

International Energy and Natural Resources Law

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This article surveys the developments during 2012 in Angola, Argentina, Brazil, Chile, Croatia, Mozambique, Russia, Spain, Timor-Leste, and the United States.

I. Angola

Following the 2011 pre-salt licensing round with participation by major international companies, the Angolan government enacted laws and regulations in 2012 to incentivize Angolan oil and gas companies,¹ to govern foreign exchange operations,² to strengthen

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1. Decreto Legislativo Presidencial n. 3/12 de 16 de Março de 2012, DIÁRIO DA REPÚBLICA [D.R.] (52, série I): 1191 de 16.3.2012 (Angl.).

environmental protections,³ and to fund social projects from a portion of the petroleum revenues.⁴

A. TAX INCENTIVES FOR ANGOLAN OIL AND GAS COMPANIES

Presidential Legislative Decree No. 3/12, which took effect in March, provides tax and other incentives to increase participation by private and public Angolan petroleum companies.⁵ Benefits for qualifying Angolan companies include a reduced petroleum income tax⁶ and exemptions from the signature bonus for new petroleum contracts,⁷ the obligation to carry the exploration costs of Sonangol P&P,⁸ and social project contributions.⁹ Angolan companies enjoying these incentives cannot transfer their shares to foreign individuals or legal entities.¹⁰

B. FOREIGN EXCHANGE OPERATIONS

A new law significantly altered the foreign exchange environment for the Angolan petroleum industry.¹¹ The law repeals the special foreign exchange framework applicable to Sonangol E.P., as well as its domestic and foreign associates, and requires each of them to open hard currency accounts with banks located in Angola and to use those accounts to settle national tax liabilities and to pay suppliers and contractors.¹² The National Bank of Angola issued regulations implementing the law, establishing foreign exchange procedures for crude oil and natural gas operations.¹³

C. ENVIRONMENTAL LAWS AND REGULATIONS

Angola enacted important environmental laws and regulations in 2012 related to the terms of reference for environmental impact studies,¹⁴ public consultation for environmental impact assessments,¹⁵ and operational discharges management.¹⁶ Further, new

2. Lei n. 2/12, de 13 de Janeiro de 2012, DIÁRIO DA REPÚBLICA [D.R.] (9, série I): 165 de 13.1.2012 (Angl.).

3. See, e.g., Decreto Executivo n. 224/12, de Julho de 2012, DIÁRIO DA REPÚBLICA [D.R.] (135, série I): 3128 de 16.7.2012 (Angl.) (repealing Decreto Executivo n. 12/05, de 12 de Janeiro de 2005, DIÁRIO DA REPÚBLICA [D.R.] (5, série I): 64 de 12.1.2005 (Angl.)).

4. Decreto Presidencial n. 80/12, de 8 de Maio de 2012, DIÁRIO DA REPÚBLICA [D.R.] (86, série I): 2146 de 8.5.2012 (Angl.).

5. See Decreto Legislativo Presidencial n. 3/12, *supra* note 1.

6. *Id.* art. 4.1.

7. *Id.* art. 5.

8. *Id.* art. 6.

9. *Id.* art. 7.

10. *Id.* art. 8.3.

11. See Lei n. 2/12, *supra* note 2.

12. See *generally id.* chs. I-III.

13. See Nat'l Bank of Angola Order No. 20/12, Apr. 25, 2012 (Angl.).

14. See Decreto Executivo n. 92/12, de 1 de Março de 2012, DIÁRIO DA REPÚBLICA [D.R.] (42, série I): 1063 de 1.3.2012 (Angl.).

15. See Decreto Executivo n. 87/12, de 24 de Fevereiro de 2012, DIÁRIO DA REPÚBLICA [D.R.] (38, série I): 1006 de 24.2.2012 (Angl.).

16. See Decreto Executivo n. 224/12, *supra* note 3.

regulations on the “Prevention and Control of National Waters Pollution,” imposed by Presidential Decree No. 141/12,¹⁷ apply to national and foreign ships, vessels, platforms, tankers, and other industrial facilities¹⁸ and require, in part, companies and operators to have a pollution plan,¹⁹ to have insurance for environmental damage and rehabilitation,²⁰ and to comply with the International Convention for the Prevention of Pollution from Ships (MARPOL), as amended by the Protocol of 1978.²¹

D. SIGNATURE BONUSES AND SOCIAL PROJECT CONTRIBUTIONS

Presidential Decree No. 80/12 established rules for the use of signature bonuses and social project contributions from petroleum revenues.²² Funds are distributed for: (i) public investment, (ii) the development of sectors such as education, science, technology, and human resources, (iii) regional and local development, (iv) fostering the Angolan oil industry, and (v) support for the national oil sector.²³

II. Argentina

A. EXPROPRIATION

On May 3, 2012, the government of Argentina expropriated the 51 percent equity interest in Argentinean oil company YPF S.A. and the 60 percent equity interest in its natural gas affiliate Repsol YPF Gas, S.A., both owned by Spanish multinational Repsol.²⁴ The predecessor of YPF S.E., the world’s first state owned oil enterprise, was created by the Argentinean government in 1922.²⁵ The company was privatized in 1992,²⁶ and Repsol completed the purchase of its equity interests in 1999.²⁷

In 2011, Argentina became a net energy importer for the first time in roughly two decades.²⁸ Argentinean leaders have attributed the country’s energy deficit to Repsol’s

17. Decreto Presidencial n. 141/12, de 21 de Junho de 2012, DIÁRIO DA REPÚBLICA [D.R.] (118, série I): 2747 de 21.6.2012 (Angl.).

18. *Id.* art. 2, at 2747.

19. *Id.* art. 9, at 2751.

20. *Id.* art. 18, at 2752.

21. *Id.* art. 3(m), at 2748 (citing International Convention for the Prevention of Pollution from Ships [MARPOL], Nov. 2, 1973, 1340 U.N.T.S. 184, modified by Protocol of 1978, Feb. 17, 1978, 1340 U.N.T.S. 61, as amended).

22. *See* Decreto Presidencial n. 80/12, *supra* note 4.

23. *Id.* art. 1, at 2146.

24. Law No. 26741, May 4, 2012, art. 7 (Arg.), available at <http://www.boletinoficial.gov.ar/Inicio/Index.castle?s=01&idAviso=10192668&IdRubro=438&f=20120507>.

25. MINISTERIO DE AGRICULTURA DE LA NACIÓN, YACIMIENTOS PETROLIFEROS FISCALES, BUENOS AIRES: RECOPIACIÓN DE LEYES, DECRETOS Y RESOLUCIONES SOBRE MATERIAL PETROLERA [NATIONAL MINISTRY OF AGRICULTURE, ENERGY FOR PEACEFUL PURPOSES, BUENOS AIRES: COLLECTION OF LAWS, DECREES, AND RESOLUTIONS CONCERNING PETROLEUM] 95-97 (1938).

26. Law No. 24145, Oct. 13, 1992, art. 7, [27,509] B.O. 1 (Arg.).

27. *See, e.g.*, Robert Grosse, *The Financing of FDI in Latin America*, 2 J. Globalization, Competitiveness & Governability 110, 118 (2008), available at http://gcg.universia.net/pdfs_revistas/revista_14_1227718638879.pdf.

28. *See, e.g.*, *Argentina’s YPF CEO Says Talk with Shale Partners ‘Advanced’*, NASDAQ (Dec. 7, 2012 1:41 PM), available at <http://www.nasdaq.com/article/correct-argentinas-ypf-ceo-says-talks-with-shale-partners-advanced-20121207-00546#.UMS8sme87gs>.

failure to invest in hydrocarbon development while depleting YPF S.A.'s assets through dividend payments to overseas shareholders.²⁹ Repsol has maintained that the dividends were legal and that Argentina's unpredictable fiscal and regulatory policies have hampered investment in the hydrocarbon sector.³⁰ Furthermore, YPF S.A. discovered over 20 billion barrels of oil equivalent in shale deposits in the Vaca Muerta formation in western Argentina while the company was under Repsol's control.³¹

The law authorizing the expropriation, known as the Hydrocarbons Sovereignty Act, allocates 51 percent of the nationalized interests to the National State and 49 percent to the oil and gas producing provinces.³² The price of the expropriated shares will be determined by the National Court of Appraisals.³³

As of December 1, 2012, the shares had not been appraised, and no compensation had been paid to Repsol. The expropriation dispute has resulted in Repsol initiating legal actions against Argentina in various forums, including before the U.S. District Court for the Southern District of New York³⁴ and with the World Bank-affiliated International Centre for Settlement of Investment Disputes (ICSID).³⁵ Repsol also brought a lawsuit against Chevron in the Southern District of New York for allegedly wrongfully benefitting from the expropriation because Chevron entered into an agreement with YPF S.A. to explore the newly discovered shale deposits in Vaca Muerta.³⁶

The world will be watching as the various legal actions between Repsol, the government of Argentina, and Chevron continue and efforts to exploit the Vaca Muerta shale deposits progress.

29. See, e.g., Cristina Fernandez de Kirchner, President of Arg., Speech to the Nation on the Announcement of the Expropriation Bill of YPF (Apr. 16, 2012) (document in Spanish), available at <http://www.presidencia.gov.ar/discursos/25810-anuncio-del-proyecto-de-ley-de-expropiacion-de-ypf-discurso-de-la-presidenta-de-la-nacion>.

30. See, e.g., *Repsol Niega Haber Hecho una Política de Dividendos 'Depredadora' para YPF* [*Repsol Denies Its Dividend Policy for YPF Was 'Predatory'*], ELMUNDO (Apr. 26, 2012, 3:44 PM), <http://www.elmundo.es/elmundo/2012/04/26/economia/1335447873.html>.

31. See Press Release, Repsol, Repsol YPF Raises Its Hydrocarbons Reserves and Resources Estimate in the Vaca Muerta Play to 22.807 Billion Barrels of Oil Equivalent (Boe), REPSOL (Feb. 8, 2012, 9:00 PM), available at http://www.repsol.com/es_en/corporacion/prensa/notas-de-prensa/ultimas-notas/08012012-repsol-leva-prevision-recursos-vaca-muerta.aspx.

32. Law No. 26741, *supra* note 24, art. 8.

33. See *id.* arts. 10, 12 (also requiring pricing to be subject to related provisions of Law 21499 and to approval by a two-thirds majority vote of the national legislature for transfers of expropriated shares in the future); cf. Law No. 21499, Jan. 17, 1977, [23,581] D.O. 3 (Arg.).

34. See Complaint, Repsol YPF S.A. v. Republic of Arg., No. 12-cv-03877 (S.D.N.Y. May 15, 2012), 2012 WL 1828874; Complaint, Repsol YPF S.A. v. Republic of Arg., No. 12-cv-04018 (S.D.N.Y. May 21, 2012), 2012 WL 1866718.

35. See Official Notice, Repsol (Dec. 3, 2012) (notice of filing an arbitration request before the International Centre for Settlement of Investment Disputes (ICSID) against Argentina), http://repsol.com/imagenes/es_en/Arbitration_request_ICSID_tcm11-636542.pdf.

36. Complaint, Repsol S.A. v. Chevron Corp., No. 12-cv-8799 (S.D.N.Y. filed Dec. 4, 2012), 2012 WL 6015729; Press Release, YPF, YPF Firmó un Acuerdo con Chevron [YPF Signed an Agreement with Chevron] (Sept. 14, 2012), <http://www.ypf.com/YPFHoy/YPFSalaPrensa/Paginas/Acuerdo-CHEVRON.aspx> (signing a Memorandum of Understanding (MOU) and noting that "Chevron is now the largest private investor in the energy sector across the region").

B. EXPANDING THE GOVERNMENT'S ROLE IN THE ENERGY SECTOR

The Argentinean government continued to increase its role in the oil and gas industry with another new Decree³⁷ that reverses the previous course of deregulation embodied in the Oil Deregulation Decrees of 1989.³⁸ The new Decree provides for the creation of a National Hydrocarbons Investment Plan to achieve hydrocarbon self-sufficiency.³⁹ Companies engaged in exploration, exploitation, refining, transportation, and marketing of hydrocarbons must submit annual investment plans to the government.⁴⁰ The government may impose adjustments to those plans as necessary to meet National Hydrocarbon Investment Plan targets.⁴¹

C. DEVELOPMENTS IN UNCONVENTIONAL HYDROCARBONS

On August 17, 2012, the province of Neuquén, home to Vaca Muerta, adopted Argentina's first environmental regulations for unconventional hydrocarbon exploration and development.⁴² The regulations require all unconventional exploration and exploitation projects to obtain environmental licenses and, at the discretion of the enforcement authority, to conduct environmental risk analyses.⁴³ Applicants must disclose well-termination fluid composition and describe the systems and treatment processes for flowback water used in hydrocarbon well stimulation, including hydraulic fracturing.⁴⁴ The rules prohibit use of underground water fit for human consumption and irrigation in unconventional operations and strictly regulate treatment, storage, and disposal of flowback water.⁴⁵

III. Brazil

A. CORPORATE LAW DEVELOPMENTS TARGETING ENERGY

Three corporate law developments in 2012 had significant impacts on the Brazilian energy sector. Normative Resolution No. 484 clarifies existing pre-approval requirements for ANEEL, the Brazilian regulatory authority for electricity, when certain changes occur in corporate control.⁴⁶ As provided, the agency has already approved some specific cases, such as corporate changes for wind farms.⁴⁷ Presidential Provisional Measure No. 577/2012 establishes rules for government intervention when a public concessionaire does not comply with regulatory performance standards or becomes insolvent and limits the con-

37. See Decree No. 1277/2012, July 27, 2012, [37,447] B.O. 1. (Arg.).

38. See Decree No. 1589/1989, Jan. 4, 1990, [26,794] B.O. 11 (Arg.); Decree No. 1212/1989, Nov. 14, 1989, [26,760] B.O. 6 (Arg.); Decree No. 1055/1989, Oct. 12, 1989, [26,738] B.O. 10 (Arg.).

39. See generally Decree No. 1277/2012, *supra* note 37.

40. See *id.* at pmb1, annex I, ch. II, arts. 9-10.

41. See *id.*

42. See Decree 1483/2012, Aug. 17, 2012, [3312] B.O.P.N. [OFFICIAL BULLETIN NEUQUÉN PROVINCE] 4, available at <http://www.neuquen.gov.ar/org/boficial/pdf/bo12081703312.pdf>.

43. *Id.* Annex XVI, art. 3.

44. *Id.*

45. *Id.* art. 10.

46. See Resolução Normativa No. 484, de 17 de Abril de 2012, DIÁRIO OFICIAL [D.O.], 149 (79, t.1): 34 de 19.4.2012 (Braz.); see also Lei No. 8.987, de 13 de Fevereiro de 1995, art. 27, COL. LEIS REP. FED. BRASIL, 187 (2): 553830, Fevereiro 1995 (Braz.).

47. See Resolução Normativa No. 484, *supra* note 46, art. 6.

cessionaire's options to avoid bankruptcy by prohibiting business and in-court restructuring procedures.⁴⁸ Finally, Presidential Provisional Measure 579/2012, aimed at reducing electricity prices, allows early renewal of concession agreements scheduled to expire as of 2015 if the concessionaire accepts new performance measures and revised revenue calculations.⁴⁹ But the prospect of passage of Presidential Provisional Measure 579/2012 has already impacted companies most directly affected, causing some to lose up to 50 percent of their market value on the São Paulo Stock Exchange.⁵⁰ The entire Brazilian energy sector will be watching as the National Congress considers, amends, and approves these Presidential provisional measures into law.

B. OIL AND GAS

Brazil began 2012 with another oil spill in the Frade Field, located northeast of Rio de Janeiro and operated by Chevron and Transocean Brazil.⁵¹ Despite the absence of discernible environmental damage, the oil spill gave rise to the largest-ever environmental prosecutions in Brazil.⁵² In December of 2012, the companies agreed to a “change-of-conduct accord” as part of the civil lawsuit settlement.⁵³ Criminal prosecutions were pending.⁵⁴ Earlier in the year, the Superior Tribunal of Justice, Brazil's highest court, reversed a cessation of activities by the companies granted by the Court of Appeals, authorized Chevron to resume operations for oil spill mitigation and monitoring in the Frade Field, and authorized Transocean to resume all operations, except in the Frade Field, due to the potential impact of Transocean's suspension on royalties and tax revenues, production outputs, and drilling capacity in ultra-deep water, an area of robust demand.⁵⁵

After a five-year hiatus in public oil and gas auctions, the President approved the country's eleventh oil licensing auction to take place in 2013.⁵⁶ For the first time, potentially high-yield deepwater pre-salt blocks will be available. In late November, the President vetoed part of a controversial royalty sharing bill because it threatened to create legal

48. See Medida Provisória No. 577, de 29 de Agosto de 2012, DIÁRIO OFICIAL [D.O.] 169 (s.1): 2-3 de 30.8.2012 (Braz.).

49. See Medida Provisória No. 579, de 11 Setembro de 2012, DIÁRIO OFICIAL [D.O.] (s.1): 1-3 de 12.9.2012 (Braz.), amended by Medida Provisória No. 591, de 29 de Novembro de 2012, DIÁRIO OFICIAL [D.O.] 231 (s.1): 1 de 30.11.2012 (Braz.) (Explanatory Memorandum changing Article 15).

50. See, e.g., *Eletrobras Perde 58% de Seu Valor desde a MP 579 [Eletrobras Loses 58% of Its Value from MP 579]*, O GLOBO ECONOMIA (Nov. 21, 2012, 10:11 AM) (Braz.), <http://oglobo.globo.com/economia/eletrobras-perde-58-de-seu-valor-desde-mp-579-6784779>.

51. See *Frade Response*, CHEVRON (March 23, 2012), <http://chevron.com/fraderesponse/>.

52. See Jeb Blount, *Exclusive: Chevron, Transocean Back Brazil Spill Conduct Change*, THOMSON REUTERS (Nov. 30, 2012), http://newsandinsight.thomsonreuters.com/Legal/News/2012/11_-_November/Exclusive__Chevron,_Transocean_back_Brazil_spill_conduct_change/.

53. *Id.*

54. *Id.*

55. See S.T.J.J., No. 1.639, Relator: Ministro Pres. do STJ Felix Fischer, 28.9.2012, 1145 D.N.-S.T.J. 1.1.2012, 15 (Braz.).

56. See News Release, Ministry of Mines and Energy, *Lobão Anuncia 11ª Rodada de Leilões de Petróleo e Gás no País [Lobão Announces 11th Auction Round of Oil and Gas in the Country]* (Sept. 18, 2012), http://www.mme.gov.br/spg/noticias/destaque_foto/destaque_0069.html.

challenges that could have delayed the auctions.⁵⁷ The President rejected applying new royalty rates to existing leases, retained broader royalty sharing for new leases, and imposed the requirement that royalties from future oil and gas activities be used for education.⁵⁸

C. RENEWABLE ENERGY

In 2012, Brazil held a public auction for new wind, hydroelectric, and thermoelectric projects⁵⁹ and issued a new regulation to boost small-scale distributed energy generation by homeowners, businesses, and industries that install and maintain micro-generators and mini-generators.⁶⁰ Small energy producers, including solar and wind, are now eligible to receive grants in the form of credits for electrical energy amounts generated beyond those consumed.⁶¹

D. LOCALIZATION REQUIREMENTS

Enforcement of mandated localization requirements continue to be of importance for the energy sector. The National Agency of Petroleum, Natural Gas and Biofuels (ANP) told the media in December that oil companies are not achieving minimum local content targets, creating “the possibility of a high number of fines” for 2012.⁶² Foreign investors should closely monitor changes and ensure they are in compliance with local content requirements.⁶³

IV. Chile

Potential environmental and public health consequences of major energy and natural resources projects and enforcement of indigenous rights gained attention in 2012. In a series of cases, Chile’s Supreme Court upheld challenges brought by local residents, environmentalists, and indigenous communities to approved new plans and environmental permits for a wind farm,⁶⁴ hydroelectric plants,⁶⁵ thermoelectric plants,⁶⁶ a coal-fired

57. See Medida Provisória No. 592/2012, de 3 de Decembro de 2012, DIÁRIO OFICIAL DA UNIAO [D.O.U.] de 4.12.2012 (Braz.).

58. See *id.*

59. See Resolução Homologatória No. 1379, de 13 de Novembro de 2012, DIÁRIO OFICIAL [D.O.], 149 (220, t.1): 90 de 14.11.2012 (Braz.) (approving Auction 006/2012).

60. See Resolução Normativa No. 482, de 17 de Abril de 2012, DIÁRIO OFICIAL [D.O.], 149 (76, t.1): 53 de 19.4.2012 (Braz.).

61. See *id.*

62. Leila Coimbra, *Entrevista: Petroleiras Conseguem Apenas 32% de Conteúdo Local [Interview: Oil Companies Get Only 32% Local Content]*, THOMSON REUTERS (Sept. 3, 2012, 5:13 PM) (Braz.), <http://br.reuters.com/article/businessNews/idBRSP88206120120903>.

63. See Christiana Sciaudone, *BNDES Tightens Local-Content Rules for Brazil’s Wind Industry*, RECHARGE (Oct. 1, 2012), <http://rechargenews.com/wind/article1298482.ece>.

64. Corte Suprema de Justicia [C.S.J.] [Supreme Court], 22 marzo 2012, “Parque Eólico Chiloé,” Rol de la causa: 10.090-2011 (Chile) (Chiloé wind farm project).

65. Corte Suprema de Justicia [C.S.J.] [Supreme Court], 11 mayo 2012, “Central Hidroeléctrica Cuervo,” Rol de la causa: 2463-2012 (Chile) (Cuervo hydropower project); Corte Sumprema de Justicia [C.S.J.] [Supreme Court], 16 ago 2012, “Centrales La Higuera y La Confluencia,” Rol de la causa: 2726-2012 (Chile) (La Confluencia and La Higuera hydropower plants).

plant,⁶⁷ and mining projects.⁶⁸ In these cases, the Supreme Court found arbitrary decision making for environmental impacts,⁶⁹ failure to consider local residents' rights,⁷⁰ and a lack of proper consultation with indigenous communities, as required by the domestic law implementing the International Labour Organization's Convention Concerning Indigenous and Tribal Peoples in Independent Countries (ILO Convention 169), a treaty ratified by Chile in 2008.⁷¹

To better define the indigenous consultation and participation procedures, the Chilean government proposed new regulations.⁷² The U.N. Special Rapporteur on the Rights of Indigenous Peoples praised the regulations as "an important step."⁷³ The Rapporteur, however, recommended that the procedures be revised and expanded in scope to ensure better implementation and conformity with the ILO Convention 169 and international standards.⁷⁴ He noted that meaningful indigenous consultation and participation should be incorporated earlier and throughout the decision-making process.⁷⁵ Three Courts of Appeals cases, decided in November 2012, ruled unfavorably for the indigenous right to consultation during the early phases of geothermal explorations.⁷⁶ These cases likely will be appealed to the Supreme Court.

66. Corte Suprema de Justicia [C.S.J.] [Supreme Court], 29 agosto 2012, "Central La Castilla," Rol de la causa: 2703-2012 (Chile) (Central La Castilla, a thermoelectric power plant and the second largest power project in Chile).

67. Corte Suprema de Justicia [C.S.J.] [Supreme Court], 26 noviembre 2012, "Piriquenes," Rol de la causa: 7071-2012 (Chile) (Piriquenes coal-fired plant in Arauco municipality).

68. Corte Suprema de Justicia [C.S.J.] [Supreme Court], 27 abril 2012, "Proyecto el Morro," Rol de la causa: 2211-2012 (Chile) (El Morro mining project); Corte Suprema de Justicia [C.S.J.] [Supreme Court], 30 marzo 2012, "Paguanta," Rol de la causa: 11.040-2011 (Chile) (prospect drilling project in Paguanta in Patagonia).

69. See, e.g., Rol de la causa: 11.040-2011, *supra* note 68 (finding arbitrary and illegal decisionmaking in approving environmental permits).

70. See, e.g., Rol de la causa: 2726-2012, *supra* note 65 (finding proposed hydropower plants would violate local residents' water rights).

71. See, e.g., Rol de la causa: 10.090-2011, *supra* note 64; Law No. 124/2009, Maio 12, 2009, DIARIO OFICIAL [D.O.] (Chile) (regulating Article 34 of Law No. 19253 on indigenous consultation and participation); see generally Convention Concerning Indigenous and Tribal Peoples in Independent Countries, arts. 6-7, June 27, 1989, 72 ILO OFFICIAL BULL. 29, 28 I.L.M. 1382 [hereinafter ILO Convention 169].

72. See *Gobierno Chileno da a Conocer Propuesta de Nuevo Mecanismo de Consulta Para Pueblos Originarios* [Chilean Government Unveils Proposed New Mechanism for First Nations Consultation], ORGANIZACIÓN INTERNACIONAL DEL TRABAJO (Aug. 8, 2012), http://www.ilo.org/santiago/sala-de-prensa/WCMS_187948/lang-es/index.htm.

73. James Anaya, *Special Rapporteur on the Rights of Indigenous Peoples, Comentarios en Relación con el Documento Titulado: "Propuesta de Gobierno para Nueva Normativa de Consulta y Participación Indígena de Conformidad a los Artículos 6° y 7° del Convenio N° 169 de la Organización Internacional del Trabajo"*, Chile [Comments on the Document Titled: "Government Proposal for New Rules on Indigenous Consultation and Participation Pursuant to Articles 6 and 7 of Convention No. 169 of the International Labour Organization", Chile], 3 (Nov. 2012), available at <http://unsr.jamesanaya.org/docs/special/2012-11-29-unsr-comentarios-a-propuesta-reglamento-consulta-chile.pdf>.

74. *Id.* at 4, 10.

75. *Id.* at 9-10.

76. Press Release, Judiciary of the Republic of Chile, Corte de Santiago Rechaza Recursos De Protección de Comunidades Indígenas por Exloraciones Geotérmica [Santiago Court Rejects Indigenous Communities' Appeals for Protection against Geothermal Explorations] (Nov. 20, 2012), available at http://www.poderjudicial.cl/modulos/Home/Noticias/PRE_txtnews.php?cod=4642.

V. Croatia

Important legislative developments included the implementation of the *acquis communautaire* of the EU's third energy package⁷⁷ and the drafting of two new laws to replace the current Mining Act.⁷⁸ The transpositions of the EU's Gas and Electricity Directives 2009/72/EC⁷⁹ and 2009/73/EC⁸⁰ into the Energy Act and the Act on the Regulation of Energy Activities further support Croatia's accession process to the European Union.⁸¹ The Energy Act regulates issues of common interest for all energy activities.⁸² The Act on the Regulation of Energy Activities (HERA Act) broadens the authority and responsibilities of the Croatian Energy Regulatory Agency (HERA), particularly with regard to regulation of electricity and gas prices.⁸³

Two laws currently being drafted—the Hydrocarbons Act and proposed Mineral Mining Act—are expected to replace the current Mining Act next year.⁸⁴ The creation of a separate law for hydrocarbons is intended to create an improved legal and regulatory environment favorable to increased investment. Given that oil and gas development is seen as one of the top governmental priorities for economic recovery, tenders are expected shortly after the new Hydrocarbons Act is passed in 2013.

VI. Mozambique

Two backdated pieces of legislation containing important energy regulations were published in 2012. The first creates a specific statutory regime for the production, processing, trading, and distribution of biofuels and biofuel mixtures.⁸⁵ It addresses a range of matters, including (i) the types of licenses and their award requirements and procedures; (ii) the requirements in regard to monitoring, storage, blending and supply contracts, pricing, and licensing fees; and (iii) the minimum percentage of biofuel to be blended with diesel and gasoline.⁸⁶ The second covers safety regulations for high voltage power lines.⁸⁷ In line with Mozambique's goal to expand its power transmission and distribution grid, the new regulations aim to adapt the statutory regime to the latest technological advances occurring in the field of high-voltage transmission of electrical current.⁸⁸

77. Energy Act, Narodne novine, No. 120/2012 (Official Gazette of the Republic of Croatia) [hereinafter Energy Act]; Act on the Regulation of Energy Activities, Narodne novine No. 120/2012 (Official Gazette of the Republic of Croatia) [hereinafter HERA Act]; see also *Single Market for Gas & Electricity: Third Package*, EUR. COMMISSION, http://ec.europa.eu/energy/gas_electricity/legislation/legislation_en.htm (last visited Feb. 2, 2013).

78. See Mining Act, Narodne novine No. 75/09, 49/11 (Official Gazette of the Republic of Croatia) [hereinafter Mining Act].

79. Council Directive 2009/72/EC, art. 49, 2009 O.J. (L 211) 89 (EC).

80. Council Directive 2009/73/EC, art. 54, 2009 O.J. (L 211) 121-32 (EC).

81. See *id.*

82. See Energy Act, *supra* note 77, art. 1(2).

83. See HERA Act, *supra* note 77, art. 11.

84. See Mining Act, *supra* note 78; *Oil and Gas and Renewable Energy Legis. and Mkt. Update*, INT'L L. OFF. (Oct. 8, 2012), <http://www.internationallawoffice.com/newsletters/Detail.aspx?g=15a0bfe1-fabd-4069-b9ea-2456a6524e96>.

85. Decreto No. 58/2011, de 11 de Novembro de 2011, B.R. 1 (45, 2d supp.): 502-(36-39) (Mozam.).

86. *Id.*

87. Decreto No. 57/2011, de 11 de Novembro de 2011, B.R. 1 (45, 2d supp.): 502-(3-35) (Mozam.).

88. *Id.*

Mozambique's Council of Ministers established rules for the exploration and production of ground water in 2012.⁸⁹ The regulations detail procedures for licensing ground water exploration, drilling and production activities and set drilling and water extraction standards.⁹⁰

VII. Russia

There were two significant amendments to Russian legislation affecting the energy and natural resources sectors in 2012.

A. SUBSOIL PLOT BOUNDARY EXTENSIONS

The Russian Federation approved regulations for the establishment and modification of subsoil plot grants.⁹¹ These regulations clarified procedures for extending the boundaries of subsoil plots related to a mineral license.⁹² Previously, Russian law did not explicitly permit license area border extensions and did not provide border extension procedures. Only geological exploration license boundaries could be modified.⁹³ Modification was not permitted, even when a discovered deposit exceeded the subsoil plot boundaries, for license areas either under production or under both geological exploration and production.

The new regulations allow the expansion or reduction of subsoil plot boundaries in both area and depth, in any spatial direction.⁹⁴ This is a positive development, although there are some limitations. The license area may only be increased once throughout the term of the mineral license.⁹⁵ The subsoil plot may only be expanded at the expense of adjacent territory if such territory has not been granted to another user or offered for public sale.⁹⁶ If a license area is to be expanded, the additional reserves may not exceed 20 percent of the initial deposit previously explored and entered into the state balance.⁹⁷ The extension is only possible in relation to the same mineral covered in the existing license.⁹⁸ The subsoil plot may be reduced only after completion of geological exploration, detailed mineral prospecting, and submission of a report to the geological information fund.⁹⁹ Finally, the boundaries of the subsoil plot may not be reduced if the area subject to reduc-

89. Decreto No. 18/2012, de 5 de Julho de 2012, B.R. 1 (27, supp.): 304-(10-17) (Mozam.).

90. *Id.*

91. SOBRANIE ZAKONODATEL'STVA ROSSIISKOI FEDERATSII [SZ RF] [Russian Federation Collection of Legislation] 2012, No. 19, Item 2445 [hereinafter Decree No. 429].

92. *Id.* arts. 13-28.

93. VEDOMOSTI S^{TE}ZDA NARODNYKH DEPUTATOV ROSSIISKOI FEDERATSII I VERKHOVNOGO SOVETA ROSSHISKOI FEDERATSII [VED. RF] [Bulletin of the Congress of People's Deputies of the Russian Federation and Supreme Council of the Russian Federation] 1992, No. 33, Item 1917, cl. 6.2, ¶ 4 (allowing boundary license modifications in the Regulations on Licensing of Subsoil Use approved by Decree No. 3314-1 of July 15, 1992, as amended).

94. Decree No. 429, *supra* note 91, art. 7.

95. *Id.* art. 9.

96. *Id.* art. 10.

97. *Id.* art. 11.

98. *Id.* art. 10.

99. *Id.* art. 12.

tion contains mineral reserves described in the license that have already been evaluated by the state.¹⁰⁰

In order to expand the license area, geological and other data must be provided confirming that the minerals outside the area's boundaries entered into the state balance are part of the deposit of those minerals.¹⁰¹ The regulations therefore exclude boundary extensions into "greenfield" areas.

B. SUBSOIL PLOT FOREIGN INVESTMENT RESTRICTION EXEMPTIONS

Another piece of legislation adopted in 2012 clarified the rules for subsoil plots of federal importance with foreign ownership restrictions. Certain international financial organizations enjoy an exemption from the requirement to obtain government consent before acquiring a stake in a strategic entity, including an entity holding a subsoil plot of federal importance.¹⁰² But that exemption was not valid until the list of international financial organizations to which it applied had been adopted. Russian Federation Decree No. 119-r, adopted on February 3, 2012, lists the exempt international financial institutions.¹⁰³ The list includes the International Bank for Reconstruction and Development, the European Bank for Reconstruction and Development, and the International Finance Corporation, among others.¹⁰⁴

Ever since the legislation restricting foreign investment in Russian subsoil was adopted in 2008,¹⁰⁵ companies operating in the region have expressed concern about whether and when the restrictions would be eased. Several amendments are currently in process that will provide certain exemptions from restrictions on foreign investment in subsoil plots of federal importance for deposits of gold, diamonds, and platinum-group metals,¹⁰⁶ so interested investors should monitor these proposed changes in 2013.

VIII. Spain

The Spanish government in 2012 passed important legislation affecting the energy and natural resources sectors. The legislative reforms should be considered in light of the austerity measures taken by the government to address long-standing and pressing issues that have been magnified by the ongoing economic crisis. These new rules largely aim to

100. *Id.*

101. *Id.* art. 8.

102. (O poriyadke osuschchestvleniya inostrann'ikh investitsii v khosyatvenn'ie obshchestva, imeiyushchie strategicheskoe znachenie dliya obespecheniya oboron' i stran' i i bezopasnosti gosudarstva) O poriyadke osuschestvleniya inostrann'ikh investitsii v khosyatvennye obshchestva, imeyushchie strategicheskoe znachenie dlya obespecheniya oborony strany i bezopasnosti gosudarstva [Procedures for Foreign Investments in Business Entities of Strategic Importance for National Defense and State Security], SOBRANIE ZAKONODATEL'STVA ROSSIISKOI FEDERATSII [SZ RF] [RUSSIAN FEDERATION COLLECTION OF LEGISLATION] 2008, No. 18, Item 1940, cl. 2(3) (dated April 29, 2008, as amended) [hereinafter Law No. 57-FZ].

103. SOBRANIE ZAKONODATEL'STVA ROSSIISKOI FEDERATSII [SZ RF] [RUSSIAN FEDERATION COLLECTION OF LEGISLATION] 2012, No. 7, Item 899 [hereinafter Decree No. 199-r].

104. *Id.* par.1.

105. Law 57-FZ, *supra* note 102.

106. See, e.g., MINISTRY OF NATURAL RESOURCES AND ECOLOGY OF THE RUSSIAN FEDERATION, DRAFT FEDERAL LAW: ON AMENDING ARTICLE 2.1 OF THE LAW OF THE RUSSIAN FEDERATION ON SUBSOIL (2012), available at <http://www.mnr.gov.ru/regulatory/detail.php?ID=129028>.

address the tariff deficit in the Spanish energy sector, which reached _24 billion in 2011.¹⁰⁷

A. TEMPORARY ELIMINATION OF RENEWABLE ENERGY INCENTIVES

Royal Decree Law 1/2012 repealed the incentives for renewable energy resources initiated by Royal Decree 661/2007,¹⁰⁸ which spurred a “rush of new investments” in the sector in Spain when it was introduced.¹⁰⁹ Royal Decree Law 1/2012 describes itself as a “temporary” measure applicable only to new facilities.¹¹⁰ Yet, without an end date, the termination of incentives might continue until the government decides there is economic stability in the electricity sector.

B. COST CONTAINMENT AND CONSUMER PROTECTION

Royal Decree Law 13/2012 contains cost adjustment measures for the Spanish energy sector, including restrictions on the retribution to energy transport companies, stimulus for carbon extraction, and financing of the National Energy Committee.¹¹¹ The Royal Decree Law also transposes Directive 2009/72/EC into the Spanish body of laws and establishes rules for improving consumer protections in the sector.¹¹²

107. See Real Decreto-ley 1/2012, de 27 de enero, por el que se procede a la suspensión de los procedimientos de preasignación de retribución y a la supresión de los incentivos económicos para nuevas instalaciones de producción de energía eléctrica a partir de cogeneración, fuentes de energía renovables y residuos [Royal Decree-Law 1/2012, of 27 January, which is applicable to the suspension of pre-allocation procedures and the removal of economic incentives for new plants producing electricity from cogeneration sources, renewable energy and waste] (B.O.E. 2012, 8068-72) [hereinafter Royal Decree Law 1/2012] (describing the tariff deficit as a barrier to development in the explanatory text preamble), available at <http://www.boe.es/buscar/doc.php?id=BOE-A-2012-1310>; *Spain Says Ends Subsidies for New Renewable Units*, REUTERS (Jan. 27, 2012, 9:27 AM), <http://www.reuters.com/article/2012/01/27/spain-renewables-idUSL5E8CR2B620120127> (citing Industry Minister Jose Manuel Soria’s concern with the _24 billion tariff deficit).

108. See Royal Decree Law 1/2012, *supra* note 107, art. 2, cl. 1; Real Decreto 661/2007, de 25 de mayo, por el que se regula la actividad de producción de energía eléctrica en régimen especial [Royal Decree 661/2007 of 25 May, which regulates the activity of electricity production in the special regime] (B.O.E. 2007, 22846-86) [hereinafter Royal Decree 661/2007], available at <http://www.boe.es/buscar/doc.php?id=BOE-A-2007-10556>.

109. Richard Silberstein, *International Energy and Natural Resources Law*, 42 INT’L LAW. 583, 588 (2008).

110. Royal Decree Law 1/2012, *supra* note 107, pmbl., art. 2 (describing the removal of incentives as temporary in the preambular explanatory text and applicable to new facilities in Article 2).

111. Real Decreto-Ley 13/2012, de 30 de marzo, por el que se transponen directivas en materia de mercados interiores de electricidad y gas y en materia de comunicaciones electrónicas, y por el que se adoptan medidas para la corrección de las desviaciones por desajustes entre los costes e ingresos de los sectores eléctrico y gasista [Royal Decree-Law 13/2012, of 30 March, which transposes directives on internal markets in electricity and gas and electronic communications, and by adopting measures to correct deviations by mismatches between costs and revenues of the electricity and gas sectors] (B.O.E. 2012, 26,876-967) [hereinafter Royal Decree Law 13/2012].

112. See Ana Isabel Mendoza Losana, *Real Decreto-Ley 13/2012: Recortes y reformas en el sector eléctrico* [Royal Decree Law 13/2012: Cuts and Reforms in the Power Sector], NOTICIAS BREVES [NEWS BRIEF] (Gómez-Acebo & Pombo, Spain), Apr. 2012, at 2-3.

C. NEW ENERGY TAXES

Although originally intended as an energy market reform measure, Law No. 15/2012,¹¹³ effective on January 1, 2013, has become a vehicle for imposing several new energy sector taxes, including taxes on electricity using continental waters and nuclear energy.¹¹⁴ It also imposes a special tax, known as “Green Cent,” on natural gas, carbon, and fuel used for energy production.¹¹⁵ Critics are questioning the law’s constitutionality¹¹⁶ and its potential adverse effects on consumers.¹¹⁷

D. NATIONAL COMMITTEE OF THE MARKETS AND COMPETITION

Draft Law 121/000028, originally to be effective on January 1, 2013, is intended to streamline government and to cut costs by merging different authorities, including the National Energy Committee, into one regulatory body.¹¹⁸ This new body, the National Committee of the Markets and Competition, will assume all responsibilities and competencies of the previous authorities.¹¹⁹

IX. Timor-Leste

The government of Timor-Leste continued its efforts to establish a regulatory regime for the petroleum industry and to further define the powers and duties of the National Petroleum Authority in 2012. The government approved a legal framework governing the supply, processing, transportation, storage, sales, and marketing of raw and refined petroleum and related products.¹²⁰ Companies wishing to engage in these activities now require licenses from the National Petroleum Authority and must comply with all relevant technical, safety, and economic rules and standards.¹²¹ License durations may range from one to thirty years, depending upon the type of activity and various considerations, such as the activity’s degree of complexity, the investment required, and the time required to recover the initial investment and generate a reasonable profit.¹²² The legal framework includes rules covering the investigation and punishment of infractions, provides for fines

113. Ley 15/2012 de medidas fiscales para la sostenibilidad energética [Fiscal Measures for Energy Sustainability] (B.O.C.G. 2012, 10-A-25-5).

114. *Id.* at 5-6.

115. *Id.*

116. See, e.g., Blanca Lozano Cutanda & Carlos Vázquez Cobos, *¿Tiene soporte constitucional el nuevo canon por utilización de las aguas continentales para la producción de energía? [Are There Constitutional Grounds for the New Taxes on the Use of Inland Waters for Energy Production?]*, ANÁLISIS [ANALYSIS] (Gómez-Acebo & Pombo, Spain), Sept. 2012, at 1-2.

117. See, e.g., Blanca Lozano Cutanda, “*El proyecto de ley que crea nuevos impuestos sobre la actividad de las eléctricas: nuevo juicio*” [Proposed Law Creates New Taxes on Electrical Energy Activities: A Critical Assessment], ANÁLISIS [ANALYSIS] (Gómez-Acebo & Pombo, Spain), Sept. 2012, at 1.

118. Proyecto de Ley de creación de la Comisión Nacional de los Mercados y la Competencia [Draft Law Creating the National Commission on the Markets and Competition] at 4 (B.O.C.G. 2012, 10-A-28-1).

119. *Id.*

120. See generally Decreto-Lei n. 1/2012, de 1 de Fevereiro de 2012, JORNAL DA REPÚBLICA [OFFICIAL GAZETTE] I (4): 5584-5607 (Timor-Leste), available at http://www.jornal.gov.tl/?mod=secao_1&cid=3.

121. *Id.*

122. *Id.* art. 11.

ranging from US \$250 to US \$1 million and additional penalties, and anticipates the establishment of an inspection division within the National Petroleum Authority.¹²³

X. United States

The expansion of hydraulic fracturing drilling, or “fracking,” to release natural gas and oil trapped in rock formations prompted increased federal actions to address improved safety and environmental safeguards and concerns related to water and air quality.

In April, President Obama issued an Executive Order establishing an Interagency Working Group to coordinate federal policy efforts related to “unconventional domestic natural gas resources,” such as gas released through hydraulic fracturing.¹²⁴ The Working Group is responsible for coordinating efforts to improve the safety of natural gas activities on federal and Indian lands, to promote cost-effective public health and environmental standards, to support research and development, and to engage in long-term planning.¹²⁵

The U.S. Department of the Interior proposed new regulations for hydraulic fracturing drilling on federal and Indian lands, including requirements for companies to meet appropriate construction standards, to obtain approval of well stimulation and fluid management plans before drilling, and to disclose publicly the chemicals used in the fracking process once operations cease.¹²⁶ If adopted, the proposed regulations will update hydraulic fracturing regulations last revised in 1988.¹²⁷ The proposed regulations are consistent with the voluntary industry best practices for hydraulic fracturing operations recommended by the American Petroleum Institute.¹²⁸

The U.S. Environmental Protection Agency (EPA) enacted the first-ever federal air pollution regulatory standards for hydraulic fracturing of gas wells under the Clean Air Act.¹²⁹ The EPA also issued a draft guidance document to assist EPA permit writers of oil and gas hydraulic fracturing operations using underground injection of diesel fuels.¹³⁰ The draft guidance document is based on the EPA’s interpretation of the Safe Drinking Water Act, as revised by the Energy Policy Act of 2005, and Underground Injection Control (UIC) permitting regulations.¹³¹

123. *Id.* ch. V.

124. Exec. Order No. 13,605, 77 Fed. Reg. 23,107, 23,107 (Apr. 17, 2012).

125. *Id.* at 23,108 (defining the functions in section 2(b)).

126. Well Stimulation, Including Hydraulic Fracturing, on Federal and Indian Lands, 77 Fed. Reg. 27,691, 27,692 (proposed May 11, 2012) [hereinafter Proposed Rule]; Extension of Comment Period, 77 Fed. Reg. 38,024 (June 26, 2012) (received 59,786 public comments).

127. See 43 C.F.R. § 3162.3-2 (2012).

128. Proposed Rule, *supra* note 127, at 27,693; AM. PETROLEUM INST., HYDRAULIC FRACTURING OPERATIONS—WELL CONSTRUCTION AND INTEGRITY GUIDELINES (1st ed. 2009).

129. New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants, 77 Fed. Reg. 49,490, 49,493 (Aug. 16, 2012) (effective October 15, 2012) (to be codified at 40 C.F.R. pts. 60, 63) (defining a phased-in period until January 1, 2015 and thereafter requiring reduced emission completion technologies for new hydraulic fracturing and re-fracturing operations).

130. Permitting Guidance for Oil and Gas Hydraulic Fracturing Activities Using Diesel Fuels—Draft: Underground Injection Control Program Guidance #84, 77 Fed. Reg. 27,451, 27,451 (May 10, 2012); Extension of Comment Period, 77 Fed. Reg. 40,354, 40,355 (July 9, 2012) (received more than 97,000 public comments).

131. Draft Underground Injection Control Program Guidance #84, 77 Fed. Reg. at 27,451.

State legislatures and regulators continued to take varying approaches. Two new developments included the establishment of presumptive water supply contamination impact areas around deep-shale-deposit gas wells in Maryland¹³² and a new per-well impact fee for shale gas drilling in Pennsylvania with revenues going partially to counties and local municipalities for infrastructure projects and public services.¹³³ Maryland continued its moratorium on hydraulic fracturing pending a state report on the potential environmental impacts.¹³⁴ Vermont became the first state to ban hydraulic fracturing, but the gesture was largely symbolic because the state has little to no known reserves.¹³⁵ Several states imposed new chemical disclosure requirements in 2012, including Colorado,¹³⁶ Idaho,¹³⁷ Indiana,¹³⁸ New Mexico,¹³⁹ North Dakota,¹⁴⁰ Ohio,¹⁴¹ Oklahoma,¹⁴² Pennsylvania,¹⁴³ Texas,¹⁴⁴ and Utah.¹⁴⁵ The majority of those states allow companies to comply with disclosure requirements by posting the information on the FracFocus website.¹⁴⁶ Lastly, South Dakota urged Congress to delegate authority for hydraulic fracturing to the states.¹⁴⁷

As hydraulic fracturing continues to fuel the U.S. economy and energy exports, an ongoing challenge for policymakers and the industry will be navigating the coordination of expanded federal oversight and actions with ongoing state regulatory and legal reforms.

132. Presumptive Impact Areas – Contamination Caused by Gas Wells in Deep Shale Deposits, H.B. 1123/S.B. 636, 2012 Gen. Assembly (Md. 2012) (effective July 1, 2012).

133. Act of Feb. 14, 2012, Pub. L. 87, No. 13 (Pa. 2012) (effective Apr. 14, 2012) (enacting H.B. 1950/S.B. 1100 to amend Title 58 and the state Oil and Gas Act of 1984).

134. See Governor's Exec. Order No. 01.01.2011.11, The Marcellus Shale Safe Drilling Initiative, at pmb1., sec. E (Md. June 6, 2011).

135. See An Act Relating to Hydraulic Fracturing Wells for Natural Gas and Oil Production, 2012 Vt. Acts & Resolves No. 152 (Vt. 2012) (codifying H.B. 464 and requiring, in part, the Secretary of Natural Res. to provide a report to the General Assembly by Jan. 15, 2016, on whether the prohibition should be repealed).

136. COLO. CODE REGS. § 404-1:205A (2012) (effective Apr. 1, 2012).

137. IDAHO ADMIN. CODE r. 20.07.02.056 (2012) (effective Mar. 29, 2012).

138. IND. CODE §§ 14-8-2-19.5, 14-8-2-128.4, 14-37-3-8 (2012) (effective July 1, 2012; enacting H.B. 1107); Ind. Natural Res. Comm'n, Emergency Rule, LSA Document #12-292(E) (effective July 1, 2012) (temporarily adding non-code provisions to assist with the implementation of H.B. 1107 and § 14-37).

139. N.M. CODE R. § 19.15.16.19(B) (LexisNexis 2012) (effective Feb. 15, 2012).

140. N.D. ADMIN. CODE 43-02-03-27.1(2)(i) (2012) (effective Apr. 1, 2012).

141. S.B. 315, 129th Gen. Assembly (Ohio 2012) (certain provisions effective June 11, 2012).

142. OKLA. ADMIN. CODE § 165:10-3-10 (2012) (effective July 1, 2012).

143. Act of Feb. 14, 2012, *supra* note 134 (codified as 58 PA. CONS. STAT. § 3222.1 (2012)).

144. 16 TEX. ADMIN. CODE § 3.29 (2012) (effective for well permits on or after Feb. 1, 2012).

145. Hydraulic Fracturing, 18 Utah Bull. 33 (proposed Sept. 15, 2012) (proposing rule R649-3-39 to require chemical disclosure and noting majority of operators had voluntarily complied); 22 Utah Bull. 170 (Nov. 15, 2012) (announcing R649-3-39 effective Nov. 1, 2012).

146. See *FracFocus Chemical Disclosure Registry*, FRACFOCUS, <http://fracfocus.org/welcome> ©(last visited Feb. 2, 2013) (managed by the Ground Water Protection Council and Interstate Oil and Gas Compact Commission).

147. H. Con. Res. 1005, 87th Leg., 2012 Sess. (S.D. Feb. 7, 2012).

