

Michael Stadler



<https://www.linkedin.com/in/StadlerMichael>

<https://scholar.google.com/citations?user=oV-22vkAAAAJ&hl>

SUMMARY

Dr. Michael Stadler is a Staff Scientist at Berkeley Lab, California and is leading the Grid Integration Group. He studied at Vienna University of Technology, from which he holds a Master's degree in electrical engineering and a Ph.D. with honors in energy economics. He is a recipient of the PECASE Award of the White House. The Presidential Early Career Award for Scientists and Engineers (PECASE) is the highest honor bestowed by the U.S. government on science and engineering professionals in the early stages of their independent research careers. Michael also leads the microgrid team and distributed energy resources team at Berkeley Lab and is the lead developer of DER-CAM. He is also the CTO and founder of the Center for Energy and innovative Technologies (CET) in Austria. He leads a team of more than 40 researchers and students in the USA, China, and Europe. He is also a reviewer for the American Society of Mechanical Engineers (ASME), ASHRAE, Applied Energy, Elsevier, European Council for an Energy Efficient Economy (ECEEE), European Transactions on Electrical Power, International Journal of Electronic Business Management, as well as Institute of Electrical and Electronics Engineers (IEEE). Michael has published more than 200 papers, journal papers, reports, as well as six software tools in his 15 year career to date.

INTERESTS

Smartgrids, microgrids, microgrid controller design, building control, building and Distributed Generation optimization, energy economics, Combined Heat and Power, renewable energy

EDUCATION

Ph.D. (with honours) in Energy Economics

Vienna University of Technology, Vienna, Austria, 2003

Thesis title: "The relevance of demand-side-measures and elastic demand curves to increase market performance in liberalized electricity markets: The case of Austria."

Field: Electrical Engineering and Energy Economics

M.S. (excellent completion) in Power Engineering and Electrical Drives

Vienna University of Technology, Vienna, Austria, 2001

Diploma thesis: “A Model for Optimal Portfolio Management in a Liberalized Electricity Market. The Computer Program Optimum.”

HONOURS AND AWARDS

2016: Celebration of Excellence, Lawrence Berkeley National Laboratory, Honored for excellent and outstanding scientific achievements.

2013/2016: US Presidential Early Career Award for Scientists and Engineers (PECASE) 2013, White House. Received for microgrid and modelling work with the Distributed Energy Resources Customer Adoption Model (DER-CAM) for the year 2013. Award was presented in 2016 after a 2 1/2 year scientific evaluation phase. The Presidential Early Career Award for Scientists and Engineers is the highest honor bestowed by the United States Government on science and engineering professionals in the early stages of their independent research careers. The recipients are employed or funded by various US federal agencies, including the Department of Energy, which join together annually to nominate the most meritorious scientists and engineers whose accomplishments show the greatest promise for assuring America’s preeminence in science and engineering and contributing to the awarding agencies’ missions. The awards, established by President Clinton in 1996, are coordinated by the Office of Science and Technology Policy within the Executive Office of the President. Awardees are selected for their pursuit of innovative research at the frontiers of science and technology and their commitment to community service as demonstrated through scientific leadership, public education, or community outreach.

<https://www.whitehouse.gov/the-press-office/2016/02/18/president-obama-honors-extraordinary-early-career-scientists>

2013: IECON 2013, 39th Annual Conference of the IEEE Industrial Electronics Society, Certificate of appreciation for best paper in session TT03 3 - Optimization techniques for distribution systems

2011: Kery Foundation of the province of Burgenland, Austria honours the EnRiMa project.

2004: Ph.D. with honours financially awarded by the Austrian chamber of commerce

2003: Ph.D. with honours financially awarded by the upper Austrian government and the upper Austrian energy savings club (O.Ö. Energiesparverband)

2003: Ph.D. with honours financially awarded by the Austrian Energy Control, regulatory authority for the liberalized energy market in Austria

2003: Ph.D. with honours financially awarded by the Siegfried Ludwig Foundation

2002: Financial award from the lower Austrian government for a research fellow position at Lawrence Berkeley National Laboratory

2002: Financial award from Vienna University of Technology for a research fellow position at Lawrence Berkeley National Laboratory

RESEARCH EXPERIENCE

Lawrence Berkeley National Laboratory at University of California, Berkeley, CA

Energy Storage and Distributed Resources Division

Grid Integration Group

March 2015 – present: Group Leader Grid Integration Group and Team Lead Microgrid Research & Development

Lawrence Berkeley National Laboratory at University of California, Berkeley, CA

Energy Storage and Distributed Resources Department

Grid Integration Group

June 2013 – present: Team Lead Microgrid Research & Development

January 2012 – present: Scientist

Lawrence Berkeley National Laboratory at University of California, Berkeley, CA

Energy Analysis Department

Technology Evaluation, Modeling, & Assessment Group

October 2009 – December 2011: Scientist

February 2008 – September 2009: Postdoctoral Fellow

Center for Energy and innovative Technologies, Austria

December 2006 – present: Chief Technical Officer and Founder

Lawrence Berkeley National Laboratory at University of California, Berkeley, CA

Energy Analysis Department

March 2006 – September 2006: Guest Researcher

September 2005 – February 2006: Postdoctoral Fellow

February 2002 – September 2002: Guest Researcher

University of California at Berkeley, CA

Energy and Resources Group at University of California at Berkeley,

Pacific Region CHP Application Center

March 2006 – September 2006: Postdoctoral Fellow

Vienna University of Technology, Austria

Institute of Power Systems and Energy Economics,

Energy Economics Group

April 2004 – August 2005: Postgraduate Researcher & Senior Software Developer

December 2003 – August 2005: Postgraduate Researcher

March 2001 – November 2003: Junior Research Fellow

November 2000 – February 2001: Student Collaborator

TEACHING and OTHER EXPERIENCES***Universidad Pontificia Comillas, Spain***

March 2014: Invited seminars within the Erasmus Mundus Joint Master in Economics and Management of Network Industries

University of Applied Sciences, FH Centres for Advanced Studies, FH - Pinkafeld, Austria

September 2009 – February 2013: Lecturer in optimization and stochastic simulation

February 2007 – July 2013: Lecturer in hydro power, wave power, and tidal power

KWI Consultants Corporation, St. Pölten, Austria

March 2007 – December 2007: Consultant and Team Leader

LEADERSHIP**Research Team**

Scientific leadership of the Grid Integration Group with 40 researchers and students

Scientific leadership of the Microgrid research team with 15 researchers and students

Most Recent Mentored Ph.D Students in the Field of Distributed Energy Resources

2014: Sebastian Wagner, Information Systems department of the University of Freiburg, Germany

2014: Michael Hartner, Institute of Energy Systems and Electrical Drives Vienna University of Technology, Austria

2014: Tobias Brandt, Information Systems department of the University of Freiburg, Germany

2013: Alessandro Pensini, Technical University of Denmark (DTU)

2013: Christian Milan, Department of Energy Technology, Aalborg University, Denmark

2013: David Steen, Department of Energy and Environment, Chalmers University of Technology, Sweden

2012 Alexander Schuller: Karlsruhe Institute of Technology, Germany

2012: Jan Steinbach, Fraunhofer Institute for Systems and Innovation Research ISI, Karlsruhe, Germany

2011: Maximilian Kloess, Institute of Energy Systems and Electrical Drives, Vienna University of Technology, Austria

2009, 2011: Gonçalo Cardoso, MIT-Portugal Program at Instituto Superior Técnico, University of Lisbon

Most Recent Mentored Theses in the Field of Distributed Energy Resources

Anna Schoenbein (2016): *Using Electronic Market Mechanisms to Coordinate Microgrids with Heterogeneous Stakeholders*, University of Freiburg, Germany

Tim Schittekatte (2015): *The impact of short term stochastic variation in solar radiation on the investment and planning of a microgrid*, Erasmus Mundus EMIN, Universidad Pontificia Comillas, Spain

Ryan Tulabing (2015): *Smart Grid: Evaluation of Flexible and Responsive Loads for Frequency Control and Power Balance in the Chinese Electrical Grid*, European Joint Masters ME3, Ecole des Mines de Nantes, France

Bernhard Kossak (2015): *Designing and Testing of Thermal Equations to Model Temperature Behavior of Buildings*, University of Applied Science Technikum Wien, Austria

Christoph Gehbauer (2014): *Implementation of extended thermodynamic capabilities into the optimization tool „DER-CAM“*, University of Applied Science Technikum Wien, Austria

Shi Wang (2014): *Distributed Solar Thermal Energy in China: A regional analysis of building energy costs and CO₂ emissions*, Universidad Pontificia Comillas, Spain

David Berger (2013): *Ensuring flexible optimization of thermal energy supply at Campus Pinkafeld*, Burgenland University of Applied Science, Austria

Markus Groissböck (2011): *Assessment of Distributed Energy Resource Optimization Potentials at Campus Pinkafeld*, Burgenland University of Applied Science, Austria

Industry and Academic Collaborations (excerpt)*USA and Canada*

Bosch, General Electric Energy Consulting, Burns Group Engineering and Construction, Willdan Energy Solutions, One-Cycle Control Inc., Massachusetts Institute of Technology, University of San Diego, University of New Mexico, University of Wisconsin–Madison, McGill University, etc.

Europe

Siemens, Hidrocantábrico Energía, Tecnia Research and Innovation, Institute of Information Systems and Marketing (IISM), Karlsruhe Institute of Technology, Technische Universität Wien, Instituto Superior Técnico - Lisboa, Universidad Pontificia Comillas Madrid, University of Freiburg, Linköping Universitet, Stockholm University, University College London, International Institute for Applied System Analysis (IIASA), Universidad Rey Juan Carlos, SINTEF Group, Mines ParisTech, University of Applied Science Technikum Wien, University of Applied Science Burgenland, etc.

Others

CSIRO, Australia; Building Physics, South Africa;

COPYRIGHTS: 6**PUBLICATIONS****Summary**

Number of Peer Reviewed Archival Journal Articles	30
Refereed Conference Proceedings Publications	60
Non-Refereed Journals, Books, and Proceedings Publications	27
Invited Talks, Seminars, Briefings, and Interviews	33
Project Reports and Deliverables	53
Scientific Software Tools	6
Total	209

Peer-Reviewed Archival Journal Articles

GHATIKAR Girish, Salman MASHAYEKH, Michael STADLER, Rongxin YIN, and Zhenhua LIU, *“Distributed Energy Systems Integration and Demand Optimization for Autonomous Operations and Electric Grid Transactions,”* Applied Energy Journal by Elsevier, Special Issue on Integrated Energy Systems, Volume XXX, X Month 201X, page X-X, ISSN: 0306-2619, LBNL-1003742.

STADLER Michael, Gonalo CARDOSO, Salman MASHAYEKH, Thibault FORGET, Nicholas DEFOREST, Ankit AGARWAL, Anna SCHÖNBEIN, *“Value streams in microgrids: A literature review,”* Applied Energy Journal by Elsevier, Volume 162, 15 January 2016, page 980-989, ISSN: 0306-2619, <http://dx.doi.org/10.1016/j.apenergy.2015.10.081>, LBNL-1003608.

KOSSAK Bernhard, Michael STADLER, *“Adaptive thermal zone modeling including the storage mass of the building zone,”* Energy and Buildings Journal by Elsevier, Volume 109, 15 December 2015, page 407-417, ISSN 0378-7788, <http://dx.doi.org/10.1016/j.enbuild.2015.10.016>

LEE Eleanor S., Christoph GEHBAUER, Brian E. COFFEY, Andrew MCNEIL, Michael STADLER, Chris MARNAY: *“Integrated control of dynamic facades and distributed energy resources for energy cost minimization in commercial buildings,”* Solar Energy by Elsevier, Volume 122, December 2015, Pages 1384–1397, <http://dx.doi.org/doi:10.1016/j.solener.2015.11.003>, LBNL-1003927.

MILAN Christian, Michael STADLER, Gonalo CARDOSO, Salman MASHAYEKH, *“Modelling of non-linear CHP efficiency curves in distributed energy systems,”* Applied Energy Journal by Elsevier, Volume 148, 15 June 2015, page 334-347, ISSN: 0306-2619, <http://dx.doi.org/10.1016/j.apenergy.2015.03.053>, LBNL-6979E.

- ROCHA P., A. SIDDIQUI, M. STADLER, *“Improving Energy Efficiency via Smart Building Energy Management Systems: A Comparison with Policy Measures,”* Energy and Buildings Journal by Elsevier, Volume 88, 1 February 2015, page 203-213, ISSN 0378-7788, <http://dx.doi.org/10.1016/j.enbuild.2014.11.077>.
- STADLER M., M. GROISSBÖCK, G. CARDOSO, C. MARNAY, *“Optimizing Distributed Energy Resources and Building Retrofits with the Strategic DER-CAModel,”* Applied Energy Journal by Elsevier, Volume 132, 1 November 2014, page 557-567, ISSN: 0306-2619, <http://dx.doi.org/10.1016/j.apenergy.2014.07.041>, LBNL-6779E.
- STEEN David, Michael STADLER, Gonçalo CARDOSO, Markus GROISSBÖCK, Nicholas DEFOREST, Chris MARNAY, *“Modeling of thermal storage systems in MILP distributed energy resource models,”* Applied Energy Journal by Elsevier, Volume 137, 1 January 2015, page 782–792, ISSN: 0306-2619, <http://dx.doi.org/10.1016/j.apenergy.2014.07.036>, LBNL-6757E.
- CANO EL, M. GROISSBÖCK, JM. MOGUERZA, and M. STADLER, *“A Strategic Optimisation Model for Energy Systems Planning,”* Energy and Buildings Journal by Elsevier, Volume 81, October 2014, page 416-423, ISSN 0378-7788, <http://dx.doi.org/10.1016/j.enbuild.2014.06.030>.
- MENDES G., W. FENG, M. STADLER, J. STEINBACH, J. LAI, N. ZHOU, C. MARNAY, Y. DING, J. ZHAO, Z. TIAN, N. ZHU, *“Regional Analysis of Building Distributed Energy Costs and CO₂ Abatement: A U.S. – China Comparison,”* Energy and Buildings Journal by Elsevier, Volume 77, July 2014, page 112-129, ISSN 0378-7788, <http://dx.doi.org/10.1016/j.enbuild.2014.03.047>, LBNL-6678E.
- DEFOREST Nicholas, Gonçalo MENDES, Michael STADLER, Wei FENG, Judy LAI, Chris MARNAY, *“Optimal Deployment of Thermal Energy Storage under Diverse Economic and Climate Conditions,”* Applied Energy Journal by Elsevier, Volume 119, 15 April 2014, page 488-496, ISSN: 0306-2619, <http://dx.doi.org/10.1016/j.apenergy.2014.01.047>, LBNL-6645E.
- CARDOSO G., M. STADLER, M. C. BOZCHALUI, R. SHARMA, C. MARNAY, A. BARBOSA-PÓVOA, P. FERRÃO, *“Optimal investment and scheduling of distributed energy resources with uncertainty in electric vehicle driving schedules,”* published in Energy by Elsevier, Volume 64, 2014, Pages 17-30, ISSN: 0360-5442, <http://dx.doi.org/10.1016/j.energy.2013.10.092>, LBNL-6471E.
- PEREA E., A. MERA, L. M. SANTOS, A. ALVAREZ, E. L. CANO, J. M. MOGUERZA, A. SIDDIQUI, M. STADLER, *“Aplicación para la toma de decisiones relativas al uso eficiente de energía en edificios,”* DYNA Energía y Sostenibilidad, Vol. 2-1, 2013. DOI: <http://dx.doi.org/10.6036/ES6901> (only available in Spanish).
- GROISSBÖCK Markus, Somayeh HEYDARI, Ana MERA, Eugenio PEREA, Afzal SIDDIQUI, Michael STADLER, *“Optimizing Building Energy Operations via Dynamic Zonal Temperature Settings,”* Journal of Energy Engineering, American Society of Civil Engineers (ASCE), 2013, [http://dx.doi.org/10.1061/\(ASCE\)EY.1943-7897.0000143](http://dx.doi.org/10.1061/(ASCE)EY.1943-7897.0000143), ISSN (online): 1943-7897.

- CARDOSO G., M. STADLER, A. SIDDIQUI, C. MARNAY, N. DEFOREST, A. BARBOSA-PÓVOA, P. FERRÃO, *"Microgrid Reliability Modeling and Battery Scheduling Using Stochastic Linear Programming,"* Journal of Electric Power Systems Research, Volume 103, October 2013, Pages 61-69, ISSN: 0378-7796, LBNL-6309E.
- STADLER Michael, Maximilian KLOESS, Markus GROISSBÖCK, Gonçalo CARDOSO, Ratnesh SHARMA, Mohammad C. BOZCHALUI, Chris MARNAY: *"Electric Storage in California's Commercial Buildings,"* Applied Energy Journal by Elsevier, Volume 104, April 2013, page 711-722, ISSN: 0306-2619, LBNL-6071E.
- MARNAY Chris, Michael STADLER, Afzal SIDDIQUI, Nicholas DEFOREST, Jon DONADEE, Prajesh BHATTACHARYA, and Judy LAI: *"Applications of Optimal Building Energy System Selection and Operation,"* Journal of Power and Energy, Vol. 227, No. 1, Print ISSN: 0957-6509, Online ISSN: 2041-2967.
- STADLER Michael, Chris MARNAY, Maximilian KLOESS, Gonçalo CARDOSO, Gonçalo MENDES, Afzal SIDDIQUI, Ratnesh SHARMA, Olivier MÉGEL, Judy LAI: *"Optimal Planning and Operation of Smart Grids with Electric Vehicle Interconnection,"* Journal of Energy Engineering, American Society of Civil Engineers (ASCE), Special Issue: Challenges and opportunities in the 21st century energy infrastructure, Volume 138, Issue 2, June 2012, ISSN 0733-9402 / e-ISSN - 1943-7897, [http://dx.doi.org/10.1061/\(ASCE\)EY.1943-7897.0000070](http://dx.doi.org/10.1061/(ASCE)EY.1943-7897.0000070), LBNL-5251E.
- BEER Sebastian, Tomás GÓMEZ, David DALLINGER, Ilan MOMBER, Chris MARNAY, Michael STADLER, Judy LAI: *"An Economic Analysis of Used Electric Vehicle Batteries Integrated into Commercial Building Microgrids,"* IEEE Transactions on Smart Grid, Vol. 3, No. 1, March 2012, ISSN: 1949-3053.
- NORWOOD Zack, Tim LIPMAN, Michael STADLER, Chris MARNAY: *"Assessment of Combined Heat and Power System Premium Power Applications in California,"* International Journal of Distributed Energy Resources, Volume 6 Number 2 April – June 2010, page 131 – 147, ISSN 1614-7138, LBNL-3563E.
- STADLER Michael, Afzal SIDDIQUI, Chris MARNAY, Hirohisa AKI, Judy LAI: *"Control of Greenhouse Gas Emissions by Optimal DER Technology Investment and Energy Management in Zero-Net-Energy Buildings,"* European Transactions on Electrical Power 2010, Special Issue on Microgrids and Energy Management, Volume 21, Issue 2, Online ISSN: 1546-3109, LBNL-2692E.
- KOMIYAMA Ryoichi, Chris MARNAY, Michael STADLER, Judy LAI, Sam BORGESON, Brian COFFEY, Inês Lima AZEVEDO: *"Japan's Long-term Energy Demand and Supply Scenario to 2050 - Estimation for the Potential of Massive CO₂ Mitigation,"* IEEJ Energy Journal of the Institute of Energy Economics, Japan, Vol. 4, No.4 2009, ISSN 1880-9286, LBNL-3849E.
- KOMIYAMA Ryoichi, Chris MARNAY, Michael STADLER, Inês Lima AZEVEDO, Sam BORGESON, Brian COFFEY, Judy LAI: *"Japan's Energy Outlook for 2050 with Stochastic Sectoral*

Modelling,” IEEJ Energy Journal of the Institute of Energy Economics, Japan, Vol. 4, No.2 2009, ISSN 1880-9286.

MARNAY C., G. VENKATARAMANAN, M. STADLER, A. SIDDIQUI, R. FIRESTONE, B. CHANDRAN: *“Optimal Technology Selection and Operation of Microgrids in Commercial Buildings,”* IEEE Transactions on Power Systems, Volume 23, Issue 3, page 975-982, August 2008, ISSN 0885-8950.

STADLER Michael, Friederich KUPZOG, Peter PALENSKY: *“Distributed Energy Resource Allocation and Dispatch: an Economic and Technological Perception,”* 2007, International Journal of Electronic Business Management, Volume 5, Number 3, page 182 – 196, ISSN 1728-2047.

STADLER Michael, Lukas KRANZL, Claus HUBER, Reinhard HAAS, and Elena TSIOLIARIDOU: *“Policy Strategies and Paths to Promote Sustainable Energy Systems - The Dynamic Invert Simulation Tool,”* January 2007, Energy Policy, Volume 35, Issue 1, page 597 – 608, ISSN 0301-4215.

KRANZL Lukas, Michael STADLER, Claus HUBER, Reinhard HAAS, Mario RAGWITZ, Anselm BRAKHAGE, Adam GULA, Arkadiusz FIGORSKI: *“Deriving efficient policy portfolios promoting sustainable energy systems – case studies applying Invert simulation tool,”* December 2006, Renewable Energy, Volume 31, Issue 15, page 2393-2410, ISSN 0960-1481.

TSIOLIARIDOU E., BAKOS G.C., and STADLER M.: *“A new energy planning methodology for the penetration of renewable energy technologies in electricity sector – application for the island of Crete,”* December 2006, Energy Policy, Volume 34, Issue 18, page 3757-3764, ISSN 0301-4215.

STADLER Michael, P. PALENSKY, B. LORENZ, M. WEIHS, and C. ROESENER: *“Integral Resource Optimization Networks and their Techno-Economic Constraints,”* International Journal of Distributed Energy Resources, Volume 1 Number 4, October – December 2005, page 299 – 320, ISSN 1614-7138.

SIDDIQUI Afzal S., Chris MARNAY, Jennifer L. EDWARDS, Ryan M. FIRESTONE, Srijay GHOSH, and Michael STADLER: *“Effects of a CarbonTax on Microgrid Combined Heat and Power Adoption,”* Journal of Energy Engineering, American Society of Civil Engineers (ASCE), SPECIAL ISSUE: QUANTITATIVE MODELS FOR ENERGY SYSTEMS, April 2005, Volume 131, Number 1, page 2 – 25, ISSN 0733-9402.

Refereed Conference Proceedings Publications

PENSINI Alessandro, Matthew ROBINSON, Nicholas HEINE, Michael STADLER and Andrea MAMMOLI: *“Assessment of grid-friendly collective optimization framework for distributed energy resources,”* IEEE Power and Energy Society ISGT Asia 2015, 4-6 November 2015, Bangkok, Thailand, LBNL-1001907.

- BRANDT Tobias, Nicholas DEFOREST, Michael STADLER, Dirk NEUMANN: *“Power Systems 2.0: Designing an Energy Information System for Microgrid Operation,”* 2014 International Conference on Information Systems (ICIS 2014), December 14-17, 2014, Auckland, New Zealand, LBNL-6911E.
- DEFOREST N., M. STADLER, G. CARDOSO, T. BRANDT, S. NARAYANAN: *“Enabling broad adoption of distributed PV-storage systems via supervisory planning and control,”* 2014 ACEEE Summer Study on Energy Efficiency in Buildings, 17-22 August 2014, Pacific Grove, California, LBNL-6715E.
- ROCHA P., M. GROISSBÖCK, A. SIDDIQUI, M. STADLER: *“An Integrated Approach to Optimal Energy Operations in Buildings,”* e-nova international congress 2013, University of Applied Science Campus Pinkafeld, Nov. 14-15 2013.
- CARDOSO G., M. STADLER, M. CHEHREGHANI BOZCHALUI, R. SHARMA, C. MARNAY, A. BARBOSA-PÓVOA, and P. FERRÃO: *“Stochastic Programming of Vehicle to Building Interactions with Uncertainty in PEVs Driving for a Medium Office Building,”* IEEE IECON 2013, Technical Track on Electric and Plug-in Hybrid Electric Vehicles, November 10-13 2013, Vienna, Austria, LBNL-6416E.
- HENKEL Martin, Janis STIRNA, Markus GROISSBÖCK, Michael STADLER: *“Supporting Energy Efficiency Decisions with IT: Initial Experiences from the EnRiMa Project,”* BIR 2013, 12th International Conference on Perspectives in Business Informatics Research, 23.09-25.09.2013, Warsaw, Poland.
- LÓPEZ Emilio, Markus GROISSBÖCK, Javier MOGUERZA and Michael STADLER: *“Strategic Buildings' Energy Systems Planning,”* oral presentation, the OR Society YoungOR 18 biennial conference, 9–11 April 2013, Exeter, UK.
- MARNAY Chris, Terry CHAN, Nicholas DEFOREST, Judy LAI, Jason MACDONALD, Michael STADLER, Tobias ERDMANN, Andreas HOHEISEL, Markus MÜLLER, Scott SABRE, Ed KOCH, Paul LIPKIN, Robert W. ANDERSON, Spence GERBER, and Elizabeth REID: *“Los Angeles Air Force Base Vehicle to Grid Pilot Project,”* ECEEE 2013 Summer Study 3–8 June 2013, Belambra Les Criques, France, ISBN: 978-91-980482-2-3 (printed) / 978-91-980482-3-0 (digital), LBNL-6154E.
- DEFOREST Nicholas, Gonçalo MENDES, Michael STADLER, Wei FENG, Judy LAI, Chris MARNAY: *“Thermal Energy Storage for Electricity Peak-demand Mitigation: A Solution in Developing and Developed World Alike,”* ECEEE 2013 Summer Study 3–8 June 2013, Belambra Les Criques, France ISBN: 978-91-980482-2-3 (printed) / 978-91-980482-3-0 (digital), LBNL-6308E.
- PEREA E., A. MERA, S. HEYDARI, A. SIDDIQUI, M. STADLER, M. GROISSBÖCK, A. ALVAREZ: *“Decision Support System for Distributed Energy Resources and Efficient Utilisation of Energy in Buildings,”* 22nd International Conference on Electricity Distribution, CIRED, Stockholm, 10-13 June 2013.
- MAMMOLI A., M. STADLER, N. DEFOREST, H. BARSUN and C. MARNAY: *“Software as-a-Service Optimised Scheduling of a Solar-Assisted HVAC System with Thermal*

Storage,” The 3rd International Conference on Microgeneration and Related Technologies, Naples, Italy, 15-17 April 2013, LBNL-6127E.

GROISSBÖCK Markus, Michael STADLER, Afzal SIDDIQUI, Somayeh HEYDARI, Martin HENKEL, Janis STIRNA, Emilio LOPEZ, Javier MOGUERZA, Eugenio PEREA: *“Optimizing Distributed Energy Resources, Passive Measures, and the daily Operation at Campus Pinkafeld,”* e-nova international congress 2012, University of Applied Science Campus Pinkafeld, Nov. 22-23 2012, Pinkafeld, Austria, CET-number: C-2012-1.

DEFOREST Nicholas, Michael STADLER, Chris MARNAY, Jon DONADEE: *“Microgrid Dispatch for Macrogrid Peak-Demand Mitigation,”* 2012 ACEEE Summer Study on Energy Efficiency in Buildings, August 12 – 17, 2012, Pacific Grove, California, LBNL-5727E.

FENG Wei, Nan ZHOU, Chris MARNAY, Michael STADLER, Judy LAI: *“Building Distributed Energy Performance Optimization for China -- a Regional Analysis of Building Energy Costs and CO₂ Emissions,”* 2012 ACEEE Summer Study on Energy Efficiency in Buildings, August 12 – 17, 2012, Pacific Grove, California, and LBNL-5728E.

MENDES Gonçalo, Michael STADLER, Chris MARNAY, Paulo FERRÃO, Christos IOAKIMIDIS: *“Modeling of Plug-in Electric Vehicles’ Interactions with a Sustainable Community Grid in the Azores,”* 2012 ACEEE Summer Study on Energy Efficiency in Buildings, August 12 – 17, 2012, Pacific Grove, California, LBNL-5730E.

MENDES Gonçalo, Paulo FERRÃO, Christos IOAKIMIDIS, Michael STADLER, Chris MARNAY: *“Multi-building microgrids for a distributed energy future in Portugal,”* International Conference on Applied Energy, ICAE 2012, Jul 5-8, 2012, Suzhou, China, paper ID: ICAE2012-10758, LBNL-81766.

MARNAY Chris, Steven LANZISERA, Michael STADLER, and Judy LAI: *“Building Scale DC Microgrids,”* 2012 IEEE Energytech, 30 May-31 May 2012, Cleveland, OH, USA, LBNL-5729E.

STADLER Michael, Chris MARNAY, Nicholas DEFOREST, Jo ETO, Gonçalo CARDOSO, Andrea MAMMOLI, Hans BARSUN, Richard BURNETT, Dave KLAPP, Judy LAI: *“Web-Based Economic and Environmental Optimization of Microgrids,”* 2012 IEEE PES Innovative Smart Grid Technologies Conference, January 16-20 2012, Washington Marriott Wardman Park, Washington D.C., USA.

GROISSBÖCK Markus, Michael STADLER, Thomas EDLINGER, Afzal SIDDIQUI, Somayeh HEYDARI, Eugenio PEREA: *“The First Step for Implementing a Stochastic based Energy Management System at Campus Pinkafeld,”* e-nova international congress 2011, University of Applied Science Campus Pinkafeld, Nov. 24-25 2011, Pinkafeld, Austria, CET-number: C-2011-1.

STADLER Michael, Chris MARNAY, Ratnesh SHARMA, Gonçalo MENDES, Maximillian KLOESS, Gonçalo CARDOSO, Oliver MÉGEL, Afzal SIDDIQUI: *“Modeling Electric Vehicle Benefits Connected to Smart Grids,”* 7th IEEE Vehicle Power and Propulsion Conference, Sept 6-9 2011, Chicago, IL 60604, USA, LBNL-4929E.

- STADLER Michael, Jonathan DONADEE, Chris MARNAY, Gonalo MENDES, Jan von APPEN, Olivier MEGEL, Prajesh BHATTACHARYA, Judy LAI: *“Application of the Software as a Service Model to the Control of Complex Building Systems,”* ECEEE 2011 Summer Study, 6–11 June 2011, Belambra Presqu’ile de Giens, France, ISBN 978-91-633-4455-8, LBNL-4860E.
- MARNAY Chris, Nicholas DEFOREST, Michael STADLER, Judy LAI, Carlos DIERCKXSENS, Jonathan DONADEE, Gonalo Ferreira CARDOSO: *“A Green Prison: Santa Rita Jail Creeps Towards Zero Net Energy (ZNE),”* ECEEE 2011 Summer Study, 6–11 June 2011, Belambra Presqu’ile de Giens, France, ISBN 978-91-633-4455-8, LBNL-4497E.
- LAI Judy, Nicholas DEFOREST, Sila KILICCOTE, Michael STADLER, Chris MARNAY, Jon DONADEE: *“Evaluation of evolving residential electricity tariffs,”* ECEEE 2011 Summer Study, 6–11 June 2011, Belambra Presqu’ile de Giens, France, ISBN 978-91-633-4455-8, LBNL-4496E.
- VON APPEN Jan, Chris MARNAY, Michael STADLER, Ilan MOMBER, David KLAPP, and Alexander VON SCHEVEN: *“Assessment of the Economic Potential of Microgrids for Reactive Power Supply,”* 8th International Conference on Power Electronics, ICPE2011-ECCE Asia, Jeju Island, Korea, 29 May-2 June 2011.
- MARNAY Chris, Michael STADLER, Afzal SIDDIQUI, Nicholas DEFOREST, Jon DONADEE, Prajesh BHATTACHARYA, and Judy LAI: *“Applications of Optimal Building Energy System Selection and Operation,”* Second International Conference of Microgeneration and Related Technologies, University of Strathclyde, Glasgow, Scotland, 4-6 April 2011, LBNL-4764E.
- STADLER Michael, Nicholas DEFOREST, Florence BONNET, Chris MARNAY, Judy LAI, and Trucy PHAN: *“Behavioral Aspects in Simulating the Future US Building Energy Demand,”* 2010 Behavior, Energy and Climate Change Conference, November 14 - 17, 2010, Sacramento, California, USA, LBNL-4079E.
- STADLER Michael, Ilan MOMBER, Olivier MEGEL, Tomas GOMEZ, Chris MARNAY, Sebastian BEER, Judy LAI, and Vincent BATTAGLIA: *“The added economic and environmental value of plug-in electric vehicles connected to commercial building microgrids,”* 2nd European Conference on SmartGrids and E-Mobility, October 20 -21, 2010, Bedford Hotel & Congress Centre, Brussels, Belgium, LBNL-3885E.
- STADLER Michael, Nicholas DEFOREST, Florence BONNET, Chris MARNAY, Judy LAI, and Trucy PHAN: *“Simulation of the GHG Abatement Potentials in the U.S. Building Sector by 2050,”* 29th USAEE/IAEE Annual North American Conference, October 14-16, 2010, at the Hyatt Regency Calgary, Canada, LBNL-4013E.
- MOMBER Ilan, Tomas GOMEZ, Giri VENKATARAMANAN, Michael STADLER, Sebastian BEER, Judy LAI, Chris MARNAY, and Vincent BATTAGLIA: *“Plug-in Electric Vehicle Interactions with a Small Office Building: An Economic Analysis using DER-CAM,”* IEEE PES 2010 General Meeting, Power System Analysis and Computing and

Economics, July 25th - 29th, 2010, Minnesota, USA, ISSN: 1944-9925, E-ISBN: 978-1-4244-8357-0, Print ISBN: 978-1-4244-6549-1, LBNL-3555E.

STADLER Michael, Chris MARNAY, Judy Lai, Gonçalo CARDOSO, Olivier MÉGEL, and Afzal SIDDIQUI: *"The Influence of a CO₂ Pricing Scheme on Distributed Energy Resources in California's Commercial Buildings,"* 23rd Annual Western Conference, Advanced Workshop in Regulation and Competition, June 23-25, 2010, Hyatt Regency, Monterey, California, USA, LBNL-3560E.

SIDDIQUI Afzal, Michael STADLER, Chris MARNAY, and Judy LAI: *"Optimal Control of Distributed Energy Resources and Demand Response under Uncertainty,"* IAEE's Rio 2010 International Conference, June 6-9, 2010, InterContinental Rio Hotel – Rio de Janeiro, Brazil, LBNL-3828E.

MARNAY Chris, Michael STADLER, Gonçalo CARDOSO, Oliver MÉGEL, Judy LAI, and Afzal SIDDIQUI: *"The Added Economic and Environmental Value of Solar Thermal Systems in Microgrids with Combined Heat and Power,"* 3rd International Conference on Solar Air-Conditioning, September 30 – October 2, 2009, University of Palermo, Sicily, Italy, LBNL-2629E.

STADLER Michael, Chris MARNAY, Gonçalo CARDOSO, Olivier MEGEL, Afzal SIDDIQUI, and Judy LAI: *"Greenhouse Gas Abatement with Distributed Generation in California's Commercial Buildings,"* 10th IAEE European Conference, Energy, Policies and Technologies for Sustainable Economies, 7-10 September 2009, Hofburg Congress Center, Austria, LBNL-2693E.

MARNAY Chris, Judy LAI, Michael STADLER, and Afzal SIDDIQUI: *"Added Value of Reliability to a Microgrid: Simulations of Three California Buildings,"* CIGRÉ and IEEE PES Symposium, Integration of wide-scale renewable resources into the power delivery system, July 29th-31st, 2009, Calgary, Canada, LBNL-1853E.

STADLER Michael, Chris MARNAY, Inês LIMA AZEVEDO, Ryoichi KOMIYAMA, and Judy LAI: *"The Open Source Stochastic Building Simulation Tool SLBM and its Capabilities to Capture Uncertainty of Policymaking in the US Building Sector,"* 32nd IAEE International Conference, Energy, Economy, Environment: The Global View, June 21-24, 2009, Grand Hyatt Hotel, San Francisco, CA, USA, LBNL-1884E.

MARNAY Chris, Michael STADLER, Afzal SIDDIQUI, Hirohisa AKI: *"Control of Carbon Emissions in Zero-Net-Energy Buildings by Optimal Technology Investments in Smart Energy Systems and Demand-Side-Management,"* 32nd IAEE International Conference, Energy, Economy, Environment: The Global View, June 21-24, 2009, Grand Hyatt Hotel, San Francisco, CA, USA.

STADLER Michael, A. SIDDIQUI, C. MARNAY, H. AKI, and J. LAI: *"Optimal Technology Investment and Operation in Zero-Net-Energy Buildings with Demand Response,"* 22nd Annual Western Conference, Advanced Workshop in Regulation and Competition, June 17-19, 2009, Hyatt Regency, Monterey, California, USA, LBNL-1973E.

- STADLER Michael, Chris MARNAY, Afzal SIDDIQUI, Judy LAI, and Hirohisa AKI: *“Integrated building energy systems design considering storage technologies,”* ECEEE 2009 Summer Study, 1–6 June 2009, La Colle sur Loup, Côte d'Azur, France, ISBN 978-91-633-4454-1 and LBNL-1752E.
- STADLER Michael, Hirohisa AKI, Ryan FIRESTONE, Judy LAI, Chris MARNAY, & Afzal SIDDIQUI: *“Distributed Energy Resources On-Site Optimization for Commercial Buildings with Electric and Thermal Storage Technologies,”* ACEEE 2008 Summer Study on Energy Efficiency in Buildings, August 17 – 22, 2008, Pacific Grove, California, ISBN 0-918249-58-9 and LBNL-293E.
- MARNAY Chris, Michael STADLER, Sam BORGESON, Brian COFFEY, Ryoichi KOMIYAMA, and Judy LAI: *“A Buildings Module for the Stochastic Energy Deployment System,”* ACEEE 2008 Summer Study on Energy Efficiency in Buildings, August 17 – 22, 2008, Pacific Grove, California, ISBN 0-918249-58-9 and LBNL-291E.
- MARNAY C., G. VENKATARAMANAN, M. STADLER, A. SIDDIQUI, R. FIRESTONE, B. CHANDRAN: *“Optimal Technology Selection and Operation of Microgrids in Commercial Buildings,”* 31st IAEE International Conference "Bridging Energy Supply and Demand: Logistics, Competition and Environment", June 18-20, 2008, Istanbul, Turkey.
- MARNAY Chris, Michael STADLER, Hirohisa AKI, Brian COFFEY, Ryan FIRESTONE, Judy LAI, and Afzal SIDDIQUI: *“Microgrid Selection and Operation for Commercial Buildings in California and New York States,”* 4th European PV-Hybrid and Mini-Grid conference, May 29th – May 30th 2008, Glyfada, Athens, Greece, LBNL-313E.
- KRANZL Lukas, Anselm BRAKHAGE, Pedro GÜRTLER, Jacky PETT, Mario RAGWITZ, Michael STADLER: *“Integrating RES & RUE policies: Comparing results from Germany, Luxemburg and Northern Ireland,”* ECEEE 2007 Summer Study, 4–9 June 2007, La Colle sur Loup, Côte d'Azur, France, ISBN 978-91-633-0899-4.
- MARNAY Chris, Giri VENKATARAMANAN, Michael STADLER, Afzal SIDDIQUI, Ryan FIRESTONE, Bala CHANDRAN: *“Optimal Technology Selection and Operation of Microgrids in Commercial Buildings,”* IEEE 2007 Power Engineering Society General Meeting, 24-28 June 2007, Tampa, FL, USA.
- STADLER Michael, Tim LIPMAN, Chris MARNAY: *„Aktuelle Trends in der dezentralen KWK Technologie Integration – Das kalifornische Fördermodell und dessen Implikation für die Endenergieeffizienzrichtlinie“,* Internationale Energiewirtschaftstagung an der TU Wien, 14 - 16 February 2007, Vienna, also available as Lawrence Berkeley National Laboratory Report LBNL 62314, (only available in German).
- FIRESTONE M Ryan, Michael STADLER, and Chris MARNAY: *“Integrated Energy System Dispatch Optimization,”* 4th International IEEE Conference on Industrial Informatics, INDIN'06, 16-18 August 2006, Singapore.
- STADLER Michael, Ryan M. FIRESTONE, Dimitri CURTIL, and Chris MARNAY: *“On-Site Generation Simulation with EnergyPlus for Commercial Buildings,”* ACEEE Summer

- Study on Energy Efficiency in Buildings, August 13-18, 2006, Pacific Grove, California, ISBN 0-918249-56-2.
- KRANZL Lukas, Jacky PETT, Michael STADLER, Pedro GUERTLER: *“How can DSM programmes be optimised for successful delivery?”* 4th International Conference on Energy Efficiency in Domestic Appliances and Lighting – EEDAL’06, London, 21 – 23 June 2006.
- KRANZL Lukas, Michael STADLER, Reinhard HAAS, Claus HUBER: *„Modellierung und Entwicklung von Strategien zur effizienten Förderung nachhaltiger Energiesysteme am Beispiel des Wiener Raumwärmesektors,“* 9. Energieinnovationssymposium TU GRAZ, 15 -17 February 2006, (only available in German).
- ROESENER C., P. PALENSKY, M. WEIHS, B. LORENZ and M. STADLER: *“Integral Resource Optimization Network - a new solution on power markets”*, INDIN2005, 3rd International IEEE Conference on Industrial Informatics 10-12 August 2005, Perth, Western Australia.
- STADLER Michael, Lukas KRANZL: *„Invert - Das Simulations- Tool zur Bewertung von Förderstrategien im Gebäude-, Strom- und Transportsektor“*. Internationale Energiewirtschaftstagung an der TU Wien, Vienna, 16 - 18 February 2005, (only available in German).
- KRANZL Lukas, Michael STADLER: *„Modellierung von Förderinstrumenten für erneuerbare Energieträger und Energieeffizienz am Beispiel der Stadt Wien.“* Internationale Energiewirtschaftstagung an der TU Wien, Vienna, 16 - 18 February 2005, (only available in German).
- STADLER Michael, Hans AUER: *„Innovative Maßnahmen auf der Verbraucherseite zur Verbesserung der Marktperformance in liberalisierten Strommärkten: Eine ökonomische Bewertung für Österreich“*, 8. Energieinnovationssymposium TU GRAZ, Graz 4 & 5.2.2004, ISBN-Nr. 3-85133-033-1, (only available in German).
- STADLER Michael, Hans AUER, Claus HUBER: *„Ein Modell zur Analyse und Bewertung von Maßnahmen zur Steigerung der verbraucherseitigen Energieeffizienz in liberalisierten Strommärkten“*, Internationale Energiewirtschaftstagung an der TU Wien, Vienna, 12 – 14 February 2003, (only available in German).
- EDWARDS Jennifer L, Ryan M FIRESTONE, Srijay GHOSH, Chris MARNAY, Afzal SIDDIQUI, Michael STADLER: *“Effects of a Carbon Tax on Combined Heat and Power Adoption by a Microgrid,”* 22nd USAEE/IAEE North American Conferences, Vancouver 6-8 October 2002.
- EDWARDS Jennifer L, Ryan M FIRESTONE, Srijay GHOSH, Chris MARNAY, Afzal SIDDIQUI, Michael STADLER: *“Effects of a Carbon Tax on Combined Heat and Power Adoption by a μ Grid,”* Second International Symposium on Distributed Generation: Power System and Market Aspects, Stockholm, Sweden, October 2-4 2002.

STADLER Michael, Hans AUER, Reinhard HAAS: „Die zunehmende Bedeutung von dynamischen Tarifmodellen in liberalisierten europäischen Strommärkten“, Energieinnovationssymposium TU GRAZ, Graz 31.1 & 1.2.2002, (only available in German).

KESERIC Nenad, Michael STADLER, Manfred TRAGNER, Hans AUER: „Der Einfluss der technischen, wirtschaftlichen und organisatorischen Rahmenbedingungen des Übertragungsnetzes auf die Grosshandelspreise für Strom in Mitteleuropa“, Energieinnovationssymposium TU GRAZ, Graz 31.1 & 1.2.2002, (only available in German).

HAAS Reinhard, Hans AUER, Michael STADLER: “Introducing Competition in the Western European electricity market: A Critical Review,” ENER Forum 2. Monitoring the progress of the implementation of the EU Gas and Electricity Directives: Are European markets becoming competitive? Prague, Czech Republic, 15-16 November 2001

STADLER Michael, Hans AUER, Reinhard HAAS: “The Increasing Relevance of Dynamic Tariff Structures in the Liberalised European Electricity Market,” DistribuTECH- EUROPE 2001, Berlin, 6-8 November, 2001.

Non-Refereed Journals, Books, and Proceedings Publications

MAMMOLI Andrea, Nicholas HEINE, Matthew ROBINSON, Alessandro PENSINI, Michael STADLER: “Can greedy customers be good citizens?,” the 6th international conference on integration of renewable and Distributed Energy Resources, IRED2014, Kyoto, Japan, 2014, poster presentation.

BERGER D., M. STADLER, M. GROISSBÖCK: “EnRiMa, Introduction to EU Energy Efficiency Policy Context,” e-nova international congress 2013, University of Applied Science Campus Pinkafeld, Nov. 14-15 2013, CET-number: P-2013-2.

BERGER D., M. STADLER, M. GROISSBÖCK: “Demonstration of Operational DSS of EnRiMa,” e-nova international congress 2013, University of Applied Science Campus Pinkafeld, Nov. 14-15 2013, CET-number: P-2013-3.

STADLER M., D. BERGER, M. GROISSBÖCK: “Potential Energy Savings by Using the Operational EnRiMa DSS,” e-nova international congress 2013, University of Applied Science Campus Pinkafeld, Nov. 14-15 2013, CET-number: P-2013-4.

MENDES G., C. MARNAY, M. STADLER, P. FERRÃO, C. IOAKIMIDIS, W. FENG, J. STEINBACH: “Economic Analysis of Milligrids,” Santiago 2013 Symposium on Microgrids, Chile, September 11-12 ,2013, poster presentation.

GROISSBÖCK Markus, Michael STADLER, Emilio LÓPEZ, Javier MOGUERZA: “Energieeffizienz und Risiko-Management in öffentlichen Gebäuden,” World Sustainable Energy Days, February 27 - March 1 2013, Wels, Austria, poster presentation, CET-number: P-2013-1.

- BARSUN Hans, Richard BURNETT, Nicholas DEFOREST, Andrea MAMMOLI, Chris MARNAY, Michael STADLER: *“Benefits of using an optimized scheduling service to operate a building with thermal storage and solar-assisted HVAC,”* Évora 2012 Symposium on Microgrids, Portugal, Monday & Tuesday, 3 & 4 September 2012.
- MENDES Gonçalo, Paulo FERRÃO, Michael STADLER, Chris MARNAY, Christos IOAKIMIDIS: *“Assessment of Multi-building Microgrids’ Potential in the Portuguese Urban Context,”* Évora 2012 Symposium on Microgrids, Portugal, Monday & Tuesday, 3 & 4 September 2012.
- STADLER Michael, Markus GROISSBÖCK, Afzal SIDDIQUI, Somayeh HEYDARI, Martin HENKEL, Janis STIRNA, Eugenio PEREA: *“Optimierter Energieverbrauch in öffentlichen Gebäuden”*, Austrian’s specialized trade journal for heating, ventilation, and cooling (HLK), September 8-9/12 Vol. 43, hlk.co.at, (only available in German).
- STADLER Michael, Chris MARNAY, Gonçalo CARDOSO, Tim LIPMAN, Olivier MÉGEL, Srirupa GANGULY, Afzal SIDDIQUI, & Judy LAI: *“The CO₂ Reduction Potential of Combined Heat and Power in California’s Commercial Buildings,”* November 2009, Berkeley, California, USA, LBNL-2850E.
- MARNAY Chris, Michael STADLER, Tim LIPMAN, Judy LAI, Gonçalo CARDOSO, and Olivier MÉGEL: *“Greenhouse Gas Abatement with Distributed Generation in California’s Commercial Buildings,”* poster presentation, 6th Annual California Climate Change Research Symposium Sacramento Convention Center, Tuesday September 8 - Thursday September 10, 2009, Sacramento, California, USA, LBNL-3820e-poster.
- STADLER Michael, Chris MARNAY, Inês Lima AZEVEDO, Hirohisa AKI, Ryoichi KOMIYAMA, and Judy LAI: *“Radical Rethinking in Building Energy Forecasting – The Open Source Stochastic Building Simulation Tool SLBM,”* poster presentation, 2008 Behavior, Energy and Climate Change Conference, November 16-19, 2008, Sacramento, California, USA.
- MARNAY Chris, Michael STADLER, Inês Lima AZEVEDO, Hirohisa AKI, Ryoichi KOMIYAMA, and Judy LAI: *“The Stochastic Building Simulation Tool SLBM and its New Energy Forecasting Approach,”* poster presentation, Fifth Annual California Climate Change Conference Sacramento Convention Center, September 8-10, 2008, Sacramento, CA.
- STADLER Michael, Chris MARNAY: *„Dezentrale Energieversorgung mit Speichertechnologien“*, Energy Journal of the Austrian Energy Agency, Number 2 & 3/2008, ISBN 1026-339X, (only available in German).
- BRACKHAGE Anselm, Lukas KRANZL, Mario RAGWITZ, Michael STADLER: *„Invert Simulationen von budgetunabhängigen Instrumenten zur Marktdurchdringung von erneuerbaren Energien im deutschen Wärmemarkt“*, poster presentation, Internationale Energiewirtschaftstagung an der TU Wien, Vienna, 14 - 16 February 2007, (only available in German).

- HAAS Reinhard, Lukas WEISSENSTEINER, Michael STADLER, Thomas FABER: „Umsetzung der *Energiedienstleistungsrichtlinie der EU*“, 2005, VEÖ Journal Dezember 2005 – Januar 2006, page 44 – 47, (only available in German).
- STADLER Michael, Lukas KRANZL, Gustav RESCH, Claus HUBER, Reinhard HAAS: „Das dynamische Bottom-Up Simulationstool *Invert* zur Bewertung von Förderstrategien im Gebäude-, Strom- und Transportsektor“. International dissemination conference of the project *Invert* in Karlsruhe, Germany, April 26th 2005, (only available in German).
- STADLER Michael, Lukas KRANZL, Gustav RESCH, Claus HUBER, Reinhard HAAS: „Introduction to the *Invert* Simulation Tool,“ International dissemination conference of the project *Invert* in Brussels, Belgium, April 21st 2005.
- STADLER Michael, Lukas KRANZL, Gustav RESCH, Claus HUBER, Reinhard HAAS: „*Invert* Simulation Tool: Modelling Promotion Schemes for sustainable energy systems,“ International dissemination conference of the project *Invert* in Brussels, Belgium, April 21st 2005.
- KRANZL Lukas, Michael STADLER, Claus HUBER, Reinhard HAAS, Mario RAGWITZ: „Comparing policy options: Methodology and conclusions derived from *Invert*,“ International dissemination conference of the project *Invert* in Brussels, Belgium, April 21st 2005.
- KRANZL Lukas, Michael STADLER, Claus HUBER, Reinhard HAAS: „Strategien und Softwaretools zur effizienten Förderung nachhaltiger Energiesysteme“, Zeitschrift Energy, Number 2/2005, page 32 – 34, ISSN 1026-339X, (only available in German).
- STADLER Michael, Lukas KRANZL, Gustav RESCH, Claus HUBER, Reinhard HAAS: „Das dynamische Bottom-Up Simulationstool *Invert*“. International dissemination conference of the project *Invert* in Vienna, Austria, March 14th 2005, (only available in German).
- STADLER Michael, Lukas KRANZL, Gustav RESCH, Claus HUBER, Reinhard HAAS: „*Invert* – A Bottom-Up Simulation Tool for the Dynamic Evaluation of the Effects of Promotion Schemes in the fields of RES and RUE,“ International dissemination conference of the project *Invert* in Roskilde, Denmark, March 7th 2005.
- STADLER Michael, Lukas KRANZL, Gustav RESCH, Claus HUBER, Reinhard HAAS: „*Invert* – A Bottom-Up Simulation Tool for the Dynamic Evaluation of the Effects of Promotion Schemes in the fields of RES and RU,“ International dissemination conference of the project *Invert* in Athens, Greece, March 4th 2005.
- STADLER Michael: „Die Notwendigkeit von verbraucherseitigen Maßnahmen und elastischen Nachfragekurven für die Marktperformance in liberalisierten Strommärkten: Der Fall Österreich“, OVE Workshop „Intelligenter Strom“, Wien 23. Oktober 2003, (only available in German).

STADLER Michael, Jennifer L EDWARDS, Ryan M FIRESTONE, Chris MARNAY, Srijay GHOSH, Afzal SIDDIQUI: „Auswirkungen einer CO₂-Steuer auf Dezentrale Energieversorgungsunternehmen mit Kraft-Wärme-Kopplung und deren Interaktion mit dem Verteilnetz, analysiert am Beispiel eines städtischen Mikronetzes“, Energiegespräche im Technischen Museum, Vienna, September 24, 2002, (only available in German).

MARNAY Chris, Jennifer L. EDWARDS, Afzal SIDDIQUI and Michael STADLER: “Economic Parameters of μ Grid Distributed Energy Resource Adoption,” Lawrence Berkeley National Laboratory, 2002.

Invited Talks, Seminars, Briefings, and Interviews

TSERONIS Pete, Michael STADLER, Juan TORRES, Shaun GLEASON, Glenn FINK: “Electric Grid Modernization, Visual Analytics, and Microgrid Integration,” panel session, Critical Infrastructure Protection: Catalyzing the Innovation Ecosystem, Center for Innovative Technology, Herndon, Virginia, 31 March 2016.

FIRENZE Michael E., Monica DEANGELO, Robert GILLESKIE, Michael STADLER, Tim TETREULT: “Microgrid Opportunities in the Department of Defense’s (DoD) Goals of Reducing Energy Costs and Increasing Energy Security/Resiliency,” keynote panel discussion, Microgrid Markets Summit East, Arlington, Virginia, 17 March 2016.

STADLER Michael: “Locational Valuation Methodologies in Distribution Resource Plans,” panel discussion, Academic Perspective on California's Distribution Grid Planning Efforts, California Public Utilities Commission (CPUC), San Francisco, CA, November 16, 2015.

STADLER Michael: “Tackling Technical & Regulatory Integration Challenges,” panel discussion, Commercial and Government Microgrid Summit, Executive Forum Designing & Implementing Distributed Energy, Energy Storage and Microgrid Projects, San Diego, October 20-22, 2015.

STADLER Michael: “Microgrid Modelling with DER-CAM,” ACI’s Next Generation Microgrids Conference, Dallas, Texas, April 14-16, 2015.

STADLER Michael, Gregory VALLERY: “Fort Hunter Liggett Microgrid Conversion,” Military & Government Microgrids Summit, Hilton Arlington, Arlington, Virginia, 08-10 April, 2015.

STADLER Michael, Jeff WORLEY, Mike FERRY, Kevin JOHNSON: “Microgrids’ Role in Meeting RPS’ - Integrating Renewables and Energy Storage,” panel discussion, Infocast’s 5th Military & Commercial Microgrids Summit 2014, San Diego, California, 20 November 2014.

STADLER Michael: “From DER Optimization to a Multi-Layered Microgrid Controller,” Infocast’s 5th Military & Commercial Microgrids Summit 2014, Pre-Summit Showcase, San Diego, California, 19 November 2014.

- STADLER Michael: *“Economic and Environmental Design / Operation of Microgrids,”* microgrid panel discussion, The Business of Local Energy Symposium, a program of the Climate Protection Campaign, Petaluma, CA, October 23, 2014.
- STADLER Michael: *“DER-CAM A Complete Overview,”* United States Agency for International Development (USAID), Washington D.C., August 2014.
- STADLER Michael and Gonçalo CARDOSO: *“Economic and Environmental Optimization of Microgrids,”* IEEE PES Boston Chapter Micro-grid Course, 4 June 2014.
- STADLER Michael: *“Modelling of Economic and Environmental Value Streams for Microgrids,”* IEEE PES Conference on Innovative Smart Grid Technologies, Washington DC, 19-22 February 2014.
- STADLER Michael and Wei FENG: *“Economic and Environmental Optimization of Microgrids,”* Shenzhen Institute of Building Research, DER-CAM and optimization training, Shenzhen, China, 8 – 11 April 2013.
- STADLER Michael and Chris MARNAY: *“Economic and Environmental Optimization of Microgrids,”* National Renewable Laboratory (NREL), Golden Colorado, 28 March 2013.
- STADLER Michael: *“Microgrid modeling using the stochastic Distributed Energy Resources Customer Adoption Model DER-CAM,”* INFORMS Annual Meeting 2012 Phoenix, 15 October 2012, LBNL-5937E.
- STADLER Michael: *“Economic and Environmental Optimization of Microgrids,”* presented at the University of California at Berkeley, UC-LBNL DR-R-ISO discussion group, 21 February 2012.
- STADLER Michael, Gonçalo CARDOSO, Nicholas DEFOREST, Jon DONADEE, Tomás GÓMEZ, Judy LAI, Chris MARNAY, Olivier MÉGEL, Gonçalo MENDES, Afzal SIDDIQUI: *“Smart buildings with electric vehicle interconnection as buffer for local renewables?”* Researching the Intelligent City: Key Challenges of Integrating Urban Energy and Mobility Systems Research Symposium, Berlin, May 30, 2011.
- STADLER Michael, Gonçalo MENDES, Chris MARNAY, Olivier MÉGEL, and Judy LAI: *“Analysis of electric vehicle interconnection with commercial building,”* Electric Vehicle Integration Into the Smart Grid of the Future - G2V & V2G Forum, University of California at Los Angeles, April 6, 2011, LBNL-4559E.
- MARNAY Chris, Michael STADLER, Nicholas DEFOREST: *“The Joy of Stochastic Forecasting: An Overview of the Stochastic Buildings Energy and Adoption Model,”* presented at LBNL, February 14 2011.
- STADLER Michael, Tim LIPMAN: *“California CHP Greenhouse Gas Abatement: Contribution of Medium-Sized Commercial Buildings,”* presented at the California Energy Commission, Sacramento, CA, July 23 2009.

STADLER Michael: *“Optimal Building Technology Selection and Operation: A Systemic Approach,”* presented at LBNL, July 14 2009.

STADLER Michael: *“The Distributed Energy Resources Customer Adoption Model (DER-CAM) for Building Energy Use Optimization,”* presented at the University of Karlsruhe (TH), Germany, December 10th, 2008.

MARNAY Chris, Michael STADLER: *“Optimizing Building Energy Use: A Systemic Approach,”* U.S. Dept. of Energy, Washington DC, USA, October 28th 2008.

MARNAY Chris, Michael STADLER: *“Microgrids, CHP, Storage, Heterogenous Power Quality and Reliability, and Uncertainty,”* presentation at the California Energy Commission (CEC), Sacramento, 18 July 2008.

RAGWITZ Mario, Anselm BRACKHAGE, Michael STADLER, Lukas KRANZL: *„Simulation der Wärmeerzeugung für Bonusmodell und Einsatzpflicht“*, im Rahmen des Projekts *„Eckpunkte für die Entwicklung und Einführung budgetunabhängiger Instrumente zur Marktdurchdringung erneuerbarer Energien im Wärmemarkt“*, German Federal Ministry of Environment, Berlin, November 2nd 2006, *(only available in German)*.

CURTIL Dimitri, Chris MARNAY, Michael STADLER, Nan ZHOU, Ryan FIRESTONE, Judy LAI: *“Distributed Energy Enabling Technologies: Site Energy Simulation,”* PNNL DG/CHP Advisory Panel Meeting Washington DC, October 5th 2005.

STADLER Michael: *“Economic Constraints for Integral Resource Optimization Networks,”* IRON midterm workshop in Vienna, June 17th 2005.

European Commission Project Meeting *Invert*, European Commission, 5th Framework Programme; Vienna University of Technology, Vienna; Thursday, 11 November 2004 and Friday, 12 November 2004.

European Commission Project Meeting *Invert*, European Commission, 5th Framework Programme; AGH University of Science and Technology, Krakow; Thursday, 06 May 2004 and Friday, 07 May 2004.

European Commission Project Meeting *Invert*, European Commission, 5th Framework Programme; Energy Economics Group (EEG), Gusshausstrasse 25-29, Vienna; Thursday, 04 December 2003 and Friday, 05 December 2003.

European Commission Project Meeting *GreenNet*, European Commission, 5th Framework Programme, DG TREN; Energy Economics Group (EEG), Gusshausstrasse 25-29, Vienna; Monday, 30 June 2003 and Tuesday, 01 July 2003.

European Commission Project Meeting *GreenNet*, European Commission, 5th Framework Programme, DG TREN; DG TREN, N° 28 Rue de Mot., Room S 31, Ground Floor, Brussels, Wednesday, 29 January 2003.

„*Introducing Michael Stadler - Life with Energy*“ by Juliet M. Beverly, bridges vol. 19, October 2008 / News from the Network: Austrian Researchers Abroad; Office of Science and Technology, Washington D.C., USA.

Project Reports and Deliverables

“Supervisory Controller for PV and Storage Microgrids.” Michael Stadler, Salman Mashayekh, Sankar Narayanan, Nicholas DeForest, and Tobias Brandt, California Public Utilities Commission (CPUC) Solar Initiative Research, Demonstration and Deployment, Program - Small Grant Solicitation, LBNL-1002273, October 2015.

“Modeling Customer-Side Distributed Energy Resources Dispatch Optimization for Electric Grid Transactions.” Demand Response Research Center and California Energy Commission, Rish Ghatikar, Salman Mashayekh, Michael Stadler, Rongxin Yin, and Zhenhua Liu, Public Interest Energy Research (PIER) Program, Contract No. 500-03-026, LBNL-185943, July 2015.

“A Total Cost of Ownership Model for Low Temperature PEM Fuel Cells in Combined Heat and Power and Backup Power Applications.” U.S. Department of Energy, Max Wei, Timothy Lipman, Ahmad Mayyas, Joshua Chien, Shuk Han Chan, David Gosselin, Hanna Breunig, Michael Stadler, Thomas McKone, Paul Beattie, Patricia Chong, Whitney G. Colella, Brian D. James, LBNL-6772E, October 2014.

“Final Report of the Project EnRiMa.” Restricted deliverable of the EnRiMa project. EnRiMa a research project within the 7th framework programme of the European Commission, March 2014.

“Commercial Exploitation Plan.” Restricted deliverable of Work Package 7 of the EnRiMa project. EnRiMa a research project within the 7th framework programme of the European Commission, March 2014.

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“Work Package 1: Requirements Analysis, EnRiMa Validation Test Site Report for the University of Applied Science Burgenland, Pinkafeld Campus.” Working Paper of Work Package 1 of the EnRiMa project. EnRiMa a research project within the 7th framework programme of the European Commission, M. Groissböck, M. Stadler, T. Edlinger, Center for Energy and innovative Technologies (CET), July 2011.

“Work Package 1: Requirements Analysis, EnRiMa Validation Test Site Report for the office building ENERGYbase.” Working Paper of Work Package 1 of the EnRiMa project. EnRiMa a research project within the 7th framework programme of the European Commission, T. Edlinger, M. Stadler, M. Groissböck, Center for Energy and innovative Technologies (CET), June 2011.

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“Effect of Heat and Electricity Storage and Reliability on Microgrid Viability: A Study of Commercial Buildings in California and New York States.” Michael Stadler, Chris Marnay, Afzal Siddiqui, Judy Lai, Brian Coffey, and Hirohisa Aki, Report number LBNL-1334E, December 2008.

“Beta version SEDS Lite Building Module.” Michael Stadler, Chris Marnay, Sam Borgeson, Brian Coffey, Ryoichi Komiya, Judy Lai, software tool, <http://seds.nrel.gov/>, May 2008.

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„Modellierung von Kraftwerksbetrieb und Regelenergiebedarf bei verstärkter Einspeisung von Windenergie in verschiedene Energiesysteme unter Berücksichtigung des Lastmanagements“ Energiesystem der Zukunft Projektnummer: 807717. Hans AUER, Marian KLOBASA, Carlo OBERSTEINER, Michael STADLER, Mario RAGWITZ und Claus HUBER, Endbericht, July 2005, *(only available in German)*.

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“Case Studies, Work Package 6 of INVERT” a research project within the ALTENER Program of the European Commission, DG TREN N^o: 4.1030/Z/02-094, Mario RAGWITZ, Anselm BRAKHAGE, Lukas KRANZL, Michael STADLER, Claus HUBER, Reinhard HAAS, Elena TSIOLARIDOU, Jacky PETT, Pedro GÜRTLER, Kaj JOERGENSEN, Arkadiusz FIGORSKI, Adam GULA, Elzbieta GULA, Beata SLIZ, and Artur WYRWA, February 2005.

„Integral Resource Optimization Network Study“ Energiesysteme der Zukunft Projektnummer: 808570. Peter PALANSKY, Brigitte LORENZ, Charlotte ROSENER, Michael STADLER, Manfred WEIHS, und Thomas FRANK, Zwischenbericht, February 2005, *(only available in German)*.

„Modellierung von Kraftwerksbetrieb und Regelenergiebedarf bei verstärkter Einspeisung von Windenergie in verschiedene Energiesysteme unter Berücksichtigung des Lastmanagements.“ Energiesystem der Zukunft Projektnummer: 807717. Hans AUER, Marian KLOBASA, Carlo OBERSTEINER, Michael STADLER, Mario RAGWITZ und Claus HUBER, Zwischenbericht, September 2004, *(only available in German)*.

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Commission, DG TREN Contract N^o: 4.1030/Z/02-094, Michael STADLER, Lukas KRANZL, and Claus HUBER, September 2004.

“Rational Use of Energy and Renewable Energy Sources – A Review of Current Policy Strategies and Promotion Schemes, Work Package 1 of INVERT” a research project within the ALTENER Program of the European Commission, DG TREN N^o: 4.1030/Z/02-094, Kaj JOERGENSEN, Lukas KRANZL, Elena TSIOLIARIDOU, Maria-Assumpcio LOPEZ-POLO, Michael STADLER, Gustav RESCH, and Reinhard HAAS, February 2004.

“Pushing a least cost integration of green electricity into the European grid, GreenNet. Cost and Technical Constraints of RES-E Grid Integration, Work Package 2” within the 5th framework programme of the European Commission supported by DG TREN Contract N^o: NNE5-2001-660, Hans AUER, Michael STADLER, Thomas SCHUSTER, Hans TAUS, Lars Henrik NIELSEN, John TWIDELL, and Derk Jan SWIDER, December 2003.

“A Business Case for On-Site Generation: The BD Biosciences Pharmingen Project,” FIRESTONE Ryan, Charles CREIGHTON, Owen BAILEY, Michael STADLER and Chris MARNAY: Lawrence Berkeley National Laboratory, September 2003. Lawrence Berkeley National Laboratory Report LBNL 52759.

“Distributed Energy Resources Customer Adoption Modeling with Combined Heat and Power Applications,” SIDDIQUI, A.S., R. FIRESTONE, S. GHOSH, M. STADLER, C. MARNAY, and J.L. EDWARDS: Lawrence Berkeley National Laboratory, June 2003. Lawrence Berkeley National Laboratory Report LBNL 52718.

„Maßnahmen zur Steigerung der verbraucherseitigen Energieeffizienz in liberalisierten Strommärkten und deren Beitrag für eine nachhaltige Entwicklung in Österreich“; Projekt gefördert vom JUBILÄUMSFOND DER ÖSTERREICHISCHEN NATIONALBANK (Nr. 9403); Michael STADLER, Hans AUER, Gabriele KUDERER, December 2003, (*only available in German*).

“Pushing a least cost integration of green electricity into the European grid, GreenNet. Dynamics and basic interactions of RES-E with the grid, switchable loads and storages, work package 1.” within the 5th framework programme of the European Commission supported by DG TREN Contract N^o: NNE5-2001-660, Gustav RESCH, Hans AUER, Michael STADLER, Lars Henrik NIELSEN, and John TWIDELL, September 2003.

“Investment Costs for Transmission and Distribution Lines World-Wide Until 2030,” prepared for the International Energy Agency (IEA) in Paris, Reinhard HAAS, Michael STADLER, June 2003.

“Distributed Energy Resources in Practice: A Case Study Analysis and Validation of LBNL’s Customer Adoption Model, Appendix,” Prepared for the Distributed Energy and Electric Reliability Program U.S. Department of Energy, Owen BAILEY, Charles CREIGHTON, Ryan FIRESTONE, Chris MARNAY, and Michael STADLER, Report number LBNL-52753, February 2003.

“Distributed Energy Resources in Practice: A Case Study Analysis and Validation of LBNL’s Customer Adoption Model,” Prepared for the Distributed Energy and Electric Reliability Program U.S. Department of Energy, Owen BAILEY, Charles CREIGHTON, Ryan FIRESTONE, Chris MARNAY, and Michael STADLER, Report number LBNL-52753, February 2003.

„Maßnahmen zur Steigerung der verbraucherseitigen Energieeffizienz in liberalisierten Strommärkten und deren Beitrag für eine nachhaltige Entwicklung in Österreich“; Projekt gefördert vom JUBILÄUMSFOND DER ÖSTERREICHISCHEN NATIONALBANK (Nr. 9403); Leitung: Hans AUER, Bearbeitung: Michael STADLER, Zwischenbericht, December 2002, *(only available in German)*.

„Prognose der Entwicklung der leistungsmäßigen Nachfrage nach Strom in Österreich“, im Auftrag der E-Control, Reinhard HAAS, Michael STADLER, Hans AUER, December 2002, *(only available in German)*.

„Entwicklung der Marktpreise für Strom in ausgewählten europäischen Ländern“, Gutachten im Auftrag der EVN AG, Reinhard HAAS, Hans AUER, Michael STADLER, November 2002, *(only available in German)*.

“Distributed Energy Resources Customer Adoption with Combined Heat and Power Applications,” prepared for the California Energy Commission, Ernest Orlando Lawrence National Laboratory; Ryan M FIRESTONE, Srijay GHOSH, Afzal SIDDIQUI, Michael STADLER, May 2002.

„Die Bedeutung von dynamischen Tarifmodellen und neuer Ansätze des Demand-Side-Managements als Ergänzung zu Hedging-Maßnahmen in deregulierten Elektrizitätsmärkten.“ Projekt gefördert vom JUBILÄUMSFOND DER ÖSTERREICHISCHEN NATIONALBANK (Nr. 7895); Leitung: Reinhard HAAS, Bearbeitung: Michael STADLER und Hans AUER, December 2001, *(only available in German)*.

Scientific Software Tools

2010 - 2014: Energy Efficiency and Risk Management in Public Buildings (EnRiMa). The overall objective of EnRiMa is to develop a web-based decision-support system (DSS) for operators of public buildings. By providing integrated management of conflicting goals such as cost minimisation, meeting energy demand, efficiency, and emission-reduction requirements as well as risk management, the DSS will enable operators to improve building energy efficiency in the most cost-effective manner based on their tolerances for comfort and risk. The DSS enables long-term planning aimed at increasing energy efficiency, specifically analyses of retrofits and/or expansion of on-site energy sub-systems, in order to meet forthcoming EU targets for reducing CO₂ emissions. <http://enrima-project.eu/>

2010 – present: Web Optimization of Distributed Energy Resources (WebOpt). This tool aims to provide a fully accessible Web service that users can employ to evaluate potential Distributed Energy Resources (DER) options. Based on DER-CAM, the tool will work on multiple operating systems and web browsers, and will include DER with combined heat and power (CHP) / combined cooling, heating, and power (CCHP) optimization. <http://building-microgrid.lbl.gov/projects/distributed-energy-resources-web>.

2009 – 2014: *Industrial, Agricultural, and Water Storage Viability and Optimization Website Service (SVOW)*. This web based service aims to provide industrial, agricultural, and water (IAW) facilities with basic guidance on whether available storage technologies and photovoltaic of interest merit deeper analysis. Since the IAW sectors encompass a broad range of facilities with fundamentally different characteristics, the tool starts by asking the user to select a load profile from a limited cohort group of example facilities. These examples may be modified by the user to better fit a site's unique circumstances. After the load profile selection, the user will be prompted to select a tariff, the cost option, and so on, until all of the parameters are specified. Based on the user selections, the solution set will be adjusted to provide ballpark results to the user. This service is based on DER-CAM. <http://building-microgrid.lbl.gov/projects/svow>.

2002 – present: The *Distributed Energy Resources Customer Adoption Model (DER-CAM)* is a mixed-integer linear program (MILP) written and executed in the General Algebraic Modeling System (GAMS). Its objective is to minimize the annual costs or CO₂ emissions for providing energy services to the modeled site, including utility electricity and natural gas purchases, amortized capital and maintenance costs for distributed generation (DG) investments. <http://building-microgrid.lbl.gov/projects/der-cam>.

2004 – 2009: *Invert*, a research project within the ALTENER Program of the European Commission, DG TREN N^o: 4.1030/Z/02-094. The *Invert* Simulation Tool is a comprehensive computer model supporting the design of efficient promotion schemes for renewable and efficient energy technologies based on the consumers' point of view. The *Invert* Simulation Tool is applicable for heating, cooling, electricity, district heating and biofuels and can be applied on a local, regional and national level.

2007 – 2012: The *Buildings Module (SLBM) of the Stochastic Energy Deployment System (SEDS)* of the United States. SEDS is a long-range model of the US energy markets. It is designed to explore how the US energy economy will evolve in response to the development of new energy technologies, including renewable sources of energy and improvements in energy efficiency. It simulates whether and how markets adopt new technologies depending on their costs and performance relative to competing technologies. It uses projections of how R&D may improve the performance of new technologies over time. <http://seds.nrel.gov/>.

PROFESSIONAL SERVICE

Organization of Scientific Meetings and Seminars

- International Energy Economics Conference (IEWT)
- EnRiMa session at the e-nova 2013 conference at Burgenland University of Applied Science

Reviewer for

- American Society of Mechanical Engineers (ASME)

- ASHRAE
- Applied Energy, Elsevier
- Energy and Buildings, Elsevier
- Journal of Energy Storage
- European Council for an Energy Efficient Economy (ECEEE)
- European Transactions on Electrical Power
- International Journal of Electronic Business Management
- Institute of Electrical and Electronics Engineers (IEEE)

Session Chair at

- IEWT conferences
- International Association for Energy Economics conferences (IAEE)

Standardization Groups

Contributions to

- Distribution Resources Integration WG/Microgrid Controllers TF (PE/T&D/DRI/2030.7), IEEE Standards Association

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- European Council for an Energy Efficient Economy (ECEEE)
- Institute of Electrical and Electronics Engineers (IEEE)

SOFTWARE

Visual Basic .NET, C++, GAMS, SQL, HTML 5, JavaScript, MS Office (Excel, Word, PowerPoint, Access), DER-CAM

APPENDIX, DETAILED EDUCATION & VOCATIONAL EXPERIENCE

1980 – 1984	Elementary School, Persenbeug
1984 – 1988	Extended Elementary School, Persenbeug
1988 – 1993	Technical Secondary School, St. Pölten
06/1993	Graduation after excellent completion of Technical Secondary School, Leaving Exam (<i>Matura</i>)
1993 – 2001	Master of science studies at Vienna University of Technology, Electrical engineering with emphasis on power engineering and electrical drives

- 07/1998 – 07/1999 Part-time employment as computer programmer at J.M. VOITH Dienstleistungs-GmbH
- 02/2000 – 10/2000 Fulfilment of required military service
- 11/2000 – 03/2001 Student collaborator at the institute of Energy Economics at Vienna University of Technology
- 03/2001 Graduation after excellent completion of diploma examination and publication of diploma thesis: *A Model for Optimal Portfolio Management in a Liberalized Electricity Market. The Computer Program "Optimum"*.
- 03/2001 – 11/2003 Ph.D. study at Vienna University of Technology
- 04/2001 – 01/2002 Teacher at Berufsförderungsinstitut (bfi) Wien (promotion facility for unemployed adults). Performed topics: *electrical engineering (power engineering and electrical drives), mathematics, and informatics*.
- 03/2001 – 08/2005 Researcher at the institute of Energy Economics at Vienna University of Technology. Research topics: *electricity markets, deregulation, integration of renewable energy sources into the grid, demand response programs, and software design*.
- 02/2002 - 09/2002 Research fellow at Ernest Orlando Lawrence Berkeley National Laboratory at University of California/Berkeley. Research topics: *software design in the field of distributed generation, Distributed Energy Resource Customer Adoption Model (DER-CAM)*.
- 11/2003 Ph.D. (summa cum laude) in Energy Economics at Vienna University of Technology: *The relevance of demand-side-measures and elastic demand curves to increase market performance in liberalized electricity markets: The case of Austria*.
- 11/2003 – 08/2005 Modelling and software design in the fields of demand-side management, building Sector, and renewable energy sources.
- 01/2004 – 08/2005 Senior software developer (Windows Programming, Visual Basic, C++) at the Energy Economics Group for the Simulation Tool *Invert*. *Invert*, a research project within the ALTENER Program of the European Commission, DG TREN N^o: 4.1030/Z/02-094.
- 09/2005 – 12/2009 Associated researcher at the Energy Economics Group. Counselling research topics: *software design in the field of renewable energy sources / renewable energy sources - combined heat and power enabled as well as rational use of energy*.
- 09/2005 – 09/2006 Researcher at Ernest Orlando Lawrence Berkeley National Laboratory (Electricity Markets and Policy Group) at University of

- California/Berkeley, United States of America. Research topics: *distributed generation – microgrids, building efficiency research based on EnergyPlus, SPARK and DOE2.*
- 03/2006 – 09/2006 Researcher at the Pacific Region CHP Application Center, Energy and Resources Group at University of California/Berkeley, United States of America. Research topics: *combined heat and power applications for residential, commercial, and industrial customers.* The Pacific Region CHP Application Center was established in 2004 and features a collaborative structure among UC Berkeley, UC Irvine, and San Diego University.
- 10/2006 – 12/2006 Consultant for the Austrian Energy provider EVN AG, Maria Enzersdorf in the field of *distributed generation with combined heat and power.*
- 10/2006 – 01/2008 Associated researcher at Ernest Orlando Lawrence Berkeley National Laboratory (Electricity Markets and Policy Group) at University of California/Berkeley, United States of America. Counselling research Topics: *modelling and software design in the field of distributed generation, Distributed Energy Resource Customer Adoption Model (DER-CAM).*
- since 01/2007 Chief technical officer of the non-profit organization “Center for Energy and innovative Technologies – CET”. CET was established in December 2006 and features a collaborative structure among international and national researchers with affiliations to research institutes with high reputation. It creates a platform for knowledge exchange in the field of renewable energy sources as well as energy efficiency.
- 02/2007 – 07/2013 Lecturer in *hydro power, wave power, and tidal power* at the Austrian University of Applied Sciences for Sustainable Energy Systems, Burgenland’s FH Centres for Advanced Studies, FH - Eisenstadt – Pinkafeld, Austria.
- 03/2007 – 12/2007 Consultant and team leader at KWI Consultants corporation, Fuhrmannsgasse 3 – 7, 3100 St. Pölten, Austria in the field of *energy and carbon management.*
- 02/2008 – 09/2009 Researcher at Ernest Orlando Lawrence Berkeley National Laboratory at University of California/Berkeley, United States of America.
- 09/2009 – 02/2013 Lecturer in *optimization and stochastic simulation* at the Austrian University of Applied Sciences, Burgenland’s FH Centres for Advanced Studies, FH - Eisenstadt – Pinkafeld, Austria.
- since 10/2009 Scientist at Ernest Orlando Lawrence Berkeley National Laboratory at University of California/Berkeley, United States of America. Research

- topics: *distributed generation – microgrids, stochastic building simulation and software design*. Technical & Programming lead of microgrid research (<http://building-microgrid.lbl.gov/projects>).
- since 06/2013 Head of Microgrid R&D in the Grid Integration Group (GIG), Environmental Energy Technologies Division, Lawrence Berkeley National Laboratory at University of California/Berkeley, United States of America.
- since 03/2015 Group Leader Grid-Integration Group (GIG) and Head of Microgrid R&D, Environmental Energy Technologies Area, Lawrence Berkeley National Laboratory at University of California/Berkeley, United States of America.