

Personal Information

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Academic Qualifications

Full Professor within the Scientific Disciplinary Sector ING-IND/17 (Industrial Mechanical Systems Engineering) at the Department of Management, Economics & Industrial Engineering, Politecnico di Milano, from 2014.

Associate Professor within the Scientific Disciplinary Sector ING-IND/17 (Industrial Mechanical Systems Engineering) at the Department of Management, Economics & Industrial Engineering, Politecnico di Milano, from 2007 to 2014.

Assistant Professor within the Scientific Disciplinary Sector ING-IND/17 (Industrial Mechanical Systems Engineering) at the Department of Management, Economics & Industrial Engineering, Politecnico di Milano, from 2001 to 2007.

Research Fellow on “Risk Analysis and Management in Industrial Workplaces” at the Department of Mechanical Engineering, Politecnico di Milano, from 2000 to 2001.

Education

PhD in Production Systems and Industrial Plants, Università degli Studi di Parma & Politecnico di Milano, Italy, 2000.

Professional Qualification in Management Engineering, Politecnico di Milano, Italy, 1996.

Master of Science in Management Engineering - Production Systems, Politecnico di Milano, Italy, 1996.

Profile Overview

Research, Consultancy, and Teaching at the Department of Management, Economics & Industrial Engineering, Politecnico di Milano.

He currently holds the courses of “Sustainability of Industrial Systems” (PhD), “Design & Management of Production Systems” (MSc), and “Management & Industrial Engineering” (BSc), at the School of Industrial and Information Engineering, Politecnico di Milano, Italy, and “Project Management” (MSc), at the School of Industrial Engineering, Università Carlo Cattaneo (LIUC), Castellanza (VA), Italy.

He also teaches in International and National PostGraduate Courses (International Master on Sustainable Strategies and Programmes for Energy and Environmental Management, MEM Master in Energy Management, IMIM International Master in Industrial Management, IMPM International Master in Project Management, PLM Product Lifecycle Management, ...) and Advanced & Corporate Courses (Industrial Eco-Sustainability and Green Economy, Risk Assessment, Industrial Energy Efficiency, Project Management, WEEE Management, ...).

Visiting Professor, School of Economics and Business, University of Ljubljana, Slovenia, June 2020 (invited).

Distinguished Visiting Professor, Faculty of Engineering and Information Technology, University of Technology Sydney, Australia, July-September 2019.

Visiting Professor, “Design for Environment”, School of Industrial Engineering, U.S. Environmental Protection Agency Grant, Rochester Institute of Technology, Rochester (NY), USA, April-May 2007.

His primary interests are Industrial Sustainability (Eco-Efficiency, with a particular focus on Energy and Resources Efficiency, and their development in the Supply Chain/Network perspective) and Risk Analysis & Management. A particular focus is on Small and Medium-sized Enterprises (SMEs).

He is author of more than 350 publications between journal papers, books, book chapters and proceedings; more than 230 of which are international peer-reviewed publications and more than 80 are international peer-reviewed journal publications and international peer-reviewed book chapters (ref. ANNEX A - Publications (excerpt; selection; from 2010)).

He serves and has served as associate editor, and as member of the editorial board and regular referee for several renown international peer-reviewed journals (e.g., Applied Energy; European Journal of Operational Research; Energy; Energy Conversion & Management; Energy Efficiency; Energy Policy; Information Sciences; International Journal of Approximate Reasoning; International Journal of Physical Distribution and Logistics Management; International Journal of Production Economics; International Journal of Production Research; International Journal of Project Management; International Journal of Risk Assessment and Management; Journal of Environmental Management; Journal of Cleaner Production; Journal of Purchasing and Supply Management; Production Planning and Control; Resources, Conservation & Recycling; Reliability Engineering & System Safety; Safety Science; Safety and Health at Work; Supply Chain Management: an International Journal; Technovation). He is also member of the scientific committee of a number of international conferences. He has also been invited as distinguished speaker to a number of international conferences and seminars.

He has promoted, coordinated, managed and participated in a number of consultancy and research projects funded by the European Commission, MIUR (Italian Ministry of University and Research), MiSE (Italian Ministry of Economic Development), CNR (National Research Council), EBRD (European Bank for Reconstruction and Development), Lombardy Region, Chamber of Commerce, Cariplo Foundation, etc. (ref. ANNEX B – Consultancy and Research Projects (excerpt; selection; from 2010)).

He served as project creator and designer of several incentives programmes in the fields of Industrial Sustainability and Innovation, especially for small and medium sized enterprises (ref., e.g., projects funded by European Bank for Reconstruction and Development in ANNEX B).

He also served as president and/or member of assessment committees, evaluating initiatives of project proposals within research and development programmes (ref., e.g., projects funded by several Chambers of Commerce in ANNEX B).

He also served as Reviewer for the Ministry of University and Research (MIUR) in several research, development and innovation programmes.

He has worked in different projects, ranging from strategic to organizational and operational development, for numerous domestic and international enterprises, groups and administrations, e.g., Siemens, General Motors, Heineken, Fiat, Italcementi, EuroControl, Snamprogetti, ANIE, SCA, Ecodom, Lombardy Region, etc.

He collaborates with the Italian Society for Industrial Plant Design (ANIMP), Association of Electrical and Electronic Enterprises (ANIE), Association of Manufacturing and Service Companies (ConfIndustria), Industrial Association of Small and Medium Enterprises (ConfAPI), Association of Entrepreneurship Artisan and Small Businesses (ConfArtgianato), Italian Workers' Compensation Authority (INAIL), and other industrial associations and groupings.

He is member of a number of technical, professional and evaluation committees.

He is Coordinator of the Sustainable Manufacturing section of the Lombardy Energy CleanTech Cluster, from 2018. Lombardy Energy Cleantech Cluster is the industrial cluster of power generation, transmission, distribution, energy efficiency and sustainable building. It operates as an organised network which facilitates communication along the entire supply chain in order to optimize products, services and final costs. It's a tool for fostering innovation and competitiveness in companies, particularly in SMEs, supporting future green growth promoting green solutions and increasing companies visibility on the market.

He was Coordinator of the Energy Saving section of the Lombardy Energy CleanTech Cluster, from 2014 to 2017.

He is invited Member of the Experts Committee of EEFIG (Energy Efficiency Financial Institutions Group), established by the European Commission Directorate - General for Energy (DG Energy) and by the United Nations Environment Program Finance Initiative (UNEP FI), from 2017.

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Curriculum Vitae

He is Member of the Group of Experts on Energy Efficiency (GEEE), established by the United Nations Economic Commission for Europe (UNECE), from 2017.

Representative for Italy (invited) at the IEA-IETS (International Energy Agency – Industrial Energy-related Technologies and Systems) within the Annex XIV on “Energy Efficiency in SMEs”, from 2011 to 2015.

He was invited to give a lecture at the Special Commission of Waste Recycling of the Italian Parliament on “Conditions for Developing the Sector of Waste Electrical and Electronic Equipment (WEEE) Recovery and Treatment”, November 2004.

He is an intellectual contributor in the IEA (International Energy Agency) Report on “Accelerating Energy Efficiency in SMEs”, 2015.

He was Member of the Board of the International Project Management Association (IPMA) Italy, 2008-10.

Distinguished Speaker, “Exploring the Link between Energy Efficiency and Innovation”, International Academic Symposium “R&D on Energy”, IEB – University of Barcelona & Foundation for Energy and Environmental Sustainability (FUNSEAM), Barcelona Science Park Auditorium, Barcelona, Spain, February 28, 2014.

Distinguished Speaker, “Industrial Process Eco-Efficiency vs. Product Eco-Effectiveness”, U.S. Environmental Protection Agency Grant, Xerox Auditorium, Rochester Institute of Technology, Rochester (NY), USA, April 26, 2007.

He is Member of the Italian Society for Industrial Plant Design (ANIMP).

He was Member of the FIRE AWARD Technical Committee.

He was Member of the ECOHITECH AWARD Technical Committee.

In 2018 Guest Co-Editor with prof. Thollander on *Energies* journal for the Special Issue “Industrial Energy Efficiency 2018”

In 2016 Guest Co-Editor with prof. Thollander on *Energies* journal for the Special Issue “Industrial Energy Efficiency”

Member of the Scientific Committee of the 16th IAEE (International Association of Energy Economics) European Energy Conference, Ljubljana, Slovenia, 25-28 August 2019.

Member of the Scientific Committee of the ECEEE (European Council for an Energy Efficient Economy) Industrial Efficiency, from 2014 to 2018.

Member of the Scientific Advisory Board del International Conference on Applied Human Factors and Ergonomics & Conference on Safety Management and Human Factors, from 2014 to 2017.

Member of the Scientific Committee dell’International Congress on Safety and Labour Market (ICSLM), from 2013 to 2016.

Member of the Scientific Committee of SHO – International Symposium of Occupational Safety & Health, from 2012 to 2016.

Member of the Scientific Committee of the Global Cleaner Production and Sustainable Consumption Conference, Barcelona, Spain, 1-4 November, 2015.

Member of the Scientific Committee of the 3rd International Congress on Environmental Health, Porto, Portugal, 24-26 September 2014.

Member of the Scientific Committee of the 26th IPMA International Project Management Association World Congress, Crete, Greece, 29-31 October, 2012.

Member of the Scientific Committee of the 22th IPMA International Project Management Association World Congress, Rome, Italy, 9-14 November, 2008.

Membro del Scientific Committee of the 4th Scientific Conference on Project Management (SCPM) & 1st International Project Management Association (IPMA) / Mediterranean Network (MedNet) Conference, Chios, Greece, 29-31 May, 2008.

Member of REPRISE (Register of Expert Peer Reviewers for Italian Scientific Evaluation) for the Ministry of University and Research (MIUR), from 2015.

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Curriculum Vitae

Reviewer for the Ministry of University and Research (MIUR) for the Flagship Project “STIIMA”, coordinated by the National Research Council (CNR) to support innovation in the research, 2018.

Reviewer for the Italian National Research Council (CNR) for the ITIA Grant 2017 - “Young Ideas”, from 2017.

Reviewer for the Ministry of University and Research (MIUR) for the Flagship Project “The Factory of the Future – SubProject 2”, coordinated by the National Research Council (CNR) to support innovation in the manufacturing sector, 2014.

Reviewer for the Ministry of University and Research (MIUR) for the Research Program “Future in Research 2013”, 2013.

Reviewer for the Ministry of University and Research (MIUR) for the Research Programs of Significant National Interest (PRIN-2012), 2013.

Reviewer for the Ministry of University and Research (MIUR) for the Flagship Project “The Factory of the Future – SubProject 1”, coordinated by the National Research Council (CNR) to support innovation in the manufacturing sector, 2012.

12/02/2020

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ANNEX A - Publications (excerpt; selection; from 2010)

- Trianni A., Cagno E., Accordini D., "Energy Efficiency Measures in Electric Motors Systems: A Novel Classification Highlighting Specific Implications for their Adoption", doi: /10.1016/j.apenergy.2019.113481, Applied Energy, 252, 113481, 1-16, 2019.
- Cagno E., Neri A., Howard M., Brenna G., Trianni A., "Industrial Sustainability Performance Measurement Systems: A Novel Framework", doi: 10.1016/j.jclepro.2019.05.021, Journal of Cleaner Production, 230, 1354-1375, 2019.
- Trianni A., Cagno E., Neri A., Howard M., "Measuring Industrial Sustainability Performance: Empirical Evidence from Italian and German Manufacturing Small and Medium Enterprises", doi: 10.1016/j.jclepro.2019.05.076, Journal of Cleaner Production, 229, 1355-1376; 2019.
- Franzò S., Frattini F., Cagno E., Trianni A., "A Multi-Stakeholder Analysis of the Economic Efficiency of Industrial Energy Efficiency Policies: Empirical Evidence from Ten Years of the Italian White Certificate Scheme", doi: 10.1016/j.apenergy.2019.02.047, Applied Energy, 240, 424-435, 2019.
- Masi D., Cagno E., Hasle P., Farnè S., "Design of OSH Interventions: A Model to Improve their Actual Implementation", doi: 10.1016/j.ssci.2019.01.009, Safety Science, 115, 51-65, 2019.
- Cagno E., Moschetta D., Trianni A., "Only Non-Energy Benefits from the Adoption of Energy Efficiency Measures? A Novel Framework", doi: 10.1016/j.jclepro.2018.12.049, Journal of Cleaner Production, 212, 1319-1333, 2019.
- Trianni A., Cagno E., Bertolotti M., Thollander P., Andresson E., "Energy Management: A Practice-based Assessment Model", doi: 10.1016/j.apenergy.2018.11.032, Applied Energy, 235, 1614-1636, 2019.
- Sa A., Thollander P., Cagno E., Rafiee M., "Assessing Swedish Foundries Energy Management Program", doi:10.3390/en11102780, Energies, 11, 2780, 2018.
- Cagno E., Neri A., Trianni A., "Broadening to Sustainability the Perspective of Industrial Decision-Makers on the Energy efficiency Measures Adoption: Some Empirical Evidence", DOI: 10.1007/s12053-018-9621-0, Energy Efficiency, 11, 1193-1210, 2018.
- Micheli G.J.L., Cagno E., Calabrese A., "The Transition from OSH Interventions to OSH Outcomes: An Empirical Analysis of Mechanisms and Contextual Factors within SMEs", DOI: 10.3390/ijerph15081621, International Journal of Environmental Research and Public Health, 15, 1621, 2018.
- Neri A., Cagno E., Di Sebastiano G., Trianni A., "Industrial Sustainability: Modelling Drivers and Mechanisms with Barriers", DOI: 10.1016/j.jclepro.2018.05.140, Journal of Cleaner Production, 194, 452-472, 2018.
- Cagno E., Micheli G.J.L., Di Foggia G., "Smart Metering Projects: How do they work? Framework and Evidence from European Cases", DOI: 10.1108/JJESM-08-2017-0009, International Journal of Energy Sector Management, 12(2), 244-264, 2018.
- Micheli G.J.L., Cagno E., Tappia E., "Improving Eco-efficiency Through Waste Reduction Beyond the Boundaries of a Firm: Evidence from a Multiplant case in the Ceramic Industry", DOI:10.3390/su10010167, Sustainability, 10, 167, 1-16, 2018.
- Ramirez-Portilla A., Cagno E., Brown T.E., "Open Innovation in Specialized SMEs: The Case of Supercars", DOI: 10.1108/BPMJ-10-2016-0211, Business Process Management Journal, 23, 1167-1195, 2017.
- Trianni A., Cagno E., Neri A., "Modelling Barriers to the Adoption of Industrial Sustainability Measures", DOI: 10.1016/j.jclepro.2017.07.244, Journal of Cleaner Production, 168, 1482-1504, 2017.
- Cagno E., Trianni A., Spallina G., Marchesani F., "Drivers for Industrial Energy Efficiency: An Investigation among Manufacturing Medium-sized Enterprises", DOI: 10.1007/s12053-016-9488-x, Energy Efficiency, 10, 855-869, 2017.
- Sa A., Thollander P., Cagno E., "Assessing the Driving Factors for Energy Management Program Adoption", DOI: 10.1016/j.rser.2017.02.061, Renewable & Sustainable Energy Reviews, 74, 538-547, 2017.
- Trianni A., Cagno E., Marchesani F., Spallina G., "Classification of Drivers for Industrial Energy Efficiency and Effect on the Barriers Affecting the Investment Decision-Making Process", DOI: 10.1007/s12053-016-9455-6, Energy Efficiency, 10, 199-215, 2017.
- Micheli G.J.L., Cagno E., "The Role of Procurement in Performance Deviation Recovery in Large EPC Projects", DOI: 10.1177/1847979016675302, International Journal of Engineering Business Management, 8, 1-17, 2016.
- Cagno E., Masi D., Pinto Leão C., "Drivers for OSH Interventions in Small and Medium-sized Enterprises", doi: 10.1080/10803548.2015.1117351, International Journal of Occupational Safety and Ergonomics, 22(1), 102-115, 2016.
- Trianni A., Cagno E., Farnè S., "Industrial Energy Efficiency: A Broad Investigation of Barriers and Drivers in the Decision-Making Process among Small and Medium-sized Enterprises", doi: 10.1016/j.apenergy.2015.02.078, Applied Energy, 162, 1537-1551, 2016.
- Cagno E., Ramirez-Portilla A., Trianni A., "Linking Energy Efficiency and Innovation Practices: Empirical Evidence from the Foundry Sector", doi: 10.1016/j.enpol.2015.02.023, Energy Policy, 83, 240-256, 2015.
- Sa A., Thollander P., Cagno E., "Industrial Energy Management Practices' Gap Analysis", doi: 10.4172/ier.10001222015, Journal of Innovative Energy Research, 4(3), 1000122, 2015.
- Perotti S., Micheli G.J.L., Cagno E., "Motivations and Barriers to the Adoption of Green Supply Chain Practices Adoption among 3PLs", International Journal of Logistics Systems and Management, 20(2), 179-198, doi: 10.1504/IJLSM.2015.067255, 2015.
- Cagno E., Trianni A., Abeelen C., Worrell E., Miggiano F., "Barriers and Drivers for Energy Efficiency: Different Perspectives from an Exploratory Study in the Netherlands", doi: 10.1016/j.enconman.2015.04.018, Energy Conversion and Management, 102, 26-38, 2015.
- Thollander P., Paramonova S., Cornelis E., Kimura O., Trianni A., Karlsson M., Cagno E., Morales I., Jimenez-Navarro J.P., "International Study on Energy End-Use Data among Industrial SMEs (Small and Medium-sized Enterprises) and Energy End-Use Efficiency Improvement Opportunities", doi: 10.1016/j.jclepro.2015.04.073, Journal of Cleaner Production, 104, 282-296 2015.
- Masi D., Cagno E., "Barriers to OSH Interventions in Small and Medium-sized Enterprises", Safety Science, 71, 226-241, doi: 10.1016/j.ssci.2014.05.020, 2015.
- Ramirez-Portilla A., Brown T., Cagno E., "Unravelling the Integration Mechanisms in Open Innovation Projects: The Case of Inter-Organizational Networks", Journal of Global Strategic Management, 8, 82-95, 2014.
- Masi D., Cagno E., Micheli G.J.L., "Developing, Implementing and Evaluating OSH Interventions in SMEs: A Pilot, Exploratory Study", International Journal of Occupational Safety and Ergonomics, 20(3), 385-405, doi: 10.1080/10803548.2014.11077059, 2014.

- Cagno E., Trianni A., "Evaluating the Barriers to Specific Industrial Energy Efficiency Measures: An Exploratory Study in Small and Medium-sized Enterprises", *Journal of Cleaner Production*, 82, 70-83, 10.1016/j.jclepro.2014.06.057, 2014.
- Arena M., Azzone G., Cagno E., Silvestri A., Trucco P., "A model for operationalizing ERM in project-based operations through dynamic capabilities", *International Journal of Energy Sector Management*, 8(2), 178-197, DOI 10.1108/IJESM-09-2012-0008, 2014.
- Trianni A., Cagno E., De Donatis A., "A Framework to Characterize Energy Efficiency Measures", *Applied Energy*, 118, 207-220, doi: 10.1016/j.apenergy.2013.12.042, 2014.
- Cagno E., Micheli G.J.L., Masi D., Jacinto M.C., "An Interpretive Model of Occupational Safety Performance for SMEs", *International Journal of Industrial Ergonomics*, 44, 60-74, doi: 10.1016/j.ergon.2013.08.005, 2014.
- Trianni A., Cagno E., Worrell E., "Innovation and Adoption of Energy Efficient Technologies: An Exploratory Analysis of Italian Primary Metal Manufacturing SMEs", *Energy Policy*, 61, 430-440, doi: 10.1016/j.enpol.2013.06.034, 2013.
- Thollander P., Backlund S., Trianni A., Cagno E., "Beyond Barriers – A Case Study on Driving Forces for Improved Energy Efficiency in the Foundry Industries in Finland, France, Germany, Italy, Poland, Spain, and Sweden", *Applied Energy*, 111, 636-643, doi: 10.1016/j.apenergy.2013.05.036, 2013.
- Masi D., Micheli G.J.L., Cagno E., "A Meta-Model for Choosing a Supplier Selection Technique within an EPC Company", *Journal of Purchasing and Supply Management*, 19, 5-15, doi: 10.1016/j.pursup.2012.07.002, 2013.
- Arena M., Azzone G., Cagno E., Ferretti G., Prunotto E., Silvestri A., Trucco P., "Integrated Risk Management through Dynamic Capabilities within Project-based Organizations: The Company Dynamic Response Map", *Risk Management*, 15, 50-77, doi: 10.1057/rm.2012.12, 2013.
- Cagno E., Trianni A., "Exploring Drivers for Energy Efficiency within Small- and Medium-sized Enterprises: First Evidences from Italian Manufacturing Enterprises", *Applied Energy*, 104, 276-285, doi: 10.1016/j.apenergy.2012.10.053, 2013.
- Trianni A., Cagno E., Worrell E., Pugliese G., "Empirical Investigation of Energy Efficiency Barriers in Italian Manufacturing SMEs", *Energy*, 49, 444-458, doi: 10.1016/j.energy.2012.10.012, 2013.
- Cagno E., Micheli G.J.L., Masi D., Jacinto M.C., "Economic evaluation of OSH and its way to SMEs: a constructive review", *Safety Science*, 53, 134-152, doi:10.1016/j.ssci.2012.08.016, 2013.
- Trianni A., Cagno E., Thollander P., Backlund S., "Barriers to Industrial Energy Efficiency in Foundries: a European Comparison", *Journal of Cleaner Production*, 40, 161-176, doi: 10.1016/j.jclepro.2012.08.040, 2013.
- Cagno E., Worrell E., Trianni A., Pugliese G., "A Novel Approach for Barriers to Industrial Energy Efficiency", *Renewable & Sustainable Energy Reviews*, 19, 290-308, doi: 10.1016/j.rser.2012.11.007, 2013.
- Perotti S., Zorzini M., Cagno E., Micheli G.J.L., "Green Supply Chain Practices on Company Performance: The Case of 3PLs", *International Journal of Physical Distribution and Logistics Management*, 42(7), 640-672, doi: 10.1108/09600031211258138, 2012.
- Cagno E., Trianni A., "Analysis of the Most Effective Energy Efficiency Opportunities in Manufacturing Primary Metals, Plastics, and Textiles Small- and Medium-Sized Enterprises", *Journal of Energy Resources Technology, Transactions of the ASME*, 134(2), 021005 1-9, doi: 10.1115/1.4006043, 2012.
- Trucco P., Cagno E., De Ambroggi M., "Dynamic Functional Modelling of Vulnerability and Interoperability of Critical Infrastructures", *Reliability Engineering & System Safety*, 105, 51-63, doi:10.1016/j.res.2011.12.003, 2012.
- Cagno E., Micheli G.J.L., Trucco P., "Eco-efficiency for Sustainable Manufacturing: An Extended Environmental Costing Method", *Production Planning & Control*, 23(2-3), 134-144, doi:10.1080/09537287.2011.591628, 2012.
- Trianni A., Cagno E., "Dealing with Barriers to Energy Efficiency and SMEs: Some Empirical Evidences", *Energy*, 37(1), 494-504, doi:10.1016/j.energy.2011.11.005, 2012.
- Cagno E., Micheli G.J.L., "Enhancing EPC Supply Chain Competitiveness through Procurement Risk Management", *Risk Management*, 13(3), 147-180, doi:10.1057/rm.2011.62011, 2011.
- Cagno E., Castelli Dezza F., Delfanti M., Merlo M., Trianni A., "One Step on the Smart Grid Path: Load and Generation Coordination in a Virtual Power System", *Journal of Energy and Power Engineering*, 5, 275-282, 2011.
- Cagno E., De Ambroggi, Grande O., Trucco P., "Risk Analysis of Underground Infrastructures in Urban Areas", *Reliability Engineering & System Safety*, 96, 139-148, doi:10.1016/j.res.2010.07.011, 2011.
- Cagno E., Micheli G.J.L., Perotti S., "Identification of OHS-related Factors and Interactions Among Those and OHS Performance in SMEs", *Safety Science*, 49, 216-225, doi:10.1016/j.ssci.2010.08.002, 2011.
- Silvestri A., Arena M., Cagno E., Trucco P., Azzone G., "Enterprise Risk Management from Theory to Practice. The Role of Dynamic Capabilities Approach: the "Spring model", in "Quantitative Financial Risk Management", Wu D.D. (ed.), Computational Risk Management, 281, Springer Verlag, New York, Stati Uniti d'America, Volume 1, Part 3, 281-307, pp. 338, ISBN 978-3-642-19338-5, DOI: 10.1007/978-3-642-19339-2_22, 2011.
- Cagno E., Trucco P., Trianni A., Sala G., "Quick E-Scan: A Methodology for the Energy Scan of SMEs", *Energy*, 35(5), 1916-1926, doi:10.1016/j.energy.2010.01.003, 2010.
- Micheli G.J.L., Cagno E., "Dealing with SMEs as a Whole in OHS Issues: Warnings from Empirical Evidence", *Safety Science*, 48(6), 729-733, 2010.

ANNEX B – Consultancy and Research Projects (excerpt; selection; from 2010)

List of consultancy and research projects he coordinated, managed and participated in the Department of Management, Economics & Industrial Engineering, Politecnico di Milano:

May 2019 – Apr 2021 (expected)

RECKON - Real-world, context-aware knowledge-based Lab: Definition of the Operational Framework and Shared Validation in the Manufacturing Sector

Funded by INAIL

In collaboration IAL

Role: research unit co-responsible

May 2019 – Feb 2020 (expected)

White Certificates: A Review

Funded by Colacem S.p.A.

Role: research unit responsible

Feb 2019 – April 2020 (expected)

Innovation Vouchers Scheme R&D and Project Finance in Serbia

Funded by European Bank for Reconstruction and Development (EBRD)

Role: research unit responsible

Nov 2018 – March 2020 (expected)

Developing a Methodological Approach for Understanding the Market Penetration Level of Climate Technologies

Funded by European Bank for Reconstruction and Development (EBRD)

Role: research unit responsible

Jun 2018 – May 2022 (expected)

H2020 - Project Ô: demonstration of planning and technology tools for a circular, integrated and symbiotic use of water

Funded by European Commission (EC)

In collaboration with IRIS (Italy), Aalborg Universitet (Denmark), Università degli Studi di Torino (Italy), Universitat Politecnica de Valencia (Spain), Centre National de la Recherche Scientifique- CNRS (France), Nanoquimia S.L. (Spain), HEIM.ART Kulturverein-flussig (Austria), Socamex S.A.U. (Spain), Technion Israel Institute of Technology - TECHNION (Israel), Vertech Group (France), EKSO SRL (Italy), EXERGY LTD (UK), Universidade de Aveiro (Portugal), Symbiosis Center (Denmark), Olimpias d.o.o. (Croatia), Municipality of Eilat (Israel), Acquedotto Pugliese (Italy), Regione Puglia (Italy), Hochschule Rhein-Waal (Germany), National Center for Mariculture (Israel), Particula Group d.o.o. (Croatia), UNI - Ente Nazionale Italiano di Unificazione (Italy).

Role: research unit co-responsible

Jun 2018 – Dec 2019

Emerging African Innovation Leaders for the Next Production Revolution

Within the G7 Exchange & Empowerment Program for enabling Innovation within the Next Production Revolution

Funded by Agenzia Italiana per la Cooperazione allo Sviluppo (Italian Agency for Development Cooperation)

Role: collaborating in the research unit

Jan 2018 – Nov 2018

Green Economy Project Preparation and Implementation Framework in Serbia

Funded by European Bank for Reconstruction and Development (EBRD)

Role: research unit responsible

Jan 2018 – Dec 2020 (expected)

PerFORM Water 2030, Research & Innovation

Funded by Lombardy Region

In collaboration with Cap Holding, Consiglio Nazionale delle Ricerche (CNR IRSA), Genegis Gi, Hydrogen For Development Of Environmental Projects (HYDEP), M.M.I., Passavant Impianti, SEAM Engineering, Societa' Italiana Acetilene e Derivati (S.I.A.D.), Università degli Studi di Milano – Bicocca, Veolia Water Technologies Italia, VOMM Impianti e Processi

Role: research unit co-responsible

Sep 2017 – Aug 2018

KEP - Know-how Exchange: Innovation Vouchers scheme for resource efficiency technologies and services in Serbia -Support to the implementation and marketing the innovation vouchers scheme in the country

Funded by Central European Initiative (CEI)

In collaboration with University of Belgrade and European Bank for Reconstruction and Development (EBRD)

Role: research unit responsible

Feb 2017 – Nov 2018 (expected)

Support to the development and pilot-phase implementation of the Innovation Voucher Scheme in Ukraine

Funded by European Bank for Reconstruction and Development (EBRD)

Role: research unit responsible

Jan 2017 – Apr 2017

Turkey: Material Efficiency Experts and Services Identification for the Turkish Material Marketplace

Funded by European Bank for Reconstruction and Development (EBRD)

In collaboration with Technology Development Foundation of Turkey

Role: research unit responsible

Mar 2016 – Jun 2017

Improving competitiveness of suppliers in Italian components supply chains in the Oil&Gas Industry

Funded by the Association of Industrial Plant Engineering (ANIMP), Federation of National Associations of Mechanical and Engineering Industries (ANIMA), Federation of Electrotechnical and Electronic Companies (ANIE)

Role: research unit responsible

Feb 2016 – Sep 2016

Innovation Vouchers scheme for resource efficiency technologies and services in Serbia

Funded by European Bank for Reconstruction and Development (EBRD)

In collaboration with University of Belgrade

Role: research unit responsible

Jan 2016 – Jun 2016

Characterisation of supply chain excellent cases in the EPC industry

Funded by Fondazione De Januario

Role: research unit responsible

Dec 2015 – Sep 2016

Benefits for industry from the adoption of smart swithgears

Funded by Schneider Electric

Role: research unit responsible

Sep 2015 – May 2017

SESAME – Improving OSH in small and micro enterprises - From policy to practice, the view from the workplace

Funded by European Agency for Safety and Health at Work

Role: research unit responsible

Jul 2015 – Dec 2015

GRC systems review

Funded by Keisdata

Role: collaborating in the research unit

Oct 2014 – Apr 2015

Water Efficiency: redesign of the generation, distribution and treatment system

Funded by Lario Holding Reti

Role: research unit responsible

Jun 2013 – Dec 2014

EMA - Energy efficiency assessment and improvement interventions definition in SMEs; incentives scheme design and implementation; proposal assessment

Funded by Chamber of Commerce of Pavia

Role: research unit responsible

Jul 2012 – Jun 2014

METER-ON - Supporting the development and deployment of advanced metering infrastructures in Europe

Funded by European Commission

In collaboration with EDSO (European Distribution System Operators for Smart Grids) (BE), CEIT (AT), EnergyLab Foundation (IT), RSE (IT), Zabala (ES), Università Statale di Milano Bicocca (IT)

Role: research unit responsible

Jan 2012 – Dec 2013

MATRICES - Multi Actor Threat Recognition Information and Collaboration System

Funded by MIUR (Italian Ministry of University and Research) and Lombardy Region

In collaboration with Astir, Neodata, NIER Ingegneria, Gruppo FNM – NordCom

Role: collaborating in the research unit

Jul 2011 – Dec 2014

InnovANCE – Creation of a database with all the technical, scientific, economic information useful for the construction supply chain (within INDUSTRIA-2015 Programme – Projects of Industrial Innovation – Energy Efficiency)

Funded by MiSE (Italian Ministry of Economic Development)

In collaboration with ANCEnergia, ENEA, ITC, Politecnico di Torino, University of Naples, SAP, SGS, One Team, ISTEDIL, TRE, EdilStampa, FederLegnoArredo, UNCSAAL Servizi, ANDIL, In Concreto

Role: collaborating in the research unit

Jun 2011 – Dec 2012

Development of a model for the enterprise risk management (ERM) in manufacturing SMEs

Funded by BPi – Business Process Informatisation

Role: research unit responsible

Jun 2011 – Dec 2011

Design of energy-related services for Artisan and Small Businesses (ConfArtgiano)

Funded by Fondazione POLIMI for the Association of Entrepreneurship Artisan and Small Businesses (ConfArtgiano)

Role: research unit responsible

Mar 2009 – Feb 2012

MIARIA – Monitoring of the Hydrogeologic Risk to Support Integrated Risk Plan (within Interreg Italy-Switzerland 2007-13 Cooperative Programme)

Funded by European Commission

In collaboration with Fondazione del Politecnico di Milano, Regione Lombardia, Provincia di Lecco, SUPSI (CH), USI (CH)

Role: collaborating in the research unit

Jan 2011 – Dec 2011

Development of Models for Risk Analysis of Critical Services and Infrastructures

Funded by Regione Lombardia and Astir

Role: research unit responsible

Jan 2010 – Jun 2010

Definition of contents, guidelines and evaluation criteria related to a Lombardy Region call for project proposals (TREND – Technology and Innovation for Energy Saving and Efficiency), devoted to SMEs

Funded by Lombardy Region (CESTEC)

Role: research unit responsible

Jan 2010 – Jun 2010

Research in Advanced Industrial Energy Efficiency. Special focus on SMEs

Funded by Siemens

Role: research unit responsible

Jan 2010 – Jun 2010

Characterisation of Energy Efficiency Improvement Interventions in Industry, especially designed for SMEs

Funded by Fondazione del Politecnico di Milano for Siemens

Role: research unit responsible

Nov 2009 – Mar 2010

PIC – Definition of the Regional Plan for Critical Services and Infrastructures Protection

Funded by Lombardy Region

In collaboration with IBM, Astir, Selex Sistemi Integrati

Role: collaborating in the research unit

May 2009 – Apr 2013

Energy & Appliances 2015 – Design and Development of a New Set of Appliances based on Innovative Energy Efficient and Low Environmental Impact Technologies (within INDUSTRIA-2015 Programme – Projects of Industrial Innovation – Energy Efficiency)

Funded by MiSE (Italian Ministry of Economic Development)

In collaboration with Indesit, Politecnico di Torino, ENEA, STMicroelectronics, CNR-ISOF, Synopsis Consulting, Meccano, Alter, Benco, Ferioli Filippo, Teknisol, Consorzio Cetma, STE.

Role: research unit responsible

Mar 2009 – Feb 2012

Energy CH-IT – District of Technologies and Materials for Energy Efficiency in Insubria (within Interreg Italy-Switzerland 2007-13 Cooperative Programme)

Funded by European Commission

In collaboration with Fondazione del Politecnico di Milano, CCIAA di Como, SUPSI (CH), API Servizi Varese, CentroCOT.

Role: research unit responsible

Feb 2009 – Jan 2010

EMA-II - Energy Efficiency Assessment and Improvement Interventions Definition in SMEs; incentives scheme design and implementation; proposal assessment

Funded by Chamber of Commerce of Lodi

Role: research unit responsible

Jul 2008 – Jun 2011

AlpEnergy - Virtual Power Systems as an Instrument to Promote Transnational Cooperation and Sustainable Energy Supply in the Alpine Space (within AlpineSpace 2007-13 Programme)

Funded by European Commission

In collaboration with Fondazione del Politecnico di Milano, Provincia di Mantova, Allgäu Initiative GbR (D), B.A.U.M. Consult GmbH (D), Institut National Polytechnique de Grenoble (F), Rhônealpennergie-Environnement (F), Business support centre Kranj (BSC) d.o.o. (SL), Elektro Gorenjska, podjetje za distribucijo električne energije, d. d. (SL), Alari Institute at University of Lugano (CH).

Role: research unit responsible