THE TABLE SUMMARIZING THE RESULTS OF THE UNCTAD SURVEY  
ON COMPETITION IN ENERGY MARKETS**

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**A. MARKET STRUCTURE**

<b>COUNTRY</b>	<b>GENERAL</b>	<b>GENERATION</b>	<b>TRANSMISSION</b>	<b>DISTRIBUTION</b>	<b>ACCESS TO NETWORK</b>
<b>ALGERIA</b>	Electricity is provided by a vertically integrated public utility. The market is highly concentrated. SONELGAZ is the largest operator with 8 subsidiaries in generation, transmission of electricity and transport of gas and distribution of both electricity and gas. Despite being entirely state owned, legally, it has a private status.	SPE, a subsidiary of SONELGAZ, is the largest operator with a market share of 83% in 2006. From 2007 onwards, its market share is expected to decrease upon the entry into operation of new installations.	Electricity: GRTE, an autonomous subsidiary of SONELGAZ, is the single operator.  Gas: GRTG, a subsidiary of SONELGAZ, is the operator for the transport.	Distribution of electricity and gas is carried out by the four subsidiaries of SONELGAZ, which are SDA, SDC, SDE, SDO.	Access is regulated. The regulation on modalities of access is in progress and expected to be issued in 2007. Access tariffs are fixed by the regulatory authority.
<b>ANGOLA</b>	In gas, the monopoly Sonagol is the leading company. In electricity, two vertically integrated public utilities are involved.	A state owned monopoly generates and distributes electricity.	Transmission network is operated by a state owned monopoly.	A state owned monopoly generates and distributes electricity.	Access to the network is not available.
<b>BARBADOS</b>	The only operator in electricity is Barbados Light & Power Company Limited (private). In gas, Barbados National Oil Company Limited (state owned), is the only operator. There is complete vertical integration in electricity, where the mentioned company is engaged in all activities from generation to supply of electricity.	Barbados Light & Power Company Limited, a private monopoly, generates electricity.	Barbados Light & Power Company Limited operates the network.	Barbados Light & Power Company Limited distributes electricity.	Access to the network is not available.
<b>BHUTAN</b>	The power sector is managed by public enterprises. There is no vertical integration between generating stations and transmission/distribution activities.	In electricity, there are 4 major hydro generating stations, all state owned.	There is only one transmission and distribution entity, the Bhutan Power Corporation (BPC), which is state owned. BPC has also some mini-micro hydro generating stations for off grid areas.	Bhutan Power Corporation (BPC) is the only distribution entity.	Access to networks is guaranteed by the Electricity Act 2001 upon payment of fees, tariffs and other charges.

<sup>1</sup> This Table is prepared based on the responses to the UNCTAD Questionnaire on Competition in Energy Markets received by 30 June 2007 from the following Member States: Algeria, Angola, Barbados, Bhutan, Botswana, Brazil, Burkina Faso, Cameroon, Colombia, Costa Rica, Croatia, Honduras, Italy, Japan, Kenya, Mali, Mauritius, Mozambique, Nepal, Oman, Pakistan, Papua New Guinea, Peru, Russian Federation, Sao Tome and Principe, Singapore, Sri Lanka, The Former Yugoslav Republic of Macedonia, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Yemen, Zambia, Zimbabwe. Since the Roundtable discussion will be limited to electricity and gas markets, this Table includes only the information provided by Member States on these two sectors. Please note that this Table is limited by the extent of information provided by Member States.

<b>BOTSWANA</b>	In the electricity sector, there is only one operator, the Botswana Power Corporation (BPC), which is vertically integrated. BPC is a state-owned monopoly generating, transmitting and distributing electricity throughout Botswana. As to gas, there are four operators: Afrox, BP, Pula Gas and Easy Gas.	In the electricity generation, besides BPC, there are independent power producers licensed by the Government.	BPC is the sole transmission network operator.	BPC is the only distribution company.	Access to the transmission network is currently not available for any other company than BPC.
<b>BRAZIL</b>	There are quite many operators in the electricity market. Generation and distribution are quite competitive segments. Vertical integration is prevented by an amendment in the relevant law. The current sectoral model requires the separation of regulated activities from the competitive ones. After the privatization of distribution and part of the production of electricity, the state involvement lessened and competition was introduced.	Brazil is one of the top hydropower producers in the world. There are 78 licensed producers; 611 independent power producers and 486 auto-producers. Yet, 51% of the market is held by six companies. The largest producers are under control of the federal government.	The transmission system is divided into transmission and sub-transmission networks. The primary network transmits electricity to major consumer centres and supplies energy to large consumers. The sub-transmission network is an extension of the primary network, which carries electricity to smaller consumer centres and provides energy to large industrial consumers. <sup>2</sup>	There are 64 concessionaires in distribution. Yet, six major companies hold 46% of the market in distribution.  Although some of the large distributors are under the control of the state governments, distribution is largely carried out by private groups.	Access is guaranteed by law.
<b>BURKINA FASO</b>	The electricity sector in Burkina Faso is divided into two segments: - The large urban areas serviced by Sonabel, which has 99% of the market, - The rural electrification done by the Electrification Development Fund (EDF). The electricity sector is vertically integrated.	The state-owned company, Sonabel, which is expected to be privatized, is the largest operator.	Sonabel is the largest operator.	Sonabel is the largest operator.	Access to the transmission network is currently not available.
<b>CAMEROON</b>	In the electricity sector of Cameroon, there is only one operator, AES-SONEL, a vertically integrated electricity utility, which carries out generation, transmission, distribution and retail of electricity. AES-SONEL is under mixed ownership.	AES-SONEL is the sole enterprise that generates electricity.	AES-SONEL is the sole transmission network operator.	AES-SONEL is the sole enterprise that distributes and retails electricity.	Third party access to the transmission network is guaranteed by the sector specific law and the specific provisions laid down in the concession contract.
<b>COLOMBIA</b>	There are quite many operators in the electricity sector. The Law enacted in 1994 allows only those companies,	There are 36 generation companies as of 2006.	There are 11 transmission companies as of 2006. Transmission is under mixed	There are 32 distribution and 67 retail companies as of 2006.	Access to the network is available upon compliance with the standards and payment of fees.

<sup>2</sup> Source: <http://www.edp.pt/EDPI/Internet/EN/Group/AboutEDP/BusinessEnvironment/BrazilianElectricitySystem/Default.htm>

	which were integrated vertically at the time of the enactment of the Law, to remain integrated. However, the transmission network operators are prevented by law to get involved in generation or retail activities. Activities in the electricity market are under mixed ownership, whereas the gas market includes very little state involvement.		ownership. Out of the four main companies, two are completely state owned, while the other two have 27% and 11% private share.		
<b>COSTA RICA</b>	The electricity sector is both horizontally and vertically integrated. The sector involves large state participation and is highly concentrated.	The main company is ICE (Instituto Costarricense de Electricidad), a vertically integrated public enterprise. Together with its sub-company CNFL, ICE generates 86% of total electricity supplied. ICE has long term exclusive sales contracts with 30 small private generators. In total, ICE accounts for 97% of the generation activity.	ICE is the sole network operator.	There are 8 companies in distribution. The largest ones are ICE with 39% and CNFL with 41% market shares. The rest of the market is accounted for by 2 municipal companies and 4 rural electrification cooperatives.	The Law defines transmission as a public service and therefore third party access to the transmission network is possible. The access fee is fixed by the regulatory authority ARESEP.
<b>CROATIA</b>	Information not available.	Information not available.	Information not available.	Information not available.	Information not available.
<b>HONDURAS</b>	The electricity sector involves both public and private companies. The largest electricity operator is the state owned National Electric Energy Enterprise (ENEE), which is vertically integrated.	ENEE is the largest company generating electricity through hydroelectric generators. In addition to ENEE, there are several independent private power producers, the largest two of which are Lufussa and Enersa. Yet, ENEE is the sole purchaser of electricity produced by independent producers.	The transmission network, the National Interconnected System (SIN), is owned and operated by ENEE.	ENEE is the sole enterprise that distributes electricity through SIN. Systems that are not connected to SIN establish distribution companies that generate their own supply and are called "isolated distribution systems". There are five such off-grid private distribution companies.	Third party access to the network is guaranteed by the electricity law upon payment of tariffs or fees.
<b>ITALY</b>	In the electricity market, there were 1548 electric undertakings operating in the sector as of 2005. Yet, the electricity sector is highly concentrated: the four major producers in 2005 accounted for over 70% of national production. At the wholesale level, concentration is also very high in each of the four regional geographic markets (Northern Italy, Southern Italy, Sicily and Sardinia). Several small competitors account for only marginal market shares. The main companies in the electricity sector are vertically integrated and operate at the generation, distribution and retail levels.	There were 470 self-producers and 1.078 producers in 2005 in the electricity market. In 2005 the ENEL Group owned about 50% of the total installed generation capacity and held 45.1% of the domestic demand.	The electricity is transmitted by Terna Spa, which owns 99% of the national grid. Terna Spa is separated from ENEL and controlled by a state-owned holding company.  As regards the gas sector, the entire national gas pipeline is owned and operated by Snam Rete Gas Spa (SRG), a corporation controlled by ENI Spa.	There are 183 distributors in the electricity market. ENEL is the largest distribution/retail company, which held about 80% of total sales to non-eligible customers in 2005.  As for gas distribution, ITALGAS Spa (controlled by ENI Spa) is the main distributor with a share of 47.7% in retail sales in 2004.	Regarding access to the network, third party access is regulated by the Italian Regulatory Authority for Electricity and Gas (AEEG), which has to approve the network code defined by Terna (the network company). AEEG defines the remuneration for transmission on the basis of a tariff system which is revised every four years.  Third party access in the gas market for all domestic infrastructures is also regulated by the Italian Regulatory Authority for Electricity and Gas (AEEG). The transmission network

	<p>In the electricity sector, ENEL Spa is the largest company, 60% of which is listed on the national stock exchange and the rest controlled by the State.</p> <p>The gas sector is highly concentrated as well. It is dominated by ENI Spa, a vertically integrated company, which controls the pipeline grid company (SNAM), as well as the only LNG terminal operator (GNL Italia). In addition, ENI Spa is a listed company controlled by the State through the Treasury and another state-owned holding company. Other upstream companies (producers or importers) are ENEL Spa, Edison Spa, Plurigas Spa and Sorgenia Spa. Several small competitors account for marginal market shares.</p>				tariffs are based on an entry-exit scheme subject to a price cap mechanism. In case of distribution, postage stamp tariffs subject to a price cap are adopted.
<b>JAPAN</b>	<p>The electricity sector in Japan involves many operators and is dominated by private companies, most of which are vertically integrated. In 2003, total market share of the ten large private general electricity utilities was 99.5 %.</p> <p>The gas sector is also dominated by vertically integrated large private companies. The market share of the four major general gas utilities is about 80%.</p>	<p>There are 10 general electricity utilities, which generate, transmit and sell electricity and 23 power producer suppliers.</p> <p>In the gas market, there are 211 general gas utilities, 1671 community gas utilities, about 25,800 LP gas selling companies, 14 gas pipeline service providers and 14 large-volume gas suppliers.</p>	Please see the section under "Generation".	Please see the section under "Generation".	There are regulations, which intend to ensure third party access to electricity and gas network.
<b>KENYA</b>	The electricity operators are under mixed ownership and are not vertically integrated. Yet, the sector is highly concentrated.	85% of generation is provided by KenGen, of which 30% is private, while the rest is produced by four independent power producers.	The transmission and distribution network operator is Kenya Power and Lighting Company (KPLC), of which 52% is private. The network is operated by one company but under mixed ownership.	KPLC is the sole distribution company.	Access to the network will be provided under the new Energy Act, 2006, which will come into effect on July 1, 2007.
<b>MALI</b>	The principal electricity service provider is Energie du Mali, EDM-SA, of which 66% is state-owned. The networks for urban and rural regions are separate. In urban regions, EDM-SA is the sole service provider,	EDM-SA generates electricity in urban areas, whereas around the "permissionnaires" provide electricity in rural area. Following the privatization of electricity sector in 2000, the production and sale of electricity to EDM-SA has	The transmission network is operated by EDM-SA.	EDM-SA is the sole distribution company.	EDM-SA will remain as the central purchaser until 2010. After then, the network will be opened for the utilisation of other operators subject to fee. The legislation is still being elaborated.

	which is vertically integrated, whereas in rural regions the "permissionnaires" are the service providers.	been open to other operators.			
<b>MAURITIUS</b>	<p>The state owned Central Electricity Board (CEB) has the monopoly in transmission and distribution and generates 50% of electricity demanded in Mauritius and buys the other half from private producers. Thus, there is complete vertical integration.</p> <p>As for gas, it is imported by the State Trading Corporation and sold to distributors, Shell and Totalgaz. There is no vertical integration in gas.</p>	CEB generates 50% of electricity demanded and purchases the rest from private producers.	CEB has the monopoly in transmission.	CEB has the monopoly also in distribution.	The third party access to the network is possible at the transmission level and can be negotiated with the CEB.
<b>MOZAMBIQUE</b>	In the electricity sector there are two operators, the distributor company, Electricity of Mozambique (EDM), and Transmission Company of Mozambique (MOTRACO). The electricity market is vertically integrated.	Cahora Bassa Hydroelectric (CBH) is the generator which is vertically integrated with the EDM.	The transmission network is operated by the Transmission Company of Mozambique (MOTRACO).	Electricity of Mozambique (EDM) is the distribution company. EDM is supplied by CBH through the network of the South African Company, ESKON, using the MOTRACO substation.	Third party access to the network is available and is regulated by an agreement between the generator in Mozambique and suppliers in South Africa.
<b>NEPAL</b>	Nepal Electricity Authority (NEA) is the main operator, which is a vertically integrated and publicly owned power utility. In gas, Nepal Oil Corporation is the single operator.	NEA generates most of the electricity. There are four other operators. However, the participation of these private generators in total capacity is very low and they sell their production to NEA.	NEA is the only operator in transmission.	NEA is the only distribution utility.	The recent electricity policy foresees the availability of access to third parties. An act to this aim is yet to be enacted.
<b>OMAN</b>	<p>Following the reforms, the electricity sector has become fully "corporatized". The Main Interconnected System (MIS) in the north of Oman, which accounts for 90% of electricity supplied in the country, is unbundled into separate generation, transmission, procurement and distribution/supply companies.</p> <p>Besides MIS, there is a separate rural network operated by the Rural Areas Electricity Company (SAOC), which generates, transmits, distributes and supplies electricity to certain areas where the MIS does not extend.</p>	MIS contains 7 electricity generation companies, 5 of which are private. The largest capacity belongs to a state-owned company, which accounts for 22% of the total generation capacity. In rural areas, electricity is generated by SAOC, a public utility.	The transmission and distribution network is currently owned by the state. MIS includes one transmission company.	The transmission and distribution network is currently owned by the state. MIS consists of 3 distribution and supply companies.	The Law guarantees free access to the network.

<b>PAKISTAN</b>	<p>The electricity sector is vertically integrated. The largest operator is the Water and Power Development Authority (WPDa). Karachi Electricity Supply Corporation, which was privatized in 2005, is another operator engaged in generation, transmission and distribution of electricity.</p> <p>In the gas sector, the largest operators are Sui Northern and Southern Gas Pipeline Companies.</p> <p>The electricity and gas markets are under mixed, that is, both public and private, ownership. The companies in these sectors are currently under the privatization program.</p>	The Water and Power Development Authority (WPDa) is the largest operator and generates electricity.	The Water and Power Development Authority (WPDa) is the largest operator and transmits electricity.	The Water and Power Development Authority (WPDa) is the operator responsible for the distribution of electricity in the entire country.	There is third party access to the transmission network, which is regulated by the National Electric Power Regulatory Authority and negotiated between the network operator and the distribution companies.
<b>PAPUA NEW GUINEA</b>	<p>99% of electricity is provided by PNG Power Limited, which is a vertically integrated state owned enterprise.</p> <p>In gas, there is only one importer company, which is also the sole retailer. Yet, the gas market is open to competition.</p>	99% of electricity in Papua New Guinea (PNG) is generated by the state owned company PNG Power Limited. However, large users such as mining companies generate their own electricity.	PNG Power Limited operates the transmission network.	PNG Power Limited distributes electricity.	There is an obligation for granting third party access to the network on a non-discriminatory basis.
<b>PERU</b>	<p>The Peruvian electricity market is competitive. Peru is one of the countries, which has undertaken relatively deeper liberalization. There is no vertical integration in the electricity market. However, there are different companies belonging to the same Group (Endesa) operating in generation (Edegel) and distribution (Edelnor).</p> <p>Furthermore, for regulated customers, distributors have a monopoly over the distribution and commercialization of electricity in their concession zones.</p>	Electricity generation is under mixed ownership. There are 18 companies in generation. However, the ENDESA Group has a market share of 64%. Hence, there is high market concentration in generation.	The transmission network is under mixed ownership, where the state has only 15% share. There are 7 operators in transmission.	There are 21 operators in the electricity distribution. The private companies Edelnor and Luz del Sur are the main distributors.	Access to the network is guaranteed by Law and access fees are regulated by OSINERG (the energy regulator).
<b>RUSSIAN FEDERATION</b>	The largest operator in the Russian natural gas market is OJSC Gazprom, which is under public and private ownership. System of separate accounting by activity status is operating. Companies for gas recovery,	Information not available.	Information not available.	Information not available.	In accordance with the Law on the Protection of Competition, the Russian Federation Government determines rules of access to goods subject to natural monopolies.

	transportation, distribution, sales are organizationally detached and included in the vertically integrated company OJSC Gazprom.				According to the Law on Natural Gas Supplying in Russian Federation, the owners of gas supply systems have to provide non-discriminatory access to any company operating at the territory of the Russian Federation.
<b>SAO TOMÉ AND PRINCEPE</b>	Information not available.	Information not available.	Information not available.	Information not available.	Information not available.
<b>SINGAPORE</b>	<p>In the electricity market, there are many operators in generation and retail. As to vertical integration, transmission and distribution are separated at the ownership level from generation and retail activities.</p> <p>In the gas industry, there are currently two gas network operators, one of which is required to divest its pipeline assets to the other, and two large gas importers.</p>	In the electricity industry, as of 1 April 2007, there are 8 electricity generation companies. The three largest generation companies, SenokoPower, PowerSeraya and Tuas Power, which are all state owned, account for 86% of the market.	SP PowerAssets Ltd. is the sole owner and operator of the electricity transmission network; whereas PowerGas Ltd is the sole owner and operator of the gas pipeline network.	SP PowerAssets Ltd. is the only electricity distribution company. Besides, there are 6 retail companies and a market support services provider.	Third party access to the electricity transmission and distribution network is possible.
<b>SRI LANKA</b>	Ceylon Electricity Board (CEB) is the largest operator, which is vertically integrated. Electricity sector is a highly concentrated sector, where state participation prevails.	CEB accounts for 73% of generation.	CEB controls the transmission network.	CEB carries out 85% of distribution.	Third party access to the network is not available.
<b>THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA</b>	The electricity sector consists of separate enterprises for generation, transmission and distribution and retail. There is large state participation in generation and transmission, whereas distribution and retail are under mixed ownership.	In the electricity market, there is one operator, AD ELEM, which is state owned and accounts for 90% of domestic generation.	<p>There is one operator, AD MEPSO, which is state owned, for the transmission of electricity, organization and operation of the electricity market and wholesale supply of electricity for tariff customers.</p> <p>In the natural gas sector, there is only one operator for transmission, AD GAMA, which is half state owned and half private.</p>	<p>Regarding distribution and retail supply of electricity, there is one operator, AD ESM (EVN), which is 90% privately owned and 10% state owned.</p> <p>In the natural gas sector, the distribution network is still under construction and operators are at the registration stage.</p>	Third party access to the network is regulated by the network operator and pre-approved by the Energy Regulatory Commission.
<b>TRINIDAD AND TOBAGO</b>	In the electricity sector, Trinidad and Tobago Electricity Commission (T&TEC) is the sole provider. It is responsible for the transmission, distribution and administration of electrical power to the national electricity grid. The electricity sector	The main electricity generator is PowerGen, which is a joint venture involving three entities. T&TEC owns 51% of PowerGen. T&TEC has Power Purchase Agreements (PPA) under which it buys power at a fixed price from PowerGen as well as from Trinity Power	T&TEC is the sole transmission network operator.	<p>T&amp;TEC is also the sole distributor of electricity.</p> <p>National Gas Company Limited (NGC) is the main local distributor of gas.</p>	T&TEC has provided both generation companies, that is, PowerGen and Trinity Power Limited, with access to its network.

	<p>is to some extent vertically integrated.</p> <p>In the gas sector, Atlantic LNG Company of Trinidad and Tobago is a liquefied natural gas (LNG) operating company, which liquefies natural gas for export. Atlantic LNG is under both public and private ownership. The major suppliers to Atlantic LNG are BP Trinidad and Tobago LLC (BP TT) and BG Trinidad and Tobago (BG TT), which also own a large share of Atlantic LNG. These two suppliers are subsidiaries of large multinationals, whereas the main local distributor, National Gas Company Limited (NGC), is wholly state-owned. Hence, the gas sector is vertically integrated.</p>	Limited, which is a foreign natural gas-electricity generating facility.			
<b>TUNISIA</b>	<p>The electricity sector is vertically integrated. Société Tunisienne d'Electricité et de Gaz (STEG) is the main operator both in electricity and gas sectors.</p>	<p>In the electricity market, there are three generation companies. STEG is the main generation company.</p> <p>In the gas market, there are five companies in production.</p>	<p>STEG is the transmission network operator for both electricity and gas.</p>	<p>STEG is the sole distributor of electricity and natural gas.</p>	<p>Third party access to the network is not possible in the electricity and gas markets.</p>
<b>TURKEY</b>	<p>The electricity sector is dominated by state owned enterprises. The sector is undergoing a reform process. Following the adoption of a sector specific law in 2001, the electricity industry was unbundled.</p> <p>The natural gas market involves both public and private companies. Following the liberalization of the market, private companies started to enter the market. Turkey imports about 97% of the natural gas consumed. There are three storage companies (one underground, two LNG), one transmission company, 49 distribution companies.</p>	<p>Turkish Electricity Generation Company (TEÜAŞ), which is a state-owned generation company, has the largest market share, that is, 46% on generation basis.</p>	<p>The electricity transmission network is operated by the Turkish Electricity Transmission Company (TEİAŞ), which is a state economic enterprise.</p> <p>BOTAŞ, a state owned enterprise, is the largest company involved in transmission, storage and import of natural gas. BOTAŞ is vertically integrated and will remain so until 2009.</p>	<p>The electricity distribution network is divided into 21 regions, out of which 20 are operated by the state-owned Turkish Electricity Distribution Company (TEDAŞ) and one is operated by the private sector. In the electricity wholesale market, the state-owned Turkish Electricity Trading Company (TETAŞ) has the largest market share, with 82% in 2005.</p> <p>As to the natural gas market, all the distribution regions created following the enactment of the Natural Gas Market Law (NGML) are owned and operated by private companies.</p>	<p>Electricity Market Law provides that TEİAŞ shall make non-discriminatory access and connection services to the transmission network available to all users.</p> <p>As to third party access to the natural gas network, the transmission company has the obligation to connect any user upon request within 12 months according to NGML.</p>
<b>UKRAINE</b>	<p>The electricity sector is undergoing reforms. Generation and retail are the competitive segments of the market. The market is not vertically integrated. Ukraine has a Wholesale Electricity</p>	<p>In the electricity market, there are 42 generation companies composed of thermal, hydro and nuclear power plants, some of which are monopolies producing in an assigned territory whereas some are</p>	<p>The National Energy Company, NEC Ukrenergo, is the state enterprise, which operates the national electricity grid and the interstate power networks.</p>	<p>There are 28 distributors and 329 suppliers, which retail electricity on the basis of regulated and unregulated tariffs. The share of electricity supplied at unregulated tariffs constitutes</p>	<p>In the electricity sector, the network operators ensure access to the network for all economic entities, which have licenses.</p>

	<p>Market operated by the State Enterprise "Energoynok" established in 2000.</p> <p>The natural gas sector is not vertically integrated. Ukrgas-Energo is the largest operator with a market share of 70%. Naftogas Ukrainy National Joint Stock Company, which owns half of the shares of Ukrgas-Energo, is the second operator with a market share of 28%. Despite large state participation, the natural gas market includes around 200 economic entities.</p>	independent suppliers.	Ukrtransgas, the affiliated company of Naftogas, operates the gas transmission system (GTS), which includes gas pipelines, underground gas storages, compressor stations and a branched network of gas metering, gas distribution and gas-filling compressor stations. GTS is one of the most powerful gas transmission systems in the world.	approximately 10% of the total volume of electricity supply in Ukraine.	In the gas sector, the legislation recognizes the rights of all economic entities for access to gas trunk pipelines and gas service pipes. Access is made available on the basis of contracts.
<b>YEMEN</b>	In the electricity sector, it is the state that deals with generation, transmission, distribution and supply, whereas in the gas market both state and private national and international companies are involved.	Detailed information is not available.	Detailed information is not available.	Detailed information is not available.	There is no access to the electricity networks while access to gas network is available.
<b>ZAMBIA</b>	In the electricity sector, there are 3 operators, ZESCO, a state owned company, CEC and Lunsemfwa, private companies. The electricity sector is vertically integrated.	ZESCO generates almost all the electricity (ZESCO 98%, Lunsemfwa 2%).	Transmission is undertaken by ZESCO, CEC and Lunsemfwa.	Information not available.	As for power transit, there is access, while for power within Zambia there is no access to the network.
<b>ZIMBABWE</b>	Zimbabwe Electricity Supply Authority (ZESA) imports about 35% of the country's electricity requirements. ZESA is the major electricity operator. It is a vertically integrated state-owned holding company that has three subsidiaries: (i) Zimbabwe Power Company (ZPC), which is involved in the production of electricity; (ii) Zimbabwe Electricity Transmission Company (ZETC); and (iii) Zimbabwe Electricity Distribution Company (ZEDC).	While ZESA has a near monopoly in generation and distribution of electricity, there are two other independent power producers that generate electricity for their own use and sell the surplus to ZETC.	Zimbabwe Electricity Transmission Company (ZETC) is involved in the installation of transmission network.	Zimbabwe Electricity Distribution Company (ZEDC) is involved in the distribution of electricity.	There is no access to the transmission network.

## B. REGULATION AND COMPETITION

COUNTRY	REGULATORY AUTHORITY	COMPETITION AUTHORITY	MERGERS & ACQUISITIONS
<b>ALGERIA</b>	The Commission for the Regulation of Electricity and Gas (CREG) is the financially autonomous and independent regulatory authority. CREG refers anti-competitive practices to the competition authority.	The Competition Council deals with competition cases in all sectors. The sector-specific law requires the regulator to coordinate with the competition authority regarding compliance of the behaviour of energy operators with competition rules.	The authorization of the competition authority is required and it is granted on the basis of a market share threshold criteria. CREG may state its opinion on the case. The decision on approval or rejection is made by the Competition Council following the opinion of the minister in charge of trade. The decision may be appealed to the Council of State.
<b>ANGOLA</b>	Electricity Sector Regulatory Institute (IRSE) is in the process of establishment. The Law is also in progress. It does not include provisions on competition in the electricity market.	The legislation is in progress. It does not include exemptions for energy markets. Once established, the two authorities are to work in cooperation.	Currently, there is no notification mechanism for mergers.
<b>BARBADOS</b>	The Fair Trading Commission (FTC) is responsible for utility regulation in electricity and natural gas markets. The Utility Regulation Act does not include provisions on anti-competitive practices.	The Fair Trading Commission (FTC) is also the authority responsible for competition issues. The Fair Competition Act deals with anti-competitive practices in all markets. The relevant departments of the Commission consult in regard to matters before them to decide whether an issue is better addressed under the Utility Regulation Act or the Fair Competition Act.	There is a merger notification mechanism. The FTC deals with merger notifications in all sectors, including the energy sector.
<b>BHUTAN</b>	Bhutan Electricity Authority is responsible for both regulation and competition in the electricity sector. The Electricity Act 2001 does not refer to anti-competitive practices, but mandate that the Authority shall encourage competition in electricity market and ensure non-discriminatory access to the network. Operators engaged in rural electrification and hydro generation up to 500 kW are exempted from licensing.	Bhutan does not have competition legislation.	Since there is no competition law, there is no notification mechanism for mergers.
<b>BOTSWANA</b>	There is no independent energy regulatory authority in Botswana. The Government regulates the services, pricing and tariffs in the electricity sector.	Botswana does not have a competition agency or a competition law either.	There have been no merger cases in the energy sector in Botswana.
<b>BRAZIL</b>	The National Agency for Electric Energy (ANEEL) is the regulatory authority. National Agency for Petroleum, Natural Gas and Bio Fuels (ANP) is the regulatory authority for gas. These two authorities are independent. They are both responsible for the promotion of competition and the prevention of anti-competitive practices in their relevant sectors. To this aim, they notify the Secretariat of Economic Law (SDE) of any violation of competition rules.	The Brazilian Competition Policy System (BCPS) is composed of the Secretariat for Economic Monitoring (SEAE) of the Ministry of Finance, the Secretariat of Economic Law (SDE) of the Ministry of Justice, and the Administrative Council for Economic Defence (CADE), an independent body administratively linked to the Ministry of Justice. The cooperation and coordination between the regulation and competition authorities are established by relevant regulation.	There is first a requirement for early consent of the Concession Authority for any transfer of the control of shares and the license of an energy company. Those mergers/acquisitions authorized by the regulatory agencies have to be notified to BCPS. In these regulated sectors, the opinion of the regulatory authority is also required during the examination at SEAE and/or SDE. Following the examination undertaken by SEAE or SDE, the merger case is sent to CADE which approves, blocks or imposes restrictions on mergers. CADE also has competence to sanction anti-competitive practices.
<b>BURKINA FASO</b>	There is no regulatory authority in the energy sector. The sector is currently regulated by the Government.	There is no competition authority.	Since there is no competition law, there is no notification mechanism for mergers.

<b>CAMEROON</b>	The Agency for the Regulation of the Electricity Sector (ARSEL) is the regulatory authority responsible for promoting competition in the electricity market. Yet, the sector specific law does not contain any provisions on anti-competitive practices, such as cartels, abuse of dominance and mergers.	The authority responsible for dealing with anti-competitive practices is the National Competition Commission. ARSEL is to cooperate with the National Competition Commission on matters concerning anti-competitive practices in the electricity sector.	There is no merger notification requirement in place. As to the approval/refusal of mergers, even if a merger/acquisition might adversely affect competition, it may be authorized if it is demonstrated that this operation brought or will bring real efficiency benefits to the national economy, which could not have been achieved without such merger/acquisition. There have not been any merger cases since there is still a monopoly situation in the electricity sector.
<b>COLOMBIA</b>	The Commission for the Regulation of Electricity and Gas (CREG) is responsible for regulating the electricity, natural gas and liquidated petroleum gas (LPG). The sector-specific Law refers to practices that violate competition rules. The Superintendence of Public Services has competence to sanction anti-competitive practices.	The competition authority is the Superintendence of Industry and Commerce. Currently, there is no legal provision on cooperation or coordination between the regulatory authority (CREG) and the competition authority.	Merger notification is required in all sectors. However, the authority responsible for such cases in the public services sector will soon be defined by a new law. Yet, in electricity, CREG has a criterion called "power threshold" considered in evaluating a merger in the electricity generation sector. In the gas sector, the criterion used in evaluating mergers is the "maximum participation" in distribution and retail. The compliance with this criterion is under the supervision and control of the Superintendence of Public Services.
<b>COSTA RICA</b>	The Regulatory Authority for Public Services (ARESEP) and the Ministry for Environment and Energy are responsible for regulation.	The Commission for the promotion of Competition under the Ministry for Economy, Industry and Commerce is responsible for competition issues. However, according to Article 9 of the Law on the Promotion of Competition and Effective Consumer Protection, public services sector is exempted from competition rules. Since the whole energy sector falls under public services by definition, this exemption applies to the energy sector as well. Due to this exemption, the electricity market is highly concentrated in all segments, that is, generation, transmission and distribution.	Due to the exemption of the energy sector from competition rules, there is no notification requirement for mergers and acquisitions in this sector.
<b>CROATIA</b>	The regulatory authority for energy markets is the Croatian Energy Regulatory Agency, which is an autonomous public institution.	Competition issues in all sectors of the economy, except for banking and partly telecommunications, are dealt with by the Croatian Competition Agency. The Competition Act includes provisions on anti-competitive practices. The competence to sanction such practices lies with the competent Courts. The Competition Agency and the Energy Regulatory Agency signed a cooperation agreement regarding competition issues in the energy market with a view to promoting competition.	There is a merger notification mechanism. Merger cases are to be examined by the Competition Agency. The authority who decides on approval, conditional approval or refusal of a merger is the Competition Council. However, there have not been any mergers in the energy sector due to the fact that the Croatian energy sector has not yet been liberalized.
<b>HONDURAS</b>	The National Energy Commission (CNE) is responsible for the regulation of the electricity sector. The sector specific law on electricity also includes provisions on competition, which refer to anti-competitive practices and abuse of dominance.	The authority responsible for competition in all sectors of the economy is the Commission on the Defence and Promotion of Competition. The relationship between the regulatory authority and the competition authority is not established by relevant laws.	There is no notification requirement for mergers and acquisitions in the electricity sector.

<b>ITALY</b>	<p>The Regulatory Authority for Electricity and Gas (AEEG) is in charge of regulating and controlling both the electricity and the gas sectors. Its mandate, as laid down in Act 481/95, is to guarantee the promotion of competition and efficiency while ensuring adequate service quality standards in the energy sector.</p> <p>The AEEG may also formulate observations and recommendations to the Government and to the Parliament concerning the market structure, the adoption and implementation of European Directives, the definition of licensing, convention and authorisation schemes. Yet, the sectoral legislation has no provisions on competition or anti-competitive practices.</p>	<p>The Antitrust Authority has the power to enforce the competition law without sectoral exemptions under Act 287/90. There is no legal provision on the cooperation or coordination between the Antitrust Authority and the AEEG, except for the requirement laid down in Act 481/95 for AEEG to report to the Antitrust Authority suspected infringements of competition law by companies operating in the electricity and gas sectors. Indeed in the past years there have been two cases reported by AEEG in which the Antitrust Authority initiated a procedure for alleged abusive conducts by ENI and ENEL. During the procedure, the Antitrust Authority asked for the cooperation of AEEG in processing the market data. However cooperation between the two authorities has extended much beyond these statutory prescriptions. For instance in 2003, the Antitrust Authority and AEEG jointly launched and carried out a fact-finding sector inquiry to examine the development of the liberalisation process in the gas and electricity sectors.</p>	<p>The merger notification system for the energy sector is not different from notification procedure in any other sector. The Antitrust Authority receives and deals with merger notifications relating to the energy sector as in all other sectors and examines the operations notified in terms of their impact on competition.</p> <p>There has not been any major merger case in the gas sector. In the electricity sector there have been many mergers and acquisitions in the last years partly due to certain provisions in the law, which envisage the liberalization of the electricity market (Please see the "Compilation of the Responses to the UNCTAD Questionnaire" for the details of the merger cases).</p>
<b>JAPAN</b>	<p>The Ministry of Economy, Trade and Industry (METI) is the authority responsible for energy regulation and enforcement of sector-specific laws on electricity and gas. METI also aims at implementing necessary policies to enhance competitive markets through sector-specific laws.</p>	<p>The authority responsible for overall competition policy is Japan Fair Trade Commission (JFTC). In the Guidelines for Proper Electric Power Trade and the Guidelines for Proper Gas Trade, JFTC and METI illustrate desirable trade practices and anti-competitive practices. JFTC and METI define anti-competitive practices as those practices, which violate the sector-specific laws as well as the competition law. JFTC and METI consult each other, where necessary, and collaborate in the preparation of guidelines concerning proper energy trade consistent with sector-specific laws and competition law.</p>	<p>Mergers and acquisitions that meet certain requirements must be notified to JFTC under the Antimonopoly Act. JFTC conducts necessary reviews on such cases. The Antimonopoly Act prohibits a merger/acquisition if it would substantially restrain competition.</p>
<b>KENYA</b>	<p>The Electricity Regulatory Board is the regulatory authority. The Energy Regulatory Commission (the Commission) established under the new Energy Act, 2006 takes over from the Board in July 2007. The law regulating energy market partly includes provisions on competition, which also cover cartels, abuse of dominance and mergers.</p>	<p>The Competition Authority in Kenya is a department of the Treasury known as the Monopolies and Prices Department headed by the Monopolies and Prices Commissioner under the control of the Minister. The Commissioner has the competence to sanction anti-competitive practices through the Ministry of Finance. Yet, there have been no cases of anti-competitive practices until now.</p> <p>In the Electric Power Act 1997 there was no explicit reference to cooperation and coordination between the competition authority and the regulatory authority. However, the new Energy Act, 2006 does provide for coordination with other Statutory Agencies. Likewise, the Draft Fair Competition Bill provides a legal framework for cooperation.</p>	<p>The authorities, which receive and deal with notifications on mergers and acquisitions, are the Ministry for Finance through the Monopolies and Prices Commissioner. Mergers and acquisitions must be approved by the Minister for Finance upon advice by the aforementioned Commissioner. However, the Monopolies and Prices Commissioner also seeks the input of the Energy Regulatory Commission. Until present, there have been no merger/acquisition cases in the electricity sector in Kenya.</p>
<b>MALI</b>	<p>The Commission on the Regulation of Electricity and Water (CREE) is an independent and autonomous authority in charge of regulating the energy sector. The sector specific legislation includes general provisions on competition and anti-competitive practices, such as abuse of dominance and discriminatory tariffs. However,</p>	<p>National Directorate of Commerce and Competition is the authority responsible for competition. There is no direct relation between the competition authority and the regulatory authority, each of which intervenes according to its prerogatives.</p>	<p>The common law on enterprises deals with mergers and acquisitions. The criteria and approval procedure has not yet been established. Since the liberalization of the electricity sector in 2000, there have not been any merger cases in Mali.</p>

	<p>the regulatory authorities do not have competence to make a decision on issues involving cartels and abuse of dominance or to sanction such practices.</p> <p>As regards gas, the authority, which is responsible for the regulation of gas markets, is the Ministry of Energy and Water.</p>		
<b>MAURITIUS</b>	<p>There is no regulatory authority. The government, through the competent ministry, is responsible for regulation in the energy market. The law for the setting up of a regulatory body for public utility sectors was voted in the Parliament, but it has not yet been promulgated.</p>	<p>There is no competition authority either. The government, through the competent ministry, is responsible for competition in the energy markets. Due to the small size of its network, competition in transmission and distribution is not economically sustainable for Mauritius.</p>	<p>There is no notification mechanism for mergers in the energy sector.</p>
<b>MOZAMBIQUE</b>	<p>The authority responsible for energy regulation is the Ministry of Energy. The Electricity Act 21/97 refers to competition but it does not include provisions on anti-competitive practices.</p> <p>In addition, there is the National Council of Electricity (CNELEC), which is responsible for the protection of consumers. CNELEC is like a forum to capitalize the public opinion regarding issues related to national electricity policy and the implementation of electricity law. CNELEC is also the council for counsel, arbitration and mediation in disputes between different concessionaries or between concessionaries and their consumers.</p>	<p>There is no competition legislation and authority in Mozambique. Therefore, competition related cases, if any, in the energy sector would be dealt with by the Ministry of Energy.</p>	<p>There is no notification mechanism for mergers/acquisitions in the energy sector.</p>
<b>NEPAL</b>	<p>The Department of Electricity Development, which is responsible for licenses, concessions and incentives, acts as a regulatory and monitoring body.</p> <p>The Electricity Tariff Fixation Commission (Commission) is an independent agency responsible for the review of tariffs and charges for all customers. The Commission is to be converted into a regulatory body in the future.</p> <p>In the gas sector, the Government of Nepal and to some extent Nepal Oil Corporation at the retail level are responsible for regulation.</p>	<p>Competition Promotion and Market Protection Board (Board) is the authority competent in competition issues. Current legislation on electricity does not incorporate provisions on competition. However, once the regulatory authority is established, the Board may request this authority to take actions against anti-competitive practices in the sector. The recently enacted Competition Promotion and Market Protection Act (Competition Act), on the other hand, will not impede the regulatory authority to take measure to this effect.</p>	<p>The procedures on mergers and acquisitions are yet to be established by a regulation.</p>
<b>OMAN</b>	<p>The Authority for Electricity Regulation (Authority), which is administratively and financially independent, regulates the electricity sector, while also promoting competition.</p>	<p>There is no separate competition authority in Oman. The Authority for Electricity Regulation is given the competence for the control of the market by Law. The sector-specific legislation includes competition criteria, such as market share, economic interest and restrictions on a licensee to undertake more than one regulated activity. The Authority for Electricity Regulation has the competence to impose sanctions against anti-competitive practices.</p>	<p>Approval of the Authority for Electricity Regulation is required before acquiring any strategic interest in other licensees in the electricity sector. Besides the competition criteria, there is a public interest provision for the evaluation of mergers.</p>
<b>PAKISTAN</b>	<p>The electricity sector is regulated by the National Electric Power Regulatory Authority (NEPRA) whereas the gas market is regulated by the Oil and Gas Regulatory Authority (OGRA).</p>	<p>Competition issues in general are dealt with by the Monopoly Control Authority (MCA). However, the Anti-Monopoly Law includes exemptions concerning energy markets under Section 25.</p>	<p>There is no notification mechanism for mergers in the energy sector under the Anti-Monopoly Law. Securities and Exchange Commission of Pakistan deals with merging of companies under the</p>

		Therefore, competition in energy markets is dealt with by the sector regulators, NEPRA and OGRA. The laws regulating the energy market include provisions on anti-competitive practices, such as abuse of dominance and mergers. The competence of the regulatory authorities extends to sanctions against anti-competitive practices. The cooperation and coordination between the Monopoly Control Authority and the regulatory authorities with respect to the handling of competition complaints is not laid down explicitly in relevant legislations. Yet, the regulatory authorities can forward the cases to the MCA, wherever necessary.	Companies Ordinance, 1984 and these mergers are approved or sanctioned by the High Courts. There has been no merger case in the energy sector.
<b>PAPUA NEW GUINEA</b>	Under the Independent Consumer and Competition Commission Act 2002 (ICCC Act), the Independent Consumer and Competition Commission (ICCC) has the competence to regulate utility industries dominated by state owned monopolies, such as electricity.  In gas markets, the Department of Energy and Petroleum (DEP) is responsible for licensing companies, which will start operation in exploration and extraction of gas under the Oil and Gas Act 1998.	ICCC is responsible for competition issues through its regulatory role and function in electricity and gas sectors.  The sector-specific Act on gas does not contain any provisions relating to competition or anti-competitive practices. The ICCC works closely with the DEP on matters concerning gas market.	Under the ICCC Act 2002, pre-merger notification is not mandatory. However, ICCC encourages merging parties to seek its views since there are significant penalties that can apply under the Act in cases where mergers substantially lessen competition in the market.
<b>PERU</b>	There is an autonomous regulatory authority, namely, OSINERG (Organismo Supervisor de la Inversión Privada en Energía), the Supervisory Body for Private Investment in Energy responsible for supervising the sector, in terms of quality, environmental protection, and compliance with the norms in electricity and hydrocarbons markets. It is also competent for the regulation of tariffs of transportation and distribution of natural gas.	The competition authority is the Institute for the Protection of Competition and Intellectual Property (INDECOPI-Instituto de Defensa de la Competencia y la Propiedad Intelectual). It is responsible for dealing with anti-competitive practices and merger control. The division of responsibilities between the regulation and competition authorities is clearly established.	INDECOPI is responsible for merger control under Antimonopoly and Oligopoly Law in the Electricity Sector, which requires preliminary approval of mergers. Yet, all the merger cases, which have been presented to INDECOPI have been approved, some with additional conditions.
<b>RUSSIAN FEDERATION</b>	The institutions responsible for regulation in the gas market are the Ministry of the Russian Federation for Industry and Energy with respect to sector legal regulation and state policy elaboration; Federal Tariffs Service on issues relating to fixing of regulated tariffs and legal regulation in this area.	The Federal Antimonopoly Service is the authority responsible for antimonopoly control, control over natural monopolies, control over the observance of the rules on non-discriminatory access and legal regulation in the pointed areas. The competence of the Federal Antimonopoly Service extends to the imposition of sanctions for anti-competitive practices. The Federal Antimonopoly Service requires companies to transfer the profits made by violating the Antimonopoly Law to the federal budget. As to the cooperation with other institutions on competition issues, the Federal Law on the Protection of Competition provides an opportunity to grant state and municipal assistance to economic entities in the certain cases.	There is a preliminary coordination mechanism for merges in the gas sector and subsequently a notification requirement to the Federal Antimonopoly Service. The Federal Antimonopoly Service then decides whether to approve or block the merger/acquisition.
<b>SÃO TOMÉ AND PRÍNCIPE</b>	There is no regulatory authority responsible for the energy sector.	There is no competition authority or competition legislation.	There is no competition authority or competition legislation to deal with merger/acquisitions, if any.
<b>SINGAPORE</b>	The Energy Market Authority (EMA) is responsible for both regulation and competition in the electricity and gas markets. The competence of the regulatory authority also extends to sanctions for anti-competitive practices.	Both the Electricity Act and the Gas Act have provisions on anti-competitive practices, including cartels, abuse of dominance and mergers, whereas the competition legislation currently does not cover electricity and gas markets.	Mergers and acquisitions are handled by EMA in accordance with the Guidelines on Evaluation of Merger and Acquisition Proposals in the Electricity Industry, which prohibit the three largest generation companies from holding any interest in each other or in each other's related retail companies.

<b>SRI LANKA</b>	The Ministry of Power and Energy and the Public Utilities Commission are responsible for regulation and competition in energy markets.	The Consumer Affairs Authority is responsible for ensuring fair competition. The legislation on competition does not extend any exemptions to the energy sector. The law regulating the energy markets includes provisions on competition and anti-competitive practices, such as mergers and abuse of a dominant position.	Currently, the Public Utilities Commission is the competent authority to handle notifications on mergers and acquisitions. The regulation on mergers/acquisitions is yet to be finalized.
<b>THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA</b>	Energy Regulatory Commission is the independent body responsible for the regulation of the energy sector.	The competition issues related to the energy sector are within the competence of the Commission for Protection of Competition. The Energy Law does not confer any power to the Energy Regulatory Commission for sanctioning anti-competitive practices. Although cooperation and coordination between these two authorities are not laid down explicitly in the Energy Law, they signed a Memorandum of Cooperation in the field of protection of competition in the energy market.	The Law on the Protection of Competition prescribes a merger notification mechanism. The Commission for Protection of Competition receives and evaluates such notifications. The legal framework for assessment of mergers in the energy sector is no different from the general rules on merger evaluation and the same criteria and procedure apply to mergers in the energy sector.
<b>TRINIDAD AND TOBAGO</b>	The authority responsible for the regulation of electricity is the Regulated Industries Commission (RIC); whereas the regulatory authority for the gas sector is the Ministry of Energy and Energy Industries.	Currently, it is Regulated Industries Commission (RIC), which deals with competition issues in the electricity sector. Competition issues in the gas sector will fall under the mandate of the Trinidad and Tobago Fair Trading Commission (TTFTC) which is expected to be established by the Fair Trading Act, 2006 upon its proclamation. As regards the sanctions against anti-competitive practices, the competence of the RIC extends to the revocation of licenses as well as the adoption of new pricing practices. The remedies that will be available under the Fair Trading Act once it is proclaimed shall include fines, injunctions and divestitures.	Currently, there is no notification requirement for mergers. Nevertheless, there is a pre-merger notification requirement under the Fair Trading Act to be enacted in respect of mergers exceeding 50 million TT Dollars. This would cover possible mergers in the energy sector.
<b>TUNISIA</b>	There is no sector regulator in the energy sector. The Ministry of Industry is responsible for the regulation of the energy sector.	The Directorate General for Competition and Economic Investigations and the Competition Council are exclusively responsible for competition issues. The competition legislation includes provisions on anti-competitive practices, such as cartels and abuse of dominance, and applies to all sectors in the economy without any exemption. Although there is no sector regulator in Tunisia, the competition law envisages the modalities of cooperation between competition authorities and sector regulators.	There is a pre-notification mechanism for mergers. The decision on the approval, refusal or conditional authorization of the merger is taken following an analysis on competition, international competitiveness and economic and social implications of the operation.
<b>TURKEY</b>	The authority responsible for the regulation of electricity, gas, petroleum and LPG markets is the Energy Market Regulatory Authority (EMRA).	Turkish Competition Authority (TCA) is responsible for competition issues in all sectors. There are no exemptions extended by competition legislation to electricity and natural gas markets.	Mergers and acquisitions are subject to the approval of TCA from a competition perspective while they are subject to the approval of EMRA from a regulatory perspective. The Competition Act applies to all mergers and acquisitions in Turkey except for a certain type of merger in the banking sector.
<b>UKRAINE</b>	National Regulatory Commission of Power Industry of Ukraine (NRCPI) is the authority responsible for regulation of the electricity and gas markets. One of the key tasks of the NRCPI is to promote competition in the production and supply of electricity as well as natural gas.	Competition issues in general are dealt with by the Antimonopoly Committee of Ukraine. This is the authority competent for sanctioning anti-competitive practices in the electricity and gas markets. Yet, the sector-specific legislation also includes certain provisions on competition, such as abuse of dominant position.	The Antimonopoly Committee deals with mergers and acquisitions in all sectors including the power sector. Mergers/acquisitions require prior authorization from the Antimonopoly Committee in certain cases. Authorization is not granted if the merger/acquisition causes monopolization or substantially restricts competition in the

		As to the relationship between NRCPI and the Antimonopoly Committee, the Law requires that NRCPI transmit any cases involving anti-competitive practices to the Antimonopoly Committee. In considering such cases, the Antimonopoly Committee consults the NRCPI concerning the requirements of the power sector legislation. Regarding the settlement of disputes among the economic entities, the Committee submits its proposals and comments to the NRCPI or to the Ministry of Oil and Power Industry of Ukraine.	whole or a significant part of market.
<b>YEMEN</b>	The authorities responsible for the regulation of the electricity sector are the Ministry of Electricity, the Government, the Parliament and the Office of the President. In gas, the competent regulatory authorities are the Ministry of Oil and Minerals, the Government, the Parliament and the Office of the President.	The authority competent in competition issues is the Authority of Protection of Competition and Prevention of Monopoly under the Ministry of Industry and Trade, which only monitors the private sector. The Ministries in charge of electricity and gas have no competence on competition issues. The state-owned companies in Yemen, and thus the electricity sector, are exempted from the competition law.	There is no notification mechanism for mergers in any sector of the economy, including the energy sector.
<b>ZAMBIA</b>	The entire energy sector is regulated by the Energy Regulation Board. The Energy Regulation Act includes provisions on competition and provides that the regulatory authority works in cooperation with the Competition Commission, by carrying out investigations and monitoring the level of competition in order to promote competition and improve market access in the energy sector.	Zambia Competition Commission established under The Competition and Fair Trading Act is the competent authority for competition issues for the whole economy.	There is a notification requirement for mergers/acquisitions. The Competition Commission deals with these notifications and has the competence to approve or reject a merger/acquisition.
<b>ZIMBABWE</b>	The electricity sector is regulated by Zimbabwe Electricity Regulatory Commission (ZERC).  In the gas sector, Zimbabwe relies on imports. The Ministry of Energy and Power Development and the Ministry of Transport and Communication are responsible for regulating the gas sector.	The Competition and Tariff Commission (CTC) is authority responsible for competition issues. The Competition Act applies to all economic activities in Zimbabwe, including the energy sector. However, the Electricity Act also gives ZERC the function of ensuring fair competition among sector players. Nevertheless, the Electricity Act does not have specific provisions on anti-competitive practices. Anti-competitive practices such as cartels, abuse of dominance and mergers are dealt with under the Competition Act by the CTC, which also has the power to sanction such practices.  With the exception of mergers and acquisitions, the nature of cooperation and coordination between the CTC and ZERC is not set down explicitly in the relevant legislation, but is based on mutual understanding. The views and comments of ZERC on competition investigations involving the energy sector are seriously taken into account in CTC's determinations. ZERC can also refer competition cases to CTC for investigation.	There is a notification mechanism for mergers in all sectors of the economy, including the energy sector. The Competition Act requires both pre- and post-merger notification to the CTC, which is responsible to examine such transactions.  In accordance with the Competition Act, in case where ZERC authorizes a merger in the energy sector, it shall apply to the Commission for the final authorization of the merger.

## C. FOREIGN INVESTMENT

COUNTRY	ENTRY BARRIERS	RESTRICTION ON FOREIGN INVESTMENT	RESTRICTION ON OWNERSHIP	UNIVERSAL ACCESS OBLIGATIONS
<b>ALGERIA</b>	Production and retail activities are subject to the authorization of CREG, whereas gas and electricity distribution is subject to tender offers, which result in concession contracts.	There is no discrimination between foreign and national investors.	There are no distinct rules for public or private investors.	The law on electricity provides that the distribution of electricity and gas is a public service and ensures the supply of electricity and gas in the entire national territory in the best conditions of security, quality and price.
<b>ANGOLA</b>	There are barriers to entry since electricity and gas sectors are dominated by state monopolies.	Information not available.	Information not available.	Information not available.
<b>BARBADOS</b>	There are some regulatory barriers, such as a license requirement for new entrants and economies of scale considerations.	There are no formal restrictions. The draft Energy Policy of the Government, however, notes a preference for investors in the generation of electricity from renewable resources.	None.	The service provider is required to supply energy for all public and private purposes. There is virtually 100% penetration of electricity in the country.
<b>BHUTAN</b>	There are technical and financial barriers to entry.	There are restrictions on foreign investment in hydro power.	There are no restrictions on the ownership as long as the applicant for a license meets all conditions specified in the relevant legislation.	Information not available.
<b>BOTSWANA</b>	There are barriers to entry in the energy sector.	There are no restrictions on foreign investment in the energy infrastructure.	Information not available.	Information not available.
<b>BRAZIL</b>	None.	None.	None.	According to the Law dated 26 April 2002, universal access applies exclusively to consumers whose installed load is equal to or below 50 kW and tension is below 2.3 kV.
<b>BURKINA FASO</b>	There are no barriers to distribution in the electricity sector.	There are no restrictions on foreign investment and ownership except for the transmission of electricity, which falls under the public domain.	There are no restrictions on foreign investment and ownership except for the transmission of electricity, which falls under the public domain.	Information not available.
<b>CAMEROON</b>	There are no entry barriers to the electricity market.	There are no restrictions on foreign investment in energy infrastructure.	There are no restrictions on ownership in the electricity sector.	Notwithstanding the fact that the legislation in force does not explicitly mention "universal access to energy", it refers to the obligation of continuous provision of electricity.
<b>COLOMBIA</b>	To provide public services in general, all enterprises are required to get the authorization of the municipal authorities and also abide by general norms. There are no restrictions on market access for newcomers. However, there are certain market share thresholds in electricity and gas markets.	None.	None.	The Political Constitution of Colombia and the Law on Public Services recognize the right of every citizen for access to electricity and natural gas.
<b>COSTA RICA</b>	There are market share restrictions imposed on small private generators producing electricity.	There are market share and ownership restrictions (please see the next cell) on all investors as well as foreign investors.	In generation, there is a requirement according to which, at least 35% of the capital of a private generator shall belong to nationals.	Information not available.
<b>CROATIA</b>	Information not available.	Information not available.	Information not available.	Information not available.

<b>HONDURAS</b>	There are no barriers to entry in the electricity sector.	There are no restrictions except for certain environmental and financial requirements. On the contrary, the state promotes investment in generation activities realized by using renewable resources through incentives, such as guaranteeing the purchase of all the electricity produced as such.	None.	The national electricity law states that distribution companies have the obligation to supply electricity to any person residing within their operation area, once the legal requisites have been fulfilled.
<b>ITALY</b>	The gas and electricity sectors are characterized by technical and quality standards, which apply to all the operators and do not constitute entry barriers for foreign investors.	There are no specific barriers which limit foreign undertakings to enter the market.	There are no restrictions on ownership in the gas sector.  In the electricity sector, however, no state owned company (including companies controlled by a foreign state) can control more than 30% of the shares of a Genco (new generating companies created after the divestment by ENEL of one third of its installed capacity).	Regarding universal access obligations, natural gas distribution is considered as a public service. Any customer located within the geographical scope of the concessionary has the right to be connected by the local distributor to the distribution grid, unless the connection is technically or financially impossible on the basis of criteria defined by the sector regulator (AEEG). Moreover, a supplier of last resort, as defined by the relevant legislation, is obliged to supply all customers with annual consumption of 200.000 m <sup>3</sup> or less in order to ensure their consumption of gas.  In the electricity sector the transmission operator is required to guarantee the transmission and dispatch of electricity throughout the country. Pursuant to the European Directive 2003/54/EC on the electricity sector, Member States shall ensure the provision of universal service to all small customers.
<b>JAPAN</b>	The conduct of business in electricity and gas markets requires a license from the Minister of Economy, Trade and Industry. Yet, for applicants other than general electricity/gas utilities or a gas pipeline service provider, who intend to supply the customer of liberalized sector with electricity/gas, shall notify the Minister.	There are no restrictions on foreign investment. However, inward direct investments to the electricity and gas industry are subject to prior notification to the Minister of Finance and the Minister in charge of the industry involved in the matters.	None.	The Electricity Business Act provides that a general electricity utility shall not refuse to supply electricity to meet general demand in its service area without justifiable grounds.
<b>KENYA</b>	There are no barriers to entry to the electricity market except for quality standards on safety, which are valid for all companies operating in the energy sector.	There are no restrictions on foreign investment in the energy infrastructure.	None.	There is rural electrification universal service obligation funded by a universal levy in the electricity market. Other energy sectors are not subject to any universal service obligations.
<b>MALI</b>	Until 2010, EDM-SA has an exclusive right to operate the transmission network. It will also remain to be the sole purchaser of electricity to the main grid. Therefore, the market is not open to new comers in these segments of the sector until 2010.	There are no restrictions on foreign investment in energy infrastructure except for technical and quality standards.	There are no restrictions on the type of ownership regarding generation/production and distribution of electricity.	The operators in the electricity sector shall provide universal access to energy.

<b>MAURITIUS</b>	<p>In the electricity sector, there are no barriers to entry at the generation level.</p> <p>In the gas market, there are no barriers to entry.</p>	<p>There are no restrictions on foreign investment at the generation level, whereas CEB is the sole operator in transmission, distribution and retail of electricity.</p> <p>There are no restrictions on foreign investment in the gas sector.</p>	<p>There are no restrictions on the type of ownership at the generation level, whereas CEB is the only service provider in transmission, distribution and retail of electricity.</p> <p>In gas there are no restrictions on ownership.</p>	<p>Access to electricity is open to everyone in Mauritius.</p>
<b>MOZAMBIQUE</b>	<p>There are no barriers to entry into the energy markets.</p>	<p>As regards investment, there are no restrictions on foreign investment in energy infrastructure except for its management. For instance, the electricity network infrastructure is under the responsibility of Electricity of Mozambique (EDM).</p>	<p>Only at the distribution level, the ownership is restricted to EDM.</p>	<p>Information not available.</p>
<b>NEPAL</b>	<p>There are no barriers to entry for energy related projects.</p>	<p>There are no restrictions on foreign investment in energy infrastructure.</p>	<p>There are no restrictions on ownership in electricity and gas with regard to generation, production and extraction, whereas the procedures for distribution of electricity are yet to be established.</p>	<p>No service provider can deny access to its services to any service seeker in its area of operation.</p> <p>As per gas, gas bottlers are free to select their area of distribution as this product is not yet in mass consumption. However, the Government controls the price of gas.</p>
<b>OMAN</b>	<p>There are no entry barriers. However, there are some financial, technical and other criteria that potential national or foreign investors should satisfy to acquire any strategic interest in the sector.</p>	<p>There is no distinction between foreign and national investors in the electricity sector.</p>	<p>None.</p>	<p>Electricity in rural areas of Oman, where the transmission network does not extend, is provided through separate remote systems of the Rural Areas Electricity Company. This company is required to meet all reasonable demand within its authorized area.</p>
<b>PAKISTAN</b>	<p>There are no barriers to entry into the energy markets. Nevertheless, operators in energy markets are subject to obligations, such as technical capability, operational capacity (off shore and on shore), legal and financial capacity, compliance with residential requirements and provision of information required under the Companies Ordinance, 1984, in order to get a license.</p>	<p>Foreign investment in energy infrastructure is not subject to any restrictions.</p>	<p>There are restrictions on ownership concerning electricity distribution system, which is carried out by WPDA.</p>	<p>No problem should occur regarding universal access to electricity services since the electricity generation companies sell electricity to the WPDA, which is responsible for distribution of electricity in the entire country.</p>
<b>PAPUA NEW GUINEA</b>	<p>There are no barriers to entry into the electricity market.</p> <p>The gas market is open to competition and there are low barriers to entry. Gas exploration is open to competition. There are no barriers for establishing a gas distribution network and retailing to households.</p>	<p>The electricity market is open to private and foreign investment.</p> <p>There are no restrictions on foreign investment in the gas sector. However, due to the small market size for domestic production and utilisation of gas, there is only one importer and retailer of gas.</p>	<p>There are no ownership restrictions in the electricity market.</p> <p>In gas, there are no restrictions on the ownership of production and distribution systems.</p>	<p>There are no universal access obligations.</p>

<b>PERU</b>	There are no barriers to entry into the electricity market.	The Law on the Promotion of Private Investment in State Enterprises eliminated the restrictions on foreign investment. This is complementary to the Law for the Increase in Private Investment, which further guarantees investment under principles of free competition, free initiative and with equal rights for private and foreign investors.	None.	The Law on Electricity Concessions recognizes the right of every petitioner for electricity in their distribution concession zones upon fulfilment of relevant requirements and payments.
<b>RUSSIAN FEDERATION</b>	There are no barriers to entry to the energy markets.	The share of foreign citizens or foreign entities should not exceed 20 percent of total shares during the sale/purchase of shares of regional gas supply and distribution systems or operations involving the change of ownership of these shares.	The share of foreign citizens or foreign entities should not exceed 20 percent of total shares during the sale/purchase of shares of regional gas supply and distribution systems or operations involving the change of ownership of these shares.	Information not available.
<b>SÃO TOMÉ AND PRÍNCIPE</b>	The absence of relevant legislation and high state participation in the sector establish barriers to entry to the energy market.	Bureaucracy is an obstacle for foreign investment.	The ownership in the energy sector depends on governmental decision.	There are contractual obligations imposed on operators in the energy sector.
<b>SINGAPORE</b>	There are no barriers to entry into the electricity and gas markets.	There are no restrictions on foreign investment in electricity generation.	There are restrictions on ownership of the networks: The SP PowerAssets Ltd. shall be the owner and operator of the electricity transmission and distribution network, whereas PowerGas Ltd shall be the owner and operator of the gas pipeline network. Furthermore, the only producer and retailer of manufactured gas shall be City Gas Ltd.	The operators of the electricity transmission and distribution network and the gas pipeline network are obliged to extend the network to provide access to the population under the Electricity Act and the Gas Act, respectively.
<b>SRI LANKA</b>	There are no barriers to entry in the energy market.	The market is open to foreign investment.	None.	There are no universal access obligations imposed on investors.
<b>THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA</b>	There are no barriers to entry in the energy market.	There are no restrictions on foreign investment in the energy sector. The Energy Law stipulates that all activities in the field of energy can be performed by domestic and foreign companies on the basis of a licence issued by the Energy Regulatory Commission.	There are no restrictions on ownership in the energy sector.	In accordance with the Energy Law, in order to protect the interest of the general public, those companies that provide services of general economic interest are subject to obligations for the provision of a public service. Hence, the obligation for the provision of a public service entails that all consumers of electricity as well as all consumers of natural gas, heating and geothermal energy that are connected to the transmission or distribution network (on the territory where that is possible) should be provided with uninterrupted and quality access to the network.
<b>TRINIDAD AND TOBAGO</b>	There are no legal barriers to entry into the energy market. Yet, there may be inherent barriers such as international technical and quality standards and benchmarks.	There are no explicit restrictions on foreign investment in gas or electricity sectors. On the contrary, 100% foreign ownership in local companies is allowed. Nevertheless, under the Foreign Investment Act, a foreign company needs	As regards ownership, there are no restrictions in energy generation/production/extraction and distribution systems.	Operators in the energy market are not subject to any expressed universal access obligations. It is worth noting that household electrification in Trinidad and Tobago is estimated to be 97%, that is, one of the highest in the Western Hemisphere.

		to obtain the approval of the Ministry of Finance in order to conduct business operations. There are also de facto local content requirements for certain local energy mega projects.		
<b>TUNISIA</b>	In the electricity and gas sectors, the network is not accessible. Apart from this factor, there are no entry barriers in electricity and gas markets.	There are no restrictions on foreign investment.	There are no restrictions on ownership, except for the distribution of electricity and gas, which is under monopoly.	Energy is considered as a public service. Therefore, operators are obliged to guarantee the access of consumers to services in the energy sector.
<b>TURKEY</b>	There are no barriers to entry to the energy market.	Under the Electricity Market Law, foreign companies engaged in electricity generation, transmission and distribution cannot have shares that would provide them with power to control the relevant market.  In natural gas market, there are no restrictions on foreign investment. There is no discrimination between national and foreign firms.	There is no discrimination between national and foreign firms in the natural gas market.	Information not available.
<b>UKRAINE</b>	The Law on Power Industry requires licensing for generation, transmission and supply activities in the electricity sector. This procedure as well as the lack of legislation setting out conditions and methods of calculation of the payment for connecting to the gas transmission system can be considered as barriers to entry in electricity and natural gas markets.	There are no restrictions on foreign investment in the energy sector.	There are no restrictions on ownership in the energy sector.	The Law on Power Industry establishes that energy suppliers, which deliver electricity on a territory, shall not refuse a contract for electricity supply with consumers in this territory.
<b>YEMEN</b>	There are no entry barriers to the electricity generation activities as long as the output is sold to the state-owned operator, with the exception of rural areas.	There are no restrictions on foreign investment in electricity and gas sectors. Investment in general, including the energy sector, is exempted from customs duties and taxes. The government encourages investors to invest in the electricity sector in a way that the investor can provide electric generators and sells the electricity output to the state owned operator. As for the rural areas, where the electricity infrastructure does not exist, the investor can build and sell electricity without any restrictions.	The electricity sector is dominated by the state whereas the gas sector involves participation of private companies.	Information not available.
<b>ZAMBIA</b>	There are no entry barriers to the electricity market.	There are no restrictions on foreign investment in the electricity sector.	There are no restrictions on ownership in the electricity sector.	There are no universal access obligations imposed on investors.
<b>ZIMBABWE</b>	In the electricity sector, the major barrier to entry in addition to large capital requirements and sunk costs is ZESA's statutory monopoly in the distribution of electricity to consumers.	In the natural gas sector, there are no restrictions on foreign investment in infrastructure. In fact foreign investment is encouraged, particularly under private/public sector partnership ventures.	Ownership of energy generation, production, extraction and distribution systems in partnership with local indigenous enterprises is strongly encouraged under the Government's Indigenisation and Empowerment Programme.	Information not available.