International Energy and Natural Resources

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I. Angola

A. OIL & GAS

In October 2007, the Angolan Council of Ministers approved implementation of the Angola LNG Project,[1] which is aimed at maximizing the use of Angola-produced natural gas by converting it into liquefied natural gas (LNG). The new Decree-Law sets forth the legal regime applicable to the Project including tax, customs and foreign exchange rules, and the economic terms for the Project's First Liquefaction Unit. The Decree-Law also sets forth mandatory rules applicable to the companies involved—Angola LNG Limited, the Angola LNG Operating Company, and the Angola Gas-Pipeline Company—especially regarding the acquisition of goods and services and the hiring of staff.

In terms of the licensing new acreage, the Ministry of Petroleum divided the Kwanza Basin into twenty-three onshore blocks, designated Kon 1 through 23, and divided the Lower Congo Basin into five offshore blocks, designated blocks forty-six to fifty, located in ultra-deep waters to the west of blocks thirty-one to thirty-three of Angola's offshore area.[2] Several of these blocks were part of the acreage offered in the 2007-2008 licensing round, which has been suspended.

By Executive Decree 56/08 of April 21, 2008,[3] the Minister of Petroleum enacted new regulations for the construction, operation, and safety of petroleum and industrial treat-

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1. *See* Decree-Law No. 10/07, 2007, 119 D.R. 1797 (Angl.).
2. *See, e.g.*, Decree-Law No. 2/08, 2008, 3 D.R. 42; Decree-Law No. 3/08, 2008, 3 D.R. 42.
3. *See* Executive Decree No. 56/08, 2008, 72 D.R. 742 .

ment facilities. Also enacted were regulations governing the technical and safety requirements for the storage and transportation of petroleum products, such as: Executive Decree 57/08 of April 22, 2008,[4] concerning overland transport; Executive Decree 186/08 of September 9, 2008,[5] regarding liquefied petroleum gas (LPG) storage; and Executive Decree 199/08 of September 18, 2008,[6] governing LNG storage.

In terms of international cooperation, the Angolan government has approved petroleum agreements with the Republic of Equatorial Guinea and the Democratic Republic of Congo.[7] While the former is aimed mostly at cooperation in the development of technical expertise, joint ventures among national oil companies, and possible future projects, the latter creates offshore areas of common interest for exploration and production.

B. Atomic Energy

Decree 79/07 of November 9, 2007, created the Atomic Energy Agency (known by its Portuguese acronym AREA) and approved its corporate structure.[8] AREA will be subject to the supervising authority of the Angolan official in charge of the energy and water sectors, and is responsible for the coordination, control, and inspection of nuclear fuel cycle activities as well as for activities associated with the use of radioactive sources, materials, devices, and substances, as provided for in the Atomic Energy Law of September 5, 2007.[9]

II. Argentina

Following the Argentine Peso devaluation in 2002, natural gas and power utility rates remained frozen. Liquid fuels, in turn, were subject to price controls. Since then, Argentina has witnessed numerous forms of government intervention in energy markets that were mainly aimed at preventing inflation and subsidizing energy consumption to sustain the growth of the domestic economy. These measures removed incentive for private investment in the exploration and production of oil and gas and in power generation, while domestic consumption increased due to the low prices resulting from price controls. Oil and gas production and reserves eventually declined, raising energy crisis concerns. Although this situation continued for most of 2008, the year ended with several new regulations and positive price signals that may lead to increases in the production of oil, gas, and power.

A. Upstream Oil & Gas

1. *Provincial Exploration & Production Bidding Rounds*

After the enactment of Law 26,197, which amended Federal Hydrocarbons Law 17,319 in 2007, provinces with proven and possible hydrocarbon resources tendered a number of

4. *See* Executive Decree No. 57/08, 2008, 73 D.R. 757 .
5. *See* Executive Decree No. 186/08, 2008, 169 D.R. 2434 .
6. Executive Decree No. 199/08, 2008, 175 D.R. 2554 .
7. *See, e.g.*, Resolution No. 57/08, 2008, 120 D.R. 1262; Resolution No. 3/08, 2008, 7 D.R. 95.
8. *See* Decree No. 79/07, 2007, 138 D.R. 2186.
9. *See* Law No. 4/07, 2007, 107 D.R. 1597.

exploration and production blocks within their territories.[10] During 2008, the provinces of Chaco, Corrientes, and Formosa launched new exploration programs; the provinces of Río Negro and Mendoza awarded a number of blocks tendered in 2007. The province of Chaco tendered twelve oil and gas exploration areas, designated Chaco 1 through 12. These areas were allocated based on the 1991 Argentina Exploration Plan guidelines, which combined areas with the provinces of Formosa and Santiago del Estero.

Although exploration operations were undertaken in the northeast of the province of Corrientes many years ago, their results have never been disclosed. Currently, a consulting firm is working with the provincial government to prepare the "legal and operating bases" for the search of such resources. Their efforts consist of collecting technical data, determining topographic and geographic characteristics, designing production agreements, determining the likelihood of investments at no cost for the government, and establishing the legal requirements for awarding operations under concession.

The first bidding round of the province of Formosa comprised three exploration areas: two located in Formosa's northeast basin and the third in the northwest covering a triangular area of 1,000 square kilometers adjacent to the Tartagal and Palmar Largo and Pilcomayo River basin. The province is situated above two sedimentary basins: the northwest basin with hydrocarbon production, and the northeast, in which no hydrocarbons have been produced.

The province of Rio Negro awarded five areas as part of the fourth bidding round conducted in March 2008. Bids totaled work commitments for over U.S. $320 million. This round featured new areas not included in previous rounds, such as the Ñirihuau and Colorado River basins. Areas awarded were Aguada de Córdoba, Meseta Baya and Cerro Chato (Neuquén basin), General Conesa (Colorado basin), and Ñirihuau (Ñirihuau basin). The province of Mendoza completed the bidding process covering the areas tendered last year, publishing the pertinent decrees last May. Altogether, this province awarded eleven exploration areas with an investment commitment of U.S. $290 million. The Unión Transitoria de Empresas (UTE), organized by Ketsal and Kilwer, was the major winner, obtaining seven areas: Chachahuen, San Rafael, Coirón I & II, Ñacuñan, Pampa del Sebo, Zampal Norte, and Malargüe.

2. *Offshore Federal Exploration and Production Bidding Rounds*

The national government, through state-owned Energía Argentina S.A. (Enarsa), called for an international public tender for the selection of companies interested in conducting exploration and production in nine areas in the Atlantic Ocean and on Argentine shores. Two of the blocks are located off the province of Buenos Aires—one in Colorado Basin and the other in Salado Basin. The other seven are located off the province of Chubut and in the north of the province of Santa Cruz, over what is known as San Jorge Gulf. Presently, Enarsa is participating in offshore exploration over six blocks—two, jointly, with Repsol and Petrobras, two with Sipetrol and Repsol, and two with Petrobras.

10. Law No. 26,197, Jan 3, 2007 (amending art. 1 of Federal Hydrocarbons Law No. 17,319).

3. *Extensions to Major Existing Concessions*

Less than eight years after the expiration of production concessions originally awarded by the National Executive Branch in 1990 and 1992, the extension of those original agreements is currently being discussed. Negotiation is taking place among provincial governments, the present titleholders described below, and concession holders.

Law 26,197, enacted in 2007, amended Article 1 of Federal Hydrocarbons Law 17,319 and established that hydrocarbon fields fall under the eminent domain of the national government or of each provincial government in whose territory those fields are found with provinces assuming full legal title and jurisdiction. Consequently, exploration permits and production concessions granted by the national government have been transferred by operation of law to provincial governments, which were thereby empowered to exercise all rights inherent in such permits and concessions and to "extend their contractual terms."

As current concessions will expire in 2015-2017, it has become critical both for companies and for provincial governments to negotiate such extensions given the long term required to recover investments made in the oil and gas industry as well as to develop and replace reserves. Concession-holders need to obtain early assurance that such extensions will be granted in order to develop appropriate plans and to enjoy more time in which to recover investment.

Under Article 35 of the Hydrocarbon Law, concessions may be extended for up to ten years, subject to the terms and conditions established in each particular case, provided the relevant concession-holder has performed the duties arising from the concession. Therefore, provincial governments, the current titleholders, will determine whether concession holders have met these requirements.

Some of these conditions include minimum investment during the extension term, an increase in the 12% production royalty currently in force, association with province-owned companies, the payment of leases, and committed investment, primarily in infrastructure works and public services in the relevant provincial territory. The alternative of royalty payment in kind, contemplated by the legislation but little-used so far, is also under review to help reduce the fuel shortage presently faced by the provinces.

Finally, Article 35 also requires concession holders to apply for an extension at least six months prior to expiration of their concessions, a requirement that will be fulfilled by any concession holder willing to have its agreement extended in the light of the long-term nature of investment planning and recovery. Even in different economic and political conditions in the past, extensions were granted to Acambuco (1991), Ramos (1996), and Loma de la Lata (2001) areas. These extensions were timely granted by the national government, with provincial consent, for terms up to 2027.

The 2007 extension granted to Pan American Energy, LLC (Pan American), for the Cerro Dragón production concession merits special mention because it was directly awarded by the Chubut and Santa Cruz provincial governments. Reportedly, the agreement between the provincial government of Chubut and Pan American now provides an extension through 2027 and potentially through 2047, in which case title would revert to the province, with Pan American as operator.

Pan American is said to have committed U.S. $2 billion of investment for the first ten years and another U.S. $500 million should offshore exploration operation prove success-

ful, assuring revenues of at least U.S. $80 million for the first five years. In addition, the applicable royalty would be raised from 12% to 15%. These terms were extremely controversial for being well in excess of the ten-year term established by Hydrocarbon Law 17,319.

The province of Neuquén is now making progress on the renegotiation of agreements, and, in order to begin discussing their terms and conditions, has called on concession holders seeking to obtain extensions to enter their names in a registry, to buy bidding terms and conditions, and to file documentation. Companies must also pay for an additional lease for the relevant area, disclose adequate investment commitments, commit to employ provincial labor and acquire local goods and services, and increase the applicable royalty from 12% to 15%.

4. *Gas Plus Program*

Secretary of Energy Resolution 24/2008, published on March 6, 2008, established the Gas Plus Program that gives incentives to increase natural gas production for the domestic market.[11] This program was expanded through Secretary of Energy Resolution 1031/2008, published on September 12, 2008, and provides that the price of natural gas that qualifies as Gas Plus will not be subject to the terms of the 2007-2011 Supply Agreement between Natural Gas Producers and the Argentine Federal Government, and it may be marketed by producers at freely negotiated prices.[12]

To qualify for the program: (i) an applicant must be a party to and in compliance with the above-mentioned Agreement unless it proves impossible; (ii) natural gas shall come from new gas discoveries, from tight gas areas, from blocks not in production in the past and those not in production since 2004, from exhausted reserves, and/or from new gas deposits discovered in areas currently in production.

When applying to the Gas Plus Program, producers must submit their estimated reserves, evolution of daily production, and, for tight gas deposits, details of a works and investment program. The resolution has been very well received by local gas producers, many of which applied to the program. On October 15, 2008, the Secretary of Energy approved projects filed by Apache Argentina S.R.L., Pluspetrol Energia S.A., Pan American, and YPF S.A.

5. *Oil Plus and Refining Plus Programs*

Executive Decree 2014/2008, published November 28, 2008, created the Oil Plus and Refining Plus Programs.[13] Under that decree, beneficiaries will be granted tax certificates to be credited against payment of much-criticized export duties levied on oil producers and refiners under Resolution 394 issued on November 15, 2007.[14] By 2009, the programs shall be available to oil and gas companies that increase their oil reserves and production, and to refining companies that increase production.

11. Secretary of Energy Resolution 24/2008, *published* Mar. 6, 2008.
12. Secretary of Energy Resolution 1031/2008, *published* Sept. 12, 2008.
13. Executive Decree 2014/2008, Nov. 28, 2008.
14. Resolution 394, Nov. 15, 2007.

B. Power Generation

1. *Distributed Self-Generation*

To increase the energy supply, Resolution 269/2008, published by the Secretary of Energy on May 14, 2008, created a category for Distributed Self-Generators for consumers that generate power and sell the excess to the grid. As a result, many companies have joined the Wholesale Electric Market as generator agents.

C. Natural Gas & Power Utilities

1. *Amendment to the Program for the Rational Use of Natural Gas*

The Energy Secretariat issued Resolution 814/2008 amending the Program for the Rational Use of Gas, created by Resolution 418/2004 and previously modified by Resolution 624/2005, which offered residential and small commercial users a bonus paid by large users for reducing their demand. Considering the recent results of this program, a stronger sacrifice has been sought from residential users in the highest tier of consumption.

2. *Increase in Power Rates Approved*

To avoid new electricity subsidies, the national government and the three largest local distribution companies, EDENOR, EDESUR, and EDELAP, assumed several undertakings reflected in the memoranda of agreement ratified by the National Congress and approved by Decrees 1957/06, 1959/06, and 802/05 as part of the renegotiation of Public Works and Services Contracts established by Law 25561, as amended, and Decree 311/03.[15] As committed in the memoranda, a new rate increase, effective July 1, 2008, was approved by the Secretary of Energy in Resolution 628/2008, subject to various requirements.

3. *Increase in Natural Gas Rates Announced*

To foster gas exploration and investment in natural gas distribution networks, the federal government announced an increase in natural gas rates, effective December 1, 2008, applicable to homes burning more than 1000 cubic meters of gas per year and to commercial users and industries. The increase will affect approximately ten percent of highest-consuming homes. The specific increases were not disclosed but are estimated to range from 40% to 160%.

D. Downstream Oil

In order to adjust the quality of fuel oil to international specifications, Resolution 150/2008 of the Secretary of Energy raised the level of sulfur in fuel oil from 0.7% to 1.0%.

15. Emergencia Pública y Reforma del Régimen Cambiario [Public Emergency and Exchange Rate Reform], Law 25561, Boletin Oficial de la Republica Argentina (Mar. 17 2006)

III. Brazil

For Brazil's energy sector, 2008 was a more active year than 2007—and a crucial one. Key events include increased demand for biofuels, the conclusion of the Rio Madeira hydroelectric plant auctions, and the discovery of huge quantities of oil and natural gas in the pre-salt layer off the Brazilian coast.

A. Biofuels

1. *Ethanol*

Business and investment in biofuels boomed, particularly for ethanol. Fast-climbing oil prices at the end of 2007, combined with the worldwide search for renewable fuels, drew much attention from foreign investors.

The industry saw several mergers and acquisitions involving sugar-alcohol plants, which produce electricity from sugar cane, and many other Greenfield projects, especially in states that traditionally focused on raising livestock or growing grain such as Goias, Mato Grosso, and Mato Grosso do Sul. As an indicator of the sector's growth, total production of ethanol rose from 9.4 to 14.3 billion liters from the 2006/2007 to 2007/2008 harvests,[16] with prospects of even faster growth in this year's harvest.

2. *Ethanol Pipelines: New Regulatory Framework Expected*

Because of anticipated strong growth in the sector, an ethanol pipeline connecting several states in the south/mid-west regions was included in an Accelerated Growth Program (PAC),[17] to transport ethanol from the interior of states to the port of Santos and lower the cost.

The absence of a legal regime for ethanol pipelines generated a veritable race between conglomerates interested in building and operating pipelines of this type and reinitiated discussion of a new legal framework. However, due to the failure of the Doha Round, in which Brazil had hoped to remove trade barriers against its ethanol exports, and because of the financial crisis, many projects have been suspended, slowing otherwise expected investment.

B. Electricity

1. *Madeira River Hydroelectric Plants*

Also in 2008, bidding processes were concluded for two hydroelectric plants in the Madeira River Energy Complex: Santo Antônio (3,150 megawatts (MW)) and Jirau (3,300 MW). Both hydroelectric plants are crucial to meeting Brazil's energy demand for the coming years. The auctions were marked by sharp competition among bidders; the Santo

16. *See* ÚNICA-Brazilian Sugar Cane Indus. Ass'n, Hydrous Ethanol: Brazilian Production (2008), *available at* http://www.unica.com.br/downloads/estatisticas/eng/BRAZILIAN%20ETHANOL%20PRODUCTION.xls.

17. The Accelerated Growth Program (PAC) is a federal government program composed of economic policies to encourage investment and focusing on major infrastructure projects.

Antônio and Jirau auctions saw discounts in the ceiling price for generated electricity of 35.0% and 21%6 percent, respectively.

2. *Other Projects*

Along with hydroelectric power from the Madeira River, Brazil hopes to tap more electricity generated by burning bagasse from sugar cane, which could yield an estimated total capacity of 6,000-8,000 MW. Shares of power produced from sugarcane were first offered for sale in a 2008 public auction.[18] Other major projects due to begin next year include the Xingu River and the Angra 3 nuclear power plant. After approval of the project by the Brazilian Environmental Institute (known by its Portuguese acronym IBAMA), the Government expects the power plant to start operating by the end of 2013.

C. Oil and Gas

Petrobras announced mammoth oil and gas discoveries in the pre-salt layer off the Brazilian coast at depths of approximately 5,000 to 7,000 meters.

IV. Chile

Environmental considerations and the diversification, autonomy, and reliability of Chile's power supply, have been at the heart of the latest Chilean government's energy programs. In this regard, the development of unconventional sources of renewable energy presents an attractive way to meet increasing energy demand but also prompts concern over the ability of local power grids to handle energy supply on such a large scale.[19]

After twelve months of discussion by Congress, Law 20,257 governing unconventional renewable energy sources (the Law) was enacted on April 1, 2008.[20] The Law amended the General Law on Electrical Services[21] to include regulations on renewable-based generation. The main purposes were to encourage diversification of the national electric energy production mix by imposing on power generators the obligation to procure a minimum percentage of their annual energy sales from renewable sources and to create a new market for renewables aimed at domestic and foreign investors interested in the development of new, environmentally-safe sources of energy.

Under the law, the technologies that may be used to comply with this annual minimum are those for which the primary source of energy is: (a) biomass from organic, biodegradable sources; (b) hydroelectric plants with a maximum of 20 MW capacity; (c) geothermal; (d) solar power; (e) wind power; (f) ocean-based; and (g) other means as provided by the

18. Thirty-one percent from the total registered energy in the public auction was successfully commercialized.

19. *See* Comisión Nacional de Energía, Fuentes Energéticas: Energías Removables, www.cne.cl/fuentes_energeticas/f_renovables.html (last visited Feb. 20, 2009); *see also* Comisión Nacional de Energía, Marco de Desarrollo de las energías Renovables en Chile, http://www.cne.cl/fuentes_energeticas/f_renovables.html (last visited Feb. 20, 2009).

20. Law No. 20,257, Apr. 1, 2008 [39.025], Diario Oficial [D.O.], 7, *available at* http://www.bcn.cl/leyes/pdf/actualizado/270212.pdf.

21. Law Decree No. 4/20.018, Ministry of Economy, General Law on Electrical Services, *restated text*, Feb.5, 2007, [38,681], Diario Oficial [D.O.], 3, *available at* www.bcn.cl/leyes/pdf/actualizado/258171.pdf.

Chilean energy authority, the National Energy Commission (NEC).[22] The NEC may add new means of generation to this list, which may also be used to comply with this annual minimum, as long as they both substantially contribute to the diversity of energy delivered to the power grid and cause a low environmental impact.[23]

The Law also provides that generators that withdraw energy from the grid for sale to commercial/industrial or individual customers shall be required to prove that a certain annual amount of energy sold was produced through unconventional renewable generation, whether self-owned or purchased from third parties.[24] This obligation goes into effect in 2010, and a minimum annual standard of 5.0% will apply from 2010 to 2014. Starting in 2015, the standard rate will increase by 0.5% each year. As of 2024 and thereafter, this minimum will be fixed at 10.0%.[25]

Generators must also prove that at least fifty percent of their annual procurement of renewable energy under the annual standard mentioned above was obtained through a competitive, transparent and impartial procurement process,[26] and the Law provides penalties for non-compliance[27] starting at 0.4 Unidad Tributaria Mensual (UTM)[28] per megawatt-hour (MWh) of deficit under the obligation breached. In the event of repeated breach of the same obligations, the fine may be increased to 0.6 UTM per MWh.[29]

The enforcement entities in charge of calculating and controlling the minimum annual procurement standards are the Centers for Economic Delivery of Charge, known as Centros de Despacho Económico de Carga (CDECs). The CDECs, created by the General Law on Electrical Services,[30] comprise the generators participating in the relevant integrated power grids and are in charge of coordinating the operation, security and efficiency of such generators' power production.

To date, the Law has allowed the commencement of operations of the first wind power station in Chile, with a capacity of 18 MW. In addition, the Chilean authorities' efforts to establish incentives for unconventional renewable energy sources, through the National Agency for Promotion of Production (Corporation de Fomento a la Producción or (CORFO)) as well as through their support of pre-investment projects and the promotion of foreign investment, have encouraged the development and beginning of approximately 120 unconventional renewable energy initiatives, mainly involving wind, hydroelectric, geothermal, biomass and biogas energy sources. While those projects are currently at different stages of development, their completion would contribute more than 1,000 MW of installed capacity as well as approximately U.S. $2 billion in investment.[31]

22. *Id.* art. 225.

23. The special regulation for the definition of new renewable non conventional energy sources to be approved by the NEC, as provided by Law 20,257, has not yet been enacted.

24. *See* Ley Decreto 20,257, art. 1, ¶ 4.

25. *Id.* art. 1, ¶ 4 (interim article).

26. *Id.*

27. *Id.* art. 1, ¶ 7.

28. *Unidad Tributaria Mensual* is a monthly readjustable unit—equivalent in November 2008, to approximately US$ 21.

29. Law Decree No. 4/20.018, art. 150 bis.

30. *Id.* arts. 137, 150(b).

31. CORFO.cl, CORFO Promueve Nuevas Inversiones en Energías Renovables No Convencionales, (Oct. 24, 2008), www.corfo.cl/corfo_det_20081024122644.aspx (last visited Feb. 21, 2009).

V. European Union

A. Renewable sources and climate change

On January 23, 2008, the European Commission published two far-reaching proposals entitled *20-20 by 2020-Europe's Climate Change Opportunity*.[32] The first represents a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, and the second represents a proposal for a directive of the European Parliament and of the Council, which amends Directive 2003/87/EC to improve and extend the Community's greenhouse gas emission allowance trading system.[33]

On November 13, 2008, the European Commission (the Commission) proposed an energy package that supports energy security in Europe and the 20-20-20 climate change proposals. This new strategy stimulates investment in more efficient, low-carbon energy networks. The Commission also proposes an EU Energy Security and Solidarity Action Plan, outlining five areas where more action is needed to secure sustainable energy supplies. The Commission also looked at the challenges that Europe will face between 2020 and 2050.

This package included several initiatives:

- On November 13, 2008, the Commission proposed an updated directive replacing Council Directive 2006/67/EC, imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products.
- On November 13, 2008, the Commission proposed a directive of the European Parliament and the Council on the energy performance of buildings.

B. Nuclear

On November 26, 2008, the Commission adopted a revised proposal for a Directive setting up a Community framework for nuclear safety.[34]

C. Gas and electricity

On June 6, 2008, the Energy Council entered into a broad agreement on legislative acts regarding the Internal Energy Market. The two main points are effective separation of supply and production activities from network operation and the creation of a new agency for energy regulatory cooperation. As some countries were reluctant to adopt full unbundling, a compromise was reached; in countries with vertically integrated undertaking, Member States can create an independent transmission operator (ITO). Consequently, supply companies can own transmission systems if these systems are managed by an ITO.

32. *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions—20-20 by 2020—Europe's Climate Change Opportunity*, COM (2008) 30 final (Jan. 23, 2008).

33. Directive of the European Parliament and of the Council Amending Directive 2003/87/EC so as to Improve and Extend the Greenhouse Gas Emission Allowance Trading System of the Community, COM (2008) 16 final (Jan. 23, 2008).

34. *Commission Proposal for a Council Directive Setting up a Community Framework for Nuclear Safety*, at 1, COM (2008) 790/3, final (Nov. 26, 2008), *available at* http://ec.europa.eu/energy/nuclear/safety/doc/2008_nuclear_safety_directive_proposal_council_proposal_euratom.pdf.

The Commission welcomed this agreement, but most of the members of the European Parliament remained skeptical. Hence, the energy ministers of all EU countries agreed on October 10, 2008, that a revised legislative framework would give companies three options, including one that involves dividing the ownership of supply and distribution businesses with the goal of encouraging competition and more energy exchanges among EU countries.

Finally, on June 5, 2008, the Commission brought actions before the European Court of Justice against several Member States for incorrect implementation of Electricity and Gas Directives.

VI. Italy

Italy introduced a new legal framework for renewable energy incentives via Budget Law No. 244 of December 24, 2007 (the Budget Law of 2008). The new regime supersedes a long-standing tradition of renewable energy incentives, dating back to Law No. 9 of January 1991 and legislative Decree No. 79 of March 16, 1999. This tradition has helped bring renewables-based generation to 16% of overall annual consumption, and the Budget Law of 2008 aims to satisfy 25% of demand with renewable energy by 2012. To pursue that target, the Budget Law introduced a new regime for "green certificates" and a new feed-in tariff for small generators.

Green certificates require Italy to use certain minimum levels of renewable electricity as a percentage of total domestic electricity consumption. Such levels started at 4.55% in 2008 and will increase at a yearly rate of 0.75% until 2012. To this end, the Budget Law obligates entities that generate or import over 100 gigawatt-hours (GWh) of non-renewable electricity per year to inject these levels of renewable energy into the system. To comply with this duty, non-renewable electricity generators may purchase green certificates, which are securities that represent 1 MWh of green electricity. The funds that result from such purchases go to finance renewable energy generators, providing an incentive for renewable power plant investors.

Green certificates are also freely tradable. Trading operations can be executed on the basis of any number of different contracts and market places, provided that any trades are registered with Gestore dei Servizi Elettrici S.p.A. (GSE), a governmental company that manages the public renewables incentives and grants. More specifically, green certificates can be traded on the Italian Power Exchange Platform (IPEX), which is operated by Gestore del Mercato Elettrico S.p.A. (GME), a wholly-owned subsidiary of GSE. Over-the-counter (OTC) trading is also allowed upon registration of quantities and prices with GME for monitoring purposes and of actual transfers with GSE for accounting purposes. GSE also sells and buys back its own green certificates or those generated by CIP-6 plants with which it has contracted.

To allow electricity retailers to prove to their clients that delivered energy in fact comes from renewable sources, the new regulations introduce a "warranty of origin," which is a title that retailers can receive from renewable generators that virtually tracks the electricity from producer to consumer.

Finally, renewable plants with a capacity of less than 0.2 MW can benefit from reverse metering whereby end-user-generated electricity in excess of that end user's own consumption can be delivered to the grid operator, which will return to the end user that

excess quantity of electricity at a different time of the day or week when the user is short of generation and cannot cover its own consumption. This allows small generators to reduce their bills and to generate and deliver electricity to the grid without having to face onerous tax, transmission, and trading regulations. By opting for reverse metering, these small generators will be treated as simple self-generators that use the grid as a storage place for the electricity they generate when they do not need it.

VII. Mexico

On October 27, 2008, the Mexican Energy Reform Bill of 2008 (the Bill) was approved by the lower house in Congress and will become the new energy law of Mexico once it is published by the Federal Executive.[35] The Bill's package presents a blend of amendments made to existing law as well as an array of entirely new legal entities. New laws were issued regarding renewable energy sources,[36] the creation of a fund for energy transition,[37] the creation of a New Hydrocarbon Regulatory Commission,[38] and, most importantly, a new law for Petroleós Mexicanos (PEMEX),[39] by which Mexico's national oil company will undergo an important restructuring.

Those who endured the many months of political debate concerning these reforms will not be surprised to see their original objectives overshadowed by the weight given to the structural change of PEMEX. While the motives of the initial Bill launched by the Federal Executive focused on the restitution of national reserves (via innovative contractual modes other than pure service contracts) and meeting growing domestic fuel demand (by allowing public-private participation in the construction, ownership, and operation of refining infrastructure), such motives were consumed by the political heat brought on by the desire to widen the spectrum of private participation in the oil and gas industry. The resulting law focused on the internal structure, operation, auditing, budget, and corporate governance of PEMEX.

In addition, the text of the Law affirms and clarifies the well known prohibitions that circumscribe private participation in exploration and production in Mexico, as compared with mere service contracts. Contractors may not gain any form of title over reserves, and price compensation shall be paid strictly in cash, which bars the possibility of agreeing to payment based on percentages of PEMEX production, sales take, or oil revenues. In ac-

35. *See* Norma Gutierrez, *Mexico: Energy - Historic Reform of Petróleos Mexicanos (PEMEX) and Approval of Renewable and Sustainable Energy Bills*, GLOBAL LEGAL MONITOR, (Nov. 6, 2008), *available at* http://www.loc.gov/lawweb/servlet/lloc_news?disp3_763_text.

36. *See* Ley para el Aprovechamiento Sustentable de la Energía [Law for Sustainable Energy Consumption], Diario Oficial de la Federación [D.O.], 28 de Noviembre de 2008 (Mex.) *available at* http://www.diputados.gob.mx/LeyesBiblio/pdf/LASE.pdf.

37. *See* Ley para el Aprovechamiento de Energías Renovables y el Financiamiento de la Transición Energética [Renewable Energy and Energy Transition Financing Law], Diario Oficial de la Federación [D.O.], 28 de Noviembre de 2008 (Mex.), *available at* http://www.diputados.gob.mx/LeyesBiblio/pdf/LASE.pdf.

38. Ley de la Comisión Nacional de Hidrocarburos [National Hydrocarbons Commission Law], Diario Oficial de la Federación [D.O.], 28 de Noviembre de 2008 (Mex.), *available at* http://www.diputados.gob.mx/LeyesBiblio/pdf/LCNH.pdf.

39. Ley de Petróleos Mexicanos [PEMEX Law], Diario Oficial de la Federación [D.O.], 28 de Noviembre de 2008 (Mex.), *available at* http://www.diputados.gob.mx/LeyesBiblio/pdf/LPM.pdf.

cordance with these prohibitions, the Law expressly bars production sharing agreements, risk service, and other similar agreements.

VIII. Portugal

A. Oil & Gas

The framework for procedures and powers concerning the licensing and inspection of storage facilities for petroleum products and gasoline stations, set forth in Decree-Law No. 267/2002 of November 26, 2002,[40] was amended by Decree-Law No. 389/2007 of November 30, 2007.[41] This latter statute also amended Decree-Law No. 125/97 of May 13, 1997,[42] which regulates the planning, construction, and exploration of distribution networks and branches for third-generation combustible gases. Among these amendments is the inclusion of licensing for the construction and functioning of gas distribution networks supplied by LPG reservoirs under the powers of municipal councils. Ministerial Order No. 1515/2007 of November 30, 2007[43] amended Ministerial Order No. 1188/2003 of October 10, 2003,[44] which regulates applications for the licensing of fuels, with regard to, for example, facilities that that are subject to simplified licensing and those that are exempt from licensing altogether.

B. Electricity

Decree-Law No. 363/2007 of November 2, 2007[45] enacted the legal framework applicable to the production of electricity by means of low-power units (micro-production) for home consumption allowing delivery of excess power to third parties or, with a limit of 150 kW, to the national electric grid. The relevant licensing can now be obtained through simple electronic registration, subject to inspection for technical conformity.

C. Environment

In the context of the development of the Environmental Framework Law and to comply with the National Strategy for the Preservation of Nature and Biodiversity, a new legal regime for the preservation of nature and biodiversity was enacted by Decree-Law No. 142/2008 of July 24, 2008.[46] Among other things, this statute restructured the National System of Classified Areas, setting forth a new economic and financial regime supported by a fund that will grant resources to projects and investments. In addition, this statute updated and adapted monitoring and inspection regulations as well as those that apply to administrative offences and sanctions under the regime established by Law No. 50/2006

40. *See* Decree Law No. 267/2002, 2002, 273 D.R. 7400.
41. *See* Decree Law No. 389/2007, 2007, 231 D.R. 8698.
42. *See* Decree Law No. 125/97, 1997, 119 D.R. 2557.
43. *See* Ministerial Order No. 1515/2007, 2007, 231 D.R. 8696.
44. *See* Ministerial Order No. 1188/2003, 2003, 235 D.R. 6678.
45. *See* Decree Law No. 363/2007, 2007, 211 D.R. 7978.
46. *See* Decree Law No. 142/2008, 2008, 142 D.R. 4596.

of August 29, 2006,[47] which enacted the Legal Guidelines for Environmental Administrative Offences.

Decree-Law No. 93/2008 of June 4, 2008,[48] amended Decree-Law No. 226-A/2007 of May 31, 2007,[49] which concerns the use of water resources. This new statute became necessary in order to clarify certain aspects of the regime then in force, specifically with respect to the procedures for creating private entities and the relevant principles to be applied.

IX. Spain

A. Alternative Energies

After a period of unease for participants in the photovoltaic business, the Spanish government finally passed and enacted a regulation that establishes remuneration for photovoltaic electricity produced in facilities that do not qualify for the feed-in tariffs contained in Article 36 of Royal Decree 661/2007 (RD 661/2007).[50] The regulation has three objectives: to meet the targets of the Renewable Energies Plan 2005-2010, to avoid burdening the electricity supply system with excessive costs, and to prevent the feed-in tariffs from negatively affecting industry research and development. The new system, devised by Royal Decree 1578/2008,[51] applies to photovoltaic facilities not registered with the administrative registry of the General Directorate of Energy Policy and Mining (the Ministry of Industry, Commerce, and Tourism) on or before the deadline established in RD 661/2007.

The new regulation has attempted to address the market practice of dividing facilities to become eligible for the higher feed-in tariff. Now, for purposes of determining the applicable feed-in tariff, facilities erected on sites that share cadastral registry references are deemed a single facility, and qualification for feed-in tariffs shall be based on aggregate output capacity. Only a limited number of MW per year shall be awarded the feed-in tariff established by the regulation.

To provide legal certainty for photovoltaic facilities developers and financiers as to the applicable feed-in tariff for a specific project, that project will need to be registered at the feed-in tariff pre-allocation registry in order to be eligible. Further, MW distribution will be done in quarterly calls based strictly on the order of application, with each quarterly call distributing one-fourth of the Yearly Cap. The Quarterly Cap distribution will begin with the project having the earliest Reference Date, and in case of equal Reference Dates, priority will be established according to the date of the administrative authorization, the date of the works license, or the date of deposit of the interconnection bond.

47. *See* Law No. 50/2006, 2006, 166 D.R. 6264.

48. *See* Decree Law No. 93/2008, 2008, 107 D.R. 3180.

49. *See* Decree-Law No. 226-A/2007, 2007, 105 D.R. 3644.

50. Royal Decree 661/2007 of May 25 (B.O.E. 2007, 126), *available at* http://www.boe.es/boe/dias/2007/05/26/pdfs/A22846-22886.pdf.

51. Royal Decree 1578/2008 of September 26 (B.O.E. 2008, 234), *available at* http://www.boe.es/boe/dias/2008/09/27/pdfs/A39117-39125.pdf.(concerning the retribution of electricity generated by means of solar photovoltaic technologies).

The duration of the new regulation's feed-in tariff will be a maximum of twenty-five years. Quarterly Caps, and feed-in tariffs will be announced on the web site of the Ministry of Industry, Commerce, and Tourism before the Quarterly Cap closing, and Registration will last for twelve months from this announcement.

B. European Court of Justice Rules on Terms Imposed by Spain on the Acquisition of ENDESA by ENEL of Italy and ACCIONA of Spain

The European Commission made a formal request to Spain to comply with its decision of December 2007 under Article 21 of the EU Merger Regulation.[52] The European Commission wanted Spain to withdraw the conditions imposed by the Spanish Energy Regulator (CNE), which had been modified by the Spanish Minister of Industry and Tourism. After a non-satisfactory reply, the Commission started the Pre-litigation Stage of Procedure, and upon completing the two steps required for the Pre-litigation Stage (the Commission issued Formal Notice on February 1, 2008,[53] and a Reasoned Opinion on May 15, 2008),[54] the Commission can now decide whether or not to refer Spain to the European Court of Justice for the Litigation Stage. However, on February 13, 2008, Spain gave notice of appeal against the Commission's decision, and the Court of First Instance has not passed a sentence concerning that notice.[55]

C. Supreme Court overturns the 2005-2007 National Co2 Allocation Plan

The utility Endesa presented a Contentious-Administrative Appeal in March 2005 against the 2005-2007 National CO_2 Allocation Plan arguing that individual allocations had been determined using a non-specific calculation process to evaluate offer and demand and that no information had been released. The Spanish Supreme Court has since ordered the Spanish Government to make an individual allocation of carbon dioxide, finding no basis for the previous allocation, which had been established by the Council of Ministers on January 21, 2005, and finding the Government's release of information insufficient.[56]

52. Press Release, Eur. Comm'n, Mergers: Commission Declares Part of Conditions Imposed by Spain on Enel and Acciona to Acquire Endesa Incompatible with EU Law and Requires Their Withdrawl (Dec. 5, 2007), *available at* http://europa.eu/rapid/pressReleasesAction.do?reference=IP/07/1858.

53. Press Release, Eur. Comm'n, Mergers: Commission Opens Infringement Procedure against Spain for Not Lifting Conditions Imposed by CNE on Acquisition of Endesa by Enel and Acciona (Jan. 31, 2008), *available at* http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/164.

54. Press Release, Eur. Comm'n, Mergers: Commission Requests Spain to Lift Conditions Imposed on Acquisition of Endesa by Enel and Acciona (May, 15, 2008), *available at* http://europa.eu/rapid/pressReleases Action.do?reference=IP/08/746.

55. Action Brought on 13 Feb. 2008 - Spain v Commission, 2008 O.J. (C 92) 41, *available at* http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:092:0041:0042:EN:PDF.

56. STS, Oct. 1, 2008 (J.T.C., No. 86/2005).

X. Timor-Leste

A. Oil & Gas

By means of Decree-Law no. 20/2008 of June 18, 2008,[57] the Timor-Leste government set up a new regulatory authority for the country's petroleum sector, the National Petroleum Authority (ANP). The ANP not only takes over the powers previously attributed to the Timor Sea Designated Authority and Australia over the Joint Petroleum Development Area (JPDA) but is also granted regulatory powers over Timor-Leste's exclusive petroleum resources.

The year 2008 has been interesting in terms of exploration activities, with Eni SpA making a new oil discovery in the Timor Sea JPDA at exploration well Kitan-1, which drilled to a total depth of 3,568 meters. Initial test results indicate a flow rate of 6,100 barrels of oil per day.[58] In addition, various seismic surveys are underway in the acreage awarded during the 2006 licensing round including one performed by Oilex in the JPDA.[59]

On the international scene, the Government of Timor-Leste has signed an agreement with South Korea pursuant to which the latter will be entitled to import natural gas from the Greater Sunrise field in the JPDA. Under the agreement, a consortium led by Korea Gas Corporation (KOGAS) will also be entitled to explore for natural gas in the country.[60]

B. Mining

The Timor-Leste Government approved specific rules for the licensing of extracting operations of mineral substances and their respective industrial use through Ministerial Statute 1/2008, of July 30, 2008.[61]

C. Environment

The Timor-Leste Parliament ratified the Kyoto Protocol by means of Resolution 6/2008, of May 7, 2008.[62]

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57. *See* Press Release, East Timor Council of Ministers, Decree Law Creates the National Petroleum Authority (NPA) (June 18, 2008), *available at* http://www.easttimorlegalinformation.org/Council_of_Ministers/June_2008_1.html; *see also* Decree Law No. 20/2008, *available at* http://www.laohamutuk.org/Oil/PetRegime/NPAlaw/ANPDLFinalEn.pdf.

58. Press Release, Eni, Eni makes new oil discovery in the Timor Sea (Mar. 10, 2008), *available at* http://www.eni.it/en_IT/media/press-releases/2008/03/2008-03-10-Eni-makes-new-oil-discovery-in-Timor-Sea.shtml?menu2=Media-archive&menu3=Press-releases.

59. Press Release, Oilex, Ltd., Oilex 3D Seismic Survey Starts in Highly Rated Block JPDA 06-103 (June 5, 2008), *available at* http://www.oilex.com.au/files/08Jun05%20Seismic%20Ops%20JPDA.pdf.

60. *East Timor signs South Korea Gas Export Deal*, Radio Australia, Oct. 14, 2008, *available at* http://www.radioaustralia.net.au/news/stories/200810/s2391017.htm.

61. *See* Ministerial Statute No. 1/2008, 2008, 32 D.R. 2520 (E. Timor).

62. *See* Kyoto Protocol Status of Ratification, http://unfccc.int/files/kyoto_protocol/status_of_ratification/application/pdf/kp_ratification.pdf (last visited Mar. 2, 2009).

XI. United States

A. Judicial Decision

On June 26, 2008, in *Morgan Stanley Capital Group, Inc. v. Public Utility District No. 1 of Snohomish County*,[63] the U.S. Supreme Court held that the presumption that electricity rates are just and reasonable applied to freely negotiated wholesale-energy contracts.

The Federal Power Act (FPA) gives the Federal Electricity Regulation Commission (FER Commission) the power to regulate the sale of electricity in interstate commerce. The FPA requires regulated entities to file their tariffs with the FER Commission and to provide electricity to purchasers on the prices and terms set forth therein. It also permits utilities to set rates with individual electricity purchasers through bilateral contracts.

In any situation, the FPA requires all wholesale electricity rates to be just and reasonable. When a utility files a new rate with the FER Commission, through a change to its tariff or a new contract, the FER Commission may suspend the rate for up to five months while it investigates whether the rate is just and reasonable or may decline to investigate and permit the rate to go into effect. The FER Commission keeps the authority to determine that the rate is not just and reasonable after receiving a complaint or on its own motion.

In 1956, the U.S. Supreme Court addressed the authority of the FER Commission to modify rates that have been set by contract.[64] Setting out the foundation of the *Mobile-Sierra* doctrine, the U.S. Supreme Court held, in substance, that when the FER Commission reviews whether rates negotiated pursuant to a bilateral contract are "just and reasonable," such rates are presumptively just and reasonable between the parties and should only be reversed if it "adversely affect[s] the public interest"[65] or "in circumstances of unequivocal public necessity."[66]

Technological advances allowed the entry of new operators as generators and sellers of wholesale electricity who were able to compete with electric utilities that had typically been vertically integrated monopolies.[67] In this context, the FER Commission allowed sellers of wholesale electricity to file a "market-based" tariff, which simply states that the seller will enter into freely negotiated contracts with purchasers.[68] When a seller files a market-based tariff, purchasers no longer have the option of buying electricity at a rate set by tariff, and contracts no longer need to be filed with FER Commission before going into effect.[69]

The dispute in *Morgan Stanley* arose in the context of California's energy crisis in 2000. Recognizing that the diminishing role of long-term contracts had been one of the seeds of

63. Morgan Stanley Capital Group, Inc. v. Pub. Util. Dist. No. 1, 128 S. Ct. 2733 (2008).

64. United Gas Pipe Line Co. v. Mobile Gas Serv. Corp., 350 U.S. 332 (1956); Fed. Power Comm'n v. Sierra Pacific Power Co., 350 U.S. 348 (1956).

65. *See Fed. Power Comm'n*, 350 U.S. at 354-55; *Morgan Stanley Capital Group, Inc.*, 128 S. Ct. at 2739.

66. *See, e.g., In re* Permian Basin Area Rate Cases, 390 U.S. 747, 822 (1968); *Morgan Stanley Capital Group, Inc.*, 128 S. Ct. at 2739.

67. *Morgan Stanley Capital Group, Inc.*, 128 S. Ct. at 2740.

68. *Id.* at 2741. To foster competition and avoid abuse of a market dominant position, a utility may only file a market-based tariff if it demonstrates that it lacks or has adequately mitigated market power, lacks the capacity to erect other barriers to entry, and has avoided giving preferences to affiliates. *Id.*

69. *Id.*

the crisis, the FER Commission abolished the requirement that investor-owned utilities purchase and sell all power through California's spot market exchange and encouraged them to enter into long-term contracts.[70] The case before the U.S. Supreme Court involved western utilities that had purchased power under long-term contracts from investor-owned wholesale electricity sellers in 2000 and 2001. These contracts provided high prices by historical standards although they were much lower than the prices on the spot market during the energy crisis.[71] The utilities sought to modify the contracts and argued that the rates should not be presumed just and reasonable under the *Mobile-Sierra* doctrine because, given the sellers' market-based tariffs, the contracts had never been initially approved by the FER Commission. The utilities also argued that the rates were so high they violated the public interest.

After the FER Commission rejected the utilities' petition, the Ninth Circuit reversed and remanded it to the FER Commission. The circuit court agreed with the utilities that rates set by contract are presumptively reasonable only where the FER Commission has had an initial opportunity to review the contracts without applying the *Mobile-Sierra* presumption. The court further held that, even assuming that the *Mobile-Sierra* presumption applied, the standard for overcoming that presumption is different for a purchaser's challenge, namely whether the contract exceeds a "zone of reasonableness."[72] The U.S. Supreme Court granted *certiorari*.

The U.S. Supreme Court first agreed with the Ninth Circuit that there is only one statutory standard for assessing wholesale electricity rates where set by contract or tariff—namely whether they are just and reasonable.[73] However, the Court rejected the Ninth Circuit's interpretation of *Sierra* as requiring that the FER Commission apply a different standard depending on the time when the contract is challenged. According to the U.S. Supreme Court,

> *Sierra* was grounded in the commonsense notion that "[i]n wholesale markets, the party charging the rate and the party charged [are] often sophisticated businesses enjoying presumptively equal bargaining power, who could be expected to negotiate a 'just and reasonable' rate as between the two of them." . . . Therefore, only when the mutually agreed-upon contract rate seriously harms the consuming public may the Commission declare it not to be just and reasonable. *Sierra* thus provided a definition of what it means for a rate to satisfy the just-and-reasonable standard in the contract context-a definition that applies regardless of when the contract is reviewed.[74]

The U.S. Supreme Court, however, affirmed the Ninth Circuit decision and remanded the case to the FER Commission because it found that: (i) the FER Commission had incorrectly only looked into the effect of the rates when they came into effect and over-

70. *Id.* at 2742-43.

71. While under one such contract, one of the utilities signed a nine year contract to purchase electricity from Morgan Stanley at a rate of $105/MWh. Prices in the Pacific Northwest had historically averaged $24/MWh, yet prices on the spot market during the energy crisis peaked at $3,300/MWh. *Id.* at 2743.

72. Pub. Util. Dist. No. 1 v. Morgan Stanley Capital Group, Inc., 471 F.3d 1053 (9th Cir. 2006), *vacated*, 128 S. Ct. 2733, *remanded to* 547 F.3d 1081 (9th Cir. 2008).

73. *Morgan Stanley Capital Group, Inc.*, 128 S. Ct. at 2745.

74. *Id.* at 2746 (internal citations omitted).

looked their effects on consumers "down the line," which the U.S. Supreme Court deemed it should have examined, and (ii) the FER Commission should not have dismissed allegations of market manipulations by the electricity sellers as not overcoming the *Mobile-Sierra* presumption because such presumption would be unavailable if it appears that the contract rates are not the product of fair, arms-length negotiations.[75]

B. Legislative Developments

When Congress adopted the Emergency Economic Stabilization Act of 2008 in late September to bail out the financial services industry, it also adopted the Energy Improvement and Extension Act of 2008 (the Act), which creates and extends significant tax incentives for alternative energy projects, alternative fuels, and energy conservation.[76] The Act contains four titles: (i) renewable energy incentives, carbon mitigation, and coal; (ii) transportation and fuels; (iii) energy conservation and efficiency; and (iv) revenue provisions that apply to the oil and gas industry.

Among other provisions, the Act extends through 2009 the placed-in service date for wind and refined coal facilities for the renewable energy production tax credit. The placed-in service date for other facilities using other renewable resources has been extended through 2011 to benefit from the available tax credit. The Act has also expanded the types of renewable energy sources, included facilities generating power from renewable marine resources, and extended through 2016 the energy credit termination date for solar energy, fuel cell, and microturbine property. Finally, the Act contains a new production tax credit applicable to the steel industry, tax credits for the creation of carbon sequestration facilities, and an U.S. $800 million authorization for new clean renewable energy bonds to finance qualified renewable energy facilities.

75. *Id.* at 2749-50.

76. Emergency Economic Stabilization Act of 2008, H.R.1424, 110th Cong. (2008) (enacted); Energy Improvement and Extension Act of 2008, H.R. 6049, 110 Cong. (2008) (enacted).