

CHIARA CANDELISE

EDUCATION

Imperial College London, London, UK 2005 - 2010

PhD in Energy Economics

Thesis title: "Technical and regulatory developments needed to foster grid-connected photovoltaic (PV) within the UK electricity sector".

University College London, London, UK 2001 - 2002

MSc Economics

Thesis title: "The impact of HIV/AIDS epidemic on economic and rural development"

Bocconi University, Milan, Italy 1994 - 2000

BSc Economics

Thesis title: "Causes and consequences of corruption. What the role for institutional models?"

Abilitazione Scientifica Nazionale (ASN), 13/A4 Economia Applicata (Seconda fascia) 2018

RESEARCH EMPLOYMENT

Imperial College London, London, UK 2013 – to date

Research Fellow - Imperial Centre for Energy Policy and Technology (ICEPT)

- Leading researcher on techno-economic and policy analysis of solar technologies

Bocconi University, Milan, Italy 2014 – to date

Research Fellow, GREEN, Centre for Research on Geography, Resources, Environment, Energy & Networks

- Research on energy economics and policy, distributed generation and grid integration, innovative business models and financing for energy investments

Collegio Carlo Alberto, Università degli studi di Torino 2018 – 2019

Research Fellow, Department Economics Cognetti de Martiis

- Coordination of research activities of Turin Centre for Emerging Economies (OEET)
- Research on the nexus energy access (rural electrification) and food security

Imperial College London, London, UK 2011 – 2012

Research Associate - Imperial Centre for Energy Policy and Technology (ICEPT)

- Working on several energy research projects (see below for more details)
- Initiating and working on Seed Funding activities
- Leading researcher on socio and techno-economic analysis of solar technologies

University of Edinburgh/Imperial College London, UK 2009 - 2011

Research Associate

- Managed the techno and socio-economic Work Package of PV Supergen Consortium PV21

RESEARCH PROJECTS COORDINATION

EU Commission – H2020 Project 2019 – 2022

COMETS project: "Collective action Models for Energy Transition and Social Innovation" (COMETS).

Co-Investigator of research consortium made of six EU country members studying the role and contribution of citizen-driven Collective Action initiatives (e.g. energy communities, cooperatives, purchasing groups) to the EU energy transition. The project maps CAIs across EU, quantifies their

aggregate contribution to energy transition, and develops indicators for their assessment as well as in-depth case studies and best practice.

UK Research Council - EPSRC

2017- 2022

"JUICE Project", Joint UK India Clean Energy Centre: UK-India research consortium aiming at solving the integration of intermittent renewable energy for grid and isolated communities in India and UK with a view to grid connectivity. Co-Investigator of work package studying:

- development of scenarios for future PV, storage and smart technologies deployment and assess their grid integration implications;
- optimization of storage and smart technologies operation to maximise contribution and value of PV generation within the electricity grid;
- assessment of the economics and business models for their deployment; analysis of regulatory and policy conditions for successful implementation.
- modelling (sizing, costing and environmental impacts) and socio-economic assessment of micro-grid implementation for rural electrification (India)

Euroheat & Power (European Association for district heating)

2018

"The use of crowdfunding as novel financial tool for district heating investment" study commissioned under H2020 project TEMPO (Temperature Optimisation for Low Temperature District Heating across Europe).

Forum per la Finanza Sostenibile

2017

Study exploring the role of crowdfunding in the context of sustainable finance.

Kantor Management Group - EU Commission

2017 – 2018

"Building Solar PV Study – High Quality Studies to Support the activities under the Eastern Partnership (HiQStep)". Project Objectives:

- Present EU policies, rules, regulations, tools and schemes of the promotion of solar panels on buildings
- To assess existing policies, rules, regulations and tools towards promotion of solar panels on buildings in the six Eastern Partner countries;
- To develop cost-benefit analysis for the staged development of building PVs in all Eastern Partner countries;
- To formulate recommendations on how to enhance PV penetration in the six Eastern Partners (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine);
- To quantify the impact of building PV penetration to the overall energy mix and on the energy security of each country and to quantify the impact of PV generated energy to greenhouse gas emission reduction.

ANCI Emilia Romagna - EU IEE project SmartReFlex

2016

"Strumenti finanziari innovativi per impianti a fonti energetiche rinnovabili con focus su piccole reti di teleriscaldamento": study of innovative financing schemes for investments in district heating.

UNDP (United Nation Development Programme) CEDRO Exchange

2015

"Crowdfunding and the energy sector", research project exploring the use of crowdfunding in the energy sector.

EU Commission - Marie Curie Intra-European Fellowship

2014 – 2016

'LocalEnergy': Investigation of emerging business models for implementation of energy efficiency and renewable, with a particular focus on community and shared ownership approaches.

- Emerging and innovative business models for the deployment of renewable energy and energy efficiency, with a focus on community energy and shared ownership approaches.
- Study of crowdfunding as innovative and potentially disruptive alternative finance tool and its application to the energy sector.

UK Research Council - EPSRC

2013 – 2016

"PV2025 Project": Potential Costs and Benefits of Photovoltaics for UK-Infrastructure and Society: academic consortium to explore potential and implication of high penetration of PV in the UK energy system. Co-Investigator of work package studying:

- Spatially disaggregated PV scenarios to assess PV deployment and potential in UK
- Spatially disaggregated assessment of impact of PV generation to the UK electricity grid

- Analysis of feasibility and conditions for implementation of storage technologies to mitigate impact.

ESRC-SSRC Collaborative Visiting Fellowship, Brazil

2009

Visiting the following departments:

- Energy Planning Engineering department (PPE) at Alberto Luiz de Coimbra Graduate School and Research in Engineering (COPPE), Federal University of Rio de Janeiro (UFRJ)
- LABSOLAR, Solar Research Laboratory, and LabEEE, Laboratorio de Eficiencia Energetica em Edificacoes, both at University of Santa Caterina (UFSC), Florianopolis

RESEARCH PROJECTS PARTECIPATION

UK National Grid

2012- 2013

Research project to review of evidence and methodologies for Impact Assessment of socioeconomic impacts of gas transportation and electricity transmission infrastructure. Coordinated by Dr Rob Gross.

Imperial College London – Pathway to Impact Project, UK

2012 – 2013

“The potential of photovoltaic technologies for rural electrification and carbon emissions mitigation in developing countries”: Evaluation of the potential of emerging novel PV technologies to accelerated PV deployment in developing countries, with focus on India. Coordinated by Prof Jenny Nelson.

Imperial College London – EPSRC funded project, UK

2012 – 2013

“Transformation of Top and Tail of Energy Networks”: Imperial College led collaborative project of 8 Universities funded by the EPSRC Grand Challenge Programme, focusing on the physical infrastructure change in energy networks required to move the UK to a low carbon economy, and achieve the Government’s 2050 reduction in CO2 emissions target. Coordinated by Dr Rob Gross.

Imperial College London – WWF UK

2012

“On picking winners”: Analysis and discussion of implementation of carbon tax versus target support to renewables in a portfolio of energy policies. Coordinated by Dr Rob Gross.

UK Energy Research Centre (UKERC), TPA

2011 - 2012

“Electricity Cost Estimates Methodologies”: Technology and Policy Assessment (TPA) project for the assessment of methodologies employed in estimating future costs in the UK electricity generation sector and of generation technologies’ cost reduction potential. Coordinated by Dr Rob Gross.

Intelligence Energy Europe (IEE), EU Commission

2009 – 2011

“BioSolEsco”: exploring potential of biomass and solar heating in public and private buildings via the energy services approach. Coordinated by Dr Marco Pantaleo.

UK Research Council - EPSRC

2009-2011

“PV Supergen (PV21)”: academic and industrial consortium developing and testing innovative thin film PV technologies. Managed the Techno-economic Work Package, coordinated by Dr Mark Winskel and Dr Rob Gross.

- Investigated PV technologies innovation and cost reduction potential
- Investigated PV materials scarcity, supply chain bottlenecks and implications for PV future development
- Parametric modelling of PV technologies production costs, assessment of drivers for cost reductions and impact of materials costs.

Energy Research Centre (UKERC), UK

2008 - 2009

“Energy 2050”: integrated assessment of how the UK can move to a resilient (‘secure’) and low-carbon energy system over the period to 2050. Coordinated by Prof Jim Skea.

- Responsible for the photovoltaics “Advanced Technological Development” scenarios and analysis
- Markal energy system model – data development and scenarios analysis and results analysis.

Energy Research Centre (UKERC), London, UK

2008 - 2009

“Energy Technology Learning Rates and Learning Effects”: Analysis of innovation processes (or ‘learning effects’) for emerging energy supply technologies and the representation of these processes in ‘learning rates’. Coordinated by Dr Mark Winskel.

E.ON UK – EPSRC Partnership**2007**

Contributed to scoping of the project “Pathways for a utility to a low-carbon energy system”.

Energy Institute, London, UK**2006**

Contributed to submission to the Government Energy Strategy Consultation (2006).

FUNDING ID

- **2019-2022** - H2020 project, Collective action Models for Energy Transition and Social Innovation (COMETS), Call: H2020-LC-SC3-2018-2019-2020 (BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AND EFFICIENT ENERGY). Topic: LC-SC3-CC-1-2018-2019-2020. Budget awarded: €170k out of a total €3000k.
- **2017-2021** - Joint UK India Clean Energy Centre (JUICE) project, budget awarded ~£250,000 out of total ~£2ml.
- **2018** - Study for Euroheat & Power (European Association for district heating), funding €14,000
- **2017** - Building Solar PV project for Kantor Management Group - EU Commission (2017-2018), funding €20,000
- **2013-2016** - Potential Costs and Benefits of Photovoltaics for UK-Infrastructure and Society (PV2025) project, budget awarded ~£190,000 out of total of £1ml.
- **2016** - Study for ANCI Emilia Romagna - EU IEE project SmartReFlex (2015), funding ~€4,000
- **2015** - Study for UNDP (United Nation Development Programme) CEDRO Exchange, funding €1,000
- **2014-2016** - Awarded EU Marie Curie Intra-European Fellowship (for total funds of €180k)
- **2009** - ESRC-SSRC Collaborative Visiting Fellowship, Brazil, ~£5,000

HONORS AND AWARDS - PROFESSIONAL MEMBERSHIPS

- Member of ETIP (European Technology & Innovation Platform) PV Working group “Socio-economic PV”
- Member of European Energy Research Alliance (EERA), Socio-Economic Joint Programme and Photovoltaics Joint Programme
- Member of Turin Centre on Emerging Economies (OEET), Collegio Carlo Alberto
- Invited Member of the World Bank Group Global Influencer Barometer Panel
- Invited guest editor of Applied Energy Journal special issue ‘Sustainable Supply Chains and Energy Security’, 2013
- Advisor of PRIMAL renewable energies Lda, clean energy start-up, 2012, UK-Portugal
- Article “*Implications for CdTe and CIGS technologies production costs of indium and tellurium scarcity*” invited for publication to Progress in Photovoltaics (impact factor 6.4) after being selected among the 20 highest scored abstracts of the 26th European Photovoltaic Solar Energy Conference (EUPVSEC), Sept 2011, Hamburg. EUPVSEC is one of the largest annual academic conferences in the solar energy field with more than 4000 delegates.
- Invited to Britain's first ever renewable energy mission to Israel (Organised by British Embassy and KTN) and attended Eilat-Eilat Renewable Energy Conference and Exhibition, 2011
- Article “*Conditions for photovoltaics deployment in the UK: the role of policy and technical developments*” featured in the top 5 list of downloaded articles in 2010. Invited paper for publication on Journal of Power and Energy at the conference 'Sustainable Energy UK: Meeting the science and engineering challenge', UKERC Meeting Place, May 2008.
- Awarded ESRC-SSRC Visiting Fellowship, 2009
- Awarded UK Energy Research Centre (UKERC) interdisciplinary PhD scholarship, 2005

- Awarded University of Padova (Italy) scholarship to attend MSc Economics, 2001

TEACHING AND SUPERVISION

- Supervision thesis projects from MSs Economics and Social Science, Politics and Policy Analysis, Bocconi University (2022, 2023)
- Supervision thesis projects from Master Degree in Environmental and Food Economics, Università degli Studi di Milano, Facoltà di Scienze Agrarie e Alimentari (2019,2021)
- Supervision PhD and MSc projects from MSc Environmental Technology (Centre for Environmental Policy) and MSc Sustainable Energy Futures (Energy Future Lab) at Imperial College London, (for the academic years 2009/2010, 2010/2011, 2011/2012, 2012/2013, 2014/2015, 2016/2017, 2017/2018, 2018/2019, 2019/2020)
- Supervision MSc projects from MaGER (Master in Green Management, Energy and Corporate Social Responsibility) at Bocconi University (2015-2016)
- Lectured at Project Management and Funding of International Programs, Bocconi University, May 2017
- Lectured at Energy Economics course, BSc course of Environmental and food economics, Università Statale, Milan (2015)
- Lectured on 'Crowdfunding: innovative tool to finance local RES projects?' at Advanced Training Course: Integration of renewable in the Mediterranean electricity market, organized by RES4MED, Polytechnic Milan, 25th November 2014
- Lectured on 'Photovoltaics technology, economics and policy' at MSc Environmental Technology, Centre for Environmental Policy, Imperial College London, 2011/2012, 2012/2013, 2013/2014
- Given small group seminars within Energy Policy option of MSc Environmental Technology (Centre for Environmental Policy), Imperial College London, 2010/2011 – 2011/2012, 2012/2013
- Given small group seminar to Laing O'Rourke MSc Systems Engineering & Innovation, Department Civil and Environmental Engineering, Imperial College London, 2011/2012
- Lectured on 'Renewables in developing countries' at MSc Environmental development, School of Environment and Development, University of Manchester, 2007/2008

OTHER PROFESSIONAL EXPERIENCE

Expert Jury Member - European Innovation Council Accelerator **2022 – to date**
 Member of the expert jury for the evaluation of funding applications to the European Innovation Council (EIC) Accelerator. The EIC is Europe's flagship innovation programme to identify, develop and scale up breakthrough technologies and game changing innovations.

Consultant – Energy Economist **2016 – to date**
 Offering consultancy in the energy economics field to national and international public institutions and companies

Ecomill s.r.l., Milan Italy **2014 – to date**
Founder and CEO
 Ecomill is the equity crowdfunding platform authorised by Consob (Italian Financial Authority) focusing on projects in energy transition and sustainability

Erculea Resine S.p.a., Cosenza, Italy **2006 – 2011**
 Family business producing plastic pipes

DEFRA (Department for Environment Food & Rural Affairs), London, UK **2003 - 2005**
Economist - Environment Policy Economics Division
 Developing economic analysis and advice to support Environmental Policy Divisions

1. Climate change branch

- *International climate change issue*: provided economic advice, analysis and support into the post-2012 negotiation and EU climate policy; modelling domestic and international climate change policy
- *Domestic climate change policy*: Appraised and evaluated domestic climate change policy, in particular cost-benefit analysis of EU f-gases regulation and Ozone Depleting Substances EU regulation infraction
- Provided support and economic analysis to Social Cost of Carbon study (*Valuation of climate change damage*) – including organization of experts meetings and workshops

2. Air quality, Chemicals and Pesticides branch

- Worked on the cost-benefit analysis of the proposed European Chemicals Strategy (REACH) and other aspects of chemicals policy
- Provided economic analysis of Pesticides Tax proposal – international review of pesticide taxes, cost-benefit analysis of pesticides use
- Worked on evaluation and assessment of Air Quality Strategy Review

Caboto Holding SIM - asset management firm, Milan Italy

2000 - 2001

Economist – Economic Analysis Department

Provided micro and macro-economic analysis to support trading activities

UNDP (United Nation Development Program - UNDP), Karakol, Kyrgystan

2000

Intern - Project Implementation Unit of the Poverty alleviation Program

Assessed impact of UNDP Program on target communities (in terms of infrastructures, sanitation, economic performance, level of income poverty) and potential scaling-up

- Collected and analysed data through questionnaires, visits and workshops in target communities and villages

SKILLS

Languages

Italian: Native

English: fluent (written and spoken)

French: intermediate (written and spoken)

Portuguese: beginner

Computer skills

Familiar with most Windows-based software

Familiar with software for econometric

applications: Eviews, STATA

Familiar with Reuters, Bloomberg

OTHER INTERESTS

Sports: Capoeira, Yoga, Sailing

Music: Saxophone and flute

PUBLICATIONS

Number of citations: 1831

H Index: 21

H10 Index: 30

Articles in refereed journals

1. 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.
2. 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

3. Sciallo, 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.
4. Few S., Barton J., Sandwell P., Morie R., Kulkarni P., Thomson 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
5. Lupi V., **Candelise C.**, Almuni Calull M., Delvaux S., Valkering P., Hubert W., Sciallo A., Ivask N., van der Waal E., Jimenez Iturriza I., Paci D., Della Valle N., Goukousikis G., Dunlop T. (2021) "*A Characterization of European Collective Action Initiatives and Their Role as Enablers of Citizens' Participation in the Energy Transition*" *Energies* 2021, 14(24), 8452
6. Wierling, A., ZeiB, J.P., Lupi, V., Sciallo, A. **Candelise, C.**, Schwanitz, V.J. (2021) "*The Contribution of Energy Communities to the Upscaling of Photovoltaics in Germany and Italy*". *Energies*, 14(8), 2258
7. **Candelise, C.** Vallino, E. Saccone, D. (2021) "*An empirical assessment of direct and indirect effects of electricity access on food security*", *World Development*, 141: 105390.
8. Few, S., Djapic, P. Strbac, G. Nelson, J. **Candelise, C.** (2020). "*Assessing local costs and impacts of distributed solar PV using high resolution data from across Great Britain.*" *Renewable Energy* 162: 1140-1150.
9. **Candelise C.**, Ruggieri, G. (2020) "*Status and Evolution of the Community Energy Sector in Italy*" *Energies*, 13(8), 1888
10. Gregg, J.S.; Nyborg, S.; Hansen, M.; Schwanitz, V.J.; Wierling, A.; Zeiss, J.P.; Delvaux, S.; Saenz, V.; Polo-Alvarez, L.; **Candelise, C.**; Gilcrease, W.; Arrobbio, O.; Sciallo, A.; Padovan, D., (2020), "*Collective Action and Social Innovation in the Energy Sector: A Mobilization Model Perspective*". *Energies* 2020, 13, 651.
11. Wierling, A., Schwanitz, V.J., ZeiB, 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
12. **Candelise, C.** Westacott, P. (2017) "*Can integration of PV within UK electricity network be improved? A GIS based assessment of storage benefits*", *Energy Policy*, Vol: 109, p. 694-703
13. Sandwell, P. Ngai Lam, A. C. Foster, S. Nagpala, D. Emmott, **C. Candelise**, Buckle, S. 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*, Vol: 156, p. 147–156
14. Westacott, P. **Candelise, C.** (2016) "*Assessing the impacts of photovoltaic penetration across an entire low-voltage distribution network containing 1.5 million customers*". *IET Renewable Power Generation*. Vol:10 (4), p. 460 – 466.
15. Westacott, P. **Candelise, C.** (2016) "*A Novel Geographical Information Systems Framework to Characterize Photovoltaic Deployment in the UK: Initial Evidence*". *Energies*. 9(1), 26.
16. Rowley, P. Leicester, P. Palmer, D. Westacott, P. **Candelise, C.** Betts, T. Gottschalg R. (2015) "*Multi-domain analysis of photovoltaic impacts via integrated spatial and probabilistic modelling*", 2015. *IET Renewable Power Generation*, Volume 9, Issue 5, p. 424 – 431.
17. Hoggett R, Bolton R, **Candelise C**, Kern F, Mitchell C. (2014) "*Supply chains and energy security in a low carbon transition*". *Applied Energy*, Vol:123, p. 292-295
18. Pantaleo, A. **Candelise, C.** Shah, N. Bauen, A. (2014) "*Esco business models for biomass heating and chp: profitability of Esco operations in Italy and key factors assessment*", *Renewable & Sustainable Energy Reviews*. Vol:30, ISSN:1364-0321, p. 237-253
19. Marigo, N., **Candelise, C.** (2013) "*What is behind the recent dramatic reductions in photovoltaic prices? The role of China*". *Economia e Politica Industriale - Journal of Industrial and Business Economics*. Vol. 40 (3), p. 5-41

20. Houari Y, Speirs J, **Candelise C**, Gross R. (2013) "A system dynamics model of tellurium availability for CdTe PV", *Progress in Photovoltaics: Research and Applications*, 2013. Vol: 22, Issue 1, p. 129–146.
21. Winskel M, Markusson N, Jeffrey H, **Candelise C**, Dutton J, Howarth P, Jablonski S, Kalyvas C, Ward D. (2013) "Learning pathways for energy supply technologies: Bridging between innovation studies and learning rates", *Technological Forecasting and Social Change*, Vol:81, p. 96-114
22. **Candelise, C.** Winskel, M. Gross, R. (2013) "The dynamics of solar PV costs and prices as a challenge for technology forecasting. *Renewable & Sustainable Energy Reviews*. Vol:26, p. 96-107
23. **Candelise C.** Winskel M. Gross R. (2012) "Implications for CdTe and CIGS technologies production costs of indium and tellurium scarcity" *Progress in Photovoltaics: Research and Applications*. Vol: 20, p. 816–831
24. **Candelise, C.** Speirs, J. Gross R. (2011) "Materials availability for thin film (TF) PV technologies development: a real concern?" *Renewable and Sustainable Energy Review Journal*. Vol: 15, Issue 9, p. 4972–4981
25. **Candelise, C.** Gross, R. Leach, M. (2010) "Conditions for photovoltaics deployment in the UK: the role of policy and technical developments". *Journal of Power and Energy*. Volume 224, p. 153-166

Forthcoming

26. Few, S., Djapic, P. Strbac, G. Nelson, J. **Candelise, C.** (2024) "How will future electricity network stresses depend on local context and where is flexibility most needed? A geographically disaggregated study across Great Britain", under review on *Nature Energy*

Book Chapters

27. **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
28. Wierling, A., ZeiB, J.P., Hubert, W. **Candelise, C.**, Sterling G, 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
29. **Candelise, C.** (2016) "The application of crowdfunding to the energy sector " in *Crowdfunding for Sustainable Entrepreneurship and Innovation*, Editor: Walter Wassallo. August 2016. IGI Global. ISBN: 9781522505686
30. **Candelise, C.** (2015) "Solar Energy, an untapped growing potential" in *Global Energy: issues, potentials and policy implications*, Editor(s) Ekins, Bradshaw, Watson. 17th September 2015. Oxford University Press. ISBN 9780198719526. DOI:10.1093/acprof:oso/9780198719526.003.0019
31. Irvine, S. **Candelise, C.** (2014) "Introduction and Techno-economic background" in *Materials Challenges: Inorganic Photovoltaic Solar Energy*. Editors: Irvine, S. Publisher: Royal Society of Chemistry, Pages: 1-26

Reports and Working Papers:

32. **Candelise, C.** (2023) "Caratterizzazione delle comunità energetiche: storia, evoluzione e modelli di implementazione" in "La transizione verso nuovi modelli di produzione e consumo di energia da fonti rinnovabili", Editor: Marisa Meli. Publisher: Pacini Giuridica.

33. Koukoulou, G., Schockaert, H., Paci, D., Filippidou, F., Caramizaru, A., Della Valle, N., **Candelise, C.**, Murauskaite-Bull, I., Uihlein, A. (2023) "*The Role of Energy Communities in Alleviating Energy Poverty*" Science for Policy report by the Joint Research Centre (JRC). December 2023 DOI: 10.2760/389514
34. 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
35. Abi Able, A., Anger, K., Barnes, J., Betz, R., Blasch, J., Boije af Gennäs Erre, E., **Candelise, C.** et al. (2022): "*Putting people at the heart of energy transitions. Social innovation in energy: four projects shine a light on the path forward*". Policy brief, April 2022. Brussels/Antwerp: COMETS, NEWCOMERS, SocialRES, SONNET H2020 projects.
36. **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
37. Sowe, J., Few, S., Schimpe M., Wu, B. **Candelise, C.**, Nelson, J. Varela Barreras. J., "*How can insights from degradation modelling inform operational strategies to increase the lifetime of li-ion batteries in islanded mini-grids?*" ECS PRIME Conference 2020, Honolulu, HI, USA. October 2020
38. Few, S., Djapic, P. Strbac, G. Nelson, J. **Candelise, C.** "*A framework to assess local grid impacts of PV deployment, and cost-effective measures to minimise disruption, across Great Britain*" 37th EU PVSEC, online, 7-10 Sept 2020
39. **Candelise C.**, Saccone, D. Vallino E. "*Synergies between SDGs: an assessment of direct and indirect effects of electricity access on food security*" 2nd Sustainability and Development Conference, University of Michigan, USA, October 11-14 2019
40. **Candelise C.** "*Crowdfunding as a novel financial tool for district heating projects*", report committed by Euro Heat and Power Association as part of EU H2020 project TEMPO (Temperature Optimisation for Low Temperature District Heating across Europe). December 2018. Available at: <https://www.euroheat.org/resource/tempo-project-crowdfunding-as-a-novel-financial-tool-for-district-heating-projects.html>
41. **Candelise C.**, Ruggieri G. "*Quale ruolo per i cittadini nella transizione verso le rinnovabili? Le comunità energetiche italiane: esperienze e prospettive*". Gazzetta Ambiente. N6. 117-131. 2017
42. **Candelise, C.** "*Crowdfunding*" in *Impact Investing: la finanza a supporto dell'impatto socio-ambientale*, Ed: Forum per la Finanza Sostenibile, October 2017
43. **Candelise, C.** "*Crowdfunding per lo sviluppo locale*" in *Finanza sostenibile e sviluppo locale*, Ed: Forum per la Finanza Sostenibile, IEFE Bocconi, IFEL. October 2017
44. **Candelise C.**, Ruggieri G. "*Le comunità energetiche in Italia: eterogeneità di approcci nelle esperienze realizzate e prospettive future nel quadro della decarbonizzazione del mercato energetico*" Convegno Annuale Società dei Territorialisti "Dai territori della resistenza alle comunità di patrimonio" – Matelica 12-14 October 2017
45. **Candelise C**, Ruggieri G, "*Community energy in Italy: heterogeneous institutional characteristics and citizens engagement*", IEFE Working Paper N.93. May 2017
46. **Candelise, C.** "*Crowdfunding in the energy sector: a smart financing and empowering tool for citizens and communities?*" 9th International Conference Improving Energy Efficiency in Commercial Buildings and Smart Communities (IEECB&SC'16), Frankfurt, 16th-18th March 2016
47. **Candelise, C.**, Gottschalg, R., Leicester, P., Rowley, P. *Submission to UK Government Consultation on a review of the Feed-in Tariffs scheme*. 23rd October 2015
48. **Candelise, C.** *Crowdfunding and the energy sector*. CEDRO Exchange report. Issue 18. August 2015

49. Westacott P, **Candelise C**, *Assessing the electricity generation and grid feed-in of PV deployment within the UK*, 11th Photovoltaic Science Application and Technology (PVSAT-11), April 2015
50. **Candelise C**, *Crowdfunding: an innovative tool to finance local RES projects?*, Advanced Training Course: Integration of renewable in the Mediterranean electricity market, Organized by RES4MED (Renewable Energy Solutions for the Mediterranean), November 2014
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52. Gazis, E. **Candelise, C.** Winskel, M. *Cost Leadership or Diversification? Assessing Business Strategies of PV Manufacturers Using Case Studies from the USA and the UK*. 28th EU PVSEC, Paris, 2013
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