



Brian Vad Mathiesen

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SHORT BIOGRAPHY

Brian Vad Mathiesen, Professor in Energy Planning at Aalborg University, is one of the world's leading researchers in renewable energy systems and is listed in the Thomson Reuters [ISI Highly Cited](#) researchers from 2015 to 2018, thus ranked among the top 1% researchers in the world. His research focuses on the technological, economic and societal shift to renewables, large-scale integration of variable renewable energy resources (e.g. wind power) and the design of 100% renewable energy systems. He holds a PhD in fuel cells and electrolysers in future energy systems (2008) and is one of the leading researchers behind the concepts of [Smart Energy Systems](#) and electrofuels. Among other positions, Brian Vad Mathiesen a member of the [EU Commission expert group on electricity interconnection targets in the Energy Union](#), Research Coordinator of the Sustainable Energy Planning Research group, Principal Investigator (PI) of the [RE-INVEST and sEEnergies projects](#), Coordinator of [Heat Roadmap Europe](#), and Programme Director for and co-founder of the MSc in [Sustainable Cities](#). He has been PI, work package leader and participant in more than 60 research projects. In 2016, together with partners from DTU and Haldor Topsøe, he received the prestigious ForskEl Prize for a research project on the use of electrolysis with renewable energy. His editorial activities include being an 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. He is a member of The Danish Academy of Technical Sciences (ATV) and makes more than 25 annual keynote and public speeches in Denmark and internationally.

PUBLICATIONS, CITATIONS & INTERNATIONAL RANKING

- Listed in the 2015-2018 ISI Highly Cited researchers list ranking the top 1% researchers in the world in Web of Science. Published almost 200 papers and reports reaching an h-factor between 29 and 36 (April 2019). 57 are peer-reviewed papers in international journals. A list of selected publications is included.
- **WEB of Science:** 72 Articles and h-index = 32 (5480 citations), [WEBofScience](#)
- **ResearcherID:** 105 publications and h-index = 32 (6003 citations), [ResearcherID](#)
- **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
- MSc. Eng. in Environmental Management, 2003, Aalborg University, Denmark
- ECIU Leadership Development Programme – International personal leadership and strategic management development programme of the European Consortium of Innovative Universities, 2011

EMPLOYMENTS

2014-today	Professor in Energy Planning and Renewable Energy Systems , <i>Department of Planning, Aalborg University, Copenhagen, Denmark</i>
2010-2013	Associate Professor in Energy Planning, <i>Aalborg University, Copenhagen, Denmark</i>
2008-2010	Assistant Professor in Energy Planning, <i>Aalborg University, Copenhagen, Denmark</i>
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), <i>Aalborg University, Aalborg, Denmark</i>
2004-2005	Energy and environmental planner, <i>Public Utility Company Aalborg, Aalborg, Denmark</i>
2004	Environmental planner, <i>Sønderjylland County, Åbenrå, Denmark</i>

INTERNATIONAL AND NATIONAL COLLABORATION AND MOBILITY

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

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 - IJSEPM (OAJ)
2012-2018	Guest editor , seven 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 (sEnergies); 6 universities & 3 industrial partners from 7 different countries. Horizon 2020. Total budget 1.5 M€
2017-today	Head , RE-Invest - Renewable Energy Investment Strategies (www.reinvestproject.eu); 17 partners from universities, public authorities and industry in 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 (www.heatroadmap.eu), low-carbon heating & cooling strategies; 14 partners from European universities, public authorities & industry; turnover 2.1M€
2012-2018	Deputy head , 4DH Research Centre (www.4dh.dk); 32 partners from universities & industry in Denmark, Sweden, Croatia and China; turnover 8.5 M€

TEACHING ACTIVITIES, 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

SCIENTIFIC ADVISORY 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 Smart Energy Systems , 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 participants from academia
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), 8 th Conference on Sustainable Development of Energy, Water and Environment Systems, " <i>Energy System Analysis and Smart Energy Systems (EnergyPLAN)</i> ", 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	Project Coordinator, Quantification of synergies between Energy Efficiency first principle & renewable energy systems (sEEnergies); 6 universities & 3 industrial partners from 7 different countries. Horizon 2020. Total budget 1.5 M€
2017-today	PI, Renewable Energy Investment Strategies – A two-dimensional interconnectivity approach (RE-Invest); 5 universities, 2 public authorities, a pension fund & 9 industrial partners in Norway, Germany and the USA. Innovation Fund Denmark & industry funding. Total budget 3.6 M€
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€
2016-today	Partner, HotMaps, Tools for local heating and cooling strategies. 2 universities & 12 industrial partners. H2020 funding. Total budget 3 M€
2016-today	Partner, Thermos, Thermal modelling, GIS and optimisation. 2 universities & 14 industrial partners. H2020 funding. Total budget 2.9 M€
2016-today	Partner, SmartEnCity, Smart Zero Carbon City concepts for replication and implementation. 2 universities & 33 industrial partners. H2020 funding, Smart Cities lighthouse. Total budget 29 M€
2016-2019	PI, Heat Roadmap Europe 4, 14 country-specific heating & cooling roadmaps (90% of the European demand). 5 universities & 9 industrial partners. H2020 funding. Total budget 2.1 M€

2015-2017	Partner, Towards SOEC plants in 2020, The role of electrolysis and synthetic transport fuels, electrofuels. 2 universities & 1 industrial partner. Energinet.dk (TSO) funding. Total budget 2.5 M€
2014-2017	Subtask leader, IEA Task 52 – Solar Energy and Energy Economics in Urban Environments in future sustainable energy systems in 4 European country contexts. 3 universities & 7 industrial partners from Switzerland, Germany & Austria. EUDP funding. Danish budget 0.24 M€
2014-2018	Partner, IEA Annex 28 – Integration of Renewable Energies by distributed Energy Storage Systems in all sectors of the energy system. 6 universities & 4 industrial partners from Germany, Norway, Switzerland, Sweden, United Kingdom. EUDP funding. Danish budget 0.18 M€
2014-2017	WP leader, CITIES - 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 Stratego , 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 4th Generation District Heating 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, Heat Roadmap Europe 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, CEESA - 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€.
<i>2005-today</i>	<i>Involved in more than 50 other projects.</i>

LIST OF PUBLICATIONS

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 [2018] 10.1016/j.rser.2018.04.113
- *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., 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; Web of Science: ; 10.5278/ijsepm.2017.12.2.
- *Heat Roadmap Europe : Large-Scale Electric Heat Pumps in District Heating Systems.** David, Andrei; Mathiesen, Brian Vad; Averfalk, Helge ; Werner, Sven; Lund, Henrik: *Energies* 10[4]: 578 [2017]. Google scholar: 1; Scopus: ; Web of Science: 0; 10.3390/en10040578.
- *Simulation versus Optimisation : Theoretical Positions in Energy System Modelling.** Lund, Henrik; Arler, Finn; Østergaard, Poul Alberg; Hvelplund, Frede Kloster; Connolly, David; Mathiesen, Brian Vad; Karnøe, Peter: *Energies* 10[7]: 840 [2017]. Google scholar: ; Scopus: ; Web of Science: ; 10.3390/en10070840
- *Smart energy and smart energy systems.** Lund H., Østergaard P.A., Connolly D., Mathiesen B.V.: *Energy* [2017]. 10.1016/j.energy.2017.05.123
- *Case study of the constraints and potential contributions regarding wind curtailment in Northeast China.** Xiong, Weiming; Wang, Yu; Mathiesen, Brian Vad; Zhang, Xiliang *Energy* [2016] 110: 55-64 2016 5 3 10.1016/j.energy.2016.03.093
- *Energy Storage and Smart Energy Systems.** Lund H., Østergaard P.A., Connolly D., Ridjan I., Mathiesen B.V., Hvelplund F., Thellufsen J.Z., Sorknæs P.: *International Journal of Sustainable Energy Planning and Management* 11: 3-14 [2016]. Google scholar: 6; Scopus: 4; Web of Science: ; 10.5278/ijsepm.2016.11.2.
- *Impact of Germany's energy transition on the Nordic power market – A market-based multi-region energy system model.** Zakeri B., Virasjoki V., Syri S., Connolly D., Mathiesen B.V., Welsch M.: *Energy* 115: 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.
- *Terminology used for renewable liquid and gaseous fuels based on the conversion of electricity : A review .** Ridjan I., Mathiesen B.V., Connolly D.: *Journal of Cleaner Production* 112: 3709-3720 [2016]. Google scholar: 9; Scopus: 2; Web of Science: 2; 10.1016/j.jclepro.2015.05.117.
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- *Comparative analysis of the district heating systems of two towns in Croatia and Denmark.** Čulig-Tokić D., Krajačić G., Doračić B., Mathiesen B.V., Krklec R., Larsen J.M.: Energy 92: 435-443 [2015]. Google scholar: 10; Scopus: 5; Web of Science: 0; 10.1016/j.energy.2015.05.096.
- *Heat roadmap China : New heat strategy to reduce energy consumption towards 2030.** Xiong W., Wang Y., Mathiesen B.V., Lund H., Zhang X.: Energy 81: 274-285 [2015]. Google scholar: 23; Scopus: 17; Web of Science: 17; 10.1016/j.energy.2014.12.039.
- *Integration of renewables and reverse osmosis desalination – Case study for the Jordanian energy system with a high share of wind and photovoltaics.** Novosel, T.; Ćosić, B.; Pukšec, T.; Krajačić, G.; Duić, N.; Mathiesen, Brian Vad; Lund, Henrik; Mustafa, M: Energy 92[3]: 270-278 [2015]. Google scholar: 19; Scopus: ; Web of Science: 11; 10.1016/j.energy.2015.06.057.
- *Large combined heat and power plants in sustainable energy systems.** Lund R., Mathiesen B.V.: Applied Energy 142: 389-395 [2015]. Google scholar: 26; Scopus: 23; Web of Science: 22; 10.1016/j.apenergy.2015.01.013.
- *Performance Analysis of a Hybrid District Heating System : A Case Study of a Small Town in Croatia.** Mikulandrić R., Krajačić G., Duić N., Khavin G., Lund H., Mathiesen B.V., Østergaard P.: Journal of Sustainable Development of Energy, Water and Environment Systems 3[3]: 282-302 [2015]. Google scholar: 4; Scopus: 5; Web of Science: ; 10.13044/j.sdewes.2015.03.0022.
- *Smart Energy Systems for coherent 100% renewable energy and transport solutions.** Mathiesen B.V., Lund H., Connolly D., Wenzel H., Østergaard P.A., Möller B., Nielsen S., Ridjan I., KarnOe P., Sperling K., Hvelplund F.K.: 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., Werner S., Wiltshire R., Svendsen S., Thorsen J.E., Hvelplund F., Mathiesen B.V.: 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 1278 Energy(2014)-papers
- *A comparison between renewable transport fuels that can supplement or replace biofuels in a 100% renewable energy system.** Connolly D., Mathiesen B.V., Ridjan I.: Energy 73: 110-125 [2014]. Google scholar: 48; Scopus: 32; Web of Science: 26; 10.1016/j.energy.2014.05.104.
- *Assessing the impact of energy saving measures on the future energy demand and related GHG (greenhouse gas) emission reduction of Croatia.** Pukšec T., Mathiesen B.V., Novosel T., Duić N.: Energy 76: 198-209 [2014]. Google scholar: 21; Scopus: 14; Web of Science: 11; 10.1016/j.energy.2014.06.045.
- *A technical and economic analysis of one potential pathway to a 100% renewable energy system.** Connolly D., Mathiesen B.V.: International Journal of Sustainable Energy Planning and Management 1: 7-28 [2014]. Google scholar: 58; Scopus: 22; Web of Science: ; 10.5278/ijsepm.2014.1.2.
- *Barriers and Potential Solutions for Energy Renovation of Buildings in Denmark.** Meyer N.I., Mathiesen B.V., Hvelplund F.: International Journal of Sustainable Energy Planning and Management 1: 59-66 [2014]. Google scholar: 8; Scopus: 3; Web of Science: ; 10.5278/ijsepm.2014.1.5.
- *Energy system impacts of desalination in Jordan.** Østergaard P.A., Lund H., Mathiesen B.V.: International Journal of Sustainable Energy Planning and Management 1: 29-40 [2014]. Google scholar: 13; Scopus: 4; Web of Science: ; 10.5278/ijsepm.2014.1.3.
- *Heat Roadmap Europe : Combining district heating with heat savings to decarbonise the EU energy system.** Connolly D., Lund H., Mathiesen B.V., Werner S., Möller B., Persson U., Boermans T., Trier D., Østergaard P.A., Nielsen S.: 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 652 Energy Policy(2014)-papers
- *Heat Saving Strategies in Sustainable Smart Energy Systems.** Lund H., Thellufsen J.Z., Aggerholm S., Wittchen K.B., Nielsen S., Mathiesen B.V., Moller B.: International Journal of Sustainable Energy Planning and Management 4: 3-15 [2014]. Google scholar: 27; Scopus: 11; Web of Science: ; 10.5278/ijsepm.2014.4.2.
- *Modelling energy demand of Croatian industry sector.** Medić Z.B., Pukšec T., Mathiesen B.V., Duić N.: International Journal of Environment and Sustainable Development 13[1]: 74-92 [2014]. Google scholar: 8; Scopus: 2; Web of Science: ; 10.1504/IJESD.2014.056412.
- *Synthetic fuel production costs by means of solid oxide electrolysis cells.** Ridjan I., Mathiesen B.V., Connolly D.: Energy 76: 104-113 [2014]. Google scholar: 24; Scopus: 17; Web of Science: 13; 10.1016/j.energy.2014.04.002.
- *2050 pathway to an active renewable energy scenario for Jiangsu province.** Hong L., Lund H., Mathiesen B.V., Möller B.: Energy Policy 53: 267-278 [2013]. Google scholar: 20; Scopus: 15; Web of Science: 12; 10.1016/j.enpol.2012.10.055.
- *Forecasting long-term energy demand of Croatian transport sector.** Pukšec T., Krajačić G., Lulić Z., Mathiesen B.V., Duić N.: Energy 57: 169-176 [2013]. Google scholar: 21; Scopus: 14; Web of Science: 10; 10.1016/j.energy.2013.04.071.
- *HEAT ROADMAP EUROPE II : Fjernvarme skaber job og hjælper Europas CO2-mål.** Lund, Henrik; Connolly, David; Nielsen, Steffen; Möller, Bernd; Mathiesen, Brian Vad; Østergaard, Poul Alberg: Fjernvarmen, Nr. 6, 06.2013, s. 30-31 [2013]. Google scholar: 0; Scopus: ; Web of Science: ;
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- *Modelling the transport system in China and evaluating the current strategies towards the sustainable transport development.** Liu W., Lund H., Mathiesen B.V.: Energy Policy 58: 347-357 [2013]. Google scholar: 33; Scopus: 24; Web of Science: 23; 10.1016/j.enpol.2013.03.032.
- *Potentials for energy savings and long term energy demands for Croatian households sector.** Pukšec T., Vad Mathiesen B., Duić N.: Applied Energy 101: 15-25 [2013]. Google scholar: 23; Scopus: 17; Web of Science: 11; 10.1016/j.apenergy.2012.04.023.
- *System and market integration of wind power in Denmark.** Lund H., Hvelplund F., Østergaard P.A., Möller B., Mathiesen B.V., Karnøe P., Andersen A.N., Morthorst P.E., Karlsson K., Münster M., Munksgaard J., Wenzel H.: Energy Strategy Reviews 1[3]: 143-156 [2013]. Google scholar: 36; Scopus: 21; Web of Science: 18; 10.1016/j.esr.2012.12.003.
- *The feasibility of synthetic fuels in renewable energy systems.** Ridjan I., Mathiesen B.V., Connolly D., Duić N.: Energy 57: 76-84 [2013]. Google scholar: 50; Scopus: 34; Web of Science: 29; 10.1016/j.energy.2013.01.046.
- *From electricity smart grids to smart energy systems : A market operation based approach and understanding.** Lund H., Andersen A.N., Østergaard P.A., Mathiesen B.V., Connolly D.: 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 812 Energy(2012)-papers
- *Limiting biomass consumption for heating in 100% renewable energy systems.** Mathiesen B.V., Lund H., Connolly D.: Energy 48[1]: 160-168 [2012]. Google scholar: 76; Scopus: 55; Web of Science: 43; 10.1016/j.energy.2012.07.063.
- *The role of Carbon Capture and Storage in a future sustainable energy system.** Lund H., Mathiesen B.V.: Energy 44[1]: 469-476 [2012]. Google scholar: 60; Scopus: 52; Web of Science: 48; 10.1016/j.energy.2012.06.002.
- *The technical and economic implications of integrating fluctuating renewable energy using energy storage.** Connolly D., Lund H., Mathiesen B.V., Pican E., Leahy M.: Renewable Energy 43: 47-60 [2012]. Google scholar: 117; Scopus: 89; Web of Science: 76; 10.1016/j.renene.2011.11.003.
- *Wind power integration using individual heat pumps – Analysis of different heat storage options.** Hedegaard K., Mathiesen B.V., Lund H., Heiselberg P.: Energy 47[1]: 284-293 [2012]. Google scholar: 102; Scopus: 76; Web of Science: 60; 10.1016/j.energy.2012.09.030.
- *100% Renewable energy systems, climate mitigation and economic growth.** Mathiesen B.V., Lund H., Karlsson K.: Applied Energy 88[2]: 488-501 [2011]. Google scholar: 350; Scopus: 236; Web of Science: 198; 10.1016/j.apenergy.2010.03.001.
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