## DR ALBERTO TROCCOLI

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## PROFESSIONAL PROFILE

Experienced global leader in weather and climate services with over 30 years of expertise spanning science, policy, and innovation. Proven track record in advancing Earth system science, delivering impactful solutions, and forging international partnerships. Skilled in managing diverse, multidisciplinary teams and organizations across continents, with a strong ability to bridge research and operations. Adept at translating complex science into actionable strategies for policy, industry, and society. Recognized thought leader with significant publications and a steadfast commitment to advancing inclusivity and excellence.

## **CORE COMPETENCIES**

- Leadership and Management: Expertise in managing complex, multidisciplinary projects and diverse teams
- Innovation and Delivery: Transforming research into scalable, practical solutions for societal impact
- Policy governance and diplomacy: Proven ability to build consensus and foster international partnerships
- Global Perspective: Deep insights into diverse stakeholder needs in developed and developing countries

## **EXECUTIVE LEADERSHIP AND STRATEGIC MANAGEMENT**

- Chair of the WMO Study Group on Energy (2020-now), leading international meteorological collaboration
- Coordinated the €5M EU H2020 SECLI-FIRM project in collaboration with organisations such as Met Office, Météo France, and KNMI, and enabling adoption of seasonal forecasts for operational decision-making
- Secured over €20M+ in funding for international projects partnering with 20+ organisations
- Founded two companies, achieving €1.4M organic revenue and delivering high-impact climate services
- Built and led high-performing teams of 10-25 professionals across multiple cultures and countries
- Lead author of the UN's Global Framework for Climate Services (GFCS) publication Energy Exemplar

## SCIENTIFIC IMPACT AND OPERATIONAL EXCELLENCE

- Published 60+ peer-reviewed papers with 5000+ citations in leading journals
- Chief editor of four influential books on weather and climate services for the energy sector
- Coordination of the Copernicus Climate Change Service (C3S) Energy Operational Service, delivering critical tools for ENTSO-E's strategic electricity grid planning across Europe and other users globally
- Developed and led the award-winning Teal platform, a Software-as-a-Service solution providing operational and actionable climate insights to the energy and agriculture sectors
- Around two hundred project reports, tens of consultancy reports, tens of blogs and newsletters
- Regular keynote speaker at major international conferences

## INTERNATIONAL ENGAGEMENT AND DIPLOMACY

- Chair of the World Meteorological Organization (WMO) Study Group on Energy and coordinator of negotiations for the WMO-International Renewable Energy Agency (IRENA) Global Partnership
- Initiator and Director of the International Conference Energy & Meteorology (ICEM) series (2011-now)
- Lead author of influential WMO/IRENA publications on climate role for energy sector
- Convenor of tens of stakeholder workshops around weather, climate and applications (2009-now)
- Created and host <u>Let's Climunicate</u> podcast on climate science solutions
- Director of major Summer School (2005, 2 weeks, 65 students, 15 lecturers)

## SELECT PROFESSIONAL EXPERIENCE

## INSIDE CLIMATE SERVICE srl | Padova, Italy and Brisbane, Australia

Co-Founder and CEO (2021-now)

- Established and grew a climate services company to €850k organic turnover within two years
- Built and remotely managed a team of 10+ professionals, fostering a collaborative, high-performing culture
- Secured major contracts including C3S Energy operational service, and built strategic partnerships

## WORLD ENERGY AND METEOROLOGY COUNCIL | Norwich, UK and Brisbane, Australia

Co-Founder and Managing Director (2015-now)

- Grew organizational revenue to £700K within three years through strategic partnerships development
- Led multiple EU climate service projects (€5M-8M scale) as coordinator and work package leader
- Led global initiatives (e.g. ICEM), employing diplomacy to foster cross-sectoral collaboration and consensus

## COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION | Canberra, Australia

Principal Research Scientist and Group Leader (latest roles) (2009-2015)

- Led the Earth Assessment Group, managing a team of 25 staff across multidisciplinary projects
- Directed A\$7.5M <u>Australian Solar Energy Forecasting System</u> project, enhancing PV power integration
- Established advanced solar monitoring networks driving innovation in energy forecasting

## **EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS | Reading, UK**

Research Scientist (Consultant) (2002-2008)

- Pioneer in coupling high-resolution ocean-atmosphere models for medium-range forecasts
- Conducted ECMWF's first decadal climate simulations
- Coordinated international research collaborations and major summer school

## **EDUCATION AND CREDENTIALS**

- PhD in Physical Oceanography, The University of Edinburgh, UK (2000)
- Laurea in Physics (MSc level), University of Padova, Italy (1996) (Year abroad: University of Edinburgh, UK)
- Certificate in Leading for Organisational Impact, University of Melbourne (2014)
- Languages: Italian (native), English (proficient), French (basic)
- Nationalities: Italian, British, Australian

## **PROFESSIONAL VALUES**

Strong commitment to scientific excellence and operational reliability, championing inclusive leadership and cross-cultural collaboration. Dedicated to delivering impactful solutions through consensus-building and evidence-based decision making. Focus on fostering next-generation talent and advancing the integration of weather and climate services into societal decision-making.

# DR (PROF.) ALBERTO TROCCOLI FULL CURRICULUM VITAE

The following sections provide an in-depth account of Dr. Troccoli's professional experience, leadership roles, publications, and contributions to the global meteorological community.

## **Table of Content**

Work Experience (Complete List with Organisation and Role)	2
Education	3
Professional Impact	
Projects and International Collaborations	
Thought Leadership	4
Convener and Event Director	5
Professional Consultancies	6
Journal Editorial Roles	
Paper and Proposal Reviews	7
Mentoring	7
Education outreach	7
Podcast	7
Blog	7
Media	8
Promotional Videos	8
Other Work Related Activities/Awards	8
Research & Publications	8
Book Editor	
Book Chapters	
Peer Reviewed Articles	
PrePrints	
	12
Newsletters/Editorials/Conference Proceedings (Selected)	
Technical Reports (Selected)	13
Speaking Engagements (Invited)	14
Selected Invited Talks/Lectures (first author only)	
Recent Conference Papers (first author or as presenter only)	
Webinars (Selected) – Last updated 2021	18
Additional Qualifications and Activities	19
Languages	19
Computing Knowledge	
Transferable Skill (Personal Development) Courses	
Minor Work Activities	
Notable Social Activities	
Hohhies	19

January 2025 Page 1 of 19

## WORK EXPERIENCE (COMPLETE LIST WITH ORGANISATION AND ROLE)

## **Inside Climate Service** (ICS), Italy – Co-Founder and CEO

**ICS** is a private company providing tailored climate data and services to help businesses enhance decision-making and climate resilience.

- Oversee company operations, including staff management, project planning, resource mobilisation, finance, and administration
- Secured multiple contracts, including the Copernicus C3S Energy project, achieving an organic turnover of €850k in the second full year of operations, with €150k net profit
- Built and remotely manage a growing team of 10+ staff, fostering a collaborative and highperforming work environment
- Positioned ICS as a leading provider of actionable climate data for sectors such as energy and agriculture.

## World Energy & Meteorology Council (WEMC), UK - Co-Founder and Managing Director

**WEMC** promotes the sustainability and efficiency of energy systems through the effective use of weather and climate information.

- Direct operations, including strategic planning, staff leadership, and financial oversight
- Led the development of the award-winning <u>Teal tool</u>, a Software-as-a-Service solution delivering tailored climate insights.
- Expanded turnover to £700k within three years and developed a diverse team of up to 12 staff.
- Supervising the co-production of the Decision Support System using the Teal platform in the EU
  H Europe CROSSEU project (2024–2026, €5M), supporting decision-making processes through
  advanced data visualisation and insights.

## • Leading a WP on atmospheric emissions in the EU H Europe FOCI project (2022–2026, €8M), advancing the integration of climate and emissions data to inform policy and operational planning

- Led a large WP on climate service co-production in the EU H2020 FOCUS-Africa project (2020–2024, €7M, 20+ partners), developing a tailored operational version of the Teal platform with TMA and DCCMS, delivering seasonal forecast indicators, including rainy season onset and multi-model precipitation and temperature forecasts, along with automated bulletin generation
- Coordinated the Copernicus Climate Change Service Energy operational climate service and led work packages in major EU projects.
- Convened international conferences and workshops, fostering partnerships with organisations such as WMO, Met Office, and Météo France.

## University of East Anglia (UEA), UK - Visiting Professor

- Led the €5M EU H2020 SECLI-FIRM project, coordinating nine partner institutions and 30 staff across Europe.
- Developed and managed a €1.7M Copernicus prototype climate service with six partners, creating a successful visual demonstrator for climate-energy applications.
- Mentored early-career researchers and collaborated with academic and industry stakeholders on climate and energy solutions.

## <u>Commonwealth Scientific and Industrial Research Organisation</u> (CSIRO), Australia – Senior/Principal Research Scientist

Held progressively senior leadership roles within a leading multi-site research organisation. Promoted from Research Scientist to Principal Research Scientist in 2013.

## 2009-2015

2015-2024

2021-now

2015-now

- Managed multidisciplinary teams, including as Leader of the Earth Assessment Group (25 staff) and Head of the Weather & Energy Research Unit (5 staff).
- Directed the Australian Solar Energy Forecasting System project (A\$7.5M), improving solar energy forecasting capabilities.
- Initiated and managed a solar monitoring network, including advanced instrumentation for irradiance, cloud observation, and PV power monitoring.
- Conducted research on wind speed, solar radiation, and power forecasting.

January 2025 Page 2 of 19

2008-2009	<u>University of Reading</u> , UK – Senior Research Fellow
2008	CMCC, Bologna, Italy – Head, Seasonal climate forecasting section
2002-2008	<ul> <li>European Centre for Medium-Range Weather Forecasts (ECMWF), UK – Research</li> <li>Scientist (Consultant) in the Seasonal Forecasting Section</li> <li>Developed ocean data assimilation schemes and high-resolution coupled ocean-atmosphere models for weather forecasting.</li> <li>Conducted research on seasonal forecasting and its applications</li> <li>Coordinated a task of a EU project (e.g., MERSEA) and organised a major summer school.</li> <li>Performed ECMWF's first decadal climate simulations, setting a precedent for long-term climate prediction.</li> </ul>
2000-2002	<ul> <li>NASA/UMBC, Goddard Space Flight Center, USA – Assistant Research Scientist</li> <li>Integrated ocean salinity data assimilation schemes into NASA's seasonal forecast system</li> <li>Developed diagnostics for ocean models to improve predictive accuracy</li> </ul>
2000	<ul> <li>University of Padova, Italy – Research Assistant</li> <li>Conducted research on the Adriatic sea circulation</li> <li>Taught part of a course of geophysical fluid dynamics</li> </ul>
1999-2000	<ul> <li>ECMWF, UK – Research Scientist (Consultant) in the Seasonal Forecasting Section</li> <li>Implemented data assimilation scheme for ocean salinity I developed during my PhD into the ECMWF seasonal forecast system during a 3-month consultancy contract</li> </ul>
1989-1990	<u>Italian Air Force</u> , <u>Italy</u> – Officer (S. Lieutenant), Deputy head of the Telecom. section

Education	
2014	The University of Melbourne, Australia  Certificate: Leading for Organisational Impact (5-day residential programme)
2000	The University of Edinburgh, UK PhD in Physical Oceanography
1996	University of Padova, Italy Laurea in Physics (MSc level)
1994-1995	The University of Edinburgh, UK  Fourth year Physics on an exchange program (Erasmus scholarship)

Professional Impact	
PROJECTS AND INTERNATIONAL COLLABORATIONS	
2024-now	Leader of the Italian Gov't €400k ENGAGEMENT project.
2024-now	Work Package leader of the EU Horizon Europe €5M CROSSEU project
2022-now	Leader of the EU C3S €1.5M operational Climate Service for Energy (under ICS). Also led the renewable energy chapter for the C3S European State of the Climate reports in 2022 and 2023.
2021-now	Work Package co-leader of the EU Horizon Europe €8M FOCI project.
2021-now	Instigator and Coordinator of the <u>Teal Tool</u> - an award-winning climate data visualisation platform designed to enhance decision-making in climate and in climate-sensitive sectors, such as renewable energy and agriculture. Coordinated efforts among international stakeholders, including software developers, UX experts, data scientists and energy professionals.
2020-24	Work Package leader of the EU H2020 €7M FOCUS-Africa project.
2018-21	Leader of an EU H2020 ca €5M project "The Added Value of Seasonal Climate Forecasts for Integrated

January 2025 Page 3 of 19

	Risk Management Decisions".
2019-20	Contributing to the Green Climate Fund's project Climate Rationale led by WMO as Energy lead.
2019-20	Leader of the EU Copernicus Climate Chance Service (C3S) Climate and Energy Demo for Students.
2018-20	Leader of the EU C3S €1M operational Climate Service for Energy (under WEMC).
2019	Led the production a Climate and Energy module under the C3S User Learning platform project.
2015-18	Leader of the EU C3S €1.7M Climate Service "European Climatic Energy Mixes".
2014-15	Leader of the Australian Renewable Energy Agency (ARENA) co-funded A\$7.5M project Australian Solar Energy Forecasting System
2012-15	Leader of the Australian Renewable Energy Agency (ARENA) co-funded A\$1.4M project Integrated Solar Radiation Data Sources over Australia
2009-15	Portfolio leader for a solar monitoring project, with equipment for irradiance (including its spectrum), clouds (ceilometer and sky cameras), other weather variables and solar power produced by PV panels at one location as well as several lower quality instruments around Canberra
2012-13	Leader of the project Solar Rain, A\$100k (funded by Game Changer Ventures Ltd)
2012-15	Member of the International Energy Agency Task Solar Resource Assessment and Forecasting
2010-14	Partner in the EU COST Action Weather Intelligence for Renewable Energy
2012-14	Leader of the Australian DFAT 18-month capacity building activity Harnessing improved weather and climate information for renewable energy generation in India with CSIR and TERI
2009-14	Leader of the CSIRO Weather and Renewable Energy programme
2009-10	Managed CSIRO component of project Australian Wind Energy Forecasting System follow-up
2004-07	Planned and managed ECMWF contribution to the EU-FP6 project MERSEA, as a task leader

THOUGHT LEADERSHIP	
2024	Chair of the Negotiation Process (2024-present) to establish a Global Partnership on Weather, Climate, and Hydrological Services for a Clean Energy Transition between the WMO and the International Renewable Energy Agency (IRENA), with interactions from stakeholders such as the UAE's National Center of Meteorology, the German Meteorological Service (DWD) and EUMETSAT.
2024	Chair of the WMO/IRENA/NCM of Scoping Workshop Global Centre for Weather, Water, and Climate Services for Renewable Energies, Abu Dhabi.
2021-now	Chair of the WMO's Study Group for Integrated Energy Services <sup>1</sup> (SG-ENE)
2018-21	Member of the Advisory Board of EU ERA4CS project Clim2Power ( <a href="https://clim2power.com">https://clim2power.com</a> )
2018-21	Member of the Advisory Board of EU H2020 project Plan4Res (https://www.plan4res.eu)
2014-15	Vice-Chair (Solar Forecasting) for Global Energy Forecasting Competition 2014
2014-15	Chair of Advisory Committee of Australian Wave Energy Atlas (AWavEA) project
2014	Invited by WMO to attend inception meeting for the UN's GFCS Energy exemplar and contribute to its formulation: prepared concept note for submission to the International Board of Climate Services
2014	Contributor to the Australian Government Environmental Information Advisory Group (AG EIAG) for the area Renewable Energy Options Under Future Climates
2009	Invited co-chair for working group on 'Adaptation for Inland Systems' at "Climate Change: Global Change and Local Adaptation", NATO Workshop, Hella, Iceland
2004-07	Co-founded the Royal Meteorological Society (RMetS, UK) specialist group on data assimilation
2004-07	Member of the meetings committee of the RMetS

 $<sup>^{1}\,\</sup>underline{\text{https://community.wmo.int/activity-areas/sercom/SG-Energy}}$ 

January 2025 Page 4 of 19

CONVENER	AND EVENT DIRECTOR
2024-now	The 8 <sup>th</sup> International Conference Energy & Meteorology, Padova, Italy, 2-5 June 2025 (upcoming)
2024	Training Course on the C3S Energy operational system, online for ENTSO-E and its members (16-17 December 2024)
2024	Training Course on Climate Models and Their Applications in the Energy Sector, online for TERNA (12-17 June 2024)
2023	The 7 <sup>th</sup> International Conference Energy & Meteorology, Padova, Italy, 27-29 June 2023
2019	H2020 SECLI-FIRM summer school on Seasonal Forecast applications, online, September 2019
2019	Third stakeholder workshop H2020 SECLI-FIRM, Norwich, UK, 18 September 2019
2019	Stakeholder workshop C3S Energy operational service, Lyngby, Denmark, 26 June 2019
2019	The 6 <sup>th</sup> International Conference Energy & Meteorology, and 1-day pre-conference seminar, Lyngby, Denmark, 24-27 June 2019
2019	Second stakeholder workshop H2020 SECLI-FIRM, Milan, Italy, 17 January 2019
2018	First stakeholder workshop H2020 SECLI-FIRM, Brussels, Belgium, 7 June 2018
2018	The 5 <sup>th</sup> International Conference Energy & Meteorology, Shanghai, China, 22-24 May 2018
2018	WMO-WEMC-CMA Training course <i>Building Weather and Climate Services for the Energy Sector</i> , Shanghai, China, 18-20 May 2018
2018	2 <sup>nd</sup> Symposium for Climate Services for Energy (fifth stakeholder workshop of C3S European Climatic Energy Mixes), in co-operation with CLIM4ENERGY project, Paris, France, 5-6 March 2018
2017	Fourth stakeholder workshop of "European Climatic Energy Mixes", Bari, Italy, 30 June 2017
2017	The 4 <sup>th</sup> International Conference Energy & Meteorology, and 1/2-day pre-conference seminar, Bari, Italy, 27-29 June 2017
2017	Symposium for Climate Services for Energy (third stakeholder workshop of C3S European Climatic Energy Mixes), in co-operation with CLIM4ENERGY project, Barcelona, Spain, 22-23 February 2017
2016	WMO-WEMC Summer Course on Climate and Energy, Norwich (UK), 4–7 July 2016
2016	Second stakeholder workshop of C3S European Climatic Energy Mixes, London, UK, 28 June 2016
2016	First stakeholder workshop of C3S European Climatic Energy Mixes, Paris, France, 16 February 2016
2015	A stakeholder workshop Solar Forecasting & Storage, Melbourne, Australia
2015	The 3 <sup>rd</sup> International Conference Energy & Meteorology, and 1-day pre-conference seminar, Boulder, CO, USA, 22-26 June 2015
2014	A 3-day workshop Assessment, Modelling and Applications of Renewable Energy (AMARE): Towards 100% Renewable Energy, Hyderabad, India (with Prashant Goswami, CSIR, India)
2014	A science day Solar Resource Assessment and Forecasting, Sydney, Australia
2014	A stakeholder workshop Integrated Solar Radiation Dataset for Australia, Sydney, Australia
2013	The 2 <sup>nd</sup> International Conference Energy & Meteorology, and 1-day pre-conference seminar, Toulouse, France, 25-28 June 2013
2013	A 1-day CSIRO workshop "Solar Resource Assessment and Forecasting", Canberra, Australia
2013	A 10-day training workshop "Harnessing improved weather and climate information for renewable energy generation", Bangalore, India (with Prashant Goswami, CSIR, India)
2012	A stakeholder workshop "Integrated Solar Radiation Dataset for Australia", Sydney, Australia
2012	A CSIRO inter-division workshop Energy & Meteorology, Newcastle, Australia
2011	The Inaugural <i>International Conference Energy &amp; Meteorology</i> , and 1-day pre-conference seminar, Gold Coast, Australia, 8-11 November 2011
2011	A Climate and Energy Workshop at the APEC Climate Symposium, Hawaii (USA) [invited]

January 2025 Page 5 of 19

2010	A 1-day research workshop <i>Exploiting weather information to improve solar energy supply estimation</i> , Canberra, Australia
2008-09	A session at the European Meteorological Society Conference [invited co-convener]
2008	A 5-day NATO Workshop Weather/Climate Risk Management for the Energy Sector, S. Maria di Leuca, Italy, $6-10$ October 2008
2005-08	Three very well attended national meetings of the Royal Meteorological Society (UK)  Perfecting imperfect models (2005), Forecasting UK and European winters (2006), Towards a seamless system: Bridging the gap between the weather, climate and the development communities (2008)
2005	A 2-week NATO Summer School Seasonal to Interannual Climate Variability: its Prediction and Impact on Society, Gallipoli, Italy, 23 May – 3 June 2005

PROFESSIONAL CONSULTANCIES	
2024-5	Lead author of the WMO/IRENA/ECMWF's publication 2023 Year in review: Climate-driven Global Renewable Energy Potential Resources and Energy Demand (upcoming).
2023	Lead author of the WMO/IRENA's publication <u>2022 Year in review: Climate-driven Global Renewable</u> <u>Energy Potential Resources and Energy Demand</u>
2023	Lead author of the WMO's publication <u>Integrated weather &amp; climate services in support to net zero</u> <u>energy transition</u>
2018-9	Lead author of a successful EU H2020 first-stage multi-million (€7M) proposal on multi-sector Climate Services (WMO). The project has been selected for funding.
2016	Main author of a Green Climate Fund project proposal for Global Climate Services for Energy (WMO)
2016	Main author of the UN's Global Framework for Climate Services (GFCS) Energy Exemplar.  Troccoli A, Dubus L, Dilley M, Boulhaya MS and Lucio F (2015) Energy Exemplar to the User Interface Platform of the Global Framework for Climate Services, a roadmap document for the UN GFCS and the World Meteorological Organisation (WMO). <a href="https://gfcs.wmo.int/implementation-plan">http://gfcs.wmo.int/implementation-plan</a>
2014	Provision of modelled solar data to a solar power developer (commercial; negotiation and manager)
2013-14	Multiple provisions of observed solar data from WERU's solar stations to solar power developers (research and commercial; negotiation and manager)
2012	Provision of modelled wind data to the Australian Energy Market Operator (negotiation and manager)
2010	Key contributor to large sections of the World Bank book 'Ebinger J and Vergara (2011) Climate Impacts on Energy Systems: Key Issues for Energy Sector Adaptation. <a href="https://doi.org/10.1596/978-0-8213-8697">https://doi.org/10.1596/978-0-8213-8697</a> a publication aimed at identifying key issues for energy sector adaptation. Also, led contract negotiation for a team of contributors from a few organisations.
2009	Study for a private firm <i>Precipitation Forecasts and Climate Scenarios</i> .  Prepared competitive proposal, negotiated contract and reviewed final document
2007-8	Reviewer of the ClimDev Africa programme proposal, for African Union, African Development Bank and UN Economic Commission for Africa, and contributed to the preparation of its summary

JOURNAL EDITORIAL ROLES	
2019-now	PLOS ONE Academic Editor
2022	Guest editor of a special issue of the MDPI Climate journal
2018	Troccoli (2018) Guest Editor, Global Energy Interconnection, 1, 4, 2018, a Global Energy Interconnection Development and Cooperation Organization (GEIDCO) publication.
2013	Guest editor of a special issue of the Solar Energy journal
2010	Invited editor for papers of the Solar2010 Conference of the Australian Solar Energy Society

January 2025 Page 6 of 19

## **PAPER AND PROPOSAL REVIEWS**

Reviewer of many project proposals for: 1) the USA National Science Foundation (ESF), 2) the USA National Oceanic and Atmospheric Administration (NOAA), 3) the USA National Aeronautics and Space Administration (NASA), 4) the Italian Evaluation of Research Quality 2004-2010, 5) the UK Natural Environment Research Council (NERC), 6) the Belmont Forum, 7) the EU European Research Area for Climate Services (ERA4CS), 8) the Research Council of Norway, and 9) the Helmholtz Research for Grand Challenges

Reviewer of articles in: 1) Advances in Science and Research, 2) Atmospheric Research, 3) Atmospheric Science Letters, 4) Australian Meteorological and Oceanographic Journal, 5) Boreal Environment Research, 6) Climate Dynamics, 7) Climate of the Past Discussions, 8) Climatic Change, 9) Energies, 10) Energy Conversion and Management, 11) Environmental Research Letters, 12) EOS, 13) Geophysical Research Letters, 14) Global Environment Change, 15) IEEE Transactions on Smart Grid, 16) International Journal of Climatology, 17) Journal of Applied Meteorology and Climatology, 18) Journal of Climate, 19) Journal of Geophysical Research (both Oceans and Atmosphere), 20) Journal of Marine Systems, 21) Meteorological Applications, 22) Monthly Weather Review, 23) Nature Climate Change, 24) Ocean Modelling, 25) Ocean Science Discussions, 26) Philosophical Transactions of the Royal Society, 27) Quarterly Journal of the Royal Meteorological Society, 28) Solar Energy, 29) Theoretical and Applied Climatology.

Reviewed World Bank and Asian Development Bank reports, UEA Masters dissertations, and Elsevier book proposals.

MENTORING	
2022-now	PhD student at Padova University (industrial supervisor)
2017-2020	PhD student at Leeds University (CASE Supervisor, with WEMC)
2016	A four-month intern at WEMC
2009-15	While at CSIRO: One PhD student (as 'industrial' supervisor) with UNSW (Sydney), one Masters student with UNSW (Canberra), Two one-year interns at CSIRO, Four summer students (one with Exemplary Energy), Five students for a term project (with University of Canberra)
2009	Masters student at Reading University (with University of Padova)
2001	Summer intern at NASA

EDUCATION OUTREACH	
2011-now	Lectures "The climate debate: basic science and possible actions" for Year 6 students at Radford College (Canberra, Aus) and for Year 5 & 6 students at Weetangera Primary (Canberra, Aus), and several schools in Italy, both in presence and remotely.
2024	Lecture "Navigating the Global Energy Transition with Climate Insights" at Masters students at the University of Bologna (Bologna, Nov 2024)
2023	Lectures "Climate Change: The Science and Possible Actions" at two impact investors events (Berlin, May 2023; Rimini, June 2023)
2018	Climate and Renewable Energy. Webinar presentation, Bright Green Future, UK
2009-14	Initiated and managed a solar school programme, with weather and solar power monitoring at select schools in Canberra, Australia

## **PODCAST**

Creator and Host of <u>Let's Climunicate</u> (2024–present), a video podcast fostering balanced discussions on climate science, policy, and solutions, aimed at reducing polarisation in the climate debate and featuring high-profile experts, including Prof. Tim Palmer and Mr. Sean Kidney.

### **BLOG**

Author of a <u>blog</u> exploring the intersection of science, policy, and energy, providing insights into global challenges and solutions. Topics include energy transition, climate resilience, and scientific innovations.

January 2025 Page 7 of 19

## **M**EDIA

Interviews for many TV and radio programmes such as ABC, SBS, RAI, New Scientist, Reuters. A few examples are available here with links to recordings (others are available on request):

- TV interview on Channel 7, on the Rebalancing Australia paper (Troccoli et al. 2024)
- TV interview (live) on Australian national ABC on wind speed trend paper (Troccoli et al., 2012)
- Radio interview (live) on Australian national ABC on wind speed trend paper (Troccoli et al., 2012)
- TV news piece (recorded) for ABC regional on our solar monitoring work at a school in Canberra (2012)
- Radio interview (recorded) on Australian national SBS on impact of solar farms on climate (2013)

## **PROMOTIONAL VIDEOS**

5<sup>th</sup> International Conference Energy & Meteorology: <a href="https://youtu.be/uCQ78QbvU1E">https://youtu.be/uCQ78QbvU1E</a>

World Energy & Meteorology Council: https://youtu.be/X8IoMZosLNQ

C3S ECEM Demonstrator: https://youtu.be/U-w5 sTHqG4

OTHER WORK RELATED ACTIVITIES/AWARDS	
2000	Assistant lecturer for a physics degree module at the University of Padova (Italy)
2000	Outstanding student paper award of the American Geophysical Union
1997	PhD Scholarship. Offered a scholarship to cover fees and maintenance for my PhD studies at the University of Edinburgh (UK). Also had a similar offer from Imperial College, London, UK.

## RESEARCH & PUBLICATIONS

## **BOOK EDITOR**

Troccoli A, ed (2018) Weather and Climate Services for the Energy Industry. Palgrave Macmillan, 197 pp. https://doi.org/10.1007/978-3-319-68418-5

Troccoli A, Dubus L and Haupt SE, eds (2014) ) Weather Matters for Energy. Springer Academic Publisher, 528 pp.

Troccoli A, ed (2010) <u>Management of Weather and Climate Risk in the Energy Industry</u>. NATO Science Series, Springer Academic Publisher, 344 pp.

Troccoli A, Harrison M, Anderson DLT and Mason SJ, eds (2008) <u>Seasonal Climate: Forecasting and Managing Risk</u>. NATO Science Series, Springer Academic Publishers, 467 pp.

## **BOOK CHAPTERS**

Troccoli A (2018) Achieving Valuable Weather and Climate Services in: Weather and Climate Services for the Energy Industry, Troccoli A, ed, Palgrave.

Dubus L, Muralidharan S and Troccoli A (2018) What does the Energy Industry Require from Meteorology? in: Weather and Climate Services for the Energy Industry, Troccoli A, ed, Palgrave.

Troccoli A, Soares MB, Dubus L, Haupt SE, Boulahya MS and Dorling S (2018) Forging a dialogue between the energy industry and the meteorological community in: *Weather and Climate Services for the Energy Industry*, Troccoli A, ed, Palgrave.

Dubus L, Troccoli A, Haupt SE, Boulahya MS and Dorling S (2018) Lessons learned establishing a dialogue between the energy industry and the meteorological community and a way forward in: *Weather and Climate Services for the Energy Industry*, Troccoli A, ed, Palgrave.

Ronalds B, Wonhas A and Troccoli A (2014) A new era for Energy in: *Weather Matters for Energy*, Troccoli A, Dubus L and Haupt SE, eds, Springer Academic Publishers, 3-16.

Troccoli A (2014) Climatic changes: looking back, looking forward in: *Weather Matters for Energy*, Troccoli A, Dubus L and Haupt SE, eds, Springer Academic Publishers, 65-90.

January 2025 Page 8 of 19

Gunasekera D, Troccoli A and Boulahya M (2014) Energy & Meteorology: Partnership for the future in: *Weather Matters for Energy*, Troccoli A, Dubus L and Haupt SE, eds, Springer Academic Publishers, 497-512.

Lambert JH, Troccoli A, White KD, Karl H, Yumagulova L and Sterin A (2011) Adaptation of Inland Systems to Climate Change with Challenges and Opportunities for Physical, Social, and Engineering Disciplines, in: *Climate Change Adaptation*, Linkov I and Bridges TS, eds, Springer Academic Publishers, 479-490.

Troccoli A (2010) Weather and Climate Predictions for the Energy Sector, in: *Management of Weather and Climate Risk in the Energy Industry*, Troccoli A, ed, NATO Science Series, Springer Academic Publishers, 25-37.

Harrison M and Troccoli A (2010) Data Headaches, in: *Management of Weather and Climate Risk in the Energy Industry*, Troccoli A, ed, NATO Science Series, Springer Academic Publishers, 137-147.

Troccoli A et al. (2010) Weather/Climate Risk Management For The Energy Sector: Workshop Recommendations, in: *Management of Weather and Climate Risk in the Energy Industry*, Troccoli A, ed, NATO Science Series, Springer Academic Publishers, 327-332.

Harrison M, Troccoli A, Anderson DLT and Mason SJ (2008) Introduction, in: *Seasonal Climate: Forecasting and Managing Risk*, Troccoli A, Harrison M, Anderson DLT and Mason SJ, eds, NATO Science Series, Springer Academic Publishers, 3-12.

Harrison M, Troccoli A, Williams JB and Coughlan M (2008) *Seasonal Forecasts in Decision Making, in: Seasonal Climate: Forecasting and Managing Risk,* Troccoli A, Harrison M, Anderson DLT and Mason SJ, eds, NATO Science Series, Springer Academic Publishers, 13-42.

Tribbia J and Troccoli A (2008) Getting the coupled model ready at the starting blocks, in: *Seasonal Climate:* Forecasting and Managing Risk, Troccoli A, Harrison M, Anderson DLT and Mason SJ, eds, NATO Science Series, Springer Academic Publishers, 91-126.

Harrison M, Troccoli A, Anderson DLT, Mason SJ, Coughlan M and Williams JB (2008) A way forward for seasonal climate services, in: *Seasonal Climate: Forecasting and Managing Risk*, Troccoli A, Harrison M, Anderson DLT and Mason SJ, eds, NATO Science Series, Springer Academic Publishers, 399-410.

## **PEER REVIEWED ARTICLES**

Troccoli A, Stone R, Bardi U, Breyer C and Henggeler C (2024) Rebalancing Regional and Remote Australia: A vision for a global carbon sink while creating sustainable communities. *Environ. Res. Lett.*, **19** 111003, <a href="https://dx.doi.org/10.1088/1748-9326/ad78ea">https://dx.doi.org/10.1088/1748-9326/ad78ea</a>

Obahoundje S, Diedhiou A, Troccoli A, Boorman P, Alabi TAF, Anquetin S, Crochemore L, Fassinou WF, Hingray B, Koné D, Mamadou C and Sorho F (2024) Teal-WCA: A Climate Services Platform for Planning Solar Photovoltaic and Wind Energy Resources in West and Central Africa in the Context of Climate Change. Data, 9(12), 148. <a href="https://doi.org/10.3390/data9120148">https://doi.org/10.3390/data9120148</a>

Krikken F, Geertsema G, Nielsen K and Troccoli A (2024) The added value of statistical seasonal forecasts. *Climate*, 12,83. https://doi.org/10.3390/cli12060083

Tombolato A, Brambilla G, Troccoli A, Sanchini A and Bonomini F (2024) Basics of meteorology for outdoor sound propagation and related modelling issues. *Noise Mapping*. https://doi.org/10.1515/noise-2024-0006

Troccoli A, Tobias Fuchs T, Boscolo R, Matt E, Bastani H (2024) Co-production of integrated weather and climate services to support net-zero energy transitions. *Bulletin of the American Meteorological Society*. DOI: 10.1175/BAMS-D-23-0029.1

Añel JA, Pérez-Souto C, Bayo-Besteiro S, Prieto-Godino L, Bloomfield H, Troccoli S, de la Torre L (2024) Extreme Weather Events and the Energy Sector in 2021. Wea. Climate Soc., 16, 353–368, <a href="https://doi.org/10.1175/WCAS-D-23-0115.1">https://doi.org/10.1175/WCAS-D-23-0115.1</a>

Norman J, Maycock A, Troccoli A and Dessai S (2024) The role of repowering India's ageing wind farms in achieving net-zero ambitions, Environ. Res. Lett. **19** 034031 <a href="https://dx.doi.org/10.1088/1748-9326/ad28db">https://dx.doi.org/10.1088/1748-9326/ad28db</a>

Roy I, Mliwa M and Troccoli A (2024) Important drivers of East African monsoon variability and improving rainy season onset prediction. *Nat Hazards* **120**, 429–445. <a href="https://doi.org/10.1007/s11069-023-06223-3">https://doi.org/10.1007/s11069-023-06223-3</a>

Roy I and Troccoli A (2023) Identifying Important Drivers of South-East African October to December rainfall season. Science of Total Environment. <a href="https://doi.org/10.1007/s11069-023-06223-3">https://doi.org/10.1007/s11069-023-06223-3</a>

January 2025 Page 9 of 19

Zampieri M, Toreti A, Meroni M, Bojovic D, Octenjak S, Marcos-Matamoros R, Materia S, Chang'a L, Merchades M, del Mar Chaves Montero M, Rembold F, Troccoli A, Roy I and Hoteit I (2023) Seasonal forecasts of the rainy season onset over Africa: preliminary results from the FOCUS-Africa project. Climate Services. <a href="https://doi.org/10.1016/j.cliser.2023.100417">https://doi.org/10.1016/j.cliser.2023.100417</a>

Dubus L, Saint-Drenan Y-M, Troccoli A, De Felice M, Moreau Y, Ho L, Goodess C and Sanger L (2023) C3S Energy: a climate service for the provision of power supply and demand indicators for Europe based on the ERA5 reanalysis and ENTSO-E data. Meteorological Applications, <a href="https://doi.org/10.1002/met.2145">https://doi.org/10.1002/met.2145</a>

Goodess CM, Troccoli A, Vasilakos N, Dorling S, Steele E, Amies JD, Brown H, Chowienczyk K, Dyer E, Formenton M, et al. (2022) The Value-Add of Tailored Seasonal Forecast Information for Industry Decision Making. Climate, 10, 152. https://doi.org/10.3390/cli10100152

Bett PE, Thornton HE, Troccoli A, De Felice M, Suckling E, Dubus L, Saint-Drenan Y-M, Brayshaw DJ (2022) A simplified seasonal forecasting strategy, applied to wind and solar power in Europe. Climate Services 27, 100318. <a href="https://doi.org/10.1016/j.cliser.2022.100318">https://doi.org/10.1016/j.cliser.2022.100318</a>

Bloomfield HC, Brayshaw DJ, A. Troccoli A, Goodess CM, De Felice M, Dubus L, Bett PE, Saint-Drenan Y-M (2021) Quantifying the sensitivity of European power systems to energy scenarios and climate change projections. Renewable Energy 164, 1062-1075. https://doi.org/10.1016/j.renene.2020.09.125

Troccoli A (2020) Effect of Climate and Geography on Worldwide Fine Resolution Economic Activity. PLoS ONE 15(3): e0229243. https://doi.org/10.1371/journal.pone.0229243

Ho LT, Dubus L, De Felice M and Troccoli A (2020) Reconstruction of Multidecadal Country-Aggregated Hydro Power Generation in Europe based on a Random Forest Model. *Energies*, *13*, 1786. <a href="https://doi.org/10.3390/en13071786">https://doi.org/10.3390/en13071786</a>

Saint-Drenan YM, Besseau R, Jansen M, Staffell I, Troccoli A, Dubus L, Schmidt J, Gruber K, Heier S (2020) A parametric model for wind turbine power curves incorporating environmental conditions. Renewable Energy, 157, 754-768. https://doi.org/10.1016/j.renene.2020.04.123.

Goodess C, Troccoli A, Acton C, Añel JA L, Bett PE, Brayshaw D, De Felice M, Dorling S, Dubus L, Penny L, Percy B, Ranchin T, Thomas C, Trolliet M, Wald L (2019) Advancing climate services for the European renewable energy sector through capacity building and user engagement. Climate Services, 16, 191–205, doi.org/10.1016/j.cliser.2019.100139

Bartók B, Tobin I, Vautard R, Vrac M, Jin X, Levavasseurc G, Denvilc S, Dubus L, Parey S, Michelangeli PA, Troccoli A, Saint-Drenan YM (2019) A climate projection dataset tailored for the European energy sector. Climate Services, 16, doi.org/10.1016/j.cliser.2019.100138

De Felice M, Bruno Soares M, Alessandri A, Troccoli A (2019) Scoping the potential usefulness of seasonal climate forecasts for solar power management. Renewable Energy 142, 215-223, doi.org/10.1016/j.renene.2019.03.134

Troccoli A, Goodess C, Jones P, Penny L, Dorling S, Harpham C, Dubus L, Parey S, Claudel S, Khong D-H, Bett PE, Thornton H, Ranchin T, Wald L, Saint-Drenan Y-M, De Felice M, Brayshaw D, Suckling E, Percy B and Blower J (2018) Creating a proof-of-concept climate service to assess future renewable energy mixes in Europe: An overview of the C3S ECEM project. Adv. Sci. Res., 15, 191–205, doi.org/10.5194/asr-15-191-2018

Mukkavilli SK, Prasad AA, Taylor RA, Huang J, Mitchell RM, Troccoli A, Kay MJ (2018) Assessment of atmospheric aerosols from two reanalysis products over Australia. Atmospheric Research, 10.1016/j.atmosres.2018.08.026

Saint-Drenan YM, Wald L, Ranchin T, Dubus L, Troccoli A (2018) An approach for the estimation of the aggregated photovoltaic power generated in several European countries from meteorological data. Advances in Science and Research, 15, 51-62, doi.org/10.5194/asr-15-51-2018

Mukkavilli SK, Prasad AA, Taylor RA, Troccoli A and Kay MJ (2018) Mesoscale simulations of Australian direct normal irradiance, featuring an extreme dust event. J Applied Met. and Climatology, 493-515, doi.org/10.1175/JAMC-D-17-0091.1

Jones PD, Harpham C, Troccoli A, Gschwind B, Ranchin T, Wald L, Goodess CM and Dorling S (2017). Using ERA-Interim Reanalysis output for creating datasets of energy-relevant climate variables. *Earth System Science Data Discussions*, 9, pp. 471-495, DOI: 10.5194/essd-9-471-2017

Nguyen KC, Katzfey JJ, Riedl J and Troccoli A (2017) Potential impacts of solar arrays on regional climate and on array efficiency. Int. J. Climatology. DOI: <a href="tel:101.1002/joc.4995">10.1002/joc.4995</a>

January 2025 Page 10 of 19

Perry M and Troccoli A (2016) An approach for generating synthetic fine temporal resolution solar radiation time series from hourly gridded datasets. Met Zet. DOI: 10.1127/metz/2016/0746

Davy RJ, Huang J and Troccoli A (2016) Improving the accuracy of hourly satellite-derived solar irradiance by combining with dynamically-downscaled estimates using generalised additive models. Solar Energy, 135, 854-863, DOI: 10.1016/j.solener.2016.06.052.

Chen Z and Troccoli A (2016) Urban solar irradiance and power prediction from nearby stations. Met Zet. DOI: 10.1127/metz/2016/0725

Polo J, Wilbert S, Ruiz-Arias JA, Meyer R, Gueymard C, Súri M, Martín L, Mieslinger T, Blanc P, Grant I, Boland J, Ineichen P, Remund J, Escobar R, Troccoli A, Sengupta M, Nielsen KP, Renne D, Geuder N and Cebecauer T (2016) Review on site-adaptation techniques for satellite-derived and reanalysis solar radiation datasets. Solar Energy

Perry M and Troccoli A (2015) Impact of a fire burn on solar irradiance and PV power. Solar Energy, 114, 167-173, doi: 10.1016/j.solener.2015.01.005.

Davy R and Troccoli A (2014) Continental-scale spatial optimisation of a solar irradiance monitoring network. Solar Energy, 109, 36–44, doi: 10.1016/j.solener.2014.08.026

Troccoli A and Morcrette J-J (2014) Skill of direct solar radiation predicted by the ECMWF global atmospheric model over Australia. J. Applied Meteorology and Climatology, 2571–2588, doi: 10.1175/JAMC-D-14-0074.1

Huang J, Troccoli A and Coppin P (2014) An analytical comparison of four approaches to modelling the daily variability of solar irradiance using meteorological records. Renewable Energy, 72, doi: 195–202, 10.1016/j.renene.2014.07.015

Ellis N, Davy R and Troccoli A (2014) Predicting wind power variability events using different statistical methods driven by regional atmospheric model output. Wind Energy, doi: 10.1002/we.1779

Convertino M, Troccoli A and Catani F (2013) Landslide Patterns as Fingerprints of Climate Change, Journal of Geophysical Research, doi: 10.1002/jgrf.20099.

Troccoli A, Audinet P, Bonelli P, Boulahya MS, Buontempo C, Coppin P, Dubus L, Dutton JA, Ebinger J, Griggs D, Gryning S-E, Gunasekera D, Harrison M, Haupt S-E, Lee TR, Mailier P, Mathieu P-P, Schaeffer R, Schroedter-Homscheidt M, Zhu R and Zillman J (2013) Promoting New Links Between Energy and Meteorology. Bull. Amer. Meteorol. Soc., ES36-40, doi:10.1175/BAMS-D-12-00061.1.

Troccoli A, Zambon F, Hodges K and Marani M (2012) Reply to comment on Storm surge frequency reduction in Venice under climate change Jordà G, Gomis D, Marcos M. Climatic Change, doi: 10.1007/s10584-012-0506-5.

Davy R and Troccoli A (2012) Interannual variability of solar electricity generation in Australia, Solar Energy, doi:10.1016/j.solener.2011.12.004.

Rowlinson B, Gunasekera D and Troccoli A (2012) Potential role of renewable energy in water desalination in Australia, Journal of Renewable and Sustainable Energy, 4, 013108(1-15), doi: 10.1063/1.3682060.

Schaeffer R, Szklo A, Frossard Pereira de Lucena A, Soares Moreira Cesar Borba B, Pinheiro Pupo Nogueira L, Pereira Fleming F, Troccoli A, Harrison A, Boulahya MS (2012) Energy Sector Vulnerability to Climate Change: a review, The International Energy Journal, 38, 1-12, doi: 10.1016/j.energy.2011.11.056.

Troccoli A, Muller K, Coppin P, Davy R, Russell C and Hirsch AL (2012) Long-term wind speed trends over Australia, J Climate, 25, 170-183, doi: 10.1175/2011JCLI4198.1

Troccoli A, Zambon F, Hodges K and Marani M (2011) Storm surge frequency reduction in Venice under climate change, Climatic Change, doi: 10.1007/s10584-011-0093-x.

Brayshaw DJ, Troccoli A, Fordham R, Methven J (2011) The impact of large scale atmospheric circulation patterns on wind power generation and its potential predictability: A case study over the UK. Renewable Energy, 36, 2087–2096, doi:10.1016/j.renene.2011.01.025.

Linkov I, Todd S, Bridges TS, Hady A, Jonsdottir I, Kiker G, Lambert J, MacBride M, Palma-Oliveira J, Ranger N, Russo E Troccoli A (2010) Brief Summary of a North Atlantic Treaty Organization (NATO) Advanced Research Workshop on Global Climate Change and Local Adaptation. Integrated Environmental Assessment and Management, 6:4, 617–618, doi: 10.1002/ieam.127.

Troccoli A, Boulahya MS, Dutton JA, Furlow J, Gurney RJ and Harrison M (2010) Weather and Climate Risk Management in the Energy Sector, Bull. Amer. Meteorol. Soc., 6, 785-88. doi:10.1175/2010Bams2849.1

January 2025 Page 11 of 19

Troccoli A (2010) Seasonal Climate Forecasting: a Review, Meteorological Applications, 17, 251-268. doi: 10.1002/met.184. https://rmets.onlinelibrary.wiley.com/doi/10.1002/met.184 (invited)

Shapiro M et al. (2010) An Earth-system Prediction Initiative for the 21st Century, Bull. Amer. Meteorol. Soc., 1377-1388, doi:10.1175/2010BAmS2944.1

Troccoli A (2009) Climate and the development community, Weather, vol. 64, n. 1, 25-26.

Troccoli A and Palmer TN (2007) Ensemble Decadal Predictions from Analysed Initial Conditions, Phil. Trans. R. Soc. A, vol. 365, 2179-2191.

Troccoli A and Huddleston M (2006) Forecasting UK and European winters, Weather, vol. 61, n. 12, 356-357.

Troccoli A (2005) Perfecting imperfect models, Weather, vol. 60, n. 6, 171-172.

Troccoli A et al. (2002) Salinity adjustments in the presence of temperature data assimilation, Monthly Weather Review, vol. 130, 89-102.

Segnschneider J et al. (2001) Initialization of seasonal forecasts assimilating sea level and temperature observations, J. Climate, vol. 14, 4292-4307.

Grey S, Haines K and Troccoli A (2000) A study of temperature changes in the upper North Atlantic: 1950—94, J. Climate, vol. 13, 2697-2711.

Troccoli A and Haines K (1999) Use of the Temperature-Salinity relation in a data assimilation context, J. Atmos. Oceanic Technol., vol. 16, 2011-2025.

## **PREPRINTS**

Troccoli A (2019) Effect of Climate and Geography on Worldwide Fine Resolution Economic Activity. arXiv:1806.06358 [econ.EM], https://arxiv.org/abs/1806.06358

Bett P, Thornton HE, Troccoli A, De Felice M, Suckling E, Dubus L, Saint-Drenan Y-M, Brayshaw DJ (2019) A simplified seasonal forecasting strategy, applied to wind and solar power in Europe. EarthArXiv, doi.org/10.31223/osf.io/kzwqx

De Felice M, Dubus L, Troccoli A (2018) The impact of the North Atlantic Oscillation on European hydro-power generation. EarthArXiv, doi.org/10.31223/osf.io/8sntx

## **THESES**

Troccoli A (2001) Ocean data assimilation using the temperature-salinity relation and water mass diagnostics, PhD Thesis, The University of Edinburgh, UK, 215 pp.

Troccoli A (1996) 3-dim structure of the Adriatic sea and processes which determine it, Laurea Thesis, University of Padova, Italy, 224 pp (in Italian).

## NEWSLETTERS/EDITORIALS/CONFERENCE PROCEEDINGS (SELECTED)

Author and contributor to many newsletters (see <a href="https://www.wemcouncil.org/wp/news">https://www.wemcouncil.org/wp/news</a>)

Troccoli (2018) WEMC Magazine (www.wemcouncil.org/wp/resources/#1572874015564-48a9e7dd-450f).

Troccoli A (2016) <u>Assessing climate change resilience in the energy sector</u>, A UK Energy Research Centre (UKERC) Guest Blog.

Hong T, Pinson P, Fan S, Zareipour H, Troccoli A and Hyndman RJ (2016) Probabilistic Energy Forecasting: Global Energy Forecasting Competition 2014 and Beyond, to appear in International Journal of Forecasting.

Troccoli A and Boscolo R (2015) Climate Services for the Energy Sector: A New Priority Area for the GFCS. WMO Bulletin vol 64(2), 13-16. <a href="http://www.wmo.int/bulletin/en/content/issue-responding-challenges-climate-change">http://www.wmo.int/bulletin/en/content/issue-responding-challenges-climate-change</a>

Troccoli A (2015) Community spotlight a conversation with Alberto Troccoli, Interview for the Climate Services Partnership (CSP) Newsletter. http://www.climate-services.org/sites/default/files/CSPNewsletter\_April2015.pdf

Troccoli A (2013) International Conference Energy & Meteorology (ICEM) Solar Radiation. Preface to special part of Solar Energy, 98, 99. http://dx.doi.org/10.1016/j.solener.2013.10.030.

January 2025 Page 12 of 19

Troccoli A and Morcrette J-J (2013) An assessment of solar irradiance components produced by the IFS, ECMWF Newsletter, 137, 6-7. Available at: <a href="http://www.ecmwf.int/publications/newsletters/">http://www.ecmwf.int/publications/newsletters/</a>

Troccoli A and Morcrette J-J (2012) Forecast assessment of surface solar radiation over Australia, World Renewable Energy Conference, Denver, CO, USA.

Troccoli A (2011) What's the energy forecast – bringing meteorology and generation together, The Conversation. <a href="http://theconversation.edu.au/whats-the-energy-forecast-bringing-meteorology-and-generation-together-3406">http://theconversation.edu.au/whats-the-energy-forecast-bringing-meteorology-and-generation-together-3406</a>

Gunasekera D and Troccoli A (2010) Medium term prospects for wind and solar energy in Australia, Solar 2010 Conference, Canberra, Australia.

Troccoli et al (2010) Long term wind variability in Australia, 14th Australasian Wind Engineering Society Workshop, Canberra, Australia.

Ferry N et al. (2008) Seasonal weather prediction: How the Ocean Fast Track Services contribute towards improved meteorological services, Window on GMES, 57-61.

Troccoli A et al. (2008) Coupled ocean-atmosphere medium range forecasts: the MERSEA experience, ECMWF Newsletter, 115, 27-35. <a href="http://www.ecmwf.int/publications/newsletters/">http://www.ecmwf.int/publications/newsletters/</a>

Troccoli A and Doblas-Reyes F (2007) Ocean data make their appearance on the public web at ECMWF, ECMWF Newsletter, 114, 6-7. http://www.ecmwf.int/publications/newsletters/

Lavers D, Prudhomme C, Hannah DM and Troccoli A (2007) Comparison of the potential skill of raw and downscaled GCM output for river flow forecasting: a UK case study, CLIVAR Exchanges, 12, 4, 33-25.

Ferry N, Guérémy J-F, Troccoli A and Gualdi S (2007) Seasonal Prediction, MERCATOR newsletter, 24, 11-13.

Dickson RR, Hulme M, Stevenson H, Troccoli A, Hoskins BJ, Houghton JT, Niemeyer SJ and Venables J (2003) Abrupt climate change: can society cope? Discussion, Phil. Trans. R. Soc. A, vol. 361, 2019-2021.

Troccoli A and Rienecker MM (2002) The importance of salinity in the assimilation of temperature observations in the tropical pacific ocean, Symposium on Observations, Data Assimilation, and Probabilistic Prediction, Orlando (USA), 107-110.

## **TECHNICAL REPORTS (SELECTED)**

Many <u>tens of reports</u> for the C3S Energy operational service (2018-to-date), several as lead author (selected reports available on request).

Around twenty reports for the H2020 SECLI-FIRM project (2018-2019, selected reports available on request).

In excess of <u>seventy</u> reports for the C3S European Climatic Energy Mixes (ECEM) project, several as lead author (2015-2018, selected reports available on request).

Troccoli A and Goswami P (2015) Harnessing Improved Weather and Climate Information for Renewable Energy Generation: Final Project Report. CSIRO/Australian Dept of Foreign Affairs and Trade (DFAT) report, pp 16.

Troccoli A (2015) Integrated Solar Radiation Data Sources over Australia – Final report: project results and lessons learnt. CSIRO/Australian Renewable Energy Agency (ARENA) report, pp 37.

Troccoli A, Perry M, Davy R, Paget M, Pascual R, Rikus L and Sengupta M (2015) Integrated Solar Radiation Data Sources over Australia: Final Project Report. CSIRO/ARENA report, pp 130.

Troccoli A (2015) Australian Solar Energy Forecasting System – Final report: project results and lessons learnt. CSIRO/ Australian Renewable Energy Agency (ARENA) report, pp 45.

Troccoli A (2015) Australian Solar Energy Forecasting System (ASEFS) — Phase I — Milestone 10 Report. CSIRO/ARENA report, pp 113.

Troccoli A (2014) Australian Solar Energy Forecasting System (ASEFS) – Phase I – Milestone 8 Report. CSIRO/ Australian Renewable Energy Agency (ARENA) report, pp 68.

Perry M, Troccoli A, Davy R and Sengupta M (2015) Integrated Solar Radiation Data Sources over Australia: Statistical model development for high temporal resolution solar radiation time series and solar data assessment using NRELs National Solar Radiation Database. CSIRO/ARENA report, pp 30.

January 2025 Page 13 of 19

Troccoli A, Davy R, Paget M and Pascual R (2014) Integrated Solar Radiation Data Sources over Australia: Integrated Solar Radiation Dataset: Combining ground stations, satellite-derived and model data. CSIRO/ Australian Renewable Energy Agency (ARENA) report, pp 76.

Troccoli A (2014) Integrated Solar Radiation Data Sources over Australia: Integrated Solar Radiation Dataset: Workshop report. CSIRO/ARENA report, pp 18.

Huang J, Troccoli A and Davy R (2014) Solar Radiation Data for Solar Power Site Assessment. Client report, pp 12.

Troccoli A, Davy R, Paget M and Rozas-Larraondo P (2013) Integrated Solar Radiation Data Sources over Australia: Solar radiation uncertainty and optimal ground stations layout. CSIRO/ARENA report, pp 49.

Troccoli A, Davy R, Paget M, Rozas-Larraondo P, Rikus LJ, Sengupta M and Stoffel T (2013) Integrated Solar Radiation Data Sources over Australia: Assessment of solar radiation. CSIRO/ARENA report, pp 38.

Troccoli A (2011) Preliminary analysis of projected 10-m wind speed over Australia using climate model scenario data, Australia Climate Change Science Program, Australia.

Hirsch AL, Troccoli A, Russell CJ and Muller K (2011) Report on the quality of automatic weather observations in Australia, Australia Climate Change Science Program, Australia.

Russell C, Troccoli A, Woods M and Davy R (2011) Simulation of Wind Speed Time-Series at Potential Wind Farms in South-Eastern Australia for 2002 to 2010, Report for the Australian Energy Market Operator, Australia.

Russell C, Coppin P, Troccoli A and Price C (2010) The FlatPVSolar (solflat) AWEFS module, Part II, Report for the Department of Resources, Energy and Tourism (DRET), Australia.

Troccoli A and Kållberg P (2004) Precipitation correction in the ERA-40 reanalysis, ERA-40 Project Report Series, 13 [Despite being a tech report it has been widely cited in ISI-tracked journal articles].

Anderson DLT et al. (2003) Comparison of the ECMWF seasonal forecast Systems 1 and 2, and performance of the 1997/8 El Niño, ECMWF Tech. Memo N. 404.

Troccoli A Rienecker M, Keppenne CL and Johnson GC (2003) Temperature data assimilation with salinity corrections: validation for the NSIPP ocean data assimilation system in the tropical Pacific ocean, NASA Tech. Memo N. 104606, vol. 24.

Anderson DLT et al. (2000) Ocean data assimilation for seasonal forecasting, in Exploitation of the New Generation of Satellite Instruments for Numerical Weather Prediction, ECMWF.

Troccoli A et al. (2000) Salinity adjustments in the presence of temperature data assimilation, ECMWF Tech. Memo N. 305.

## **SPEAKING ENGAGEMENTS (INVITED)**

## SELECTED INVITED TALKS/LECTURES (FIRST AUTHOR ONLY)

Troccoli A (2024) "Rebalancing Regional and Remote (3R) Australia", Queensland Academy of Arts and Science and the James Cook University, Townsville, Australia.

Troccoli A (2024) "Overview of the Global Partnership for Weather, Water, and Climate Services for a Clean Energy Transition White Paper", IRENA Council, Abu Dhabi, UAE

Troccoli A (2024) "State of the art of meteorology for solar technologies and further renewable energy systems", Concentrated Solar Thermal for All (CST4ALL) Workshop (online)

Troccoli A (2024) "Assess the Socio-Economic Value of Climate Services in FOCUS-Africa", Climate Services for Africa Policy Workshop, Brussels, Belgium (with S Whittlesay)

Troccoli A (2024) "Methodological improvements of climate data", ENSTO-E's European Resource Adequacy Assessment (ERAA) 2024 (online)

Troccoli A (2023) "Energy Plenary: Energy Transition Towards Net Zero - Progress, Challenges and Outlook", Keynote, 3<sup>rd</sup> International Conference on Sustainable Energy-Water-Environment Nexus in Desert Climates (ICSEWEN'23), Doha, Qatar

Troccoli A (2023) "The Copernicus Climate Change Service (C3S) for the Energy Sector", Forum of 18th IEEE PES China Chapter Council, China (online)

January 2025 Page 14 of 19

Troccoli A (2023) "How can we balance adaptation measures with mitigation targets in a changing climate? The case of the Energy sector", Keynote, 11<sup>th</sup> Annual Conference of the Italian Society for Climate Science, Milan, Italy

Troccoli A (2023) "Collaborative approaches to developing weather and climate services", WMO 1st regional training workshop on energy services and nexus issues (online)

Troccoli A (2023) "How can weather and climate services better support the energy sector?", Global Energy Interconnection Conference (hybrid), Bejing, China (online)

Troccoli A (2023) "Climate Change: The Science and Possible Actions", University of Padova, Rovigo, Italy

Troccoli A (2023) "Climate Change: The Science and Possible Actions", Scuola Superiore di Sant'Anna, Pisa, Italy

Troccoli A (2023) "Co-production of seasonal forecasts for energy applications", IEA Task 51 Seasonal Workshop (hybrid), Reading UK (online)

Troccoli A (2022) "Integrated Weather and Climate Services in support to Net Zero Energy Transition", COP27 (online)

Troccoli A (2022) "Climate change risk for Energy systems", Keynote, Asset Management Conference, Seattle, USA

Troccoli A (2022) "Use of multi-model combination and an independence metric in seasonal climate forecast for applications in the energy sector", World Weather Research programme, WMO, Geneva, Switzerland

Troccoli A (2022) "Bridging the gap between Energy & Meteorology", Grid Service Market Symposium (hybrid), Lucerne, Switzerland (online)

Troccoli A (2022) "Climate service co-production for the Energy sector, and beyond: *Output and lessons learnt*", Réseau de Transport d'Électricité (RTE), Paris, France

Troccoli A (2022) "Climate service co-production for the Energy sector, and beyond: *Output and lessons learnt*", Institut Pierre-Simon Laplace (IPSL), Paris, France

Troccoli A (2022) "Tailoring Seasonal Climate Forecasts for the Utility Sector", Royal Meteorological Society annual meeting, Reading, UK

Troccoli A (2021) "Adoption and integration of geospatial knowledge and 4IR technology in Energy Transition", Collaborative Workflow for Geospatial knowledge in Energy Transition (online)

Troccoli A (2021) "Science and technology advances in weather and climate services for the energy sector", COP26 (online)

Troccoli A (2021) "TEAL: A Climate data visualisation tool", Climate Talks Global Festival, International Universities Climate Alliance, UNSW, Sydney, Australia (online)

Troccoli A (2021) "Seasonal Forecast Climate Services for the Energy (& Water) Industries: Some results from the EU SECLI-FIRM project", Australian Meteorological and Oceanographic Society, Australia (online)

Troccoli A (2021) "Climate services for the energy industry: state-of-the-art and where they are heading", Royal Meteorological Society, UK (online)

Troccoli A (2020) "Climate Change Impacts on Energy", American Meteorological Society, USA (online)

Troccoli A (2020) "Current Situation and Trends in Global Climate Change and Energy", GEIDCO Seminar, China (online)

Troccoli A (2020) "Climate Services for the Energy Sector", Australian Meteorological and Oceanographic Society Energy Forum, Australia (online)

Troccoli A (2020) "Climate Change Adaptation and Mitigation Planning for Climate Variability and Change: What does it mean for energy networks?", Supergen Energy Networks Conference, UK (online)

Troccoli A (2019) "From Resource Assessment to Climate Projections: The Key Role of Meteorology in Planning and Operations of Solar Power (and other Energy sources)", International Conference on Sustainable Energy-Water-Environment Nexus in Desert Climate, Doha, Qatar

Troccoli A et al. (2019) "Seasonal Forecast for Energy Management", C3S General Assembly, Warsaw, Poland

Troccoli A et al. (2018) "Climate Change and the Global Electricity Interconnection", COP24, Katowice, Poland

Troccoli A et al. (2018) "C3S Energy Operational Service", COP24, Katowice, Poland

January 2025 Page 15 of 19

Troccoli A (2018) "Ingredients of climate services for the energy sector, and beyond", H2020 CLARA project Multi-User Forum Workshop, Cordoba, Spain.

Troccoli A (2018) "What can European climate services offer to the energy sector?", Workshop on Adaptation for European Energy Systems, European Environment Agency, Copenhagen, Denmark

Troccoli A (2018) "Climate services in support of the energy transformation", University of Queensland, Brisbane

Troccoli A (2018) "What can European climate services offer to the energy (and water resource) sector?", APEC Climate Symposium, Port Moresby, Papa New Guinea

Troccoli A (2018) "Global Impacts of Climate Change on Renewable Energy", Forecasting Workshop, Energy Systems Integration Group (ESIG), St Paul, MN, USA

Troccoli A (2018) "Climate services in support of the energy transformation", CMCC Seminar, Bologna, Italy

Troccoli A (2017) "Climate Change and Energy: from Knowledge to Decisions", Gas Natural Fenosa, Vigo, Spain

Troccoli A (2017) "Our Experience in Energy & Climate Services for the GFCS HelpDesk Development", WMO GFCS-Help Desk planning workshop, Offenbach, Germany (remotely).

Troccoli A (2017) "Climate Service and Technology: a Key Tool of Climate Change Adaptation for the Energy Sector", Laboratoire des Sciences du Climat et de l'Environnement (LSCE), Paris, France.

Troccoli A (2017) "Climate Service and Technology: a Key Tool of Climate Change Adaptation for the Energy Sector", European Bank for Development and Reconstruction, London, UK.

Troccoli A (2016) "Il valore delle osservazioni e delle previsioni meteorologiche per le energie rinnovabili" (in Italian), Festival della Meteorologia, Rovereto, Italy.

Troccoli A (2016) "Climate Service and Technology: a Key Tool of Climate Change Adaptation for the Energy Sector", JRC, Ispra, Italy.

Troccoli A (2016) "Energy & Meteorology and ECEM", Energy UK breakfast meeting, London, UK.

Troccoli A (2016) "Energy & Meteorology and the European Climatic Energy Mixes", Eurelectric expert meeting, Brussels, Belgium.

Troccoli A (2016) Two lectures "Weather & Climate Adaptation Planning for Renewable Energy System", and "Climate Service and Technology: a Key Tool of Climate Change Adaptation for the Energy Sector", Conference on Climate Change Adaptation for the Energy and Industrial Sectors, Taipei, Taiwan.

Troccoli A (2016) Two lectures "How can Earth observations assist the energy sector?" and "The European Energy Climatic Mixes project", European Space Solutions conference, The Hague, The Netherlands

Troccoli A (2016) "Energy & Meteorology Nexus", 6th International Energy Agency Nexus Forum, Ottawa (Canada).

Troccoli A (2016) "Engagement Models for the Earth Science Community", NASA Energy Management Stakeholder Ideation Workshop, Arlington, VA (USA).

Troccoli A (2015) "Global Framework for Climate Services (GFCS) Energy Priority: Implementation Planning", GFCS meeting, International Energy Agency, Paris, France.

Troccoli A (2015) "Sectoral impacts of El Niño: Energy Industry experiences", El Niño Conference, Palisades, USA.

Troccoli A (2015) "Resource assessment and forecasting for solar and wind energies", a series of four 90-min lectures for the Twelfth CMA's "International Seminar on Climate System and Climate Change", Lanzhou, China.

Troccoli A (2015) "Conference Welcome and Opening", 3rd ICEM, Boulder, USA.

Troccoli A (2015) "Overview of the draft GFCS Energy Exemplar", WMO Congress Invited Expert, Geneva, Switzerland.

Troccoli A (2015) "An analysis of the Energy & Meteorology Couple", Guest speaker, World Meteorological Day, WMO, Geneva, Switzerland.

Troccoli A (2015) "Solar Radiation Forecasting for the Energy Industry", ECMWF, Reading, UK.

Troccoli A (2015) "Solar Radiation Forecasting for the Energy Industry", EDF, Paris, France.

Troccoli A (2014) "Resource assessment and forecasts for solar and wind: Possible lessons from more mature technologies", Australian Wave Energy Atlas project Workshop, Melbourne, Australia.

January 2025 Page 16 of 19

Troccoli A (2014) "Why should we be concerned about meteorological impacts on our energy systems?", Meeting of Italian Scientists Down Under, Embassy of Italy, Canberra, Australia.

Troccoli A (2014) "Operational Wind and Solar Energy power forecasting for the Australian Energy Market", Energy Future Conference, Sydney, Australia.

Troccoli A and Dubus L (2014) "Why should we be concerned about meteorological impacts on our energy systems?", World Weather Open Science Conference, Montréal, Canada; <a href="https://www.wmo.int/pages/prog/arep/wwrp/new/wwosc/videos.html">https://www.wmo.int/pages/prog/arep/wwrp/new/wwosc/videos.html</a>.

Troccoli A (2014) "Climate Change and the Energy Sector: Some Challenges", World Bank event, Fortaleza, Brazil.

Troccoli A (2013) "Climate Change and Implications for Renewables", WIRE Summer School, Montegut, France.

Troccoli A (2013) "Conference opening remarks", ICEM 2013, Toulouse, France; <a href="https://www.youtube.com/watch?v=lgw6000Wyyc">https://www.youtube.com/watch?v=lgw6000Wyyc</a> or <a href="https://www.youtube.com/78038500">https://www.youtube.com/watch?v=lgw6000Wyyc</a> or <a href="https://www.youtube.com/78038500">https://www.youtube.com/watch?v=lgw6000Wyyc</a> or <a href="https://www.youtube.com/r8038500">https://www.youtube.com/watch?v=lgw6000Wyyc</a> or <a href="https://www.youtube.com/r8038500">https://www.youtube.com/watch?v=lgw6000Wyyc</a> or <a href="https://www.youtube.com/r8038500">https://www.youtube.com/watch?v=lgw6000Wyyc</a> or <a href="https://www.youtube.com/r8038500">https://www.youtube.com/r8038500</a>.

Troccoli A (2013) "Uncertainty in Meteorological Data for the Energy Industry", ICEM 2013 pre-conference seminar, Toulouse, France; <a href="https://www.youtube.com/watch?v=AASNldp3gb0">https://www.youtube.com/watch?v=AASNldp3gb0</a> or <a href="https://www.youtube.com/watch?v=AASNldp3gb0">https://watch?v=AASNldp3gb0</a> or <a href="https://watch?v=AASNldp3gb0">https://watch?v=AASNldp3gb0</a> or <a href="https://watch?v=AASNldp3gb0">https://watch?v=AASNldp3gb0</a> or <a href="https://watch?v=AASNldp3gb0">https://watch?v=AASNldp3gb0</a> or <a href="https://watch?v=AASNldp3gb0">https://watch?v=AASNldp3gb0</a> or <a href="https://www.youtube.com/watch?v=AASNldp3gb0">https://w

Troccoli A et al (2012) "Wind Power Variability and Ramp Forecasting", 3<sup>rd</sup> Annual Wind Farms Australia, Melbourne.

Troccoli A (2011) "Weather & Climate Impacts on Energy Planning, Operations and Maintenance", APEC Climate Symposium, Hawaii (USA).

Troccoli A (2011) "Weather & Climate Impacts on Energy Planning, Operations and Maintenance", 2<sup>nd</sup> Symposium on Renewable Energy Technology, Fiji.

Troccoli A et al (2011) "Mesoscale Modelling, Power Variability Forecasting and Storage Applications", 2<sup>nd</sup> Annual Wind Farms Australia, Sydney.

Troccoli A et al (2010) "Long term wind variability in Australia", Keynote speaker, 14th Australasian Wind Engineering Society Workshop, Geoscience Australia, Canberra.

Troccoli A (2009) "Regional Aspects of Adaptation", Climate Change: Global Change and Local Adaptation. NATO Workshop, Hella, Iceland, oral in a panel discussion.

Troccoli A (2010) in session "Leveraging ESMAP's Climate Vulnerability Assessment Pilot", ESMAP Knowledge Exchange Forum, World Bank, Washington DC, USA.

Troccoli A, Boulahya M and Furlow J (2010) "Management of Weather and Climate Risk in the Energy Industry", World Bank, Washington DC, USA.

Troccoli A (2009) "Weather, Climate and Renewable Energy at CSIRO", Climate and Sustainable Energy session at the World Climate Conference 3, Geneva, Switzerland.

Troccoli A (2008) "Weather and Climate Prediction for the Energy sector", NATO Workshop "Weather/Climate Risk Management for the Energy sector", S. Maria di Leuca (I).

Troccoli A (2008) "Environmental databases, ocean analyses and seasonal climate forecasts", four lectures for the summer school "Climate forcings and global patterns", Istituto Veneto di Scienze Lettere ed Arti, Venezia (I).

Troccoli A (2008) "Seasonal climate prediction activities in Italy", CEH (UK).

Troccoli A (2007) "Working at ECMWF extremes!", University of Reading (UK).

Troccoli A (2006) Three lectures on seasonal climate forecasting system at the training course "Seasonal forecasts: the state of the art ...", Agenzia Regionale per la Protezione dell'Ambiente Ligure (ARPAL), Genova (I).

Troccoli A (2006) "Dynamical Seasonal-to-Interannual Predictions: The European dimension", Long-range weather forecast consultation: Forecasts for the energy industry and markets, London, UK.

Troccoli A (2005) "What can Seasonal Forecasts offer to their users?", European Conference on Application in Meteorology, Utrecht (NL).

Troccoli A, Anderson DLT and Balmaseda M (2003) "Progress and issues of ocean data assimilation for seasonal forecasts and state estimation the ECMWF viewpoint", UK Ocean Data Assimilation meeting, RAL, Didcot (UK).

Troccoli A et al. (2002) "Value of High Accuracy Altimeter Data for Seasonal Predictions", EUMETSAT STG Science Working Group, EUMETSAT HQ, Darmstad (D).

January 2025 Page 17 of 19

## RECENT CONFERENCE PAPERS (FIRST AUTHOR OR AS PRESENTER ONLY)

Troccoli A et al (2019) "The Added Value of Seasonal Climate Forecasting for Integrated Risk Assessment", SECLI-FIRM project 2<sup>nd</sup> Stakeholder Workshop, Milan, Italy, oral

Troccoli A et al (2019) "The Added Value of Seasonal Climate Forecasting for Integrated Risk Assessment", 99th Annual Meeting, American Meteorological Society, Phoenix, AZ, USA, oral

Troccoli A et al (2018) "How can seasonal climate forecasts help your business?" European Union Sustainable Energy Week, Brussels, Belgium, oral

Troccoli A et al. (2018) "H2020 SECLI-FIRM", 5th ICEM, Shanghai, China, poster

Troccoli A et al. (2018) "European Climate Services for Energy: C3S ECEM and H2020 SECLI-FIRM", 5<sup>th</sup> ICEM, Shanghai, China, oral

Troccoli A et al (2017) "Climate services in support of the energy transformation", EGU, Vienna, Austria (presented by Parey S), oral

Troccoli A et al. (2017) "European Climatic Energy Mixes", 4th ICEM, Bari, Italy, oral.

Troccoli A et al. (2016) "European Climatic Energy Mixes", European Meteorological Society Annual Conference, Trieste, Italy, oral.

Chen Z and Troccoli A (2015) "Urban solar irradiance and power prediction from nearby stations", 3<sup>rd</sup> ICEM, Boulder, USA, oral.

Nguyen K, Katzfey J, Riedl J, Troccoli A (2015) "Potential impacts of solar arrays on regional climate and on array efficiency", 3<sup>rd</sup> ICEM, Boulder, USA, oral.

Troccoli A (2014) "Activities at the CSIRO's Weather & Energy Research Unit", The Energy Resource Institute, Delhi, India, oral.

Troccoli A et al (2013) "Integrated Solar Radiation Dataset for Australia", International Conference Energy & Meteorology, Toulouse, France, oral

Troccoli A and Morcrette J-J (2012) "Forecast assessment of surface solar radiation over Australia", World Renewable Energy Conference, Denver, CO, USA, oral.

Troccoli A and Morcrette J-J (2011) "Forecast assessment of surface solar radiation components over Australia", International Conference Energy & Meteorology, Gold Coast, Australia, oral.

Troccoli A et al. (2010) "Long term wind variability in Australia, and worldwide", European Meteorological Society Conference, Zurich, Switzerland, oral.

Troccoli A et al. (2010) "Decline in Extreme Storm Surges in Venice under Climate Change", Australian Meteorological and Oceanographic Society Conference, Canberra, Australia, oral.

## WEBINARS (SELECTED) - LAST UPDATED 2021

Most webinars as a presenter or chair available at: <a href="https://www.wemcouncil.org/wp/videos\_and\_webinars/">https://www.wemcouncil.org/wp/videos\_and\_webinars/</a> and <a href="https://www.inclimateservice.com/events">https://www.inclimateservice.com/events</a>

Troccoli (Jan 2020) C3S Education Demonstrator – Background & Vision: <a href="https://youtu.be/kj268qIXp1Y">https://youtu.be/kj268qIXp1Y</a>

Troccoli A et al. (Jan 2020) EU H2020 SECLI-FIRM project overview and some preliminary results. <a href="http://www.secli-firm.eu/presentations/#1578572731484-213c64e5-d4a9">http://www.secli-firm.eu/presentations/#1578572731484-213c64e5-d4a9</a>

Troccoli A (Oct 2016) Energy Demand, Generation and Resilience under a Changing Climate, a Global Sustainable Electricity Partnership (GSEP) Webinar. <a href="https://www.youtube.com/watch?v=dQlHVRDBOV8">https://www.youtube.com/watch?v=dQlHVRDBOV8</a>

January 2025 Page 18 of 19

## ADDITIONAL QUALIFICATIONS AND ACTIVITIES

### **LANGUAGES**

Italian: native language

English: fluent, written and spoken. "Certificate of Proficiency in English" of Cambridge (1998).

French: basic/conversational

## **COMPUTING KNOWLEDGE**

Operating systems regularly utilised: Mac and Unix. Also extensively used Windows and Linux.

Regularly used for at least the last 20 years: Microsoft Office suite (Word, Excel, Power-Point). Solid experience with the statistics software R. Also experience with Wordpress, FORTRAN, Python, IDL and LaTeX.

## TRANSFERABLE SKILL (PERSONAL DEVELOPMENT) COURSES

Certificate: Leading for Organisational Impact – 5-day Residential Programme, U. of Melbourne, Australia (2014)

"Shadowed" the Australian Bureau of Meteorology Director, Dr Rob Vertessy: a 1-day activity (2013)

"Shadowed" a CSIRO senior manager, Dr Carol Couch: a 1-day activity (2013)

Working with People: a 3-day course (CSIRO, 2011)

New People Leader Programme: a 3-day course (CSIRO, 2010)

Enterprise, Research and Innovation: a 1-week course (Univ. S. Marino, 2000)

Team Development: a 2-day course (Univ. Edinburgh, 1997)

## **MINOR WORK ACTIVITIES**

Lifeguard swimming pools (Padua, Italy, part-time 1991-2)

Sales person for bedding products (Padua, Italy, part-time 1-6/1991)

Assistant instructor and sales person for personal memory courses (Padua, Italy, part-time 1990)

Waiter in a pizzeria (Jesolo, Italy, Summer 1988)

Pony-express (Padua, Italy, Summer 1987)

Assistant mechanic and crew in a motor boat (Italy, Slovenia, Croatia, 1983-7)

## **NOTABLE SOCIAL ACTIVITIES**

President of the Parents and Community committee in the local school (Canberra, Australia, 2010)

Candidate for a major political party at local elections (Reading, UK, 2007-09)

Chair of a major political party branch (Reading, UK, 2007-09)

Neighbourhood watch scheme coordinator (Reading, UK, 2004-09)

Played Santa Claus for Christmas children parties (Reading, UK, 1999-2004)

## **HOBBIES**

Medium- to Long-Distance Running – Completed five marathons (Venice: 2019, 2022, 2023, 2024; Florence: 2024) and several half-marathons. Personal best: 4h 3m (Florence Marathon, 2024).

Sailing (Sailing certification, Maryland, USA, 2001), Power Boat safety (Certification 2017)

Photography (City and Guild certificate, UK, 2007)

Cycling, walking, reading, guitar strumming and playing with my family

January 2025 Page 19 of 19