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**Education:**

- Oxford Adaptation Academy, August 2015, Global Climate Adaptation Partnership and Smith School of Enterprise and the Environment, University of Oxford

- DPhil, Environmental Change Institute, Oxford University Centre for the Environment, University of Oxford (2007-2012)

Dissertation Title: Sustainable Development, Climate Change and Renewable Energy in Rural Central America

Research Question: Can rural renewable energy projects simultaneously meet the multiple goals of sustainable development, climate change mitigation and climate change adaptation? If so, under what criteria?

For the research I used qualitative and quantitative analysis tools, GIS information analysis of project sites, and participatory approach and focus group interviews.

Viva Date: December 13<sup>th</sup>, 2012

- MSc, Civil Engineering - Building Systems Program, University of Colorado at Boulder (2001-2002)

GPA: 3.91 out of 4

Master's Report: An Assessment of Energy and Water in the Galápagos Islands. Study sponsored by the World Wild Life Fund in the frame of an initiative towards the reduction of fossil fuels consumption and CO<sub>2</sub> emissions through the increased use of clean energy technologies.

- 5-Year BS Degree, Electromechanical Engineering, Centro Universitario Mexico, Division de Estudios Superiores (Mexico City) (1996-2001)

GPA: 9.58 out of 10

Social Service: Comisión Nacional para el Ahorro de Energía (CONAE), cogeneration and renewable energy departments

**Professional Experience:**

United Nations Economic Commission for Latin America and the Caribbean, ECLAC

Mexico Sub-Regional Headquarters (covering Mexico, Central America, Haiti, Cuba, and Dominican Republic)

June 2023 to Present

Chief

Energy and Natural resources Unit

- Strategic planning for the Unit
- Technical assistance to SICA member countries
- Implementation of the Sustainable Energy Strategy 2030 for SICA member countries
- Coordination with other entities of the United Nations System and other multilateral partners
- Development of activities that help achieve the Sustainable Development Goal 7 on energy in the countries of the subregion
- Strengthening of linkages between the energy sector, climate change and other sustainable development goals.
- Development of a regional NDC for the energy sector for the SICA member countries

November 2022 to Present

Officer in Charge

Energy and Natural Resources Unit

- Strategic planning for the Unit
- Technical assistance to SICA member countries
- Implementation of the Sustainable Energy Strategy 2030 for SICA member countries

November 2018 to Present

Economic Affairs Officer

Energy and Natural Resources Unit

- Technical assistance for activities related to the regional energy integration within the Central American Integration System (SICA)
- Lead for energy poverty and universalization of modern energy services for the countries of the sub-region
- Development of a regional NDC for the energy sector for the SICA member countries
- Development of regional energy compacts for the SICA member countries
- Technical assistance as requested by countries on topics of energy, natural resources and climate change.
- Deputy for the Chief of the Unit when required
- Relevant publications: 'Sustainable Energy Strategy for SICA Member Countries to 2030', 'Energy Sector Plan during the COVID-19 Pandemic for the SICA Member Countries', 'Women and Energy'.

#### Ongoing:

- Coordinating Lead Author, GEO-7, Energy Pathways, February 2023 to Present
- Lead Author, Adaptation Gap Report, 2022
- Lead Author, UNEP-CCC Climate Technology Progress Report, 2022 and 2023
- Peer Reviewer, Región y Sociedad Journal, Colegio de Sonora, 2016 to Present
- Editor, Climate Change and Energy, Sense and Sustainability, 2013 to 2022
  - Editor of climate change and energy articles, including review of references and current literature on renewable energy, energy policy, climate change mitigation, climate change adaptation and energy efficiency topics.
- Professional partner and mentor for Engineers without Borders at The Johns Hopkins University chapter, 2006 to present
  - Lead professional partner from 2006 to 2008, 2018 to present
  - Planning, design and implementation of a solar water pumping project in the Guatemalan Highlands
  - Mentoring to student team on topics of solar energy, local community governance and grant writing.

#### Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)

April 2022 to Present

Coordinating Lead Author

- Coordinating Lead Author in Chapters 6 and 7 of the Nexus Assessment

#### Intergovernmental Panel on Climate Change

February 2017 to Present

Lead Author

- Lead Author in Chapter 18 of the Sixth Assessment Report (AR6), on 'Climate Resilient Development Pathways'.
- Lead Author in Chapter 4 'Strengthening and implementing the global response to the threat of climate change' of assessment of Global Warming of 1.5 °C: An Intergovernmental Panel on Climate Change (IPCC) special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.
- Lead Author for Technical Summary for SR1.5 and AR6
- Drafting Author for Summary for Policy Makers for SR1.5 and AR6
- Member of the Scientific Team for the Scoping Meeting for the Synthesis Report of the Sixth Assessment Cycle – October 2019, Singapore.
- Member of the Scientific Team for the Structured Expert Dialogue with Member Countries, December 2020 and June 2022
- Member of the Scientific Team for the Dialogues pertaining to the Global Goal of Adaptation, June 2022 to present
- Expert review of the Joint Report of IPBES-IPCC on Biodiversity and Climate Change

#### Intergovernmental Platform on Biodiversity and Ecosystem Services

April 2022 to Present

Coordinating Lead Author

- Coordinating Lead Author in the Nexus Assessment

Independent Consultant

- Ecodit  
September 2017 - Present: Clean Energy Specialist for the Clean Energy Finance Facility for the Caribbean and Central America (CEFF-CCA) Project, doing independent technical evaluation of grant applications following CEFF-CCA grant Evaluation Rubric.
- JBS International  
April - June 2017: Technical Expert (Global Climate Change), Researcher and Writer for Guatemala METRICs proposal. Strategy, planning, and development of technical proposal for the METRICs Program in Guatemala for climate change, environment, and clean energy programs under USAID/Guatemala's portfolio.
- Winrock International  
May - June 2016: Renewable Energy and Climate Policy Expert: Strategy, planning and technical support to the USAID/Mexico Low Emissions Development II Strategy RFP on topics of climate change mitigation, clean energy initiatives and monitoring, verification and validation. I focused on the climate policy and gender components.
- Organización Latinoamericana de Energía (OLADE, Latin American Energy Organization)  
February-March 2016: Instructor of the online course 'Analysis of energy and environmental policies in light of climate change', targeted at national and local government officials for the inclusion of energy, climate change and sustainable development goals into existing energy policies.
- NIRAS, Programa Alianza en Energía y Ambiente con la Región Andina, Finland  
February 2015  
Topic: 'Evaluation of Project Profiles Presented in the 3rd Request for Proposals of the AEA Program'. I specifically carried out the environmental, climate change adaptation, vulnerability, and technical evaluation of the 45 project proposals presented. Feedback included advice on how projects could be more resilient to site specific climate impacts and their linkages to national environmental and energy policy.
- Estado de la Nación, task for the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC)  
November 2014 – March 2015  
Topic: 'Convergence of energy policies, including carbon neutrality and strategies to attain SE4ALL and climate agreements' in the SICA (Sistema de Integración Centroamericana) member countries. This task included the analysis of local, national and international climate change and energy policies, different bilateral and multilateral efforts and on-going international commitments, especially for the Sustainable Development Goals and the Paris Climate Agreement; including development of NAMA's, NAP's and the INDC's. Climate change was analysed as a transversal axis on all the energy topics included, and recommendations discussed the roles of all donor agencies, including USAID, in the funding, planning, implementation and monitoring and evaluation of all interventions in the SICA member countries and region.
- Fondo Hondureño de Inversión Social (Social Investment Fund of Honduras)/World Bank  
July 2012 to November 2012  
Topic: 'Evaluation of the Performance of the Rural Electrification Program with Solar Energy (PROSOL) of the Rural Infrastructure Project (PIR)'. Task included technical, economic, environmental, climatic, social and cultural evaluation. Climate change specific evaluation focused on the adaptive role of renewable energy systems and the robustness of renewable energy infrastructure.
- Economic Commission for Latin America and the Caribbean  
June 2012 to October 2012  
Topic: 'Inclusion of the Climate Change Dimension in the Sustainable Energy Strategy 2020'. Task included coordination between energy, environment and disaster prevention entities and authorities of the region and of foreign/bilateral/multilateral assistance, and analysis of local, national and regional climate change and energy policies,

with the inclusion of social and gender issues in order for climate change to appear and influence the Sustainable Energy Strategy.

- Chemonics International  
February 2011 to July 2011  
Topic: Strategy, planning and technical support to the USAID/Mexico Low Emissions Development Strategy RFP on topics of climate change mitigation, clean energy initiatives and monitoring, verification and validation. I focused on the energy policy, renewable energy and energy efficiency components  
Support for the LAC Climate Change and the Central America Clean Energy USAID RFP's.
- Fundación Sares/Ministry of Energy and Mines of Nicaragua  
January 2010 to April 2010  
Topic: Evaluation of The World Bank's PERZA (Rural Electrification in Isolated Zones Project) Program. I carried out the technical, social, cultural and environmental aspects of the Program as well as the energy, renewable energy and energy sector policy analysis. Climate change analysis included the vulnerability and robustness of renewable energy infrastructure.
- Organización Latinoamericana de Energía (OLADE, Latin American Energy Organization)  
September 2011: Instructor of Climate Change Economics in the Diplomado 'Executive Development Program on Energy Planning' in Mexico, and Central and South America. Course focused on energy sector.  
September 2010: Instructor of Climate Change Economics in the Diplomado 'Executive Development Program on Energy Planning in Central America and Mexico'. Course focused on energy sector.  
January 2009 to February 2009 (with the University of Calgary): Identification and profiling of a decentralized rural electrification project in Nicaragua

#### TetraTech (Antigua, Guatemala, Central America)

July 2012 to March 2015

Renewable Energy Expert

- Planning, execution and follow-up of renewable energy programs and projects under the Regional Clean Energy Initiative of USAID.
- Implementation of the US Government's Climate Change and Economic Growth Strategy.
  - Technical assistance for the renewable energy auction processes in Guatemala. The country has developed three energy auction processes, each following a different methodology. The first one, PEG-1, was open to all energy sources; PEG-2 was only open to renewable energy sources, with limits for different types of renewable energy source; PEG-3 was a reverse auction. PEG-4 is currently under development. The technical assistance I provided was 1) to the regulators in creating a flow chart of all the processes required for a project to go on-line, 2) with the different Ministries and Entities in charge of providing the required licenses and permits ensuring there was a proper protocol for each process, 3) with the developers in working with each one of them, especially those facing some barrier, in order for them to start generating on the date established in their PPA.
  - Development of minimum social criteria to be met by renewable energy projects, especially with regards to working with women and rural indigenous communities;
  - Support to EC-LEDs (Enhancing Capacities of Low Emissions Development Strategies) process in Guatemala
  - Strengthening of the Energy Coordinating Unit of the Central American Integration System (SICA).
- Technical support of regional energy efficiency projects of the same Initiative

#### United Nations Economic Commission for Latin America and the Caribbean

May 2006 to December 2006 and March 2007 to September 2007

Special Services Consultant

Energy and Natural Resources Unit

- Under contract to the InterAmerican Development Bank, support to the renewable energy, energy efficiency, rural electrification and household biomass use activities of the Plan Puebla Panamá.

- Support, negotiation and coordination for the Matrix of Actions for the Energy Integration and Development of Central America. Coordination and communications with the Energy General Directors of the region and funding entities; and follow-up and support during project development and implementation.
- Support to the Mesoamerican Energy Integration Program, with a special focus on the clean energy activities and regional energy integration.
- Review and analysis of policy and technical studies for the introduction of biofuels to the Central American region.
- Development of a sustainable energy strategy for the Central American region.
- Development of a study for the inclusion of energy within the Millennium Development Goals for Central America.
- Analysis of clean energy opportunities for Central America under the UN Framework Convention on Climate Change and the Kyoto Protocol.
- Mentoring to student interns on topics related to rural development, renewable energy and climate change.

Sandia National Laboratories (Albuquerque, NM, USA)

July 2001 to April 2006 and January 2007 to February 2007

Member of Technical Staff

Solar Energy Technologies and International Sustainable Engineering Group

- Program Manager for the Clean Energy and Environment Program for Central America (jointly funded by the US Department of Energy and the US Agency for International Development): Management, technical leadership, and strategic planning for the regional development of clean energy, environment and climate change activities for the Mexico and Central America region (focus on technical and non-technical aspects of off-grid household, communal and productive and social use applications of renewable energy); Extensive hands-on fieldwork in rural communities with indigenous populations; Work on gender issues in development projects; Development of disaster reconstruction projects (solar photovoltaics); Implementation of the US Government energy and environment commitments to the region through CONCAUSA; Promotion of private sector involvement in emerging development markets; Technical Assistance and capacity building on clean energy, environment and climate change issues; Technical assistance to the World Bank, the Energy Sector Management Assistance Program, and the InterAmerican Development Bank on the implementation of their clean energy projects, grants and loan programs in Central America; Preparation of and giving workshops and courses on renewable energy and standards; Development of a rural electrification strategy for the Central America region; Development of energy policy reform proposals for the new Guatemalan government (2004); Development of case studies, lessons learned and other dissemination documents; Transfer of knowledge and Lessons Learned to Colombia through IPSE (Institute for Planning and Promotion of Energy Solutions for Isolated Zones) for their rural electrification plans and programs.
- North American Energy Working Group, Experts in Science and Technology: Negotiation and coordination of activities on renewable energy and energy efficiency between the United States, Canada, and Mexico; US Lead for the La Casa Nueva/La Comunidad Nueva sustainable community project; Technical Assistance for the US/Mexico Energy Bilateral Agreement.
- Strategic planning for the US Department of Energy's Office of Weatherization and Intergovernmental Programs in the development of their 5 year international energy efficiency and renewable energy strategy. Lead and prepared a requirements flow-down scheme as a framework, ensuring implementation of activities to meet Commitments.
- Program planning and development for clean energy and watershed management programs in Serbia and the Caribbean.
- Technical support and planning for the Mexico Renewable Energy Program by providing technical assistance and training to local counterparts on renewable energy technologies in off-grid household and productive use applications
- Technical support and planning for Secure Border Initiatives (US/Mexico Border).
- Member of the Sandia Recruiting Team for the University of Colorado at Boulder.

June 2000 to August 2000

Student Intern; Org. 6201, Mexico Renewable Energy Program, Renewable Energy and Electric Network Surety Office, Sandia National Laboratories

Comisión Nacional para el Ahorro de Energía (Mexico City, Mexico)

August 2000 to June 2001 and June 1999 to June 2000

Student Intern

## Renewable Energy and Cogeneration Department, National Energy Savings Commission (CONAE)

- Participation in the development of the activities program for the term 2000 - 2006 and the program Catalog for 2001
- Analysis of policies related to the development of renewable energy alternatives in Mexico and the opportunities that derive from the mechanisms under the United Nations Framework Convention on Climate Change (UNFCCC)
- Assisted in the organization and logistics of the Advisory Council to Promote Renewable Energy (COFER), and of eleven international seminars, as well as development of proposals and conclusions documents derived from these events
- Analysis of the energy sector laws and regulations of United States (focusing on the states of California, Arizona, New Mexico and Texas) and of Canada for the new proposal of Mexico's energy sector reform
- Preparation of the new proposal of inclusion of renewable energy in the energy sector laws and regulations for the transition team of the new government
- Participation in the elaboration of the Mexican standard for Solar Water Heating Systems (SWHS) for the system and the solar collector
- Translation of technical documents (English-Spanish and Spanish-English), including Florida Solar Energy Center and ANSI/ASHRAE standards
- Technical assistance
- Generation of papers on renewable energy, climate change and carbon market mechanisms.

January 1999 to May 1999, Engineering Assistant

Project: Environmental Impact Assessment for additional traffic lanes in the Paseo Tollocan, Toluca, Estado de Mexico

Other

- Member of the Editorial Board of the 'International Journal of Climate Change Strategies and Management, 2015 to 2020.
  - Peer review and editor of climate change articles, including review of references and current literature on climate change mitigation and adaptation topics.
- Member of Scientific Council, Latinoamerica Renovable, 2013 to 2020
  - Author of monthly renewable energy and climate change articles, analysis of energy and climate change data and statistics.
  - Speaker at two webinars on the topics of renewable energy investments (prior to COP20 in Lima) and renewable energies role within the INDC's (prior to COP21 in Paris) submitted ahead of COP21 in Paris 2015.
  - Participation in UNFCCC's COP23, the Sustainable Innovation Forum 2017 of Climate Action Programme, UNEP and Development and Climate Days 2017, Bonn, 2017
  - Participation in UNFCCC's COP22, the Sustainable Innovation Forum 2016 of Climate Action Programme, UNEP and Development and Climate Days 2016, Marrakech, 2016
  - Participation in UNFCCC's COP21 and Development and Climate Days 2015, Paris, 2015
  - Participation in the stakeholder consultation of the Environmental Goods Agreement (EGA) mandated by the European Commission
  - Participation in the Sustainable Innovation Forum 2014 of Climate Action Programme, UNEP and in the UNFCCC's COP20, Lima, 2014
  - Participation as speaker and participant in diverse renewable energy and climate change seminars and conferences
  - Participation, through the US National Academies of Science, in review processes for energy and climate change planning.
- Contributor and reviewer to the REN21 Renewables Global Status Report 2017, Ongoing
- Initial support to Guatemala's Environment and Natural Resources Ministry to frame their INDC's (Intended Nationally Determined Contributions) in preparation for the 2015 climate agreement in Paris, France, 2015
- Review and edit of 'The Climate Bonus: co-benefits of climate policy?' published by Earthscan in 2012.
- Review of Spanish renewable energy and climate change entries in Wikipedia, Wikimedia Foundation, December 2011 to January 2012
- U.S. Speakers Program of the United States Embassy in Mexico, Social Barriers to Renewable Energy in Monterrey, Oaxaca and Mexico City, Mexico, June 2009

- Peer reviewer for publications of the American Solar Energy Society, 2005 to 2007
- Peer reviewer for energy efficiency and renewable energy projects of the Environmental Protection Agency, 2006
- Presentation of renewable energy, climate change and rural development work in numerous conferences.
- Training and capacity building for the use of renewable energy and energy efficiency in rural Guatemalan communities.
- Participation in annual conferences of IPSE (Institute for Planning and Promotion of Energy Solutions for Isolated Zones) sharing lessons learned and best practices for rural renewable energy electrification, training on software and tools for solar and wind energy project design and specifications.

**Academic Experience:**

- Instructor for the Master's course on Regulation and Public Policies for the Energy Sector, Central American Institute for Public Administration, June 2023
- Instructor of the online course for the Latin America Energy Organization 'Analysis of energy and environmental policies in light of climate change', February-March 2016
- Thesis supervisor for MSc students in Oxford University's Environmental Change Institute on climate change, sustainability and renewable energy topics.
- Lecture on 'Climate Change and Energy Policy' at the Oregon Institute of Technology, January 2012
- Professor of Climate Change Economics in the Diplomado 'Programa de Desarrollo Ejecutivo en Planificación Energética' (PDEPE CA-MEXICO), Latin America Energy Organization (OLADE), Universidad Galileo, Guatemala, September 2010.
- Instructor in workshops focused on the use of renewable energy for diverse uses, such as 'Use of Renewable Energy in Protected Areas', 'Use of Renewable Energy for Distance Education', 'Latin America Renewable Energy Development', and 'Photovoltaic Codes and Standards', in the US, México, Guatemala, Honduras and Nicaragua, 2002 to the present.
- Instructor of clean energy courses to micro-financing institutions, Nicaragua, 2004
- Instructor of the Renewable Energy Module (technical, administrative, financial and governance aspects) in three sessions of the Diplomado Internacional de Manejo Integral de Cuencas, in Mexico and Guatemala, 2005 and 2006.
- MSc Thesis supervisor on topics of climate change, renewable energy and rural development.

**Languages:**

English: Native; Spanish: Native; Cantonese: Fair understanding

**Software:**

WINDOWS, AutoCAD 2000, OFFICE, ELECTRONICS WORKBENCH, HOMER, ENERGY 10, PV CHART, PVFCHART, NETFIT, SSSP, RETScreen Suite, PROFORM.

**Courses:**

- Technical Report Writing, June 2000, Sandia National Laboratories, Albuquerque, New Mexico
- Packaging Yourself, July 2000, Sandia National Laboratories, Albuquerque, New Mexico
- Advanced Presentation Skills, July 2000, Sandia National Laboratories, Albuquerque, New Mexico
- AutoCAD 2000 in 2D and 3D, February/March 2001, Centro Universitario México División de Estudios Superiores
- Installing Photovoltaic Systems Course, February 2003, Florida Solar Energy Center, Cocoa, Florida
- Micro-Hydro Power Workshop, Solar Energy International, April 2003, San Juan Islands, WA
- PV for Women, American Solar Energy Society, June 2003, Austin, Texas
- Focus: Achieving your Highest Priorities, February 2004, Albuquerque, New Mexico
- Erika Jones Project Management, May 2004, Albuquerque, New Mexico
- Effective Business Presentations, August 2004, Albuquerque, New Mexico
- Professional Training for Social Scientists, October 2007 to March 2008, Säid's Business School, University of Oxford
- Microsoft Office Suite (Word, PowerPoint, Excel, Access), February 2008 to June 2008, Oxford University Computing Services, University of Oxford
- Research Methods, National Centre for Research Methods, Economic and Social Research Council (UK), June 2008, University of Oxford
- 5<sup>th</sup> International Summer Academy 'Energy and the Environment', July 2008, University of Greifswald, Germany

- Introduction to Green Economics, May 2009, Green Economics Institute, UK
- LEAP, September-December 2019, Mexico City, Mexico
- Taller Modelos Mentales, CEPAL, 2020
- Evaluación y retroalimentación, CEPAL, 2020
- Normas culturales para el trabajo en equipo, CEPAL, 2020
- Active Listening, CEPAL, 2020
- Microsoft Teams, CEPAL, 2021
- Team Building, CEPAL, 2021
- Taller Derribando Barreras para la Inclusión, CEPAL. 2021
- Curso Interseccionalidad y Genero, CEPAL, 2021
- Coaching Individual, CEPAL, 2021
- Litio, CEPAL, 2022

**Awards:**

Climate and Disaster Governance Research Bursary, Institute of Development Studies, 2009  
Cambridge Who's Who VIP List of Professionals, 2008  
Small Grants from the Environmental Change Institute, Oxford University Centre for the Environment, Academic Years 2007-2008, 2008-2009, and 2009-2010  
Jesus College Graduate Scholarship, University of Oxford, Academic Years 2007-2008, 2008-2009, and 2009-2010  
Scholarship from the German Academic Exchange Service to participate in the 5<sup>th</sup> International Summer Academy 'Energy and the Environment', 2008  
Nomination to the Women's for Rural Creativity Award, 2008  
Scholarship from Mexico's Secretariat for Public Education to obtain a Doctorate Degree at the University of Oxford, 2007  
Joint CONACYT/British Council Scholarship to obtain a Doctorate Degree at the University of Oxford, 2007  
Cambridge Who's Who List of Professionals, 2007  
Finalist to the Women's for Rural Creativity Award, 2006  
Sandia National Laboratories 2005 Women's Wall of Fame  
Spot Award, Sandia National Laboratories, 2002 and 2003  
Sandia National Laboratories Fellowship for the One Year On Campus (OYOC) Program to obtain a Masters Degree  
Nomination to the National Youth Award, 1997  
80% Scholarship from Centro Universitario México División de Estudios Superiores from the 2nd to the 10th Semesters of the Undergraduate Studies  
Netzahualcóyotl Medal for outstanding achievements during High School, 1996  
Diploma of Recognition to Outstanding Students, National Autonomous University of Mexico, 1996

**Publications:**

Francisco Márquez, Debora Ley, Carolina Fuentes "CONAE AND RENEWABLE ENERGY IN MEXICO" Memorias del "Mexico Renewable Energy Program Review Meeting", Cuernavaca, Morelos, May, 2000

"MUSEUM'S GET ENERGIZED SCIENCE SUMMER CAMP CASTS LIGHT ON SOLAR ENERGY" Sandia Lab News, Vol. 52, No. 16, August 11, 2000, pág. 12.

"USE OF RENEWABLE ENERGY FOR PRODUCTIVE USE APPLICATIONS IN RURAL OFF-GRID COMMUNITIES" Presented in the "Fifth Annual Symposium of Sandia National Laboratories", Albuquerque, Nuevo México, August 2000

Francisco Márquez, Debora Ley, et. al., "RENEWABLE ENERGY IN MÉXICO: EXPERIENCES, ACTIONS AND PERSPECTIVES" Memorias del "2000-2001 APEC Energy R&D and Technology Transfer Seminar", Cuernavaca, Morelos, October, 2000

Debora Ley and Carolina Fuentes, "ENERGÍAS RENOVABLES EN EL SIGLO XXI: MOTOR PARA EL DESARROLLO SOSTENIBLE". Memorias del IV Congreso Nacional de la Asociación Mexicana para la Economía Energética. "El Sector

Energía en México de Cara al Siglo XXI: Tendencias, Política, Abastecimiento y Financiamiento", Mexico City, June, 2001 (*'Renewable Energy in the XXI Century: An Engine for Sustainable Development'. Proceedings. IV National Congress of the Mexican Association for Energy Economy. 'The Energy Sector in Mexico Looking Towards the XXI Century: Tendencias, Policies, Supply and Financing'. Mexico, June 2001*)

Debora Ley and Carolina Fuentes, "ENERGÍAS RENOVABLES Y ECOTURISMO EN UNA RESERVA DE LA BIOSFERA DEL MAR DE CORTÉS". Proceedings from the V Congreso Nacional de la Asociación Mexicana para la Economía Energética, " Oferta de Energía para el Desarrollo de México. Políticas y Financiamiento", Mexico City, May, 2002 (*'Renewable Energy and Ecotourism in a Biosphere Reserve of the Sea of Cortes'. Proceedings. V National Congress of the Mexican Association for Energy Economy. Energy Supply for the Development of Mexico. Policies and Financing'. Mexico, May 2002*)

Debora Ley and Blaise Stoltenberg, "HYBRID ELECTRIC SYSTEMS FOR THE GALAPAGOS". Proceedings from the 26ª Semana Nacional de Energía Solar of the Asociación Nacional de Energía Solar, Chetumal, Quintana Roo, México, November, 2002

Debora Ley, Charles Hanley, Robert Foster and Guillermo Mazariegos, "RURAL HONDURAN PV POWERED SCHOOLS AND COMMUNITY CENTERS". Proceeding from Solar 2006 of the American Solar Energy Society, ASME International Solar Energy Conference – Solar Engineering 2006, Denver, CO, USA, July 2006

Robert Foster, Debora Ley, Herminia Martinez, Luis Estrada, Elieneth Lara, "NICARAGUAN RENEWABLE ENERGY FOR RURAL ZONES PROGRAM INITIATIVE". Proceeding from Solar 2006 of the American Solar Energy Society, ASME International Solar Energy Conference – Solar Engineering 2006, Denver, CO, USA, July 2006

Debora Ley and Hope Corsair "EL PAPEL DE LA ELECTRIFICACIÓN RURAL RENOVABLE EN EL DESARROLLO NACIONAL", Concurso de Ensayo El Hombre y la Tierra, Julio 2006

Debora Ley and Hope Corsair "OPORTUNIDADES PARA EL SECTOR PRIVADO EN PROGRAMAS DE ENERGIZACIÓN RURAL", Memorias del XII Seminario de Ahorro de Energía, Cogeneración y Energía Renovable, PowerMex 2006, Mexico City, September 2006 (*'PRIVATE SECTOR OPPORTUNITIES IN RURAL ENERGY PROGRAMS', Proceedings. XII Seminar on Energy Savings, Cogeneration and Renewable Energy, PowerMex 2006, Mexico, September 2006*)

Robert Foster, Debora Ley, Herminia Martinez, Luis Estrada, Elieneth Lara, "ENERGÍAS RENOVABLES EN NICARAGUA: PROGRAMA DE ELECTRIFICACIÓN RURAL EN ZONAS AISLADAS". Proceeding from the 26ª Semana Nacional de Energía Solar of the Asociación Nacional de Energía Solar, Zacatecas, Zacatecas, México, October, 2007

Contributing author to Johns Hopkins University Chapter of Engineers without Borders:

"Balancing water sources to mitigate the risk of spring water contamination in the highlands of Guatemala", presented at 'Sustainable and Safe Drinking Water in Developing and Developed Countries: Where Science Meets Policy', North Carolina, USA; November 2008

Brian Smith and Debora Ley, "SUSTAINABLE TOURISM AND CLEAN WATER PROJECT FOR TWO GUATEMALAN COMMUNITIES: A CASE STUDY". Presented at the International Workshop in Water and Sanitation in International Development and Disaster Relief, Edinburgh, UK, May, 2008, Publication in progress for *Desalination*

Ley, D and H. Corsair (2008) "THE ROLE OF HUMAN ACTORS IN THE INSTITUTIONALIZATION AND APPLICATION OF TECHNOLOGICAL INNOVATIONS FOR ENERGY-BASED SUSTAINABLE DEVELOPMENT PROJECTS" Presented at the 5th International Summer Academy 'Energy and the Environment', Greifswald, Germany. Accepted for publication at 'Realising the Paradigm Shift towards Energy Sustainability – Climate Change, Technological Innovation, and the Challenge of an Optimal Instrument Mix' by Lexxion Verlag Publishers, Berlin.

Ley, D and H. Corsair (2008) 'HUMAN MOTIVATION: THE FINAL DRIVER OF SYSTEM SUCCESS. CASE STUDY OF A PRIVATELY-OWNED SOLAR PHOTOVOLTAIC SYSTEM IN XENIMAJUYU, CHIMALTENANGO, GUATEMALA'. Chapter in: Renewable Energy and the Environment. (2008) CRC Press Energy Book Series/ Taylor and Francis. Eds Abbas Ghassemi

Corsair, H.J. and D. Ley (2008) "THE COMMERCIALIZATION OF SOLAR ENERGY AS A MEANS FOR RURAL DEVELOPMENT" IEEE ENERGY2030 Proceedings. November, 2008. Atlanta, GA USA

Corsair, H.J. and D. Ley (2009) "ENERGY SUPPLY RISK IN ISOLATED COMMUNITIES WITH RENEWABLE ENERGY SYSTEMS" Presented at the 2009 Annual Meeting of the Association of American Geographers.

Billett, S. and D. Ley (2010) "THE WAY OF THE WORLD BANK: FUNDING CLEAN ENERGY IN LATIN AMERICA" Presented at the 2010 Annual Meeting of the Association of American Geographers.

D. Ley (2016), "SUSTAINABLE DEVELOPMENT, CLIMATE CHANGE, AND RENEWABLE ENERGY IN RURAL CENTRAL AMERICA". Chapter in: Evaluating Climate Change for Sustainable Development (2016) Springer Verlag GmbH. Eds. J. Uitto, J. Puri, R. D. van den Berg.

Paulo Nobre, Ph.D.; Enio B Pereira, Ph.D.; Francinete F Lacerda, Dr.; Marcel Bursztyn, Ph.D.; Eduardo A Haddad, Ph.D.; Debbie Ley, Ph.D. (2019), "SOLAR SMART GRID AS A PATH TO ECONOMIC INCLUSION AND ADAPTATION TO CLIMATE CHANGE IN THE BRAZILIAN SEMIARID NORTHEAST" International Journal of Climate Change Strategies and Management

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