

Research interests

- Energy economics and policy
- Techno-economic analysis of energy technologies
- Community energy
- Crowdfunding in energy
- Distributed generation and grid integration
- Energy access and rural electrification
- Sustainable energy system transitions

Publications

Journal papers:

- Few, S., Djapic, P. Strbac, G. Nelson, J. **Candelise, C.** (2024) "A geographically disaggregated approach to integrate low-carbon technologies across local electricity networks", *Nature Energy* (1-12)
- Wierling, A., Schwanitz, V.J., Zeiss, J.P. **Candelise C.** et al. (2023) "A Europe-wide inventory of citizen-led energy action with data from 29 countries and over 10000 initiatives". *Sci Data* 10, 9.
- Sowe, J. Varela Barreras, J. Schimpe, M. Wu, B. **Candelise, C.** Nelson, J. Few, S. (2022) "Model-informed battery current derating strategies: Simple methods to extend battery lifetime in islanded mini-grids". *Journal of Energy Storage*, Vol. 51 Pages 104524
- Sciullo, A.; Gilcrease, G.W.; Perugini, M.; Padovan, D.; Curli, B.; Gregg, J.S.; Arrobbio, O.; Meynaerts, E.; Delvaux, S.; Polo-Alvarez, L.; **Candelise, C.**; van der Waal, E.; van der Windt, H.; Hubert, W.; Ivask, N.; Muiste, M. (2022) "Exploring Institutional and Socio-Economic Settings for the Development of Energy Communities in Europe". *Energies* 2022, 15, 1597.
- Few S., Barton J., Sandwell P., Morie R., Kulkarnif P., Thomso M., Nelson J., **Candelise C.** (2022) "*Electricity demand in populations gaining access: Impact of rurality and climatic conditions, and implications for microgrid design*" *Energy for Sustainable Development*, 66, 151-164
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- **Candelise, C.**, Saccone, D. Vallino E. (2021). "*An empirical assessment of the effects of electricity access on food security*". *World Development*, 141: 105390.
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- **Candelise C.**, Ruggieri, G. (2020) "*Status and Evolution of the Community Energy Sector in Italy*" *Energies*, 13(8), 1888

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- Wierling, A., Schwanitz, V.J., Zeiß, J.P., Bout, C., **Candelise, C.**, Gilcrease, W., Sterling Gregg, J. (2018) "*Statistical Evidence on the Role of Energy Cooperatives for the Energy Transition in European Countries*" *Sustainability*, 10(9), 3339
- **Candelise C.**, Westacott P. (2017) "*Can integration of PV within UK electricity network be improved? A GIS based assessment of storage*", *Energy Policy*, 109, 694-703
- Sandwell P., Chan NLA., Foster S., Nagpal D., Emmott CJM., **Candelise C.**, Buckle SJ., Ekins-Daukes N., Gambhir A., Nelson J., (2016) "*Off-grid solar photovoltaic systems for rural electrification and emissions mitigation in India*", *Solar Energy Materials and Solar Cells*, 156, 147-156
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Book Chapters:

- **Candelise C.**, Ruggieri G. (2021) “*The Community Energy sector in Italy: historical perspective and recent evolution*” in “*Renewable Energy Communities and the Low Carbon Energy Transition in Europe*” Editors: Coenen F. H. J. M., Hoppe, T. Publisher: Palgrave Macmillan. ISBN 978-3-030-84439-4, ISBN 978-3-030-84440-0 (eBook), <https://doi.org/10.1007/978-3-030-84440-0>
- Wierling, A., Zeiß, J.P., Hubert, W. **Candelise, C.**, Sterling Gregg, J. Schwanitz, V.J. (2020) “*Who participates in and drives collective action initiatives for a low carbon energy transition?*” in “*Paradigms, Models, Scenarios and Practices for Strong Sustainability*” Editors: Diemer, A. Morales, M.E., Nedelciu, C.E. Oostdijk, M. Schellens, M. Publisher: Editions Oeconomia. Pages: 239-256
- **Candelise C.** (2016) “*The application of crowdfunding to the energy sector*”, in W. Vassallo (ed) *Crowdfunding for Sustainable Entrepreneurship and Innovation*, Publisher: Business Science Reference, 266-287
- **Candelise C.** (2015) “*Solar Energy, an untapped potential*” in P. Ekins, M. Bradshaw, J. Watson (eds), *Global Energy: issues, potentials and policy implications*, Oxford University Press, Sept 2015. Print ISBN-13: 9780198719526. DOI:10.1093/acprof:oso/9780198719526.001.0001
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Reports:

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- Busto, C., **Candelise, C.** et al. (2023) “*Towards sustainable and massive deployment of photovoltaics: the nexus of socio-economic and technological challenges*” White Paper of ETIP PV (European Technology and Innovation Platform for Photovoltaics) Social PV Working Group. November 2023

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- **Candelise, C.**, Sandwell, P. Ed. (2022) “*The role of mini-grids for electricity access and climate change mitigation in India*”, JUICE White Paper. February 2022.DOI: 10.25561/94889
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- **Candelise C.**, Ruggieri G., 2017, "Community energy in Italy: heterogeneous institutional characteristics and citizens engagement", Publisher: IEFE Working Paper N.93
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