

Dr. El Khatib Selected Credentials

Dr. Sameh El Khatib

Sameh El Khatib (PhD)
SmartWatt CEO – Energy Expert
+20 Years of Professional Experience



About

- / Dr. Sameh El Khatib received his PhD in Electrical Engineering, as well as his Bachelor's and Master's degrees from McGill University,
- / He pursued his research in power system analysis & economics, electricity market restructuring & planning.
- / He was a faculty in the Engineering Systems & Management department at Masdar Institute in Abu Dhabi.
- / His research group focused on the development & analysis of integrated engineering systems as well as DSM and DR programs
- / As a visiting professor at MIT in Cambridge, he focused his research on the security challenges, both cyber and physical, in interfacing the grid's physical structure with the new smart system layers of the emerging cyber physical smart power grids.
- / Before joining Masdar, Dr. El Khatib was an energy expert with Booz and Co. working on strategic projects in Energy Sector
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- / Dr. Sameh has an extensive background in the analysis and optimization of cost elements pertaining to the ability of the power system to meet demand continuously and reliably while minimizing the probability of shedding load.
- / Dr. Sameh has experience in the structure of and the economics of deregulated electricity trading and spot market;
- / Dr. El khatib has practical experience in development of smart communities

Relevant Experience

- / **Project Name:** : *The Development of a Demand Response Program & Aggregator in Abu Dhabi*
 - **Project Description** : To pursue digitization of the power grid through the establishment of the demand-centered aggregator role in Abu Dhabi to offer a multitude of services to the grid regulator, operator and end-users including a demand response program offering flexibility services to the grid
 - **Activities Performed:**
 - i. Detailed benchmarking and assessment of different aggregators around the world, including their specific roles, business models and services;
 - ii. Detail framework and rollout plan for such a project in Abu Dhabi;
 - iii. Detail modeling of national savings produced from the project through the assessment of hourly load duration curves;
 - iv. Detail business model for the successful and profitable development of this project;
 - v. Detail assessment of services to be provided by the aggregator;
 - vi. Engagement with the different stakeholders in Abu Dhabi to be involved in this project, including Taqa and Ministry of Energy
 - **Client:** Injazat – Mubadala, U.A.E.
 - **Specific Role Played:** Engagement Partner
 - **Project Timeline:** Approximately 24 months
 - **Start Date:** 2019

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Relevant Experience

- / **Project Name:** : *The Development of a Smart City in Riyadh*
 - **Project Description:** : To develop the role of the Master System Integrator (MSI), that will lead an ecosystem of best of breed partners, to design, develop, build, operate and transfer a user-centric smart city inclusive of all infrastructure, smart city platform, smart city pillars as well as the rollout of use cases. The city to accommodate around 20,000 residents in the initial phases
 - **Activities Performed:**
 - i. Lead the multidisciplinary team that developed the strategy to approach this project;
 - ii. Design the framework for assessment, design and rollout of smart city use cases;
 - iii. Detail scoping and sizing of the requirements of the city;
 - iv. Benchmarking of different partners for the different scopes of the project, including platform, smart city pillars and solutions;
 - v. Benchmarking of different smart cities around the world and extractions of lessons learned and critical success factors for such an endeavor;
 - vi. Optimizing the design and sizing of the requirements of the city including functional requirements to ensure achievements of the city requirements
 - **Client:** ICAD – Misk Foundation, KSA
 - **Specific Role Played:** Engagement Partner
 - **Project Timeline:** Approximately 8 months
 - **Start Date:** 2021

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Relevant Experience

- / **Project Name:** : *Techno-Economic Assessment for a DER System Integration Capability in KSA*
 - **Project Description** : To assess the development of a localized manufacturing capacity in partnership with industry leaders catering to the increased demands of energy related products. The objectives :
 - Follow Energy aspiration of Vision 2030 initiative in Made in KSA products
 - Delivering the ability to meet peak demand surges
 - Facilitate the transition towards a decentralized green and smart power grid
 - Reduce Dependency on Oil & Gas
 - **Activities Performed:**
 - i. Feasibility study assessment of the following potential products to be manufactured/assembled in the factory with their respective market studies:
 - ii. Energy Storage Systems (ESS)
 - iii. Solar PV Modules Manufacturing & Production Lines
 - iv. Fuel Cells
 - v. Distributed Energy Resources (DER)
 - vi. The following critical success factors for the project were analyzed and investigated:
 - vii. Increasing demand for renewable power penetration in the grid in the region;
 - viii. Increased focus to transition towards a smarter power grid in the region;
 - ix. Increasing the requirement to balance the grid during fluctuations or outage in supply and demand.
 - x. Limited advanced production facilities for energy storage, PV modules and DER solutions available In KSA to meet the growing regional demand;
 - **Client:** MBL Group, KSA
 - **Specific Role Played:** Engagement Partner
 - **Project Timeline:** Approximately 6 months
 - **Start Date:** 2021

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Relevant Experience

- / **Project Name:** : *Roadmap for the Development of an Advanced Energy Management Platform*
 - **Project Description:** The scope was to plan, design and lead the development of an advanced energy management platform, capable of harnessing high-resolution data from remote locations and apply advanced energy management to provide energy intelligence and services to the grid operator and end-users
 - **Activities Performed:**
 - i. Development of the concept for the platform including the multitude of services to be offered through the platform to end-users and the grid;
 - ii. Development of a detailed feasibility study for the development of the platform including the detailed business model to be offered;
 - iii. Development of the high-level architecture and wire frame for the platform;
 - iv. Development of the backbone for the rules engine to be developed to allow the platform to apply multitude of services;
 - v. Planning the detailed development plan for the rollout of the platform including the MVP, the use cases and services;
 - vi. Detail manpower planning for the development and operation of the platform;
 - **Client:** ICAD, KSA
 - **Specific Role Played:** Engagement Partner
 - **Project Timeline:** Approximately 6 months
 - **Start Date:** 2020

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Relevant Experience

- / **Project Name:** : *Strategy for the Development of Energy Services*
 - **Project Description:** The scope was to develop the energy services capabilities at ICAD, considered among the biggest system technology integrators and contractors in the region. Amongst ICAD many mega projects is the system integration of the new KAIA airport in Jeddah.
 - **Activities Performed:**
 - i. Detail market assessment for the development of niche energy services in the region;
 - ii. Competitiveness assessment to ensure the rollout of profitable energy services with significant revenue streams;
 - iii. Gap assessment to capitalize on the existing capabilities of ICAD and the development of missing ones;
 - iv. Development of the detail portfolio of energy services to be offered to ensure the establishment of a profitable business model;
 - v. Development of market penetration strategy for the energy services to be offered
 - **Client:** ICAD, KSA
 - **Specific Role Played:** Engagement Partner
 - **Project Timeline:** Approximately 6 months
 - **Start Date:** 2019

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Relevant Experience

- / **Project Name:** : *Optimization of an Off-grid Distributed Energy Resources System*
 - **Project Description:** An off-grid site with no power connection to the main substation. Thus, reliance for meeting demand is on diesel generation. The client wanted to minimize the use of diesel power for environmental and economic reasons using a microgrid consisting of solar panels and batteries
 - **Activities Performed:**
 - i. Sizing of solar panels to be able to meet peaking loads;
 - ii. Sizing of storage system to allow for minimal reliance on diesel generation;
 - iii. Design of controller and inverter systems to charge and discharge the batteries efficiently;
 - iv. Optimization of the use of the system to ensure reliability and long-term performance of the batteries and solar systems
 - v. Energy audit of the facility identifying power system structure as well as load profile;
 - vi. Mapping hourly demand with activated hourly generation from solar system;
 - vii. Detailing demand versus supply system in a report along with scenario analysis for different load profiles;
 - viii. Sizing of battery system along with support for developing the RFQ for the batteries and supporting the client procure most suitable system;
 - ix. Designing controller and inverter systems to optimize the operation of the system;
 - x. Designing demand side management frameworks for optimizing load profile on site
 - **Client:** Confidential
 - **Specific Role Played:** Engagement Partner
 - **Project Timeline:** Approximately 6 months
 - **Start Date:** 2019

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Relevant Experience

- / **Project Name:** : *Energy Audit and Energy Management Strategy Roadmap Development*
 - **Project Description:** The owner of these hotel/ resort properties, RAKNH appointed SmartWatt to carry out an audit for four of their facilities in order to identify areas of improvement in terms of utility consumption. The major utility consumption in each of these properties happens in the form of Water use, Electricity use and LPG use. The objective of the project was to identify interventions and develop utility management plan.
 - **Activities Performed:**
 - i. Conduct the opening and closing meeting with the team on site/ facility managers
 - ii. Develop the audit plan (in line with ISO 50002) and inform the client of the audit plan, required data, information, etc.
 - iii. Interact closely with the engineering staff from each of these properties and understand the building operating plan
 - iv. Perform the onsite audit with the team of engineers focusing on the MEP of these properties
 - v. Consolidate the audit observations and develop a detailed proposal for RAKNH on the probable interventions and effective energy management plan following principles of ISO 50001.
 - vi. Provide a detailed tech-commercial assessment of a wastewater treatment facility at one of the resorts
 - **Client:** Hilton Ras Al Khaimah Resort & Spa, Hilton Garden Inn, Rixos Marjan Island and Ritz Carlton Wild Wadi Resort (all hotels under RAKNH)
 - **Specific Role Played:** Engagement Partner
 - **Project Timeline:** Approximately 3 months
 - **Start Date:** 2019

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Relevant Experience

- / **Project Name:** : *Improving Facility Energy Efficiency through an Integrated Energy Solution*
 - **Project Description:** Client's monthly electricity bills is very high and with plans on expansion as well as anticipated power tariff increase, the client wanted to find solutions to minimize the electricity consumption or find alternative power sources
 - **Activities Performed:**
 - i. Energy assessment and audit of facilities;
 - ii. Design of real time energy monitoring system that produces real time power consumption across optimized locations of the site, in addition to thermal losses;
 - iii. Design of solutions to optimize energy efficiency of site;
 - iv. Techno economic assessment of proposed solutions which include thermal losses minimization, cooling efficiency enhancement, alternative power options and smart power management
 - **Client:** Bahra Cables, KSA
 - **Specific Role Played:** Engagement Partner
 - **Project Timeline:** Approximately 12 months
 - **Start Date:** 2018

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Relevant Experience

- / **Project Name:** : *Design of a Market-Based Demand Response Program*
 - **Project Description** : To investigate power system flexibility issues with high penetration of renewables & model the use of market-based demand response program to produce adequate reserve margins and thus enhance social welfare and power grid resilience
 - **Activities Performed:**
 - i. Detail analysis & baselining of different types of reserve or flexibility needed in power systems;
 - ii. Benchmarking of different demand response programs around the world;
 - iii. Modeling the price of reserve from a security constrained economic dispatch perspective in a deregulated electricity market with a day-ahead and spot market;
 - iv. Design of a market-clearing model with virtual power plants submitting different kinds of reserve through demand response;
 - v. Development of a new Index of power system Flexibility that incorporates response delay (θ) of distributed devices
 - **Client:** Masdar Institute
 - **Specific Role Played:** Principal Investigator
 - **Project Timeline:** Approximately 36 months
 - **Start Date:** 2017

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Relevant Experience

- / **Project Name:** : *Smart Cool Dolly*
 - **Project Description** : The project scope was to develop a green cooling dolly system to be used to transfer temperature sensitive cargo such as pharmaceuticals when they come through Abu Dhabi Airport.
 - Dolly had to have specific temperature and mechanical requirements & to reduce temperature inside the dolly up to 5 degrees given any ambient external temperature
 - **Activities Performed:**
 - i. Standalone power system was developed that is able to meet the power requirements;
 - ii. The chassis of the dolly was designed and produced to allow for swappable battery banks while meeting all mechanical requirements of the dolly system
 - iii. The cooling system in the dolly was designed and produced and was able to successfully reduce the temperature within the dolly to 2 degrees with an ambient temperature of 47 degrees;
 - iv. A smart energy management system was designed and used in the dolly to optimize the cooling and power requirements of the dolly to make it operate successfully
 - v. The Dolly was designed and developed to self sustain its cooling requirements through a standalone power system that operates for 8 hours continuously while meeting operational restrictions to be deployed in Abu Dhabi airport
 - vi. The dolly design was patented;
 - vii. The dolly design was nominated among the top 3 innovative products of 2017 by IATA;
 - viii. The dolly was successfully tested in Abu Dhabi Airport and mass production of the dolly design is under consideration by Etihad Airlines Cargo
 - **Client:** Etihad Airlines
 - **Specific Role Played:** Principal Investigator
 - **Project Timeline:** Approximately 12 months
 - **Start Date:** 2016

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- / **Project Name:** : *Cyber Physical Sustainability of Smart Grids*
 - **Project Description :** Assess the effect of the evolution of smart grids on the physical security of power systems
 - **Activities Performed:**
 - i. Structure the smart grid into a cyber layer, a SCADA layer and a physical power layer;
 - ii. Analyze the effects of evolving cyber space overlapping evolving smart grids on increasing the vulnerability of the overall power system;
 - iii. Link such vulnerabilities to potential physical power security issues
 - iv. Design an integrated metric framework to assess a power grid from an integrated cyber physical perspective;
 - v. Model the power economic dispatch to account for new security contingencies that are effected by cyber vulnerabilities
 - vi. Develop a case study on electric vehicles integrated in a smart grid and analyze potential cyber attacks along with their effect on the grid
 - vii. The key outcome from the project was –
 - viii. Results demonstrate the high risk of cyber vulnerability in smart grids on the physical power system stability and security;
 - ix. Work presented and defended in MIT IC3 summits;
 - x. A graph theory based method was developed to assess the NIST standards given the approach in this project
 - **Client:** Massachusetts Institute of Technology (MIT), Cambridge USA
 - **Specific Role Played:** Principal Investigator
 - **Project Timeline:** Approximately 24 months
 - **Start Date:** 2014

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- / **Project Name:** : *Efficiency Enhancement National Savings*
 - **Project Description :** Assess the potential national savings to UAE government from the implementation of different energy efficiency retrofits across the energy value chain.
 - **Activities Performed:**
 - i. Understand the complex economic nature of the UAE semi privatized power sector;
 - ii. Understand detailed energy value chain to be able to assess MW savings from energy efficiency enhancements
 - iii. Formulated detailed economic assessment of subsidy system in UAE to include monetary losses for the government from every MWH consumed by electricity end-users
 - iv. Developed a detailed energy model that computes national savings from retrofits
 - v. The key outcome of the project was:
 - vi. Comparative analysis of savings to UAE government from different retrofits across energy value chain;
 - vii. Savings from demand-side retrofits proved to be significantly higher than any other sector
 - **Client:** General Electric (GE)
 - **Specific Role Played:** Principal Investigator
 - **Project Timeline:** Approximately 12 months
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Relevant Experience

- / **Project Name:** : *Arbitration for Gas Contracts for a Leading Gas Company in the Gulf*
 - **Project Description** : The key objective of the project was to analyze the effect of gas prices on operation and financials of a leading power company in Italy
 - **Activities Performed:**
 - i. Modeled the gas market in Italy to analyze profits and losses made from procuring gas from the gulf-based gas company;
 - ii. Analyzed financial statements of the Italian company to model profits and losses from other gas markets made from procuring the gas from the gulf-based gas company;
 - iii. Detailed analysis of the Italian power market to understand the economics of power companies using natural gas as fuel;
 - iv. Modeled the bidding behavior of the Italian gas power department and analyzed profits and losses made from procuring the gas from the gulf-based gas company;
 - v. The key outcome of the project was:
 - vi. Detailed report was delivered to the client which was used in the arbitration case
 - **Client:** Leading Gas Company in the Gulf
 - **Specific Role Played:** Energy Sector Expert
 - **Project Timeline:** Approximately 12 months
 - **Start Date:** 2012

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Relevant Experience

- / **Project Name:** : *Strategy and Operational Development for a Cyber Security Government Entity in the Gulf*
 - **Project Description** : The project scope was to develop the operational strategy and implementation of a cyber security entity focusing on the development of local talent in cyber security
 - **Activities Performed:**
 - i. A supply/demand gap analysis was performed to identify core competencies needed to be developed by the entity;
 - ii. Detailing curriculum to be offered by the entity to promote local talent in the areas identified;
 - iii. Designing community outreach programs to meet the mission of the entity;
 - iv. Developing an implementation framework to roll out the entity into full operation;
 - v. Development of the documents to be used for engagement with international partners that will develop the detailed courses & training material
 - **Client:** Cyber Security Government Entity in the Gulf
 - **Specific Role Played:** Senior Consultant
 - **Project Timeline:** Approximately 12 months
 - **Start Date:** 2011

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Relevant Experience

- / **Project Name: : Strategy Development for a Petrochemical Company in KSA**
 - **Project Description :** The key scope of work for the project was to develop a medium-to-long terms growth strategy model for a leading petrochemical company in KSA
 - **Activities Performed:**
 - i. Baselining the current status of the client in terms of financial standings and operational as well as strategic perspectives;
 - ii. Development of a strategy framework for assessment and decision making on optimal sectors for the client to focus on;
 - iii. Assessment of different petrochemical sectors in the region;
 - iv. Development of a model for quantitative scoring of the different sectors through a capability & attractiveness index-based criteria
 - v. The key outcome of the project was –
 - vi. Strategy frameworks was used by the client;
 - vii. Scoring model was asked to be expanded in subsequent phases of the project
- **Client:** Major Petrochemical Company in KSA
- **Specific Role Played:** Senior Consultant
- **Project Timeline:** Approximately 6 months
- **Start Date:** 2011

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Relevant Experience

- / **Project Name:** : *Emission Regulation Policy & Modeling in the Power Sector*
 - **Project Description** : : Bottom-up econometric model for emission reduction in oligopolistic electricity markets as well as of gaming behavior within an hourly electricity market operating under optimally designed emission regulation mechanisms
 - **Activities Performed:**
 - i. Development of a market-based cap-and-trade program that can be used in a deregulated electricity market operating under a day-ahead hourly market-clearing structure;
 - ii. Development of a joint emission permits and electricity market with an hourly joint market-clearing mechanism;
 - iii. Modeling of hourly gaming behavior within such a joint market based on Cournot and supply function Nash equilibrium;
 - iv. Optimal temporal allocation of yearly emission permits into hourly fractions through a Nash equilibrium approach while accounting for hourly gaming and trading in the joint market-clearing;
 - v. Social-welfare based allocation through the independent system operator of yearly permits amongst generating companies through a tri-level optimization problem that accounts for hourly joint market-clearing with gaming;
 - vi. Development of an auction model for yearly permit allocation by which the independent system operator can mitigate market power
 - vii. Development of a carbon tax program that can be used a deregulated electricity market operating under a day-ahead market-clearing structure
 - **Client:** Natural Sciences and Engineering Research Council of Canada (NSERC)
 - **Specific Role Played:** Research Scientist
 - **Project Timeline:** Approximately 48 months
 - **Start Date:** 2005

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Relevant Experience

- / **Project Name:** : *Portfolio Management in Pool/Bilateral Electricity Markets*
 - **Project Description** : A contract negotiation model for agreeing on bilateral contracts given different risk measures under a pool-based hourly electricity market
 - **Activities Performed:**
 - i. Analyzed & benchmarked different combined pool/bilateral electricity markets;
 - ii. Assessed different types of physical and financial bilateral contracts and how they are implemented;
 - iii. Modeled a combined pool/bilateral contract electricity market-clearing program;
 - iv. Developed different risk measures to be used to assess physical bilateral contracts between generating companies & load-serving entities;
 - v. Developed a negotiating mechanism for generating companies & load-serving entities to arrive at optimally calibrated bilateral contracts;
 - vi. Simulated different negotiating scenarios where mutually agreeable contracts where agreed-upon in a mixed pool/bilateral market
 - **Client:** Natural Sciences and Engineering Research Council of Canada (NSERC)
 - **Specific Role Played:** Research Scientist
 - **Project Timeline:** Approximately 24 months
 - **Start Date:** 2003

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Relevant Publications

- / S. El Khatib and F. D. Galiana, "Negotiating bilateral contracts in electricity markets", IEEE Trans. Power Syst., vol. 22, no. 2, pp. 553-562, May 2007;
- / F. D. Galiana, S. El Khatib, and "An emission allowance auction for an oligopolistic electricity market operating under cap-and-trade", invited paper, IET Generation, Transmission & Distribution, vol. 4, no. 2, pp. 191-200, 2010;
- / Mezher, T., El Khatib, S., and Sooriyaarachchi, T.H. Cyberattacks on Critical Infrastructure and Potential Sustainable Development Impacts. International Journal of Cyber Warfare and Terrorism, 5(3), 1-19, July-September 2015;
- / Sooriyaarachchi, T.H., Tsai, I., El Khatib, S., Farid, A., and Mezher, T. Job Creation Potentials and Skill Requirements in, PV, CSP, Wind, Water-to-Energy and Energy Efficiency Value Chains. Accepted for publications in Renewable and Sustainable Energy Reviews, Vol. 52, pp. 653-668, December 2015;
- / Ito S., El Khatib S., and Nakayama M.; Conflict over a hydropower plant project between Tajikistan and Uzbekistan: The lack of informational transparency and normative symmetry; accepted for publication the Int. J. Water Resources Development;
- / Ktair R., El Khatib S., and Mezher T.; "Formulation of an Integrated Energy Strategy for United Arab Emirates based on a Holistic Optimization of the Country's Energy Resources"; Proceedings in Energy Procedia; ELSEVIER, 2014;
- / Nakayama M, Salwicz K., El Khatib S., Kikuchi R., Sakamoto R.; "Water-Energy-Agriculture Nexus in Vaksh River basin of Tajikistan"; invited paper at the proceedings of the World Water Congress XV; by the International Water Resources Association (IWRA); Scotland, 25th-29th May 2015;
- / Gun, D. Sasaki; S. T. El Khatib, and M. Nakayama "Impact of Implementing a Feed-in Tariff in Abu Dhabi UAE"; Journal of Applied Economics and Finance; Sept 2016;

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- / A. Zekar, A. Afshari, and S. T. El Khatib; "The use of Simplified Thermal Energy Consumption Model to Predict Building Cooling Load while Accounting for Heat Island Effect in Urban Settings"; Energy and Buildings Journal. March 2017;
- / S. Kaddoura, and S. T. El Khatib; "An Evaluation of Water-Energy-Food Nexus Tools to Improve the Nexus Modelling Approach for Integrated Policy Making;" Environmental Science and Policy Journal; Nov. 2017;
- / B. Mohandes, R. A. Hammadi, W. Sanusi, T. Mezher, and S. E. Khatib, "Advancing cyber-physical sustainability through integrated analysis of smart power systems; a case study on electric vehicles," International Journal of Critical Infrastructure Protection, 2018.
- / O. Abou Kasm, B. Mohandes, A. Diabat, S. El Khatib, "Exam Timetabling with Allowable Conflicts within a Time Window", Jnl. of Computers & Industrial Engineering, 0360-8352, 2018,
- / S. T. El Khatib, and F.D. Galiana "Investigating Emission Regulation Policy in the Electricity Sector: Modeling an Oligopolistic Electricity Market under Hourly Cap-and-Trade"; Energy Economics Journal, Feb. 2019;
- / B. Mohandes, M. S. E. Moursi, N. Hatzigryriou, and S. E. Khatib, "A review of power system flexibility with high penetration of renewables," IEEE Transactions on Power Systems, vol. 34, pp. 3140–3155, July 2019.
- / B. Mohandes, M. S. El Moursi and S. El Khatib, "A New Index of Power System Flexibility: Response Delay (θ) of Distributed Devices," 2019 International Conference on Smart Energy Systems and Technologies (SEST), Porto, Portugal, 2019, pp. 1-6. (Nominated for Best-Paper Award)
- / B. Mohandes, M. S. El Moursi, N. Hatzigryriou, and S. El Khatib, "Smart Demand Response Contracts for Smarter Grids: A Detailed Operation Model for Incentive Based DR", IEEE Transactions on Smart Grid, Jan 2021'

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- / Kiani, A., Mezher, T. Griffiths, S., and El Khatib, S., Potential Impact of Methane Hydrate Development on GCC and NEA Energy Trade, in Energy Relations and Policy Making in Asia, Editor: Lester, L., Springer, 2016, pp. 31-51, DOI 10.1007/978-981-10-1094-1_3.
- / Kaddoura S., Tammimi M., and El Khatib S; "Energy/Water Nexus Modeling Approach in the Context of Integrated Policy Making in UAE"; U.A.E. State of Energy Report 2017; published by the Ministry of Energy in UAE, United Nations Development Programme (UNDP) and Dubai Carbon, June 2017;
- / El Khatib S., and Temimi M.; "Energy Efficiency and Potential National Savings in UAE"; U.A.E. State of Energy Report 2017; published by the Ministry of Energy in UAE, United Nations Development Programme (UNDP) and Dubai Carbon, June 2017;
- / S. El Khatib, C.G. Quiles, and F. D. Galiana, "Effects of risk measures on bilateral trading in electricity markets", in Proc. Power Tech 2007 conf., PES, IEEE, Lausanne, Jul. 2007;
- / Al Abed Y., Al Jasmi M, Griffiths S., Al Roub M, and El Khatib S, "Driving Productivity & Profitability of Energy Efficiency in UAE" GE White Paper, presented to GE higher management, stakeholders in UAE Energy value chain and at the WFES, January 2015;
- / B. Abula, L. A. Youssef, S. T. El Khatib, and A. Galadari; "Evaluation of Dubai's Road Network Resilience against Intersection and Interchange Disruptions"; Accepted for publication in the 2017 Gulf Research Meeting at the University of Cambridge, Smart Cities in the Gulf: Current State, Opportunities, and Challenges workshop, Cambridge, U.K., August 2017;
- / B. Mohandes, A. Zekar, and S. T. El Khatib; "Active Demand Engagement in an Electricity Market Designed for Evolving Smart Grids" Accepted for publication in the 2017 Gulf Research Meeting at the University of Cambridge, Smart Cities in the Gulf: Current State, Opportunities, and Challenges workshop, Cambridge, U.K., August 2017;