Curriculum vitae with track record (for researchers)

*** ROLE IN THE PROJECT** Project manager ☒ Work package leader ☐ Project partner ☐

*** PERSONAL INFORMATION**

*Family name, First name:	Korpås, Magnus		
*Date of birth:	08.09.1974	*Sex:	Male
*Nationality:	Norwegian		
Researcher unique identifier(s) (ORCID, ResearcherID, etc.):	https://orcid.org/0000-0001-5055-3912		
URL for personal website:	https://www.ntnu.edu/employees/magnus.korpas		

*** EDUCATION**

	Name of faculty/department, name of university/institution, country
2004	Ph.D. at Dept. of Electric Power Engineering, NTNU, Norway.
1998	MSc at Dept. of Physics, NTNU, Norway.

*** POSITIONS** (academic, business, industry, public sector, national or international organisations)

Current Position

	Job title/name of employer/country
2014-	Full Professor at Dept of Electric Power Engineering, NTNU. Research group leader for Electricity Markets and Energy System Planning. Norway.

Previous positions held

	Job title/name of employer/country
2012-2014	Research director, Energy Systems Department, SINTEF Energi AS, Norway.
2010-2012	Research manager, Energy Systems Department, SINTEF Energi AS, Norway.
2006-2010	Research scientist, Energy Systems Department, SINTEF Energi AS. Norway.
2004-2006	Post Doc, Dept. of Electric Power Engineering, NTNU, Norway.

MOBILITY

Research stays abroad lasting more than three months

	Name of faculty/department/centre, name of university/institution/country
2018-2019	Laboratory of Information and Decision Systems (LIDS), Massachusetts Institute of Technology (MIT), USA.

PROJECT MANAGEMENT EXPERIENCE

Projects funded by Research Council of Norway, international research programmes, private or public organisations

	Project and role, funding from
2016-	FME CINLEDI. Work Package leader for "Flexible Resources" and leader of Scientific Committee. NFR.
2016-	EU Horizon2020 project INVADE. Project leader for NTNU.
2014-2018	KPN HydroBalance. WP-leader and PhD supervisor. NFR.
2016-	FME HydroCen and FME ZEN. Phd supervisor. NFR.
2014-2015	KPN North Sea Offshore Networks. Project leader. NFR.
2011-2013	KMB Role of North Sea Power Transmission, Project leader, NFR

SUPERVISION OF GRADUATE STUDENTS AND RESEARCH FELLOWS

	No. of	Master's students/ Ph.D./Postdocs	Name of faculty/department/centre, name of university/institution/country
2014-	58	Master students	Dept. of Electric Power Engineering. NTNU. Norway
2014-	12	PhD (main supervisor)	Dept. of Electric Power Engineering. NTNU. Norway
2014-	11	PhD (co-supervisor)	Dept. of Electric Power Engineering. NTNU. Norway
2015-	4	Post docs	Dept. of Electric Power Engineering. NTNU. Norway
2015-2020	1	PhD (co-supervisor)	Univ. of Kassel / Fraunhofer IEE, Germany

TEACHING ACTIVITIES

	Teaching position – topic, name of university/institution/country
2014-	TET4135 Energy Planning and Operation. Course responsible .NTNU, Norway
2014-	ET8208 Power Market Theory. Course responsible. NTNU, Norway
2014-	TEP 4225 Energy and the Environment. Lecturer. NTNU, Norway
2014-2017	TEP 4235 Energy Management in Buildings. Lecturer. NTNU. Norway
2014	ET 6003 Hydro Power Planning. Course responsible. NTNU, Norway
2019-	Experts in Team, Village supervisor for Sustainable Energy, NTNU, Norway

INSTITUTIONAL RESPONSIBILITIES

	Name of university/institution/country
2015-	3 times PhD committee administrator for dissertations at NTNU
2015-	9 times PhD committee member for other universities: DTU (3), TU Delft (1), TU Wien (1), UPC Barcelona (1), UPM Madrid (1), KTH (1), ULisboa (1)
2015-2018	Leader of the PhD-programme in Electric Power Engineering, NTNU

MEMBERSHIPS OF ACADEMIES / SCIENTIFIC SOCIETIES / NETWORKS

	Name of academies, scientific societies, networks
2017-	Elected member of the Norwegian Academy of Technological Sciences (NTVA) , Norway
2014-	Participant inf EERS JP Smart Grids, Sub-programme on Storage Integration. Leading the Coordinated Activity on "Economic and technical benefits of storage systems in the network integration"
2006-	Participant in IEA Task 25 "Design and Operation of Power Systems with Large Amounts of Wind Power"

MAJOR COLLABORATIONS (if applicable)

Name of university/ institution/ faculty/ department/ centre, company/ governmental or non-governmental organisation	Topic
SINTEF Energy Research	Energy system planning and markets
NTNU Industrial Economy and NTNU Industrial Ecology	Energy system planning and markets
Massachusetts Institute of Technology (MIT), LIDS and MIT Energy Initiative, USA	Deep decarbonisation studies, Market analyses of renewable energy, energy storage
DTU Elektro, Denmark	Grid integration of electric vehicles
Fraunhofer IEE, Germany	Energy system planning and markets
National Renewable Energy Laboratory (NREL), USA	Market analysis of renewable energy
VTT, Finland	Energy storage modelling and analysis, Market analysis of renewable energy

Track record

- Total no. of scientific publications: 137, thereof 57 journal articles, 80 conference papers, 2 book chapters and 1 monograph. Technical reports from EU projects and SINTEF projects not included.
- H-index: 26 (all years). Since 2015: 20. (Google scholar, Aug. 26. 2020)
- Citations: 2745 (all years). Since 2015: 1528 (Google scholar, Aug. 26. 2020)
- PhD-thesis: "Distributed Energy Systems with Wind power and Energy Storage", NTNU, 2004.
- Ten major journal publications:

- M. Korpås, A. T. Holen, and R. Hildrum, "Operation and sizing of energy storage for wind power plants in a market system," *Int. Journal of Electrical Power & Energy Systems,* vol. 25, pp. 599-606, 2003. 579 citations (Google scholar, Aug 26. 2020)
- M. Korpås and A. T. Holen, "Operation planning of hydrogen storage connected to wind power operating in a power market," *IEEE Transactions on Energy Conversion,* vol. 21, pp. 742-749, 2006. 190 citations (Google scholar, Aug 26. 2020)
- M. Korpås and C. J. Greiner, "Opportunities for hydrogen production in connection with wind power in weak grids," *Renewable Energy,* vol. 33, pp. 1199-1208, 2008. 116 citations (Google scholar, Aug 26. 2020)
- T. Trötscher and M. Korpås, "A framework to determine optimal offshore grid structures for wind power integration and power exchange," *Wind Energy,* vol. 14, pp. 977-992, 2011. 47 citations (Google scholar, Aug 26. 2020)
- M. Kristiansen, F. Muñoz, S. Oren, and M. Korpås, «A mechanism for allocating benefits and costs from transmission interconnections under cooperation: A case study of the North Sea offshore grid," *The Energy Journal*, vol. 39(6), pp. 209-234. 2018.
- M. Löschenbrand and M. Korpås, "Multiple Nash-equilibria in electricity markets with price-making hydrothermal producers," *IEEE Transactions on Power Systems*, vol. 34(1), 2019.
- M. Jafari, M. Korpås, A. Botterud, "Power system decarbonization: Impacts of energy storage duration and interannual renewables variability", Renewable Energy, vol. 156, pp. 1171-1185, 2020.
- H. O. Riddervold, S. Riemer-Sørensen, P. Szederjesi, and M. Korpås, « A supervised learning approach for optimal selection of bidding strategies in reservoir hydro», Electric Power Systems Research, vol. 187, 106496, 2020.
- I. Graabak, M. Korpås, S. Jaehnert, and M. M. Belsnes, "Balancing future variable wind and solar power production in Central-West Europe with Norwegian hydropower," *Energy*, vol. 168, pp. 870-882, 2019.
- E. F. Bødal and M. Korpås, «Value of hydro power flexibility for hydrogen production in constrained transmission grids". *Int. J of Hydrogen Energy*, vol. 45(2), 2020.

Selected recent presentations:

- "How Costs are Recovered in Electricity Markets with Wind, Solar and Storage Plants: An Analytical Approach", MIT A+B Applied Energy Conf., Aug 2020, Session Keynote
- Panelist in the "Smartgridkonferansen" 2020 on the topic of Flexibility.
- "Forecasting and Market Design for Multi-area Energy Balancing: A European Perspective", 2019 Meteorology & Market Design for Grid Services Workshop, Denver. Invited closing plenary session.
- "Small-scale vs. large-scale flexibility options in systems dominated by variable renewables", MIT Energy Initiative Electric Power Systems Fall Workshop, Boston, 2018, Invited plenary session.
- "The role of offshore wind in Europe's future energy system", Energiforskningskonferansen 2018 (Eng: The Energy Research Conference), Oslo, Invited opening plenary session.

Selected recent media contributions:

- Fact provider for www.faktisk.no, "Viral vindkraft-video er full av feil", June 2020.
- M. Korpås, «Hvorfor bry oss med å bygge ut vindkraft i Norge?» (Eng: Why should we build wind power in Norway?), Chronicle, *energiogklima.no*, Aug. 8, 2019.
- A. Sakti and M. Korpås, « The Lessons of Norway's rapid Electric vehicle adoption,» Popular Science Article, *Axios*, Jan. 30, 2019.
- C. R. Olsen, M. Korpås and G. Kjølle, "Batterier blir en del av strømnettet» (Eng: Batteries becomes part of the power grid), Interview, gemini.no, June 25, 2018.