

Gürcan Gülen

Professional Summary

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Professional Preparation

Academic Background

Ph.D. Economics, Boston College, 1996

B.A. Economics, Bosphorus University, Istanbul, Turkey, 1990

Professional Appointments

Present Position: Senior Energy Economist, Bureau of Economic Geology, The University of Texas at Austin, Center for Energy Economics (June 2005 - Present). Ongoing projects: manager of gas-power linkages research area, including integration of renewables, impact of energy regulations, and fluctuations in natural gas prices; assessment of economic potential in four shale gas plays for a project funded by the Alfred P. Sloan Foundation; evaluation of CO₂-EOR value chain economics for the Gulf Coast Carbon Center. Completed major projects: Co-PI of the 5-year, \$3.5-million U.S. Agency for International Development (USAID) cooperative agreement on energy sector development, with a focus on West Africa; PI for CEE's subcontract with PA Consulting on USAID South Asia Energy Research Initiative-Energy; PI for the partnership with Centro de Estudos e Investigação Científica at the Universidade Católica de Angola; Co-instructor for two 1-week programs on Natural Gas Value Chain Economics in Nigeria in collaboration with the Gas Research Center from the University of Port Harcourt.

Researcher, Institute for Energy Law and Enterprise, University Law Center (June 2002 - May 2005). Director of grant for "Partnership to Strengthen Local Capacity for Economic, Financial and Social Analysis of Energy Sector Initiatives" program of Association Liaison Office for University Cooperation in Development; management of Energy Sector Governance Program Grant of U.S. Agency for International Development; supervision of day-to-day activities and development of materials for and instruction in Institute's annual capacity building programs; development and management of 14-week custom program for 17 Assistant Energy Experts from Energy Markets Regulatory Authority of Turkey; development of statistical & analytical methodology for normalization of costs data between costs incurred by E&P companies operating outside North America and those operating in North America for Ziff Energy Group; politics and economics of proposed Caspian export pipeline projects; analysis of Turkey's efforts to diversify its sources of oil and gas and its active role in development and pipeline transportation of Central Asian resources in the face of increasing energy consumption; exploration of new geopolitics of oil and gas resulting from increasing global demand and emergence of Former Soviet Union republics of Central Asia and the Caucasus as major producers and/or transit countries, with a special emphasis on the role of China.

Researcher, Energy Institute, Bauer College of Business, University of Houston (January 1997 - June 2002). Preparation of training manuals for Oil and Gas Accounting, International Petroleum Contracts, Project Finance and International Petroleum Economics to be used in U.S. AID/Hagler Bailly Consulting consortium's training of oil and gas professionals in Central Asian republics of Kazakhstan, Uzbekistan and Turkmenistan; developed and taught courses.

Scholar in Residence, Duke Energy International, Houston (February 2000 - August 2000). Day-to-day evaluation of legal and regulatory risk to DEI's electricity and natural gas projects in Latin America and Europe; appraisal of electricity laws and regulations for a group of countries and their evolution over time for developing a better understanding of best practices in electricity restructuring; project evaluation from the perspective of legal and regulatory approaches to pricing and dispatching electricity; market analysis.

Graduate Assistant, Boston College, Department of Economics (September 1990 - May 1996). Examination of impact of trading in crude oil futures at NYMEX; analysis of long-run and short-run relationships among prices of similar quality crude oils from different parts of the world; investigation of cartel behavior of OPEC; helped develop alternative model of oil producer behavior and test consistency of data with the model; comparison of alternative hypotheses of oil producer behavior for both OPEC and non-OPEC producers.

Dissertations

A multifaceted analysis of the world crude oil market

Areas of Expertise

Areas of Expertise

Economics of oil and gas value chains

Electricity sector restructuring

Energy policy and regulation

Awards

Awards and Honorary Societies

SPE Economics & Management, Outstanding Technical Editor, 2014

SPE Economics & Management, Outstanding Technical Editor, 2013

USAEE Senior Fellow, 2013

Service

External Committees Participation

Member of the Editorial Board, Utilities Policy, January 1, 2015-Present

Editor, USAEE newsletter: Dialogue, January 1, 2006-December 31, 2011

Editor, Dialogue, quarterly newsletter, United States Association for Energy Economics (USAEE), 2006 - 2011

Vice President, Conferences, United States Association for Energy Economics (USAEE), 2006 - 2007

Officer, Houston Chapter, United States Association for Energy Economics (USAEE), 1998 - 2001

Presentations

Invited Presentations

Wolfberry and Wolfbone Resource Assessment: Outcrop and Core to Geocellular Models and Economic Outlooks: presented to West Texas Geological Society, presented at 2018 West Texas Geological Society Fall Symposium: A Decade of Shale, Midland, Tex., September 26-27, 2018.

Powering the future - demand perspectives in North America: presented to Energy Dialogues, presented at North American Gas Forum, Washington, D.C., October 3, 2017.

Unconventionals - the new conventional: presented at 22nd World Petroleum Congress, Istanbul, Turkey, July 12, 2017.

Oil and gas developments in Texas: presented to ERCOT, Austin, Tex., May 16, 2017.

Global energy outlook for 2017 and beyond: presented at EnergyRisk USA 2017, Houston, Tex., May 10, 2017.

Threats and opportunities for gas burn in power generation: presented at Gas/Electric Partnership, Conference XXV, Houston, Tex., February 8, 2017.

U.S. natural gas outlooks: presented at The University of Texas at Austin Energy Week, Austin, Tex., February 7, 2017.

Going Through Another Cycle: presented to Petroleum Engineer's Club of Dallas, Dallas, Tex., September 16, 2016.

Power Generation - Risks and Opportunities for Gas Use: presented at Gas Power 2016, Houston, Tex., June 7, 2016.

Going Through Another Cycle: presented to Gulf Coast Power Association, Houston, Tex., May 19, 2016.

Going Through Another Cycle: presented to Greater Houston Partnership Economy Council, Houston, Tex., February 16, 2016.

Energy Sector Developments: presented to Steel Tank Institute Annual Meeting, Mobile, Ala., September 30, 2015.

Resource Development, Market Dynamics, and Potential Demand: presented to SPE-GCS General Meeting, Houston, Tex., November 13, 2014.

The Current Economics Behind Natural Gas: Resource Development, Market Dynamics, and Potential Demand: presented to Houston Geological Society/Geophysical Society of Houston Geoscience Day, Houston, Tex., October 16, 2014.

Presentations

Bakken Production Outlook Sensitivities: presented at URTeC, Austin, Tex., July 25, 2017.

Eagle Ford Production Outlook Sensitivities: presented at URTeC, San Antonio, Tex., August 2, 2016.

Impacts of Price Differentials, Taxation, and Costs on Shale Gas Drilling: A Case Study of Marcellus Shale Play: presented at SPE/IAEE Hydrocarbon Economics and Evaluation Symposium, Houston, May 17, 2016.

Understanding Shale Resource Production: What Are the Key Variables?: presented at SPE/IAEE Hydrocarbon Economics and Evaluation Symposium, Houston, May 17, 2016.

Factors Impacting Oil Price: presented at Energy Forum, Baker Institute, Rice University, Houston, Texas, November 2012.

Shale Gas Production and Economics in Barnett: presented at 31st USAEE/IAEE North American Conference, Austin, Texas, November 2012.

Unconventional resource development in the U.S.: presented to delegates from Surgutneftegaz, October 2012.

Energy Sector Developments: presented at Steel Tank Institute 2012 Fall Conference, Houston, Texas, September 2012.

Gas, Power & Environment: presented to Gulf Coast Environmental Affairs Group, Houston, Texas, September 2012.

Shale Gas Production and Economics in Barnett: presented at 34th International Geological

Congress, Brisbane, Australia, August 2012.

Gas-Power Linkages: Observations from Electricity Market Modeling: presented at North American Energy Standards Board (NAESB) Board Meeting, June 2012.

Energy Sector Developments: presented at Steel Scene 2012, Houston, Texas, May 2012.

Moving Energy to Markets: Regional Electric Power Grids: presented at Latin American Forum VII, organized by the Jackson School of Geosciences in collaboration with the Energy Institute at UT-Austin, Greater Houston Partnership and Council of the Americas, Houston, Texas, March 2012.

Gas-Power Linkages: Observations from Electricity Market Modeling: CFA Society of Houston, Houston, Texas, February 2012.

Gas-Power Linkages: presented at 2011 Electric Market Forecasting Conference, EPIS, Inc., San Antonio, Texas, October 2011.

Economics of CCS: presented at American Association of Petroleum Geologists 2011 Annual Convention & Exhibition, April 2011.

Global Perspectives on LNG: presented at American Association of Petroleum Geologists 2011 Annual Convention & Exhibition, April 2011.

Price of Natural Gas?: presented at Professional Risk Managers' International Association (PRMIA) Forecasting Conference, April 2011.

Role of Natural Gas: presented at Gulf Coast Power Association Spring 2011 Conference, The Woodlands, Texas, April 2011.

Energy in Economic Development: presented at Baylor University Energy Forum, March 2011.

Energy Efficiency, Conservation and Consumer Behavior: presented at Austin Energy Green Building seminar, Austin, Texas, December 2010.

Lessons Learned from State RPS Programs: presented in Webinar for Institute for Public Utilities, Michigan State University, December 2010.

Economics and Technology of the Crude Oil, Natural Gas and LNG Value Chains: presented in McCombs School of Business Executive MBA Program, November 2010.

Integrating EVs into Electricity Grids: presented at Hart Energy Executive Breakfast, Houston, Texas, September 2010.

Energy in Houston: presented to Greater Houston Partnership and American Chamber of Commerce Brasil, Houston, Texas, May 2010.

Economics and Technology of the Crude Oil, Natural Gas and LNG Value Chains: presented in McCombs School of Business Executive MBA Program, March 2010.

Lessons Learned from Renewable Energy Credit (REC) Trading in Texas: presented at 29th USAEE/IAEE North American Conference, San Francisco, California, June 2009.

Economic modeling of carbon dioxide integrated pipeline network for enhanced oil recovery and geologic sequestration in the Texas Gulf Coast region: presented at the GHGT-9 (Green House Gas Technology) Conference, Washington, D.C., November 16-20, 2008.

Policy perspectives and options for clean coal industry development: presented to Regional Clean Coal Partnership Program, South Asia Regional Initiative for Energy, Kolkata, India, September 16, 2008.

Supporting biofuels: a case study on the law of unintended consequences: presented at the 27th USAEE/IAEE North American Conference, Houston, Texas, September 2007.

Improving regulatory agency efficiency and effectiveness: best practices, processes, and

organizational structures: presented at the 11th Annual Conference of the International Society for New Institutional Economics (with Ruzanna Makaryan and Dmitri Volkov), Reykjavik, Iceland, 2007.

Life-cycle analysis of different urban transport options for Bangladesh: presented at the 26th USAEE/IAEE North American Conference, Ann Arbor, Michigan, September 2006.

Natural gas industry and considerations for Ghana: presented to the Ghanaian delegation attending the NARUC Conference, Washington, D.C., February 2006.

Electricity restructuring and investment trends in the world: presented at workshop organized by the Resource Center for Energy Economics and Regulation, Accra, Ghana, July 2005.

Partnership to strengthen local capacity for economic, financial, and social analysis of energy sector initiatives: presented at the ALO Synergy in Development Conference (with Professor Mohammad Tamim), Washington, D.C., July 2005.

Natural gas industry fundamentals: presented at a workshop organized by the Resource Center for Energy Economics and Regulation, Accra, Ghana, March 2005.

Energy value chain fundamentals: presented at launching of the Resource Center for Energy Economics and Regulation, Accra, Ghana, September 2004.

Capacity payments: presented at USAEE/IAEE 22nd North American Conference, Vancouver, Canada, October 6-8, 2002.

Mean reversion and Volatility in energy prices: implications for policy: presented (with Michelle Foss) at 25th Annual IAEE International Conference, Aberdeen, Scotland, June 26-29, 2002.

Real time pricing in electricity markets: presented at 25th Annual IAEE International Conference, Aberdeen, Scotland, June 26-29, 2002.

Pipelines, politics, and economics: invited lecture presented at CERI World Oil Conference, Calgary, Canada, January 31, 2000.

Turkey: a hub for gas or power?: presented at 20th Annual Conference of the USAEE/IAEE, Orlando, Florida, August 29, 1999.

Politics and economics behind proposed Caspian export pipeline projects: presented at 22nd Annual International Conference of the IAEE, Rome, Italy, June 1999.

Electric power privatization in Turkey: presented at 21st Annual International Conference of the IAEE, Québec City, Canada, May 1998.

What future for OPEC?: presented (with Norm Duncan) at 21st Annual International Conference of the IAEE, Québec City, Canada, May 1998.

Competition in the U.S. energy market: presented at the 18th Annual North American Conference of the USAEE/IAEE, San Francisco, California, September 1997.

Publications

Peer Reviewed Journal Articles

Rhodes, J. D., King, C. W., Gülen, G., Olmstead, S. M., Dyer, J. S., Hebner, R. E., Beach, F. C., Edgar, T. F., and Webber, M. E., 2017, A geographically resolved method to estimate levelized power plant costs with environmental externalities: *Energy Policy*, v. 102, p. 491-499, <http://doi.org/10.1016/j.enpol.2016.12.025>.

Tsai, C., and Gülen, G., 2017, Are zero emission credits the right rationale for saving economically challenged U.S. nuclear plants?: *The Electricity Journal*, v. 30, no. 6, p. 17-21, <http://doi.org/10.1016/j.tej.2017.06.007>.

Tsai, C., and Gülen, G., 2017, Natural gas use in electricity generation in the United States: outlooks to 2030: *The Electricity Journal*, v. 30, no. 2, p. 15-24,

<http://doi.org/10.1016/j.tej.2017.01.012>.

Ambrose, W. A., Breton, C., Nuñez-López, V., and Gülen, G., 2015, EOR potential from CO₂ captured from coal-fired power plants in the Upper Cretaceous (Cenomanian) Woodbine Group, East Texas Basin, and southeastern Texas Gulf Coast, USA: *Natural Resources Research*, v. 24, no. 2, p. 161-188, <http://doi.org/10.1007/s11053-014-9242-z>.

Gülen, G., and Bellman, D. K., 2015, Scenarios of resource adequacy in ERCOT: mandated reserve margin, impact of environmental regulations and integration of renewables: *The Electricity Journal*, v. 28, no. 2, p. 89-100, <http://doi.org/10.1016/j.tej.2015.01.011>.

Gülen, G., Ikonnikova, S., Browning, J., and Tinker, S. W., 2015, Fayetteville shale-production outlook: *SPE Economics & Management*, v. 7, no. 2, p. 47-59, <http://doi.org/10.2118/173187-PA>.

Gülen, G., Ikonnikova, S., Smye, K. G., Browning, J., and Tinker, S. W., 2015, Production scenarios for the Haynesville shale play: *SPE Economics & Management*, v. 7, no. 4, p. 138-147, <http://doi.org/10.2118/176022-PA>.

Ikonnikova, S., and Gülen, G., 2015, Impact of low prices on shale gas production strategies: *The Energy Journal*, v. 36, p. 43-62, <http://doi.org/10.5547/01956574.36.SI1.siko>.

Ikonnikova, S., Browning, J., Gülen, G., Smye, K. G., and Tinker, S. W., 2015, Factors influencing shale gas production forecasting: empirical studies of Barnett, Fayetteville, Haynesville, and Marcellus Shale plays: *Economics of Energy & Environmental Policy*, v. 4, no. 1, p. 19-35, <http://doi.org/10.5547/2160-5890.4.1.siko>.

Ikonnikova, S., Gülen, G., Browning, J., Tinker, S. W., and Smye, K. G., 2015, Profitability of shale gas drilling: a case study of the Fayetteville shale play: *Energy*, v. 81, p. 382-393, <http://doi.org/10.1016/j.energy.2014.12.051>.

Browning, J., Ikonnikova, S., Gülen, G., and Tinker, S. W., 2013, Barnett shale production outlook: *SPE Economics & Management*, v. 5, no. 3, p. 89-104, <http://doi.org/10.2118/165585-PA>.

Gülen, Gürçan, and Soni, M., 2013, The impacts of raising the energy price cap in ERCOT: *The Electricity Journal*, v. 26, no. 7, p. 43-54.

Gülen, Gürçan, Browning, J., Ikonnikova, Svetlana, and Tinker, S. W., 2013, Well economics across ten tiers in low and high Btu (British thermal unit) areas, Barnett Shale, Texas: *Energy*, v. 60, p. 302-315, doi: <http://dx.doi.org/10.1016/j.energy.2013.07.041>.

King, C. W., Gülen, G., Cohen, S. M., and Nuñez-López, V., 2013, The system-wide economics of a carbon dioxide capture, utilization, and storage network: Texas Gulf Coast with pure CO₂-EOR flood: *Environmental Research Letters*, v. 8, 16 p., <http://doi.org/10.1088/1748-9326/8/3/034030>.

King, Carey, Gülen, Gürçan, Cohen, S., and Nuñez López, Vanessa, 2013, The system-wide economics of a carbon dioxide capture, utilization, and storage network: Texas Gulf Coast with pure CO₂-EOR flood: *Environmental Research Letters*, v. 8, no. 3, 034030, doi: [10.1088/1748-9326/8/3/034030](http://doi.org/10.1088/1748-9326/8/3/034030).

Ambrose, W. A., Breton, C., Nuñez-López, V., and Gülen, G., 2012, Geologic and economic criteria for siting clean-coal facilities in the Texas Gulf Coast, USA: *Natural Resources Research*, v. 21, no. 4, p. 461-481.

Ambrose, W. A., Breton, C., Hovorka, S. D., Duncan, I. J., Gülen, G., Holtz, M. H., and Nuñez-López, V., 2011, Geologic and infrastructure factors for delineating areas for clean coal: examples in Texas, USA: *Environmental Earth Science*, v. 63, p. 513-532.

Gülen, Gürçan, and Hossain, Ijaz, 2007, Life-cycle analysis of different urban transport options for Bangladesh: *Energy Policy*, v. 35, p. 4909-4918.

Gülen, G., 1999, Regionalization in the world crude oil market: further evidence: *The Energy Journal*, v. 20, no. 1, p. 125-139, Stable URL: <http://www.jstor.org/stable/41322822>.

Gülen, G., Derman, O., and Bilgic, H., 1999, Review of legal battleground in Turkey's power privatization war: *Utilities Law Review*, v. 10, no. 2, p. 78-84, [http://doi.org/10.1002/\(SICI\)1099-1808\(199903/04\)10:2<78::AID-ULR9123>3.0.CO;2-0](http://doi.org/10.1002/(SICI)1099-1808(199903/04)10:2<78::AID-ULR9123>3.0.CO;2-0).

Gülen, Gürcan, 1998, Efficiency in the crude oil futures market: *Journal of Energy Finance and Development*, v. 3, no. 1, p. 13-21.

Gülen, Gürcan, 1997, Regionalization in the world crude oil market: *The Energy Journal*, v. 18, no. 2, p. 109-126.

Gülen, Gürcan, 1996, Is OPEC a cartel? Evidence from cointegration and causality tests: *The Energy Journal*, v. 17, no. 2, p. 43-57.

Non Peer Reviewed Authored Books

Gülen, Gürcan, Atiyas, I, and Çetin, T., 2012, *Reforming Turkish Energy Markets: Political Economy, Regulation and Competition in the Search for Energy Policy*: New York, Springer, 188.

Gülen, Gürcan, and Foss, M. M., 2003, *Electricity industry restructuring in Texas: a status report*: University of Houston, Institute for Energy Law and Enterprise, .

Gülen, Gürcan, Foss, M. M., and Hitchcock, David, 2003, *Guide to electric power in Texas*, 3rd edition: Institute for Energy Law and Enterprise, University of Houston Law Center, and Houston Advanced Research Center, .

Non Peer Reviewed Journal Articles

Tsai, C., and Gülen, G., 2017, The ERCOT experience with integrating renewables: *International Association for Energy Economics Energy Forum*, Third Quarter, p. 42-45.

Foss, M. M., and Gülen, G., 2016, Is U.S. LNG Competitive?: *IAEE Energy Forum*, Third Quarter, p. 33-36.

Gülen, G., 2016, Importance of midstream in oil and gas resource development: *Current Sustainable/Renewable Energy Reports*, v. 3, no. 1, p. 23-27, <http://doi.org/10.1007/s40518-016-0049-x>.

Browning, J., Ikonnikova, S., Male, F., Gülen, G., Smye, K. G., Horvath, S., Patzek, T., Potter, E., and Tinker, S. W., 2015, Study forecasts gradual Haynesville production recovery before final decline: *Oil & Gas Journal*, 7 p.

Browning, J., Tinker, S. W., Ikonnikova, S., Gülen, G., Potter, E., Fu, Q., Smye, K. G., Horvath, S., Patzek, T., Male, F., Roberts, F., and Grote, C., 2014, Study develops Fayetteville Shale reserves, production forecast: *Oil & Gas Journal*, v. 112, no. 1, p. 64-73.

Browning, J., Tinker, S. W., Ikonnikova, Svetlana, Gülen, Gürcan, Potter, E., Fu, Qilong, Horvath, S. C., Patzek, T., Male, F., Fisher, W. L., Roberts, C., and Medlock, K., 2013, Barnett study determines full-field reserves, production forecast: *Oil and Gas Journal*, v. 111, no. 11, p. 88-95.

Foss, M. M., Gülen, G., and Wainberg, M., 2013, Sharp Cycles Ahead: *Oil and Gas Investor*, p. 85-89.

Gülen, Gürcan, Wainberg, Miranda L., and Foss, Michelle Michot, 2011, Value creation in national oil companies, in *Empirical Methods in Energy Economics Conference*, Southern Methodist University, Dallas, July 14.

King, Carey, Cohen, S., Coleman, S., and Gülen, Gürcan, 2010, The economics of an integrated CO2 capture and sequestration system: *Texas Gulf Coast case study*, GHGT-10 Conference.

King, Carey, Essandoh-Yeddu, Joseph, Hovorka, S. D., and Gülen, Gürcan, 2009, Economic Analysis of an Integrated Anthropogenic Carbon Dioxide Network for Capture and Enhanced Oil Recovery along the Texas Gulf Coast, Paper ES2009-90415, Proceedings of the ASME 3rd International Conference on Energy Sustainability, San Francisco, CA, July 19-23.

Volkov, Dmitry, Gülen, Gürcan, Foss, Michelle Michot, and Foss, Michelle Michot, 2009, The new EU energy policy and implications for former Soviet Union natural gas supplies: Oil, Gas & Energy Law Intelligence, v. 7, no. 2, 18 p.

Volkov, Dmitry, Gülen, Gürcan, Foss, Michelle Michot, and Makaryan, Ruzanna, 2009, Gazprom pipeline gas remains key to Europe: Oil and Gas Journal, v. 107, no. 16.

Gülen, Gürcan, 2008, What can we expect from new CAFÉ standards? The Analyst, ICFAI University Press, India, April.

Gülen, Gürcan, and Esandoh-Yeddu, Joseph, 2008, Economic modeling of carbon dioxide integrated pipeline network for enhanced oil recovery and geologic sequestration in the Texas Gulf Coast region, in GHGT-9, Energy Procedia.

Gülen, Gürcan, and Shenoy, Bhamy, 2008, Supporting biofuels: a case study on the law of unintended consequences: The University of Texas at Austin, Bureau of Economic Geology, Center for Energy Economics, 14 p.

Esandoh-Yeddu, Joseph, Gülen, Gürcan, and Asante, Felix, 2007, Net WAGP economic benefit requires Ghana development: Oil & Gas Journal, August, p. 68-73.

Gurfinkel, M. E., Gülen, Gürcan, Foss, M. M., Makaryan, Ruzanna, and Volkov, Dmitry, 2007, The elusive optimal fiscal regime for an extra-heavy oil resource: a case study, in Proceedings, 27th USAEE/IAEE Annual Conference, Houston, 20 p.

Gülen, Gürcan, Makaryan, Ruzanna, and Volkov, Dmitry, 2007, Improving regulatory agency efficiency and effectiveness: best practices, processes and organizational structures, in Proceedings, 11th Annual Conference of the International Society for New Institutional Economics, Reykjavik, Iceland, 23 p.

Shenoy, Bhamy, and Gülen, Gürcan, 2007, Electricity and natural gas sectors in Korea: a synthetical overview and recent developments: KIET Industrial Economic Review, v. 12, no. 2, p. 27-45.

Ambrose, W. A., Holtz, M. H., Nuñez-Lopez, Vanessa, Breton, C. L., Gülen, Gürcan, Duncan, Ian, Smyth, R. C., Foss, M. M., Lakshminarasimhan, Srivatsan, and Hovorka, S. D., 2006, FutureGen: clean-coal and near-zero-emission power generation technology for the Gulf Coast: Gulf Coast Association of Geological Societies Transactions, v. 56, p. 5-13.

Foss, M. M., Gurfinkel, M. E., and Gülen, Gürcan, 2006, Historical data provide low-cost estimating tool: Oil & Gas Journal, November.

Gülen, Gürcan, and Foss, M. M., 2001, Electricity industry restructuring in Texas: a white paper: Energy Institute, Bauer College of Business, University of Houston.

Foss, Michelle Michot, Shenoy, Bhamy, and Gülen, Gürcan, 2000, "Monetizing" stranded gas: the case of Turkmenistan and considerations for explorationists, in International oil and gas exploration: a business perspective: Tulsa, American Association of Petroleum Geologists.

Gülen, Gürcan, Shenoy, Bhamy, and Foss, M. M., 2000, Caspian pipeline prospects hinge on transparent, logical regulatory frameworks: Oil & Gas Journal, August, p. 68-72.

Foss, Michelle Michot, Shenoy, Bhamy, and Gülen, Gürcan, 1999, The politics and economics of Caspian oil export pipelines: Oil & Gas Journal, April.

Gülen, Gürcan, 1999, Electricity in Turkey--a legal battleground in an ongoing privatization war: Power Economics, December/January, p. 13-16.

Gülen, Gürcan, Derman, Özgür, and Bilgiç, Haluk, 1999, Review of legal battleground in Turkey's power privatization war: *Utilities Law Review*.

Gülen, Gürcan, Shenoy, Bhamy, and Foss, M. M., 1999, Analysis suggests economic viability of Trans-Caspian Sea gas line: *Oil & Gas Journal*, November, p. 51-58.

Gülen, Gürcan, Shenoy, Bhamy, and Foss, M. M., 1999, Caspian oil export choices clouded by geopolitics, project economics: *Oil & Gas Journal*, April, p. 29-35.

Gülen, Gürcan, 1998, Power marketization in Turkey: a white paper: Energy Institute, Bauer College of Business, University of Houston.

Gülen, Gürcan, Xu, Xiaojie, and Foss, M. M., 1998, Restructuring the petroleum industry in China: *Geopolitics of Energy*, v. 19, no. 1.

Gülen, Gürcan, 1997, Regionalization in the world crude oil market: *The Energy Journal*, v. 18, no. 2, p. 109-126.

Gülen, Gürcan, Xu, Xiaojie, and Foss, M. M., 1997, The new geopolitical game in the Eurasian oil and gas scene: *Geopolitics of Energy*, v. 19, no. 12.

Xu, Xiaojie, Foss, M. M., and Gülen, Gürcan, 1997, Asian oil & gas: megatrends, balance and geopolitics: a closer look at China: current studies on business/public policy issues in energy: CBA Energy Institute White Paper, June.

Non Peer Reviewed Book Chapters

Foss, Michelle Michot, Wainberg, Miranda L., Gülen, Gürcan, Makaryan, Ruzanna, and Volkov, Dmitry, 2012, Chapter 2.2. The impact of institutions on the economic performance of country hydrocarbon sectors, in Labarthe, C. M., Robles Peiro, R. H., Velázquez Roa, J. L., Enriquez Rosas, J. D., and Foreign Affairs Latinoamérica, eds., *Derecho, instituciones y desarrollo*: Mexico City, Editorial Porrúa/ITAM, p. 155-190.

Volkov, Dmitry, Gülen, Gürcan, and Foss, Michelle Michot, 2010, Section III: changing the rules for the EU natural gas markets--from state to market and plan to contract, Chapter 1: The new EU energy policy and implications for former Soviet Union natural gas suppliers, in *EU Russia energy relations, legal and political issues: Oil, Gas, & Energy Law*, www.euroconfidentiel.org, 205-244.

Wood, P., and Gülen, Gürcan, 2009, Laying the Groundwork for Power Competition in Texas, in *Electricity Restructuring: Texas Story*: American Enterprise Institute,

Contract Reports

Gülen, G., Tsai, C., and Baldick, R., 2016, Post-process locational marginal price preliminary feasibility analysis: Phase II Final Report: Final report prepared for Entergy Nuclear Power Marketing, LLC, under contract no. UTA15-000866 AMD 1, 43 p.

Gülen, G., Tsai, C., and Baldick, R., 2015, Post process locational marginal price preliminary feasibility analysis: Final Report prepared for Entergy Nuclear Power Marketing, LLC, 31 p.

Gülen, Gürcan, and Makaryan, Ruzanna, 2009, Harmonization of Renewable Energy Credit (REC) Markets across the U.S.: The University of Texas at Austin, Bureau of Economic Geology, project report prepared for Texas State Energy Conservation Office.

Gülen, Gürcan, and Makaryan, Ruzanna, 2009, Lessons Learned from Renewable Energy Credit (REC) Trading in Texas: The University of Texas at Austin, Bureau of Economic Geology, project report prepared for Texas State Energy Conservation Office.

Gülen, Gürcan, Foss, Michelle Michot, Casey, Jack, Gardner, Everette, and Gregory, Paul, 1999, Best practices in energy sector reform: University of Houston, Energy Institute, summary report prepared for 1998 Shell Interdisciplinary Scholars Program.

Published Reports

Griffiths, B. W., King, C. W., Gülen, G., Dyer, J., Spence, D., and Baldick, R., 2018, State-Level Financial Support for Electricity Generation Technologies: The University of Texas at Austin Energy Institute.

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