

CURRICULUM VITAE

NAME	Carlos Batlle López
POSITION	Member of the Board of Appeal of the European Union Agency for the Cooperation of Energy Regulators
PROFESSIONAL EXPERIENCE	* Comillas University, Spain Since 2022 onwards: also Professor, Electrical Engineering Department - ICAI School of Engineering, Comillas Pontifical University From 1996 to 2017: Researcher, Institute for Research in Technology * Massachusetts Institute of Technology (MIT), US Since 2024 onwards: Research Affiliate at MIT CEEPR From 2023 to 2024: Senior Lecture at MIT Sloan School of Management From 2011 to 2023: Research Scientist at MITEI * Florence School of Regulation (FSR), European University Institute (EUI) Since June 2006 onwards: Part-time Professor
EDUCATION	* Ph. D. in Industrial Engineering. December 2002 ICAI School of Engineering, Comillas Pontifical University, Madrid, Spain. June 1996 * Electrical Engineer. June 1996 ICAI School of Engineering, Comillas Pontifical University, Madrid, Spain.
TRAINING/ SEMINARS	TRAINING Postgraduate education MIT Professor in: - “Engineering, Economics and Regulation of the Electric Power Sector”, graduate course ESD.162, 15.032 and 6.695. 2011-2024. ICAI School of Engineering Doctorate and Master Program Professor in the following courses: - “Regulation and new business models”, 2019-onwards. - “Electric Power Systems Regulation”, 2008-onwards. - “Wholesale and retail electricity markets”, 2002-onwards. - “Models for risk analysis and management in the energy sector”, 2002-2007. Other postgraduate programs - Máster en Gestión Energética. Centro de Excelencia Sergio Arboleda. 2018-onwards - Energy Science and Technology Master Program. Skolkovo Institute of Science and Technology, Moscow. 2014. - Lecturer in the course “Power Markets and Regulation”. - Master del Negocio Energético. Enerclub. 2010-onwards. - Programme coordinator and lecturer in “Maestría en Gestión de Energía” (Master in Energy management), ESAN and Universidad Pontificia Comillas, Lima, Perú. 2010-onwards.

	- Máster Universitario en Tecnología Eléctrica Endesa-ICAI (Master in Electric Technology Endesa-ICAI), Endesa and Universidad Pontificia Comillas. 2008-2010. - Lecturer in the module: “Economía del sector eléctrico” (“Electricity systems economics”). - Máster en regulación de la industria eléctrica (Regulation of the electricity industry”), Universidad Pontificia Comillas, Santo Domingo, Dominican Republic. - 2010-2011. Programme coordinator. - Lecturer in the modules: “Regulatory models and institutions in the electricity sector” and “Retail markets”, 2007-onwards. - Lecturer in the “Máster en gas y electricidad” (Master on gas and electricity) organized by the Instituto Superior de la Energía, Madrid, Spain. 2004-07. Bachelor education <i>ICAI School of Engineering</i> - Professor on Energy Economics. With Pablo Rodilla. 2012 onwards. - Coordinator of the Final degree dissertation programme, Industrial Organization branch, 2002-2003, 2003-2004. <i>ICADE, Faculty of Economics and Business Studies</i> - “Microeconomics”, 2026-onwards. Professional training for energy regulatory institutions & energy companies <i>Florence School of Regulation. Training Program for European Energy Regulators</i> Director and instructor of the following courses: - “Annual Training on Regulation of Energy Utilities”, 36-week presential + online course. 2020-onwards - “Regulation of the Power Sector”, 13-week online course. 2010-onwards - “FSR Summer School on Regulation of Energy Utilities”, one-week intensive course. 2007-onwards. <i>Organization and coordination of tailor-made courses</i> - Regulatory challenges conditioning the future of the electric power sector, for the World Bank. Washington DC, March-June 2021, 2022. - Co-lecturer (together with P. Rodilla) of the course “Curso sobre Diseño de Mercados Mayoristas de Electricidad”, for XM, Medellín, Colombia. May, 2019. - Short course on Wholesale Electricity Market Design, for the World Bank. Washington DC, March 2016. - Co-lecturer (together with P. Rodilla) of the course “Economía y regulación de mercados regionales”, for CENACE. Quito, Ecuador. February 17-19, 2014. - Co-lecturer (together with I. J. Pérez-Arriaga) of the course “Regulation of the Power sector” for Saudi Aramco, December 15-19, 2014. Al Khobar, Saudi Arabia. - Co-lecturer (together with J. Barquín) of the course “Curso de análisis y gestión de riesgos en mercados de energía” (“<i>Risk analysis and management in electricity markets</i>”), for Petrobras. May 8-10th, 2007, Madrid, Spain. - Co-lecturer (together with Carlos Vázquez) of the course “Factores clave del mercado eléctrico español” (“<i>Key issues of the Spanish electricity market</i>”), for Gas Natural. December 12-14th, 2005, Barcelona, Spain. <i>Contributions to specific courses</i> - “Module 4: The economic regulation of System Operators and allocation of costs to network users.” In Taylor-Made Training for ACER on Energy Infrastructure Planning. Florence, September 2026. - “Working Group activity: How to future prove an energy system that is shifting towards more real time operation?” CEER Training on Electricity Market Design and Implementation of the European Green Deal. March 2026.
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	- “Working Group activity: How to future prove an energy system that is shifting towards more real time operation?” Electricity Market Designs in the Evolving Political Context. CEER Training Academy, 10 April 2025. - “Working Group activity: How to future prove an energy system that is shifting towards more real time operation?” Electricity Market Designs in the Evolving Political Context. CEER Training Academy, Electricity Market Design and Implementation of the European Green Deal, Brussels, 23 May 2024. - “The need to redesign regulation to support an efficient expansion of power systems”. Curso Ejecutivo 'Transición Energética en España. Eficiencia y sostenibilidad'. September 2020. - La formation sur la Régulation du Secteur Electrique. Sous le Haut Patronage de S.E. Dr. Chakib Khelil, Ministre de l’Energie et des Mines. L’Algerian Petroleum Institute avec la Florence School of Regulation. Algiers, Algeria. Nov. 8th-11th 2009 - Jan. 17th-19th 2010. · L’Evolution du rôle de l’Etat dans l’expansion de la fourniture d’électricité en Amérique latine. · Dix ans de libéralisation du marché de l’électricité en Espagne. · Gestion et programmation de la production : du dispatching centralise aux marchés de gros. · Questions stratégiques et réglementaires concernant la sécurité de l’approvisionnement en électricité. - Corso di formazione per funzionari II edizione. Autorità per l'energia elettrica e il gas. Milano, Italy. September 28th, 2009. · Transition issues to full retail liberalization, default prices. - Training Course for Senior Regulatory Staff from MEDREG MPC Countries. Programme by Florence School of Regulation. Milan, Italy. July 13th-17th 2009. · Impact of market design on generation adequacy. · Experience with generation adequacy in Latin America. - International course “Regional Power Market integration in Central America. Hydropower Economics and Financing”, International Centre for Hydropower (ICH), Asociación de Generadores con Energía Renovable (AGER) y Federación de Energías renovables de Centro América y el Caribe (FERCCA). La Antigua, Guatemala. 6–11 October 2008. · Two-day lectures on “Wholesale electricity market design and analysis”. - “Sistema energético sostenible, nueva economía y empleos verdes ante la crisis” (<i>Sustainable Energy System, New Economy and Green Employments in face of the Crisis</i>). Summer Course organized by Instituto Sindical de Trabajo, Ambiente y Salud (ISTAS) de CCOO. Universidad Complutense, El Escorial, Spain. July 31th, 2009. · Comparación de marcos regulatorios internacionales (“<i>International regulatory schemes comparison</i>”). - On-line course “<i>Nuevas tendencias en el Sector Eléctrico</i>” (“New trends in the Electric Power Industry”), for UNESA, Spain, June-July, 2008. Lecturer in the modules: · “Mercados de electricidad. El Mercado Interior de la Electricidad y el Mercado Ibérico” (“Electricity Markets. The Internal Electricity Market and the Iberian Market”) · “Comercialización de electricidad y diseño de tarifas” (“Electricity retail business and tariff design”). - “FSR advanced training course on electricity markets”, Training course for energy regulatory institutions & energy companies (FSR sponsors), Florence, 31 March - 4 April 2008. · Invited speaker “Last-resort tariffs”.
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	- International seminar “Modelaje matemático de subastas de energía eléctrica. Sistemas, metodologías y experiencias” (“Mathematical modeling of electricity auctions”). DecisionWare Ltda., Bogotá, Colombia, March, 12-14th, 2008. · Modelos fundamentales de análisis de mercados eléctricos (Fundamental analysis models for electricity markets). · Mecanismos de garantía de suministro de electricidad (<i>Security of Supply Mechanisms</i>). - Course “Sustainable Energy Markets”, EEI Training Program, 2007. · Coordinator and lecturer of the module “Electricity & gas markets: Design, regulation, functioning & future perspectives”. September 11- 14, 2007. - “Energy Policy in Spain: the required change”, Summer Course, Universidad Complutense, El Escorial, July 2005. · Aspectos medioambientales de la energía: el impacto del mercado de derechos de emisión (“<i>Energy environmental aspects: impact of the emissions trading market</i>”). - On-line course “Regulación del sector eléctrico” (“Electricity sector regulation”). CEDDET – Universidad Pontificia Comillas collaboration, 2003-07. · Lecturer in the module “La regulación de libre mercado: comercialización y mercado minorista” (“<i>Free market regulation: retail market</i>”). - EES-UETP (Electric Energy Systems University Enterprise Training Partnership). Lecturer in the following international courses: · “Integration of renewables and CHP, guarantee of supply and ancillary services in electricity markets”, Porto, Portugal, November 2002. “Modeling risk analysis and management” and “Overview of Approaches to Guarantee of Supply”. · “Risk management: The perspective in electric utilities”, Paris, France, January 2001. · “Electricity markets: Models and tools for utilities and other players”, Porto, Portugal, May 2000. - “Risk management in energy markets: Optimal use of financial products”, Paris, France, October 1999 SEMINARS • “Back for the future? Reconsidering power system regulation to adapt to the multidimensional risk and uncertainty of electrification.” Electricity Regulation and Energy Transition Paces Overall Vision. CEO Forum of Debates: Electricity Regulation and Energy Transition. CIGRE Global Event for the Power System Industry Paris, France – 24 August 2026. • “Back for the future? Learning (!) with pain: Reconsidering Electricity Markets Design to Align Long- and Short-term Targets.” Energy Regulation and Policy Summer Seminar 2026: Managing affordability & delivering resilience: Global perspectives. LSE’s Centre for Analysis of Risk & Regulation, London, UK, 12 June 2026. • “Confiabilidad y resiliencia del futuro sistema eléctrico. Planificando el multiverso.” XVI Encuentro Nacional de Minería, Lima, Perú, 24 May 2026. • “Power sector regulation, in the couch.” PSR User Meeting, Foz de Iguazu, Brazil, May, 2026. • “Competition, Technology, and Energy Transition: Challenges for the Sector and Traditional Electric Companies.” Socialization and Validation of Digital Business Transformation Pillars. CNFL, Costa Rica, February 24, 2026.
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- “End-user tariff design time granularity Theoretical and practical lessons to be learnt (focus on the residential side).” Períodos horários no setor elétrico em Portugal continental. ConVERSE, ERSE (Energy Services Regulatory Authority), Lisbon, Portugal, January 15, 2026.
- “Balancing Socio-Political Acceptance and Economic Efficiency of Electricity Price Signals for Residential End Users. Sketching lessons from the pioneering Spanish experience.” 24th Energy in Western Australia Conference. Perth, September 12, 2025.
- “The (Hopefully) Enlightening Blackout: Iberian Peninsula, April 28, 2025. Questions for the future.” 24th Energy in Western Australia Conference. Perth, September 11, 2025.
- “The missing money ... the missing planning. The missing crystal ball.” Desafios da Transição Energética: Curtailment, Instituto Brasiliense de Direito Aplicado, Brasilia, August 28, 2025.
- “The (Hopefully) Enlightening Blackout: Iberian Peninsula, April 28, 2025. Questions for the future.” Seminario de Planeación Eléctrica, IEEE Sección Mexico, Acapulco, 29 July 2025.
- “The (Hopefully) Enlightening Blackout: Iberian Peninsula, April 28, 2025. Questions for the future.” Late Breaking News: Recent Grid Events - IEEE PES General Meeting, Austin, US, 28 July 2025.
- “The (Hopefully) Enlightening Blackout: Iberian Peninsula, April 28, 2025. Questions for the future.” The challenge of ensuring fit-for-purpose electricity grids in the EU. FSR online debate, 6 June 2025.
- “Electricity Market Design Models. Balancing trading and physics.” Meta II, Formação de Preços, Sao Paulo, Brazil, 4 April 2024.
- “Design of support mechanisms for short-term storage.” 2023 Future Energy Systems Center Fall Workshop. MIT, Cambridge, November 14-15, 2023.
- “Back for the future? Learning (!) with pain: Reconsidering Electricity Markets Design to Align Long- and Short-term Targets.” Panel: The balance between Markets and Reliability. Alberta’s Transforming Electricity System – Examining new benefits and costs. AESO 6th Annual Economics Excellence Conference, September 27, 2023.
- “The key role of sound regulation for an efficient energy transition. TCI’s Premier Conference.” Changing The Energy Landscape, Turks & Caicos, June 2nd, 2023.
- “The Spanish Electricity Market.” BTG Pactual, Brazil (online), March 2023.
- “Short-Term Storage. A new multi-dimensional challenge for electricity regulatory design.” Future Energy Systems Center, MIT Energy Initiative, February 8, 2023.
- “Electricity markets’ design challenges in the EU electricity wholesale market.” Session 6: Views from International Markets. IPPSA 28th Annual Conference. Pathways or Tightropes? Calgary, Canada, November 14th, 2022.
- “Back to the Future. Learning with pain: The need to Re-Regulate Electricity Markets to Develop and Integrate Long- and Short-term Markets Design.” International Workshop on Emerging Business and Regulatory Frameworks in Electricity Markets. Guadalajara, Mexico, 19 October 2022.
- “Regulatory evolution necessary to enable the modernization of the grid infrastructure”. Grids Management to Maximize Renewable Energy Potential South Africa Conference – RES4Africa, Johannesburg, 15th June 2022.

- ACER's assessment of the EU wholesale electricity market design: what next for market design? Online CEEM Conference. 30 May 2022, University Paris Dauphine-PSL.
- "Lecciones de Política y Regulación de la (creciente) Crisis Energética de la Unión Europea". Congreso Anual de Energía, Acolgen, Bogotá, Colombia. 4 May 2022.
- "Panel Internacional sobre Respuesta de la Demanda". Comisión de Regulación de Energía y Gas (CREG), Colombia. 1 April 2022.
- "Crisis del mercado energético de la Unión Europea. Relato y lecciones que debieran aprenderse". 4º Foro XM. Cartagena, Colombia. 17 March 2022.
- "Enhancing and complementing the current market design to make it future-proof". Electricity prices and market design. FSR Regulatory Policy Workshop Series 2021-2022. 11 March 2022.
- "Challenges for electricity rate design. Engaging the last mile." 5th Annual Workshop on the Economics of Electricity Policy and Markets. Ivey Energy Policy and Management Centre. London, Ontario, Canada. October 20th, 2021.
- "Solar Energy Pricing: Key regulatory lessons learnt in the Latin Souths (Europe and America)." Online workshop on international experience on wind/solar energy pricing. PECC3 and Center for Procurement Support. Vietnam, September 30th, 2021.
- "Renewable Energy Auctions Design: Key regulatory lessons learnt in the Latin Souths (Europe and America)." International Experiences in Renewable Energy Auctions. PECC3 and Center for Procurement Support. Vietnam, August 21st, 2021.
- "The Need for Further Development and Integration of Long-and Short-term Markets Design in the Current Context of Re-regulation of Electricity Markets." Designing Markets for Electricity in India: Barriers and Opportunities. IIT-Delhi School of Public Policy and Harvard Kennedy School. August 4th, 2021.
- "Geographical market configuration, liquidity and competition: an academic perspective". The Configuration of Bidding Zones, Liquidity and Competition in the Electricity Market. FSR Regulatory Policy Workshop Series 2019-2020. 18 June 2020.
- Restructuring power markets' restructuring: the need to move regulation backwards and forwards. Panel: Regulation of Digitized Power Sector. Infra4Dev Conference. Infrastructure in the digital era: how should regulation adapt? Toulouse, France. December 11, 2019.
- The need to redesign regulation to support an efficient expansion of power systems. Panel 1: Sustainable Development Goals (SDGs), Paris Agreement and the Expansion of Renewable Energy. International Seminar on Renewable Energy: Advances and Opportunities for Sustainable Development. Federal Court of Accounts (TCU). Brasilia, Brazil. November 26th, 2019.
- Lessons, opportunities and recommendations applied to Brazilian Electric Sector. International Workshop on Renewable Energy: Perspectives for Brazilian Electric Sector. Federal Court of Accounts (TCU). Brasilia, Brazil. November 25th, 2019.
- Restructuring power systems' restructuring. ESMAP Technical Advisory Group Workshop. Energy Sector Management Assistant Program Washington DC, USA. September 18-19, 2019.
- Updating regulatory and market frameworks to new realities. What is Next for Our Electricity Markets? Towards a new market and regulatory framework. IX Electricity Security Advisory Panel Workshop. International Energy Agency (IEA). Paris, France. June 17, 2019.

- Zonal- vs Nodal-Pricing: the Academic Perspective. Zonal vs nodal pricing for the electricity market. FSR Regulatory Policy Workshop Series 2018-2019. January 25, 2019.
- Future challenges for power systems planning and operation. Seminário de Prospecção Tecnológica do ONS – SPTO 2017. June 1, Rio de Janeiro, Brazil.
- Economics of new trends. How to deal with the new resources. 10th OMIE International Workshop: Tackling disruptive trends in power markets. May 29, Madrid.
- La regulación del incierto futuro de los sistemas eléctricos. Foro XM-2017: El futuro de la energía eléctrica en Colombia. May 25, Cartagena, Colombia
- The MIT Utility of the Future study. The 2017 EU – India Smart Grids Workshop. New Delhi, India, Manekshaw Center, 8 March 2017.
- The MIT Utility of the Future study. US DOE Electricity Advisory Committee, Washington DC, March, 30th, 2017.
- “Reviewing market design for a better integration of large shares of RES”. European Power Market Summit: Today’s trends, power for tomorrow. Towards a common vision for European electricity markets? EPEXSPOT, Brussels, Belgium. 5–6 October 2016.
- “La seguridad energética del sector eléctrico colombiano en el contexto internacional”. IX Encuentro anual del sector energético colombiano. Bogotá, Colombia. August 1st, 2016.
- “Capacity market design in Colombia”. IEEE PES LOLEWG. Cambridge, MA, USA. 21-22 July 2016.
- “Electricity Supply. The Evolving Role of Different Generation Technologies and its Implications in Europe and North America”. Energy Futures – Europe and North America Workshop. Zurich, Switzerland. June 7th 2016.
- New Business Models for the Utility of the Future. Plenary panel. 69th Annual NECPUC Symposium, Falmouth, MA, USA. June 5-8, 2016.
- “El paradigma de la energía distribuida: consumidor – productor. ¿Desafío o amenaza para el ingreso tarifario de las distribuidoras?”. Seminario Internacional. Tarifas de distribución y su regulación en la era de la energía inteligente. COCIER, Bogotá, Colombia. 16-17 May, 2016.
- “The Cost of Doing Nothing with the Current Design of Electricity Markets”. Energy Demand and Efficiency. King Abdullah Petroleum Studies and Research Center, London, UK. March 22nd, 2016.
- “Increasing Power Flexibility” (Chairman). Berlin Energy Transition Dialogue 2016. Berlin, Germany, March 22nd, 2016.
- “Key issues to physical and regulatory convergence of markets” (Chairman). Integration and new design of the European electricity markets. Enerclub, Madrid, Spain. January 21st, 2016.
- “The difficult interplay between long-term energy policies and electricity markets: lessons learned and current challenges”. 2015 PUA annual conference. Future challenges and lessons from international energy reforms. Jerusalem, Israel. Nov. 30, 2015.
- “Electricity Market Design and Capacity Payments: A Transatlantic Perspective”. MIT CEEPR Fall 2015 Workshop. Cambridge, MA, USA. Nov 19-20, 2015.
- “Electric power regulation for the future (with a special focus on distribution)”. *Forsyningskonference*, Energi Styrelsen, Copenhagen, Denmark. November 11, 2015.

- “The MIT Utility of the Future Study”. Empowering customers and cities. Chicago, IL, USA. November 5, 2015.
- “Overcoming the bias against innovation: what the market wants & how to work with regulators to deliver”. Together with Angela O’Connor, Chairman, Massachusetts Department of Public Utilities. 6th Annual EnerNOC Utility Customer Group summit. Boston, MA, USA. October 6-8, 2015.
- “Given forms of capacity mechanisms and the EU electricity market”. Capacity mechanisms in Europe: The fundamental issues behind the ongoing sector inquiry. Global Competition Law Centre. City of Brussels, Belgium. September 28, 2015.
- “Regional market integration” (Chairman). 6th World Forum on Energy Regulation to be organized. Istanbul, Turkey. 25-28 May 2015.
- “Appropriate remuneration for conventional assets in the European system”. Opening comments with Prof. W. Hogan (Harvard). Workshop on EU Electricity Markets for Renewable Integration. DIW Berlin – DG Energy, Berlin, Germany. 23 January 2015.
- “Some future trends of the electricity business”. Celsia, Medellín, Colombia, November 26th, 2014.
- “Regulation for an efficient integration of distributed energy systems” in the workshop “Smart Frameworks for Smart Grids: The Economy and Regulation for a Sustainable Energy Transition”. Inter-American Development Bank, Miami, USA. November 17th, 2014.
- “Demand Response in the EU”. Workshop “Demand Side Response (DSR): Can international experiences be transferred to Russia?” Skolkovo Institute of Science and Technology. Moscow, Russian Federation. October 2-3, 2014.
- “Natural gas and power markets: short- and long-term issues”. 1er Foro Académico ANDEG: Futuro del mercado eléctrico colombiano. August 22nd, 2014. Bogotá, Colombia.
- “Short-term power market design issues: the complexity of simplicity”. Complexity versus Simplification in Electricity Markets. 2014 IEEE Power & Energy Society General Meeting. National Harbor, MD, USA. 29 July, 2014.
- “The disconnect of retail tariffs from wholesale market prices in key european markets”. CEEM Workshop on drifting apart: costs, prices and tariffs in EU electricity markets. *Université Paris-Dauphine*, Paris, France. 9 July 2014.
- “The future of the EU Electricity Market. Do we really know where we want to go?” CEPS/EDF Workshop on RES Policy for the 2030 Energy and Climate Framework. “Fixing renewables policy and market design: what’s feasible? What’s acceptable?” Centre for European Policy Studies, Brussels, Belgium. June 12, 2014.
- “Capacity Remuneration Mechanisms and the future of the EU Electricity Market”. 3rd European Energy Forum “European Energy Policy to Support Transition”. Conseil Français de l’Énergie, Paris, France. April 24, 2014.
- “Renewable energy developments in Spain”. Renewable Energy and Fossil Fuels in 2020 and Beyond - Friends or foes? Università Bocconi, Milan, Italy. January 21, 2014.
- “A comparative analysis of existing CRM models. What lessons can be learned?” Future electricity markets with or without capacity mechanisms: What does Europe say? Eurelectric, Brussels, Belgium. December 12, 2013.

- “Towards a Better Integration of the EU Electricity Market”. Keynote presentation in Berlin Conference on Electricity Economics (BELEC) - Modeling and Policy in the Energy Transformation – Germany, Europe, and Beyond. Berlin, Germany. October 9th, 2013.
- “Energiewende: How about Europe?” Opening Event Berlin Conference on Electricity Economics. Stiftung Mercator – DIW Berlin. Berlin, Germany. October 9th, 2013.
- Future design issues of wholesale electricity markets in the presence of large amounts of RES-E. In “Paths towards a New Energy Market Design”. Energy Policy Conference. EnBW & MIT-CEEPR. DIW-Berlin. Berlin, Germany. September 6th, 2013
- “A couple of lessons from the US Capacity Markets design for the future of EU internal electricity market. Capacity Remuneration Mechanisms, cross-border trade and demand response” in Workshop on Generation Adequacy and Security of Supply in the Internal Electricity Market. Florence School of Regulation. Florence, Italy. 1 February 2013
- Renewable Energy in the Internal Energy Market. Organised by Policy Department A, European Parliament, Brussels, Belgium. Thursday, 8 November 2012.
- Technical Workshop on “Capacity Mechanisms”. Huys Clingendael, The Hague, The Netherlands. October 29th, 2012.
- Designing the future European power market. Axpo Nordic Forum 2012. Helsinki, Finland. 17-18th October 2012.
- A Future-proof Energy Market Workshop. Florence, Italy. 12 October 2012.
- Foro de Energía: Desarrollo de un marco regulatorio para la sostenibilidad del sector eléctrico. Parlamento de Cataluña. Barcelona, Spain. 13-14 September 2012.
- Energy-only vs. energy-and-capacity markets: what is the best long-term choice for Europe? Elforsk AB. Tändstickspalatset, Västra Trädgårdsgatan 15, Stockholm, Sweden. 19 June 2012.
- The state of the Union: Energy Policy. Loyola de Palacio Chair on Energy Policy. Florence School of Regulation. Florence, Italy. 10 May 2012.
- Colloque de Printemps de l'Association des Economistes de l'Energie 2012. Les marchés électriques européens à la croisée des chemins. La création de marchés de capacité pour la sécurité long terme. Mercredi 9 mai 2012. Représentation du Parlement Européen en France, Paris, France.
- CERAWEEK 2012. The Quest: Energy, Security and the Future of Economic Growth. Houston, TX, USA.
- Strategy session: Evolving Power Market Structures: Lessons from Texas, Alberta and Europe? Carlos Batlle, Research Scholar, MIT Energy Initiative, Doyle BENEBY, President & CEO, CPS Energy, Terry Boston, President & CEO, PJM Interconnection, Lawrence Makovich, Vice President & Senior Advisor, IHS CERA (Chair)
- “The need for security of supply mechanisms in the transition to low carbon electricity markets”. Workshop on electricity market arrangements in a low carbon economy. European Commission. Directorate-General for Energy. Brussels, Belgium. Dec. 12th, 2011.
- “Regulación y resultados de la liberación del mercado eléctrico para los consumidores en España”. Seminario “Retos y Desafíos para el Desarrollo Energético de Chile”. Ministerio de Energía - Banco Interamericano de Desarrollo. Santiago, Chile. September 2nd, 2011.

- “Regulatory Instruments for the Financial Viability of a Power Market with a Strong Presence of Renewable Intermittent Generation”. 7th ENEL International Regulation Meeting “Future Electricity Markets: delivering Sustainability, Security of Supply and Competition”. Endesa Headquarters, Madrid, Spain. 16th June 2011.
 - “Renewable energy sources (RES) policy and regulation in Spain”. Achieving Decarbonization: Transforming National Energy Systems. Energy, Climate and Innovation. Program of the Fletcher School’s Center for International Environment & Resource Policy. Tufts University’s Fletcher School. Medford, MA, USA. March 10-11, 2011.
 - “Incentivos regulatorios para la firmeza y suficiencia del suministro de electricidad”. II Encuentro Internacional de Regulación 2009. Osinergmin – CIER. Lima, Peru. September 21-22, 2009.
 - “Política y Regulación de Energía Renovable en España (*Policy and Regulation for Renewable Energy in Spain*)”. Experiencias Internacionales de Política y Regulación para el Desarrollo de Energías Renovables (Policy and Regulatory International Experiences for Development of Renewable Energy). Organized by SENER y ESMAP-World Bank. Mexico D.F., Mexico. November 3rd 2009.
 - “Ten years of Spanish electricity market liberalization”. 1999-2009: Ten years of European energy markets liberalization. Università Bocconi. Milan, Italy. October 26th, 2009.
 - “Efficiency of reliability options and applicability in different market designs”, with I. J. Pérez-Arriaga. International Workshop on “Capacity mechanisms for long term supply security in liberalised electricity markets”, Laboratoire d'Analyse économique des Réseaux et des Systèmes Energétiques (LARSEN), University Paris XI, France. March 2007.
 - “Towards a global climate change strategy: the EU ETS & beyond”, with I. J. Pérez-Arriaga. Third meeting of the Climate Change Council. Climate Change Capital. Madrid, Spain. November 2006.
 - “Enjeux énergétiques et ouverture des marchés: faut-il protéger ou responsabiliser le consommateur?”, Journée du 27 Avril 2006, SIGEIF (Syndicat Intercommunal pour le Gaz et l'Electricité en Ile de France), Paris, France. April 2006.
- “International experiences on demand management”. Energy for the industry in Europe: challenges and opportunities, Foment del Treball Nacional, Barcelona, Spain. Oct. 2005.

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¹ OJ L 295, 21.11.2018, p. 39.

² [DPN-Board of Appeal.pdf](#)