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SHORT BIOGRAPHY

Brian Vad Mathiesen, Professor in Energy Planning and Renewable Energy Systems at Aalborg University, holds a PhD in fuel cells and electrolysers in future energy systems (2008). His research focuses on technological and socioeconomic transitions to renewables, energy storage, large-scale renewable energy integration and the design of 100% renewable energy systems. He is one of the leading researchers behind the concepts of <u>Smart Energy Systems</u> and electrofuels. He is on the Thomson Reuters Highly Cited list (2015-2017), thus among the top 1% most cited researchers globally. Among other positions, he is member of the <u>EU Commission expert group on electricity</u> <u>interconnection targets in the EU</u> as well as Research Coordinator of the Sustainable Energy Planning Research group, Principal Investigator (PI) of <u>RE-INVEST</u> and sEEnergies projects, Coordinator of <u>Heat Roadmap Europe</u> and Programme Director for the MSc in <u>Sustainable Cities</u>. He has been PI, work package leader and participant in more than 60 research projects as well as editorial board member of The Journal of Energy Storage (Elsevier) and The Journal of Sustainable Development of Energy, Water & Environment Systems; Associate Editor of Energy, Ecology and Environment (Springer) and Editor of the International Journal of Sustainable Energy Planning and Management. Furthermore, he is a member of The Danish Academy of Technical Sciences (ATV).

PUBLICATIONS, CITATIONS & INTERNATIONAL RANKING

- Thomson Reuters ISI Highly Cited Researcher within Engineering from 2015 to 2018.
- WEB of Science: 72 Articles and h-index = 32 (5480 citations), WEBofScience
- ResearcherID: 105 publications and h-index = 32 (6003 citations), <u>ResearcherID</u>
- Google Scholar: 214 publications indexed: 10206 citations, h-index: 40, GoogleScholar
- SCOPUS: 83 publications indexed: 6774 citations, h-index: 36, Scopus

EDUCATION

- PhD, 2008, "Fuel cells and electrolysers in future energy systems", Aalborg University, Denmark
- ECIU Leadership Development Programme, 2011, International personal leadership and strategic management
- development programme of the European Consortium of Innovative Universities
- MSc. Eng. in Environmental Management, 2003, Aalborg University, Denmark

EMPLOYMENTS

2014-today	Professor in Energy Planning and Renewable Energy Systems , <i>Department of Planning,</i> Aalborg University, Copenhagen, Denmark
2010-2013	Associate Professor in Energy Planning, Aalborg University, Copenhagen, Denmark
2008-2010	Assistant Professor in Energy Planning, Aalborg University, Copenhagen, Denmark
2005-2008	PhD Fellow, Part of research programme: Efficient conversion of renewable energy with solid oxide cells, <i>Aalborg University, Aalborg Denmark</i>
2004-2005	Research Assistant (part time), Aalborg University, Aalborg, Denmark
2004-2005	Energy and environmental planner, Public Utility Company Aalborg, Aalborg, Denmark
2004	Environmental planner, <i>Sønderjylland County, Åbenrå, Denmark</i>

INTERNATIONAL AND NATIONAL COLLABORATION AND MOBILITY

2017	Visiting researcher, Stanford University
2015	Visiting guest lecturer, PhD level, <i>Kyoto University, Japan;</i> Evaluation of MSc thesis <i>, University College Cork</i> ; Examiner energy system analyses, <i>University of Southern Denmark</i>
2014	Visiting guest lecturer, MSc level, University of Copenhagen, Denmark
2013	Examiner, PhD level qualifying exam, Aarhus University
2011	Visiting guest lecturer, PhD and MSc level, University of California, Santa Cruz, USA
2010	Visiting guest lecturer, PhD level, Roskilde University, Denmark
2009-2010	Visiting researcher, University of Zagreb
2006	Visiting researcher, Dep. of Energy, Power Engineering and Environment, Roskilde, DTU Risø

EDITORIAL POSITIONS

2015-today	Associate Editor, Energy, Ecology and Environment (Springer)
2014-today	Editorial board member, Journal of Energy Storage (Elsevier)
2013-today	Editorial board member , The Journal of Sustainable Development of Energy, Water and Environment Systems – JSDEWES (OAJ)
2013-today	Editor, International Journal of Sustainable Energy Planning and Management (OAJ)
2012-2018	Guest editor, six Special Issues for Energy, The International Journal (Elsevier)
2012-2013	Guest editor, two for Applied Energy (Elsevier)
MANAGEMENT	
2019-today	Project Coordinator , Quantification of synergies between Energy Efficiency first principle & renewable energy systems (sEEnergies); 6 universities & 3 industrial partners from 7 countries. Horizon 2020; turnover 1.5 M€
2017-today	Head, RE-Invest: Renewable Energy Investment Strategies (<u>www.reinvestproject.eu</u>); 17 partners from universities, public authorities and industry Denmark, Norway, Germany and the USA; turnover 3.6 M€
2012-today	Research Coordinator, The Sustainable Energy Planning Research Group (30 staff)
2012-today	Programme Director, MSc in Sustainable Cities programme (25-35 students annually)
2017-2019	Project Coordinator, Heat Roadmap Europe 4 (<u>www.heatroadmap.eu</u>), low-carbon heating & cooling strategies; 14 partners from European universities, public authorities & industry; turnover 2.1M€
2012-2018	Deputy head, 4DH Research Centre (<u>www.4dh.dk</u>); 32 partners from universities & industry in Denmark, Sweden, Croatia and China; turnover 8.5 M€
TEACHING ACTIV	ITIES, SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS
2006-today	14 PhD courses at Aalborg University (organiser and/or lecturer)
2009-today	Supervision of 7 PhDs at the Department of Development and Planning (one of which was the winner of the EliteForsk travel grant 2014)
2008-2011	Supervision of 1 PhD, Department of Physics and Energy, University of Limerick, Ireland (winner of the 2010 Globe Forum "Early Careers Research Award", Ireland)
2014-2015	Examiner in PhD Assessment Committees, Aalborg University and University of Zagreb
2009-today	Supervision of master theses (approx. 45), Aalborg University, Denmark
2004-today	Supervision of student projects (approx. 125) and teaching at BSc and MSc level
2009-today	Supervision of 5 international guest researchers and 4 international visiting research trainees
ACADEMIC ADVIS	SORY BOARDS, MEMBERSHIPS & ORGANISATION OF INTERNATIONAL SCIENTIFIC CONFERENCES
2017-today	Member of the Danish Academy of Technical Sciences (ATV).
2015-today	Conference chair and organiser of the annual International Conferences on <u>Smart Energy</u> <u>Systems</u> ,4 th Generation District Heating, electrification, electrofuels and energy efficiency, with 300-400 participants from academia & industry
2014-today	Scientific Steering Committee member, International Renewable Energy Storage Conference (IRES), European Association for Renewable Energy EUROSOLAR & World Council for Renewable Energy, organiser of annual conferences with >600 participants from academia & industry
2013-today	Scientific Review Committee member, 8 th -13 th International Renewable Energy Storage Conference and Exhibition (EUROSOLAR – IRES)
2012-today	Management Board Member, International Centre for Sustainable Development of Energy, Water and Environment (SDEWES), organiser of annual conferences with 350-550 academics
2012-today	International Scientific Committee member, International Centre for Sustainable Development of Energy, Water and Environment (SDEWES)
2010-today	Scientific Advisory Board member, International Centre for Sustainable Development of Energy, Water and Environment (SDEWES)
2013-2018	Scientific Award Committee member, 8 th -11 th Conferences on Sustainable Development of Energy, Water and Environment Systems (Lisbon, Dubrovnik, Novi Sad, Perlermo)
2015	Special session organiser (35 invited papers), 10 th Conference on Sustainable Development of Energy, Water and Environment Systems, " <i>Smart Energy Europe - Challenges and opportunities for a fossil and nuclear free European continent"</i> , Dubrovnik, Croatia

2013

Special session organiser (16 invited papers), 8th Conference on Sustainable Development of Energy, Water and Environment Systems, "*Energy System Analysis and Smart Energy Systems (EnergyPLAN)*", Dubrovnik, Croatia

SCIENTIFIC ADVISORY ACTIVITIES

2016-today	Member of the European Commission Expert Group on Electricity Interconnection Targets in the Energy Union
2015-today	Member of UN Sustainable Development Solutions Network Northern Europe (SDSN)
2010-today	Professional university representative in the Smart City/Renewable energy partnership network Gate 21 for companies and public authorities in Greater Copenhagen
2016-2018	Vice-Chair of the European Commission's Horizon 2020 Advisory Group for Energy (AGE)
2016-2017	Member of Advisory Board, Roadmap for Buildings in Renewable Energy Systems, InnoByg
2015-2016	Scientific Consultant on Renewable Energy Scenarios, Danish Society of Engineers (IDA)
2014	Member of Scientific Advisory Board, Energy for Denmark 2050 Project (DK2050), Danish Architecture Centre (DAC)
2013-2015	Member of Advisory Board, Analyses of the Future Heating System in Greater Copenhagen conducted by HOFOR, CTR and VEKS (district heating utilities in Greater Copenhagen)
2012-2013	Reviewer in the Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR), Evaluation of Quality of Research
2010-2012	Scientific Advisor at the Danish Board of Technology on Sustainable Transport Scenarios, technical advisory board for the Danish parliament
2006-2009	Scientific Consultant on Renewable Energy Scenarios, Danish Society of Engineers (IDA)

SELECTED MAJOR COLLABORATIONS AND PROJECTS

2019-today	PI, Quantification of synergies between Energy Efficiency first principle & renewable energy systems (sEEnergies); 6 universities & 3 industrial partners from 7 countries. H2020 funding. Total budget 1.5 M€
2017-today	PI, Renewable Energy Investment Strategies – A two-dimensional interconnectivity approach (<u>RE-Invest</u>); 5 universities, 2 public authorities, a pension fund & 9 industrial partners in Norway, Germany & the USA. Innovation Fund Denmark & industry funding. Total budget 3.6M€
2017-today	Partner, Coordinated operation of integrated energy systems (CORE) 100% renewable energy analyses, 2 universities & 2 industrial partners. EUDP funding. Total budget 1.7 M \in
2016-today	Partner, <u>HotMaps</u> , Tools for local heating and cooling strategies. 2 universities & 12 industrial partners. H2020 funding. Total budget 3 M€
2016-today	Partner, <u>Thermos</u> , Thermal modelling, GIS and optimisation. 2 universities & 14 industrial partners. H2020 funding. Total budget 2.9 M€
2016-today	Partner, <u>SmartEnCity</u> , Smart Zero Carbon City concepts for replication and implementation. 2 universities & 33 industrial partners. H2020 funding, Smart Cities lighthouse. Total budget 29M€
2016-2019	PI, <u>Heat Roadmap Europe</u> 4, 14 country-specific heating & cooling roadmaps (90% of the European demand). 5 universities & 9 industrial partners. H2020 funding. Total budget 2.1 M€
2014-2017	WP leader, <u>CITIES</u> - Strategic Research Centre for IT-Intelligent Energy System in Cities. Decision support & pathways for cities to transform to 100% renewable energy. 5 universities & 35 private partners. Innovation Fund Denmark & industry funding. Total budget 10 M€
2014-2016	Partner, Heat Roadmap Europe 3 <u>Stratego</u> , Impact for Czech Republic, Croatia, Italy, Romania, United Kingdom. 5 universities & 14 private partners. H2020 funding. Danish budget 0.16 M€
2012-2018	Deputy head of the international Strategic Research Centre for <u>4th Generation District Heating</u> Technologies and Systems for Smart Energy Systems (4DH). 8 universities & 19 industrial partners in Sweden, Croatia & China. Innovation Fund Denmark & industry funding. Total budget 8.5 M€
2011-2013	Partner, <u>Heat Roadmap Europe</u> 2050: 1st & 2nd pre-study for EU27/EU28. 2 universities & 3 industrial partners from Germany, Sweden and Belgium. Partly funded by 4DH.
2007-2011	WP leader, <u>CEESA</u> - Coherent Energy and Environmental System Analysis. 100% renewable energy and transport scenarios as well as implementation policies and transition road map. 5 universities & 2 industrial partners. Innovation Fund Denmark Total budget 3 M€.
2005-today	Involved in more than 50 other projects.

SELECTED PUBLICATIONS

Selected peer-reviewed papers in international journals

*Full energy system transition towards 100% renewable energy in Germany in 2050. Hansen, K.; Mathiesen, B. V.; Skov, I. R.: Renewable & Sustainable Energy Reviews 102 [2019] 10.1016/j.rser.2018.11.038

*Transitioning to a 100% renewable energy system in Denmark by 2050: assessing the impact from expanding the building stock at the same time. Drysdale, David; Mathiesen, Brian Vad; Paardekooper, Susana: Energy Efficiency: 1-19 [2019]. 10.1007/s12053-018-9649-1

*Smart Energy and District Heating: Special Issue dedicated to the 2016 Conference on Smart Energy Systems and 4th Generation District heating. Lund, H.; Duic, N.; Østergaard, P. A.; Mathiesen, B. V.: Energy 160: 1220-1223 [2018] 10.1016/j.energy.2018.07.012

*Smart energy systems and 4th generation district heating systems. Østergaard, P. A.; Lund, H.; Mathiesen, B. V.: International Journal of Sustainable Energy Planning and Management 16 [2018] 10.5278/ijsepm.2018.16.1 *The direct interconnection of the UK and Nordic power market – Impact on social welfare and renewable energy integration. Zakeri, B.; Price, J.; Zeyringer, M.; Keppo, I.; Mathiesen, B. V.; Syri, S.: Energy 162 [2018] 10.1016/j.energy.2018.08.019

*The status of 4th generation district heating: Research and results. Lund, H.; Østergaard, P. A.; Chang, M.; Werner, S.; Svendsen, S.; Sorknæs, P.; Thorsen, J. E.; Hvelplund, F.; Mortensen, B. O. G.; Mathiesen, B. V.; Bojesen, C.; Duic, N.; Zhang, X.; Möller, B.: Energy 164 [2018] 10.1016/j.energy.2018.08.206

*Shedding light on energy transition: Special issue dedicated to 2016 conferences on sustainable development of energy, water and environment systems. Markovska, N.; Duić, N.; Mathiesen, B. V.; Guzović, Z.; Schlör, H.; Bjelić, I. B.; Lund, H.: Energy 144: 322-325 [2018] 10.1016/j.energy.2017.12.024

*Future district heating systems and technologies: On the role of smart energy systems and 4th generation district heating. Lund, H.; Duic, N.; Østergaard, P. A.; Mathiesen, B. V.: Energy 165: 614-619 [2018] 10.1016/j.energy.2018.09.115

*Beyond sensitivity analysis: A methodology to handle fuel and electricity prices when designing energy scenarios. Lund, H.; Sorknæs, P.; Mathiesen, B. V.; Hansen, K.: Energy Research and Social Science 39: 108-116 [2018] 10.1016/j.erss.2017.11.013

*Comprehensive assessment of the role and potential for solar thermal in future energy systems. Hansen, K.; Mathiesen, B.V.: Solar Energy 169: 144-152 [2018]

*Response to 'Burden of proof: A comprehensive review of the feasibility of 100% renewable-electricity systems'. Brown, T. W.; Bischof-Niemz, T.; Blok, K. Breyer, Lund, H.; Mathiesen, B. V.: Renewable and Sustainable Energy Reviews 92: 834-847 arXiv preprint arXiv:1709.05716 [20187] 10.1016/j.rser.2018.04.113

*Comprehensive assessment of the role and potential for solar thermal in future energy systems. Hansen, K.; Mathiesen, B.V.: Solar Energy 169: 144-152 [2018]

*Matching demand with supply at low cost in 139 countries among 20 world regions with 100% intermittent wind, water, and sunlight (WWS) for all purposes. Jacobson, Mark Z.; Delucchi, Mark A.; Cameron, Mary A.; Mathiesen, Brian V.: Renewable Energy 123: 236-248 [2018]. 10.1016/j.renene.2018.02.009

*Comparison of Low-temperature District Heating Concepts in a Long-Term Energy System Perspective. Lund, R S, Østergaard, D S, Yang, X, Mathiesen, B V: International Journal of Sustainable Energy Planning and Management 12: 5-18 [2017]. Google Scholar: 1; SCOPUS: 1

*Heat Roadmap Europe : Large-Scale Electric Heat Pumps in District Heating Systems. David, A, Mathiesen, B V, Averfalk, H, Werner, S, Lund, H: Energies 10[4]: 578 [2017]. Google Scholar: 1

*Simulation versus Optimisation: Theoretical Positions in Energy System Modelling. Lund, H, Arler, F, Østergaard, P A; Hvelplund, F K, Connolly, D, Mathiesen, B V, Karnøe, P: Energies 10[7]: 840 [2017].

*Impact of Germany's energy transition on the Nordic power market – A market-based multi-region energy system model. Behnam Z. et.al. Energy 115[3]: 1640-1662 [2016]. Google Scholar: 7; SCOPUS: 5; Web of Science: 2; 10.1016/j.energy.2016.07.083

*Smart Energy Europe: The technical and economic impact of one potential 100% renewable energy scenario for the European Union. Connolly, D, Lund, H, Mathiesen, B V: Renewable and Sustainable Energy Reviews 60: 1634-1653 [2016]. Google Scholar: 43; SCOPUS: 24; Web of Science: 13; 10.1016/j.rser.2016.02.025

*Smart Energy Systems for coherent 100% renewable energy and transport solutions. Mathiesen B V et.al.: Applied Energy 145: 139-154 [2015]. Google Scholar: 159; SCOPUS 107; Web of Science 79; 10.1016/j.apenergy.2015.01.075

*4th Generation District Heating (4GDH) : Integrating smart thermal grids into future sustainable energy systems. Lund H, et.al: Energy 68: 1-11 [2014]. Google Scholar: 342; SCOPUS: 202; Web of Science: 147; 10.1016/j.energy.2014.02.089. Most cited paper: 1 of 1352 Energy(2014)-papers

*A comparison between renewable transport fuels that can supplement or replace biofuels in a 100% renewable energy system. Connolly, D; Mathiesen, BV; Ridjan, I: Energy 73: 110-125 [2014]. Google Scholar: 48; SCOPUS: 32; Web of Science: 26; 10.1016/j.energy.2014.05.104

*Synthetic fuel production costs by means of solid oxide electrolysis cells. Ridjan, I; Mathiesen, BV; Connolly, D: Energy 76: 104-113 [2014]. Google Scholar: 24; SCOPUS: 17; Web of Science: 13; 10.1016/j.energy.2014.04.002

*Heat Roadmap Europe : Combining district heating with heat savings to decarbonise the EU energy system. Connolly, D. et.al. Energy Policy 65: 475-489 [2014]. Google Scholar: 200; SCOPUS: 132; Web of Science: 96; 10.1016/j.enpol.2013.10.035. Most cited paper: 1 of 660 Energy Policy(2014)-papers *From electricity smart grids to smart energy systems: A market operation based approach and understanding. Lund, H et.al. Energy 42[1]: 96-102 [2012]. Google Scholar: 296; SCOPUS: 218; Web of Science: 178; 10.1016/j.energy.2012.04.003. Most cited paper: 1 of 814 Energy(2012)-papers

*The role of Carbon Capture and Storage in a future sustainable energy system. Lund, H; Mathiesen, BV. Energy 44[1] 469-476 [2012]. Google Scholar: 60; SCOPUS: 52; Web of Science: 48; 10.1016/j.energy.2012.06.002

*Limiting biomass consumption for heating in 100% renewable energy systems. Mathiesen BV et.al. Energy 48 [1]: 160-168 [2012]. Google Scholar: 76; SCOPUS: 55; Web of Science: 43; 10.1016/j.energy.2012.07.063

*100% Renewable energy systems, climate mitigation and economic growth Mathiesen BV et.al. Applied Energy 88[2]: 488-501 [2011]. Google Scholar: 350; SCOPUS: 236; Web of Science: 198; 10.1016/j.apenergy.2010.03.001

*Potential of renewable energy systems in China. Liu, W; Lund, H; Mathiesen, B V; Zhang, Xiliang: Applied Energy 88[2]: 518-525 [2011]. Google Scholar: 156; SCOPUS: 120; Web of Science: 115; 10.1016/j.apenergy.2010.07.014

*Large-scale integration of wind power into the existing Chinese energy system. Liu, W; Lund, H; Mathiesen, BV: Energy 36[8]: 4753-4760[2011] Google Scholar: 132; SCOPUS: 109; Web of Science: 87; 10.1016/j.energy.2011.05.007

*Centralisation and decentralisation in strategic municipal energy planning in Denmark. Sperling, K; Hvelplund, F; Mathiesen, BV: Energy Policy 39[3]: 1338-1351 [2011]. Google Scholar: 102; SCOPUS: 59; Web of Science: 47; 10.1016/j.enpol.2010.12.006 *A review of computer tools for analysing the integration of renewable energy into various energy systems. Connolly, D. et.al.: Applied Energy 87[4]: 1059-1082 [2010]. Google Scholar: 848; SCOPUS: 526; Web of Science: 440; 10.1016/j.apenergy.2009.09.026. Most cited paper: 2 of 422 Applied Energy (2010)-papers

*The role of district heating in future renewable energy systems. Lund, H; Möller, B; Mathiesen, BV; Dyrelund, A: Energy 35[3]: 1381-1390 [2010]. Google Scholar: 447; SCOPUS: 292; Web of Science: 243; 10.1016/j.energy.2009.11.023. Most cited paper: 2 of 626 Energy(2010)-papers

*Energy system analysis of 100% renewable energy systems-The case of Denmark in years 2030 and 2050. Lund, H; Mathiesen, BV: Energy 34[5]: 524-531 [2009]. Google Scholar: 630; SCOPUS: 419; Web of Science: 356; 10.1016/j.energy.2008.04.003. Most cited paper: 1 of 248 Energy(2009)-papers

*Comparative analyses of seven technologies to facilitate the integration of fluctuating renewable energy sources. Mathiesen, BV; Lund, H: IET Renewable Power Generation 3[2]: 190-204 [2009]. Google Scholar: 182; SCOPUS: 120; Web of Science: 103. 10.1049/iet-rpg:20080049

*Uncertainties related to the identification of the marginal energy technology in consequential life cycle assessments. Mathiesen, BV; Münster, M; Fruergaard, T: Journal of Cleaner Production 17[15]: 1331-1338 [2009]. Google Scholar: 137; SCOPUS: 83; Web of Science: 74. 10.1016/j.jclepro.2009.04.009

*Integrated transport and renewable energy systems. Mathiesen, BV. et.al: Utilities Policy 16[2]: 107-116 [2008]. Google Scholar: 107; SCOPUS: 71; 10.1016/j.jup.2007.11.007. Most cited paper: 1 of 35 Utilities Policy (2008)-papers

Selected peer-reviewed papers in conference proceedings

*Book of abstracts: 4th International Conference on Smart Energy Systems and 4th Generation District Heating: Aalborg, 13-14 November 2018. Lund, H.; Mathiesen, B.V.; Østergaard, P. A.: Aalborg: Department of Planning, Aalborg University 287 s [2018].

*Heat Roadmap Europe: Towards EU-Wide, Local Heat Supply Strategies. Møller, B.; Wiechers, E.; Persson *Book of abstracts: 3rd International Conference on Smart Energy Systems and 4th Generation District Heating: National Museum, Copenhagen, 12-13 September 2017. Lund, H.; Mathiesen, B.V.: Copenhagen: Department of Development and Planning, Aalborg University 156 s [2017].

*Capacity Credit and Security of Supply : The Case of Renewable Energies in Denmark. Chozas, JF; Mathiesen, BV. Proceedings from 10th Dubrovnik Conference on SDEWES. 2015. SDEWES2015-0742 [2015]

*Renewable Energy Systems: A Smart Energy Systems Approach to the Choice and Modelling of 100% Renewable Solutions. Lund, H; et.al: PRES 2014, 17th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction, Pts 1-3. Vol. 39 AIDIC, 2014. p. 1-6 (Chemical Engineering Transactions, Vol. 39) [2014]. Google Scholar: 19; SCOPUS: 10; Web of Science: 1; 10.3303/CET1439001

*Heating technologies for limiting biomass consumption in 100% renewable energy systems. Mathiesen, BV; Lund, H; Connolly, D: 2011. 6th Dubrovnik Conference on SDEWES [2011]. Citations: Google Scholar: 9

*Mapping public regulation measures for photovoltaic technologies. Sperling, K; Mathiesen, BV; Hvelplund, F: 2011. 6th Dubrovnik Conference on SDEWES [2011]

*Smart Energy Storages for Integration of Renewables in 100% Independent Energy Systems. Krajačić, G; Duić, N; Mathiesen, BV; Carvalho, MDG: PRES 2010, 13th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction Vol. 21 AIDIC, 2010. p. 391-396 (Chemical Engineering Transactions, Vol. 21) [2010]. Google Scholar: 4; SCOPUS: 6; Web of Science: 5; 10.3303/CET1021066

*100% Renewable Energy Systems in Project Future Climate: the case of Denmark. Mathiesen, BV: Proceedings: 5th Dubrovnik Conference on SDEWES [2009]. Google Scholar: 10

*Energy System Analysis of 100 Per cent Renewable Energy Systems: The Case of Denmark year 2030 and 2050. Lund, H; Mathiesen, BV: Proceedings of the 4th Dubrovnik Conference on SDEWES [2007]. Google Scholar: 17

*Integrated transport and renewable energy systems. Mathiesen, BV; Lund, H; Nørgaard, P: Proceedings of the 4th Dubrovnik Conference on SDEWES [2007]

*Fuel-efficiency of hydrogen and heat storage technologies for integration of fluctuating renewable energy sources. Mathiesen, BV; Lund, H: 2005 IEEE St. Peterburg powertech: proceedings: art.no.: 4524828. Faculty of Mechanical Engineering and Naval Architecture, 2005 [2005]. Google Scholar: 9; SCOPUS: 4; 10.1109/PTC.2005.4524828 Selected Reports

*Definition & Experiences of Strategic Heat Planning. Djørup, S. R.; Bertelsen, N.; Mathiesen, B. V.; Schneider, N. C. A.: Department of Planning, Aalborg University [2019]

*Guidance for the comprehensive assessment of efficient heating and cooling. Djørup, S. R.; Bertelsen, N.; Mathiesen, B. V.; Schneider, N. C. A.: Department of Planning, Aalborg University [2019]

*Technical and Economic Potential of Distributed Energy Storages for the Integration of Renewable Energy. Sveinbjörnsson, D. P.; Trier, D.; Hansen, K.; Mathiesen, B. V.: PlanEnergi s/I [2018]

*Heat Roadmap Europe 4 - Guidelines for the Energy System Transition | The National Aspects of the HRE 2050 Scenario and Associated Policy Recommendations. Trier, D.; Kowalska, M.; Rothballer, C.; Stiff, G.; Mathiesen, B. V.: PlanEnergi s/i [2018] *Heat Roadmap Europe 4: Quantifying the Impact of Low-Carbon Heating and Cooling Roadmaps. Paardekooper, S.; Lund, R.

S.; Mathiesen, B. V.; Chang, M.; Petersen, U. R.; Grundahl, L.; David, A.; Dahlbæk, J.; Kapetanakis, I. A.; Lund, H.; Bertelsen, N.; Hansen, K.; Drysdale, D.; Persson, U.: Department of Planning, Aalborg University [2018]

*Handlingsplan for storskala anvendelse af elektrolyse i Danmark. Skov, I. R.; Mathiesen, B. V.: Department of Planning, Aalborg University [2018]

*Heat Roadmap Europe 4 - Business Cases and Business Strategies to Encourage Market Uptake: Addressing Barriers for the Market Uptake of Recommended Heating and Cooling Solutions. Trier, D.; Kowalska, M.; Paardekooper, S.; Volt, J.; Groote, M. D.; Krasatsenka, A.; Popp, D.; Beletti, V.; Nowak, T.; Rothballer, C.; Stiff, G.; Terenzi, A.; Mathiesen, B. V.: PlanEnergi s/I [2018]

*Heat Roadmap Europe 4 - Guidelines for the Energy System Transition | Recommendations for Local and Regional Policymakers. Trier, D.; Sørensen, S. S.; Rothballer, C.; Stiff, G.; Mathiesen, B. V.: PlanEnergi s/I [2018]

*Heat Roadmap Europe 4 - Guidelines for the Energy System Transition | Recommendations for Policymakers Including the Local and Regional Approach, the National Aspects and the Energy Union Perspective. Trier, D.; Kowalska, M.; Sørensen, S. S.; Rothballer, C.; Stiff, G.; Mathiesen, B. V.: PlanEnergi s/I [2018]

*Heat Roadmap Europe 4 - Guidelines for the Energy System Transition | The Energy Union Perspective. Trier, D.; Rothballer, C.; Stiff, G.; Mathiesen, B. V.: PlanEnergi s/i [2018]

*The role of Solar thermal in Future Energy Systems: Country cases for Germany, Italy, Austria and Denmark. Mathiesen, B.V.; Hansen, K.: Department of Development and Planning, Aalborg University, 122 s [2017].

*The role of Photovoltaics towards 100% Renewable energy systems: Based on international market developments and Danish analysis. Mathiesen, B.V.; David, A.; Petersen, S.; Sperling, K.; Hansen, K.; Nielsen, S.; Lund, H.; Neves, J.: Department of Development and Planning, Aalborg University, 135 s [2017].

*Danish roadmap for large-scale implementation of electrolysers. Skov, I R, Mathiesen, B V: Department of Development and Planning, Aalborg University. 35 p [2017]

*Future Green Buildings : A Key to Cost-Effective Sustainable Energy Systems. Mathiesen, BV. et.al: Department of Development and Planning, Aalborg University, [2016]

*A Review of Smart Energy Projects & Smart Energy State-of-the-Art. Mathiesen, BV. et.al: Department of Development and Planning, Aalborg University. 146 p [2015]. Google Scholar: 2

*Applications of SOECs in different types of energy systems: German and Danish case studies. Mathiesen, BV. et.al: Department of Development and Planning, Aalborg University, 35 p [2015]. Google Scholar: 1

*Copenhagen Energy Vision: A sustainable vision for bringing a Capital to 100% renewable energy. Mathiesen, BV. et.al: Department of Development and Planning, Aalborg University. 125 p [2015]. Google Scholar: 6

*IDA's Energy Vision 2050 : A Smart Energy System strategy for 100% renewable Denmark. Mathiesen, BV. et.al: Department of Development and Planning, Aalborg University. 164 p [2015]. Google Scholar: 3

*CEESA 100% Renewable Energy Transport Scenarios towards 2050 (Part 2). Mathiesen, BV. et.al: Department of Development and Planning, Aalborg University, 102 p [2014]. Google Scholar: 13

*Heat Saving Strategies in Sustainable Smart Energy Systems. Lund, H. et.al: 2014-1 ed. Institut for Planlægning, Aalborg Universitet, 86 p. (DDP-Publication series, Vol. 2014-1) [2014]. Google Scholar: 2

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