

# RICARDO J. RAINERI BERNAIN

## PROFESSIONAL SUMMARY

Economist with a solid background and professional experience in a wide range of macro and micro economic and development issues. Have superior managerial, professional, research, and academic career, with outstanding experience in public policy at the macro and micro level, government issues, international fora, business, projects and advisory services; and in deep industry expertise in key resources, infrastructure and services sectors as energy and electric industries, mining, telecommunications, transport and ports, among others, on questions related with markets, institutions and governance, industrial organization, business strategy, competition, antitrust and regulation, projects and financial issues.

## EDUCATION

- **PhD**, Economics – *Minors in Monetary Economics, Industrial Organization and Regulation*, University of Minnesota, 1993  
Thesis advisors: *Edward C. Prescott* (2004 Nobel Prize in Economics) and *Richard Rogerson* (Fed Minneapolis and Charles and Marie Robertson Professor of Public and International Affairs at Princeton University)
- **MA**, Economics - University of Minnesota, 1991
- **MA**, Economics - Pontificia Universidad Católica de Chile, 1987
- **Business Engineer**, Economics - Pontificia Universidad Católica de Chile, 1987
- **BA**, Economics - Pontificia Universidad Católica de Chile, 1985
- The **Executive Program for the Americas** (non-degree business certificate program), MIT 1999

## PROFESSIONAL EXPERIENCE

- **IAEE President 2017 and 2018 Immediate past President** 2017 -  
**International Association for Energy Economics** ([www.iaee.org](http://www.iaee.org))

The International Association for Energy Economics was founded in 1977 in response to the 70's energy crisis. IAEE is worldwide non-profit professional organization based in the United States, which has more than 4,200 members in over 100 nations, who strive to provide an interdisciplinary forum for the exchange of ideas, experience and issues among professionals interested in economics and energy issues. It actively seeks those who are interested in economics and energy issues, and those who shape opinions and prepare for events which affect the energy industry. Among the key strategic priorities, is

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the objective of substantially increase IAEE footprint in underrepresented regions and countries such as **Asia, Africa, Eastern Europe, and LAC.**

The President leads the Association as its Chief Executive Officer, performing all duties required by the Bylaws or, if not there specified, by the Council. Among others, his responsibilities include:

- Sets the agenda for and chairs Council meetings
- Works with the President-Elect and Executive Director to maintain the list of Officers and Council Meeting Action Items
- Chairs and serves on the Executive Committee
- Chairs the Association's Annual General Membership meeting, which is held during the Annual International Conference
- Appoints ad-hoc committees as needed
- Represents and speaks on behalf of the IAEE at the conferences, workshops, seminars, etc. of the IAEE and other meetings/events invited to address
- Participate as a Distinguished Lecturer Speaker
- Decides topics/themes addressed in the Energy Forum
- Receives and reviews complaints or allegations of member misconduct and refers those that appear valid and serious to the Committee on Member Conduct for further review and potential recommendations to Council
- May participate as a member ex officio of any Association committee
- Serves as the principal designated point of contact for matters concerning the general operations, policies, and well-being of the Association, and is the only authorized respondent to any such matters or issues, whether brought directly to the President's attention or forwarded by other officers, members or Headquarters staff

In its 40th anniversary, 2017 was an exciting year for IAEE, and many things were achieved under my presidency, among others stand out:

- The updated bylaws according to DC codes, created a IAEE Officer and Council Handbook, and an IAEE Code of Conduct. Some additional improvements in the governance have been made, as the creation of the VP for Regional Affairs, the agreement to have regular audits of IAEE financial statements as well to move to a bidding process for the procurement of our management contract. Some new collaboration agreements have been achieved, such as the one to support the construction of the Mexican Energy Museum.
- IAEE three publications improved ranking (The Energy Journal; The Economics of Energy and Environmental Policy; and IAEE Energy Forum).
- Big success of IAEE and affiliates conference as well in new locations where we have succeeded to move with a broader regional presence and the launch of new affiliates in Eastern Europe, Asia and Africa. Some of the remarkable events were hosted with the regional partners in Singapore, Vienna, Houston, Rio de Janeiro, Athens, Tbilisi, Zagreb, Abuja, Dhaka, Pretoria, Paris, Rome, Oxford, and Beijing among others.

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- **IAEE President Elect 2016** 2016  
**International Association for Energy Economics** ([www.iaee.org](http://www.iaee.org))

The President-Elect assist the President and carry out such duties as may be assigned by the President. The President-Elect have responsibility for strategic planning for the Association in consultation with IAEE Council officers and the Executive Director.

- Reviews, further develops and oversees the ongoing implementation of the Association's Strategic Plan in coordination with the President and Executive Director
- Chairs ad-hoc task forces or committees as appointed by the President
- Serves on the Executive Committee and Code of Conduct Committee
- Serves as a Distinguished Lecturer Speaker

- **Member of the Editorial Board of The Energy Journal** 2016 –  
**International Association for Energy Economics** ([www.iaee.org](http://www.iaee.org))

**The Energy Journal** is the official quarterly journal of the IAEE. It was founded in 1980 to promote the advancement and dissemination of new knowledge concerning energy and related topics. The editors strive to publish a blend of theoretical, empirical and policy related papers in energy economics. Articles published in **The Energy Journal** provide rigorous and innovative analyses of interest to academics, energy industry professionals, civil servants and regulators, and the financial community such as Wall Street analysts.

- **Alternate Executive Director for Argentina, Bolivia, Chile, Paraguay, Peru, and Uruguay** 2012 - 2014  
**The World Bank Group**

As a member of the Bank's Board of Executive Directors, I was responsible for overseeing the conduct of the general operations of the Bank, which involves considering and deciding about proposals made by the President on loans and guarantees, credits and grants, investments and guarantees, as well as deciding on policies and strategy issues. I also was responsible for presenting to the Board of Governors, at the Annual Meetings, an audit of accounts, an administrative budget, and an annual report on the Bank's operations and policies as well as other Bank-related matters.

In my term at the WBG I was recognized for a strong commitment with the institution and great efforts to advance the development agenda; advocate for the MICs; champion for increased Bank lending, IFC investments and MIGA guarantees for the Latin America and the Caribbean Region; proponent of the need to invest in people and encouraged more investments in education and institutional capacity building; stressed the crucial links between energy, infrastructure and development, supporting projects that provided incentives to attract investments to these sectors in client countries; and for my practical

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approach and my skills in many issues, particularly my ability to build consensus and to engage and motivate everyone around.

- **Minister of Energy, Government of Chile** 2010 – 2011

As Minister of Energy take the dialogue on the energy agenda with parliament (Senators and Representatives), regional authorities, community and civil society, among others. It was my responsibility to integrate the following ministerial committees or councils:

- Council of Ministers of the National Commission on the Environment
- Committee of Ministers of Climate Change
- Economic Development Committee
- Streamlining Investment Committee

Represented the country in international fora like APEC, OECD, UNASUR, UN, WB, IADB, Council of the Americas, Institute of the Americas, UN Climate Change Conference, Energy and Climate Ministerial of the Americas, Nuclear Security Summit, and was responsible for starting the process for Chile's affiliation to the International Energy Agency (IEA). Reopened the important dialogue on energy integration with neighboring countries, Argentina, Peru and Bolivia, which was interrupted in previous years. I also leaded agreements on energy cooperation with the State of California, New Zealand, and France, among other countries.

As Minister of Energy meets the challenge of implementing the recently created Energy Ministry (February 1, 2010), which entails a breakthrough in the country's institutional framework, recognizing the energy sector as a strategic sector for economic and social development. From this recently created Energy Ministry depends the National Energy Commission (CNE), the Electricity and Fuels Superintendence (SEC), the Chilean Nuclear Energy Commission (CCHEN) that is also in charge of the country lithium resources, the Chilean Energy Efficiency Agency (AChEE, created in my term in November 2010) and a Center Advocated to Renewable Energy Sources (CER).

I promoted important laws and bylaws to improve governance in the energy sector, in energy security, energy subsidies, and renewable and clean energy sources. Create a delivery unit to manage the various legislative initiatives, projects, products and services of the ministry and its subordinate services.

In the aftermath of the 2010 earthquake and tsunami, which killed 525 people and caused significant infrastructure damage, estimated in USD 30 billion, I led the efforts to restore and ensure the supply of fuels to the affected areas. As Minister of Energy confronted the challenge of rebuilding in record time the energy networks (gas and electricity) and to put back services in the regions affected by the disaster, as well as to ensure the supply of

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fuels (petrol, diesel, and liquefied gas) that were affected by the destruction in the two major refineries in the country (BioBio and Aconcagua). Create an emergency communications system that allows the Minister and other authorities to be informed of failures, crisis or disaster occurring on or having an impact on the energy sector. Create the Energy Security Council, which for the first time in the history of the country sat at one table all major stakeholders in the energy sector.

As part of the presidential campaign of Sebastián Piñera, running for election for the 2010-2014 period, led the Committee in charge of the design of the energy program (within the Tantauco's Group, which was a team of 1,200 professionals in 36 committees that were in charge of designing the government program).

- **Board Chairperson, ENAP** 2010- 2011  
**Empresa Nacional del Petróleo, [www.enap.cl](http://www.enap.cl)**

ENAP (Empresa Nacional del Petróleo, [www.enap.cl](http://www.enap.cl)) is the State Oil Company of Chile. ENAP's main lines of business are exploration, production, refining and marketing of hydrocarbons and their by-products. As Chairperson, I was responsible for coordinating the Board's work program, overseeing the implementation of the corporate strategy and the company's operations, and managing the Board's interactions with ENAP's shareholders, stakeholders and senior management. The Board has four Special Committees of Directors: Audit Committee; Projects Committee, Business and Investment; Committee Procurement Services; Policy Committee and Risk Coverage of Oil Price. ENAP supplies about 80% of Chile's fuel needs; and exports refined products to Peru, Ecuador and Central America. ENAP has oil and gas exploration activities in Chile, Argentina, Ecuador, and Egypt.

In my term, we oversight the restructuring plan developed with the support of BCG. Some of the key company achievements in my term are:

- Incorporation of private equity to five new exploration / production concessions of oil and gas in the area of Magallanes, southern Chile. In 2010, Enap (Chilean State Oil Company) had an extremely delicate financial situation that prevented it to carry out all investments required. In the extreme south of Chile, gas production continued to decline and the traditional exploration did not deliver the expected results. It was necessary to increase exploration activities but Enap lacked from the financial resources to take the risk. Under this situation, as Energy Minister and Chairman of the Board of Enap I lead a process where we invite private oil companies and investors to work together with Enap in exploration and production activities in new areas or in areas where Enap has minor investments. This was done through oil field concessions contracts known as CEOPs (Oil Operation Special Contracts)
- Plan staff rationalization to improve efficiency and reduce costs with an organized retirement of 530 workers, or about 15% of its total 3,380 employees.

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- Lead the development of a virtual pipeline (with special trucks) to transport LNG to the eighth region of the country. Region that at the time was depended on natural gas imported from Argentina, a country that was facing serious difficulties to meet gas exports commitments to Chile.
  - Refinance the company debt (\$ 4.5 billion), which was mostly with short-term maturities.
  - Carry forward the success private placement of bonds in the international debt market, amounting to \$ 500 million within 10 years.
  - Achieve in record time the reconstruction of the two major refineries of the company, refineries that were seriously damaged after the earthquake that hit the country in February 2010; and secure the supply of oil and refined products demanded by the country.
  - In a company that had shown financial losses for many years, and despite the serious damages on the two major refineries, with the commitment of workers and the good management, in my term the company ends with positive results.
  - Compromise the resources needed by the company to engage in the geothermal business, in association with private companies.
- **Board Member, Schwager Mining & Energy S.A.** 2011-2012/2015 -  
(<http://www.schwager.cl/web/>)

Company being recognized as one with the strongest and sustained growth rates for recent years within the companies that trade their stock in Chilean markets.

As a Board member, within my responsibilities are the definition of the company's strategic directions and overseeing its operations. Establish its mission and purpose; create value for the shareholders; select the CEO; support and evaluate the CEO; set policies and ensure effective planning; monitor and strengthen programs and services; ensure adequate financial resources; protect assets and provide proper financial oversight; build a competent board; ensure legal and ethical integrity; and enhance the organization's public standing.

Contribute to the development of a 159 years old company, whose historic core business was coal mining, which has been restructured into a major mining services provider in the region, developing also renewable energy projects, and providing logistic services. In the mining sector, which exploits the mining DNA of the Company, is a major services provider to the large mining companies in Chile and abroad. The energy sector is focused on power generation from non-conventional sources, such as biogas through treating dairy waste, and hydro power generation developing run-of river plants. And, in logistic manages an industrial storage facility in the VIII region of the country.

- **Member of the Board of Directors and Treasurer** 2015 -  
**Fundación San Agustín Ingeniería UC (ex Dictuc Foundation)**

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The Fundación San Agustín Ingeniería UC (ex Dictuc Foundation) is a trust fund created to contribute to the development of the School of Engineering of the Pontifical Catholic University of Chile. Its mission is to promote the activities of the Engineering School of the Pontifical Catholic University of Chile as a center of scientific and technological excellence at international level, and as a driving agent for development in the country and region. The Fundación San Agustín manages a wealth fund investing its resources in different asset classes, both locally and abroad. Its Board has a fiduciary role and is responsible of its strategic directions, developing policies and investment strategies of this wealth fund, and also to monitor and oversee the operation of the foundation, and to decide on the use of the resources.

- **Vice President for Academic Affairs** 2013- 2015  
**International Association for Energy Economics** ([www.iaee.org](http://www.iaee.org))

The Vice President for Academic Affairs promote the expansion of the Association's membership and related activities, including fund raising, in the academic community and among students in institutions of higher education. Promotion will include membership development, community outreach, and product and service expansion. I provide input to the President-Elect responsible for strategic planning related to his/her responsibilities. The Vice President for Academic Affairs put forth ideas for new activities for the Association which will expand services to members, and increase the Association's ability to achieve its mission, leading to an expansion in membership and the enhancement of the Association's image and general well-being

- **Board Member, Instituto Libertad.** 2012- 2013

The Instituto Libertad is a think tank that aims to promote liberal ideas and the free market, in the context of a solid institutional framework where the fundamental rights of individuals are respected. The institute aims to promote best practices in public policy and management of companies, and delivery parliamentary and local governments advisory through its publications, workshops, seminars and conferences. As a member of the Council, I was responsible for defining the strategic directions of Instituto Libertad and oversight of their operations. Establish its mission and purpose; create products and services of value for constituencies; select the CEO; support and evaluating the CEO; establish policies and ensure effective planning; build a competent court; ensure legal and ethical integrity; and improve the public image of the organization.

- **Chairperson Directors' Committee, Schwager Mining & Energy S.A.** 2011- 2012

Schwager Energy requires, within the Board of Directors, the existence of a Directors' Committee. As Chairperson of the Directors' Committee, I lead the committee which oversaw the company's financial statements before Board approval, set forth principles and ethical standards for Board members and employees regarding conflict of interests

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and ethical issues, and ensured sound governance. I dealt with internal and external auditors, as well as the finance, human resources, and operations departments.

- **Board Member, SEP** 2011- 2012  
**Sistema de Empresas Públicas** (SEP, [www.sepchile.cl](http://www.sepchile.cl))

Board member of the Sistema de Empresas Públicas (SEP, [www.sepchile.cl](http://www.sepchile.cl)), which is a holding of 22 State Own Enterprises or the State is a shareholder. SEP represents the interests of the Government of Chile in companies in which it is directly or indirectly a partner, shareholder or owner. SEP Board appoints the members of the Boards or Councils and evaluate the strategic management of these companies, to maximize their economic value. SEP Board also engages in Strategic Planning, and Budget Process programming agreements. The SEP seeks the excellence in the companies under its influence, allowing the state of Chile to maximize the performance of their service to the needs and welfare of all the inhabitants of the country. SEP supervises companies in the sectors such as energy, ports, metro, railways, water and sewage utilities, mint, free trade zones, markets for small producers, postal service, the national lottery and other key sectors of the economy.

- **Professor** (current position) 1993-  
**Industrial and Systems Engineering Department**  
**School of Engineering, Pontificia Universidad Católica de Chile**

Longstanding career, started as instructor and being today Full Professor at the Industrial and Systems Engineering Department, School of Engineering, Pontificia Universidad Católica de Chile. Thesis Advisor for undergraduate engineers, Master, and PhD students, in the interface of economics, management sciences and engineering.

Strong background in research in energy and other key sectors of the economy in markets and governance issues in the areas of industrial organization, business strategy, competition, antitrust and regulation, market structure and incentives, project assessment, corporate governance, incentives and financial issues, looking through a wide range of issues, from consumers' surveys and up to complex organizational and economic model. I had assisted and worked as advisor for governments in the South American region and private and state companies such as CPFL (Companhia Paulista de Forca e Luz) in Brazil, UNE, ETB and EPM in Colombia, Endesa S.A., Colbún S.A., Electroandina S.A., Transelec S.A., Chilectra S.A., Enersis S.A., Gasco S.A., Telefónica S.A., VTR Globalcom S.A., Nextel S.A., Puerto de San Antonio S.A. in Chile, and Credit Suisse First Boston of NY and Chase Manhattan Bank of NY in the US.

I have published in a variety of academic journals as The Energy Journal, Energy Policy, Energy Economics, IEEE Transactions on Power Systems, European Transaction on Electrical Power, International Journal of Global Energy Issues, IEEE Proceedings in



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Generation, Transmission and Distribution, Utilities Policy, Revista Chilena de Derecho, and participates regularly as a referee for international journals and specialized conferences.

- **Head, Department of Industrial and Systems Engineering** 1998- 2002  
**School of Engineering**  
**Pontificia Universidad Católica de Chile**

Envisage with the Department's Council the Department strategic planning and goals with short, medium and long-term targets, in areas of teaching, research and professional services. Engage with the different stakeholders.

Key achievements in my term:

- Created a new Professional Master Degree in Industrial Engineering ([www.miiuc.cl](http://www.miiuc.cl))
  - Created a continuous education program ([www.claseejecutiva.cl](http://www.claseejecutiva.cl))
  - Increase the number of faculty members by 30%
  - Increased infrastructure in 360%
- **Director for Academic Affairs** 1994- 1995  
**Industrial and Systems Engineering Department**  
**School of Engineering**  
**Pontificia Universidad Católica de Chile**

### PUBLICATIONS

- Publications in *El Mercurio* de Santiago and blog *ClaseEjecutiva.Emol.com* 2018
  - <http://ricardo-raineri.blogspot.cl/2018/03/para-que-chile-sea-desarrollado-la.html>
  - <http://ricardo-raineri.blogspot.cl/2018/03/que-hacer-para-ser-un-pais-desarrollado.html>
  - <http://ricardo-raineri.blogspot.cl/2018/03/que-tasa-de-impuestos-corporativos.html>
  - <http://ricardo-raineri.blogspot.cl/2018/03/empresas-del-estado-sabias-que-es-una.html>
  - <http://ricardo-raineri.blogspot.cl/2018/03/que-desafios-economicos-enfrenta-el.html>
  - <http://ricardo-raineri.blogspot.cl/2018/03/no-olvidemos-el-desarrollo-de-mercados.html>
  - <http://ricardo-raineri.blogspot.cl/2018/03/la-integracion-la-economia-global-es.html>
  - <http://ricardo-raineri.blogspot.cl/2018/03/los-impuestos-corporativos-nos-dejan.html>
- “Energy Transition in Chile: An Inconvenient Truth”, Working Paper No 39, CLAPES-UC, 2018.
- Publications in El Mercurio de Santiago and blog ClaseEjecutiva.Emol.com 2017
  - <http://ricardo-raineri.blogspot.cl/2017/10/infraestructura-los-proyectos-de.html>
  - <http://ricardo-raineri.blogspot.cl/2017/10/gasto-y-deuda-publica-como-impactan-el.html>

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- <http://ricardo-raineri.blogspot.cl/2017/11/para-que-chile-sea-desarrollado-la.html>
- <http://ricardo-raineri.blogspot.cl/2017/11/productividad-en-chile-se-necesita-mas.html>
- <http://ricardo-raineri.blogspot.cl/2017/11/gobernanza-que-desafios-implica-en-un.html>
- <http://ricardo-raineri.blogspot.cl/2017/03/el-rechazo-al-proyecto-dominga-es-una.html>
- <http://ricardo-raineri.blogspot.cl/2017/03/podra-chile-salir-de-la-uti.html>
- <http://ricardo-raineri.blogspot.cl/2017/03/vietnam-una-economia-en-transicion-que.html>
- <http://ricardo-raineri.blogspot.cl/2017/03/economia-informal-un-vendedor-callejero.html>
- <http://ricardo-raineri.blogspot.cl/2017/03/como-lo-hizo-eeuu-para-contribuir-la.html>
- <http://ricardo-raineri.blogspot.cl/2017/03/no-reparto-por-que-es-inviable-el.html>
- <http://ricardo-raineri.blogspot.cl/2017/04/si-afp-por-que-el-sistema-de.html>
- <http://ricardo-raineri.blogspot.cl/2017/04/no-impuestos-por-que-la-reforma-al.html>
- <http://ricardo-raineri.blogspot.cl/2017/09/expectativas-sabias-que-son-un-poderoso.html>
- “*The Impacts of Photovoltaic Electricity Self-Consumption on Value Transfers between private and public stakeholders in France*”. with Jonathan Roulot, under review *Energy Policy*, 2017.
- Energy Forum 4<sup>th</sup> Quarter 2017, *Presidential Address on Energy Security and Geopolitical Issues*, pg. 1-3, Newsletter IAEE, USA.
- Energy Forum Singapore Special Issue 2017, *Presidential Address on Singapore 40<sup>th</sup> IAEE International Conference Meeting the Energy Demands of Emerging Economies*, pg. 1-2, Newsletter IAEE, USA.
- Energy Forum 3<sup>d</sup> Quarter 2017, *Presidential Address on Challenges and Disruptive Technologies in the Energy Sector*, pg. 1-4. Newsletter IAEE, USA.
- Energy Forum 2<sup>nd</sup> Quarter 2017, *Presidential Address on Institutions, Developing Countries, and the US contribution to Global Energy Security*, pg. 1-2. Newsletter IAEE, USA.
- Energy Forum 1<sup>st</sup> Quarter 2017, *Presidential Address on Global Energy Challenges*, pg. 1-3. Newsletter IAEE, USA.
- Book Chapter on “*Energy Integration in South America: Experiences, Potential Benefits, Fears and Challenges*”, pg. 199-235, Book *Integration and Electric Energy Security in Latin America*. Published by Gesel – Konrad Adenauer Stiftung – Ekla, in English, Portuguese and Spanish. Rio de Janeiro - Brazil, January 2017.
- “*The role of LNG and unconventional gas in the future natural gas markets of Argentina and Chile*”, with Chavez-Rodrigues et al, *Journal of Natural Gas Science & Engineering*, 2017.
- Publications in El Mercurio de Santiago and blog ClaseEjecutiva.Emol.com 2016
  - <http://ricardo-raineri.blogspot.cl/2016/04/china-tiene-espacio-para-crecer-mas.html>
  - <http://ricardo-raineri.blogspot.cl/2016/05/el-petroleo-ve-una-tenue-luz-al-final.html>

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- <http://ricardo-raineri.blogspot.cl/2016/11/necesitamos-un-clima-de-negocios.html>
- <http://ricardo-raineri.blogspot.cl/2016/11/algunos-desafios-para-estimular-el.html>
- <http://ricardo-raineri.blogspot.cl/2016/12/como-escapar-de-la-trampa-de-la-renta.html>
- Book Chapter in “*Visão 2030: Cenários, tendências e novos paradigmas do setor elétrico*” in Babilonia Cultura Editorial. Edited by Nivalde Castro, GESEL and IE UFRJ, Chapter 2 “*Desafios do desenvolvimento energético*”, pg. 55-82, Rio de Janeiro - Brazil, 2015.
- “*Self sufficiency is not needed*”, in *Petroguia*, pg. 177-178, Venezuela, 2015.
- “*Latin America Energy Challenges: Main Drivers and Features*”, in *Nuova Energia*, July 2014, Italy.
- “*Global Energy Demand Growth*”, in *Dialogue, Newsletter of the United States Association for Energy Economics, Volume 22, Number 1 - 2014*. [www.usaee.org](http://www.usaee.org).
- Book Chapter in “*Evolution of Global Electricity Markets: New paradigms, new challenges, new approaches*” in Elsevier. Edited by Fereidoon P. Sioshansi, Menlo Energy Economics, Chapter 14: “*Latin America Energy Integration: An Outstanding Dilemma*”, with José Goñi, Universidad de Concepción, Isaac Dyer, Universidad Nacional de Colombia Bogota, Nivalde Castro, GESEL - Instituto de Economía – UFRJ, Yris Olaya and Carlos Franco, Complexity Center, Universidad Nacional de Colombia, 2013.
- Book Reviews published in the *Journal Economics of Energy & Environmental Policy, March 2013*.
  - *Renewable Energy Sources and Climate Change Mitigation*, edited by O. Edenhofer, R. Pichs Madruga, Y. Sokona, K. Seyboth, P. Matschoss, S. Kadnear, T. Zwickel, P. Eickemeier, G. Hansen, S. Schlömer and C. von Stechow. Special Report of the Intergovernmental Panel on Climate Change (IPCC). (Cambridge University Press, 2011). 1088 pages. ISBN 978-1-107-60710-1 (Paperback) and ISBN 978-1-107-02340-6 (Hardback).
  - *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, edited by O. B. Field, V. Barros, T. F. Stocker, Q. Dahe, D. J. Dokken, K. L. Ebi, M. D. Mastraandrea, K. J. Mach, G. Plattner, S. K. Allen, M. Tignor, and P. M. Midgley. Special Report of the Intergovernmental Panel on Climate Change (IPCC). (Cambridge University Press, 2012). 608 pages. ISBN 978-1-107-60780-4 (Paperback) and ISBN 978-1-107-02506-6 (Hardback)
- “*Efficient Capacity Investment and Joint Production Agreements in an Oligopolistic Electricity Market: The HidroAysén Joint Venture Project*”, with Gonzalo Contreras. *Energy Policy*, Vol. 38 N°11, pg 6551 a 6559, November 2010.
- “*Combined Cycle Unit Controllers Modification for Improved Primary Frequency Regulation*”, with Carmona S., Rios S., Peña H, y Nakig G. *IEEE Transactions on Power Systems*, Vol. 25 N° 3, pg 1648-1654, 2010.
- “*Asset Life and Pricing the use of Infrastructure: the case of Electricity Transmission in Chile*”, *Energy Policy*, Vol. 38, N° 1, pg 30-41, January 2010.

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- *Anales del 2º Encuentro Latino Americano de Economía de la Energía: Seguridad Energética, Integración y Desarrollo en América Latina*. Editorial Pontificia Universidad Católica de Chile – Edición N° 1. Ricardo Raineri Editor. N° ISBN 978-956-14-1043-5. 2009.
- “*Integrating Large Wind Farms into Transmission Planning of Hydrothermal System*”, with Raby, M. Ríos, S. Jerardino, S. *Journal of Energy Engineering- ASCE*, Vol. 135/3 pg 89-97, Sept. 2009.
- “*From a bundled energy - capacity pricing model to an energy - capacity - ancillary services pricing model*”, with R. Arce, S. Ríos, and C. Salamanca. In *Energy Policy*, Vol. 36/2008 pp 2,868-2,876. 2008.
- Chapter 4 in book *Telecomunicaciones: Convergencia y Nuevos Desafíos*, Aldo Gonzalez editor. Published by Universidad de Chile y Subtel. Chapter 4 “*Cargos de acceso y simultaneidad tarifaria en Servicios de Telecomunicaciones*”, pg. 131-182. 2008.
- “*Chronicle of a Crisis Foretold: Energy Sources in Chile*”, *IAEE Newsletter (International Association for Energy Economics Newsletter)*, pg. 27-30, *Fourth Quarter 2007*.
- “*Field Simultaneous Measurements, Modeling and Simulation of Harmonic Components in a Small Generation-Transmission Network*”, with S. Ríos, J. Fuster, A. Dán, y Z. Czira. *European Transaction on Electrical Power*. Vol 17, pp. 37-46, 2007.
- “*Global Corporate Governance and Takeovers in Electric Utilities: The Case of ENERSIS, ENDESA, and DUKE Energy*”, *International Journal of Global Energy Issues*, in a *Special Issue on Advances in Energy Finances*. Vol. 26, Nos. 1/2, pp. 170-212. 2006.
- Chapter 3 in Book *Electricity Market Reform: An International Perspective*, Fereidoon P. Sioshansi and Wolfgang Pfaffenberger editors. Chapter 3: “*Chile: Where it all started*”. pp. 77-108. Series: *Global Energy Policy and Economics*, Elsevier 2006.
- “*Technical and Economic Aspects on Ancillary Services Markets in the Electric Power Industry: An International Comparison*”, with S. Ríos, and D. Schielle. *Energy Policy*. Vol. 34, pp. 1540-1555, 2006.
- “*Dynamic Performance and Resource Mix Modification in Competitive Environment*”, with S. Ríos and M. Roca. *IEE Proceedings in Generation, Transmission and Distribution*. Vol. 152, N° 6, pp. 770-779, November 2005.
- “*Price and Access Charge Discrimination in Electricity Distribution: An Application to the Chilean Case*”, with P. Giaconi. *Energy Economics*. Vol. 27, N° 5, September 2005, pp. 771-790.
- “*Business Opportunities and Dynamic Competition through Distributed Generation in Primary Electricity Distribution Networks*”, with S. Ríos and R. Vasquez. *Energy Policy*. Vol. 33., N° 17, pg. 2191-2201, November 2005.
- “*Secondary Market and Futures Markets for the Provision of Gas-pipeline Transportation Capacity*”, with A. Kuflick. *The Energy Journal*, Vol. 24, No. 1, pg. 23-47. 2003.
- “*Propiedad Privada, Estado Empresario y Principio de Subsidiariedad: Las Ideas de Antaño con Herramientas de Hoy*”. *Revista Chilena de Derecho*, Vol. 28, No. 2, pp. 311-344. 2001.
- *Management en Administración de la Información*, 2000, in *Diario Financiero and Financial Times*, articles:

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- “La atención: la siguiente frontera de la información”;
- “El turno de las empresas grandes pero pequeñas”;
- “Mercados para todo en la economía en red”;
- “Fundamentos esenciales de la administración de la información”.
- *Buscando el Control de la Corporación: El Ingreso de Endesa España a la Propiedad de Enersis. Universidad S.A. and M.N. Consulting Ltda. Publisher. Author Ricardo Raineri. 1999.*
- “*Competition through Liberalization: The Case of Chile*”. With Nicolás Majluf. In *Competition Policy, Deregulation, and Modernization in Latin America*, Joseph Taulchin and Moisés Naim editors, The Woodrow Wilson Center, Washington D.C. U.S.A. Rienner Publishers. Chapter 5, pp. 73 - 93, 1999.
- “*Restructuring the Chilean Electric Industry: From Monopoly to Competition*”. With Hugh Rudnick. *Power Economics*. Vol. 2, No. 7, pp. 41-43, September 1998.
- “*Restructuring Chilean Electric and Gas Industries: From Monopolies to Competition*”. With Hugh Rudnick. In *International Energy Markets, Competition and Policy*. James L. Sweeney Editor. United States Association for Energy Economics and International Association for Energy Economics. pp. 390-399, 1997.
- “*Transmission Pricing Practices in South America*”. With Hugh Rudnick. *Utility Policy*. Vol. 6, No. 3, pp. 211-218, September 1997.
- “*Analysis of Service Quality Standards for Distribution Firms*”. With Hugh Rudnick, in *(De)Regulation and Competition: The Electric Industry in Chile*. Pp. 259 - 294, Ilades-Georgetown University. Felipe Morandé and Ricardo Raineri Editors, 1997.
- “*Chilean Distribution Tariffs: Incentive Regulation*”. With Hugh Rudnick, in *(De)Regulation and Competition: The Electric Industry in Chile*. Pp. 223 - 257, Ilades-Georgetown University. Felipe Morandé and Ricardo Raineri Editors, 1997.
- “*Importance of Entry Barriers to the Electrical Generation Industry*”. *(De)Regulation and Competition: The Electric Industry in Chile*. pp. 137 - 192, Ilades-Georgetown University. Felipe Morandé and Ricardo Raineri Editors, 1997.
- “*Importancia de las Barreras de Entrada a la Industria de Generación Eléctrica*”. *La Industria Eléctrica en Chile: Aspectos Económicos*. Ilades-Georgetown University. Felipe Morandé Editor. pp. 143-194, 1997.
- “*Why We Should Regulate Quality in Electric Distribution Utilities, or Why We Should Not*”. In *(De)Regulation of Energy: Intersecting Business, Economics and Policy*. Michael C. Lynch Editor. United States Association for Energy Economics and International Association for Energy Economics, pp. 20-29, 1996.
- “*Industrial Organization Implications of Gas Pipeline Technology*”. In *Into the Twenty-First Century: Harmonizing Energy Policy, Environment, and Sustainable Economic Growth*, Hillard G. Huntington editor, International Association of Energy Economics, Washington D.C. pp. 111-117, 1995.
- “*Gas Pipeline Transportation: Competing within Ex-ante Increasing Return to Scale and Sunk Costs*”. *Revista de Análisis Económico*, Vol. 12, N° 1, pp. 85-116, 1997.
- *(De)Regulation and Competition: The Electric Industry in Chile. Ilades-Georgetown University. Felipe Morande and Ricardo Raineri Editors. 1997.*

## RICARDO J. RAINERI BERNAIN

- *The electricity industry in Chile: Economic Aspects (La Industria Eléctrica en Chile: Aspectos Económicos)*. Ilades-Georgetown University. Felipe Morandé Editor. Rafael Charún G., Ricardo Raineri B., Raimundo Soto M. Associated Editors. 1996.
- “Modeling an export function with input prices as an independent variable: A note” (“*Modelando una función de exportaciones con el precio de los insumos como variable independiente: Una nota*”). With Felipe Morandé. In *Estudios de Economía*, Universidad de Chile, Vol. 16, N° 1, pp. 155-175, 1989.
- “A Case of Economic Policy: Colombia 1973-1984” (“*Un caso de Política Económica: Colombia 1973-1984*”) Carlos F. Cáceres y Francisco Rosende Directors. *Tinker Foundation - Escuela de Negocios de Valparaíso, Fundación Adolfo Ibáñez*. 1986.

### CONFERENCES

- **35<sup>th</sup> USAEE/IAEE North American Conference** **35<sup>th</sup> USAEE/IAEE North American Conference: Riding the Energy Cycles**, “Welcome and Inaugural Session”, and “*The Impacts of Photovoltaic Electricity Self-Consumption on Value Transfers Between Private and Public Stakeholders in France*” with Jonathan Roulot, November 12-15, 2017, Royal Sonesta Hotel, Houston, Texas, USA
- **International Association for Energy Economics (IAEE) Summit 2017 in South Africa Pretoria** “*Energy challenges for the African continent: Academic, industrial and government perspectives*”, Welcome “*Introduction: 40 Years IAEE*”, Key Note Speaker “*Sustainable solutions: An international lens*”, **City of Tshwane and University of Pretoria**, November 1 - 2017, Protea Hotel Fire and Ice! Pretoria - **South Africa**.
- **South Asia IAEE-NSU Energy Summit**, “Welcome and Inaugural Session”, “*Press Conference: Bangladesh and Global Energy Challenges*”, “*Plenary Session: Access to Finance*”, “*Closing Remarks*”, North South University, October 17, 2017, Dhaka - **Bangladesh**.
- **2<sup>nd</sup> IAEE Eurasian Conference**, “*Energy in Eurasia: Economic Perspectives on Challenges, Risks and Opportunities*”, “*Opening Plenary (Presidential Address and Keynote Remarks)*”, “*Plenary Session: Geopolitical Impacts on the Energy Sector in Eurasia*”, University of Zagreb, October 12-14, 2017, Zagreb - **Croatia**.
- **CSIS: A Conversation with Mr. Ricardo Raineri**, “*Energy and Geopolitical Challenges in Latam*”, SCIS, 14<sup>th</sup> of September 2017, Washington D.C. **USA**.
- **Ministry of Energy Georgia & IAEE USA Cooperation Workshop** “*Challenges and Opportunities in Georgian and Eurasian Energy Issues*”, “*Welcome Remarks*”, “*Some Non Resources Challenges for Energy Security*”, September 8, Tbilisi – **Georgia**.
- **15<sup>th</sup> IAEE European Conference 2017**, “*Heading towards sustainable energy systems: evolution or revolution*”, “*Welcome and Inaugural Session: Global Energy Challenges*”, Closing Plenary Session “*Innovation in the Energy Sector: Which Technologies do we need after 2030 and which policies do we need now?*” with “*Innovation from the perspective of Developing World*”, Hofburg Congress Center, 3 -7 September 2017, Vienna – **Austria**.
- **Energy Summit Institute of the Americas**, “*Forum on Energy Transition and Disruptors*”, “*Panel Discussion on the 2017 Presidential Elections in Chile and the*

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- Candidates' Vision regarding the Energy Policy*”, Julio 25 – 2017, Santiago Marriott Hotel, Santiago - **Chile**.
- **40th International Conference IAEE**, “*Meeting the Energy Demands of Emerging Economies: Implications for Energy and Environmental Markets*”, “*Welcome and Inaugural Session*”, keynote address “*40 Years of IAEE*”, “*Final Plenary Session Energy Security: From access to subsurface energy resources to the mastery of technologies*”, “*A Road Map for Energy Access and Development: Lessons Learned in Chile for Developing Countries*”, The Marina Bay Sands, 18 - 21 June 2017, **Singapore**.
  - **2nd International Conference Hellenic Association for Energy Economics and International Association for Energy Economics**, “*40 Years of IAEE: Energy Policy and Geopolitical Reflections*”. 17-20 May 2017, Athens – **Greece**.
  - **6th Latin American Energy Economics Meeting** “*New Energy Landscape: Impacts for Latin America*”, International Association for Energy Economics (IAEE) and Asociacion Latinoamericana de Enconomia de la Energia. Plenary Session “*40 Years of IAEE: Energy Policy and Geopolitical Reflections*”; Plenary Session “*Energy Reforms*”; “*Inauguration Ceremony*”, 2-6 April 2017, Rio de Janeiro - **Brazil**.
  - **International Workshop “Oil & Gas: Global & Local Prospects”**, Distinguished Lecturer on “*Global perspectives of the oil and gas industry*”; and Special Guest Lecture “*Global Energy Prospects*”, Bogazici University & EED, December 2016, Istanbul – **Turkey**.
  - **International Conference “Accessing the Global Energy Market to Enhance Local Energy Security: The Latin American Case”**, panel “*Plausibility of Political Energy Integration and Energy Security*”. Speaker, Foundation Konrad Adenauer (KAS), through its Regional Program Energy Security and Climate Change for LA (EKLA, the Centro Brasileiro de Relações Internacionais (CEBRI), and the Instituto de Estudios Internacionales (IDEI) from PUCP. September 2016, Lima-**Perú**.
  - **Conference Integração e segurança elétrica na América Latina**. panel “*Integração dos Mercados Elétricos na Europa e América Latina: desafios e avanços*”. Presider - speaker, Fundação Konrad Adenauer (KAS), through its Programa Regional Segurança Energética e Mudanças Climáticas na América Latina (EKLA), and Grupo de Estudos do Setor Elétrico (Gesel) do Instituto de Economia da Universidade Federal do Rio de Janeiro (IE/UFRJ), August 2016, Rio de Janeiro - **Brazil**.
  - **Workshop Global Energy Outlook: Challenges and Opportunities**, Gesel-UFRJ invited keynote speaker, Firjan, May 2016, Rio de Janeiro - **Brazil**.
  - **Conference Impactos dois recursos de energia distribuída ou segmento de Distribuição**, Gesel-UFRJ-Firjan-ANEEL, invited keynote speaker, Firjan, May 2016, Rio de Janeiro - **Brazil**.
  - **XV version of the Energy Meeting Elecgas 2016**, “*Electricity bids in light of the New Electricity Transmission Project*”, inaugural panel member, Hyatt Hotel, May 2016, Santiago - **Chile**.
  - **Conference NCRE in Chile: Experience and performance to 8 years of law 20.257**, “*Renewable energy and climate change in developing countries*”, panel member,

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Organized by *New Mining and Energy Magazine*, Intercontinental Hotel, April 2016, Santiago – Chile.

- **9th NAAEE/IAEE Nigerian Conference**, “*Energizing Emerging Economies: The Role of Natural Gas and Renewable Energy*”, key note speaker plenary session “*Energizing Emerging Economies: Role of Renewable Energy and Climate Policy*”, Sheraton Hotel and Suites, April, 2016, Abuja – Nigeria.
- **ALADEE-IBP Conference Rio de Janeiro**, “*New Energy Landscape: Impacts for Latin America*”, key note speaker session “*The Global Oil Market Landscape*”, Windsor Florida, April 2016, Rio de Janeiro - Brazil.
- **5<sup>th</sup> IAEE Asian Conference**, “*Meeting Asia’s Energy Challenges*”, session chair and key note speaker Dual Plenary Session “*Financing energy production and infrastructure investments in Asia/Pacific*”, The University of Western Australia, February 2016, Perth – Australia.
- **38<sup>th</sup> IAEE International Conference**, “*Economic, Environmental, Technological and Security Challenges for Energy*”, session chair and key note speaker Dual Plenary Session, “*Energy Access*”, Gloria Golf Resort, May, 2015, Antalya – Turkey.
- **5<sup>th</sup> Latin American Meeting on Energy Economics ELAEE/IAEE** “*Energy Outlook in Latin America and the Caribbean: Challenges, Constraints and Opportunities*”, Session chair and key note speaker Closing Plenary Session, “*Energy Integration in LAC*”, March 2015, Medellin – Colombia.
- **37<sup>th</sup> IAEE International Conference**, “*Energy and the Economy*”, Presider Closing Plenary Session and Student Poster Session Award, “*Global Energy Demand Growth*”, New Yorker Hotel, June 15 -18, 2014, New York City – USA.
- Keynote speaker **IAEE Conference** “*Energy Policies in Latin-America: Key Drivers and Characteristics*”, April 22-23, 2014, Medellin – Colombia.
- Keynote speaker in **ESMAP, The World Bank Group, Conference Rethinking the Future of Energy**, Session “*How would we wean ourselves off fossil fuels, and what would this mean for productivity and investment?*”, March 2014, Washington D.C. USA.
- Keynote Speaker and Panel Discussion, Senado Federal – Comissão de Relações Exteriores e Defesa Nacional, **Ciclo de Debates sobre as Perspectivas da Integração Elétrica na America do Sul: Seminário sobre Integração no Arco Norte**. November 21, 2013. Brasília – DF, Brazil.
- Panelist on **A Presentation on the World Bank Group’s Newly Released Doing Business 2014 Report**, Center for Strategic and International Studies CSIS, October 31, 2013. Washington, D.C. USA.
- Keynote speaker in **Café Filosófico programa Invención de lo Contemporáneo**, Special of the Electric Industry: “*A Importância e os desafios da matriz elétrica de fontes renováveis*”, Instituto CPFL – Cultura, June 5 2013, Campinas – Brazil.
- Keynote speaker in **A Energia na Cidade do Futuro**, “*Perspectivas da Matriz Elétrica Brasileira I – um olhar sobre as tendências e os desafios das fontes renováveis*”, CPFL Energia, Campinas. June 7 2013, Sao Paulo, Brazil.
- **4<sup>th</sup> Latin American Meeting on Energy Economics ELAEE/IAEE** “*Energy Trends in Latin America: Towards Regional Integration and Sustainability*”, Title of the



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- Presentation: “*Energy Integration: Development as a regional Challenge*”, March 2013, Montevideo – Uruguay.
- **VII GESEL Seminário Internacional de Integração Elétrica da América do Sul**, Title of the Presentation: “*Desafios e Perspectivas da Integração Elétrica*”. August 2012, Rio de Janeiro – Brazil.
  - **National Telecommunications Secretariat of Ecuador "Workshop on Competition in Telecommunications"**, Title of Presentation: “*Effects of Competition in Telecommunications Markets*”, April 2011, Quito - Ecuador.
  - **Conference of the Systems Group at the National University of Colombia and Medellín Public Enterprises (EPM) “Pathways to a low carbon economy”**, Title of the Presentation: “*Opportunities in Energy Integration in Latin America for a Low Carbon Economy*”, March 2012, Medellín – Colombia.
  - Keynote Speaker and Panel Discussion, Senate Chile, [Seminário: Hacia un Chile más Justo](#) (A high level discussion on Chilean tax reform). November 7, 2011. Valparaíso, Chile.
  - **International Seminar on Energy PUCV**, Title of the Presentation: “*Vision and Opportunities of Energy Integration in South America*”, November 2011, Viña del Mar – Chile.
  - **VI SISEE International Seminar on Electrical Energy Sector**, Title of the Presentation: “*Vision and Perspective in South America Energy Integration*”, August 2011, Foz de Iguazú - Brazil.
  - **Conference APEMEC, Round Table "Public Policies for mini hydro"**, June de 2011, Santiago – Chile.
  - **1<sup>st</sup> Hydro Power Latin America Summit: Generation, transmission, projects & investment in Latin America`s hydro sector**, Round Table: “*Country policies related to the Hydroelectric sector in Latin America*”, May 2011, Sao Paulo – Brazil.
  - **Conference Generación Empresarial**, Title of the Presentation: “*Challenges and opportunities of the energy matrix in Chile*”, April 2011, Santiago – Chile.
  - **Conference Chilean Swedish Chamber of Commerce**, Title of the Presentation: “*Vision and Perspective of the Electricity Sector in Chile*”, April 2011, Santiago – Chile.
  - **International Conference GESEL-UFRJ**, March de 2011, Title of the Presentation: “*Investment Opportunities in the Chilean Electricity Sector*”, Rio de Janeiro - Brazil.
  - **3<sup>er</sup> Latin American Meeting on Energy Economics ELAEE/IAEE “Energy, Climate Change and Sustainable Development: Challenges for Latin America”**, Title of the Presentation: “*Strengths and Threats in the Regional Energy Integration*”. April 2011, Buenos Aires – Argentina.
  - **2<sup>o</sup> Latin American Meeting on Energy Economics ELAEE/IAEE “Energy Security, Integration and Development in Latin America”**, Title of the Presentation: “*Process and Product Technological Innovations in Natural Monopolies*”, with Carlos Salamanca. March 2009, Santiago – Chile.
  - **2<sup>o</sup> Latin American Meeting on Energy Economics ELAEE/IAEE “Energy Security, Integration and Development in Latin America”**, Title of the Presentation: “*Efficient Capacity Investment and Joint Production Agreements in an Oligopolistic Electricity*

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- Market: The HidroAysén Joint Venture Project*”, with Gonzalo Contreras, March 2009, Santiago – Chile.
- **28th Annual North American Conference of the USAEE/IAEE: “Unveiling the Future of Energy Frontiers”**, Title of the Presentation: *“Efficient Capacity Investment and Joint Production Agreements in an Oligopolistic Electricity Market: The HidroAysén Joint Venture Project”*, December 2008, New Orleans - USA.
  - **1st Latin American Meeting on Energy Economics ELAEE/IAEE “Energy policies in Latin America: Integration or Energy Nationalism”**, invited as Keynote Speaker. Title of the Presentation: *“Chile: Chronicle of an Energy Crisis Foretold and Opportunities for Future Development”* May 2008, Salvador de Bahía – Brazil.
  - **27th Annual North American Conference of the USAEE/IAEE**, Title of the Presentation: *“Asset Life and pricing the use of infrastructure: the case of Electricity Transmission in Chile”*, September 2007, Houston – Texas, USA.
  - **Conference “Energy and its' future development model”**, Facultad de Economía y Negocios UDD, Invited speaker. Title of the Presentation: *“Theoretical models of Energy”*, October 2007, Santiago - Chile.
  - **Conference “Telecommunication in Chile, + market or + regulation?”**, August 2007, Centro de Políticas Públicas Pontificia Universidad Católica de Chile, Invited speaker. Title of the Presentation: *“Telecommunication in Chile, + market or + regulation?”*, Santiago - Chile.
  - **Conference “Regulatory Telecommunications Conference: Convergence and new challenges”**, May 2007, Facultad de Economía y Negocios, Universidad de Chile, Invited speaker. Title of the Presentation: *“Access Charges and Simultaneous Pricing in Telecommunications”*, Santiago - Chile.
  - **29th IAEE - GEE International Conference, Electricity Reform Round Table I Chile: Where it all started**, IAEE - GEE. 7-10 June 2006, Potsdam – Germany.
  - **Energy Week 2006, Clean Energy for Development. World Bank.** March 6-9, 2006. Washington D.C.-USA.
  - **25th Annual North American Conference of the USAEE/IAEE.** Title of the Presentation: *“Technology Adoption and Reliability in Electricity Distribution: Pricing Distributed Generation”*, September 2005, Denver, Colorado - USA.
  - **Conference “Unbundling Telecommunication Network”**, Chilean Engineering Professional Association (Colegio de Ingenieros de Chile A.G.). Telecommunication Board, Invited Speaker. April 2005, Santiago – Chile.
  - **Conference on Natural Gas: “Natural Gas Supply, Short and Medium Term Projections”**. Pontificia Universidad Católica de Chile. Presentation: *“Natural Gas Market Structure: Present and Feasible Future”*. April 2005, Santiago - Chile.
  - **SUBTEL - MINECON, “Two decades of regulation in the telecommunication industry: It's time for a change?”**, December 2004, Santiago - Chile.
  - **Conference Liquefied Natural Gas: “LNG: projections and Options for Chile”**. Pontificia Universidad Católica de Chile and Gas Technology Institute. Presentation: *“Feasible Financing Sources in Chile”*. December 2004, Santiago – Chile.

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- **Conference “Two decades of regulation in the telecommunication industry: It's time for a change?”,** Chilean Engineering Professional Association (Colegio de Ingenieros de Chile A.G.). Telecommunication Board, Invited Speaker. October 2004, Santiago – **Chile.**
- **LACEA, Latin American Meeting of the Econometric Society, “Telecommunication Network Competition: An Equilibrium Analysis”.** July 2004, Santiago - **Chile.**
- **2º National Telecommunication Conference “La Competitividad de los Servicios”,** Organized by Unión Javeriana, Federación de Asociaciones de Profesionales Javerianos, with the support of Facultad de Ingeniería and the Asociación de Ingenieros Javerianos, Pontificia Universidad Javeriana, Invited as Distinguished International Speaker to give the presentation **“International Experience: The Case of Chile”.** June 2004, Bogotá – **Colombia.**
- **Seminar in the Facultad de Ingeniería of the Pontificia Universidad Javeriana, “Telecommunication Industry Projection”.** June 2004, Bogotá - **Colombia.**
- **Seminar in the Facultad de Ciencias Económicas y Administrativas of the Pontificia Universidad Católica de Chile, “Telecommunication Network Competition: An Equilibrium Analysis”.** June 2004, Santiago - **Chile.**
- **Conference “Projection of the Telecommunication Industry”,** Chilean Engineering Professional Association (Colegio de Ingenieros de Chile A.G.). Telecommunication Board, Invited Speaker for a panel on **“Telecommunication Industry Projection”.** 2003, Santiago - **Chile.**
- **23<sup>th</sup> Annual North American Conference of the USAEE/IAEE,.** Title of the Presentation: **“Business Opportunities in the Use of Distributed Generation in Primary Electricity Distribution”.** 2003. Mexico City - **Mexico.**
- **Chilean Annual Economist Meeting.** Title of the presentation: **“Telecommunication Network Competition: A General Equilibrium Analysis”.** 2003, Punta de Tralca - **Chile.**
- **III International Finances Conference.** Title of the presentation **“Takeover and Dual Stock in Chile”.** 2003. Santiago - **Chile.**
- **VII Annual Conference of the Latin America and Caribbean Law and Economics Association, ALACDE, Invited as speaker.** Title of the presentation: **“Law, Innovation and Competitiveness”.** 2002. Santiago - **Chile.**
- **Economics Seminar Universidad Alberto Hurtado.** Invited as speaker. Title of the presentation: **“The Telecommunication Industry”**, 2002 Santiago - **Chile.**
- **22<sup>nd</sup> Annual North American Conference of the USAEE/IAEE.** Title of the Presentation: **“Free, Regulated, and Simulated Markets in the Diagnosis of Chilean Electricity Crises”.** 2002. Vancouver - **Canada.**
- **Conference “Telecommunications: The Challenge of a regulation for Competition”,** University of Chile Law School, Invited speaker. Title of the presentation: **“Conflicts and complaints, controversy resolution procedures with the authority”.** 2002. Santiago - **Chile.**
- **Chilean Annual Economist Meeting.** Title of the presentation: **“Price and access charge discrimination in electricity distribution: an application to the Chilean case”.** 2002. Punta de Tralca - **Chile.**

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- 2002, Conference “*Tariff Models*”, Chilean Engineering Professional Association (Colegio de Ingenieros de Chile A.G.). Telecommunication Board, Invited Speaker for a panel on Tariff Models. Santiago - Chile.
- *Engineering Seminar Universidad Diego Portales*. Invited as speaker. Title of the presentation: “*The Telecommunication Industry*”, 2002. Santiago - Chile.
- *2<sup>nd</sup> World Congress Corporate Governance*. Title of the presentation: “*A Case Study of Endesa Spain*”. 2002. Mumbai - India.
- *II Finance Conference*. Title of presentations: “*Becoming Global: The Entry of ENDESA Spain in the Property of ENERSIS and the DUKE Energy Contest*”; “*The value of business conglomerates in the Chilean Companies Performance (1990-2000)*”; “*The Market for Corporate Control in Chile*”. 2002. Santiago - Chile.
- *Seminar Tariff regulation in the Telecommunication Sector*. Organized by the Chilean Chamber of Commerce, Fundación Pacífico, Pontificia Universidad Católica de Chile, Universidad de Chile. Title of the presentation: “*Access Charges*”. 2001. Santiago - Chile.
- *First International Conference of Commercial Engineering and Business Administration Students*, Universidad de Tarapacá. Title of the Presentation: “*Private Property, Entrepreneur State, and Subsidiary Principle: From the Classics to the Growth with Equity*”. 2001. Arica - Chile.
- *Chilean Annual Economist Meeting*. Title of the Presentation: “*Secondary Market and Futures Markets for the Provision of Gas-pipeline Transportation Capacity in Developing Markets*”, 2001. Punta de Tralca - Chile.
- *First Meeting of Electricity Law advocated to the analysis of the Institutions and Electricity Management*, Pontificia Universidad Católica de Chile Law School. Title of the presentation: “*Free, Regulated and Simulated Markets in the Diagnosis of Electricity Crises*”. 2001. Santiago - Chile.
- “*Multidisciplinary Seminar on Constitutional Guarantees: Commemoration of the 20 Years of the Constitution, in Honor to Professor Enrique Evans de la Cuadra*”, Pontificia Universidad Católica de Chile Law School. Title of the Presentation: “*Private Property, Entrepreneur State and Subsidiary Principle: Past Ideas with Today Tools*”. 2001. Santiago - Chile.
- *United States Association for Energy Economics (USAEE) and International Association for Energy Economics (IAEE)*. Title of the presentation: “*Secondary Market and Futures Markets for the Provision of Gas-pipeline Transportation Capacity in Developing Markets*”. 2000. Philadelphia, Pennsylvania - USA.
- *Chilean Annual Economist Meeting*. Title of the presentation: “*Takeovers and Corporate Governance*”. Presentation made in the context of a panel that analyzed the new Chilean Law on “*Public Stock Buy Offers and Corporate Governance of year 2000*”. 2000, Santiago - Chile
- *The Executive Program for the Americas*, MIT - Sloan Business School. Title of the presentation: “*Doing Business in Chile: The Entry of ENDESA Spain in the Property of ENERSIS and the DUKE Energy Contest*”. 1999. Cambridge, Massachusetts USA.
- *United States Association for Energy Economics (USAEE) and International Association for Energy Economics (IAEE)*. Title of the presentation: “*Becoming Global:*

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- The Entry of ENDESA Spain in the Property of ENERSIS and the DUKE Energy Contest*". 1999. Orlando, Florida - USA.
- **United States Association for Energy Economics (USAEE) and International Association for Energy Economics (IAEE).** Title of the presentation: "*Controlling a Natural Monopoly: The Pricing Rule for Chilean Electric Distribution Utilities*". 1998. Albuquerque, New Mexico - USA.
  - **Strategic Management Society,** Panel: "*Business Strategies for Coping with Competitive Liberalization: The Case of Chile*", Panelists: Patricio del Sol, Nicolas Majluf and Ricardo Raineri. 1997. Barcelona - Spain.
  - **United States Association for Energy Economics (USAEE) and International Association for Energy Economics (IAEE).** Title of the presentations: "*Auction, Strategy and Deregulation: Sequential and Simultaneous Bidding for a Divisible Good*"; and "*Restructuring Chilean Electric and Gas Industries: From Monopolies to Competition*". 1997. San Francisco California - USA.
  - **Energy Modeling Forum, 15 Working Group,** with Hugh Rudnick. Title of the presentation: "*Emerging Issues on Market Design in the Latin-American Electricity Market*". 1997. Stanford California - USA.
  - **Energy Modeling Forum, 15 Working Group,** with Hugh Rudnick. Title of the presentation: "*Transmission Pricing Practices in South America*". 1997. Stanford California - USA.
  - **Power Markets and Resource Management,** with Hugh Rudnick. Title of the presentation: "*Has Yard Stick Competition Proved a Reasonable Approach for Distribution Pricing in South America*". 1996. USA.
  - **United States Association for Energy Economics (USAEE) and International Association for Energy Economics (IAEE).** Title of the presentation: "*Why We Should Regulate Quality in Electric Distribution Utilities, or Why We Should Not?*". 1996. Boston Massachusetts - USA.
  - **International Association for Energy Economics (IAEE).** Title of the presentation: "*Industrial Organization Implications of Gas Pipeline Technology*". 1995. Washington D.C. - USA.
  - **CLAIO, VII Latin - Ibero American Conference on Operations Research and Systems Engineering.** Title of the presentation: "*Heterogeneity, Schooling and Cohort Size Effects: A General Equilibrium Analysis*". 1994. Santiago - Chile.
  - **Econometric Society, XIII Latin American Meeting.** Title of the presentation: "*Gas Pipeline Transportation: Ex-ante Increasing Return to Scale with Sunk Costs*". 1994. Caracas - Venezuela.
  - **Chilean Annual Economist Meeting.** Title of the presentation: "*Heterogeneity, Schooling and Cohort Size Effects: A General Equilibrium Analysis*"; and "*Gas Pipeline Transportation: Ex-ante Increasing Return to Scale with Sunk Costs*". 1994. Santiago - Chile.
  - **Econometric Society, XI Latin American Meeting.** Title of the presentation: "*Schooling and Cohort Size Effects: An Equilibrium Approach*". 1992. Mexico City - Mexico.

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- **Society for Economics Dynamics and Control.** Title of the presentation: "*Schooling and Cohort Size Effects: An Equilibrium Approach*".1992. Montreal - **Canada**.

### ADVISORY AND TECHNICAL REPORTS

- Project: *APEC Fossil Fuel Subsidy Reform (FFSR) Peer Review: Viet Nam*. Responsibility: **Team Leader** for a US-APEC Technical Assistance project to Advance Regional Integration (US-ATAARI), program funded and managed by **USAID/US State**. *US-ATAARI Viet Nam* project objective is to support the country with a peer review assessment of inefficient fossil fuel subsidies, laying the foundation to phasing out such subsidies and hold capacity building activities in subsequent years. The project is implemented by the USA-based economic consulting firm, Nathan Associates Inc. 2017.
- Project: *Senado Federal – Comissão de Relações Exteriores e Defesa Nacional*, Ciclo de *Debates sobre as Perspectivas da Integração Elétrica na America do Sul*: Seminário sobre Integração no Arco Norte. Keynote Speaker and Panel Discussion. November 21, 2013. Brasília – DF, **Brazil**.
- Project: Programa Invención de lo Contemporáneo, Café Filosófico, Special of the Electric Industry: “*A Importância e os desafios da matriz elétrica de fontes renováveis*”, Keynote speaker in Instituto **CPFL – Cultura**, Campinas – **Brazil**, June 5 2013.
- Project: A Energia na Cidade do Futuro, “*Perspectivas da Matriz Elétrica Brasileira I – um olhar sobre as tendências e os desafios das fontes renováveis*”, Keynote speaker, CPFL Energia, Campinas. Sao Paulo, **Brazil**, June 7 2013.
- Project: Expert Witness, *Tribunal de Arbitramento de Empresa de Telecomunicaciones de Bogotá S.A. ESP versus UNE EPM Telecomunicaciones S.A.*, November 2012, Chamber of Commerce of Bogotá, **Colombia**.
- Project: *Effects of competition in the telecommunications markets*, Workshop on Competition in Telecommunications, Organizers: National Telecommunications Secretariat, Government of Ecuador. Quito - **Ecuador**, April 10-11, 2012
- Project: “Concesión de Frente Costanera del Puerto de San Antonio e Incentivos de Concesionarios Preexistentes” (“*Seafront Dock Concession of Frente Costanera in San Antonio Port and Pre-Existing Concessionaire Incentives*”). Work done for Empresa Portuaria San Antonio S.A. (**EPSA**). 2008.
- Project: “Análisis del Mercado de Telefonía Móvil e Incentivo de Operadores Preexistentes ante el Concurso de la Banda 3G en Chile” (“*Analysis of the Mobile Telecommunication Market and Incumbent Incentives in light of the 3G frequency band bidding in Chile*”). Work done for **Nextel S.A.** 2007-2008.
- Project: “Convergencia tecnológica y experiencia comparada: propuestas de actualización regulatoria para el siglo XXI” (“*Technology Convergence and comparative experience: regulatory update proposals for the XXI century*”). Work done for **Telefónica del Sur S.A.** 2006-2007.
- Project: “Tarificación de Servicio de Apoyo en Postes a Proveedores de Servicios de Telecomunicaciones” (“*Pricing for poles use by telecommunication service providers*”). Work done for **VTR Globalcom S.A.** 2006-2007.

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- Project: “El Proyecto Hidroeléctrico Aysén y sus efectos en la competencia en el sector generación - transmisión” (“*The Aysén Hydropower Project and its effects on competition in the generation - transmission sector*”). Work done for Colbún S.A. 2006-2007.
- Project: “Criterios para definir la Vida Útil Económica de las Inversiones en Transmisión Troncal” (“*Criteria to define economic lifespan of main electricity transmission investments*”). Work done for Transelec S.A. 2006-2007.
- Project: Elected as *Expert Witness between Compañía de Telecomunicaciones de Chile S.A. and VTR Banda Ancha (Chile) S.A.* to provide an opinion to the Court with respect to the discrepancies on pricing and traffic measures on the 800 number calls. 2006-2007.
- Project: Elected as *Expert Witness between Compañía de Telecomunicaciones de Chile S.A. and Empresa Nacional de Telecomunicaciones S.A., Micarrier Telecomunicaciones S.A., y Entel Telefonía Local S.A.* to provide an opinion to the Arbitration Judge Mr. Gabriel Villarroel Barrientos with respect to the discrepancies on the application of Compañía de Telecomunicaciones de Chile S.A. network access charges. 2006-2007.
- Project: “Determinación de la Tasa de Costo de Capital para Gasco Magallanes” (“*Assessment of the capital cost rate for Gasco Magallanes*”) Work done for Gasco S.A. 2005-2006.
- Project: “Suministro de gas natural a Chile desde Argentina: antecedentes e historia hasta 2004” (“*Natural gas supply from Argentina to Chile: background and history through 2004*”). Work done for Nestle Chile S.A. 2005.
- Project: “Perito designado de común acuerdo por la Subsecretaría de Telecomunicaciones, el Ministerio de Economía y la empresa de telefonía fija Manquehue Net S.A. para resolver las materias en controversia respecto de las tarifas reguladas de Manquehue Net S.A.” (*Expert Witness appointed by mutual agreement between the Chilean Telecommunication Under Secretary, the Ministry of Economy, and Manquehue Net (landline Telephone Company) to solve controversies on the determination of network interconnection charges*). November 2004.
- Project: “Desagregación de Redes y Reventa de Servicios de Telecomunicaciones: Extensión de la Obligación a los Operadores No Dominantes” (“*Network’s unbundling and the resale of telecommunication services: extension of the mandate to non-dominant operators*”). Work done for VTR-GlobalCom S.A. 2004.
- Project: Elected as *Expert Witness between the Chilean telecommunication company Manquehue Net S.A. and the Telecommunication Subsecretary (SUBTEL) to solve controversies on network interconnection charges*. 2004.
- Project: “Impacto de un Cambio en los Cargos de Acceso sobre la Telefonía Móvil y la Telefonía Fija” (“*Changes on Network Interconnection Charges and its impact on Mobile and Landline Telecom Operators*”). Work done for Quiñenco S.A. (Headquarters of VTR S.A.). 2003.
- Project: “Discriminación de Precios en el Acceso a la Red de una Empresa Dominante de Telefonía Local Integrada a Mercados Potencialmente Competitivos: Una Nota” (“*Price Discrimination in Network Interconnection by a Dominant Telecom Company in Local*”).

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*Markets that is Vertically Integrated into Potentially Competitive Markets: A Note*). Work done for VTR-GlobalCom S.A. 2003.

- Project: “Monopolio, Competencia Dinámica y Cargos de Interconexión en Telefonía Móvil” (“*Monopoly, Dynamic Competition and Interconnection Charges in Mobile Telecommunications*”). Work done for VTR-GlobalCom S.A. 2002-2003.
- Project: “Análisis Comparativo de Cargos de Interconexión en Telefonía Móvil” (“*Interconnection Charges Benchmark Study of Mobile Telecommunications*”). Work done for ATELMO A.G. (Gremial Association of Chilean Mobil Operators). 2002.
- Project: “Cargos de Acceso en Empresas de Telecomunicaciones en Presencia de una Empresa Dominante en el Mercado de Telefonía Local” (“*Interconnection Charges for Telecommunications Companies facing a Dominant Local Operator*”). Work done for VTR-GlobalCom S.A. 2001-2002.
- Project: Fondecyt No. 1010750 (Chilean National Sciences Foundation). “Desarrollo de métricas dinámicas de calidad de servicio en sectores de generación-transmisión y su evaluación económica” (“*Development of Dynamic Metrics to Measure the Quality of Service for a Generation and Transmission System and its Economic Evaluation*”), researcher. 2001-2002.
- Project: *Expert Witness in the Mining and Energy Committee of the Chilean Congress, Chamber of Representatives*, Proposed changes to the 1982 Chilean Electric Law. 2002.
- Project: “Contratos y Calidad de Suministro Eléctrico en el SING” (“*Contracts and Quality of Electricity Supply in the SING - Northern Chilean Interconnected Electricity Supply System-*”). Work done for Electroandina S.A. 2001.
- Project: Advisor for the *Hungarian Government for the Licensing - Monitoring - Competition Committee of the Electricity Regulatory Regional Association*, on electricity regulation. 2001.
- Project: “Costo de Falla y Precios para Valorizar las Transferencias de Energía en el CDEC (“*Nondelivered electricity Cost and Prices to Value Energy Transfers in the CDEC - Chilean Main Interconnected Electric System Operator-*”). Work done for Endesa S.A. 1998.
- Project: “Perito designado de común acuerdo entre la Subsecretaría de Telecomunicaciones y CTC-STARTEL para resolver las materias en controversia respecto de las tarifas reguladas de CTC-STARTEL (empresa de telefonía móvil filial de Telefónica CTC Chile)” (*Expert Witness appointed by mutual agreement between the Chilean Telecommunication Under Secretary and CTC-STARTEL -Mobile Telephone Company- to solve the controversies on key parameters used for the determination of mobile phone access charges*). December 1998.
- Project: “Perito designado de común acuerdo entre la Subsecretaría de Telecomunicaciones y CTC-STARTEL para resolver las materias en controversia respecto de las bases técnico económicas utilizadas para la determinación de las tarifas de interconexión de CTC-STARTEL -empresa de telefonía móvil filial de Telefónica CTC Chile-” (*Expert Witness to solve disputes between the Chilean Telecommunication Under Secretary and CTC-STARTEL -Mobile Telephone Company- to solve*



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- controversies on the technical and economic basis for the determination of mobile phone interconnection charges*). March 1998.
- Project: “*The Sistema Interconectado del Norte Grande and the Gas Atacama Project*”. Work done for Credit Suisse First Boston of New York and Chase Manhattan Bank of New York. 1997-1998.
  - Project: “Análisis del Impacto de la Incorporación de la Central Hidroeléctrica Ralco y de Alternativas Vía Centrales de Ciclo Combinado” (“*Analysis of the Impact of the Incorporation of Ralco Hydropower Plant and Alternative Gas Combined Cycle Power Plants*”). Work done for Endesa S.A. 1997.
  - Project: “Estudio de Valores Agregados de Distribución” (“*Electricity Distribution Value Added Study*”). 1996. Work done for Chilectra S.A.
  - Project: “Tarificación de la Sub-transmisión” (“*Electricity Sub Transmission Pricing*”). Work done for Chilectra S.A. 1996-1997.
  - Project: “Relevancia de las Barreras de Entrada a la Industria de Generación Eléctrica” (“*Relevance of Entry Barriers in the Electricity Generation Industry*”). Work done for Enersis S.A. 1996.
  - Project: Fondecyt # 1960397 (Chilean National Science Foundation). “Organización Industrial en el Transporte de Gas Natural y Electricidad” (“*Industrial Organization on Natural Gas and Electricity Transportation*”). Main researcher. 1996-1997.
  - Project: Fondecyt # 1971265 (Chilean National Science Foundation). “Desarrollo de los Sistemas Eléctricos de Distribución - Optimización y Tarificación” (“*Development of Distribution Electricity Systems - Optimization and Pricing*”). Researcher. 1997-1998.
  - Project: Economist in charge of the Electricity Distribution Added Value Studies for Chilectra S.A. (main Chilean electric distribution utility). 1996.
  - Project: “Gestión del Holding: Estructura de Incentivos” (“*Corporate Management: Incentive Structure*”) Work done for Comercial Modo Ltda., Chilean Corporation of Americanino, Unlimited, Made in Europe, and AM. J. Publicidad. 1996.
  - Project: “Calidad de Servicio y Tarificación en Sistemas Eléctricos de Distribución en Chile” (“*Service Quality and Pricing of Electric Distribution Systems in Chile*”). Work done for Chilectra S.A. 1995-1997.
  - Project: “Evaluación Estratégica de una Lavandería Industrial para una Firma Líder en la Industria del Jeans” (“*Strategic Evaluation of an Industrial Laundry for a Leader Jeans Company*”). Work done for Comercial Modo LTDA. 1995-1996.
  - Project: Member of the Council of Experts that determined the Chilectra S.A. investments new replacement values used to set electricity distribution tariffs. 1995.
  - Project: "Implicancias de la Tecnología de Transporte de Gas Natural sobre la Organización Industrial del Sector" ("*Natural Gas Transportation Technology Implications on the Sector's Industrial Organization*"). Work whose objective was the review of the proposed law to account for the entry of imported natural Gas in Chile, work done for the Chilean National Energy Commission (CNE). 1993-1994.
  - Project: “*The Process of Modernization of the Chilean Economy*”. Work done for The Woodrow Wilson Center, Latin American Program. 1995.

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- Project: “Economías de Escala, Monopolio, Regulación y Competencia en el Sector Transmisión y su Relación con la Legislación Vigente” (“*Scale Economies, Monopoly, Regulation and Competition in the Transmission Sector and its Relation to Current Legislation*”). Work done for Transelec, and Endesa S.A.. 1994-1995.

### TEACHING EXPERIENCE

- **Since 1993** lecturer and researcher in the Industrial and **Systems Engineering Department, School of Engineering, Pontificia Universidad Católica de Chile (PUC)**. Topics include micro and macroeconomics, business economics, industrial organization, industrial economics and regulation, dynamic macroeconomic theory, and engineering ethics.

#### Courses at PUC

- *IND-3710 Business Economics*
  - *IND-3760 Industrial Organization*
  - *ICS-3762 Advanced Topics in Industrial Economics and Regulation*
  - *ICS-3952 Dynamic Macroeconomic Theory*
  - *IAA The Economy and the Energy Industry*
  - *ICS-2512 Microeconomics*
  - *ICS-2523 Microeconomics*
  - *ICS-3012 Industrial and Systems Engineering Seminar*
  - *FIL-188 Engineering Ethics*
- **University of Minnesota, Economics Department.** Teaching Associate and Teaching Assistant, 1990 – 1993. Courses:
    - *Public Finances*
    - *Macroeconomic Principles*
  - **Universidad Gabriela Mistral, Economics Department.** Teaching Associate, 1987–1988. Courses:
    - *Welfare Economics and Resource Allocation*
    - *Microeconomic Principles*
  - **Universidad de Santiago, Economics Department.** Teaching Associate, 1987. Course:
    - *Intermediate Microeconomics*
  - **Pontificia Universidad Católica de Chile, Economics Department,** Teaching Assistant, 1983. Course:
    - *Intermediate Microeconomic*

## RICARDO J. RAINERI BERNAIN

- **Chinese Academy of Sciences, Harbin Institute of Technology –Harbin China-, International Association for Energy Economics –IAEE-, IAEE China Summer School, 2015.** Course:  
→ *Decision Making in the Energy Sector*
- **IAE Business Scholl, Universidad Austral, Argentina.** Certificate on Renewable Energy, 2012.  
→ *Energy Outlook and the Latin American Region*
- **MIT, Sloan School of Management.** “*The Executive Program for the Americas*”, Program organized by MIT, Sloan School of Management, with the collaboration of Pontificia Universidad Católica from Chile, Pontificia Universidad Católica from Argentina, Instituto Tecnológico y de Estudios Superiores from Monterrey and Universidad de Sao Paulo, 1999.

### **SCHOLARSHIPS, AWARDS, AND RECOGNITIONS**

- ***Featured in 2015 - 2018 as one of the 50 Notable Alumni Pontificia Universidad Católica de Chile.***
- ***Nominated Distinguished Lecturer 2017,*** International Association for Energy Economics (IAEE), conferences in Regional Affiliates of Greece and Georgia.
- ***Nominated Distinguished Lecturer 2016,*** International Association for Energy Economics (IAEE), conferences in Regional Affiliates of Nigeria and Turkey.
- ***Featured Member National Capital Area Chapter of the U.S. Association for Energy Economics (NCAC-USAEE),*** April 2015.
- ***Business and Economics Students Association, Pontificia Universidad Católica de Chile, Distinguished as an example of commitment to a better country,*** 2010.
- **Second International Finance Congress, Santiago – Chile – *Distinguished by the best paper in the field of Institutional Investors,*** 2002.
- ***President of the Republic Scholarship for studies in the United States,*** 1988-1990.
- ***Pontificia Universidad Católica de Chile Scholarship for graduate studies,*** 1985-1986.

### **CURRENT AND FORMER AFFILIATIONS**

## RICARDO J. RAINERI BERNAIN

- *International Association for Energy Economics* (IAEE).
- *United States Association for Energy Economics* (USAEE).
- *National Capital Area Chapter of the United States Association for Energy Economics* (NCAC-USAEE)
- Latin American and Caribbean Economic Association (LACEA).
- Founding member of the *Chilean Economists Association*
- Founding member of the *Latin American Association for Energy Economics* (ALADEE)
- Corporate Governance Network
- American Economic Association
- Econometric Society
- Strategic Management Society
- Center for Latin American Economics, Federal Reserve Bank of Dallas

### **OTHER PROFESSIONAL ACTIVITIES**

- Referee for The Energy Journal; Energy Policy; IEE Proceeding in Generation, Transmission and Distribution; The Encyclopedia of Energy Engineering and Technology; The International Journal of Global Energy Issues; Revista de Análisis Económico; Cuadernos de Economía; and Estudios de Economía.
- Referee for Fondecyt projects (Chilean National Science Foundation)
- Member of the Organizing Committee of the 5<sup>th</sup> ELAEE, International Conference of the Latin American Association for Energy Economics (ALADEE), Intercontinental Hotel, Medellin - Colombia, 2015.
- Member of the Organizing Committee of the 37<sup>th</sup> IAEE International Conference, “Energy and the Economy”, New Yorker Hotel, New York City, June 15 -18, 2014.
- Honorary Member of the Organizing Committee of the 3<sup>er</sup> Latin American Meeting on Energy Economics ELAEE/IAEE “Energía, Cambio Climático y Desarrollo Sostenible: Los Desafíos para América Latina”, [www.elae2011.org](http://www.elae2011.org). Centro de Convenciones Universidad Católica de Argentina, April 2011, Santiago – Chile.

## RICARDO J. RAINERI BERNAIN

- Member of the Program Committee of the 33° International Meeting on Energy Economics IAEE “The Future of Energy: Global challenges, diverse solutions”, <http://ab3e.org.br/rio2010/>. Hotel Intercontinental Rio Hotel – Rio de Janeiro, June 6-9, 2010, Brasil.
- Organizer and President of the Academic Committee of the 2° Latin American Meeting on Energy Economics ELAEE/IAEE “Seguridad Energética, Integración y Desarrollo en América Latina”, [www.elaee.org](http://www.elaee.org). Hotel Sheraton Convention Center, March 2009, Santiago – Chile.
- 2008. Nominated by the Central Bank of Chile to be one of the three candidates proposed to the President of Chile to choose an economist to integrate the Anti-trust and Free Competition Court.
- 2006-2008. Member of the Energy Commission of the Chilean Engineering Institute (Instituto de Ingenieros A.G.).
- 2007. Member of the Telecommunications Commission of the Chilean Engineering Association (Colegio de Ingenieros de Chile A.G.).
- 2005. Invited to be part of the CNAP (Chilean Universities Accrediting Institution) Accrediting Committee to evaluate the Industrial and System Engineering program of Universidad Técnica Federico Santa María.
- 2004. Nominated by the Central Bank of Chile to be one of the three candidates proposed to the President of Chile to choose an economist to integrate the Anti-trust and Free Competition Court.
- 2004. Member of the Academic Board of the International Conference “LNG: projections and Options for Chile”, December 2004, organized by Pontificia Universidad Católica de Chile and Gas Technology Institute
- 2004. Member of the Academic Board of the Fifth International Finances Conference held in Santiago - Chile, January 2005
- 2003. Member of the Academic Board of the Fourth International Finances Conference held in Viña del Mar - Chile, January 2004
- 2002. Member of the Academic Board of the Third International Finances Conference held in Santiago - Chile in 2003
- 2002. Member of the Organizing Board of the Chilean Economist Annual Meeting
- 2001. Member of the Board that organized the seminar “Tariff Regulation in the Telecommunication Industry” Organized by the Chilean Chambers of Commerce, Fundación Pacífico, Pontificia Universidad Católica de Chile, Universidad de Chile, Santiago - Chile
- 2001. Founder Member of the Chilean Economists Association
- 2001. Member of the Organizing Board of the Chilean Economists Annual Meeting
- 2000. Member of the Organizing Board of the Chilean Economists Annual Meeting
- 1999. Member of the Board that evaluated the projects that participated in the contest on Management and Innovation of the Chilean Government
- 1997. Invited to participate in the Energy Modeling Forum (EMF), Stanford University