PERSONAL INFORMATION

Paris A. Fokaides

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http://www.parisfokaides.com http://www.serg-web.com

Sex Male | Date of birth 28/06/1977 | Nationality Cypriot (Greek)

WORK EXPERIENCE

June 2012 – to date

Professor (Dec. 25 -), Associate Professor (Mar. 22 -), Assistant Professor (Mar. 18 -), Research Associate (Jun. 12 -), Visiting Lecturer (Jun 12.- Feb.18)

Frederick University and Frederick Research Center, Cyprus

- Founder and Academic Supervisor of Sustainable Energy Research Group (SERG) at Frederick University and Frederick Research Centre. link
- Researcher in thirty two (32) projects, two of which as coordinator. Awarded grants: 5.3 M€ link
- Consultant in twenty (20) consultancy projects for the public sector, eighteen (18) of which as coordinator. Awarded grants: 456 k€ link
- Featured since 2020 in the World's Top 2% Scientists in the field of Energy and Building and Construction, according to the Stanford ranking. link
- Coordinator of the PhD Programme, Department of Mechanical Engineering, Frederick University (2025–) link
- Coordinator of Master's Degree Programme of Frederick University in Energy Engineering (formerly Sustainable Energy Systems) (on campus) (2015 -) link
- Coordinator of joint Master's Degree Programme between Open University Cyprus and Frederick University in Sustainable Energy Systems (Distance Learning) (2015-2023)
- Coordinator of Vocational Studies for Technicians Department, at Frederick Institute of Technology (2013-2018) link
- Lecturer of Energy, Fluid Mechanics and Process Engineering related courses in 8 programs of study (Civil Engineering, Quantity Surveying, Mechanical Engineering, Automotive Engineering, MSc in Oil and Gas, MSc in Energy Systems and the Built Environment, MSc in Engineering Management, Oil and Gas Technicians) link
- Establishment of quality and environmental management system in SERG and certification with ISO 9001 and ISO 14001 respectively.
- Development of research laboratories and infrastructure, exclusively funded by research projects for
  - solid fuels and biomass analysis link
  - solid biomass peletting center link
  - digital twins for the built environment link
  - experimental building physics link
  - solar thermal systems link
  - heating boilers link and air conditioning lab link
- Supervisor of six (6) PhD graduates, nine (9) PhD candidates, and over hundrer fifty (150) student's final year projects and MSc thesis. link

May 2017 – to date

Chief Researcher

Kaunas University of Technology, Lithuania,
Faculty of Civil and Environmental Engineering

- Chief Researcher, Leader of the Research Group Sustainable Energy in the Built Environment
- Coordinator in two (2) EU funded research project
- Supervisor of one (1) PhD graudate and one (1) PhD candidate

▪ Lecturer of two (2) courses in PhD programme in Civil Engineering

Sep 21 – to date

CEO, Founder

Euphyia Tech Ltd,
A Spin off of Frederick University and Gravity Incubator for Tools and Services for the Assessment of Smart Buildings

- Founder and CEO of Euphyia Tech Ltd, a spin off for tools and services related to the assessment of smart buildings. link
- Researcher in seven (7) EU funded research projects. Awarded grants: 1.5 M€ link
- Active Member of Smart Readiness Indicator (SRI) platform WG2 (Maintenance & potential extension of the SRI calculation methodology) - Technical Assistance for testing the implementation of SRI under the EPBD

Feb 2020 – Apr 2021

Research Associate (on sabbatical leave)

Technical University Berlin, Germany
Faculty V, Institute of Fluid Dynamics and Technical Acoustics, Chair of Fluid Dynamics

- Researcher in one (1) research project (full position researcher under TVL 13/Level 6)

June 2008 – May 2012

Special Scientist, Research Associate

University of Cyprus

- Researcher in three (3) projects
- Lecturer of 4 Energy and Fluid Mechanics related courses in 2 programs of study (Civil and Environmental Engineering, MSc in Sustainable Energy and the Built Environment)

Supervisor of five (5) student's final year projects and MSc thesis

November 2002 – July 2007

Research Associate (Wissenschaftlicher Mitarbeiter)

Engler Bunte Institute, Karlsruhe University, Germany

- Researcher in three (3) projects (full position researcher under BAT IIa)
- Teaching assistant in 5 Energy, Fluid Mechanics and Process Engineering related courses in 2 programs of study (Chemical Engineering, Mechanical Engineering)
- Supervisor of two (2) final year project thesis

January 2008 – October 2012

Building Services and Renewable Energy Technologies Consultant

RD Hydraulis Ltd, Cyprus

- Founder and CEO of RD Hydraulis Ltd, an engineering consulting company in the field of Building Services, Renewable Energy Technologies and Environmental Engineering
- Design and commissioning of mechanical engineering related building services in ca. 50 projects (mainly residential buildings)
- Energy performance certification of ca. 60 projects (residential and commercial buildings, including headquarters of CNP Insurance in Cyprus, presidential palace event hall, Metrology headquarters)
- Pre-engineering, design and commissioning of renewable energy technologies projects with a total installed capacity of > 1.2 MWp (photovoltaics, solar thermal, biomass)
- Preparation and delivery of ca. 10 environmental impact assessment studies (mainly related to renewable energy technologies projects).

EDUCATION AND TRAINING

November 2002 – February 2009

Doctor of Engineering Sciences (Doktor der Ingenieurwissenschaften – Dr.-Ing.)

Universität Karlsruhe (TH), Germany

- Thesis: Experimental investigation of the stability mechanism of lifted non-premixed swirl confined flames

October 1997 – July 2002

Mechanical Engineering Diploma (Δίπλωμα Μηχανολόγου Μηχανικού – Dipl.-Ing.)

Aristotle University Thessaloniki, Greece

- Thesis: Wind potential analysis of selected sites in Cyprus and techno-economic assessment for the establishment of a wind-park

PERSONAL SKILLS

Mother tongue(s): Greek

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
German	C2	C2	C1	C1	C2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Experimental fluid mechanics skills

- Particle Image Velocimetry: Experienced user in non-reactive flows. Measurements performed in water channels for the characterisation of urban flows. I have also performed 3D tomographic PIV measurements.
- 3D - Laser Doppler Anemometry: Experienced user in reactive and non-reactive flows. I have performed series of experiments in swirl isothermal and reacting flames for the characterisation of the stability mechanism.
- Laser Light Sheet Mie Scattering: Experienced user in reactive and non-reactive flows. Experiments performed in reacting flames for the characterisa-tion of the two-phase flow of liquid fuels.

Experimental fluid mechanics skills

- Flow Rate and Pressure Measurements: Experienced user of several instrumentation such as Coriolis and turbine flow meters, Rotameter etc. Also experienced user of several instrumentation such as piezoelectric crystals, membrane pressure gauge etc.

In flame measurements skills

- Local and Global Concentration Analysis: Experienced user of several gas analysis methods such as NDIR, FID, FTIR, Paramagnetismus etc. Experiments regarding the mixture field of reacting and non-reacting flames.
- Experienced user of several temperature measurement methods such as thermocouples, micro-thermocouples, PT100 etc. Experiments regarding the temperature field of reacting and non-reacting flames.

Temperature measurement skills

- Level 1 Thermographer (Infrared Training Center, Sweden). Experienced user for building thermography

Solid Fuels Analysis skills

- Calorific Value Definition using Bomb Calorimeter (according to EN 14918)
- CHNO Elemental Analysis using Elemental Analyser (according to EN 15104)
- Moisture Content Analysis (according to EN 14774)
- Ash Content Analysis (according to EN 14775)

Computer skills

- Languages: Matlab, Python
- Scripting Languages: HTML
- 3D-CAD: SolidWorks, Autodesk Autocad
- Building Information Modelling (BIM): Autodesk Revit
- Finite Element and Volume Methods: Comsol Multiphysics, ANSYS CFD
- Physical and Chemical Processes Simulation: Aspen Plus
- Life Cycle Assessment Software: Gabi Software (Sphere), OneClickLCA
- Whole Building Energy Analysis Software: Energy Plus (Design Builder)
- Graphics Software: TecPlot (for graphs), Adobe Photoshop

ADDITIONAL INFORMATION

Funded Research Projects

Kaunas University of Technology, Lithuania

Ongoing Projects

1. Coordinator - "Industry 4.0 for Smart, Carbon-Neutral Built Environments" (SmartCaNBE) ERASMUS-EDU-2025-EMJM-DESIGN 11/2025 – 01/2027

Completed Projects

1. Coordinator -" Boosting Research for a Smart and Carbon Neutral Built Environment with Digital Twins" (SmartWins)- HORIZON-WIDERA-2021-ACCESS-03-01". 10/2022

Funded Research Projects (cont'd)

– 09/2025

TU Berlin, Germany

Completed Projects

1. Researcher -" Emissions SooT ModEl". "H2020-EU.3.4.5.5. - ITD Engines, JTI-CS2-2017-CfP07-ENG-03-20 - Emissions prediction for very large bypass ratio turbofans - H2020-CS2-CFP07-2017-02". 11/2018 – 10/2021

Frederick University, Cyprus

Ongoing Projects

1. Principal Investigator – "Development of novel farming systems combined with water harvesting techniques to address extreme drought in the Mediterranean region, including saline and drought resilient species – WaterMelon", PRIMA Programme –(Water–Energy–Food Nexus), 2022 Call 04/2025 – 09/2028
2. Scientific and Technical Manager – "Inclusive circular bio-based insulation materials for the building sector - InBlanc" HORIZON-CL5-2023-D4-02-01 01/2025 – 06/2028
3. Principal Investigator - ".Integrated Approach on Alternative Marine Power for the Port of Limassol" - (DecarbonLIM) CEF-T-2023-CORECOEN 11/2024-10/2026
4. Principal Investigator - "Promoting excellence through innovative eco-systems" (EU-Conexus Enables). HORIZON-WIDERA-2023-ACCESS-03-01 02/2024 – 01/2029
5. Principal Investigator - "Digitally empowering citizens to deliver the twin transition" (DECODIT) HORIZON-CL5-2023-D3-03-04 06/2024 – 11/2027
6. Principal Investigator - "Enhancing Accessibility and Sustainability in Smart Cities and Smart Buildings: The Universal Accessibility Suite Initiative" (AccesS) HORIZON-CL5-2023-D4-02-05 06/2024 – 05/2027
7. Principal Investigator - " Leadership For Climate Resilient Buildings" (ClimRes.) HORIZON-CL5-2023-D4-02-02 06/2024 – 05/2027
8. Principal Investigator- "Supporting regional environmental sustainability assessment for the BIO-based sectors to improve INnovation, INdustries and INclusivity in SOUTH Europe" (BioINSouth) HORIZON-JU-CBE-2023-S-02 05/2024 – 04/2027
9. Principal Investigator - "Development of a waste biomass conversion system that incorporates liquefaction and pyrolysis technologies for producing biochemicals for the maritime sector." (BIO4MAR) CODEVELOP-AG-SH-HE 05/2024 – 04/2026
10. Principal Investigator - "Urban Planning for Social Resilience in Urban Neighbourhoods. Transformative Change through Civic Engagement". (UpRun) Erasmus + KA220-HED - Cooperation partnerships in higher education 11/2023 – 04/2026
11. Principal Investigator- "A tailored and dynamic capacity building programme to transform local and regional authorities into autonomous early adopters of digitised, integrated, and ambitious Clean Energy Transition plans". (StepWise) LIFE-2022-CET-LOCAL 09/2023 – 02/2026
12. Principal Investigator - "A significant step forward for the European University for Smart Urban Coastal Sustainability". (EU-CONEXUS Plus) ERASMUS-EDU-2022-EUR-UNIV-1 11/2022 – 10/2026

Completed Projects

1. Principal Investigator - "Innovative skateboard decks made from fully recycled advanced polymer material and a tailor-made production process, ensuring circular economy compliance" (CapsuleX) RESEARCH IN ENTERPRISES 2023 01/2024 – 12/2025

Funded Research Projects (cont'd)

2. Principal Investigator - "Advanced Energy Performance Assessment towards Smart Living in Building and District Level" (SmartLivingEPC) HORIZON-CL5-2021-D4-01-01 07/2022 – 06/2025
3. Principal Investigator - "Youth Employment Network for Energy Sustainability in ISlands" (Yenesis 2) EEA and Norway Grants Fund for Youth Employment
4. Principal Investigator - "Improving and demonstrating the potential of SRI" (easySRI) LIFE-2021-CET-SMARTREADY 10/2022 – 09/2025
5. Principal Investigator - "Development of Utilities Management Platform for the case of Quarantine and Lockdown" (eUMaP) H2020-MSCA-RISE-2020 01/2021 – 06/2025
6. Principal Investigator "A novel decentralized edge-enabled PREsCriptivE and ProacTive framework for increased energy efficiency and well-being in residential buildings". (PRECEPT) Building a low-carbon, climate resilient future (LC) Secure, clean and efficient energy LC-EEB-07-2020 11/2020 – 03/2024
7. Principal Investigator "Next-generation Dynamic Digital EPCs for enhanced quality and user awareness". (D^2EPC) Building a low-carbon, climate resilient future: Secure, clean and efficient energy H2020-LC-SC3-EE-5-2019 09/2020 – 08/2023
8. Principal Investigator - "Portal for hERItage buildingS integration into the COntemPorary built Environment". (UP PERIsCOPE) The Promotion Foundation Programmes for Research, Technological Development and InnovationRestart 2016-2020". Smart Growth, Integrated Projects 12/2019 – 05/2023
9. Principal Investigator - "Design and manufacturing of a novel Low Density Polyethylene (LDPE) Film for the construction industry, using recycled agricultural plastic waste (APW)" (ReCyFilm). The Research Promotion Foundation Programmes for Research, Technological Development and Innovation "Restart 2016-2020". Research in Enterprises 04/2019 – 03/2021
10. Principal Investigator - "Novel integrated approach for seismic and energy upgrading of existing buildings". (SupERB) The Research Promotion Foundation Programmes for Research, Technological Development and Innovation "Restart 2016-2020". Smart Growth, Integrated Projects 01/2019 – 12/2021
11. Principal Investigator - "STructural stABiLity risk assessment". (STABLE) Marie Skłodowska-Curie Research and Innovation Staff Exchange (MC RISE) H2020-MSCA-RISE-2018 11/2018 – 10/2023 Principal Investigator - "Youth Employment Network for Energy Sustainability in ISlands (Yenesis)". EEA and Norway Grants Fund for Youth Employment 09/2018 – 05/2022
12. Principal Investigator - Design and Development of the "Controlled Temperature Building Shell" concept (AENAOS) Ministry of Commerce, Industry, Tourism and Energy, Innovation in Enterprises project 11/2017 - 05/2020
13. Principal Investigator - "Phase Change Material (PCM) enhanced plaster for upgrading the energy efficiency of contemporary and historic buildings" (PCPlaster) The Research Promotion Foundation Programmes for Research, Technological Development and Innovation M-ERA.NET Transnational Call 2012. 08/2014 – 11/2016
14. Coordinator - "Design, development and application of a technologically advanced system of natural daylight and artificial PV lighting - Hybrid Light Tube" (HyLight Tube) Transnational SOLAR-ERA.NET Calls PV1 and CSP1. 08/2014 – 07/2016
15. Coordinator - "Design and development of collection, management and distribution centers for the exploitation of olive solid waste energy purpose" (KEDELEA) Cross-border Cooperation Program "Greece-Cyprus 2007-2013". 10/2012 – 03/2015
16. Principal Investigator - "Innovative methods for protection and conservation of sustainable design elements of vernacular architecture in the historic centre of Nicosia" (BioVernacular) The Research Promotion Foundation Programmes for Research, Technological Development and Innovation ΑΝΘΡΩΠΙΣΤΙΚΕΣ/ΑΝΘΡΩ/0609(ΒΙΕ)/07. 06/2012 – 08/2014

Funded Research Projects (cont'd)

17. Principal Investigator - "A concept for promotion of sustainable retroffiting and renovation in early stages" (ACES) The Research Promotion Foundation Programmes for Research, Technological Development and Innovation Eracobuild Project, KOINA/ERACOBUILD-VDP/0609/05. 03/2011–09/2013

Euphyia Tech Ltd

Ongoing Projects

1. Scientific and Technical Manager - "Circular REDesign for a Resource-efficient, Innovative, and Transformative Built Environment" (CRedIBlE) HORIZON-CL5-2024-D4-02-04, 10/2025 – 09/2029
2. Researcher - "Smart Tools for Smart Buildings: Enhancing the intelligence of buildings in Europe" (OBSERVE). LIFE-2023-CET-POLICY. 11/2024 – 11/2027
3. Researcher - "Towards an Open, Universal and Comprehensive Building Energy Performance Certification" (OpenBEP4EU). LIFE-2023-CET-BETTERRENO. 09/2024 – 02/2027
4. Researcher -" Earthquake Risk platform for European cities Cultural Heritage protection" (ERA4CH), MSCA Staff Exchanges 2021. 01/2023 – 12/2026
5. Researcher, Scientific and Technical Coordinator - "Smarter Energy Performance Certificates; Integrating smart readiness aspects into buildings energy certification and tools for market up-take" (SmarterEPC). LIFE-2022-CET. 10/2023 – 09/2026

Completed Projects

1. Researcher, Scientific and Technical Coordinator - "Smart Tools for Smart Buildings: Enhancing the intelligence of buildings in Europe" (Smart^2). LIFE-2021-CET-SMARTREADY. 10/2022 – 09/2025
2. Researcher - "Facilitating Building's Smartness Upgrade in BIM Environment using Virtual Reality" (SmartBEAR). SUSTAIN. 04/2024 – 12/2024

University of Cyprus

Completed Projects

1. Researcher -" The Research Promotion Foundation Programmes for Research, Technological Development and Innovation ΑΝΑΒΑΘΜΙΣΗ/ΠΑΓΙΟ/0308/33 - Development of an Interdisciplinary Research Center of "Energy Efficiency of the Built Environment ". **12/2008-12/2012**
2. Researcher -" The Research Promotion Foundation Programmes for Research, Technological Development and Innovation Urban-Net Project, ΔΙΕΘΝΗ/URBAN-NET/0308(BIE)/02 - Towards optimization of urban planning and architectural parameters for energy use minimization in Mediterranean cities" **03/2009–02/2012**
3. Researcher -" Categorisation of buildings in Cyprus based on their energy efficiency". The Research Promotion Foundation Programmes for Research, Technological Development and Innovation ΑΕΙΦΟΡΙΑ/ΑΣΤΙ/0308 (BIE)/02. **12/2008-03/2011**

Karlsruhe University

Completed Projects

1. Researcher - "NEW Aero engine core Concepts". AIP5-CT-2006-030876 (FP6). **01/2007 - 12/2010**
2. Researcher - "Towards Lean Combustion". AST4-CT-2005-012326 (FP6). **03/2005 – 03/2010**
3. Researcher - "LOw POllutant COmbustor TEchnology Programme". GRD1-CT2000-25062 (FP5). **04/2001 – 05/2005**

Further details are found in Annex I (Funded Research Projects Fact Sheets)

Funded Consultancy for the public sector

Ongoing Consultancies

1. Coordinator - Revision of the Inspection Guide for Heating and Air Conditioning systems and of the Guide for Overall Performance Requirements of Technical Systems installed or upgraded in residential and non-residential buildings 09/2025 - 02/2026

Funded Consultancy for the public sector (cont'd)

Completed Consultancies

1. Consultant - Training of public servants dealing with environmental legislation on Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) 09/2016 - 02/2017
2. Coordinator - Consultancy for the Elaboration of a Study on the Implementation of Rational Management of Solid Waste in the Public Sector 09-2017 - 12/2017 Coordinator - Consultancy for the Elaboration of a Study on the Reduction and Utilisation of Biodegradable Waste in Cyprus 09/2017 - 12/2017
3. Coordinator - Providing Services for Measurement, Recording and Report Preparation of Food Waste Levels at Various Stages of the Food Supply Chain 11/2020 - 10/2021
4. Coordinator - Study of Preparation of An Action Plan for Green Contracts, Location and Recording of Green Products and Services Circulated / Provided in The Cyprus Market 10/2021 - 09/2022
5. Coordinator - Measuring, recording and preparing quality control reports on certain single-use plastic products and their waste, alternatives, establishing a single-use plastic registry 10/2022 - 10/2023
6. Consultant - Consultancy for the Elaboration of a Study on the calculation of cost - optimal levels for minimum energy performance requirements for buildings in accordance with Article 5 of Directive 2010/31/EU on the energy efficiency of buildings 10/2017 -03/2018
7. Coordinator - Method for Inspections of Heating and Air Conditioning Systems, Definition of Minimum Requirements of Technical Building Systems and Method of Regulation and Control of Technical Building Systems 12/2019 - 11/2020
8. Coordinator - Provision of Technical Support Services for the project "Promoting Energy Efficiency in Public Buildings of the Balkan Mediterranean Territory: ProEnergy" 04/2021 - 03/2022
9. Coordinator - Provision of Technical Support Services for the project "Strategic Cross-Border Cooperation & Capitalisation of a Common Approach to Energy Saving in Public Buildings: STRATENERGY" 11/2021 - 07/2022
10. Coordinator - Training of registrants of Heating System Inspection and Air Condition System Inspection 11/2021 - 07/2022
11. Coordinator - Elaboration of a study for the preparation of a methodology for calculating Renewable Energy from solar domestic water and/or space heating systems and the benefits resulting from the replacement of older solar thermal frames and systems 02/2022 - 08/2022
12. Coordinator - Calculation of the cost optimum levels of the minimum energy performance requirements of buildings according to article 5 of the directive 2010/31/EU on the energy performance of buildings 11/2022 - 09/2023
13. Coordinator - Design and development of a new digital format for the Building Energy Performance Certificate (EPC) and accompanying Recommendations in accordance with Directive (EU) 2024/1275 on the Energy Performance of Buildings 04/2025 - 07/2025
14. Consultant - Preparation of a Preliminary Draft Order of the Town Planning Council for Soil Sealing in Construction Projects 06/2014 - 02/2015
15. Coordinator - Detailed cost estimation for Public Transport Vehicles for the years 2010 – 2020 04/2021 - 07/2022
16. Coordinator - Conducting a Study on the Integration of Gender Considerations into Energy Policies.-11/2024 - 01/2025
17. Consultant - Implementation of Written Exams for the Selection of Four (4) Candidates to be Employed as Energy Operators in Cyprus Energy Regulatory Authority (CERA) 09/2015 - 12/2015
18. Consultant - Implementation of Written Exams for the Selection of Four (4) Candidates to be Employed as Energy Operators in Cyprus Energy Regulatory Authority (CERA) 09/2015 - 12/2015

For further information please see Annex II (Consultancy Fact Sheets)

Peer reviewed publications

Publication metrics:
Scopus: ● Documents: 209 ● Citations: 6371 by 5522 documents ● h-index: 39
- Peer-reviewed scientific articles published in Scopus-indexed scientific journals: 139 publications
- Peer-reviewed scientific articles published in conference proceedings: 142 publications
- Books: 2
- Book Chapters (Scopus indexed): 16 publications

Further details are found in Annex III (Published Work)

Editorial work and reviewing

Editor in Chief

- International Journal of Sustainable Energy (Taylor and Francis) (2022-)

Member of Editorial Boards

- Energy Sources, Part A: Recovery, Utilization, and Environmental Effects (Taylor and Francis) (2020-)
- International Journal of Sustainable Energy (Taylor and Francis) (2020-2022)
- Sustainability (MDPI) (2018-)
- Energies (MDPI) (2021-)
- Current Sustainable/Renewable Energy Reports (Springer) (2017 -)
- Journal of Sustainable Architecture and Civil Engineering (Kaunas University of Technology) (2017 -)

Scientific papers evaluation

Regular reviewer in following Elsevier, Springer and Taylor and Francis scientific journals:
- **Elsevier:** ● Applied Energy ● Applied Thermal Engineering ● Building and Environment ● Computers & Operations Research ● Energy Conversion and Management ● Energy ● Energy and Buildings ● Biomass and Bioenergy ● Journal of Cleaner Production ● Journal of Environmental Management ● Energy Policy ● Sustainable Cities and Society ● Sustainable Production and Consumption ● International Journal of Thermal Sciences
- **Springer:** ● Waste & Biomass Valorization ● Clean Technologies & Environmental Policy
- **Taylor and Francis:** ● Energy Sources, Part A: Recovery, Utilization, and Environmental Effects ● International Journal of Sustainable Energy

Patents

Zarzalis, N.; Fokaides, P.A.; Merkle, K.: Fuel injection apparatus, European Patent: EP 1 722 164 A1, 2006

Research Projects Evaluation

European Commission (EX2012D128695)
- Evaluator HORIZON-MISS-2026-04-PCP, HORIZON-CL5-2026-01 (2026)
- Evaluator HORIZON-NEB-2025-01 (2026)
- Evaluator HORIZON-NEB-2025-01 (2026)
- Evaluator HORIZON-CL2-2025-03 (2025)
- Evaluator HORIZON-MSCA-2025-PF (2025)
- Evaluator HORIZON-EIC-2025-PATHFINDEROPEN (2025)
- Evaluator HORIZON-MISS-2024-CIT-01-02 (2025)
- Evaluator PMON-101078960-TWISMA-HORIZON-WIDERA-2021-ACCESS-03 (2024)
- Evaluator Excellence Hubs_HORIZON-WIDERA-2023-ACCESS-07 - (2024)
- Evaluator Horizon Europe Projects, HORIZON-EIC-2023-PATHFINDERCHALLENGES-01 (2023)
- Evaluator Horizon Europe Projects, HORIZON-WIDERA-2023-ACCESS-02 (2023)
- Evaluator Horizon Europe Projects, call HORIZON-CL4-2023-RESILIENCE-01, HORIZON-CL4-2023-TWIN-TRANSITION-01, (2023)
- Evaluator Horizon Europe Projects, TWIN GREEN AND DIGITAL TRANSITION 2021

Research Projects Evaluation (cont'd)

(2021)

- Evaluator Latvian Council of Science (LCS) (Latvia) (2023, 2024, 2025)
- Evaluator Slovenian Research and Innovation Agency (2025, 2026)
- Evaluator Dutch Research Council (Nederlandse Organisatie voor Wetenschappelijk Onderzoek - NWO) (2024)
- Evaluator The Royal Swedish Academy of Sciences (2024)
- Evaluator Slovak Research and Development Agency (2022, 2023)
- Evaluator Swiss National Science Foundation (2021)
- Evaluator Marsden Fund - Royal Society of New Zealand (2021)
- Evaluator Project Drawdown (2020)
- Evaluator Programma per Giovani Ricercatori Rita Levi Montalcini 2017, CINECA, Italy (2017, 2018, 2021)
- Evaluator University of Campania Luigi Vanvitelli intra-university projects, Italy (2019)
- Evaluator Chilean National Science and Technology Commission (FONDECYT) (2019)
- Evaluator Rural development programme (EAFRD), Measure 16.1, Ministry of Rural Development and Food, Republic of Greece (2018 -)

Academic Teaching

Frederick University, Cyprus

Frederick University, BSc in Mechanical Engineering (2012 -)

● AMEE 202 Fluid Mechanics ● AMEE 304 Heat Transfer ● AMEE 310 Hydraulics and Pneumatics ● ASOG 300 Mass and Energy Balance ● ASOG 402 Fundamentals of Pipeline Design

Frederick University, MSc in Sustainable Energy Systems (Program Coordinator) (2012 -)

● MES 503 Energy and Environmental Policies ● MES 511 Power Generation Technologies ● MES 520 Renewable Energy ● MES 530 Energy Design of Buildings and Energy Audits ● MES 552 Energy and Environmental Evaluation Tools

Frederick University, BSc in Civil Engineering (2012 -)

● CEH 240 Fluid Mechanics ● CESU 310 Energy Design of Buildings ● CESU 420 Structural Aspects of Renewable Energy Technologies

Frederick University, MSc in Oil, Gas and Offshore Engineering (2013 -)

● MOE 504 Process Engineering ● MOE 505 Process Modelling and Simulation

Open University, Cyprus

Open University Cyprus, MSc in Sustainable Energy Systems (Program Coordinator) (2015 -2023)

● SES 512 Renewable Energy ● SES 521 Energy Design of Buildings ● SES 611 Energy and Environmental Policies

German University in Cairo, Egypt

Faculty of Engineering and Materials Science, Architecture and Urban Design Program (visiting Professor) (2019)

● Introduction to Sustainable Energy Systems and the Built Environment

University of Cyprus

University of Cyprus, BSc in Civil and Environmental Engineering (2009 - 2011)

● CEE 272 Experimental Fluid Mechanics ● CEE 483 Transport Phenomena in Environmental Engineering

University of Cyprus, MSc in Energy Technologies and Sustainable Design (2008 - 2012)

● CEE 575 Energy Design of Buildings ● CEE 596 Renewable Energy Technologies Management

Karlsruhe University, Germany

Karlsruhe University, BSc in Chemical Engineering (2003 - 2006) (teaching assistant)

● 22999: Introduction to Process Engineering, ● 22514: Non-reacting and Reacting Turbulent Flows ● 22542 Applied Combustion Technology

Karlsruhe University, BSc in Mechanical Engineering (2003-2005) (teaching assistant)

● 22512: Heat and mass transfer for Mechanical Engineers

Further details are found in Annex IV (Academic Teaching Record)

Graduate Students Mentoring

PhD Graduates

- Dr. Elias Christoforou (2014-2019) – Frederick University, Cyprus
  Life Cycle Assessment or Raw Biomass and Biomass-to-Energy Conversion Routes
- Dr. Angeliki Kylili (2015-2019) – Frederick University, Cyprus
  Environmental Assessment of Building Elements with the use of Life Cycle Assessment
- Dr. Loucas Georgiou (2019-2022) – Frederick University, Cyprus
  Thermal Performance of Building Elements with the use of Computational Fluid Dynamics and Finite Element Analysis link
- Dr Phoebe-Zoe Georgali (2020-2025) – Frederick University, Cyprus
  Sustainability Assessment of whole building life cycles: A comparative study on European norms link
- Dr. Paulius Spudys (2020-2025) – Kaunas University of Technology, Lithuania
  Integrated building sustainability assessment using digital twin framework
- Dr. Nicholas Afxentiou (2020- 2025) – Frederick University, Cyprus
  Enhancing Building Intelligence in Europe through Smart Readiness Indicator (SRI): Implementation and Optimization
- Dr. Theoklitos Klitou (2021- 2025) – Frederick University, Cyprus
  An Integrated Digital Platform for Enhancing Building Intelligence through BIM, Virtual Reality, and the Smart Readiness Indicator (SRI)

PhD Candidates

- Ms Evi Demetriou (2023 -) – Frederick University, Cyprus
- Ms Artemis Georgiou (2024 -) – Frederick University, Cyprus
- Mr Christos Kythreotis (2024 -) – Frederick University, Cyprus
- Ms Funda Zaim (2024 -) – Frederick University, Cyprus
- Ms. Magdalena Okrzesik (2024-)– Kaunas University of Technology, Lithuania
- Mr Turkay Ersener (2025 -) – Frederick University, Cyprus
- Ms Hiva Hashemi Rezvani (2025 -) – Frederick University, Cyprus
- Mr Tibet Bashkaya (2025 -) – Frederick University, Cyprus
- Mr Yiangos Yiangou (2025 -) – Frederick University, Cyprus
- Mr Pieris Panagi (2026 -) – Frederick University, Cyprus

MSc, BSc Students

- Frederick University, BSc in Civil Engineering: 23 projects
- Frederick University BSc Quantity Surveying: 10 projects
- Frederick University, BSc in Mechanical Engineering: 31 projects
- Frederick University MSc in Energy Engineering (formerly Sustainable Energy Systems): 83 projects
- Frederick University MSc in Oil, Gas and Offshore Engineering: 9 projects
- Frederick University MSc in Engineering Management: 8 projects
- Open University Cyprus, MSc in Sustainable Energy Systems: 21 projects
- University of Cyprus, MSc in Energy Technologies and Sustainable Design: 5 projects
- Karlsruhe University of Technology, BSc in Chemical Engineering: 2 projects

Further details are found in Annex V Mentoring)

Conferences Scientific Committee Member

- 23rd International Conference on Smart and Sustainable Built Environment (SASBE), FUTUREROADS Conference, 2nd Building Digital Twin Scientific Conference (BDTSC) University of Cambridge, UK, 22–24 July 2026
- STEPGRAD XVII, 17th International Conference on Contemporary Theory and Practice in Construction. Faculty of Architecture, Civil Engineering and Geodesy, Banja Luka, June 04-05, 2026, Bosnia Herzegovina. 04-05 June 2026
- MATBUD'2026, 11th Scientific-Technical Conference on Material Problems in Civil Engineering. Cracow University of Technology, Poland. 23 – 24 April 2026
- Advancements in Sustainable Engineering (CASE25) - Conference Chairman Organized

Conferences Scientific Committee Member

by Frederick University, Limassol, Cyprus, September 2025

- Building Digital Twin Scientific Conference (BDTSC) - Conference Chairman Organized by the Faculty of Civil Engineering and Architecture, Kaunas University of Technology, in collaboration with the Building Digital Twin Association Kaunas, Lithuania, May 2025
- 7th International Conference on Renewable Energy Sources and Energy Efficiency - Energy Security. Organized by the Cyprus Chamber of Commerce and Industry, Nicosia, Cyprus, October 2023
- International Council for Research and Innovation in Building and Construction. Sustainable Built Environment Conference (SBE2023) Thessaloniki, Greece, March 2023
- 3rd Baltic Conference of Young Researchers in Architecture, Landscape Architecture, Urbanism and Civil Engineering Kaunas, Lithuania, November 2022
- 2022 IEEE Smart Cities International Conference (ISC2) Paphos, Cyprus, September 2022
- International Symposium and Workshops Sustainable Solutions at Times of Transition (SuST) Nisyros Island, Greece, July 2022,
- Smart Built Environment – KTU student scientific conference Kaunas, Lithuania, November 2021
- MATBUD'2020 – Scientific-Technical Conference: E-mobility, Sustainable Materials and Technologies, Cracow University of Technology, Poland, October 2020
- International Council for Research and Innovation in Building and Construction. Sustainable Built Environment Conference (SBE2019), Thessaloniki, Greece, October 2019
- 6th International Conference on Renewable Energy Sources and Energy Efficiency Organized by the Cyprus Chamber of Commerce and Industry, Nicosia, Cyprus, November 2018
- International Council for Research and Innovation in Building and Construction. Sustainable Built Environment Conference (SBE2016), Thessaloniki, Greece. October 2016
- International Symposium "Circular Economy and Sustainable Management of Renewable Resources', Nisyros, Greece, July 2016
- 5th International Conference on Renewable Energy Sources and Energy Efficiency Organized by the Cyprus Chamber of Commerce and Industry, Nicosia, Cyprus, May 2016
- 4rth International Exergy, Life Cycle Assessment, and Sustainability Workshop & Symposium, Nisyros, Greece, July 2015
- 40th IAHS World Congress on Housing - "Sustainable Housing Construction", Funchal, Portugal, December 2014
- 2nd International Conference Power Options for the Eastern Mediterranean Region, Organized by the Electricity Authority Cyprus, Nicosia, Cyprus, October 2013
- 4th International Conference on Renewable Energy Sources and Energy Efficiency Organized by the Cyprus Chamber of Commerce and Industry, Nicosia, Cyprus, June 2013
- 1st International Conference Power Options for the Eastern Mediterranean Region, Organized by the Electricity Authority Cyprus, Limassol, Cyprus, November 2012
- 3rd International Conference on Renewable Energy Sources and Energy Efficiency Organized by the Cyprus Chamber of Commerce and Industry, Nicosia, Cyprus, May 2011

Invited Speeches, Conference and Workshop Presentations

Keynote Speaker

- 1st Building Digital Twin Scientific Conference (BDTSC) , 15 May 2025 Kaunas, Lithuania Transforming Built Environment Research through Digital Twin Integration
- EU-CONEXUS EENVIRO Research Conference, 31 October 2024, Bucharest, Romania Digital Twins in Building Engineering: Pioneering Sustainable Solutions for Environmental Challenges / The coastal context
- SpliTech 24, 9th International conference on smart and sustainable technologies, 25-28 June 2024, Bol, Brac, Croatia Enhancing Building Intelligence: Key Advances in SRI

Invited Speeches, Conference and Workshop Presentations (cont'd)

through EU Research Initiatives

- Smart Built Environment, Student Scientific Conference, November 2023 Kaunas University of Technology, Lithuania The need of Buildings Operational Rating for a Smart Built Environment
- SpliTech 2023: 8th International conference on smart and sustainable technologies, 20-23 June 2023, Spllit - Bol, Croatia Tools for Digitizing Buildings Energy Audits: Case Studies and First Evidences
- The 15th "Romanian Conference on Energy Performance of Buildings" (RCEPB-XV) 8-9 June 2023, Bucharest, Romania The role of operational rating for achieving the NZEB Target: The Need for New Standards.
- SpliTech 2020: 5th International Conference on Smart and Sustainable Technologies, Split, Croatia, September 2020 How can Building Information Modelling make building smarter
- Advanced Construction and Architecture 2020, Kaunas, Lithuania, September 2020 How are the Smart Readiness Indicators expected to affect the Energy Performance of Buildings: First Evidences and Perspectives.

- Peer reviewed conferences: 36 presentations

- Research project and academia workshops: 78 presentations

Further details are found in Annex VI (Invited Speeches, Conference and Workshop Presentations)

Honours and awards

- CEN-CENELEC Standards + Innovation Awards 2023 for the research project category for the project Next-generation Dynamic Digital EPCs for Enhanced Quality and User Awareness (D^2EPC)
- Energy Sources, Part A: Recovery, Utilization, and Environmental Effects – Most read article of all times: Kylili, A., Afxentiou, N., Georgiou, L., Panteli, C., Morsink-Georgalli, P. Z., Panayidou, A., ... & Fokaides, P. A. (2020). The role of Remote Working in smart cities: lessons learnt from COVID-19 pandemic. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 1-16.
- Michael Frederick Awards 2025: Best researcher award at Frederick University. Awarded based on scientific work and on number of scientific studies and citations for year 2024.
- Michael Frederick Awards 2021: Best researcher award at Frederick University. Awarded based on scientific work and on number of scientific studies and citations for years 2019 and 2020.
- Renewable Energy Reviewer Award 2014, awarded by the journal of Renewable Energy, of Elsevier, The Official Journal of WREN - The World Renewable Energy Network (2014 5 year IF 3.8)
- Best Paper Award by the Combustion, Fuels & Emissions Committee from ASME Turbo Expo 2007 – Fokaides PA, Kasabov P, Zarzalis N: "Experimental Investigation of the Stability Mechanism and Emissions of a Lifted Swirl Non-Premixed Flame" GT2007-27126
- Best Paper Award by the 34th AIVC, 3rd TightVent, 1st venticool and 2nd Cool Roofs' Conference, 2013 - Neofytou MKA, Tryphonos E, Fokaides P, Sandberg M, Batchvarova E, Fernando HJS, et al. Towards Designing Strategies for Urban heat island Mitigation based on Multiscale Flow considerations.
- Scholarship by the German Section of the Combustion Institute for the participation at the European Combustion Meeting, April 2007

Committees' Member

- Member of the SET Plan Temporary Working Group 8, on Renewable Fuels and Bioenergy, as representative of the Republic of Cyprus, since 09/2016 link
- Examiner at the Cyprus State Scholarships Foundation (ΙΚΥΚ) - 06/2022 - 05/2025
- Member of the Management Committee (Cyprus Representative) of Cost Action CA23157 European Network for Multiple View Life Cycle Sustainability Assessment

Committees' Member (cont'd)

(MultiViewLCSA)– 11/2024- 10/2028 link

- Member of the Management Committee (Cyprus Representative) of Cost Action CA 17128 Establishment of a Pan-European Network on the Sustainable Valorisation of Lignin– 07/2018- 06/2022 link
- Member of the Management Committee (Cyprus Representative) of Cost Action TU 1104 Smart Energy Regions– 03/2013-02/2016 link
- Representative of the Cyprus Scientific and Technical Chamber (ETEK) in the committee for the implementation of 2012/27/EC Directive in Cyprus, Energy Service, Ministry of Commerce Industry and Tourism – 2013-2020
- Member of the Energy Committee of the Cyprus Scientific and Technical Chamber (ETEK) - 2008-2014, 2018 -2025
- Member of the Committee for Environmental Engineering of the Cyprus Scientific and Technical Chamber (ETEK) - 2019 -2023
- Member of several CEN Technical Committees, representing Cyprus Standardization Organization - since 2013 link
- Representative of University of Cyprus in the Committee for the Implementation of 2002/91/EC Directive in Cyprus, Energy Service, Ministry of Commerce Industry and Tourism – 06/2009-05/2012

Memberships

- Cyprus Scientific and Technical Chamber (ΕΤΕΚ)– since 2002
- Cyprus Association of Mechanical Engineers (ΣΜΜΗΚ) – since 2009
- Institute for Solar Technology, Greece (IHT) – since 2009
- International Solar Energy Society (ISES) - 2018-2019
- The Combustion Institute – Greek Section – since 2007
- Institute of Policy Studies and Democracy (Ινστιτούτο Μελετών Πολιτικής και Δημοκρατίας – ΙΜΠΔ), - since 2022
- VDI – Verein Deutscher Ingenieure – 2006-2019
- ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers – 2009-2012

Nicosia, February 2026

SmartCanBe – Research Project Fact Sheet

Title of Project	**Industry 4.0 for Smart, Carbon-Neutral Built Environments (SmartCaNBE)**
Project Acronym	SmartCanBe
Funding Program	EU Erasmus+ programme
Project Identifier	ERASMUS-EDU-2025-EMJM-DESIGN
Total Budget/KTU Budget	60000 € / 60000 €
Starting – Ending Date	11/2025 – 01/2027
Consortium	Kauno Technologijos Universitetas LT
Project Objectives	The SmartCaNBE! (Industry 4.0 for Smart, Carbon-Neutral Built Environments) project, under the Erasmus Mundus Design Measures (EMDM) action, aims to develop a joint, interdisciplinary Master's programme that integrates Industry 4.0 technologies, digitalization, and sustainability in the built environment. Addressing the skills gap in smart building design, energy efficiency, and carbon neutrality, SmartCaNBE will establish the foundation for an Erasmus Mundus Joint Master's (EMJM) program. Coordinated by Kaunas University of Technology (KTU), the consortium includes TU Berlin, Politecnico di Milano, Frederick University, IIT Bombay, Bentley Systems Inc., and the Lithuanian Builders Association, ensuring a strong academia-industry collaboration. The project will: - Develop the structure, curriculum, and accreditation framework for a future EMJM in smart and sustainable built environments. - Establish mobility and cooperation mechanisms, ensuring student and faculty exchange. - Design innovative teaching methods, incorporating digital twins, automation, and AI-driven energy management. - Strengthen industry linkages, bridging academic research with practical applications in smart cities and energy-efficient construction. SmartCaNBE! will enhance the internationalization of higher education, support interdisciplinary learning, and
Work Packages	WP1 Design of the SmartCaNBE curriculum and supporting mechanisms for its joint implementation
External Reference	
Role in the Project	Coordinator

CRedIBlE – Research Project Fact Sheet

Title of Project	**Circular REDesign for a Resource-efficient, Innovative, and Transformative Built Environment**
Project Acronym	CRedIBlE
Funding Program	**HORIZON-CL5-2024-D4**
Project Identifier	HORIZON-CL5-2024-D4-02-04
Total Budget/EUT Budget	3950038 € / 371500 €
Starting – Ending Date	10/25 – 09/29
Consortium	1. Kauno Technologijos Universitetas LT 2. Ethniko Kentro Erevnas Kai Technologikis Anaptyxis EL 3. Core Kentro Kainotomias Amke EL 4. Iris Technology Solutions, Sociedad Limitada ES 5. Politecnico Di Milano IT 6. Staticus Uab LT 7. Fibran Insulating Materials Industry Dimitrios Anastasiadis Sa EL 8. Euphyia Tech Ltd CY 9. Opsis Research Srl RO 10. Innotrope Sas FR 11. My Energia Oner Sl ES 12. Ayuntamiento De Murcia ES 13. Universidad Pontificia Comillas ES 14. Institute For European Energy And Climate Policy Stichting NL 15. Wider Sa CH 16. Epiqr Renovation Sarl CH 17. Estia Sa CH 18. Ville De Vevey CH
Project Objectives	To achieve green transition goals, as well as mitigate and prevent climate change impacts, it is crucial to develop and incorporate solutions, methodologies, and techniques aimed at promoting transition efforts and sustainability. In this context, the EU-funded CRedIBle project aims to enhance the transition of the construction sector and its sustainability by developing a fully interoperable digital ecosystem. This ecosystem will improve the design, adaptability, reuse, and deconstruction phases, thereby increasing their sustainability. To achieve this, the project will integrate several key technologies, including AI-driven decision-support tools, digital product passports, predictive analytics, modular building components, and a systematic framework to improve circularity, sustainability, and efficiency at every step.
Work Packages	WP1 – Project specification and positioning WP2 – Development of digital tools WP3 – Development of circular building materials WP4 – Integration into the digital ecosystem WP5 – Demonstration in pilot projects WP6 – Capacity building and training WP7 – Project management WP8 – Dissemination and exploitation
External Reference	https://cordis.europa.eu/project/id/101235056
Role in the Project	Scientific and Technical Manager

WaterMelon – Research Project Fact Sheet

Title of Project	**Development of novel farming systems combined with water harvesting techniques to address extreme drought in the Mediterranean region, including saline and drought resilient species**
Project Acronym	WaterMelon
Funding Program	**PRIMA Programme**
Project Identifier	PRIMA Programme –(Water–Energy–Food Nexus), 2022 Call
Total Budget/FRC Budget	4000000 € / 280000 €
Starting – Ending Date	04/25 – 09/28
Consortium	1. Centre For Renewable Energy Sources & Saving EL 2. Consiglio Per La Ricerca In Agricoltura E L'Analisi Dell'Economia Agraria IT 3. International Center For Agricultural Research In Dry Areas MA 4. Alma Mater Studiorum – Università Di Bologna IT 5. University Of Skikda DZ 6. Cooperativas Agro-Alimentarias De España ES 7. Iniciativas Innovadoras S.A.L. ES 8. University Of Catania IT 9. City Of Scientific Research & Technological Applications EG 10. Institut National De La Recherche Agronomique De Tunisie TN 11. Universidade Nova De Lisboa PT 12. Frederick Research Center CY 13. Irrigation Consortium For The Emilia Romagna Canal IT 14. Hellenic Association For Conservation Agriculture EL 15. Istituto Per La Cooperazione Universitaria LB 16. Centre De Développement De La Région Du Tensift MA 17. Agricultural University Of Athens EL 18. Centro Para A Valorização De Resíduos PT 19. Tarla Bitkileri Merkez Araştırma Enstitüsü Müdürlüğü TR 20. Koinsep Agrima EL
Project Objectives	WaterMellon aims to improve the resilience of Mediterranean dry farming to withstand and adapt to climate change and water scarcity by combining traditional and modern hydro-technologies with innovative agricultural techniques. The initiative aims to achieve sustainable food and feed production while improving the livelihoods of smallholder farmers by training local farmers, introduce new products and value chains, and provide practical, affordable solutions to boost yields and profitability.
Work Packages	WP1 – Farmers' engagement WP2 – Water harvesting systems WP3 – Novel cropping systems WP4 – Identification of novel value chains WP5 – Communication, dissemination and exploitation (CIRCUIT platform) WP6 – Coordination and project management
External Reference	https://watermellon.eu/
Role in the Project	Principal Investigator

InBlanc – Research Project Fact Sheet

Title of Project	**Transforming the building lifecycle through data-driven solutions**
Project Acronym	InBlanc
Funding Program	HORIZON-CL5-2023-D4-02
Project Identifier	HORIZON-CL5-2023-D4-02-01
Total Budget/FRC Budget	4999391 € / 525125 €
Starting – Ending Date	01/25 – 06/28
Consortium	1. Demo Consultants Bv NL 2. Frederick Research Center CY 3. Aalborg Universitet DK 4. Core Kentro Kainotomias Amke EL 5. Tampereen Korkeakoulusaatio Sr FI 6. R2M Solution Srl IT 7. Z Prime Gmbh DE 8. Cype Soft Sl ES 9. My Energia Oner Sl ES 10. Colouree Srl IT 11. Roelofs & Haase Projectontwikkeling B.V. NL 12. Comfortica B.V. NL 13. European Public Law Organization EL 14. Dimos Thessalonikis EL 15. Siemens Aktiengesellschaft Oesterreich AT 16. Etaireia Promitheias Aeriou Thessalonikis - Thessalias Monoprosopi Anonymos Etaireia EL 17. C.M.B. Societa Cooperativa Muratorie Braccianti Di Carpi IT 18. Estia Sa CH 19. Ecole Polytechnique Federale De Lausanne CH 20. Epiqr Renovation Sarl CH 21. Les Hopitaux Universitaires De Geneve CH 22. Eidgenoessische Technische Hochschule Zuerich CH
Project Objectives	The building and construction industry faces challenges due to fragmentation and siloing across the value chain, hindering collaboration and efficiency. A systemic change, guided by lifecycle perspectives, is needed to uncover interactions, opportunities, and risks. To address this problem, the EU-funded INBLANC project will establish an open ecosystem that leverages building lifecycle data for greater value. Through its innovative accumulation framework, digital logbooks, and integration with EU dataspaces, INBLANC will streamline data collection and enhance decision-making for building owners and facility managers. Its comprehensive toolset will support energy planning, virtual management, low-carbon renovation, and urban integration, with demonstrations across diverse use cases.
Work Packages	WP1 – Building lifecycle data management architecture WP2 – Consolidation of indicator catalogue WP3 – Engagement and acceptance strategy WP4 – Numeracy solutions based on nexus strategy WP5 – Data accumulation in operational environment WP6 – Ecosystem of services based on BLDM capitalisation WP7 – INBLANC solution acceptance in the B&C value chain WP8 – Operational demonstration scenarios WP9 – INBLANC uptake and finalisation WP10 –12 Dissemination, exploitation and communication WP13 – Project management
External Reference	https://cordis.europa.eu/project/id/101147225
Role in the Project	Scientific and Technical Manager

DecarbonLim – Research Project Fact Sheet

Title of Project	**Integrated Approach on Alternative Marine Power for the Port of Limassol**
Project Acronym	DecarbonLim
Funding Program	**CEF-T-2023-CORECOEN**
Project Identifier	CEF-T-2023-CORECOEN-MARP-WORKS
Total Budget/FredU Budget	1376250 € / 427000 €
Starting – Ending Date	11/2024 – 10/2026
Consortium	1. Archi Limenon Kyprou CY 2. Frederick University Fu CY 3. Dp World Limassol Ltd CY 4. Eurogate Container Terminal Limassol Limited CY 5. Archi Ilektrismou Kyprou CY 6. Dimos Lemesos CY 7. Diacheiristis Systimatos Metaforas CY
Project Objectives	To comply with EU environmental objectives and aiming to minimize emissions within the port areas and their effects on the surrounding urban areas, the Cyprus Port Authority (CPA) promotes the integration of an Onshore Power System (OPS), interchangeably referred to as "Cold Ironing" (CI), facility for vessels calling at the multipurpose terminal and the container terminal of the maritime port of Limassol (Cyprus). The project will develop concise technical and economic studies to identify the feasibility and economic/social viability of construction of OPS infrastructure and the provision of onshore power system to vessels moored in the Port of Limassol. The study will cover the technical, financial, and social requirements of all interested parties, i.e. Cyprus port Authority (CPA), Port Operators, Electricity Authority, Transmission System Operator, the Municipality of Limassol, and the various ship types approaching the port, affecting its competitiveness and development opportunities.
Work Packages	WP1 Project Management WP2 Analysis of the Port's current operational capacity WP3 Preliminary Study WP4 Risk Assessment Studies WP5 Detailed Infrastructure Study WP6 Feasibility Study & Cost Benefit Analysis WP7 Dissemination & Exploitation
External Reference	
Role in the Project	Principal Investigator

Observe – Research Project Fact Sheet

Title of Project	**Support for setting up natiOnal Building Stock obsERVatoriEs**
Project Acronym	OBSERVE
Funding Program	**LIFE-2023-CET**
Project Identifier	LIFE-2023-CET-POLICY
Total Budget/EUT Budget	2094756 € / 224219 €
Starting – Ending Date	11/24 – 10/27
Consortium	1. Institute For European Energy And Climate Policy NL 2. University Of Piraeus Research Center EL 3. Accademia Europea Di Bolzano IT 4. Euphyia Tech Ltd CY 5. R2M Solution FR 6. Epb Center B.V. NL 7. Agenzia Nazionale Per Le Nuove Tecnologie, L'Enerit IT 8. Energetski Institut Hrvoje Pozar HR 9. Centro De Investigaciones Energeticas Medioambi ES 10. Agencia Estatal Consejo Superior De Investigacio ES
Project Objectives	To achieve the reduction of carbon emissions in the building sector, policy-makers should be provided with reliable and updated data to facilitate monitoring and periodic assessment of the effectiveness of building-related policies and strategies. The lack of reliable and high-quality data of the building sector, the disparities regarding the type and quality of data among Member States and the lack of standard approaches and templates for data collection, management and reporting create an urgent need for more efficient and well-established data procedures through the EU. The proposal to revise the EPBD introduced key provisions for the promotion of a more reliable and transparent data framework in the EU. OBSERVE aims to guide national authorities develop national Building Stock Observatories by developing and standardising protocols for the systematic collection and aggregation of building-related data, optimising data collection methods and streamlining the coordination of all relevant bodies. OBSERVE will also enhance synergies and interaction between several relevant EU and national initiatives and projects. Special attention will be given to establish cooperation with the overarching EU Building Stock Observatory. OBSERVE will directly support six Member States (Croatia, Cyprus, France, Greece, Italy and Spain) and further spread good practices and governance models to other EU countries. OBSERVE's collaborative effort is expected to enhance the transparency and utility of building data, thereby assisting national authorities to better implement energy and climate policies towards 2030 and support more informed policy and decision-making in the realm of building energy efficiency and regulation compliance.
Work Packages	WP1 – Project management and coordination WP2 – Requirements analysis and specification of OBSERVE's national BSOs WP3 – Data-driven process for OBSERVE's national BSOs WP4 – Stakeholder engagement WP5 – Synthesis and policy recommendations WP6 – Communication and dissemination, sustainability, replication and exploitation of project results
External Reference	https://webgate.ec.europa.eu/life/publicWebsite/project/LIFE23-CET-OBSERVE-101167643/support-for-setting-up-national-building-stock-observatories
Role in the Project	Principal Investigator

OpenBEP4EU – Research Project Fact Sheet

Title of Project	**Towards an Open, Universal and Comprehensive Building Energy Performance Certification**
Project Acronym	OpenBEP4EU
Funding Program	**LIFE-2023-CET**
Project Identifier	LIFE-2023-CET-BETTERRENO
Total Budget/EUT Budget	2086884 € / 240750 €
Starting – Ending Date	09/2024 – 02/2027
Consortium	1. European Dynamics Luxembourg Sa LU 2. Que Technologies Kefalaiouchiki Etaireia EL 3. Euphyia Tech Ltd CY 4. Symvoulio Aeiforon Ktirion Elladas EL 5. Epb Center B.V. NL 6. Enersave Capital Sarl LU 7. Verband Deutscher Maschinen- Und Anlagenbau DE 8. European Green Cities Aps DK 9. Federation Europeenne Des Services En Efficacite E BE
Project Objectives	Inspired by the deep renovation wave in Europe towards the enhancement of the EU building stock in terms of sustainable indices and energy efficiency, openBEP4EU will follow a standards-based implementation approach that facilitates the collaborative development of interconnected components promoting improved data accessibility, reliability, consistency, and impact of Energy Performance Certificates (EPCs). To this end, openBEP4EU aims to deliver an open-source, universal software implementation of the ISO 52000 standards family, namely the EU Kernel EPC Engine, to facilitate simultaneous and coordinated adoption of an innovative EPC calculation approach among all the Member States. This initiative aims to make building performance data easily accessible to various stakeholders like financial institutions, energy service providers, and building owners, fostering the development of financial products supporting sustainable renovation projects. Core elements of openBEP4EU's activities are the creation of an EPC Support Team to drive market adoption as well as a Sustainable Design Data Hub, aligned with the overarching goals of the European Bauhaus initiative, that not only serves as a data repository but also promotes collaboration and research for sustainable architecture and design. These activities will facilitate stakeholder engagement, contribute to improved EPC reliability, accuracy, accessibility, while paving the way for EPC market uptake across the EU Member States though well promotion strategies. All data sharing within this framework adheres to the principles of the Common European Energy Data Space, prioritizing sovereign data sharing and respecting data ownership among the involved stakeholders. openBEP4EU's framework will be extensively tested and then validated in five (5) different areas in Greece, Denmark, Spain, Cyprus and Switzerland, covering different climatic zones, building typologies, and EPC schemes.
Work Packages	WP1 – Project management and coordination WP2 – Implementation, delivery and demonstration of the EU kernel for EPC asset calculation WP3 – Improving inspection procedures and innovative services WP4 – The EPC support center and value added services WP5 – Sustainability, replication and exploitation of project results
External Reference	https://www.openbep4.eu/
Role in the Project	Principal Investigator

Decodit – Research Project Fact Sheet

Title of Project	**Digitally empowering citizens to deliver the twin transition**
Project Acronym	DECODIT
Funding Program	**HORIZON-CL5-2023-D3**
Project Identifier	**HORIZON-CL5-2023-D3-03-04**
Total Budget/FRC Budget	3999388 € / 198750 €
Starting – Ending Date	06/24 – 10/27
Consortium	1. European Dynamics Luxembourg Sa LU 2. Que Technologies Kefalaiouchiki Etaireia EL 3. Frederick Research Center CY 4. Innovation Engineering Srl IT 5. Eurocorp Investment Services Sa EL 6. Hardware And Software Engineering Epe EL 7. Pragma-Iot Ae Greece 8. Aalborg Universitet DK 9. Smart Energy Europe BE 10. Inesc Tec - Instituto De Engenharia De Sistemas E Copt 11. Synergy B.V. NL 12. La Solar Energia Sociedad Cooperativa ES 13. My Energia Oner Sl ES 14. Renesco Sia LV 15. Energeiaki Koinotita Periorismenis Evthinis EL 16. Azienda Elettrica Di Massagno (Aem) Sa CH 17. Hive Power Sa CH 18. R2M Solution Spain Sl ES
Project Objectives	Navigating the labyrinth of home energy transitions poses a significant challenge for average citizens. With myriad options available, identifying the best solutions becomes overwhelming. Meanwhile, professionals face substantial costs in tailoring services due to a lack of essential household data. In light of this, the EU-funded DECODIT project aims to develop digital tools to support citizens in making informed decisions for a sustainable energy future. Specifically, DECODIT will offer personalised options through data-driven services. Natural language interfaces ensure accessibility, while innovative financing models lower barriers for investment. Pilots across diverse European countries will demonstrate DECODIT's effectiveness, shaping smart energy landscapes and fostering collaboration among market actors.
Work Packages	WP1 – Quality assurance and project management WP2 – Participatory design and co-creation activities WP3 – Digital tools for service providers WP4 – Technology enablers for data-driven service provision WP5 – Decodit demonstration, validation and impact assessment WP6 – Shaping the enablers and boundary conditions for citizen empowerment WP7 – Outreach and exploitation activities
External Reference	https://cordis.europa.eu/project/id/101160660
Role in the Project	Principal Investigator

BioInSouth – Research Project Fact Sheet

Title of Project	**Building eco-friendly bioeconomy strategies in Southern Europe**
Project Acronym	BioInSouth
Funding Program	**HORIZON-JU-CBE-2023**
Project Identifier	HORIZON-JU-CBE-2023-S-02
Total Budget/FredU Budget	2999195 € / 200000 €
Starting – Ending Date	06/24 – 05/27
Consortium	1. Spring Sustainable Processes And Resources For I IT 2. Universita Degli Studi Di Napoli Federico II IT 3. Universita' Degli Studi Di Milano-Bicocca IT 4. Fundacion Corporacion Tecnologica De Andaluces 5. Frederick University Fu CY 6. Asociacion De Investigacion De Industrias Carnicaes 7. Apbio - Associação Portuguesa De Bioindústria PT 8. Bioeast Hub Cr, Z. U. CZ 9. Pno Innovation Single Member Private Company Greece 10. Innovation Engineering Srl IT 11. Ethniko Kai Kapodistriako Panepistimio Athinon EL 12. Gospodarska Zbornica Slovenije SI 13. Agri Sud Ouest Innovation FR 14. Acondicionamiento Tarrasense Associacion ES 15. Turkiye Bilimsel Ve Teknolojik Arastirma Kurumu TR
Project Objectives	The southern Mediterranean European regions struggle to integrate ecological limits into their bioeconomy strategies. This challenge is compounded by varying levels of regional development, particularly in Cyprus, Slovenia, Greece and Portugal. The need for sustainable practices is critical as these areas strive to balance economic growth with environmental preservation. Without effective frameworks, regional competitiveness and innovation capacity lag behind. The EU-funded BioINSouth project aims to address this by developing guidelines and digital tools that are safe and sustainable. By establishing regional hubs and uniting stakeholders, BioINSouth will foster sustainable bio-based activities and contribute to the EU's fair and green transition. This methodology will be demonstrated in eight regions, promoting broader adoption post-project.
Work Packages	WP1 – Project management WP2 – Development of the BioINSouth multi-actor approach framework WP3 – Development of regional hubs WP4 – Development of an environmental impact assessment and circularity monitoring system WP5 – Validation of methodologies and tools developed in WP4 WP6 – Guidelines to support policymakers to incorporate sustainability and circularity considerations into regional bioeconomy strategies and roadmaps WP7 – Communication, dissemination and exploitation
External Reference	https://cordis.europa.eu/project/id/101156363
Role in the Project	Principal Investigator

ClimRES – Research Project Fact Sheet

Title of Project	**Climate-resilient building solutions for the Mediterranean**
Project Acronym	ClimRES
Funding Program	**HORIZON-CL5-2023-D4-02**
Project Identifier	HORIZON-CL5-2023-D4-02-02
Total Budget/FRC Budget	5827262 € / 302500 €
Starting – Ending Date	06/24 – 05/27
Consortium	1. Singular Logic EL 2. Erevnitiko panepistimiako instituto systimaton EL 3. Fundacion CARTIF ES 4. Frederick Research Center CY 5. European centre for medium-range weather fore UK 6. Centre internacional de metodes numerics en eng ES 7. Universita politecnica delle Marche IT 8. Mobics telecommunication and consulting servic EL 9. RINA consulting spa IT 10. Demo consultants NL 11. Nazka mapps bvba BE 12. Imzi-institut za modro-zeleno infrastrukturo SI 13. Takis g. Zarifopoulos s.a. EL 14. ICLEI european secretariat GmbH DE 15. Institut Municipal d Urbanisme ES 16. Asociacion Ecoserveis ES 17. Diktyo poleon gia ti viosimi anaptyxi kai kykiliki oik greece EL 18. Pich-aguilera arquitectos sl ES 19. Linkcity Ile de France FR 20. Univerza v Ljubljani SI 21. Comune di Senigallia IT
Project Objectives	The broader Mediterranean region, in particular, demonstrates the devastating consequences of climate-related disruptions. To promote leadership in climate-resilient buildings, the EU-funded CLIMRES project aims to identify and categorise building vulnerabilities, estimate their impact on the urban environment, and develop methodologies and tools for assessment and increased resilience. It includes creating an inventory of measures for building materials and designs to mitigate climate risks, as well as a decision support toolkit for strategic, tactical, and operational decision-making. These solutions will be tested in large-scale pilots in Greece, Italy, Slovenia, and Spain to assess their effectiveness against heatwaves, extreme flooding, fires, and earthquakes, with a multi-hazard replication pilot that will be conducted in France.
Work Packages	WP1 – Project management WP2 – Stakeholders requirements, co-creation and solutions specifications: CLIMRES context and framing WP3 – Vulnerability analysis and impact assessment: CLIMRES assessment tools WP4 – Building resilience: CLIMRES resilience solutions WP5 – CLIMRES pilot demonstration and evaluation WP6 – Replication, capacity building, policy support and standardization: CLIMRES replication and policy making WP7 – Dissemination, exploitation and communication
External Reference	https://cordis.europa.eu/project/id/101147777
Role in the Project	Principal Investigator

AccesS – Research Project Fact Sheet

Title of Project	**Enhancing Accessibility and Sustainability in Smart Cities and Smart Buildings: The Universal Accessibility Suite Initiative**
Project Acronym	AccesS
Funding Program	**HORIZON-CL5-2023-D4-02**
Project Identifier	**HORIZON-CL5-2023-D4-02-05**
Total Budget/FRC Budget	4849551 € / 302727 €
Starting – Ending Date	06/2024 – 05/2027
Consortium	1. CERTH EL 2. IsZEB EL 3. Frederick Research Center CY 4. FORTH EL 5. Energy@work IT 6. Que technologies EL 7. DEMO Consultants bv NL 8. Uni systems EL 9. European Union of the Deaf BE 10. Lama Societa Cooperativa IT 11. Asociacion Empresarial de Investigacion Centro ES 12. Municipality of Gabrovo BG 13. Musey na Humora i Satirata BG 14. My Energia Oner SL ES 15. Ayuntamiento de Murcia ES 16. Comune di Bari IT 17. Vaimoo s.r.l. IT 18. Comune di Firenze IT 19. ASRO RO 20. Hive Power sa CH 21. Azienda Elettrica di Massagno (AEM) sa CH 22. Bruco Huisvesting Adviseurs Bv NL
Project Objectives	In today's urban landscape, accessibility remains a critical issue, hindering the full participation of diverse communities in smart cities. While infrastructure upgrades are vital in making spaces more accessible, there is tremendous potential in leveraging technology to further empower these communities. In this context, the EU-funded AccesS project aims to revolutionise urban accessibility by leveraging AI, building information modelling (BIM) and geographic information system (GIS) technologies. AccesS seeks to create barrier-free environments, optimise energy use and ensure inclusive design across smart buildings and cities. This sets a new standard for accessibility and sustainability in urban development. Spanning cultural heritage sites, care facilities and public services across five European cities, AccesS embodies a collaborative effort involving 22 partners from 9 countries.
Work Packages	WP1 – Design and integration of the AccesS framework: setting the foundations for a smart and accessible built environment WP2 – Social inclusion and user-centered design approach WP3 – Towards a common evaluation and certification framework for accessibility and inclusiveness WP4 – Digitalization and sustainable design for the built environment WP5 – Virtual user modeling and assistive technologies for accessibility WP6 – Intelligent systems for adaptive building and mobility management WP7 – Advancing accessibility and sustainable urban environments WP8 – Development and harmonization of accessibility assessment scheme WP9 – Pilots preparation and set up WP10–13 – Demonstration and impact assessment: cultural heritage buildings, people care facilities and public services buildings WP14–15 – Communication, dissemination and exploitation WP16–17 – Project management and coordination
External Reference	https://cordis.europa.eu/project/id/101147722
Role in the Project	Principal Investigator

Bio4MAR – Research Project Fact Sheet

Title of Project	**Development of a waste biomass conversion system that incorporates liquefaction and pyrolysis technologies for producing biochemicals for the maritime sector**
Project Acronym	BIO4MAR
Funding Program	CO-DEVELOP
Project Identifier	CODEVELOP-AG-SH-HE/0823
Total Budget/FRC Budget	599980 € / 75700 €
Starting – Ending Date	04/2024 – 07/2026
Consortium	1. Ecorbio Ltd CY 2. Cyprus University Of Technology CY 3. Frederick Research Center CY 4. Cy.R.I.C Cyprus Research And Innovation Center Ltd CY
Project Objectives	**BIO4MAR** is an industry–research driven R&D project designed to foster effective collaboration between enterprises and research organisations through the co-development and implementation of innovative, bio-based solutions for maritime polymer applications. The project brings together a highly competent and complementary consortium consisting of two SMEs (Ecorbio and CyRIC), two local academic organisations (Cyprus University of Technology and Frederick Research Center), and two foreign research organisations (WKI and CELL). This balanced mix of scientific excellence, technical expertise, and industrial know-how provides a strong foundation for high-quality knowledge exchange and successful project implementation, supported by prior collaboration experience and Knowledge Transfer Office mechanisms. BIO4MAR contributes to strengthening regional economic competitiveness and improving quality of life in Cyprus by enabling a transition away from imported, less sustainable chemicals towards circular, bio-based alternatives. The project benefits from strong stakeholder support, including access to Cyprus' shipping and maritime sectors through the Cyprus Employers Association. Leveraging shared infrastructures—such as accredited laboratories, prototyping facilities, and lifecycle assessment tools—BIO4MAR ensures effective dissemination, exploitation, and long-term impact.
Work Packages	WP1 – Project management WP2 – Dissemination and exploitation activities WP3 – Defining the requirements and designing the system WP4 – Integration, testing and performance assessment WP5 – Environmental impact assessment and life cycle analyses WP6 – Demonstration of the production system and the produced BP and PBO
External Reference	
Role in the Project	Principal Investigator

SmartBEAR – Research Project Fact Sheet

Title of Project	**Visualizing SRI Upgrades in VR environment and BIM Integration**
Project Acronym	Smart BEAR
Funding Program	Single Market Programme (SMP)
Project Identifier	SMP-COSME-2021-CLUSTER-01
Total Budget/EUT Budget	50 000 €
Starting – Ending Date	03/2024 – 12/2024
Consortium	Euphyia Tech Ltd
Project Objectives	The construction industry is undergoing a paradigm shift, with technology playing an increasingly pivotal role. Yet, challenges such as design complexity and communication bottlenecks persist. The Smart BEAR project addresses these issues head-on by combining innovative technologies. The Smart BEAR project aims to create a cutting-edge platform that facilitates the visualization of Smart Readiness Indicators (SRI) potential upgrades within a Virtual Reality (VR) environment and seamlessly integrates this vital information into the Building Information Modeling (BIM) environment. During its Alpha testing phase, the project focuses on developing both the backend and frontend components of the platform. The backend will handle data integration, analysis, and generation of SRI potential upgrades, ensuring that this information is accurate. The frontend, on the other hand, will provide users with an immersive VR experience, allowing them to visualize these upgrades in a dynamic and interactive environment. The integration of SRI visualization within a VR environment is anticipated to be a game-changer. Stakeholders will have the ability to explore and understand the potential upgrades with unparalleled clarity, fostering better decisionmaking and collaboration. Furthermore, this information will seamlessly flow into the BIM environment, enhancing the model's intelligence and facilitating informed choices throughout the building's lifecycle. As the Smart BEAR project advances towards TRL 4, it represents a critical step in harnessing the full potential of technology to improve construction and building efficiency. By combining SRI visualization in VR with BIM integration, this initiative aims to create a smarter, more efficient, and sustainable built environment, setting new standards for the industry.
Work Packages	WP1 – Regulatory analysis and integration framework for Smart BEAR WP2 – Backend development of the Smart BEAR digital platform WP3 – Frontend development and user interface design of Smart BEAR WP4 – Demonstration and validation of the Smart BEAR solution WP5 – Project management and milestone monitoring WP6 – Dissemination, communication and stakeholder engagement
External Reference	https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-details/43252476/101074311
Role in the Project	Principal Investigator

EU Conexus Enables - Research Project Fact Sheet

Title of Project	**EU-CONEXUS ENABLES - Promoting excellence through innovative ecosystems**
Project Acronym	EU Conexus Enables
Funding Program	HORIZON-WIDERA-2023
Project Identifier	HORIZON-WIDERA-2023-ACCESS-03-01
Total Budget/FredU Budget	€4 966 093 / €659 250
Starting – Ending Date	02/2024-01/2029
Consortium	1. La Rochelle Universite (FR) 2. Agricultural University of Athens (GR) 3. Fundacion Universidad Catolica de Valencia San Vicente Martir (ES) 4. Klaipedos Universitas (LT) 5. Sveucliste U Zadru (HR) 6. UCTB Technical University of Civil Engineering Bucharest (RO) 7. South East Technological University (IR) 8. University Rostock (DE) 9. Frederick University (CY) 10. Odeskiy Nacionalniy Universitet Imeni I.i. Mechnikova (UA)
Project Objectives	The concept of EU-CONEXUS ENABLES is built upon the strong foundation of our Alliance within the Joint Research Area as an excellent network for co-operation between the partners with several points of gravity.The project is devoted to promote scientific and academic cooperation between the members of the alliance in the same time with an effective implementation of ERA policy agenda main objectives. Using as thematical background 4 major challenges, the project is dedicated to achieve specific objectives that are aligned with mostly all of the ERA goals. The scope of the EU-CONEXUS ENABLES project is to create the framework of an innovative ecosystem promoting sustainable synergies between the alliance and its partners such as the fellow municipalities, other stakeholders, in order to develop long term solutions for Smart Urban Coastal Sustainability challenges, based on the Digital Twin approach. The project is focused on one hand to raise excellence in value creation through deeper and geographically inclusive cooperation, and on the other hand to the societal based topics and needs coming from our supporting ecosystems of stakeholders. The project will also offer training and capacity-building programs for researchers, promoting a culture of collaboration, innovation, and continuous improvement. Through hackathons, capacity building, and knowledge exchange activities, the project will engage experts, researchers, and stakeholders in the development and implementation of innovative Digital Twin solutions.
Work Packages	WP1 Management 1 WP2 Framework for knowledge transfer towards widening partners with focus on Digital Twins WP3 Research Career Development support activities - upskilling and reinforcing academic expertise transfer towards widening countries WP4 Dissemination, Communication and Outreach 1 WP5 Management 2 WP6 Stakeholders exchanges – Bridging the gap between Cities and Universities with focus on the widening partners WP7 Joint research activities WP8 Dissemination, Communication and Outreach 2 WP9 Management 3 WP10 Research integrity and gender equality consolidation WP11 Dissemination, Communication, and Outreach 3
External Reference	https://cordis.europa.eu/project/id/101136822 https://www.eu-conexus.eu/en/projects/eu-conexus-enables/
Role in the Project	Principal Investigator

CapsuleX - Research Project Fact Sheet

Title of Project	**Innovative skateboard decks made from fully recycled advanced polymer material and a tailor-made production process, ensuring circular economy compliance**
Project Acronym	CapsuleX
Funding Program	RESTART 2016 – 2020 Programmes
Project Identifier	RESEARCH IN ENTERPRISES 2023
Total Budget/FRC Budget	€268254 / €40530
Starting – Ending Date	01/2024 – 12/2025
Consortium	1. Capsule Skateboards Ltd 2. Frederick Research Center 3. CyRIC Ltd
Project Objectives	Skateboarding is a conservative sport in terms of technological advancements, the materials used and the manufacturing processes. Conventional plywood has been the main source of the upstream supply chain for feeding manufacturing companies. Not only this, but the market has "enforced" the global skateboarding communities to believe that nothing beats a classic 7-ply maple deck in terms of pop and durability. During the last few years Capsule Skateboards has managed to bring an end to these urban myths, by introducing a new generation skateboard made from advanced polymer and composite materials and thermoforming processes, incorporating unique and advanced performance and durability features, including durability, zero delamination, impact absorbing, and customizable according to user requirements. Our initial manufacturing facility has also expanded to reach demand scales. This has created increased raw fabric material waste that is left behind after the fabric material is cut to shape. As of this, Capsule (HO) has developed, tested, and validated a prototype deck made from 100% recyclable fabric material waste, and its process for production, that could be used to manufacture cruisers and kid skateboards. The process involves a combination of transportation robots, manipulators, automated processes, and moulds. The key objectives of the CapsuleX project are (a) to advance the developed TRL4 prototype decks and their production process to TRL7, (b) to assess the quality and to demonstrate the 100% recycled prototype decks in real environment, and (c) to establish a compound dissemination and exploitation plan. These will allow Capsule to move closer to becoming the first circular-economy compliant skateboard deck manufacturer. The project is jointly supported by Capsule Skateboards Ltd (HO), FRC (PA1) and CyRIC Ltd (PA2), that exploit their established collaborations, combined with accredited academic, industrial, scientific, technical, and business competencies.
Work Packages	WP1 Project Management WP2 Dissemination and Communication Activities WP3 Requirements of the recycled material properties and production process WP4 Requirements of the recycled material properties and production process WP5 Environmental Assessment and Circularity WP6 Large-scale demonstration of the CapsuleX fully recycled decks
External Reference	https://capsuleskateboards.com/
Role in the Project	Principal Investigator

StepWise – Research Project Fact Sheet

Title of Project	**A tailored and dynamic capacity building programme to transform local and regional authorities into autonomous early adopters of digitised, integrated, and ambitious Clean Energy Transition plans**
Project Acronym	StepWise
Funding Program	LIFE Clean Energy Transition (CET)
Project Identifier	LIFE-2022-CET-LOCAL
Total Budget/FredU Budget	€ 1 498 834 / €145 360
Starting – Ending Date	12/2023-05/2026
Consortium	1. IES RD (IR) 2. R2M Solutions Srl (IT) 3. Sinloc Sistema Iniziative Locali Spa (IT) 4. Energy Agency Plovdiv Association (BG) 5. Cyprus Energy Agency (CY) 6. Frederick University (CY) 7. CERES (ES) 8. Traza Consultoria SLL (ES)
Project Objectives	Step-WISE acknowledges the pivotal role that Local and Regional Authorities(LRAs) play in reducing energy consumption and GHG emissions through the development of local Clean Energy Transition Plans(CETPs). Step-WISE recognizes that there is no single solution or easily transferrable practice that can be adopted universally to develop these plans. The multiplicity of local geographical, political and social contexts adds more variations at local governance level as stakeholders have roles, activities and skills that differ based on the characteristics of the area they administer. Step-WISE builds on a thorough understanding of this "local DNA" and embeds this into the decision-making process of LRAs as a first step towards a systemic, future-appropriate CETP development. Step-WISE provides LRAs with an inclusive, adaptive and effective support package leveraging i) Use Case(UC) based learning streams, which establish local partnerships to understand how to engage stakeholders and their contexts ii) a unique intuitive digital toolkit enabling LRAs to create their own, cross-sectoral digitized and dynamic model, with energy and socio-economic and regulatory aspects to make CETP development, implementation and monitoring easier, faster and more accurate. A 2-wave cascade Capacity Building Programme(CBP) will empower LRAs across 4 UCs(Bulgaria, Spain, Cyprus and Mediterranean Islands). This will target local governance and consider challenges of different areas, and stakeholder engagement.
Work Packages	Work Package 1: Project management and coordination Work Package 2: Step-WISE framework: Skills Gap Analysis and Use Cases definition Work Package 3: Capacity building programme planning and preparation, including Step-WISE toolkit development Work Package 4: Stakeholders engagement and CBP first wave implementation Work Package 5: Second wave implementation for capacity building per each Use Case Work Package 6: Sustainability, replication, and exploitation of project results
External Reference	https://webgate.ec.europa.eu/life/publicWebsite/project/LIFE22-CET-Step-WISE-101120859/a-tailored-and-dynamic-capacity-building-programme-to-transform-local-and-regional-authorities-into-autonomous-early-adopters-of-digitised-integrated-and-ambitious-clean-energy-transition-plans
Role in the Project	Principal Investigator

UpRun - Research Project Fact Sheet

Title of Project	**Urban Planning for Social Resilience in Urban Neighbourhoods. Transformative Change through Civic Engagement**
Project Acronym	UpRun
Funding Program	Erasmus +
Project Identifier	KA220-HED - Cooperation partnerships in higher education
Total Budget/FredU Budget	€400 000 / €43 500
Starting – Ending Date	11/2023 – 04/2026
Consortium	1. Technische Universität Dortmund (DE) 2. Universiteti Polis (AL) 3. Universität Basel (SW) 4. Frederick University (CY) 5. Kaunas University of Technology (LT) 6. University of Mitrovica (KO) 7. National Technical University of Athens (GR) 8. Demo Consultants BV (NL) 9. Cyril and Methodius University in Skpoje (MKD)
Project Objectives	The aim of UPRUN is to provide future planners and other built environment professionals with a more sophisticated understanding of neighbourhood resilience. For this, UPRUN will identify strategies to strengthen social participation, resilience and sustainability in urban communities and neighbourhoods. The findings are used to develop hybrid teaching modules enabling students to make urban neighbourhoods more resilient via planning, collective action, innovation and learning. UPRUN will establish a multi-lingual digital knowledge and learning platform providing open-access to a database with educational material and relevant case studies. Based on that, a 12-week course, held within a HE program, is developed. This concerns the compilation of a self-contained course, including e-learning components using digital participatory and learning tools. A handbook will explain the intentions and use of the teaching module. The module is tested and evaluated in real courses. Beyond academics directly engaged in the project, we are convinced that UPRUN will be of benefit to other teachers, but also students. Teacher will have the benefit by using the data base, the interactive platform and e-learning components for designing their 'own' courses; all tools and materials are designed in such a way that self-contained teaching formats/units can be used by external actors without further information. This will also allow students to engage interactively with the platform
Work Packages	WP1 Project Management WP2 Online Survey-Consultation Tool WP3 Case Study Analysis WP4 Module Templates WP5 Evaluation
External Reference	
Role in the Project	Principal Investigator

Smarter EPC - Research Project Fact Sheet

Title of Project	**Smarter Energy Performance Certificates; Integrating smart readiness aspects into buildings energy certification and tools for market up-take**	
Project Acronym	Smarter EPC	
Funding Program	LIFE Clean Energy Transition (CET)	
Project Identifier	LIFE-2022-CET-BUILDPERFORM	
Total Budget/EUT Budget	1883107 € / 248882 €	
Starting – Ending Date	10/2023-09/2026	
Consortium	1. R2M Solution (FR) 2. CERTH (GR) 3. EPB Center (BE) 4. Euphyia Tech LTd (CY) 5. R2M Solution Srl (IT)	6. Demo Consultants BV (NL) 7. CRIF Spa (IT) 8. Caverion Suomi Oy (FI) 9. Opsis Research Srl (RO)
Project Objectives	Recognizing EU projects' significant achievements since 2018 regarding the development of novel tools for EPC and SRI, actors representing 7 relevant research projects join forces to create a single platform which will provide open access to numerous EPC and SRI tools to enable their market up-take. Smarter EPC aims to develop and deliver an open platform which will include a total of 7 different tools for issuing EPCs and SRI, with the aim of bringing stakeholders closer to recently developed or to be developed tools by research programs of the NextGenEPC network as well as the 2021-CET-SMARTREADY Life call. The Smarter EPC platform will allow full access to the EPC tools developed under D2EPC, SmartLivingEPC and UCERT, as well as to the SRI tools to be delivered under Smart^2, easySRI, SRI2Market and UCERT. The platform will enable the smart introduction of building related data, as well as the selection of the tool that will be used to issue EPC and SRI. At the same time, through the platform, the issue of common EPC and SRI certificates will be attempted, through the development of visual solution combining the two certificates. Smarter EPC will also implement other actions to further promote and harmonize the two buildings assessment schemes. The project envisages the development of common building inspection procedures for the export of EPC and SRI certificates through the adaptation of existing European standards, as well as common training programs for the training and certification of auditors for certification of the two schemes through parallel procedures. Smarter EPC places particular emphasis to the support of the policies adopted at this stage both for the promotion of SRI, such as the support of the SRI platform and the national SRI test committees, as well as actions to support the goal of certifying mandatory SRI assessment for buildings over 290 kW by 2026.	
Work Packages	WP1 Project Management WP2 Defining and addressing EPC and SRI market uptake barriers WP3 Development of Smarter EPC Platform towards EPC and SRI uptake WP4 Demonstrating the Smarter EPC: Making the instrument work WP5 Tools and Services for faster EPC and SRI uptake WP6 Sustainability, replication, and exploitation of project results	
External References	https://webgate.ec.europa.eu/life/publicWebsite/project/LIFE22-CET-Smarter-EPC-101121034/smarter-energy-performance-certificates-integrating-smart-readiness-aspects-into-buildings-energy-certification-and-tools-for-market-up-take	
Role in the Project	Scientific and Technical Manager	

ERA4CH - Research Project Fact Sheet

Title of Project	**Earthquake Risk platform for European cities Cultural Heritage protection - ongoing**
Project Acronym	ERA4CH
Funding Program	MSCA Staff Exchanges 2021
Project Identifier	HORIZON-TMA-MSCA-SE
Total Budget/EUT Budget	€ 791200 / € 101 200
Starting – Ending Date	01/2023-12/2026
Consortium	1. Alma Sistemi Srl (IT) 2. Politecnico Di Milano (IT) 3. Polytechneio Kritis (GR) 4. Frederick University (CY) 5. Geomatics (Cyprus) Limited (CY) 6. Comune Di Narni (IT) 7. Dimos Chania (GR) 8. Quantum Innovation I.K.E. (GR) 9. Euphyia Tech Ltd (CY) 10. Strovolos Municipality (GR)
Project Objectives	Disaster prevention is essential to save historical monuments. The protection of people and cultural heritage from natural disasters requires an effective policy response. However, effective prevention hinges on reliable information about the risks. This is essential for the design of prevention measures. In this context, the MSCA-funded ERA4CH project will develop innovative tools providing monitoring and preventive intervention in areas at serious risk. It will combine AI, structural stability models, advanced remote sensing techniques, image processing, geotechnics and cadastral data sets in a geographic information system, or GIS, application. Tests will be carried out in Greece (Chania), Italy (Narni) and Cyprus (Strovolos).
Work Packages	WP1 Analysis of methods and data WP2 S/W Applications WP3 Platform development WP4 Demonstration WP5 Dissemination, Communication and Transfer Of Knowledge WP6 Project Office & Exploitation
External Reference	https://cordis.europa.eu/project/id/101086280
Role in the Project	Principal Investigator

EU Conexus Plus - Research Project Fact Sheet

Title of Project	**A significant step forward for the European University for Smart Urban Coastal Sustainability**
Project Acronym	EU Conexus Plus
Funding Program	ERASMUS-LS
Project Identifier	ERASMUS-EDU-2022-EUR-UNIV
Total Budget/FredU Budget	€ 14 399 968 / € 1 391 554
Starting – Ending Date	11/2022-10/2026
Consortium	1. La Rochelle Universite (FR) 2. Agricultural University of Athens (GR) 3. Fundacion Universidad Catolica de Valencia San Vicente Martir (ES) 4. Klaipedos Universitas (LT) 5. Sveucliste U Zadru (HR) 6. UCTB Technical University of Civil Engineering Bucharest (RO) 7. South East Technological University (IR) 8. University Rostock (DE) 9. Frederick University (CY) 10. EU Conexus (BE)
Project Objectives	EU-CONEXUS Plus is mainstreaming, deepening and expanding the European University for Smart Urban Coastal Sustainability EU-CONEXUS. Building on established strategic cooperation structures, joint activities and procedures EU-CONEXUS Plus introduces three former associated partners as full members, creates a legal entity for the implementation of joint actions, continues the set-up of a joint infrastructures and stabilises the scope of cooperation chosen around the thematic focus "Smart Urban Coastal Sustainability" (SmUCS) while covering all missions of a university: education, research, innovation and service to society. A special focus is laid on the empowerment of students' self-governance and their initiatives. Regarding education, joint course programmes on SmUCS on all levels, micro-credentials to broaden flexibility, personalisation and LLL aspects and special modules aiming at attracting BSc students to research are planned. Training on pedagogical methodologies and tools is intensified. Support for the development of study programmes proposed by the teaching community will be centralised. For research, the Joint Research Area is further supported by enlarged mobility programmes, networking events and the introduction of scientific management staff promoting the linkage of research activities on SmUCS. Regarding innovation, a support service is established around knowledge and technology transfer promoting entrepreneurial mindsets and creativity among staff and students. The already established Career network widens its scope of action by offering trainings on job readiness and facilitating work-based experiences.
Work Packages	WP 1: Alliance Management, Coordination and Support WP 2: Strengthening Complementarity of Bachelor Studies on SmUCS Topics WP 3: Joint SmUCS Master programme development and micro-credential development WP 4: EU-CONEXUS PhD Level Joint Actions WP 5: EU-CONEXUS Teaching Academy WP 6: EU-CONEXUS Office for Development of Study Offers WP 7: Research to Education WP 8: Research Networking and Mobility WP 9: Support Joint Research Structures WP 10: Project Development Support for Education, Research and Innovation WP 11: Transfer of Knowledge and Technologies WP 12: Supporting Student Engagement WP 13: EU-CONEXUS Career Network WP 14: EU-CONEXUS Stakeholder Academy WP 15: EU-CONEXUS University to School Programme **WP 16: Green Campus** WP 17: Community Engagement through Arts and Culture WP 18: Communication, Impact and Dissemination
External Reference	https://www.eu-conexus.eu/en/
Role in the Project	Principal Investigator

easySRI - Research Project Fact Sheet

Title of Project	**Improving and demonstrating the potential of SRI - ongoing**
Project Acronym	easySRI
Funding Program	LIFE Clean Energy Transition (CET)
Project Identifier	LIFE-2021-CET-SMARTREADY
Total Budget/FredU Budget	€2104562 / €190995
Starting – Ending Date	11/2022-09/2025
Consortium	1. CERTH (GR) 2. Frederick University (CY) 3. Energy@Work Societa' Cooperativa A R.L. (IT) 4. Sgs Tecnos Sa (ES) 5. Sera Global Gmbh (DE) 6. Centro Di Ricerche Europeo Di Tecnologie Design E Materiali (IT) 7. Waide Strategic Efficiency Europe Limited (IE) 8. Demo Consultants BV (NL) 9. Austrian Standards International (AT) 10. Centre for Renewable Energy Sources (GR)
Project Objectives	**General:** easySRI aims to enable a smooth and extendable web platform that offers services for the automated calculation of the SRI according to the Final report on the technical support to the development of a smart readiness indicator for buildings accomplished under the authority of the European Commission DG Energy ENER that will act as a basis for the effective implementation of the SRI and allow further testing at the Member State level.
Work Packages	WP1 Project Management & Coordination WP2 easySRI Specifications and Design WP3 Development of the implementation framework of easySRI WP4 easySRI Services and System WP5 Demonstration and Impact Assessment WP6 Untapping the potential of smart technologies WP7 Sustainability, replication and exploitation of project results
External Reference	https://webgate.ec.europa.eu/life/publicWebsite/project/details/101077169
Role in the Project	Principal Investigator

Smart² - Research Project Fact Sheet

Title of Project	**Smart Tools for Smart Buildings: Enhancing the intelligence of buildings in Europe - ongoing**	
Project Acronym	Smart²	
Funding Program	LIFE Clean Energy Transition (CET)	
Project Identifier	LIFE-2021-CET-SMARTREADY	
Total Budget/EUT Budget	2047124 € / 273920 €	
Starting – Ending Date	10/2022-09/2025	
Consortium	1. CyRIC Ltd (CY) 2. R2M Solutions SRL (IT) 3. REHVA (BE) 4. IsZEB (GR) 5. Asociatia De Standardizare Din Romania (RO)	6. Cleopa GmbH (DE) 7. Arcadis Italia SRL (IT) 8. AI BrainBox EU (IE) 9. Euphyia Tech Ltd (CY) 10. Fondatsiya Tsentar Za Energiyna Efektivnost - Enefekt (BG)
Project Objectives	The project Smart Tools for Smart Buildings: Enhancing the intelligence of buildings in Europe (Smart²), aims to develop and deliver the appropriate tools and applications, which will enable the promotion and establishment of intelligence assessment of buildings in Europe, through buildings Smart Readiness Indicator (SRI) scheme. Smart² aspires to deliver a cloud based open platform for assessing the intelligence of buildings, tailored for building designers, facility managers and building users. Smart Square tool will be available in all 24 EU official languages, considering as well the specificities of the Member States, with a view to maximize synergies with other EU initiatives. Within Smart², the Rate of Return of smart readiness improvements of buildings will be identified, on the grounds of existing CEN standards, enabling in this way the definition of smartness cost optimal building upgrades, as well as laying the grounds for the development and establishment of cost optimal SRI minimum requirements for new buildings. As part of the project, an SRI audit process will also be developed, with related protocols and procedures, with the aim to act as the forerunner of a standardized procedure. Smart² will also enable the smartness assessment of buildings with the use of real time data, based on the in-use assessment method, focusing on interoperability gaps and cybersecurity aspects.	
Work Packages	WP1 Collecting the information for bridging the gap between SRI and EU citizens WP2 Rolling out ICT and smart ready technologies for Smarter SRIs WP3 Design and development of Smart² platform WP4 Combining energy efficiency with smartness upgrade: The SRI Audit Procedure WP5 Untapping the EU market uptake of the SRI WP6 Sustainability, replication, and exploitation of project results WP7 Project Management	
External References	https://webgate.ec.europa.eu/life/publicWebsite/project/LIFE21-CET-SMARTREADY-SMART-SQUARE-101077241/smart-tools-for-smart-buildings-enhancing-the-intelligence-of-buildings-in-europe https://www.smartsquare-project.eu	
Role in the Project	Scientific and Technical Manager	

SmartWins - Research Project Fact Sheet

Title of Project	**Boosting Research for a Smart and Carbon Neutral Built Environment with Digital Twins - ongoing**
Project Acronym	SmartWins
Funding Program	Horizon Europe
Project Identifier	HORIZON-WIDERA-2021-ACCESS-03-01
Total Budget/KTU Budget	1499974 € / 571875 €
Starting – Ending Date	10/2022-09/2025
Consortium	1. Kaunas University of Technology – Coordinator (LT) 2. Politecnico di Milano (IT) 3. CERTH (GR) 4. Contecht GmbH (DE) 5. Innotrope SAS (FR)
Project Objectives	The overall objective of the project "Boosting Research for a Smart and Carbon Neutral Built Environment with Digital Twins – SmartWins" is to build the capacities for the Kaunas University of Technology in Lithuania, through its "Sustainable Energy in the Built Environment" Research Group (SEBERG) within the Faculty of Civil Engineering and Architecture to conduct high-quality research on the topic of next generation digital twins, applied for allowing the transition to a smart, sustainable, resilient and carbon neutral built environment. The concept of the SmartWins project is to form a network between KTU and leading institutions in the field of energy and sustainability assessment of buildings with the use of Industry 4.0 practices related research and innovation management, for know-how transfer and development of a long-term research collaboration. KTU will twin with the Politecnico di Milano University (PoliMi, Italy), the Centre for Research and Technology, Hellas (CERTH, Greece), a spin-off of the Technical University of Berlin, Contecht GmbH (CON, Germany), and Innotrope (France), aiming to develop its excellence and international reputation in the field, to both cover fundamental research aspects, as well as to further develop its skills, practices and structures to conduct top-notch research.
Work Packages	WP1 Smart technologies for smart buildings: Digitisation, IoT and Indoor Environment Quality WP2 Research competence building. Research management and administration capacity building WP3 Linkages with businesses, citizen engagement and policy making WP4 Enhancing and enriching the educational activities of KTU WP5 Dissemination, exploitation, and communication WP6 Project management
External References	https://cordis.europa.eu/project/id/101078997 https://ieeexplore.ieee.org/document/9922513
Role in the Project	Coordinator

SmartLivingEPC - Research Project Fact Sheet

Title of Project	**Advanced Energy Performance Assessment towards Smart Living in Building and District Level - ongoing**
Project Acronym	SmartLivingEPC
Funding Program	Horizon Europe
Project Identifier	HORIZON-CL5-2021-D4-01
Total Budget/FRC Budget	4100534 € / 334000 €
Starting – Ending Date	07/2022-06/2025
Consortium	1. CERTH (GR) 2. IsZEB (GR) 3. Frederick Research Center (CY) 4. REHVA (BE) 5. AIIR (RO) 6. IES R&D (IE) 7. Demo Consultants Bv (NL) 8. R2M Energy Srl (IT) 9. Universidad De La Iglesia De Deusto Entidad Religiosa (ES) 10. Que Technologies (GR) 11. Goiener S.Coop (ES) 12. Tallinna Tehnikaülikool (EE) 13. Austrian Standards International (AT) 14. ANEC (BE) 15. Waide Strategic Efficiency Limited (IE) 16. Eunice Energy Technologies Gmbh & Co. KG (DE)
Project Objectives	**General:** SmartLivingEPC project aims to deliver a certificate which will be issued with the use of digitized tools and retrieve the necessary assessment information for the building shell and building systems from BIM literacy, including enriched energy and sustainability-related information for the, as designed and the actual performance of the building. SmartLivingEPC will provide information in relation to the operational behaviour of the building, by introducing a new rating scale, based on a weighted approach of life cycle performance aspects, building smartness assessment and information on the actual performance of the technical systems of buildings provided by technical audits.
Work Packages	WP1 Exploration for SmartLivingEPC WP2 SmartLivingEPC Framework Asset Methodology WP3 SmartLivingEPC Framework Operational Methodology WP4 Building digitalization towards Smart Living EPCs WP5 Added Value tools for Smart Living EPCs at Building and Complex Level WP6 Demonstration and Impact Assessment WP7 Communication, Dissemination & Exploitation
External References	https://cordis.europa.eu/project/id/101069639 https://www.smartlivingepc.eu/en
Role in the Project	Scientific and Technical Manager

StratEnergy - Research Project Fact Sheet

Title of Project	**Strategic Cross-Border Cooperation & Capitalisation of a Common Approach to Energy Saving in Public Buildings: STRATENERGY - completed**
Funding Body	INTEREG BALKAN V GR-CY
Project Identifier	YEEB/ΥΕ/03/2021
Total Budget /FredU Budget	3723406 € / 12400 €
Starting – Ending Date	11/2021-07/2022
Consortium	1. Energy Service of the Ministry of Energy, Commerce and Tourism, Republic of Cyprus (CY) 2. Nicosia Development Agency (CY) 3. Center of Renewable Energy Sources, Greece (GR) 4. Region of Crete (GR) 5. Municipality of Thira (GR) 6. Municipalityo of Eastern Samos (GR) 7. Municipality of Kos (GR) 8. Association of Greek Regions (GR) 9. Frederick University (Subcontractor of Energy Service of the Ministry of Energy, Commerce and Tourism) (CY)
Project Objectives	STRATENERGY seeks to consolidate constructive cooperation between the most competent national structures of Greece - Cyprus and to implement a modern, cross-border strategy for the integration of Energy Efficiency practices and technologies into public sector buildings up to 2030. The beneficiaries from the result of the project are: ▪ Public bodies and the users of the buildings where the energy-saving projects were implemented. Public bodies can also apply the common strategic and operational planning framework to integrate energy savings into their building stock - by 2030; ▪ National Agencies that elaborate Energy Strategy in Greece and Cyprus, supported in achieving national targets for 2030 energy savings in public buildings; ▪ Professional and Active Citizens Groups were familiarized with benefits, technologies and energy-saving practices in buildings
External Reference	http://www.strat-energy.eu/
Role in the project	Subcontractor (Energy Service of the Ministry of Energy, Commerce and Tourism, Republic of Cyprus)

ProEnergy - Research Project Fact Sheet

Title of Project	**Provision of Technical Support Services for the project "Promoting Energy Efficiency in Public Buildings of the Balkan Mediterranean Territory" - completed**
Project Acronym	PRO-ENERGY
Funding Program	INTERREG V-B
Project Identifier	BALKAN MED 2014 - 2020
Total Budget/ FredU Budget	1052500 € / 46100 €
Starting – Ending Date	04/2021-03/2022
Consortium	1. Region of Epirus - Regional Unit of Thesprotia (GR) 2. Development Agency of Evia SA (GR) 3. Cyprus Energy Agency (CY) 4. Department of Electrical and Mechanical Services – Ministry of Transport, Communications and Works (CY) 5. Regional Development Agency with Business Support Centre for Small and Medium-sized Enterprises (BG) 6. Ministry of Infrastructure and Energy (AL) 7. Frederick University (subcontractor of EMS) (CY)
Project Objectives	**General:** The common challenge of PRO-ENERGY is to improve energy efficiency of public buildings (municipal/provincial/regional buildings, schools, universities, health centres, hospitals, museums, sports facilities etc.). This is a common problem faced by the territories participating in the project characterized by old facilities, outdated/degraded building facades, materials & equipment (insulation, electrical appliances, cooling/heating systems etc.), low energy consciousness & awareness, lack of skilled civil servants, etc. all leading to high energy consumption & CO2 emissions. Combined with the fact that participating territories are energy import dependent it is more than evident that there is room for improvements in energy consumption & more efficient use of energy. More importantly, the exemplary role of the public sector should be promoted by increasing energy savings in public buildings. PRO-ENERGY aims to address these issues by developing & implementing a Joint Strategy & Action
Work Packages	WP1 Project Management & Coordination WP2 Project Communication & Dissemination WP3 Joint Regional Analysis, Strategy and Framework WP4 Capacity Building for Energy Managers WP5 Pilot Actions & Sustainability WP6 EUSEW Participation
External Reference	https://pro-energy-project.eu/en/front-en/
Role in the project	Subcontractor, Department of Electrical and Mechanical Services – Ministry of Transport, Communications and Works

eUMaP - Research Project Fact Sheet

Title of Project	**Development of Utilities Management Platform for the case of Quarantine and Lockdown - ongoing**
Project Acronym	eUMaP
Funding Program	H2020 MSCA-RISE
Project Identifier	Call Identifier H2020-MSCA-RISE-2020, Topic MSCA-RISE-2020
Total Budget / FredU Budget	961400 € / 128800 €
Starting – Ending Date	01/2021-06/2025
Consortium	1. Alma Sistemi Srl (IT) 2. Frederick University FU (CY) 3. Aristotle University of Thessaloniki (GR) 4. Kaunas University of Technology (LT) 5. National Interuniversity Consortium for Transport and Logistics (IT) 6. Geosystems Hellas (GR) 7. Cleopa Gmbh (DE) 8. UAB Caverion Lietuva (LT) 9. Space Systems Solutions (S3)Ltd (CY)
Project Objectives	**General:** In 2020 Europe went through a very significant economic and social crisis, namely the response to the disease of Coronavirus. Over 200 million European citizens were obliged to observe restrictive measures, in some cases lock-down measures, for governments and local authorities of the Member States of the European Union to address and limit the problem of the spread of the virus. Through this situation, many issues emerged, one of which relates to building utilities under such conditions. Specifically, in a very few days, most European economic activity shifted from the office environment to homes, leading to several problems concerning the completeness and integrity of utilities such as power outages, water shortage, and poor internet connection. The initiative entitled Development of Utilities Management Platform for Quarantine and Lockdown - eUMaP aims to implement all those activities to develop an open platform. Through this platform, local authorities will be able to plan and manage the demand and supply of building utilities in case of quarantine or lockdown. The platform will be developed through a Research and Innovation Staff Exchange (RISE) program. eUMaP platform will be based on the rationale of earth observation, and the recording of the required net-work information in open BIM platforms of five European capital cities (Rome, Berlin, Athens, Vilnius, Nicosia).
Work Packages	WP1 Program Management WP2 Communication, Dissemination and Exploitation WP3 Recording crisis features in building services WP4 Spatial planning of city service utility networks - GIS WP5 Integration of Digital Technology Monitoring and Management into eU-MaP WP6 Utilities Management under crisis conditions WP7 eUMaP Platform Development and Application WP8 Transfer of Knowledge, training and Networking
External References	https://eumap-project.eu/ https://cordis.europa.eu/project/id/101007641
Role in the project	Scientific and Technical Manager

PRECEPT - Research Project Fact Sheet

Title of Project	**A novel decentralised edge-enabled PREsCriptivE and ProacTive framework for increased energy efficiency and well-being in residential buildings- ongoing**
Project Acronym	PRECEPT
Funding Program	H2020 - Building a low-carbon, climate-resilient future (LC.)
Project Identifier	Call Identifier H2020-NMBP-ST-IND-2018-2020, Topic LC-EEB-07-2020
Total Budget/FRC Budget	7654025 € / 321000 €
Starting – Ending Date	10/2020-03/2024
Consortium	1. Watt and Volt AE (GR) 2. Centre for Research and Technology Hellas (GR) 3. Kaunas University of Technology (LT) 4. Frederick Research Center (CY) 5. Cleopa GmbH (DE) 6. Nuromedia (DE) 7. Odin Solutions SL (SP) 8. DEMO Consultants bv (NL) 9. Austrian Standards International (AT) 10. LC Innoconsult International (HU) 11. State Higher Educational Institution Prydniprovska State (UA) 12. Contecht GmbH (DE) 13. Private Construction and Assembly Enterprise (UA) 14. My Energia Oner SL (SP) 15. Politecnico di Milano (IT)
Project Objectives	**General:** PRECEPT ambitiously aims to set the grounds for the deployment and operation of proactive residential buildings. The proposed framework introduces a "plug-n-play" Pred(scr)ictive and Proactive building energy management system (PPBMS) installed locally at a building level, at the Edge-Enable Proactiveness (E EP) device. The proposed PP-BMS is self-adapted, self-learned, -managed, -monitored, -healing and -optimised, requiring no (or minimum) installation costs and no maintenance. PP-BMS transform traditional reactive buildings to proactive ones, increasing their performance (both energy efficiency and occupants' well-being), exploiting RES, storage, forecasts and energy tariffs. PRECEPT also targets developing a real-time digital representation of the intelligent, proactive residential buildings by employing 6D BIM technology. Further to that, a set of novel indicators leveraging the smart readiness rationale will be introduced to rating the Smart Proactiveness of buildings. Also, PRECEPT approach will deliver advanced data visualisations, utilising big-data and visual analytics techniques, which in conjunction with a social collaboration platform will engage stakeholders to exchange best-practices. Interaction with the grid will be supported in a secured (Hyperledger Fabric) manner through the decentralised EEP device, supporting the implementation of D/R strategies. PRECEPT framework will be demonstrated in relevant environments in 5 use cases, including 250 apartments.
Work Packages	WP1 PRECEPT Requirements, Specifications and Architecture WP2 BIM & Digital Twin Technologies WP3 PRECEPT Distribution, Modelling and Security Technologies WP4 Pred(scr)ictive and Proactive Building Management System WP5 System Integration, Demonstration & Impact Assessment WP6 Dissemination, Exploitation & Promotion WP7 Project Management
External References	https://www.precept-project.eu/ https://cordis.europa.eu/project/id/958284
Role in the Project	Principal Investigator

D^2EPC - Research Project Fact Sheet

Title of Project	**Next-generation Dynamic Digital EPCs for Enhanced Quality and User Awareness - ongoing**
Project Acronym	D^2EPC
Funding Program	H2020 - Building a low-carbon, climate resilient future (LC.)
Project Identifier	Call Identifier H2020-LC-SC3-2019, Topic LC-SC3-EE-5-2019
Total Budget/FRC Budget	2993687 € / 192500 €
Starting – Ending Date	09/2020-08/2023
Consortium	1. Centre for Research & Technology, Hellas (GR) 2. Kaunas University of Technology, (LT) 3. GeoSystems Hellas (GR) 4. Cleopa GmbH (DE) 5. SEnerCon GmbH (DE) 6. UNE - Asociación Española de Normalización (ES) 7. DEMO Consultants BV (NL) 8. SGS Tecnos, S.A. (ES) 9. Hypertech Energy Labs (GR) 10. Austrian Standards International (AT) 11. Frederick Research Center (CY) 12. Austrian Energy Agency (AT)
Project Objectives	**General:** Next-generation Dynamic Digital EPCs for enhanced quality and user awareness (D^2EPC) project aspires to deliver the next-generation EPCs framework, based on a set of novel and user-friendly, holistic and human-centric indicators, which cover significant aspects of buildings energy performance including smartness, sustainability, environmental, human comfort and financial aspects. D^2EPC will be based on Level 3 6D-BIM literacy, integrating smart meters real-time data and activities profiling into the calculation process through digital twins. The proposed scheme will provide sufficient background for the redefinition of EPC related policies, through regular benchmarking and upgrade of the reference buildings, as well as with the integration of geolocation and "polluter pay" practices into the EPC rationale. The implementation of the proposed project is also anticipated to foster the energy saving consciousness of buildings' users, through their regular information on the actual energy performance of their buildings.
Work Packages	WP1 Foundations for next generation dynamic EPCs (dEPCs): Identifying challenges, needs and opportunities WP2 Development of the Operational Framework for dEPC Schemes WP3 Building digitalisation and inverse modelling for implementing next generation dEPCs WP4 Digital Platform for Dynamic EPCs Issuance and Enabled Applications WP5 Demonstration and Impact Assessment WP6 Policy-related Implication for the enforcement of the next generation EPCs scheme WP7 Project Communication, Dissemination and Exploitation WP8 Project Management & Coordination
External References	https://cordis.europa.eu/project/id/892984 https://www.d2epc.eu/en https://doi.org/10.1002/er.8517
Role in the Project	Scientific and Technical Manager

UP Periscope - Research Project Fact Sheet

Title of Project	**Portal for hERItage buildingS integration into the COntemPorary built Environment- ongoing**
Project Acronym	UP PeriScope
Funding Program	The Research Promotion Foundation Programmes for Research, Technological Development and Innovation "Restart 2016-2020".
Project Identifier	Smart Growth, Integrated Projects
Total Budget/FRC Budget	1104501 € / 180480 €
Starting – Ending Date	12/2019-05//2023
Consortium	1. The Cyprus Institute (CY) 2. Cyprus University of Technology (CY) 3. Frederick Research Center (CY) 4. Ministry of Interior (CY) 5. Municipality of Strovolos (CY) 6. Limassol Municipality (CY) 7. NetU Consultants Ltd (CY) 8. HIT HYPERTECH INNOVATIONS LTD (CY) 9. RTD Talos Ltd (CY) 10. Bruno Kessler Foundation (IT)
Project Objectives	**General:** The project "Portal for heritage buildings integration into the contemporary built environment" (PERIsCOPE) aims to design and develop an innovative platform for the identification, classification, documentation and renovation of heritage buildings which can be exploited by a variety of stakeholders related to the conservation and retrofit activities. PERIsCOPE will enable the exploitation of state-of-the-art techniques in the scientific fields of Building Information Modelling (BIM), remote sensing, terrestrial and aerial 3D modelling techniques, and non-destructive onsite testing, pursued by the leading research and academic institutions of Cyprus in these fields. PERIsCOPE platform is targeted to specific stakeholders to impact culturally and economically the society of Cyprus, including public authorities and policy makers (Town Planning and Housing Department, Department of Antiquities, Municipalities) and professionals (archaeologists, engineers, architects and chartered surveyors).
Work Packages	WP1 Project Management WP2 Dissemination Activities WP3 Satellite and GIS Environmental Analysis WP4 Multi-scale 3D Building Reconstruction Methods WP5 Non-destructive Onsite Testing of Heritage Buildings WP6 Modelling Historical Building Sustainability Aspects WP7 Building Information Modelling for Heritage WP8 PERIsCOPE Platform and HBIM methodology WP9 PERIsCOPE Exploitation: Community Building and Business Models
External References	https://uperiscope.cyi.ac.cy/ https://doi.org/10.5755/j01.sace.29.2.29425
Role in the Project	Principal Investigator

ReCyFilm - Research Project Fact Sheet

Title of Project	**Design and manufacturing of a novel Low-Density Polyethylene (LDPE) Film for the construction industry, using recycled agricultural plastic waste (APW) - completed**
Project Acronym	ReCyFilm
Funding Program	The Research Promotion Foundation Programmes for Research, Technological Development and Innovation "Restart 2016-2020".
Project Identifier	Smart Growth, Research in Enterprises
Total Budget/ FRC Budget	199629 € / 59200 €
Starting – Ending Date	03/2019-02//2021
Consortium	1. Elysee Irrigation Ltd (CY) 2. Agricultural Research Intitute (ARI) 3. Frederick Research Center (FRC)
Project Objectives	**General:** The project "Design and manufacturing of a novel Low-Density Polyethylene (LDPE) Film for the construction industry, using recycled agricultural plastic waste (APW) aims to the design and manufacturing of an innovative, environmental friendly and economically viable Low Density Polyethylene (LDPE) film (Recy-Film) for applications in the construction industry. The main innovation and environmental aspect of the proposed product is the raw material to be used, which will be recycled agricultural plastic waste (APW), delivering a green building material which can be considered for green public procurements (GPP). The main beneficiary of the product is Elysee Irrigation Ltd, the largest manufacturer and supplier of plastic systems for agricultural, domestic and public use in Cyprus. Recy-Film will essentially replace the existing LDPE film product of Elysee, whose current production line uses virgin, fossil fuel-based materials. LDPE films are installed in buildings as vapour barriers, to reduce weed growth, and as a separating layer to accommodate differential movements. The choice of construction LDPE films was selected due to the contamination of APW with chemicals, a fact that forbids its exploitation either for potable water pipes, or for irrigation plastics. For the manufacture of the Recy-Film, a pilot recycling unit, which will be able to handle 6 tonnes of APW on a daily basis, will be installed at the industrial facilities of Elysee. The project will also investigate the supply chains of APW from the source to the recycling facilities for the design of a comprehensive collection system that will be adopted by Elysee.
Work Packages	1. WP1. Project Management 2. WP2. Dissemination Activities 3. WP3. Supply chain and collection of Agricultural Plastic Waste (APW) 4. WP4. Recy-Film Design 5. WP5. Recy-Film Manufacturing and Testing 6. WP6. Sustainability Aspects of Recy-Film
External References	https://doi.org/10.1016/j.clet.2021.100326 https://doi.org/10.1016/j.dib.2020.106622
Role in the Project	Principal Investigator

SupERB - Research Project Fact Sheet

Title of Project	**Novel integrated approach for seismic and energy upgrading of existing buildings - completed**
Project Acronym	SupERB
Funding Program	The Research Promotion Foundation Programmes for Research, Technological Development and Innovation "Restart 2016-2020".
Project Identifier	Smart Growth, Integrated Projects
Total Budget/ FRC Budget	1146921 € / 106984 €
Starting – Ending Date	12/2018-11/2021
Consortium	1. Cyprus University of Technology, Coordinator (CY) 2. University of Cyprus (CY) 3. Frederick Research Center (CY) 4. Tsircon Co. Ltd (CY) 5. Geoinvest Ltd (CY) 6. AuDeSy Ltd (CY) 7. Limassol Municipality (CY) 8. Technical Services on Construction Products, Ministry of Interior (CY) 9. Energy Service, Ministry of Energy, Commerce, Industry and Tourism (CY) 10. Cyprus Scientific and Technical Chamber ETEK (CY) 11. Department of Civil Engineering, University of Patras (GR)
Project Objectives	**General:** The objectives of the Project entitled "Novel integrated approach for **S**eismic and **E**ne**R**gy upgrading of existing **B**uildings" (SupERB) are to a) integrate innovative materials and determine techniques enabling the simultaneous upgrading of both seismic resistance and energy efficiency of existing buildings, b) evaluate these techniques by testing both small and full-scale specimens, and c) propose a holistic and novel methodology for the optimum upgrading of existing buildings for seismic resistance and energy efficiency, taking into account economic, technical, geo-location, durability and environmental factors.
Work Packages	1. WP1 Project Coordination 2. WP2 Dissemination of results 3. WP3 Investigation of mechanical and thermal properties of available materials 4. WP4 Establishment of criteria for target performance level 5. WP5 Laboratory-based design and testing of the PCM related upgrading system 6. WP6 Testing of the upgrading system for seismic and energy performance evaluation 7. WP7 Optimisation tool and upgrading methodology development 8. WP8 Application study 9. WP9 Software development and methodology guidelines
External References	https://doi.org/10.1016/j.conbuildmat.2022.129984 https://doi.org/10.1016/j.dib.2020.106599
Role in the Project	Principal Investigator

STABLE - Research Project Fact Sheet

Title of Project	**STructural stABiLity risk assessment - ongoing**
Project Acronym	STABLE
Funding Program	Marie Skłodowska-Curie Research and Innovation Staff Exchange (MC RISE)
Project Identifier	H2020-MSCA-RISE-2018
Total Budget / FredU Budget	1182200 € / 128800 €
Starting – Ending Date	11/2018-04/2023
Consortium	1. Alma Sistemi SRL (IT) 2. National Technical University of Athens - NTUA (GR) 3. Universita Degli Studi Di Roma La Sapienza (IT) 4. Geosystems Hellas IT (GR) 5. Frederick University (CY) 6. Space Systems Solutions (CY) 7. Universita Degli Studi Della Tuscia (IT) 8. Foundation for Research and Technology Hellas (GR)
Project Objectives	STABLE addresses the design and development of a Thematic Platform, combining structural stability models, damage assessment simulation tools, advanced remote sensing, in-situ monitoring technologies, geotechnics and cadastral data sets with WebGIS application for mapping and long term monitoring of Cultural Heritage (CH). This will enable effective monitoring and management of the CH to prevent, or at least reduce, catastrophic damages. STABLE will coordinate the existing expertise and research efforts of the participant beneficiaries into a synergetic plan of collaborations and exchanges of personnel to offer a comprehensive transfer of knowledge and training environment for the researchers in the specific area. The development of Platform will constitute for scientist the way to share and improve CH safeguard methods, and to professionals to apply the most advanced technologies in the related fields.
Work Packages	WP1 Monitoring System WP2 Seismic movement WP3 Structural Stability WP4 Thematic Platform WP5 Data Integration and Feature Extraction WP6 Demonstration WP7 Transfer of Knowledge, training and Networking WP8 Communication, Dissemination and Exploitation WP9 Project Management
External References	https://cordis.europa.eu/project/id/823966 https://www.stable-project.eu/
Role in the Project	Principal Investigator

ESTiMatE - Research Project Fact Sheet

Title of Project	**Emissions SooT ModEl – completed**
Project Acronym	ESTiMatE
Funding Program	H2020-EU.3.4.5.5.
Project Identifier	H2020-CS2-CFP07-2017-02
Total Budget / TUB Budget	1799875 €/ 252500 €
Starting – Ending Date	11/2018-10/2021
Consortium	1. Barcelona Supercomputing Center, Spain, Coordinator 2. Tecnische Universität Berlin, Germany 3. Universitat Polytecnica de Valcencia, Spain 4. Technische Universiteit Eindhoven 5. Technische Universität Darmstadt, Germany 6. Karlsruher Institut für Technologie, Germany 7. Universität Stuttgart, Germany
Project Objectives	The main objective of ESTiMatE is to develop a modelling strategy using CFD simulations for the prediction of soot in terms of chemical evolution and particle formation in conditions relevant to aero engine operation. The model developments are based on the use of detailed chemical kinetics for kerosene surrogates, and advanced combustion and spray models validated with reference experiments. ESTiMatE develops an advanced methodology based on advanced soot prediction models integrated into high-fidelity simulations. It includes the development of efficient algorithms for the coupling of soot particles with gas phase dynamics allowing the use of large-scale applications with high computational efficiency. ESTiMatE will contribute to the characterization and prediction of the combustion process and subsequent emissions, to increase the predictivity and reliability of soot predictions in the aeronautical sector.
Work Packages	WP1 Coordination and Management WP2 Development of soot models WP3 Coupling soot models into different combustion WP4 Assessment of soot models WP5 Soot validation experiments WP6 Modelling of primary spray WP7 Exploitation and dissemination
External References	https://cordis.europa.eu/project/id/821418
Role in the Project	Principal Investigator

Yenesis - Research Project Fact Sheet

Title of Project	**Youth Employment Network for Energy Sustainability in ISlands - ongoing**
Project Acronym	YENESIS
Funding Program	EEA and Norway Grants Fund for Youth Employment
Project Identifier	-
Total Budget/FredU Budget	2.920000 € / 264734 €
Starting – Ending Date	10/2018-05/2022, 08/2022 – 02/2024
Consortium	1. Cyprus Energy Agency, Coordinator (CY) 2. Network of Sustainable Greek Islands (DAFNI Network) (GR) 3. Association of Estonian Islands (AEI) (EE) 4. Regional Agency for Energy and Environment of the Autonomous Region of Madeira (AREAM) (PT) 5. The International Centre for Sustainable Development of Energy, Water and Environment Systems (SDEWES) (HR) 6. Sapienza University of Rome - Department of Astronautical, Electrical and Energy Engineering – DIAEE (IT) 7. Frederick University (CY) 8. Chrysalis LEAP Limited (CY) 9. Canary Islands Institute of Technology (ITC) (ES) 10. Møre and Romsdal County Authority (NO)
Project Objectives	The main objective of the project is to reduce unemployment of the target group by creating green jobs in islands. The project directly addresses the Fund's principles and priorities by firstly targeting young people between 25-29 who are also NEET. By reducing the focus group to this age group and specific requirements, the partners aim to support the discouraged young people who have stopped looking for work and are therefore socially excluded. Furthermore, embracing the Smart Islands Initiative and its principles of bottom-up approaches for innovation in islands, the project puts transnationality at its core as it recognises the commonalities amongst islands around Europe and understands the potential of exchanging good practices, as well as joint endeavours.
Work Packages	1. Research Stage ▪ Firstly, the expert needs to achieve a sustainable future will be identified and summarised in a guide on sustainability competencies for green jobs. These should be in line with each country's Innovation Strategy for Smart Specialisation. 2. Learning Stage ▪ Once the participants are identified, they need to be equipped with the necessary tools to achieve the desired outcome. 3. Application Stage ▪ The final stage of the project will solidify the outcomes of the project with the return of the participants to their home countries to work on local sustainability projects.
External References	https://yenesis.eu/ https://doi.org/10.1080/15567249.2022.2148019
Role in the Project	Principal Investigator

AENAOS - Research Project Fact Sheet

Title of Project	**Design and Development of the "Controlled Temperature Building Shell" concept - completed**
Project Acronym	AENAOS
Funding Program	Sustainable Development and Competitiveness. Development of Innovative Products, Services and Processes. Ministry of Energy, Commerce, Industry and Tourism, Republic of Cyprus
Project Identifier	-
Total Budget / FredU Budget	246285 € / 43806 €
Starting – Ending Date	11/2017-05/2020
Consortium	1. CrossWise Ltd, Coordinator 2. Frederick University, Cyprus 3. RTD Talos Ltd
Project Objectives	1. The key objective of this project is to commercialize a novel concept, the Controlled Temperature Building Shell. The operation principle of the Controlled Temperature Building Shell is based on the continuous induction of controlled-temperature air within the building envelope, conditioned with the use of a heat pump, resulting to a steady building shell temperature. 2. The introduced concept will be validated both with the use of finite element analysis (Comsol Multiphysics), as well as with the implementation of a comprehensive life cycle assessment. 3. The validation of the experimental design will be achieved through the development of pilot elements and optimization of their geometry. In particular, the project consortium will proceed with the construction of a small test cell using the innovative element. The purpose of constructing the experimental building is to carry out validation measurements of the experimental design and, if necessary, to improve the geometry of the product.
Work Packages	WP1: Project Management WP2: Product Design WP3: Pilot Development and Optimization WP4: Demonstration Activities WP5: Commercialisation and Market Penetration WP6: New product certification
External References	https://doi.org/10.1016/j.dib.2021.107034 https://doi.org/10.1016/j.proenv.2017.03.094
Role in the project	Principal Investigator

HyLight - Research Project Fact Sheet

Title of Project	**Design, development and application of a technologically advanced system of natural daylight and artificial PV lighting - Hybrid Light Tube - completed**
Project Acronym	HyLighT
Funding Program	SOLAR-ERA.NET Transnational Programs
Project Identifier	SOLAR – ERA.NET PV1 and CSP1
Total Budget / FRC Budget	248000 € / 74500 €
Starting – Ending Date	09/2014-09/2016
Consortium	1. Frederick Research Centre (CY) 2. PRKL Solar Century (CY) 3. AG Metall ITM Sp. z o.o. (PL)
Project Objectives	1. The development of a database for the parametric design and best practises for the manufacturing of hybrid light tubes of natural and artificial lighting 2. The testing and demonstration of the HyLighT concept. 3. The establishment of inspection procedures and standardised technical processes for constructive operation controls and energy characterisation of hybrid light tubes 4. The active involvement of the potential users in the downstream part of the value chain, 5. The boosting of the stakeholder's competiveness, through the upgrade of the existing light tube applications. The final product is anticipated to achieve breakthrough for this technology by considerably improving the performance and application conditions of conventional light tubes. Accordingly the commercialisation of the final product to the local and international markets is foreseen.
Work Packages	WP1 Project Management WP2 Literature Review – Applicable Codes and Standards WP3 Modular scaled model design and investigation WP4 Prototype design and investigation WP5 Production feasibility and guidelines WP6 Project Dissemination and Exploitation of Results
External References	
Role in the project	Coordinator

PCPlaster - Research Project Fact Sheet

Title of Project	**Phase Change Material (PCM) enhanced plaster for upgrading the energy efficiency of contemporary and historic buildings - completed**
Project Acronym	PCPlaster
Funding Program	M-ERANET
Project Identifier	M-ERA.NET 2012
Total Budget / FRC Budget	240000 € / 32400 €
Starting – Ending Date	08/2014-08/2016
Consortium	1. University of Cyprus, Coordinator (CY) 2. Frederick Research Center (CY) 3. Termokir Industries Ltd (IL)
Project Objectives	1. The primary objective of the PCPLASTER project was the development of a novel, smart, cementless PCM-enhanced plaster with improved physical, chemical, mechanical and thermal properties, which would be appropriate for application in southern European climatic conditions. 2. A parametric study was adopted for the design and production of the PCM-enhanced plasters, in order to keep the mix designs to the absolute minimum number required. Various techniques were utilized for the addition of the PCM to the matrix (e.g. microencapsulation and addition using porous aggregates as carriers) in an effort to find the optimum solution. 3. The thermophysical (i.e. thermal conductivity and thermal storage capacity), hygric (i.e. capillary absorption, porosity etc), mechanical (i.e. compressive and flexural strength) and durability (i.e. resistance to salt crystallization) properties of the various plasters produced were tested in the laboratory, following EN and international standardized testing methodologies. 4. The most appropriate and better behaving laboratory-produced plasters were applied on various substrates (brick and stone) in-situ (pilot applications) and their performance/ efficiency (i.e. thermal and physico-mechanical properties) was monitored continuously through field measurements, in order to verify and/or normalise the numerical results. 5. A Life Cycle Analysis performance of selected PCM-enhanced plasters was conducted, while a feasibility study was carried out to determine whether the new product would be able to enter the market at a competitive level.
Work Packages	WP1 Literature review, market survey and definition of PCM properties WP2 Design, lab production/testing and application of PCPLASTER WP 3 Computational analysis of PCMs and PCPLASTER thermal properties WP4 Life Cycle Assessment (LCA) of PCPLASTER WP 5 Project Dissemination and Exploitation of Results WP 6 Project Management
External References	https://doi.org/10.1016/j.jobe.2016.02.008 https://doi.org/10.1007/s40243-015-0047-8
Role in the project	Principal Investigator

KEDELEA - Research Project Fact Sheet

Title of Project	**Design and development of olive husk collection and management centres for waste to energy purpose- completed**
Project Acronym	KEDELEA
Funding Program	Cross-border co-operation programme Greece-Cyprus
Project Identifier	INTERREG IV, Greece Cyprus
Total Budget/ FRC Budget	569500 € / 126500 €
Starting – Ending Date	10/2012-03/2015
Consortium	1. Frederick Research Centre, Coordinator (CY) 2. Agricultural Research Institute (CY) 3. Yeri Municipality (CY) 4. Agricultural Research Centre ELGO Demetra (GR)
Project Objectives	1. The assembly of an integrated model of provision and recording of the generated annual olive husk amount, based on the feedback acquired from the major olive mills and olive producers in the area of study, as well as on indicators that associate to other stochastic factors (eg. climatic conditions). 2. The definition of minimum requirements for integrated collection and transport systems of olive husk to the collection and management centres in Greece and Cyprus. 3. The development of standards and a pilot operation management centre of olive husk for the introduction of olive husk as a solid biofuel into the market 4. The identification of the best practices for olive husk's treatment using innovative methods that aim towards the reduction of the combustion emissions as well as the increase of the process efficiency. 5. The development of an olive husk price observatory and the definition of its operation specifications. 6. The identification of a permanent mechanism for assessing the potential of olive husk in contributing in the energy mix of the participating countries and the effort towards achieving the 2020 target. 7. The promotion of the olive husk as an alternative fuel mainly for space heating as well as the promotion of its advantages over conventional fuels in the participating countries through relevant dissemination activities, which will include print publications, workshops, events and a regularly updated website.
Work Packages	WP1 - Definition of annual olive husk amount WP2- Definition of olive husk contribution to the indigenous energy balance WP3 - Definition of necessary framework for olive husk transport networks WP4 - Olive husk collection and management points WP5 - Olive husk price watch
External References	https://doi.org/10.1016/j.renene.2016.04.046 https://doi.org/10.1016/j.wasman.2016.01.012 https://doi.org/10.1016/j.biombioe.2015.11.018 https://doi.org/10.1007/s10973-014-4027-5
Role in the project	Coordinator

BioVernacular - Research Project Fact Sheet

Title of Project	**Innovative Methods for Protection and Conservation of Sustainable Design Elements of Vernacular Architecture in the Historic Centre of Nicosia - completed**
Project Acronym	BioVernacular
Funding Program	Project Technological Development and Innovation Δέσμη 2009-2010, Research Promotion Foundation, Cyprus
Project Identifier	ΑΝΘΡΩΠΙΣΤΙΚΕΣ/ΑΝΘΡΩ/0609/ΒΙΕ
Total Budget/FRC Budget	100000 € / 10000 €
Starting – Ending Date	06/2012-08/2014
Consortium	1. Municipality of Nicosia, Coordinator (CY) 2. University of Cyprus (CY) 3. ICOMOS (CY) 4. Frederick Research Centre (CY)
Project Objectives	1. This research project explored innovative methods for the conservation and restoration of traditional buildings, giving emphasis on the preservation of the elements of their bioclimatic design, by identifying factors that contribute to a pleasant environment and thermal comfort. 2. A large number of traditional buildings within the historic centre of Nicosia were studied, with focus on the areas of Kaimakli and Chrysaliniotissa. The organic and typological structure of these buildings (orientation, ventilation, shading and lighting) and the choice of building materials were investigated. 3. Temperature and humidity measurements were recorded during the different seasons of the year in order to establish data tables for further analysis. Through these qualitative and quantitative recordings, the study aimed at identifying bioclimatic design principles and elements which have been applied, over time, in traditional structures. 4. Modelling and simulation of data led to the identification of various parameters which improve the energy efficiency of buildings. 5. The overall goal of the program was to highlight the environmental aspects of vernacular architecture and to design a set of guidelines and proposals for the proper restoration of traditional buildings, with emphasis on the maintenance/enhancement of bioclimatic characteristics and environmentally friendly approaches.
Work Packages	WP1: Project Management WP2: Project Dissemination and Exploitation of Results WP3: Database of bioclimatic parameters of vernacular buildings in the historic centre of Nicosia WP4: Recordings of temperature and humidity, benchmarking of recorded data, laboratory measurements to determine the main characteristics of the principle traditional materials. WP5: Modelling and Simulation of data WP6: Suggestions and Rehabilitation Proposals. Conclusions.
External References	http://www.biovernacular.ac.cy https://doi.org/10.1007/s41024-016-0021-6
Role in the Project	Principal Investigator

ACES - Research Project Fact Sheet

Title of Project	**A Concept for Promotion of Sustainable Retrofitting and Renovation in Early Stages - completed**
Project Acronym	ACES
Funding Program	Strategic. Networking of RDI Programmes in. Construction and Operation of Buildings
Project Identifier	ERACOBUILD
Total Budget/FRC Budget	400000 € / 131720 €
Starting – Ending Date	03/2011-09/2013
Consortium	1. Frederick Research Centre (CY) 2. KTH Royal Institute of Technology (SW) 3. DTU Technical University of Denmark (DK)
Project Objectives	1. ACES project aimed to show how restoration that results in sustainable development can be motivated by economic reasons. Also, this project aimed to explain how quality assurance and how workers health issues can contribute to this. Another objective of this project was to produce documents that would motivate stakeholders to continue their development towards sustainable renovation. 2. The work focused on the building owners' interests and needs. It included both innovative and well-known measures for improving a building with respect to the performance wanted. It also focused on how the measures in question would be possible to use in a structured way in a safe and effective building process. 3. ACES project focused on early phases of a building project, when decisions about technologies are to be done. The project dealt with how to obtain the required building upgrade information.
Work Packages	WP1: Visions and possibilities for building renovation WP2: Evaluation of economic and environmental benefits for restoration WP3: Predictable quality WP4: Process and safety issues WP5: Quality control and dissemination of results WP6: Project management
External Reference	https//doi.10.12966/ae.09.01.2013
Role in the project	Principal Investigator

TOPEUM - Research Project Fact Sheet

Title of Project	**Towards an optimisation of urban planning and architectural parameters for energy use minimisation in Mediterranean cities - completed**
Project Acronym	TOPEUM
Funding Program	Strategic. Networking of RDI Programmes in. Construction and Operation of Buildings
Project Identifier	URBANNET
Total Budget/ UCY Budget	400000€ / 99960 €
Starting – Ending Date	03/2009-02/2012
Consortium	1. University of Cyprus, UCY; Coordinator (CY) 2. Högskolan i Gävle (SW) 3. Bulgarian Academy of Science - National Institute of Meteorology and Hydrology, NIMH (BG) 4. EXA-High Performance Computing (CY) 5. ATLANTIS (CY)
Project Objectives	The main objective of the project was to investigate the influence of different urbanization characteristics, such as the geometry and density of buildings within a city, as well as of the building materials, on the intensity of the urban heating effect, for the case of a typical city in Cyprus. The key goal of the proposed project was to improve the scientific understanding of how land cover changes associated with urbanization in Southern Europe, affect local climate, surface energy flux, and air quality characteristics. Allied with this goal was the prospect that the results from this research would be applied by urban planners, environmental managers and other decision-makers, for determining how urbanization has impacted the climate and overall environment and in order to promote sustainable development.
Work Packages	WP1: Project Management WP2: Identification of representative urban canopy areas WP3: Review of the urban heat island studies in the participating countries WP4: Wind tunnel measurements of velocity field WP5: Field measurement of heat flux at buildings WP6: Computational Modelling of urban air flow without and with heat transfer WP7: Identification of best practices in urban planning WP8: Cost Benefit Analysis WP9: Project Dissemination and Exploitation of Results
External Reference	-
Role in the project	Principal Investigator

KTIRIA - Research Project Fact Sheet

Title of Project	**Categorisation of buildings in Cyprus based on their energy efficiency - completed**
Project Acronym	KTIPIA
Funding Program	Project Technological Development and Innovation Δέσμη 2009-2010, Research Promotion Foundation, Cyprus
Project Identifier	ΑΕΙΦΟΡΙΑ/ΑΣΤΙ/0308 (ΒΙΕ)/02
Total Budget/ UCY Budget	120000 € / 34080 €
Starting – Ending Date	12/2008-03/2010
Consortium	1. Cyprus University of Technology (CY) 2. University of Cyprus (CY) 3. Cyprus Scientific and Technical Chamber (ΕΤΕΚ) (CY) 4. Energy Service, Cyprus Ministry of Commerce Industry and Tourism, Cyprus (CY) 5. RTD Talos Ltd (CY)
Project Objectives	1. The recording and evaluation of the energy performance of the building stock of Cyprus. This mapping is of particular importance as will be the prerequisite for the specification of the highest limits for each category of buildings, which is also prerequisite of the directive 2002/91/EC. 2. The classification and estimation of the upper and lower limits of energy consumption per category of buildings based on today's consumptions, which finally will lead to the specification of the various classes. 3. The formulation of specific proposals for the re-establishment of the limits, particularly of the two best classes, as well as to the assessment of the optimum time for the materialization of the application of these limits so as not to simply reflect the present situation but to show the willingness of the state to improve the level of constructions. 4. The collection of data which will be further examined so as to lead to the undertaking of measures and to the establishment of targeted actions for the improvement of the energy performance as well as to the support of decision making in the area of energy policy of Cyprus with respect to the building construction industry. 5. The transfer of knowledge from and to the European and international environment and the creation of a dataset which will concern the Cypriot reality.
Work Packages	WP1: Project Management WP2: Project Dissemination and Exploitation of Results WP3: Cypriot building stock processing WP4: Measurement of buildings energy performance WP5: Buildings clustering based on their energy performance WP6: Project management
External References	https://doi.org/10.1016/j.enbuild.2011.08.005 https://doi.org/10.1016/j.enbuild.2010.06.018
Role in the project	Principal Investigator

ΑΝΑΒΑΘΜΙΣΗ - Research Project Fact Sheet

Title of Project	**Development of an Interdisciplinary Research Center of "Energy Efficiency of the Built Environment" - completed**
Project Acronym	ΑΝΑΒΑΘΜΙΣΗ
Funding Program	Strategic. Networking of RDI Programmes in. Construction and Operation of Buildings
Project Identifier	ΑΝΑΒΑΘΜΙΣΗ/ΠΑΓΙΟ/0308/33
Total Budget/UCY Budget	400000€ / 400000 €
Starting – Ending Date	12/2008-12/2012
Consortium	1. University of Cyprus, Coordinator (CY) 2. Cambridge University (UK) 3. Massachusetts Institute of Technology (MIT) (USA) 4. Cyprus Scientific and Technical Chamber (ΕΤΕΚ) (CY) 5. Energy Service, Cyprus Ministry of Commerce Industry and Tourism, Cyprus (CY)
Project Objectives	The specific scientific and technological objectives of the project consist in the development of an integrated approach for the methodological approach of urban climatology and environmental fluid issues, based on three pillars: 1. The implementation of comprehensive experimental thermofluids measurements on laboratory scale 2. The implementation of field measurements, 3. The employment of advanced computational thermofluids methods Through the implementation of the project, the University of Cyprus attempted to upgrade its existing hardware equipment as follows 1. Upgrade its Particle Image Velocimetry (PIV) system from two-dimensional (2D) to three-dimensional (3D) 2. Develop a temperature measurement system in laboratory and field level for urban climate measurements
Work Packages	WP1: Project Management WP2: Project Dissemination and Exploitation of Results WP3: Procurement, purchase and installation of hardware equipment WP4: Operation and calibration of equipment WP5: Pilot studies: Processing and interpretation of measurements: Flow measurements WP6: Pilot studies: Processing and interpretation of measurements: Field measurements WP7: Horizontal interdisciplinary synergy: Sensors customization WP8: Horizontal interdisciplinary synergy: Thermal comfort and improvement of wellbeing WP9: Literature review: State of the art in urban climatology
External Reference	-
Role in the Project	Principal Investigator

NEWAC - Research Project Fact Sheet

Title of Project	**"NEW Aero engine core Concepts" - completed**
Project Acronym	NEWAC
Funding Program	FP6 Integrated Project
Project Identifier	AIP5-CT-2006-030876 (FP6)
Total Budget/ KIT Budget	71 M€ / 720000 €
Starting – Ending Date	01/2007 -12/2010
Consortium	1. MTU Aero Engines (DE) (coordinator) 2. Snecma (FR) 3. Volvo Aero Corporation (SW) 4. Rolls Royce Deutschland Ltd & Co KG (DE) 5. Wytwonia Sprzetu Komunikacyjnego (PL) 6. První Brněnská Strojírna (CZ) 7. Aristotle University of Thessaloniki (GR) 8. Centre de Recherche en Aéronautique (BE) 9. Cranfield University (UK) 10. DLR (DE) 11. Ecole Centrale de Lyon (FR) 12. EnginSoft (IT) 13. Office National d'Etudes et de Recherches Aerospatiales (FR) 14. University of Oxford (UK) 15. University of Technology – Aachen (DE) 16. Université Belfort-Montbéliard (FR) 17. Steigerwald Strahltechnik GmbH (DE) 18. University of Technology – Graz (AU) 19. Université de Liège (BE) 20. University of Stuttgart (DE) 21. Rolls Royce Plc (UK) 22. AVIO S.p.A (IT) 23. Turbomeca (FR) 24. Techspace Aero (BE) 25. ARTTIC S.A.S. (FR) 26. Airbus France S.A.S (FR) 27. University of Cambridge (UK) 28. CEP(FR) 29. Chalmers University of Technology (SW) 30. Ecole Polytechnique de Lausanne (CH) 31. Loughborough Uiversity (UK) 32. National Technical University of Athens (GR) 33. PCA Engineers Limited (UK) 34. Scitek Consultants Ltd (UK) 35. Société des Nouvelles Applications des Techniques de Surface (FR) 36. Sulzer Metco AG (CH) 37. Università degli Studi di Firenze (IT) 38. University of Karlsruhe (DE) 39. University of Sussex (UK) 40. Vibro-Meter S.A. (CH)
Project Objectives	NEWAC was a European-level programme, under the leadership of MTU Aero Engines, in which major European engine manufacturers, assisted by universities, research institutes and enterprises – 40 partners in all - focus on new core engine concepts. NEWAC will develop and validate novel core engine technologies to further close the gap between the current emissions and the ACARE targets. NEWAC is a 71 million Euro programme of which 40 million Euro is funded by the EC. Four core concepts were investigated: ▪ Intercooled Recuperative Core (SP 2) for the intercooled recuperative aero engine concept (IRA) operated at low OPR and using a LP(P) combustor concept (SP 6) ▪ Intercooled Core (SP 3) for a high OPR engine concept based on a 3 shaft direct drive turbo fan (DDTF) with a LDI combustor (SP 6) ▪ Active Core (SP 4) with active systems applicable for a geared turbo fan (GTF) using a PERM combustor (SP 6) ▪ Flow Controlled Core (SP 5) for the counter rotating turbo fan (CRTF) using a PERM or a LDI combustor (SP 6) The main NEWAC result will be fully validated novel technologies enabling a 6% reduction in CO2 emissions and a further 16% reduction in NOx.
External Reference	https://cordis.europa.eu/project/id/30876
Role in the Project	Principal Investigator

TLC - Research Project Fact Sheet

Title of Project	**Towards Lean Combustion - completed**
Project Acronym	TLC
Funding Program	FP6-AEROSPACE, FP6-2003-AERO-1,
Project Identifier	AST4-CT-2005-012326
Total Budget/ KIT Budget	7.55 M€ / 720000 €
Starting – Ending Date	03/2005 – 03/2010
Consortium	1. Rolls Royce Deutchland (DE) 2. MTU Aero Engines (DE) 3. Avio S.P.A. (IT) 4. Turbomeca (FR) 5. ONERA (FR) 6. DLR (DE) 7. Lunds University (SW) 8. CNRS (FR) 9. Ecole Central de Nantes (FR) 10. Karlsruhe Institut für Technologie (DE) 11. Univesita Degli Studi di Genova (IT) 12. Univesita Degli Studi di Napoli (IT) 13. CERFACS (FR) 14. Universidad de Zaragoza (SP) 15. University of Rome ":a Sapienza" (IT) 16. Instytut Maszyn Przeplywowych (PL) 17. ACIES (FR) 18. IRD (FR)
Project Objectives	The mitigation of aviation emissions in terms of their environmental impact is a priority for both air quality (local impact) and the greenhouse effect (global impact). For a fixed engine cycle, the margin of progress depends on the combustor technology. Lean combustion is the breakthrough which should enable high-level reductions in NOx emissions both during the LTO cycle (air quality) and at cruise speeds (global impact). In addition, lean combustion also enhances particulate reduction. Injection systems form the most critical issue in achieving a satisfactory level of lean combustion and will be the technological focus for the project. Within this framework, a wide range of experiments will be carried out on mono-sector or tubular combustors. This new program will be a crucial effort in achieving sufficient maturity for the single annular combustor application. The objectives will be an 80% reduction in NOx emissions in relation to the CAEP2 regulation limit during the LTO cycle, and low NOx emission indices at cruise speed (EINOx=5g/kg as target). Other gaseous emissions and soot performance characteristics will be also precisely evaluated. In this prospect, the project will support the adaptation of most advanced, non-intrusive laser-based measurement techniques to combustors actual conditions and their application (in addition to intrusive techniques) to experiments of various concepts of injection systems. The injection systems tested will derive from the LOPOCOTEP program or other projects and from advanced CFD optimization of new concepts. The entire range of operating conditions will be experimentally evaluated (LTO points, cruise speeds). Auto-ignition and flashback risk issue as well as lean extinction limit will be assessed. Advanced CFD simulation will also exploit the data from the fundamental experiments, thereby enabling calibration of the latest codes in emissions predictions.
External References	http://cordis.europa.eu/project/rcn/74772_en.html https://doi.org/10.1115/1.2749279 https://doi.org/10.1007/s10494-009-9205-3
Role in the project	Principal Investigator

LOPOCOTEP - Research Project Fact Sheet

Title of Project	**Low pollutants combustor technology programme - completed**
Project Acronym	LOPOCOTEP
Funding Program	FP5-GROWTH
Project Identifier	G4RD-CT-2001-00447
Total Budget/KIT Budget	7.05 M€ / 200 k€
Starting – Ending Date	04/2001 – 05/2005
Consortium	1. CNRS (FR) 2. DLR (DE) 3. MTU Aero Engines (DE) 4. ONERA (FR) 5. QINETIQ (UK) 6. TURBOMECA (FR) 7. Technical University of Munich (DE) 8. Lund University (SW) 9. Avio SPA (IT) 10. University of Cambridge (UK) 11. University of Florence (IT) 12. Loughborough University (UK) 13. Rolls-Royce Deutschland (DE)
Project Objectives	The challenge of this project is for European aero-engine manufacturers to develop combustor concepts that reduce major pollutant emissions like NOx and CO2. This project firstly investigates the individual combustor technologies like lean premixed injection system, advanced cooling concepts and adapted diffusers. The work builds upon the experience from previous programme such as Low NOx III, where numerical and diagnostic tools were also developed. Secondly, it looks at integration and application of these technologies into combustor designs at realistic scales and both evaluates and optimises the overall performance improvements. The co-operation at a European level between 18 partners shows the strong interest, which will also help to save cost and time. By the end of this programme the resulting low pollutant combustion technologies should enhance the global competitiveness of the European aero-engine manufacturing.
External Reference	https://cordis.europa.eu/project/id/G4RD-CT-2001-00447
Role in the Project	Principal Investigator

DoE 01 - Consulting Project Fact Sheet

Title of Project	**Information and training of staff dealing with environmental legislation on Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) - completed**
Funding Body	Department of Environment, Ministry of Agriculture, Rural Development and Environment
Project Identifier	Τ.Π. 02/2016
Total Budget	100000€
Starting – Ending Date	09/2016-02/2017
Consortium	Frederick University
Project Objectives	1. Fulfillment of ex ante conditionality for the utilization of resources from the European Structural and Investment Funds for the period 2014-2020 regarding the implementation of environmental legislation on the Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA). 2. Provision of training programs, software preparation and development of an educational video or website or guide on the environmental laws of SEA and EIA. 3. Preparation of the Kick-off Report as well as the Final Report for submission to the Managing Authority of the Operational Program "Competitiveness and Sustainable Development 2014-2020"
Work Packages	WP1 - Management WP2 - Five training programs for two (2) civil servants per program, lasting five (5) days, abroad WP3 - A five (5) day training program in Cyprus WP4 - A training program, lasting two (2) days, in Cyprus WP5 - Two training programs, one (1) day each, in Cyprus WP6 - Development of an educational website for SEA and EIA environmental legislation WP7 - Preparation and application of computer software and related instructions for use on the different stages of environmental legislation SEA and EIA
Reference	http://infoeia-sea.environment.moa.gov.cy/
Role in the Project	Main Consultant

DoE 02 - Consulting Project Fact Sheet

Title of Project	**Consultancy for the Elaboration of a Study on the Reduction and Utilization of Biodegradable Waste in Cyprus - completed**
Funding Body	Department of Environment , Ministry of Agriculture, Rural Development and Environment
Project Identifier	Τ.Π. 08/2017
Total Budget	20000€
Starting – Ending Date	09/2017-12/2017
Consortium	Frederick University
Project Objectives	1. The general objective of this Convention is to carry out the necessary studies in order to establish an Action Plan to prevent the creation and rational management of biodegradable waste (2008/98/EC) and the Directive on the Landfill of Waste (1999/31/EC) 2. State-of-the-art documentation and quantification of the problem and the need to comply with the corresponding European obligations. 3. Market research concerning the perception of stakeholders on the current status of the waste management practices in Cyprus. 4. Drafting on the action plan of the Republic of Cyprus for a comprehensive management of biodegradable waste in Cyprus 5. Costing of the proposed action plan through a feasibility and a cost-benefit analysis.
Work Packages	WP1 - Management WP2 – Current state of the art and requirements for the Republic of Cyprus to fulfil the EU Acquis on waste management. WP3 – Market Research on Stakeholders Perception on Waste Management Policies in Cyprus WP4 – Action Plan on the Reduction and Utilisation of Biodegradable Waste in Cyprus WP5 – Feasibility Assessment and Cost-Benefit Analysis of the Proposed Action Plan
Reference	https://doi.org/10.1016/j.jclepro.2022.131490
Role in the Project	Coordinator

DoE 03 - Consulting Project Fact Sheet

Title of Project	**Consultancy for the Elaboration of a Study on the Implementation of Rational Management of Solid Waste in the Public Sector - completed**
Funding Body	Department of Environment , Ministry of Agriculture, Rural Development and Environment
Project Identifier	Τ.Π. 06/2017
Total Budget	10000€
Starting – Ending Date	09/2017-12/2017
Consortium	Frederick University
Project Objectives	1. The overall objective of the Convention is to draw up an Action Plan for the rational management of solid waste produced by the public sector, and the adoption of procedures to be taken in order to reduce waste generated in the public sector. 2. Drafting of a register of all public buildings and spaces, including all waste generated (type and quantity) 3. Documentation of processes and practices followed by the public sector for the management of the waste generated 4. Drafting on the action plan of the Republic of Cyprus for a comprehensive management of waste produced by buildings of the public sector 5. Costing of the proposed action plan through a feasibility and a cost-benefit analysis. 6. Publishing of a "Waste Management Best Practice Guide for the Public Sector".
Work Packages	WP1 - Management WP2 – Register of buildings of public sector, and quantification of generated waste WP3 – Action Plan on the Reduction of waste produced by buildings of the public sector WP4 – Feasibility Assessment and Cost-Benefit Analysis of the Proposed Action Plan WP5 - "Waste Management Best Practice Guide for the Public Sector".
Reference	N/A
Role in the Project	Coordinator

DoE 04 - Consulting Project Fact Sheet

Title of Project	**Providing Services for Measurement, Recording and Report Preparation of Food Waste Levels at Various Stages of the Food Supply Chain - completed**
Funding Body	Department of Environment , Ministry of Agriculture, Rural Development and Environment
Project Identifier	ΤΠ 07/2020
Total Budget	32400 €
Starting – Ending Date	11/2020-10/2021
Consortium	Frederick University
Project Objectives	Under the original Directive 2008/98 / EC, Member States are required to adopt a standard methodology for recording food waste levels, with a view to the successful monitoring and evaluation of national food waste prevention programs. The measures taken by the Member States are evaluated, and the results, based on the data collected, are communicated to the Commission, accompanied by a quality control report. The objective of the consultancy entitled "Providing Services for Measurement, Recording and Report Preparation of Food Waste Levels at Various Stages of the Food Supply Chain". Concerns the definition of the quantities of food waste produced in Cyprus, based on methodology and format determined by the EU, in the delegated Decision 2019/1597 / EU and in the Executive Decision 2019 / 2000 / EU, in all stages of the supply chain, namely Primary production, processing and manufacturing, retail and other distribution of food, restaurants and food services and households
Work Packages	WP1 Preparation of an opening report WP2 Development of methodology WP3 Investigation, recording and counting of data WP4 Establishment of a national register of food waste WP5 Food waste quality control report
Reference	https://doi.org/10.1016/j.resconrec.2022.106486
Role in the Project	Coordinator

DoE 05 - Consulting Project Fact Sheet

Title of Project	**Study of Preparation of An Action Plan for Green Contracts, Location and Recording of Green Products and Services Circulated / Provided in The Cyprus Market – completed**
Funding Body	Department of Environment , Ministry of Agriculture, Rural Development and Environment
Project Identifier	ΤΠ 32/2021
Total Budget	32000 €
Starting – Ending Date	10/2021-10/2022
Consortium	Frederick University
Project Objectives	The object of the contract is the study and preparation of proposals for the elaboration of an Action Plan for Green Public Procurements (GPP), evaluation of the existing Action Plan and submission of proposals for its improvement and upgrade, identification and recording of green products and services, identify and record the similarities and differences between the widespread European eco-labels and other labels and how they can be made equivalent (within and outside the European Union) of the mandatory and voluntary standards applicable to products, their industries and services. A registry (database) of products / services, markings and standards, identification and recording of trends and developments in Europe, as well as the preparation of a Register of Green Contracts will also be delivered.
Work Packages	1. WP1. Opening report 2. WP2. Market research for tracking and recording of green labeled products 3. WP3. Market research analysis and registry preparation (database) 4. WP4 Study and proposals for the preparation of an Action Plan for Green Public Procurements 5. WP5 Register of Green Public Procurements
Reference	N/A
Role in the Project	Coordinator

DoE 06 - Consulting Project Fact Sheet

Title of Project	**Measuring, recording and preparing quality control reports on certain single-use plastic products and their waste, alternatives, establishing a single-use plastic registry - completed**
Funding Body	Department of Environment , Ministry of Agriculture, Rural Development and Environment
Project Identifier	ΤΠ/07/2022
Total Budget	€35000
Starting – Ending Date	11/2021-07/2022
Consortium	Frederick University
Project Objectives	The objective of this consultancy is the provision of services for the "Measurement, Recording and Preparation of Quality Control Reports on certain single-use plastic products and their post-consumer waste, as well as the establishment of single-use plastic register". The measurements, records and quality control reports will include data on the quantities of single-use plastic products that have been placed on the market, their waste and their management, based on the methodology and format determined by the EU, in the context of Directive 904/2019/EU, Executive Decision 2021/1752/EU, Executive Decision 2021/958/EU and Executive Decision 2022/162/EU
Work Packages	WP1 Introductory Report WP2 Documentation of Enterprises. Preliminary Design and Description of the Registry for single use plastics importers WP3 Development of Registry for single use plastic importers WP4 Market research for definition and documentation WP5 Research analysis and completion of e-registry for one use plastics WP6 Quality control report
Reference	N/A
Role in the Project	Coordinator

MECI 01 - Consulting Project Fact Sheet

Title of Project	**Consultancy for the Elaboration of a Study on the calculation of cost - optimal levels for minimum energy performance requirements for buildings in accordance with Article 5 of Directive 2010/31/EU on the energy efficiency of buildings - completed**
Funding Body	Energy Service - Ministry of Energy, Commerce and Tourism
Project Identifier	YEEBT/ΥΕ/01/2017
Total Budget	25000€
Starting – Ending Date	10/2017-03/2018
Consortium	Frederick University
Project Objectives	The scope of the Consultancy is to provide services for the calculation of the cost-optimal energy efficiency levels for new buildings; and building units, for existing buildings subject to large-scale renovation, as well as for elements of the building being replaced or retrofitted, in accordance with the Regulation (EU) 244/2012. The minimum requirements will be defined for the time period 2018-2023.
Work Packages	WP1 - Management WP2 – Definition and energy analysis of 12 reference buildings in Cyprus WP3 – Determination of energy efficiency and renewable energy measures to be applied in each reference building WP4 - Calculation of primary energy demand from the implementation of measures and of the combinations of measures in sets defined above for each reference building WP5 – Definition of the level of optimal energy performance of each building and comparison of calculated cost optimal levels with existing minimum energy efficiency requirements.
Reference	https://energy.ec.europa.eu/system/files/2018-06/cy_2018_cost-optimal_el_version_0.pdf
Role in the Project	Main Consultant

MECI 02 - Consulting Project Fact Sheet

Title of Project	**Method for Inspections of Heating and Air Conditioning Systems, Definition of Minimum Requirements of Technical Building Systems and Method of Regulation and Control of Technical Building Systems - completed**
Funding Body	Energy Service - Ministry of Energy, Commerce and Tourism
Project Identifier	ΥΕΕΒ/ΥΕ/06/2019
Total Budget	€36000
Starting – Ending Date	12/2019-11/2020
Consortium	Frederick University
Project Objectives	The objectives of the contract are the following: ▪ The revision of the Heating System Inspections method to create a new Heating System Inspection Guide to comply with the new EU Directive, ▪ The revision of the Air Conditioning System Inspections method to create a new Air Conditioning System Inspection Guide to be in line with the new EU Directive, ▪ The definition of new Requirements for Technical Building Systems to create a new Technical Guide for overall performance requirements for technical systems that are installed or upgraded in buildings and building units that are used as residences and of the new Technical Guide for overall performance requirements for technical systems that are installed or upgraded in buildings and building units that are not used as residences in order to comply with the new Directive, ▪ The revision of the method of Regulation and Control of Heating Systems and Air Conditioning Systems, with the purpose to deliver a new technical guide for regulation and control of air conditioning systems and a new technical guide for regulation and control of heating systems, ▪ Proposal to revise the frequency with which the inspections, adjustment and control of heating systems, and the inspection, adjustment and control of air conditioning systems should be carried out, ▪ Proposal for revision of the examination material of the candidate Heating Systems Inspectors.
Work Packages	WP1 Ventilation Heating Systems Inspection Methodology WP2 Air Conditioning/Refrigeration System Inspection Methodology WP3 Minimum Requirements for Building Technical Systems for Residential Buildings WP4 Minimum Requirements for Building Technical Systems for non-Residential Buildings WP5 Methodology for Regulation and Control of Heating Systems WP6 Methodology for Regulation and Control of Air Conditioning Systems
Reference	link
Role in the Project	Coordinator

MECI 05 - Consulting Project Fact Sheet

Title of Project	**Training of registrants of Heating System Inspection and Air Condition System Inspection - completed**
Funding Body	Energy Service - Ministry of Energy, Commerce and Tourism
Project Identifier	YEEB/ΥΕ/03/2021
Total Budget	15000€
Starting – Ending Date	11/2021-07/2022
Consortium	Frederick University
Project Objectives	The objective of this consultancy services is the training of registered auditors of heating and air conditioning systems on the Heating and Air Conditioning Inspection Guide, the SEER calculation procedure for heat pumps, the SCOP calculator for heat pumps and the SCO calculator. The contractor will provide training in both the theoretical understanding of the Guide and the practical training on all the measurements required by the inspector during the inspection process. In addition, the contractor will train participants by completing examples of heating, air conditioning, and / or non-ventilated inspection forms (four, at least as inspection forms) to be completed on site at an actual heating system installation, air conditioning with / or without ventilation. The training includes AHU, heat pumps of all types, boilers of all types, local heating systems, cogeneration, solar heating in combination with heating system as well as Building Automation and Control Systems.
Work Packages	N/A
Reference	
Role in the Project	Coordinator

MECI 06 - Consulting Project Fact Sheet

Title of Project	**Elaboration of a study for the preparation of a methodology for calculating Renewable Energy from solar domestic water and/or space heating systems and the benefits resulting from the replacement of older solar thermal frames and systems - completed**
Funding Body	Energy Service - Ministry of Energy, Commerce and Tourism
Project Identifier	YEEB/ΥΕ/06/2021
Total Budget	€5000
Starting – Ending Date	02/2022 – 08/2022
Consortium	Frederick University
Project Objectives	The objective of this Contract is the preparation of a methodology for calculating the renewable energy from solar hot water and/or space heating systems and the benefits resulting from the replacement of older solar thermal frames and systems. Given the data set by the EU on: ▪ Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources ▪ Comprehensive Evaluation of the Potential of Efficient Heating and Cooling based on Directive 2012/27/EU ▪ Regulation (EC) 1099/2008 on energy statistics ▪ Standards EN-15316, EN-12975, EN-12831, as well as other related standards the actual performance measurements of solar systems, records and the methodology for gathering data regarding the assessment of the contribution of solar systems to the national goals regarding the use of RES will be processed, as well as the improvement of existing incentive plans regarding the promotion of solar systems in the entire Territory of the Republic of Cyprus (where it exercises effective control). The methodology will include data on the degradation of system performance, as well as the calculation of the share of energy from renewable sources on the one hand to promote the use of energy specified in Directive 2018/2001/EU - article 7, and on the other hand for the evaluation of the efficient heating and cooling potential based on Directive 2012/27/EU - article 14.
Work Packages	N/A
Reference	N/A
Role in the Project	Coordinator

MECI 07 - Consulting Project Fact Sheet

Title of Project	**Calculation of the cost optimum levels of the minimum energy performance requirements of buildings according to article 5 of the directive 2010/31/EU on the energy performance of buildings - completed**
Funding Body	Energy Service - Ministry of Energy, Commerce and Tourism
Project Identifier	YEEB/ΥΕ/03/2022
Total Budget	€35000
Starting – Ending Date	11/2021-03/2022
Consortium	Frederick University
Project Objectives	The scope of the Consultancy is to provide services for the calculation of the cost-optimal energy efficiency levels for new buildings; and building units, for existing buildings subject to large-scale renovation, as well as for elements of the building being replaced or retrofitted, in accordance with the Regulation (EU) 244/2012. The minimum requirements will be defined for the time period 2023-2028.
Work Packages	WP1 - Management WP2 – Definition and energy analysis of 18 reference buildings in Cyprus WP3 – Determination of energy efficiency and renewable energy measures to be applied in each reference building WP4 - Calculation of primary energy demand from the implementation of measures and of the combinations of measures in sets defined above for each reference building WP5 – Definition of the level of optimal energy performance of each building and comparison of calculated cost optimal levels with existing minimum energy efficiency requirements.
Reference	N/A
Role in the Project	Coordinator

MECI 08 - Consulting Project Fact Sheet

Title of Project	**Design and development of a new digital format for the Building Energy Performance Certificate (EPC) and accompanying Recommendations in accordance with Directive (EU) 2024/1275 on the Energy Performance of Buildings – completed**
Funding Body	Energy Service - Ministry of Energy, Commerce and Tourism
Project Identifier	
Total Budget	€4800
Starting – Ending Date	04/2025-07/2025
Consortium	Frederick University
Project Objectives	The consultancy aims to design and develop a new digital template for the Building Energy Performance Certificate (EPC) and its accompanying Recommendations, fully aligned with Directive (EU) 2024/1275 (recast). The EPC format is designed to be clear, readable, and machine-readable, enabling integration into the national EPC software and certification system. It incorporates indicators related to primary and final energy use, greenhouse gas emissions, renewable energy production, smart readiness, renovation pathways, and indoor environmental quality. The Recommendations provide ranked, cost-effective measures for energy efficiency improvements, emissions reduction, and life-cycle economic performance.
Work Packages	WP1 – Project Management and Coordination: Overall coordination, kick-off meeting, and liaison with the contracting authority. WP2 – Stakeholder Research and Needs Assessment: Questionnaire-based research targeting construction professionals, real estate stakeholders, public authorities, and related actors. WP3 – Draft EPC and Recommendations Formats: Development of two alternative draft digital formats and structures for the EPC and Recommendations. WP4 – Stakeholder Consultation and Validation: Presentation of draft formats in two stakeholder meetings and collection of feedback. WP5 – Finalisation and Branding Guidelines: Finalisation of the EPC and Recommendations formats and delivery of graphical presentation and branding guidelines.
Reference	Directive (EU) 2024/1275 on the Energy Performance of Buildings (recast)
Role in the Project	Coordinator

MECI 09 - Consulting Project Fact Sheet

Title of Project	**Revision of the Inspection Guide for Heating and Air Conditioning Systems and of the Guide for Overall Performance Requirements of Technical Systems installed or upgraded in residential and non-residential buildings - ongoing**
Funding Body	Energy Service - Ministry of Energy, Commerce and Tourism
Project Identifier	
Total Budget	€4650
Starting – Ending Date	09/2025-02/2026
Consortium	Frederick University
Project Objectives	The consultancy aims to revise and update the national inspection guide for heating and air-conditioning systems and the guide for overall performance requirements of building technical systems, in line with Articles 13, 19, 23 and 24 of Directive (EU) 2024/1275 (recast). The project ensures alignment with updated EU requirements for technical systems, including on-site renewable energy production, energy storage, hydronic balancing, smart automation and control systems, indoor environmental quality, system inspections, and technical–economic feasibility for exemptions.
Work Packages	WP1 – Project Management and Kick-off: Project coordination, kick-off meeting, data collection, and methodological setup. WP2 – Gap Analysis and Regulatory Review: Analysis of existing national guides against Directive (EU) 2024/1275 and EU guidance documents. WP3 – Draft Revision of Technical System Requirements: Revision of requirements for heating, cooling, ventilation, DHW, renewable integration, storage, automation, lighting controls, and indoor environmental quality. WP4 – Draft Revision of Inspection Guides: Update of inspection procedures, checklists, reporting formats, and recommendations for heating and air-conditioning systems. WP5 – Stakeholder Consultation and Finalisation: Coordination with stakeholders, incorporation of feedback, and final delivery of revised guides, templates, and supporting documentation.
Reference	Directive (EU) 2024/1275 on the Energy Performance of Buildings (recast)
Role in the Project	Coordinator

MI 01 - Consulting Project Fact Sheet

Title of Project	**Preparation of a Preliminary Draft Order of the Town Planning Council for Soil Sealing in Construction Projects - completed**
Funding Body	Ministry of Interior, Department of Urban Planning and Housing
Project Identifier	
Total Budget	5000€
Starting – Ending Date	06/2014-02/2015
Consortium	Frederick University
Project Objectives	The objective of this project is the provision of services for the drafting of a Draft Order of the Town Planning Council for Soil Sealing in Construction Projects. The purpose of the projects was the preparation of a Preliminary Draft Order for the Sealing of the Territory in the framework of the work of the Urban Council, which set out the basic principles and parameters that would assist the Town Planning Authorities in formulating and imposing similar conditions regarding the sealing of the terrain in the examination of applications for planning permission for development of housing and building properties. The Contractor used as a basis for his study the draft Order entitled "Provisions for the sealing of the soil in relation to developments", prepared by the Department of Town Planning and Housing and for the preparation of which was taken into account: the study "SEALPLAN: Preliminary Draft Minister of Interior Order in relation to the percentage of sealing ", the views of various Government Departments and Services and other competent bodies, the minutes of the interdepartmental commission set up to study the issue, the presentations made n during the Workshop for Stamping Ground, held on November 24, 2016 at the Department of Building and Housing, and other items.
Work Packages	N/A
Reference	https://doi.org/10.1177/1420326X16644495
Role in the Project	Main Consultant

MTCW 01 - Consulting Project Fact Sheet

Title of Project	**Detailed cost estimation for Public Transport Vehicles for the years 2010 – 2020 - completed**
Funding Body	Ministry of Transport, Communications and Works, Directorate of Public Transport
Project Identifier	01 2021
Total Budget	20000 €
Starting – Ending Date	04/2021-07/2022
Consortium	Frederick University
Project Objectives	The objective of the consultancy service entitled Detailed cost estimation for Public Transport Vehicles for the years 2010 – 2020, concerns the detailed cost estimation for maintenance of the public transport vehicles and specifically of buses in Cyprus for the years 2010 - 2020. The consultancy includes the detailed definition of the maintenance costs per year for three categories of vehicles (Up to 22 seats, 23 - 42 seats, 42 and more seats) and age (0-10 years, 10-20 years and 20-30 years).
Work Packages	WP1 Definition of calculation method of maintenance cost of public buses WP2 Calculation of maintenance cost for different buses categories WP3 Report drafting and delivery
Reference	N/A
Role in the Project	Coordinator

Pr01 - Consulting Project Fact Sheet.

Title of Project	**Conducting a Study on the Integration of Gender Considerations into Energy Policies.- completed**
Project Acronym	N/A
Funding Program	Presidency of the Republic of Cyprus Office of the Commissioner for Gender Equality
Project Identifier	16/2024
Total/Own Budget	10.000€
Starting – Ending Date	11/2024 – 01/2025
Consortium	Frederick University
Project Objectives	General: This consultancy's objective is to explore how gender considerations can be effectively integrated into Cyprus' energy policies. The study will examine existing gender inequalities within the energy sector and provide actionable recommendations for incorporating gender dimensions into these policies. It will involve analyzing current data, identifying gender-related challenges, and reviewing international best practices. The consultancy will focus on how gender factors have been integrated into energy policies in other countries and by global organizations. The final deliverables will include a detailed report on the current state of gender integration in Cyprus' energy policies, supported by relevant data, and proposals for actions that enhance women's representation in decision-making roles and promote gender-sensitive measures within the energy framework.
Work Packages	WP1: Assessment of the Current Situation WP2: Development of the Gender Integration Study
External References	N/A
Role in the Project	Main Consultant

CERA 01 - Consulting Project Fact Sheet

Title of Project	**Provision of Services by University Institutions for the Implementation of Written Exams for the Selection of Four (4) Candidates to be Employed as Energy Operators in Cyprus Energy Regulatory Authority (CERA) - completed**
Funding Body	Cyprus Energy Regulatory Authority
Project Identifier	PAEK 05/2015
Total Budget	55000€
Starting – Ending Date	09/2015-12/2015
Consortium	Frederick University
Project Objectives	The Cyprus Regulatory Authority for Energy conducted an open and competitive tendering procedure for the purchase of services from University Institute for the implementation of written examinations for the preselection of candidates for the filling of four (4) permanent positions of Energy Officers in the Cyprus Energy Regulatory Authority (CERA). The objective of this consulting service was the preparation of examination papers for the implementation of the exams, as well as the organization of the exams at Frederick's premises. In terms of the contract the papers were also marked and the results were communicated to the contracting authority. The results were followed by interviews, conducted by CERA, and the filling of four permanent positions at CERA.
Work Packages	WP1 – Preparation of examination papers and other preparatory activities WP2 – Implementation of exams WP3 – Exams papers marking WP4 – Communication of exams results to the contracting authority
Reference	N/A
Role in the Project	Main Consultant

MUN 01 - Consulting Project Fact Sheet

Title of Project	**Assessment of citizens' perception and acceptance of the Municipality of Aradippou as the first Net Zero Energy Municipality in Cyprus - completed**
Funding Body	Municipality of Aradippou
Project Identifier	
Total Budget	4400 €
Starting – Ending Date	04/2025 – 07/2025
Consortium	Frederick University
Project Objectives	The consultancy aims to record and analyse the level of awareness, acceptance, and active participation of citizens of the Municipality of Aradippou in relation to the transition towards net zero energy consumption. The project supports the strategic positioning of the municipality as the first Net Zero Energy Municipality in Cyprus and formulates targeted proposals to enhance citizen engagement and participation.
Work Packages	WP1 – Project Initiation and Planning: Kick-off meeting, clarification of scope, confirmation of methodology. WP2 – Field Research and Data Collection: Questionnaire-based survey and structured interviews with a representative sample of citizens. WP3 – Data Analysis and Recommendations: Analysis of results and development of proposals to enhance awareness and participation. WP4 – Dissemination and Public Consultation: Presentation of results in a public consultation event organised by the Municipality.
Reference	N/A
Role in the Project	Coordinator

Peer-reviewed Scientific Articles Published in Scientific Journals

2025 - Articles in Scientific Journals - Peer Reviewed

[1] Babenko, M., Klitou, T., Klumbyte, E., & **Fokaides, P. A**. (2025). Environmental assessment of mycelium based straw insulation composite: A sustainability analysis at building material level. **Case Studies in Construction Materials, 22, e04572.**

[2] Chatzikonstantinidis, K., Afxentiou, N., Giama, E., **Fokaides, P. A.**, & Papadopoulos, A. M. (2025). Energy management of smart buildings during crises and digital twins as an optimisation tool for sustainable urban environment. **International Journal of Sustainable Energy, 44(1), 2455134.**

[3] Ersener, T., Koukaras, P., Ioannidis, D., Tjortjis, C., Ioannou, B., & **Fokaides, P.** (2025). A Scalable and Standardized Methodology for the Comparative Cost–Benefit Evaluation of Smart Readiness Indicator (SRI) Technologies Across Europe. **Energies, 18(21), 5825.**

[4] Fokaides, P. A. (2025). Development of a Heritage Life Cycle Assessment (H-LCA) framework: Integrating sustainability metrics and cultural preservation in heritage buildings. **Energy Reports, 14, 4437-4448.**

[5] Martinez, L., Klitou, T., Olschewski, D., Melero, P. C., & **Fokaides, P. A.** (2025). Advancing building intelligence: Developing and implementing standardized Smart Readiness Indicator (SRI) on-site audit procedure. **Energy, 316, 134538**.

[6] Morkunaite, L., Pupeikis, D., Tsalikidis, N., Ivaskevicius, M., Manhanga, F. C., Cerneckiene, J., ... & **Fokaides, P.** (2025). Efficiency in Building energy use: Pattern discovery and crisis identification in hot-water consumption data. **Energy and Buildings, 336, 115579**.

[7] Osadcha, I., Klumbyte, E., Jurelionis, A., Spudys, P., Hartmann, T., Saket, S., ... & **Fokaides, P.** (2025). Towards Interoperable Building Energy Performance Simulation: A Digital Twin Perspective. **Journal of Building Engineering, 113059**. link - **Retracted at the request of the authors**

[8] Reckien, D., Buzasi, A., Olazabal, M., **Fokaides, P.,** Pietrapertosa, F., Eckersley, P., & Salvia, M. (2025). Explaining the adaptation gap through consistency in adaptation planning. **Nature Climate Change, 1-5**.

[9] Spudys, P., Jurelionis, A., & **Fokaides, P.** (2025). Digitizing buildings sustainability assessment: Integrating energy audits, operational energy assessments, and life cycle assessments for enhanced building assessment**. Energy, 316, 134429.**

2024 - Articles in Scientific Journals - Peer Reviewed

[10] Artopoulos, G., **Fokaides, P.**, Lysandrou, V., Deligiorgi, M., Sabatakos, P., & Agapiou, A. (2023). Data-Driven Multi-Scale Study of Historic Urban Environments by Accessing Earth Observation and Non-Destructive Testing Information via an HBIM-Supported Platform. **International Journal of Architectural Heritage, 18(6), 920-939.**

[11] Calotă, R., Bode, F., Souliotis, M., Croitoru, C., & **Fokaides, P. A.** (2024). Bridging the gap: Discrepancies in energy efficiency and smart readiness of buildings. **Energy Reports, 12, 5886-5898.**

[12] Chatzikonstantinidis, K., Giama, E., Fokaides, P. A., & Papadopoulos, A. M. (2024). Smart Readiness Indicator (SRI) as a Decision-Making Tool for Low Carbon Buildings. **Energies,** 17(6), 1406.

[13] Klitou, A., Klitou, T., & Fokaides, P. A. (2024). Modelling a packed-bed latent heat thermal energy storage unit and studying its performance using different paraffins. **International Journal of Sustainable Energy,** 43(1), 2306416.

[14] Kylili, A., Georgali, P. Z., Christou, P., & Fokaides, P. (2024). An integrated building information modeling (BIM)-based lifecycle-oriented framework for sustainable building design. **Construction Innovation**, 24(2), 492-514.

[15] Mouzas, A. J., Afxentiou, N., Kriaučiūnaitė-Neklejonovienė, V., Rekus, D., & **Fokaides, P. A.** (2024). Harnessing the Sun: revolutionizing the industrial sector with solar-powered roofs. **Energy Sources, Part A: Recovery, Utilization, and Environmental Effects**, 46(1), 1332-1346.

[16] Osadcha, I., Jurelionis, A., & **Fokaides, P.** (2024). Patterns and trends in the use of RFID within the construction industry and Digital Twin architecture: a Latent Semantic Analysis. **International Journal of Sustainable Energy, 43(1), 2421281.**

[17] Spudys, P., Osadcha, I., Morkunaite, L., Manhanga, F. C., Georgali, P. Z., Klumbyte, E., ... & Fokaides, P. (2024). A comparative life cycle assessment of building sustainability across typical European building geometries. **Energy, 302, 131693**.

[18] Tsalikidis, N., Mystakidis, A., Koukaras, P., Ivaškevičius, M., Morkūnaitė, L., Ioannidis, D., ... & Tzovaras, D. (2024). Urban traffic congestion prediction: a multi-step approach utilizing sensor data and weather information. **Smart Cities,** 7(1), 233-253.

[19] Zamanidou, A., Carnero Melero, P., Martinez Garcia, L., Novakova, A., Vladimir Litiu, A., Olschewski, D., ... & **Fokaides, P. A.** (2024). Enhancing smart readiness of buildings: bridging the knowledge gap to European citizens. **International Journal of Sustainable Energy, 43(1), 2385632**.

2023 - Articles in Scientific Journals - Peer Reviewed

[20] Apostolidou, E, **Fokaides. P.** (2023). Enhancing Accessibility: A Comprehensive Study of Current Apps for Enabling Accessibility of Disabled Individuals in Buildings. **Buildings** 13 (285)

[21] **Fokaides, P. A.**, Georgali, P. Z., & Afxentiou, N. (2023). First evidences of energy performance certificate operational rating: The case of Cyprus. In IOP Conference Series: Earth and Environmental Science (Vol. 1196, No. 1, p. 012007). **IOP Publishing**.

[22] Georgiou, L., Konatzii, P., Morsink-Georgali, P. Z., Klumbyte, E., Christou, P., & **Fokaides, P. A.** (2023). Numerical and environmental analysis of post constructive application of PCM coatings for the improvement of the energy performance of building structures. **Construction and Building Materials, 364**, 129984.

[23] Georgiou, L., Afxentiou, N., & **Fokaides, P. A.** (2023). Numerical Investigation of a Novel Controlled-Temperature Double-Skin Façade (DSF) Building Element. **Energies**, 16(4), 1836. link

[24] Georgiou, L., Souliotis, M., Leontiou, T., Šadauskienė, J., Vaičiūnas, J., Papaefthimiou, S., & **Fokaides, P. A.** (2023). Numerical investigation of building integrated solar thermal collectors under diverse conditions. **International Journal of Sustainable Energy**, 42(1), 1042-1062.

[25] Georgiou, L., Stasiuliene, L., Valancius, R., Seduikyte, L., Jurelionis, A., & **Fokaides, P. A.** (2023). Investigation of the performance of mock-target IR thermography for indoor air temperature measurements under transient conditions. **Measurement**, 208, 112461.

[26] Klumbyte, E., Georgali, P. Z., Spudys, P., Giama, E., Morkunaite, L., Pupeikis, D., ... & **Fokaides, P.** (2023). Enhancing Whole Building Life Cycle Assessment through Building Information Modelling: Principles and Best Practices. **Energy and Buildings**, 113401.

[27] Kylili, A., Koutinas, M., Georgali, P. Z., & **Fokaides, P. A.** (2023). Lignin valorisation: Life Cycle Assessment (LCA) considerations for enabling Circular Bioeconomy. **International Journal of Sustainable Energy**, 42(1), 1008-1027.

[28] Osadcha, I., Jurelionis, A., & **Fokaides, P.** (2023). Geometric parameter updating in digital twin of built assets: A systematic literature review. **Journal of Building Engineering**, 106704.

[29] Papouis, C., Kylili, A., & **Fokaides, P. A.** (2023). Adapting to energy storage needs: gaps and challenges arising from the European directive for the electricity internal market. **Clean Technologies and Environmental Policy**, 1-14.

[30] Pietrapertosa, F., Olazabal, M., Simoes, S. G., Salvia, M., **Fokaides, P. A.,** Ioannou, B. I., ... & Reckien, D. (2023). Adaptation to climate change in cities of Mediterranean Europe. **Cities**, 140, 104452.

[31] Plienaitis, G., Daukšys, M., Demetriou, E., Ioannou, B., **Fokaides, P. A.,** & Seduikyte, L. (2023). Evaluation of the Smart Readiness Indicator for Educational Buildings. **Buildings**, 13(4), 888.

[32] Reckien, D., Buzasi, A., Olazabal, M., Spyridaki, N. A., Eckersley, P., Simoes, S. G., ... & Wejs, A. (2023). Quality of urban climate adaptation plans over time. **npj Urban Sustainability**, 3(1), 13.

[33] Seduikyte, L., Gražulevičiūtė-Vileniškė, I., Povilaitienė, I., **Fokaides, P. A.,** & Lingė, D. (2023). Trends and Interdisciplinarity Integration in the Development of the Research in the Fields of Sustainable, Healthy and Digital Buildings and Cities. **Buildings**, 13(7), 1764.

[34] Spudys, P., Jurelionis, A., & **Fokaides, P.** (2023). Conducting smart energy audits of buildings with the use of building information modelling. **Energy and Buildings**, 285, 112884.

[35] Spudys, P., Afxentiou, N., Georgali, P. Z., Klumbyte, E., Jurelionis, A., & **Fokaides, P.** (2023). Classifying the operational energy performance of buildings with the use of digital twins. **Energy and Buildings**, 290, 113106.

[36] Spyrou, G., Ioannou, B., Souliotis, M., Savvides, A. L., & **Fokaides, P. A.** (2023). The Adaptability of Cities to Climate Change: Evidence from Cities' Redesign towards Mitigating the UHI Effect. **Sustainability**, 15(7), 6133.

[37] Tzima, M. S., Agapiou, A., Lysandrou, V., Artopoulos, G., **Fokaides, P.**, & Chrysostomou, C. (2023). An Application of Machine Learning Algorithms by Synergetic Use of SAR and Optical Data for Monitoring Historic Clusters in Cypriot Cities. **Energies**, 16(8), 3461.

2022 - Articles in Scientific Journals - Peer Reviewed

[38] Ioannou, A., Georgali, P. Z., & Fokaides, P. A. (2022). Quantification of food waste in an insular island state for all stages of the food supply chain. **Resources, Conservation and Recycling**, 185, 106486. *(Q1 - 99% 2/696 Economics and Econometrics) (85th percentile Citations in Scopus)*

[39] Morsink-Georgali, P. Z., Kylili, A., Fokaides, P. A., & Papadopoulos, A. M. (2022). Compost versus biogas treatment of sewage sludge dilemma assessment using life cycle analysis. **Journal of Cleaner Production,** 350, 131490. *(Q1 - 98% 6/456 Strategy and Management)* ***(93rd percentile Citations in Scopus)***

[40] Kylili, A., Georgali, P. Z., Christou, P., & Fokaides, P. (2022). An integrated building information modeling (BIM)-based lifecycle-oriented framework for sustainable building design. **Construction Innovation**, (ahead-of-print). *(Q1 - 95% 7/149 Architecture)*

[41] Koltsios, S., Fokaides, P., Georgali, P. Z., Tsolakis, A. C., Chatzipanagiotidou, P., Klumbytė, E., ... & Tzovaras, D. (2022). An enhanced framework for next-generation operational buildings energy performance certificates. **International Journal of Energy Research**, 46(14), 20079-20095. *(Q1 - 91% 6/64 Nuclear Energy and Engineering)*

[42] Šadauskienė, J., Ramanauskas, J., Krawczyk, D. A., Klumbytė, E., & Fokaides, P. A. (2022). Investigation of Thermal Bridges of a New High-Performance Window Installation Using 2-D and 3-D Methodology. **Buildings**, 12(5), 572. *(Q1 - 90% 15/149 Architecture)*

[43] Morkunaite, L., Pupeikis, D., Jurelionis, A., Fokaides, P. A., & Papadopoulos, A. (2022). An Analytical Model for the Impact of Building Control and Automation Upgrade on Space Heating Energy Efficiency. **Buildings**, 12(8), 1074. *(Q1 - 90% 15/149 Architecture)*

[44] Kylili, A., Fokaides, P. A., Zachariou, A., Ioannou, B., Georgalli, P. Z., Vlachos, S., ... & Kirsimaa, K. (2022). A comprehensive policy framework for the development of green markets in European Islands. **Energy Sources, Part B: Economics, Planning, and Policy**, 17(1), 2148019. *(Q1 - 79% 58/280 General Chemical Engineering)*

[45] Mouzas, A. J., Ioannou, B., & Fokaides, P. (2022). The establishment of an intermodal walkability index for use in car oriented urban environments: The case of Nicosia. **Frontiers in Environmental Science**, 1230. *(Q2 - 73% 60/228 General Environmental Science)*

2021 - Articles in Scientific Journals - Peer Reviewed

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[80] Lagou, A., Kylili, A., Šadauskienė, J., & Fokaides, P. A. (2019). Numerical investigation of phase change materials (PCM) optimal melting properties and position in building elements under diverse conditions. **Construction and Building Materials**, 225, 452-464. *(Q1 - 95% 14/326 Civil and Structural Engineering)* ***(91st percentile Citations in Scopus)***

[81] Seduikyte, L., Stasiulienė, L., Prasauskas, T., Martuzevičius, D., Černeckienė, J., Ždankus, T., ... & Fokaides, P. (2019). Field Measurements and Numerical Simulation for the Definition of the Thermal Stratification and Ventilation Performance in a Mechanically Ventilated Sports Hall. **Energies**, 12(12), 2243. *(Q1 - 85% 18/118 Control and Optimization) (51st percentile Citations in Scopus)*

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2018 - Articles in Scientific Journals - Peer Reviewed

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[90] Christoforou, E. A., & Fokaides, P. A. (2018). Recent Advancements in Torrefaction of Solid Biomass. **Current Sustainable/Renewable Energy Reports**, 1-9. *(Q1 - 76% 28/115 Engineering (miscellaneous)) (36th percentile Citations in Scopus)*

2017 - Articles in Scientific Journals - Peer Reviewed

[91] Kylili, A., Ilic, M., & Fokaides, P. A. (2017). Whole-building Life Cycle Assessment (LCA) of a passive house of the sub-tropical climatic zone. **Resources, Conservation and Recycling**, 116, 169-177. *(Q1 - 99% 2/696 Economics and Econometrics)* ***(94th percentile Citations in Scopus)***

[92] Kylili, A, Fokaides, P.A. (2017). Policy trends for the sustainability assessment of construction materials: A review **Sustainable Cities and Society**, 35, 280-288 *(Q1 - 99% 5/747 Geography, Planning and Development)* ***(96th percentile Citations in Scopus)***

[93] Fokaides, P. A., Panayidou, A., Hadjichristos, C., Phocas, M.C. (2017). Application of non-linear programming to optimize buildings' solar exposure. **Journal of Building Engineering**, 11, 127-133. *(Q1 - 98% 3/149 Architecture) (33rd percentile Citations in Scopus)*

[94] Fokaides P.A., Polycarpou, K, Kalogirou, S (2017). The impact of the implementation of the European Energy Performance of Buildings Directive on the European building stock: The case of the Cyprus Land Development Corporation, **Energy Policy**, 111, 1-8. *(Q1 - 97% 11/376 Management, Monitoring, Policy and Law) (85th percentile Citations in Scopus)*

[95] Pyrilli, D., Savvides, A.L., Fokaides, P.A. (2017). The Impact of Urban Design on the Realization of the Zero Energy Building Target Through On-site Energy Production: a Case Study. **Current Sustainable/Renewable Energy Reports**, doi 10.1007/s40518-017-0072-6. *(Q1 - 76% 28/115 Engineering (miscellaneous)) (27th percentile Citations in Scopus)*

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[97] Exizidou, P., Christoforou, E., & Fokaides, P. A. (2017). Numerical assessment of night ventilation impact on the thermal comfort of vernacular buildings. **Journal of Building Pathology and Rehabilitation**, 2(1), 2 *(Q3 - 40% 125/211 Building and Construction) (42nd percentile Citations in Scopus)*

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2016 - Articles in Scientific Journals - Peer Reviewed

[100] Kylili, A., & Fokaides, P. A. (2016). Life Cycle Assessment (LCA) of Phase Change Materials (PCMs) for building applications: A review. **Journal of Building Engineering**, 6, 133-143. *(Q1 - 98% 3/149 Architecture)* ***(98th percentile Citations in Scopus)***

[101] Kylili, A., Christoforou, E., & Fokaides, P. A. (2016). Environmental evaluation of biomass pelleting using life cycle assessment. **Biomass and Bioenergy**, 84, 107-117. *(Q1 - 95% 7/153 Forestry)* ***(96th percentile Citations in Scopus)***

[102] Christoforou, E., Kylili, A., & Fokaides, P. A. (2016). Technical and economical evaluation of olive mills solid waste pellets. **Renewable Energy**, 96, 33-41. *(Q1 - 90% 21/215 Renewable Energy, Sustainability and the Environment) (67th percentile Citations in Scopus)*

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[104] Christoforou, E. A., & Fokaides, P. A. (2016). Life cycle assessment (LCA) of olive husk torrefaction. **Renewable Energy**, 90, 257-266. *(Q1 - 90% 21/215 Renewable Energy, Sustainability and the Environment) (73rd percentile Citations in Scopus)*

[105] Pyrgou, A., Kylili, A., & Fokaides, P. A. (2016). The future of the Feed-in Tariff (FiT) scheme in Europe: The case of photovoltaics. **Energy Policy**, 95, 94-102. *(Q1 - 97% 11/376 Management, Monitoring, Policy and Law)* ***(97th percentile Citations in Scopus)***

[106] Christoforou, E., Fokaides, P. A., Koroneos, C. J., & Recchia, L. (2016). Life Cycle Assessment of first generation energy crops in arid isolated island states: The case of Cyprus. **Sustainable Energy Technologies and Assessments**, 14, 1-8. (Q1 - 79% 49/235 Energy Engineering and Power Technology) *(38th percentile Citations in Scopus)*

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[108] Kylili, A., Fokaides, P. A., & Jimenez, P. A. L. (2016). Key Performance Indicators (KPIs) approach in buildings renovation for the sustainability of the built environment: A review. **Renewable and Sustainable Energy Reviews**, 56, 906-915. *(Q1 - 97% 6/215 Renewable Energy, Sustainability and the Environment) (73rd percentile Citations in Scopus)*

[109] Fokaides, P. A., Jurelionis, A., Gagyte, L., & Kalogirou, S. A. (2016). Mock target IR thermography for indoor air temperature measurement. **Applied Energy**, 164, 676-685. *(Q1 - 99% 1/211 Building and Construction) (57th percentile Citations in Scopus)*

[110] Christoforou, E., Kylili, A., Fokaides, P. A., & Ioannou, I. (2016). Cradle to site Life Cycle Assessment (LCA) of adobe bricks. **Journal of Cleaner Production**, 112, 443-452. *(Q1 - 98% 6/456 Strategy and Management) (86th percentile Citations in Scopus)*

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[112] Fokaides, P. A., Kylili, A., Nicolaou, L., & Ioannou, B. (2016). The effect of soil sealing on the urban heat island phenomenon. **Indoor and Built Environment**, 25(7), 1136-1147. *(Q2 - 75% 138/562 Public Health, Environmental and Occupational Health) (43rd percentile Citations in Scopus)*

[113] Christoforou, E. A., & Fokaides, P. A. Thermochemical Properties of Pellets Derived from Agro-residues and the Wood Industry. **Waste and Biomass Valorization**, 8, 1325-1330. *(Q2 - 71% 50/173 Environmental Engineering) (40th percentile Citations in Scopus)*

2015 - Articles in Scientific Journals - Peer Reviewed

[114] Kylili, A., & Fokaides, P. A. (2015). European smart cities: The role of zero energy buildings. **Sustainable Cities and Society**, 15, 86-95. *(Q1 - 99% 5/747 Geography, Planning and Development)* ***(99th percentile Citations in Scopus)***

[115] Erdas, C., Fokaides, P. A., & Charalambous, C. (2015). Ecological footprint analysis based awareness creation for energy efficiency and climate change mitigation measures enhancing the environmental management system of Limassol port. **Journal of Cleaner Production**, 108, 716-724. *(Q1 - 98% 6/456 Strategy and Management) (62nd percentile Citations in Scopus)*

[116] Kylili, A., & Fokaides, P. A. (2015). Competitive auction mechanisms for the promotion renewable energy technologies: The case of the 50MW photovoltaics projects in Cyprus. **Renewable and Sustainable Energy Reviews**, 42, 226-233. *(Q1 - 97% 6/215 Renewable Energy, Sustainability and the Environment) (53rd percentile Citations in Scopus)*

[117] Fokaides, P. A., Tofas, L., Polycarpou, P., & Kylili, A. (2015). Sustainability aspects of energy crops in arid isolated island states: the case of Cyprus. **Land Use Policy**, 49, 264-272. *(Q1 - 97% 21/747 Geography, Planning and Development) (58th percentile Citations in Scopus)*

[118] Fokaides, P. A., Kylili, A., & Kalogirou, S. A. (2015). Phase change materials (PCMs) integrated into transparent building elements: a review. **Materials for Renewable and Sustainable Energy**, 4(2), 1-13. *(Q1 - 81% 57/298 Materials Chemistry) (68th percentile Citations in Scopus)*

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[121] Kylili, A., & Fokaides, P. A. (2015). Numerical simulation of phase change materials for building applications: a review. **Advances in Building Energy Research**, 1-25. *(Q2 - 68% 66/211 Building and Construction) (59th percentile Citations in Scopus)*

2014 - Articles in Scientific Journals - Peer Reviewed

[122] Kylili, A., Fokaides, P. A., Christou, P., & Kalogirou, S. A. (2014). Infrared thermography (IRT) applications for building diagnostics: A review. **Applied Energy**, 134, 531-549. *(Q1 - 99% 1/211 Building and Construction)* ***(96th percentile Citations in Scopus)***

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[125] Fokaides, P. A., & Papadopoulos, A. M. (2014). Cost-optimal insulation thickness in dry and mesothermal climates: Existing models and their improvement. **Energy and Buildings**, 68, 203-212. *(Q1 - 97% 10/326 Civil and Structural Engineering)* ***(94th percentile Citations in Scopus)***

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16(3), 477-488. *(Q1 - 90% 22/216 General Business, Management and Accounting) (84th percentile Citations in Scopus)*

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[128] Christoforou, E. A., Fokaides, P. A., & Kyriakides, I. (2014). Monte Carlo parametric modeling for predicting biomass calorific value. **Journal of Thermal Analysis and Calorimetry**, 118(3), 1789-1796. *(Q1 - 87% 51/415 Condensed Matter Physics) (64th percentile Citations in Scopus)*

[129] Christoforou, E. A., & Fokaides, P. A. (2014). A review of quantification practices for plant-derived biomass potential. **International Journal of Green Energy** 2015;12:368-378. *(Q2 - 55% 97/215 Renewable Energy, Sustainability and the Environment) (49th percentile Citations in Scopus)*

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2013 - Articles in Scientific Journals - Peer Reviewed

[131] Kylili, A., & Fokaides, P. A. (2013). Investigation of building integrated photovoltaics potential in achieving the zero energy building target. **Indoor and Built Environment**, 1420326X13509392. *(Q2 - 75% 138/562 Public Health, Environmental and Occupational Health) (82nd percentile Citations in Scopus)*

2011 - Articles in Scientific Journals - Peer Reviewed

[132] Fokaides, P. A., & Kalogirou, S. A. (2011). Application of infrared thermography for the determination of the overall heat transfer coefficient (U-Value) in building envelopes. **Applied Energy**, 88(12), 4358-4365. *(Q1 - 99% 1/211 Building and Construction)* ***(94th percentile Citations in Scopus)***

[133] Fokaides, P. A., Maxoulis, C. N., Panayiotou, G. P., Neophytou, M. K. A., & Kalogirou, S. A. (2011). Comparison between measured and calculated energy performance for dwellings in a summer dominant environment. **Energy and Buildings**, 43(11), 3099-3105. *(Q1 - 97% 10/326 Civil and Structural Engineering) (86th percentile Citations in Scopus)*

2010- Articles in Scientific Journals - Peer Reviewed

[134] Panayiotou, G. P., Kalogirou, S. A., Florides, G. A., Maxoulis, C. N., Papadopoulos, A. M., Neophytou, M., ... & Georgakis, G. (2010). The characteristics and the energy behaviour of the residential building stock of Cyprus in view of Directive 2002/91/EC. **Energy and Buildings**, 42(11), 2083-2089. *(Q1 - 97% 10/326 Civil and Structural Engineering) (85th percentile Citations in Scopus)*

2009 - Articles in Scientific Journals - Peer Reviewed

[135] Fokaides, P., Weiß, M., Kern, M., & Zarzalis, N. (2009). Experimental and numerical investigation of swirl induced self-excited instabilities at the vicinity of an airblast nozzle. **Flow, turbulence and combustion**, 83(4), 511-533. *(Q1 - 78% 53/240 General Physics and Astronomy) (46th percentile Citations in Scopus)*

2008 - Articles in Scientific Journals - Peer Reviewed

[136] Fokaides, P. A., Kasabov, P., & Zarzalis, N. (2008). Experimental investigation of the stability mechanism and emissions of a lifted swirl nonpremixed flame. **Journal of Engineering for Gas Turbines and Power**, 130(1), 011508. *(Q1 - 77% 15/64 Nuclear Energy and Engineering) (77th percentile Citations in Scopus)*

2005 - Articles in Scientific Journals - Peer Reviewed

[137] Koroneos, C., Fokaides, P., & Moussiopoulos, N. (2005). Cyprus energy system and the use of renewable energy sources. **Energy**, 30(10), 1889-1901. *(Q1 - 98% 5/303 Modeling and Simulation) (73rd percentile Citations in Scopus)*

Peer-reviewed Scientific Articles published in Conference Proceedings

2025 - Articles in Conference Proceedings - Peer Reviewed

[1] Koltsios, S., Katsaros, N., Mpouzianas, N., Klonis, P., Giannopoulos, G., Pastaltzidis, I., ... & Tzovaras, D. (2022, September). Digital Twin application on next-generation Building Energy Performance Certification scheme. In 2022 IEEE International Smart Cities Conference (ISC2) (pp. 1-7). IEEE, Cyprus.

[2] Apostolidou, E., **Fokaides, P.,** Tatas, C., Kassianides, V., Ortega Martínez, R.,, Chalkia, H., Chatzipanagiotidou, P., Ioannidis, D., Bezas, N., Koskinas, I., Tzilopoylos, D. (2025). Enhancing Accessibility in the Built Environment Using IoT-Enabled Smart Sensors. **Conference in Advancements in Sustainable Engineering (CASE25). Frederick University, 11-12 September 2025, Limassol, Cyprus.**

[3] Carnero Melero, P., Waide, P., **Fokaides, P.A.** (2025). Integrating Smart Readiness Assessment and Building Inspections: A Comparative Analysis under the EPBD Recast. **REHVA HVAC World Congress CLIMA 25. Decarbonized, healthy, and energy-conscious buildings in future climates. , 04-06 June 2025, Milan, Italy.**

[4] Chadjiconstantinides, K., Giama, F., Chantzis, G., Zafeiriou, A., **Fokaides, P.**, Papadopoulos, A. (2025). Resilient Water Management in Smart Buildings: Insights from the COVID-19 Pandemic. **Conference in Advancements in Sustainable Engineering (CASE25). Frederick University, 11-12 September 2025, Limassol, Cyprus.**

[5] Christodoulides V., Afxentiou, N., **Fokaides, P.** (2025). Utilizing Digital Twin Technology for improved predictive modelling of Energy Consumption in Smart Buildings **Inter Klima Conference, Vodice, Croatia, 26-28 March, 2025**

[6] Demetriou, E.,Vitistas, C., Penezić, Z., **Fokaides, P.** Advancing Green University Campuses: Challenges, Best Practices, and the Role of Environmental Management Systems. **Conference in Advancements in Sustainable Engineering (CASE25). Frederick University, 11-12 September 2025, Limassol, Cyprus.**

[7] Demetriou, E., **Fokaides, P.,** Koumenidou, K., Alexopoulou, E. (2025). Whole Life Cycle Analysis of Buildings: Carbon Sequestration Databases and Carbon Balances. **10th International Conference on Smart and Sustainable Technologies (SpliTech), Split, Croatia.**

[8] Ersener, T., **Fokaides, P.A**., Koukaras, P., Asgharzadeh, F., Luparelli, A., Mastandrea, G. (2025). Comparative Assessment of Smart Ready Technologies Using Economic and Technological Metrics. **Conference in Advancements in Sustainable Engineering (CASE25). Frederick University, 11-12 September 2025, Limassol, Cyprus.**

[9] Ersener, T., **Fokaides, P.A.** (2025). Overview of the Use of AI in Buildings Sustainability Assessment. **1st International Conference on Building Digital Twin and Smart Cities (BDTSC), Kaunas University of Technology (KTU), Lithuania.**

[10] **Fokaides, P.**. (2025) Recent Developments in Life Cycle Assessment Implementation in the EU: Advancing Sustainability Through Level(s) and the New European Bauhaus. **10th International Conference on Smart and Sustainable Technologies (SpliTech), Split, Croatia.**

[11] **Fokaides, P.A.,** Afxentiou, N., Carnero Melero, P., Pietrobon, M, Zamandiou, A. (2025). Smart Data Collection for Building Sustainability Assessment: The Case of Call Centres and the Smart Readiness Indicator, **Conference in Advancements in Sustainable Engineering (CASE25). Frederick University, 11-12 September 2025, Limassol, Cyprus.**

[12] Klitou, T., **Fokaides, P.**, Dourlens-Quaranta, S., Barrère, C., Litiu, A.V., Koukaras, P. Momi, S. (2025). Towards Integrated Building Assessment: A Unified Certificate for Energy Performance and Smart Readiness. **Conference in Advancements in Sustainable Engineering (CASE25). Frederick University, 11-12 September 2025, Limassol, Cyprus.**

[13] Koumenidou, K., Demetriou, E., **Fokaides, P.**, Vayanou, P. (2025). Navigating the Bio-economy Landscape: Crafting Sustainable and Circular Futures for Underrepresented Southern European Regions. **Conference in Advancements in Sustainable Engineering (CASE25). Frederick University, 11-12 September 2025, Limassol, Cyprus.**

[14] Kyriakou, C., Klitou, T., Afxentiou, N., **Fokaides, P.** (2025). A digital model for the monitoring of a solar thermal system: development and analysis. **International Conference on Renewable Energy Systems (ICRES) with focus on Solar Technologies. Thessaloniki, 09-11 April 2025**

[15] Kythreotis, C., Carnero Melero, P., Veliskaki, A.,,Koltsios, S., **Fokaides, P.A.** (2025). A Data-Driven Framework for Operational Energy Performance Certification Aligned with Directive (EU) 2024/1275. **Conference in Advancements in Sustainable Engineering (CASE25). Frederick University, 11-12 September 2025, Limassol, Cyprus.**

[16] Litiu, A. V., **Fokaides, P. A.**, Zirngibl, J., Kurnitski, J., Hogeling, J., Carnero Melero, P., Robimarga, F. (2025) The 2024 recast EPBD: What HVAC and building professionals need to know? **Conference in Advancements in Sustainable Engineering (CASE25). Frederick University, 11-12 September 2025, Limassol, Cyprus.**

[17] Lungu, C., Catalina, T., **Fokaides, P,** Carnero, P., Ilies, I. (2025). Development of the SmartLivingEPC Rating System for Ho-listic Building Performance Assessment. **REHVA HVAC World Congress CLIMA 25. Decarbonized, healthy, and energy-conscious buildings in future climates. , 04-06 June 2025, Milan, Italy.**

[18] Okrzesik, M., **Fokaides, P.A.** (2025). Overview of the Use of Co-Creation Tools for the Design of Sustainable Buildings. **1st International Conference on Building Digital Twin and Smart Cities (BDTSC), Kaunas University of Technology (KTU), Lithuania.**

[19] Petrou, A., Georgiou, A., Georgiou, S., Koumenidou, K., Kyriakou, C., , **Fokaides, P.A.** (2025) Reviewing Resilience Enhancement Solutions for the Built Environment under Climate Stressors. **Conference in Advancements in Sustainable Engineering (CASE25). Frederick University, 11-12 September 2025, Limassol, Cyprus.**

[20] Pietrapertosa, F., Reckien, D., Treville, A., Viguiée, V., Salvia, M., Santopietro, L., Buzasi, A., Eckersley, P., Rižnar, K., Geneletti, D., Ioannou, B., Grafakos, S., De Gregorio Hurtado, S., Krook-Riekkola, A., Foley, A. M., Orru, H., **Fokaides, P.**, Bertoldi, P., Szalmane Csete, M., Heidrich, O., Feliu, E. (2025). Quality check of urban adaptation plans for more effective policies. **1st FutureMed Workshop & Training School 29th September to 3rd October – Chania, Crete**

[21] Pietrapertosa, F., Treville, A., Reckien, D., Salvia, M., Vigué, V., Geneletti, D., Ioannou, B., Krook-Riekkola, A., Bertoldi, P., Foley, A. M., De Gregorio Hurtado, S., Buzási, A., **Fokaides, P.**, Rižnar, K., Eckersley, P., Heidrich, O., Feliu, E., Santopietro, L., Orru, H., Szalmane Csete, M., Grafakos, S. (2025). Assessing the Quality of Urban Climate Adaptation Plans: Insights from 2205 Cities of the Global Covenant of Mayors. **13th Annual Conference of the Italian Society for Climate Sciences 22-24 October 2025, Salerno, Italy**

[22] Salvia, M., Pietrapertosa, F., Buzasi, A., Olazabal, M., **Fokaides, P.**, Eckersley, P., Reckien, D. (2025). The quality and consistency of urban climate adaptation plans in 327 European cities. **1st FutureMed Workshop & Training School 29th September to 3rd October – Chania, Crete**

[23] Spudys, P., Klumbyte, E., Morkunaite, L., Jurelionis, A., **Fokaides, P.** (2025). A Multi-Criteria Decision-Making Approach for Sustainable Building Improvement: Integrating Expert Evaluation and Optimization Methods. **REHVA HVAC World Congress CLIMA 25. Decarbonized, healthy, and energy-conscious buildings in future climates. , 04-06 June 2025, Milan, Italy.**

[24] Spudys, P., Scoccia, R.,,Pupeikis, P.,Jurelionis, A.,, **Fokaides, P.**, Mazzarella, L. (2025). Challenges in Digitalizing Indoor Environmental Monitoring: Insights from the IEQ Monitoring Systems at Kaunas University of Technology. **REHVA HVAC World Congress CLIMA 25. Decarbonized, healthy, and energy-conscious buildings in future climates. , 04-06 June 2025, Milan, Italy.**

2024 - Articles in Conference Proceedings - Peer Reviewed

[25] Afxentiou, N., Douni, O., Paraskakis, N., & Fokaides, P. A. (2024, June). Simplifying Smart Readiness: A Novel Tool for Rapid SRI Assessment in European Buildings. **9th International Conference on Smart and Sustainable Technologies (SpliTech)**

[26] Carnero, P., Koltsios, S., Veliskaki, A., Katsaros, N., Fokaides, P. A., Ioannidis, D., & Tzovaras, D. (2024, June). Innovative SRI Evaluation Through BIM: Developing a Unique Rule-Checking Methodology Utilizing the IFC Schema. **9th International Conference on Smart and Sustainable Technologies (SpliTech)**

[27] Chatzikonstantinidis, K., Giama, E., Chantzis, G., Zafeiriou, A., Fokaides, P. A., & Papadopoulos, A. M. (2024, June). Smart Buildings and Water Management in Crises: The case of COVID-19 Lockdown. **9th International Conference on Smart and Sustainable Technologies (SpliTech)**

[28] Giama, E., Chatzikonstantinidis, K., Chantzis, G., Manataki, M., Fokaides, P., & Papadopoulos, A. (2024, June). Smart Readiness, A Tool for Green Building Certification Schemes Towards Carbon Neutrality in the Built Environment. **9th International Conference on Smart and Sustainable Technologies (SpliTech)**

[29] Klitou, T., **Fokaides, P.A.** (2024). Introducing the Smart Proactive Indicator (SPI): Advancing Comparative Assessment and Investment in Smart Buildings. **Innovations in construction and smart building technologies for comfortable, energy efficient and sustainable life style.20-21 February 2024, PSACEA, Dnipro, Ukraine.**

[30] Klitou, T., Pavlou, N., Barrère, C., Dourlens–Quanranta, S., Momi, S., Messervey, T. B., ... & Fokaides, P. A. (2024, June). Bridging the Gap: A Comprehensive Review of EPC and SRI Calculation Tools in Europe. **9th International Conference on Smart and Sustainable Technologies (SpliTech)**

[31] Osadcha, I., Jurelionis, A., & Fokaides, P. (2024, June). Requirements for Geometrical Data in Digital Twin for Building Energy Modelling and Interoperability. **9th International Conference on Smart and Sustainable Technologies (SpliTech)**

[32] Papadopoulos, P., Koukaras, P., Giama, E., Ioannidis, D., Papadopoulos, A. M., & Fokaides, P. A. (2024, June). Enhancing Smart Readiness through Simplified Financial Indicators. **9th International Conference on Smart and Sustainable Technologies (SpliTech)** .

[33] Xekalakis, G., Apostolaki, S., Martinavicius, D., Fokaides, P., Christou, P. (2024). Implementation of the PRISM survey form to create seismic risk maps. **The Fifth European and Mediterranean Structural Engineering and Construction Conference, Vilnius, Lithuania, May 13-17, 2024**

[34] Xekalakis, G., **Fokaides, P.,** Christou, P. (2024). Importance of data collection in risk assessment and the challenges behind. **EU Conexus Research Conference, "Sustainable Solutions for Energy and Environment" 29th - 31st of October 2024, Bucharest, Romania**

[35] Zamanidou, A., Magliozzi, A., & Fokaides, P. (2024, June). From Buildings to Neighborhoods: Upscaling Smartness Assessment for Enhanced Sustainability. **9th International Conference on Smart and Sustainable Technologies (SpliTech)**

[36] Zamanidou, A., **Fokaides, P.**, Christoforidis, G.C. (2024). Enhancing the Smart Readiness Indicator Scheme: Methodology Assessment through 20 Use Cases **SyNERGY MED 2024 · The 3rd International Conference on Energy Transition in the Mediterranean Area · 21-23 October 2024 · Limassol, Cyprus**

[37] Αυξεντίου, Ν., Ντούνη, Ο., Παρασκάκης, Ν., Φωκαΐδης, Π.Α. (2024). Απλοποίηση της έξυπνης ετοιμότητας (SRI) σε ευρωπαϊκά κτήρια. 13ο Εθνικό Συνέδριο για τις Ήπιες Μορφές Ενέργειας, Αθήνα 15-17 Μαίου 2024

[38] Δημητρίου, Ε., Φωκαΐδης, Π.Α. (2024) Ολιστική ανάλυση κύκλου ζωής κτηρίων: Βάσεις δεδομένων και ισοζύγια άνθρακα. 13ο Εθνικό Συνέδριο για τις Ήπιες Μορφές Ενέργειας, Αθήνα 15-17 Μαίου 2024

[39] Κυθραιώτης, Χ., Χαραλαμπίδης, Μ., Ντούνη, Ο., Αυξεντίου, Ν., Ιωάννου, Β., Φωκαΐδης, Π.Α. (2024). Ανάπτυξη και εφαρμογή υπολογιστικού κώδικα για τον σχεδιασμό πόλεων 15 λεπτών. 13ο Εθνικό Συνέδριο για τις Ήπιες Μορφές Ενέργειας, Αθήνα 15-17 Μαίου 2024

[40] Παπαδόπουλος, Π., Ιωάννου, Β., Κουκάρας, Π., Ιωαννίδης, Δ., Φωκαΐδης, Π (2024). Κατάταξη ευφυίας και οικονομική ανάλυση συστημάτων αυτοματισμού και ελέγχου για τεχνικά συστήματα κτηρίων. 13ο Εθνικό Συνέδριο για τις Ήπιες Μορφές Ενέργειας, Αθήνα 15-17 Μαίου 2024

2023 - Articles in Conference Proceedings - Peer Reviewed

[41] Chantzis, G., Zafeiriou, A., Chavari, A. Giama, E., **Fokaides, P.,** Papadopoulos, A. Optimization of a Hybrid Renewable Energy System for power generation on Greek Non-Interconnected Islands: The case of Amorgos. 2023 **8th International Conference on Smart and Sustainable Technologies, SpliTech 2023, 20-23 June 2023, Brac/Split, Croatia**

[42] Demetriou, E., **Fokaides, P.A.** (2023). Evaluating and Defining Repositories for Calculating CO2 Absorption by Urban Plantations . **7th International Conference on Renewable Energy Sources and Energy Efficiency - Energy Security, October 12 - 14, 2023, Nicosia, Cyprus**

[43] **Fokaides, P.A..** Europe's bleak energy winter: Exploring energy alternatives in the Middle East. **International Conference & Exhibition for Science (ICES2023) 6-8 February 2023, King Saud University, Riyadh, Saudi Arabia**

[44] **Fokaides, P.A.,** Basabe, A.A., Chatzipanagiotidou, P., Koltsios, S., Georgali, P.Z., Ioannidis, D., Tzovaras, D.. The role of operational rating for achieving the NZEB Target: The Need for New Standards. **The 15th "Romanian Conference on Energy Performance of Buildings" (RCEPB-XV) 8–9 June 2023, Bucharest, Romania**

[45] **Fokaides, P.A.**, Klitou, T., Georgali, P.Z., Papadopoulos, A. 2023 Buildings Minimum Energy Requirements, The Cyprus Case Study: Lessons Learnt 2nd Hybrid (physical-virtual real-time) Workshop in **"Innovative Seismic Protection and Structural/Community Resilience" 2-4. September 2023, Democritus University of Thrace (DUTh), Xanthi, Greece.**

[46] **Fokaides, P.A.,** Konatzii, P., Georgali, P.Z.. First evidences of energy performance certificate operational rating: The case of Cyprus. **International Council for Research and Innovation in Building and Construction. Sustainable Built Environment Conference (SBE2022), 22-24 March 2023, Thessaloniki, Greece**

[47] Georgali, P.Z., Afxentiou, N., **Fokaides, P.A.** (2023). Operational Rating in Buildings - Current Trends and Future Prospects. **7th International Conference on Renewable Energy Sources and Energy Efficiency - Energy Security, October 12 - 14, 2023, Nicosia, Cyprus**

[48] Klitou, T., **Fokaides, P.A**. (2023). Thermochemical Properties and Life Cycle Assessment of Waste Spent Coffee Grounds. **2023 Circular Bioeconomy in a Decarbonised World Symposium. 15-16 June 2023. The University of Queensland, Brisbane, Australia.**

[49] Konatzii, P., Georgali, P.Z., **Fokaides, P.A...** Heritage Life Cycle Assessment (HLCA): Evaluating the sustainability of heritage buildings. **International Council for Research and Innovation in Building and Construction. Sustainable Built Environment Conference (SBE2022), 22-24 March 2023, Thessaloniki, Greece**

[50] Morkunaite,L., Kardokas, J., Pupeikis, D., **Fokaides, P.**, Angelakis, V.. Multi-story residential buildings heat dynamics grey box modelling in sense of digital twins **IEEE 9th World Forum on Internet of Things 12–27 October 2023 Aveiro, Portugal**

[51] Osadcha, I., Jurelionis, A., **Fokaides, P..** Review of the framework for updating the geometry of a Digital Twin. **2023 IEEE European Technology and Engineering Management Summit. 20-22 April 2023, Kaunas, Lithuania.**

[52] Pietrapertosa, F.,, Buzasi. A., Olazabal, M., Spyridaki, N.A., Eckersley, P., Simoes. S.G., Salvia, M., **Fokaides, P.,** Reckien, D., Assessing planning progress: The quality of Urban Adaptation Plans in Europe. **6th European Climate Change Adaptation Conference 2023 19-21 June Dublin, Ireland**

[53] Reckien, D., Buzasi. A., Olazabal, M., Spyridaki, N.A., Eckersley, P., Simoes. S.G., Salvia, M., Pietrapertosa, F., **Fokaides, P.** How the quality of urban adaptation plans in Europe has evolved over time: indication of progress? Judgement by way of an assessment framework. **Adaptation Futures Conference 2023. 2- 6 October 2023. Montreal, Canada.**

[54] Seduikyte, L., Kalamaris, T., Georgali, P.G., Konatzii, P., Chatzipanagiotidou, P., Katsaros, N., Koltsios, S., Ioannidis, D., Stasiulienėa, L., Spūdys, P., Jurelionis, A., **Fokaides, P..** Integration of Human Comfort Indicators in a Holistic Framework of Next-Generation Energy Performance Certificates **18th Healthy Buildings Europe Conference, 11 – 14 June 2023, Aachen, Germany**

[55] Spudys, P., **Fokaides, P.A.** Tools for Digitizing Buildings Energy Audits: Case Studies and First Evidences. **SpliTech 2023 International conference on smart and sustainable technologies, 20-23 June 2023, Split - Bol, Croatia**

[56] Zafeiriou, A., Chantzis, G., Jonkaitis, T., **Fokaides, P.,** Papadopoulos, A.. Smart Energy Strategy - A Comparative Study of Energy Consumption Forecasting Machine Learning Models. **26th Conference Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction 8 - 11 October 2023 Thessaloniki, Greece**

2022 - Articles in Conference Proceedings - Peer Reviewed

[57] **Fokaides, P.,** Jurelionis, A.,Spudys, P.. Boosting Research for a Smart and Carbon Neutral Built Environment with Digital Twins (SmartWins) **2022 IEEE Smart Cities International Conference (ISC2), 26-29 September 2022 · Paphos, Cyprus**

[58] Georgali, P.Z., **Fokaides, P.A**.. Life Cycle Analysis of wool utilization. **2nd European Wool Day, 9 April 2022, Museo del Traje, Spain**

[59] Ioannou, B., Konatzii, P., Mouzas, A.J., **Fokaides, P..** Walkability indexes and Energy and Climate adaptation plans. Bridging the gap. **17th SDEWES Conference, Paphos 2022. 6-10 November 2022, Paphos, Cyprus**

[60] Klitou, T., **Fokaides, P.A.**. Numerical Investigation of the thermal performance of a solid biofuel boiler. **International Symposium and Workshops Sustainable Solutions at Times of Transition (SuST) 14-17 July 2022, Nisyros Island, Greece**

[61] Koltsios, S., Katsaros, N., Mpouzianas, N., Klonis, P., Giannopoulos, G., Pastaltzidis, I., Chatzipanagiotidou, P., Klumbytė, E., Jurelionis, A., Šeduikytė, L., Georgali, P.Z., **Fokaides, P.**, Ioannidis, D., Tzovaras, D. Digital Twin application on next-generation Building Energy Performance Certification scheme **2022 IEEE Smart Cities International Conference (ISC2) 26-29 September 2022 , Paphos, Cyprus**

[62] Mela, M., **Fokaides, P.A.**. Numerical assessment of solar assisted plastics pyrolysis for sustainable utilization of plastic waste. **International Symposium and Workshops Sustainable Solutions at Times of Transition (SuST) 14-17 July 2022, Nisyros Island, Greece**

[63] Šadauskienė, J., Ramanauskas, J., Krawczyk, D.A., Klumbytė, E., **Fokaides, P.A.**. Investigation of thermal bridges of a new high-performance windows installatoin using 2D and 3D methodology. **ISMO 22 XI International Scientific Conference Environmental Engineering - Through A Young Eye - Innovations – Sustainability – Modernity – Opennes, May 2022 Bialystok University of Technology, Poland.**

[64] Seduikyte,L., Morsink-Georgali,P.Z., Panteli,C., Chatzipanagiotidou,P., Koltsios,S., Ioannidis, D., Stasiulienė, L., Spūdys, P., Pupeikis, D., Jurelionis, A., **Fokaides, P.**. Next-Generation Energy Performance Certificates. What novel implementation do we need? **CLIMA 2022: the 14th REHVA HVAC World Congress 22nd – 25th May in Rotterdam, The Netherlands**

[65] Seduikyte,L., Panteli,C., Klumbytė,E., Spūdys,P., Morsink-Georgali,P.Z., Černeckienė,J., Chatzipanagiotidou,P., Koltsios,S., Ioannidis,D., Jurelionis,A., **Fokaides,P.**. Next-generation energy performance certificates. Users and stakeholders requirements and market's needs. **Energy and Climate Transformations: 3rd International Conference on Energy Research & Social Science Conference 20-23 June 2022 | Renold Building, University of Manchester, UK**

[66] Seduikyte, L., Konatzii, P., Georgali, P.Z., Klumbyte, E., **Fokaides, P.A.** First evidence of sustainability assessment of educational building units with the use of Building Information Modelling tools. **International Symposium and Workshops Sustainable Solutions at Times of Transition (SuST) 14-17 July 2022, Nisyros Island, Greece**

[67] Spudys, P., Afxentiou, N., Konatzii, P., Jurelionis, A., **Fokaides, P.A.**. Employment of digital twins for the implementation of energy audits. **SpliTech 2022 7th International Conference on Smart and Sustainable Technologies (SpliTech). 5-8 July 2022, Split - Bol, Croatia**

[68] Tzima, M.S., Agapiou, A., Lysandrou, V., Artopoulos, G., **Fokaides, P.,** Chrysostomou, C.. An application of Machine Learning methods in Earth Observation datasets for monitoring historic clusters in Cypriot cities. **17th SDEWES Conference, Paphos 2022. 6-10 November 2022, Paphos, Cyprus**

2021 - Articles in Conference Proceedings - Peer Reviewed

[69] Carlucci, R., Di Iorio, A., **Fokaides, P.**, Ioannou, A., Luglio, M., Quadrini, M., ... & Zampognaro, F. (2021, October). Architecture definition for a multi-utility management platform. In **2021 International Symposium on Networks, Computers and Communications (ISNCC) (pp. 1-6). IEEE**

[70] Koltsios,S., Tsolakis,A.C., **Fokaides, P.,** Katsifaraki, A., Cebrat, G., Jurelionis,A., Kontopoulos,C., Chatzipanagiotidou, P., Malavazos, C., Ioannidis, D., Tzovaras, D. D2EPC: Next Generation Digital and Dynamic Energy Performance Certificates. **Splitech 2021 6th International Conference on Smart and Sustainable Technologies (SpliTech) ; 8-11 September 2021, Split-Bol, Croatia**

[71] Morsink-Georgali, P.Z., Carlucci, R., Kylili, A., Giama, E., Panteli, C.,Charalampopoulou, V., Coradini, M., Jurelionis, A., Ioannou, B., Luglio, M., Olschewski, D., Papadopoulos, A.,Pupeikis, D., Sokaitis, D., Di Iorio, A., **Fokaides, P.**. Critical Assessment of Utilities under Crisis Conditions. **9th Global Conference on Global Warming (GCGW-2021) August 1-4, 2021 Virtual conference Croatia**

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2014 – Book Chapters - Peer Reviewed

[14] Fokaides PA, Kylili A, 2014. Smart Energy Regions: Cyprus Case Study. In COST Action TU1104 – Smart Energy Regions. Eds . Jones P, Lang W, Patterson J and Geyer P. The Welsh School of Architecture, Cardiff University, 45-54.

2013 – Book Chapters - Peer Reviewed

[15] Fokaides PA, Poullikkas A, Christofides C, 2013. Lost in the National Labyrinths of Bureaucracy: The Case of Renewable Energy Governance in Cyprus. In Renewable Energy Governance. Eds. Michalena E., Hills J, Maxwell J. Springer London, 69-81.
[16] Fokaides PA, Polycarpou P, 2013. Exploitation of olive solid waste for energy purposes. In Renewable energy, economies, emerging technologies and global practices. Ed Poullikkas A. New York: Nova Science Publishers, Inc, 163-78.

2011 – Book Chapters - Peer Reviewed

[17] Fokaides, PA, 2011. Towards zero energy buildings (ZEB): the role of environmental technologies. In Green and ecological technologies for urban planning: creating smart cities. Ed. Ercoskun O. Hershey, USA: IGI Global Publication, 93-111.

Dissertations/Thesis

[1] Fokaides PA. (2013). Experimentelle Analyse der Stabilisierungseigenschaften von abgehobenen eingeschlossenen nicht-vorgemischten Drallflammen. KIT Scientific Publishing.

Patents

[1] Zarzalis, N., Fokaides, P. A., & Merkle, K. (2005). Fuel Injection Apparatus, Patent No. DE, 10(2005), 022.

1. Frederick University Department of Mechanical Engineering, BSc in Mechanical Engineering

Code	**Title**	**Semester Taught**
ME 304	**Heat Transfer**	F19, F21, F22, F23, F25
Brief Description	● Introduction to heat transfer ● Steady-state and transient heat conduction ● Free and forced convection ● Radiation ● Boiling and Condensation ● Mass transfer principles ● Transient mass transfer	
Code	**Title**	**Semester Taught**
AMEE 202 (ME 202)	**Fluid Mechanics**	S15, S19, S21, S22, S23, S25, S26
Brief Description	● Properties of fluids ● Pressure and fluid statics ● Fluid Kinematics ● Momentum analysis of flow systems ● Flow in Pipes	
Code	**Title**	**Semester Taught**
AMEE 310 (ME 310)	**Hydraulics and Pneumatics**	F12, F13, F14, F15, F16, F17, F18, F19, F21
Brief Description	● Introduction to hydraulic power systems ● Ideal and real analysis of hydraulic systems components, including oils, transmission lines, pumps, valves, actuators and accessories ● Introduction to pneumatic power systems	
Code	**Title**	**Semester Taught**
ASOG 300 (OG 300)	**Mass and Energy Balance**	F15, F17
Brief Description	● Thermophyscial properties of pure substances and mixtures ● Mass balances for non-reacting and reacting flows ● Energy balances in non-reacting systems ● Computational Applications	
Code	**Title**	**Semester Taught**
ASOG 402 (OG 402)	**Fundamentals of pipeline design**	S16, S18, S19, S21, S22, S23, S25
Brief Description	● Elemental analysis of pipeline design for natural gas transportation ● Equations used for calculation of pressure drop due to friction ● Pipping in series and in parallel analysis ● Compressor stations versus pipe loops ● Computational Applications	
Code	**Title**	**Semester Taught**
ASOG 403 (OG 403)	**Industrial Processes**	F16, F18
Brief Description	● Process design of heat exchangers ● Process design of distillation columns ● Process design of absorbers ● Petroleum refining ● Modelling of heat exchangers ● Modelling of distillation columns	

2. Frederick University Department of Civil Engineering, BSc in Civil Engineering

Code	**Title**	**Semester Taught**
CESU 310	**Energy Design of Buildings**	S13, S14, S15, S16, S17, S18, S19
Brief Description	● Basic principles of energy transfer from and to the building envelope ● Indoor thermal comfort, indoor comfort indicators ● Best practices in building's thermal insulation ● Overall heat transfer coefficient of building elements ● Building's heat losses ● Energy performance certification (EPCs) calculations and issuance	
Code	**Title**	**Semester Taught**
CEH 240	**Fluid Mechanics**	S13, S14, S15, S16, S17, S18, S19
Brief Description	● Basic fluids properties ● Physics of fluids in rest, hydrostatic pressure, pressure variation, buoyancy ● Physics of fluids in motion, Bernoulli equation, velocity and acceleration field	
Code	**Title**	**Semester Taught**
CESU 420	**Structural aspects in renewable energy applications**	F14
Brief Description	● Basic concepts of renewable energy sources applications ● Large structures deemed necessary for the proper operation of renewable energy sources power plants ● Structures related to on ground, coastal and underground renewable energy technologies applications	

3. Frederick University Department of Civil Engineering, BSc in Quantity Surveying

Code	**Title**	**Semester Taught**
AQSE 430	**Evaluating Sustainable Development**	S14
Brief Description	● Sustainability aspects in the built environment ● Sustainable building materials and energy technologies for the built environment ● Whole life costing concept in the built environment ● Sustainability schemes for eco-friendly buildings	
Code	**Title**	**Semester Taught**
AQSM 475	**Facilities Management**	F13, S19
Brief Description	● Basic concepts in facilities management ● Building services and building electromechanical equipment ● Facilities planning ● In-house versus outsourcing of facilities management ● Facilities management service providers	

4. Frederick University Department of Architecture, BSc in Architecture

Code	**Title**	**Semester Taught**
APX 333 (APX 432)	**Buildings Environmental Design (co-teaching with Dr Nikos Georgiou)**	S15, S16, S17, S18, S19, F22, F23, F25
Brief Description	● Passive buildings design ● Building integration of renewable energy technologies ● Building services and energy efficiency of buildings ● Low energy buildings standards ● Buildings sustainability schemes	

5. Frederick University School of Engineering MSc in Sustainable Energy Systems (as of Fall Semester 22: MSc in Energy Engineering)

Code	**Title**	**Semester Taught**
MES 503 (MEEB 503)	**Energy and Environmental Policies**	F12, F13, F14, F15, S17, F21, F22, F24
Brief Description	● Introduction of the major concepts that govern the energy policy decision making in national and European level ● Aspects of efficient use of energy in various sectors (buildings, products, end-use) ● Energy-related environmental policies ● Clean secure and affordable energy by means of secure energy supply and alternative energy sources	
Code	**Title**	**Semester Taught**
MES 511	**Power Generation Technologies**	S13, S14
Brief Description	● Types and operation of power generation technologies based on fossil fuels ● Factors influencing performance of thermal power plants, via calculation of thermodynamic data, construction of graphs of thermodynamic cycles and energy balance of various types of gas turbines, steam turbines and combined cycle plants ● Methodologies for test, assessment and design of thermal power plants and basic components configuration.	
Code	**Title**	**Semester Taught**
MES 520 (MEE 510)	**Renewable Energy**	F12, S15, S16, F16, F17, F18, F19, F21, F22, F25
Brief Description	● Theory and practice of renewable energy technologies ● Renewable energy potential analysis ● Technical, environmental and economic considerations of renewable energy technologies applications ● Pre-engineering of renewable energy technologies applications	
Code	**Title**	**Semester Taught**
MES 530 (MEEB 504)	**Energy Design of Buildings and Audits (co-teaching with Dr Agis Papadopoulos)**	F16, S18, S19, S21, S22, S23, S25, S26
Brief Description	● Aspects of the energy design of buildings that are related to the sustainable energy field. ● Energy interaction between the building shell and the environment ● Buildings shell design towards minimizing energy losses to the environment ● Energy behaviour of building elements ● Whole buildings energy analysis	
Code	**Title**	**Semester Taught**
MES 521	**Sustainable Built Environment**	S13, S14
Brief Description	● Theoretical foundations of sustainability in the built environment ● Solutions for the improvement of energy and environmental performance of the built environment ● Tools and methods for assessing the sustainability of the built environment ● Sustainability schemes for the built environment ● Ecological footprint analysis of products and processes	

6. Frederick University School of Engineering MSc in Oil and Gas and Offshore Engineering

Code	**Title**	**Semester Taught**
MOE 504	**Process Engineering**	F12, F13, F14, F15, F16
Brief Description	● Introduction to process engineering ● Presentation and analysis of main physical and chemical processes ● Applied process engineering in the oil and gas industry	
Code	**Title**	**Semester Taught**
MOE 505	**Process Modelling and Simulation**	S15, S16
Brief Description	● Introduction to process modelling and simulation ● Simulation of oil and gas industry processes including mixing, splitting, distillation, and chemical reactors ● Design, simulation and optimization steps of process engineering problems	

7. Frederick University School of Engineering MSc in Engineering Management

Code	**Title**	**Semester Taught**
MEM 514	**Environmental Management**	S12
Brief Description	● Introduction to sustainable development ● Management of main environmental sources (water, air, waste, energy) ● Holistic environmental management through tailored systems ● Environmental Management Systems ● Products life cycle assessment	
Code	**Title**	**Semester Taught**
MEM 522	**Facilities Management**	S12, S13
Brief Description	● Basic concepts in facilities management ● Building services and building electromechanical equipment ● In-house versus outsourcing of facilities management ● Facilities management contracts ● Facilities management processes ● Facilities and quality management	

8. German University in Cairo, Egypt, Programme of Architecture and Urban Design

Code	**Title**	**Semester Taught**
	Introduction to Sustainable Energy Systems and the Built Environment	F19
Brief Description	● Renewable Energy Technologies Integrated into the Built Environment ● Energy Economics, business Plan and Feasibility Assessment for Renewable Energy Project ● Fundamentals of Energy Policy: The European Energy Roadmap 2030 and 2050	

9. Open University Cyprus, MSc in Sustainable Energy Systems

Code	**Title**	**Semester Taught**
SES 512	**Renewable Energy for the Built Environment**	F15, F17, F19, F21, F22
Brief Description	● Theory and practice of renewable energy technologies ● Renewable energy potential analysis ● Technical, environmental and economic considerations of renewable energy technologies applications ● Pre-engineering of renewable energy technologies applications	
Code	**Title**	**Semester Taught**
SES 521	**Energy Design of Buildings**	S16, S17, S18, S19, S21, S22
Brief Description	● Aspects of the energy design of buildings that are related to the sustainable energy field. ● Energy interaction between the building shell and the environment ● Buildings shell design towards minimizing energy losses to the environment ● Energy behaviour of building elements ● Whole buildings energy analysis	
Code	**Title**	**Semester Taught**
SES 611	**Energy and Environmental Policies**	F16
Brief Description	● Introduction of the major concepts that govern the energy policy decision making in national and European level ● Aspects of efficient use of energy in various sectors (buildings, products, end-use) ● Energy-related environmental policies ● Clean secure and affordable energy by means of secure energy supply and alternative energy sources	

10. Frederick Institute of Technology, Programme of Natural Gas Technician

Code	Title	Semester Taught
ΦΑΕΡ 102	**Introduction to the Technology of Natural Gas**	F13, F14, F15, F16
Brief Description	● Natural gas properties ● Natural gas uses for heating and power production ● Natural gas market and the role of natural gas installation technician ● Transportation and storage of natural gas facilities ● Environmental impact due to the usage of natural gas	
Code	**Title**	**Semester Taught**
ΦΑΕΡ 201	**Natural Gas Transportation**	F14
Brief Description	● Natural gas supply chain ● Design of natural gas pipelines ● Materials and installation techniques of different natural gas pipelines ● Natural gas storage facilities ● Legislation concerning the transportation and storage of natural gas ● Natural gas pumping stations and SCADA systems	

11. University of Cyprus, Department of Civil and Environmental Engineering, BSc in Civil and Environmental Engineering

Code	Title	Semester Taught
CEE 272	**Experimental Fluid Mechanics**	F09, F10, F11
Brief Description	● Introduction in experimental fluid mechanics ● Bernoulli theorem application ● Drag force definition ● Hydrostatic forces in inclined surfaces ● Jet impact force ● Viscosity definition through submerging of objects ● Friction measurement in pipe flows ● Demonstration of Reynolds – Osborne Theorem	
Code	**Title**	**Semester Taught**
CEE 483	**Transport Phenomena in Environmental Engineering**	S09
Brief Description	● Pollutants transport mechanisms (displacement, diffusion and dispersion) in the air, water and soil ● Gaussian plume models ● Lagrange models ● Taylor dispersion ● Development of air quality assessment models	

12. University of Cyprus, School of Engineering, MSc in Energy Technologies and Sustainable Design

Code	Title	Semester Taught
CEE 575	**Energy Design of Buildings**	F08, S09, S10, S11, S12
Brief Description	● Aspects of the energy design of buildings that are related to the sustainable energy field. ● Energy interaction between the building shell and the environment ● Buildings shell design towards minimizing energy losses to the environment ● Energy behaviour of building elements ● Whole buildings energy analysis	
Code	**Title**	**Semester Taught**
CEE 596	**Renewable Energy Technologies Management**	F08, F10, F11, S12
Brief Description	● Theory and practice of renewable energy technologies ● Renewable energy potential analysis ● Technical, environmental and economic considerations of renewable energy technologies applications ● Pre-engineering of renewable energy technologies applications	

13. Karlsruhe University of Technology, Department of Process and Chemical Engineering

Teaching Assistant and Lab Tutor in following courses:

- 22999: Introduction to Process Engineering, Lab Tutor (F06)
- 22514: Non-reacting and Reacting Turbulent Flows (S06)
- 22542: Applied Combustion Technology, Teaching Assistant (F03)
- 22542: Applied Combustion Technology, Lab Tutor (F03, F04, F05, F06)

14. Karlsruhe University of Technology, Department of Mechanical Engineering

Teaching Assistant in following course:

- 22512: Heat and mass transfer for Mechanical Engineers (S03, S04, S05)

15. Training Seminars under the Auspices of Other Institutions

Date	Title	Institution	Duration	Details
10/2009	Energy efficiency of buildings	Cyprus Energy Agency	12 hours	Approved by Human Resources Development Authority, Cyprus
12/2009	Multicriteria analysis for decision making	RTD Talos Ltd	8 hours	Approved by Human Resources Development Authority, Cyprus
11/2010	Energy efficiency of buildings	Cyprus Energy Agency	12 hours	Approved by Human Resources Development Authority, Cyprus
01-03/2011	Environmental Management	Higher Hotel Institute Cyprus	60 hours	Training Seminar for Unemployed of the Hospitality Industry
05/2011	Quality Management	Cyprus Productivity Centre	7 hours	Training Seminar for Higher Education Unemployed Graduates
05/2011	Technical Session „Thermography" Urban Physics and interactions across the scales, Spring School 2012.	University of Cyprus	6 hours	International specialised Workshop for doctoral students and postdoctoral researchers.
05/2011	Green energy and plot exploitation for medium and large scale projects	Leaf Research Ltd	7 hours	Approved by Human Resources Development Authority, Cyprus
05/2011	Energy saving and use of renewable energy technologies in enterprises	Confectioners Federation Cyprus	6 hours	Approved by Human Resources Development Authority, Cyprus
05/2011	Energy saving and use of renewable energy technologies in enterprises	EuroSuccess Ltd	7 hours	Approved by Human Resources Development Authority, Cyprus
07/2011	IR Thermography practices in the industry	Swedish Levant Trading Ltd	6 hours	Approved by Human Resources Development Authority, Cyprus
10/2011	IR Thermography practices in the industry	Swedish Levant Trading Ltd	7 hours	Approved by Human Resources Development Authority, Cyprus
10/2011	Energy certification of existing buildings	Cyprus Energy Agency	14 hours	Approved by Human Resources Development Authority, Cyprus
11/2011	Energy efficiency of Buildings	HAP Schools, Cyprus	14 hours	Approved by Human Resources Development Authority, Cyprus
11/2011	Energy saving and use renewable energy sources in enterprises	EuroSuccess Ltd	7 hours	Approved by Human Resources Development Authority, Cyprus
01-03/2012	Environmental Management	Higher Hotel Institute Cyprus	78 hours	Training Seminar for Unemployed of the Hospitality Industry
04/2012	Energy Efficiency of Buildings	HAP Schools	14 hours	Approved by Human Resources Development Authority, Cyprus
06/2012	Investing in Renewable Energy Technologies	KPMG Ltd	3 hours	KPMG Academy – Internal Seminar
10/2012	Investing in Renewable Energy Technologies	Piraeus Bank	3 hours	Internal Seminar
03/2013	Energy upgrade of buildings in Cyprus	Scientific and Technological Chamber Cyprus (ETEK)	3 hours	Workshop

Date	Title	Institution	Duration	Seminar Type
05/2015	Boilers Auditors Certification	Frederick Training Center	20 hours	Approved by the Ministry of Energy, Cyprus
11/2015	Boilers Auditors Certification	Frederick Training Center	20 hours	Approved by the Ministry of Energy, Cyprus
01-05/2016	Environmental Management	Higher Hotel Institute Cyprus	72 hours	Culinary Arts Department
07/2016	IR Thermography practices in the industry	Medochemie Ltd	6 hours	Approved by Human Resources Development Authority, Cyprus
10-12/2016	Environmental Management	Higher Hotel Institute Cyprus	24 hours	Hospitality Management Department
02-03/2018	Boilers Auditors Certification	Frederick Training Center	20 hours	Approved by the Ministry of Energy, Cyprus
11/2018	Building Shell and Thermal Bridges in Nearly Zero Energy Buildings	Cyprus Association of Civil Engineers	7 hours	Approved by Human Resources Development Authority, Cyprus
11/2019	Energy Savings in Industrial Buildings	Nicolaides and Kountouris Metals Company	7 hours	Approved by Human Resources Development Authority, Cyprus
12/2019	New practices in the construction industry from the mandatory implementation of Near Zero Energy Buildings	Federation of Associations of Building Contractors of Cyprus (O.S.E.O.K.)	7 hours	Approved by Human Resources Development Authority, Cyprus
12/2021-05/2022	Boilers Auditors Certification	Frederick Training Center	24 hours	Approved by the Ministry of Energy, Cyprus
07/2022	Building Shell and Thermal Bridges in Nearly Zero Energy Buildings	Cyprus Association of Civil Engineers	7 hours	Approved by Human Resources Development Authority, Cyprus
01/2023	Inspections and Systemic Requirements of Heating and Air-Conditioning Systems in Buildings	Frederick Training Center	8 hours	Multi-company Training Programme, Human Resource Development Authority
02/2023	Scientific Publications: Best Practices for Successful Writing and Publishing	Frederick Training Center	3 hours	Internal Seminar, Frederick University
04/2023	Energy Performance of Buildings – Certification of Qualified Experts	Frederick Training Center	30 hours	Multi-company Training Programme, Human Resource Development Authority
07/2023	Energy Performance of Buildings – Certification of Qualified Experts	Frederick Training Center	30 hours	Multi-company Training Programme, Human Resource Development Authority
11/2023	Energy Performance of Buildings – Certification of Qualified Experts	Frederick Training Center	30 hours	Multi-company Training Programme, Human Resource Development Authority
11/2023	Scientific Publications: Best Practices for Successful Writing and Publishing	Frederick Training Center	3 hours	Internal Seminar, Frederick University
06/2024	Energy Performance of Buildings – Certification of Qualified Experts	Frederick Training Center	30 hours	Multi-company Training Programme, Human Resource Development Authority
10-11/2024	Energy Performance of Buildings – Certification of Qualified Experts	Frederick Training Center	30 hours	Multi-company Training Programme, Human Resource Development Authority
11/2025	Energy Performance of Buildings – Certification of Qualified Experts	Frederick Training Center	30 hours	Multi-company Training Programme, Human Resource Development Authority
11-12/2025	Scientific Publications: Best Practices for Successful Writing and Publishing	Frederick Training Center	6 hours	Internal Seminar, Frederick University
Total			684 hours	

1. PhD Students Mentoring

PhD Graduates

- **Dr. Elias Christoforou (2014-2019)**
  Frederick University, Department of Mechanical Engineering
  Life Cycle Assessment or Raw Biomass and Biomass-to-Energy Conversion Routes

- **Dr. Angeliki Kylili (2015-2019)**
  Frederick University, Department of Civil Engineering
  Environmental Assessment of Building Elements with the use of Life Cycle Assessment

- **Dr. Loucas Georgiou (2019-2022)**
  Frederick University, Department of Mechanical Engineering
  Thermal Performance of Building Elements with the use of Computational Fluid Dynamics and Finite Element Analysis link

- **Dr Phoebe-Zoe Georgali (2020-2025)**
  Frederick University, Department of Mechanical Engineering
  Sustainability Assessment of whole building life cycles: A comparative study on European norms link

- **Dr. Nicholas Afxentiou (2020- 2025)**
  Frederick University, Department of Mechanical Engineering
  Enhancing Building Intelligence in Europe through Smart Readiness Indicator (SRI): Implementation and Optimization link

- **Dr. Paulius Spudys (2020-2025)**
  Kaunas University of Technology, Faculty of Civil Engineering and Architecture
  Integrated building sustainability assessment using digital twin framework

- **Dr. Theoklitos Klitou (2021- 2025)**
  Frederick University, Department of Mechanical Engineering
  An Integrated Digital Platform for Enhancing Building Intelligence through BIM, Virtual Reality, and the Smart Readiness Indicator (SRI) link

PhD Candidates

- Ms Evi Demetriou (2023 -), *Frederick University, Department of Mechanical Engineering*
- Ms Artemis Georgiou (2024 -) *Frederick University, Department of Mechanical Engineering*
- Mr Christos Kythreotis (2024 -) *Frederick University, Department of Mechanical Engineering*
- Ms Funda Zaim (2024 -) *Frederick University, Department of Mechanical Engineering*
- Ms Magdalena Okrzesik (2024 -) *Kaunas University of Technology, Faculty of Civil Engineering and Architecture*
  Mr Turkay Ersener (2025 -) *Frederick University, Department of Mechanical Engineering*
- Ms Hiva Hashemi Rezvani (2025 -) *Frederick University, Department of Mechanical Engineering*
- Mr Tibet Bashkaya (2025 -) *Frederick University, Department of Mechanical Engineering*
- Mr Yiangos Yiangou (2025 -) *Frederick University, Department of Mechanical Engineering*
- Mr Pieris Panagi (2026 -) *Frederick University, Department of Mechanical Engineering*

2. Frederick University, School of Engineering, BSc in Civil Engineering

Thesis Title	**Monitoring of the energy performance of a residence in Cyprus**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis Experimental Building Physics – In-situ Measurements
Student's Name	Nikos Michael
Students Reg. Number	4780
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Antonis Kanelopoulos, Lecturer, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Spring Semester 2013
Thesis Title	**Investigation of the impact of the reference building on the energy classification of buildings**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Leontios Tselepos
Students Reg. Number	6159
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Fall Semester 2013
Thesis Title	**Renovation of existing building towards energy performance improvement**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Panagiotis Georgiou
Students Reg. Number	4101
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Michaelides, Ass. Professor, Civil Engineering Department Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department
Semester	Fall Semester 2013
Thesis Title	**Design and construction of building element samples presenting energy insulation techniques in the building sector**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Experimental Building Physics
Student's Name	Antonis Matsangos
Students Reg. Number	4167
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Spring Semester 2014

Thesis Title	**Infrared thermography (IRT) for building diagnostics and possible ways of improving the thermal performance of the building shell**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Experimental Building Physics – In-situ Measurements
Student's Name	Panagiotis Konstantinou
Students Reg. Number	5934
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Antonis Michael, Lecturer, Civil Engineering Department
Semester	Spring Semester 2014
Thesis Title	**Building's energy upgrade in Cyprus**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Rafaella Apousel
Students Reg. Number	5891
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Michaelides, Ass. Professor, Civil Engineering Department Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department
Semester	Spring Semester 2014
Thesis Title	**Life Cycle Assessment of selected building materials applied in Cyprus**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Life Cycle Assessment
Student's Name	Panagiotis Ilia
Students Reg. Number	6020
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Spring Semester 2014
Thesis Title	**Numerical analysis of energy behaviour of thermal bridges**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics– Finite Elements Methods
Student's Name	George Nicolaidis
Students Reg. Number	1965
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Spring Semester 2014

Thesis Title	**Numerical evaluation of thermal behaviour of a vernacular building in Nicosia**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics– Finite Elements Methods
Student's Name	Marios Michael
Students Reg. Number	5275
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Fall Semester 2014
Thesis Title	**Structural and energy aspects of BIPVs in Cyprus**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Sustainable Energy Technologies – Structural Aspects
Student's Name	Panagiota Tsitsi
Students Reg. Number	6126
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christos Anastasiou, Ass. Professor, Civil Engineering Department Dr. Petros Christou, Ass. Professor, Civil Engineering Department
Semester	Fall Semester 2014
Thesis Title	**Structural aspects of Renewable Energy Technologies in the built environment**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Sustainable Energy Technologies – Structural Aspects
Student's Name	Avraam Papaloizou
Students Reg. Number	5866
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christos Anastasiou, Ass. Professor, Civil Engineering Department Dr. Petros Christou, Ass. Professor, Civil Engineering Department
Semester	Spring Semester 2015
Thesis Title	**Energy upgrade of a building block in Cyprus**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Petros Neophytou
Students Reg. Number	8111
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christos Anastasiou, Ass. Professor, Civil Engineering Department Dr. Petros Christou, Ass. Professor, Civil Engineering Department
Semester	Spring Semester 2015

Thesis Title	**Life Cycle Assessment of a Phase Change Material**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Life Cycle Assessment
Student's Name	Avraam Avraam
Students Reg. Number	6399
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Spring Semester 2015

Thesis Title	**Implementation of energy audit of Frederick University SEAS Lab**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis Experimental Building Physics – In-situ Measurements
Student's Name	Christiana Panteli
Students Reg. Number	5808
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Spring Semester 2015

Thesis Title	**Energy Audits in existing buildings**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis Experimental Building Physics – In-situ Measurements
Student's Name	Christos Karkanias
Students Reg. Number	5749
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Spring Semester 2015

Thesis Title	**Setup and testing of a Hydrology Bench**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Experimental Fluid Mechanics
Student's Name(s)	Antonis Georgiou, Plastiras Plastira
Students Reg. Number(s)	6556, 6439
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Michaelides, Ass. Professor, Civil Engineering Department Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department
Semester	Fall Semester 2015

Thesis Title	**The characteristics and the energy behaviour of the residential building stock of "Cyprus land development corporation".**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Kyriakos Polycarpou
Students Reg. Number	7209
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Spring Semester 2016
External Reference	http://www.sciencedirect.com/science/article/pii/S0301421517305694
Thesis Title	**Comparative environmental assessment of a contemporary building and a building with a steel frame using Life Cycle Assessment (LCA)**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Life Cycle Assessment
Student's Name	Maria Nicolaou
Students Reg. Number	6408
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Michaelides, Ass. Professor, Civil Engineering Department Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department
Semester	Spring Semester 2016
Thesis Title	**Technical and Feasibility Analysis of Fenestration for a Sustainable Structures**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Christina Chatzoglou
Students Reg. Number	9710
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Michaelides, Ass. Professor, Civil Engineering Department Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department
Semester	Spring Semester 2016
Thesis Title	**Heat Flux Variation Through An Opaque Wall Based On The Position Of The Insulating Material**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics– Finite Elements Methods
Student's Name	Christos Galazis
Students Reg. Number	7896
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Fall Semester 2016

Thesis Title	**Investigation of indoor thermal comfort conditions during summer period under subtropical environmental conditions**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis Experimental Building Physics – In-situ Measurements
Student's Name	Kyriakos Xystouris
Students Reg. Number	8360
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Fall Semester 2016
Thesis Title	**Whole building energy analysis with the use of energy performance certification tools**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics - Whole Building Energy Analysis
Student's Name	Iosif Kapelakis
Students Reg. Number	10273
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Assoc. Professor, Civil Engineering Department Dr. Christos Anastasiou, Assoc. Professor, Civil Engineering Department
Semester	Fall Semester 2017
Thesis Title	**Experimental and numerical investigation of the performance of reflective coatings**
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Finite Elements Experimental Building Physics – In-situ Measurements
Student's Name	Constantina Christodoulou
Students Reg. Number	8587
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Assoc. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Ass. Professor, Civil Engineering Department
Semester	Spring Semester 2018

3. Frederick University, School of Engineering, BSc in Quantity Surveying

Thesis Title	**Quantity surveying aspects of renewable energy technologies applications**
Programme of Studies	BSc in Quantity Surveying, Frederick University, Cyprus
Course	ASSP 450 Senior Project
Area of Study	Sustainable Energy Technologies – Structural Aspects
Student's Name	Andreas Michael
Students Reg. Number	5777
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department Dr. Skevi Perdikou, Lecturer, Civil Engineering Department
Semester	Spring Semester 2014
Thesis Title	**The cost of achieving energy efficient performance of large constructions**
Programme of Studies	BSc in Quantity Surveying, Frederick University, Cyprus
Course	ASSP 450 Senior Project
Area of Study	Computational Building Physics - Whole Building Energy Analysis
Student's Name	Stylianos Mesimeris
Students Reg. Number	4129
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department Dr. Skevi Perdikou, Lecturer, Civil Engineering Department
Semester	Spring Semester 2014
Thesis Title	**Sustainability schemes and building materials**
Programme of Studies	BSc in Quantity Surveying, Frederick University, Cyprus
Course	ASSP 450 Senior Project
Area of Study	Computational Building Physics – Sustainability Assessment
Student's Name	Ioannis Koutsoumpas
Students Reg. Number	6060
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department Dr. George Papadopoulos, V. Lecturer, Civil Engineering Department
Semester	Spring Semester 2015
Thesis Title	**Thermal insulation options of single dwelling in Cyprus**
Programme of Studies	BSc in Quantity Surveying, Frederick University, Cyprus
Course	ASSP 450 Senior Project
Area of Study	Computational Building Physics - Whole Building Energy Analysis
Student's Name	Panagiotis Tafouna
Students Reg. Number	5733
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department Dr. George Papadopoulos, V. Lecturer, Civil Engineering Department
Semester	Spring Semester 2015
Thesis Title	**Optimization of Quantity Surveying KPIs for large construction projects**
Programme of Studies	BSc in Quantity Surveying, Frederick University, Cyprus
Course	ASSP 450 Senior Project
Area of Study	Computational Building Physics – Sustainability Assessment
Student's Name	Maria Konnidou
Students Reg. Number	7946
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department Dr. George Papadopoulos, V. Lecturer, Civil Engineering Department

Semester	Spring Semester 2015
Thesis Title	**Quantity surveying aspects of zero energy dwellings**
Programme of Studies	BSc in Quantity Surveying, Frederick University, Cyprus
Course	ASSP 450 Senior Project
Area of Study	Computational Building Physics - Whole Building Energy Analysis
Student's Name	Marios Georgiou
Students Reg. Number	6535
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department Dr. George Papadopoulos, V. Lecturer, Civil Engineering Department
Semester	Spring Semester 2015
Thesis Title	**Quantity surveying aspects of zero energy industrial buildings**
Programme of Studies	BSc in Quantity Surveying, Frederick University, Cyprus
Course	ASSP 450 Senior Project
Area of Study	Computational Building Physics - Whole Building Energy Analysis
Student's Name	Christos Modestou
Students Reg. Number	3671
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department Dr. George Papadopoulos, V. Lecturer, Civil Engineering Department
Semester	Spring Semester 2015
Thesis Title	**Life Cycle Assessment of a selected building material used in Cyprus built environment**
Programme of Studies	BSc in Quantity Surveying, Frederick University, Cyprus
Course	ASSP 450 Senior Project
Area of Study	Computational Building Physics – Life Cycle Assessment
Student's Name	Chrystalla Chrysostomou
Students Reg. Number	6678
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department
Semester	Spring Semester 2015
External Reference	http://www.tandfonline.com/doi/abs/10.1080/14786451.2015.1100197?journalCode=gsol20
Thesis Title	**Quantity Surveying Aspects of Hotel Renovation towards zero energy consumption**
Programme of Studies	BSc in Quantity Surveying, Frederick University, Cyprus
Course	ASSP 450 Senior Project
Area of Study	Computational Building Physics - Whole Building Energy Analysis
Student's Name	Constantinos Ellinas
Students Reg. Number	5926
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department Dr. Skevi Perdikou, Lecturer, Civil Engineering Department
Semester	Spring Semester 2016
Thesis Title	**Life cycle costing of sustainable masonry for zero energy buildings**
Programme of Studies	BSc in Quantity Surveying, Frederick University, Cyprus
Course	ASSP 450 Senior Project
Area of Study	Computational Building Physics - Whole Building Energy Analysis
Student's Name	George Valanides
Students Reg. Number	4794
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Michaelides, Ass. Professor, Civil Engineering Department Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department
Semester	Spring Semester 2016

4. Frederick University, School of Engineering, BSc in Mechanical Engineering

Thesis Title	**Proximal analysis of pellets derived from the wood industry**
Programme of Studies	BSc in Mechanical Engineering, Oil and Gas Stream, Frederick University, Cyprus
Course	ASOG 405 – Senior Project
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Yan Moisev
Students Reg. Number	8318
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2017
Thesis Title	**Energy analysis of a three-stage distillation unit**
Programme of Studies	BSc in Mechanical Engineering, Oil and Gas Stream, Frederick University, Cyprus
Course	ASOG 405 – Senior Project
Area of Study	Processes Modelling and Simulation
Student's Name	Nicholas Christodoulou
Students Reg. Number	8370
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2017
Thesis Title	**Use of natural gas for heating in the building sector**
Programme of Studies	BSc in Mechanical Engineering, Oil and Gas Stream, Frederick University, Cyprus
Course	ASOG 405 – Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Christoforos Andreou
Students Reg. Number	8453
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2017
Thesis Title	**Design of pipelines network for natural gas supply in Cyprus**
Programme of Studies	BSc in Mechanical Engineering, Oil and Gas Stream, Frederick University, Cyprus
Course	ASOG 405 – Senior Project
Area of Study	Processes Modelling and Simulation
Student's Name	Charalampos Charalampous
Students Reg. Number	8512
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2017

Thesis Title	**Biogas production from anaerobic digestion of potatoes**
Programme of Studies	BSc in Mechanical Engineering, Oil and Gas Stream, Frederick University, Cyprus
Course	ASOG 405 – Senior Project
Area of Study	Sustainable Energy Technologies – Biomass assessment
Student's Name	Constantinos Demetriou
Students Reg. Number	8734
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2017
Thesis Title	**Natural Gas Pipeline**
Programme of Studies	BSc in Mechanical Engineering, Stream Oil and Gas, Frederick University
Course	ASOG 405 Senior Project
Area of Study	Processes Modelling and Simulation
Student's Name	Marios Philippou
Students Reg. Number	8406
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2018
Thesis Title	**Simulation of the Performance of Heat Exchangers for the Oil and Gas Industry**
Programme of Studies	BSc in Mechanical Engineering, Stream Oil and Gas, Frederick University
Course	ASOG 405 Senior Project
Area of Study	Processes Modelling and Simulation
Student's Name	Michalis Charalampous
Students Reg. Number	9883
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019
Thesis Title	**Cyprus energy system demand in natural gas and renewables**
Programme of Studies	BSc in Mechanical Engineering, Stream Oil and Gas, Frederick University
Course	ASOG 405 Senior Project
Area of Study	Energy Policy
Student's Name	Kyrillos Sehata
Students Reg. Number	9982
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019

Thesis Title	**Natural Gas Transmission System: A Case Study for Cyprus**
Programme of Studies	BSc in Mechanical Engineering, Stream Oil and Gas, Frederick University
Course	ASOG 405 Senior Project
Area of Study	Processes Modelling and Simulation
Student's Name	Constantinos Panayi
Students Reg. Number	10041
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019
Thesis Title	**Natural Gas use for buildings energy requirements: A Case Study for Cyprus**
Programme of Studies	BSc in Mechanical Engineering, Stream Oil and Gas, Frederick University
Course	ASOG 405 Senior Project
Area of Study	Processes Modelling and Simulation
Student's Name	Theofanis Makri
Students Reg. Number	10099
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019
Thesis Title	**NG to Methanol and Production of biodiesel**
Programme of Studies	BSc in Mechanical Engineering, Stream Oil and Gas, Frederick University
Course	ASOG 405 Senior Project
Area of Study	Sustainable Energy Technologies – Biomass assessment
Student's Name	Nicholas Afxentiou
Students Reg. Number	10186
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019
Thesis Title	**Design of a Geothermal Heat Pump Installation**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	AMET 400 Senior Project
Area of Study	Sustainable Energy Technologies – Geothermal Energy
Student's Name	Efstratios Kyritsis
Students Reg. Number	13137
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019

Thesis Title	**Energy Performance Analysis of Frederick University Building using REVIT software**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	AMET 400 Senior Project
Area of Study	Sustainable Built Environment – Whole Building Energy Assessment
Student's Name	Nicholas Chourdakis
Students Reg. Number	13165
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2020

Thesis Title	**Design and Analysis of a 50 MW CSP Unit**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	AMET 400 Senior Project
Area of Study	Sustainable Energy Technologies – Solar Energy
Student's Name	Christophoros Kelliris
Students Reg. Number	13173
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Spring Semester 2020

Thesis Title	**Energy Redevelopment of a Building**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	ME 400 Senior Project
Area of Study	Computational Building Physics – Buildings Assessment
Student's Name	Averkios Konstantinou
Students Reg. Number	8454
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Spring Semester 2020
Thesis Title	**The use and transport of natural gas through pipelines in the industry of Cyprus**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	OG 405 Senior Project
Area of Study	Process Engineering
Student's Name	Alexandros Hadjithoma
Students Reg. Number	12648
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Spring Semester 2020
Thesis Title	**Gas transportation to Cyprus**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	OG 405 Senior Project
Area of Study	Process Engineering
Student's Name	Charalampos Kyriakou
Students Reg. Number	12739
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Spring Semester 2021

Thesis Title	**Carbon Capture and Storage in Cyprus' Power Plants**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	OG 405 Senior Project
Area of Study	Process Engineering
Student's Name	Dimitris Louka
Students Reg. Number	13887
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Spring Semester 2021
Thesis Title	**The implementation of the Smart Readiness Indicator for the Assessment of Buildings Intelligence**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	ME 400 Senior Project
Area of Study	Computational Building Physics – Smart Buildings
Student's Name	Nikolaos Tsigkakos
Students Reg. Number	13273
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Spring Semester 2022
Thesis Title	**The Use of Hydrogen for Heating in Buildings and the Greening of Natural Gas Networks**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	OG 405 Senior Project
Area of Study	Sustainable Energy Technologies - Hydrogen
Student's Name	Constantina Kyriakou
Students Reg. Number	16422
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Spring Semester 2023
Thesis Title	**Advanced Integration of Building Information Modeling (BIM) and Virtual Reality (VR) for Enhanced Interactive Visualization and Editing of Mechanical Plans**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	ME 400 Senior Project
Area of Study	Computational Building Physics – Smart Buildings
Student's Name	John Kouppanou
Students Reg. Number	20064
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Dr Theoklitos Klitou, Sustainable Energy Research Group
Supervisory Committee	Dr Andreas Poullikkas, Professor, Mechanical Engineering Department Dr. Michalis Menicou, Ass. Professor, Mechanical Engineering Department
Semester	Spring Semester 2025

Thesis Title	**Investigation of the Performance of Hydraulic Systems for Lifting and Excavating Purposes**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	ME 400 Senior Project
Area of Study	Hydraulic and Pneumatic Systems
Student's Name	Evaggelos Stylianou
Students Reg. Number	20381
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Mr Christos Kythreotis, Sustainable Energy Research Group
Supervisory Committee	Dr Andreas Poullikkas, Professor, Mechanical Engineering Department Dr. Michalis Menicou, Ass. Professor, Mechanical Engineering Department
Semester	Spring Semester 2025
Thesis Title	**Utilizing Digital Twin Technology for Improved Predictive Modelling of Energy Consumption in Smart Buildings**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	ME 400 Senior Project
Area of Study	Computational Building Physics – Smart Buildings
Student's Name	Vasilis Christodoulides
Students Reg. Number	25542
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Dr Nicholas Afxentiou, Sustainable Energy Research Group
Supervisory Committee	Dr Andreas Poullikkas, Professor, Mechanical Engineering Department Dr. Michalis Menicou, Ass. Professor, Mechanical Engineering Department
Semester	Spring Semester 2025
Thesis Title	**Development of an Environmental Management System Digital Twin**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	ME 400 Senior Project
Area of Study	Computational Building Physics – Digital Twins
Student's Name	Theodoros Tsilidis
Students Reg. Number	19920
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Dr Nicholas Afxentiou, Sustainable Energy Research Group
Supervisory Committee	Dr. Paris A. Fokaides, Professor, Mechanical Engineering Department Dr. Theoklitos Klitou, Mechanical Engineering Department Dr. Nicholas Afxentiou, Sustainable Energy Research Group
Semester	Fall Semester 2025
Thesis Title	**Urban Microclimate Simulation and Heatwave Mitigation Assessment of European Cities**
Programme of Studies	BSc in Mechanical Engineering, Frederick University
Course	ME 400 Senior Project
Area of Study	Computational Building Physics – Urban Microclimate
Student's Name	Anastasios Petrou
Students Reg. Number	24027
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Dr. Theoklitos Klitou, Mechanical Engineering Department
Supervisory Committee	Dr. Paris A. Fokaides, Professor, Mechanical Engineering Department Dr. Theoklitos Klitou, Mechanical Engineering Department Dr. Nicholas Afxentiou, Sustainable Energy Research Group
Semester	Fall Semester 2025

5. Frederick University, School of Engineering, MSc in Energy Engineering (formerly Sustainable Energy System)

Thesis Title	**Exploitation of olive husk for energy purposes**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Anna Ioannou
Students Reg. Number	7584
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christos Anastasiou, Ass. Professor, Civil Engineering Department Dr. Petros Christou, Ass. Professor, Civil Engineering Department
Semester	Fall Semester 2013
Thesis Title	**Predictions for the future of the Emissions Trading System**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Energy Policy
Student's Name	Nicholas Meintanis
Students Reg. Number	7539
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christos Anastasiou, Ass. Professor, Civil Engineering Department Dr. Petros Christou, Ass. Professor, Civil Engineering Department
Semester	Spring Semester 2014
Thesis Title	**Numerical simulation of thermal performance of buildings thermal bridges**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Finite Elements Methods
Student's Name	Marina Papaconstantinou
Students Reg. Number	230
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christos Anastasiou, Ass. Professor, Civil Engineering Department Dr. Nicholas Christofides, Lecturer, Electrical Engineering Department
Semester	Spring Semester 2015
Thesis Title	**Numerical investigation of Photovoltaics passive cooling using Finite Element Methods**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Finite Elements Methods
Student's Name	Panagiota Papadopoulou
Students Reg. Number	9189
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr Byron Ioannou, Ass. Professor, Architectural Department
Semester	Fall Semester 2015

Thesis Title	**Use of dark chamber for measurement of the thermal performance of building products**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Experimental Building Physics – In-situ Measurements
Student's Name	Constantinos Vassileiou
Students Reg. Number	1841
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Spring Semester 2016
Thesis Title	**Numerical investigation of thermal performance of a Building Integrated Photovoltaic system**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Finite Elements Methods
Student's Name	Miltiades Asprou
Students Reg. Number	8675
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr Byron Ioannou, Ass. Professor, Architectural Department
Semester	Spring Semester 2016
Thesis Title	**Experimental study on the optimisation of the combustion process in a small scale pellet boiler**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Ioannis Hadjigeorgiou
Students Reg. Number	5385
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christos Anastasiou, Ass. Professor, Civil Engineering Department Dr. Charalampos Chasos, Lecturer, Mechanical Engineering Department
Semester	Spring Semester 2016
Thesis Title	**Experimental study on the optimisation of the combustion process in a small scale pellet boiler**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Ioannis Hadjigeorgiou
Students Reg. Number	5385
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christos Anastasiou, Ass. Professor, Civil Engineering Department Dr. Charalampos Chasos, Lecturer, Mechanical Engineering Department
Semester	Spring Semester 2016

Thesis Title	**Cradle to Gate Life Cycle Assessment of Solar Thermal Panels**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Processes Modelling and Simulation – Life Cycle Assessment
Student's Name	Phoebe Georgalli
Students Reg. Number	10383
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr. Byron Ioannou, Ass. Professor, Architectural Department
Semester	Fall Semester 2016
Thesis Title	**How Heat Island Effect Change The City Of Larnaca Over The Years And What Must Be Done To Mitigate This Problem**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Sustainable Built Environment
Student's Name	Fanos Poullou
Students Reg. Number	5739
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr. Byron Ioannou, Ass. Professor, Architectural Department
Semester	Fall Semester 2016
Thesis Title	**Characterisation of Pellets Derived From Solid Residues of the Winery Industry**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Erman Dolmaci
Students Reg. Number	10510
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr. Byron Ioannou, Ass. Professor, Architectural Department
Semester	Fall Semester 2016
Thesis Title	**Energy Modelling for Manufacturing Sector Development in Nepal**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Energy Policy
Student's Name	Sangrila Phuyal
Students Reg. Number	11758
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christos Themistos, Assoc. Professor, Electrical Engineering Department Dr. Nicholas Christofides, Ass. Professor, Electrical Engineering Department
Semester	Fall Semester 2016

Thesis Title	**Life Cycle Assessment of Steel Production Process**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Life Cycle Assessment
Student's Name	Pantelis Demetriou
Students Reg. Number	2595
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr. Byron Ioannou, Ass. Professor, Architectural Department
Semester	Spring Semester 2017
Thesis Title	**Energy Audit of a Poultry Farm**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Iro Andreou
Students Reg. Number	9942
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr. Byron Ioannou, Ass. Professor, Architectural Department
Semester	Spring Semester 2017
Thesis Title	**Comparison of the Whole-building Life Cycle Assessment (L.C.A) of Concrete, Metal and Wood Structure of a residential building – A Case Study**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Life Cycle Assessment
Student's Name	Leoni Efstathiou
Students Reg. Number	6455
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr. Byron Ioannou, Ass. Professor, Architectural Department
Semester	Spring Semester 2017
Thesis Title	**Sustainable Assessment of Frederick's Research Centre at Engineering School Labs Using BREEAM In-Use International Sustainability Scheme**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Sustainability Assessment
Student's Name	Avraam Avraam
Students Reg. Number	6399
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr. Byron Ioannou, Ass. Professor, Architectural Department
Semester	Spring Semester 2017

Thesis Title	**Optimization of building overhang design using Building Integrated Modelling (BIM) and Life Cycle Assessment (LCA)**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Building Integrated Modelling – Life Cycle Assessment
Student's Name	Christiana Panteli
Students Reg. Number	5808
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr. Byron Ioannou, Ass. Professor, Architectural Department
Semester	Fall Semester 2017
Thesis Title	**Perception of Stakeholders on the Required Policy Measures for the Improvement of the Energy Performance of Greenhouses**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Energy Policy
Student's Name	Eleftherios Nicolaou
Students Reg. Number	7379
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Ms Angeliki Kylili, PhD Candidate, Civil Engineering Department
Semester	Fall Semester 2017
Thesis Title	**Energy Analysis of a Steam Power Generation Cycle**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Processes Modelling and Simulation
Student's Name	Efthimios Valkanas
Students Reg. Number	7075
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2017
Thesis Title	**Energy Analysis of a Solar Thermal System for Space Heating**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Sustainable Built Environment – Solar Thermal Systems Anlalysis
Student's Name	Stavros Skais
Students Reg. Number	7999
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr. Byron Ioannou, Ass. Professor, Architectural Department
Semester	Fall Semester 2017

Thesis Title	**Energy Analysis of a Gas Turbine**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Processes Modelling and Simulation
Student's Name	Ioannis Skroumpelos
Students Reg. Number	7018
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2018
Thesis Title	**Photovoltaics Reverse Osmosis Desalination Plant**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Systems – Solar Systems
Student's Name	Athina Hadjivasili
Students Reg. Number	8448
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019
Thesis Title	**Fast-wood plantations for biofuels**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Marianna Michael
Students Reg. Number	8699
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019
Thesis Title	**CO2-absorbing, petrochemical building materials**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Finite Elements Methods
Student's Name	Christine Louka
Students Reg. Number	13429
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Byron Ioannou, Ass. Professor, Architectural Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019

Thesis Title	**Thermal-insulating, petrochemical building materials**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Processes Modelling and Simulation
Student's Name	Kyriaki Kerverou
Students Reg. Number	7708
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Michalis Menoikou, Assoc. Professor, Mechanical Engineering Department Dr. Byron Ioannou, Ass. Professor, Architectural Department
Semester	Spring Semester 2019
Thesis Title	**Numerical assessment of oil catalytic cracking reactor**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Processes Modelling and Simulation
Student's Name	George Anastasiou
Students Reg. Number	13437
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019
Thesis Title	**Catalytic Pyrolytic Thermochemical Conversion of grape pomace to Biofuels**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Yan Moisev
Students Reg. Number	8318
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019
Thesis Title	**Conversion of waste coffee grounds to solid biofuels**
Programme of Studies	MSc in Energy Systems and the Built Environment, Frederick University, Cyprus
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	George Skroumpelos
Students Reg. Number	8596
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Spring Semester 2019

Thesis Title	**Simulation Of The Effect Of Certain Parameters On Biogas Production By Anaerobic Digestion**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Constantinos Demetriou
Students Reg. Number	8734
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2019
Thesis Title	**Vasiliko Power Station (VPS) Boiler No.3: The conversion of the burner to enable the use of Crude Oil and Natural Gas**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Nicholas Charalambous
Students Reg. Number	15279
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2019
Thesis Title	**Designing a residential property using Building Information Modelling**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Demetris Constantinou
Students Reg. Number	9166
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2019
Thesis Title	**Modelling Frederick's Building Using BIM for Energy Evaluation Improvement of energy efficiency of the building**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Maria Karyou
Students Reg. Number	14653
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2019

Thesis Title	**Solar Thermal Power Stations as a Hybrid System**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Eleni Apostolidou
Students Reg. Number	6676
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2019
Thesis Title	**Assessment of the Energy Performance of a Public Building using Real Data and BIM**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Achilleas Pilias
Students Reg. Number	15248
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2019
Thesis Title	**Smart Readiness Indicator for Buildings**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Smart Buildings
Student's Name	Nicholas Afxentiou
Students Reg. Number	10186
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Ass. Professor, Architectural Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2020
Thesis Title	**Challenges and Risk Allocation in Cyprus LNG Import Terminal Project**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Process Engineering
Student's Name	Iosif Alambritis
Students Reg. Number	17072
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2020
Thesis Title	**Future Trends and Transition to Next-Generation Dynamic Digital Energy Performance Certificates**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Buildings Assessment
Student's Name	Michelle Sibusisiwe Duri
Students Reg. Number	9806
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Ass. Professor, Architectural Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2020

Thesis Title	**Challenges and Risk Allocation in Cyprus LNG Import Terminal Project**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Process Engineering
Student's Name	Theofanis Makris
Students Reg. Number	10099
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2020
Thesis Title	**The intelligence of buildings versus their dependence on fossil fuels: the case of the Smart Readiness Indicator of buildings**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Smart Buildings
Student's Name	Andri Panayidou
Students Reg. Number	16794
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Ass. Professor, Architectural Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2020
Thesis Title	**Syngas production from natural gas and biomass**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels
Student's Name	Constantinos Papouis
Students Reg. Number	14577
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2020
Thesis Title	**Analysis and Design of a Distillation Column process control system**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Process Engineering
Student's Name	Michael Psaras
Students Reg. Number	16822
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. Nicholas Christofides, Asst. Professor, Electrical Engineering Department
Semester	Fall Semester 2020
Thesis Title	**Numerical assessment of Green Roofs with the use of Building Energy Performance Simulation (BEPS) integrated into Building Information Modelling (BIM) tools**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Building Information Modelling
Student's Name	Ramiz Qumsieh
Students Reg. Number	9726
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Ass. Professor, Architectural Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2020

Thesis Title	**The transition from Crude Oil to Natural Gas: The Malta paradigm**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Process Engineering
Student's Name	Kyrillos Sehata
Students Reg. Number	9982
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2020
Thesis Title	**Floating Storage and Regasification Unit**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Process Engineering
Student's Name	Antonis Shiamptanis
Students Reg. Number	9885
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2020
Thesis Title	**Enhancing Gas Turbines with Battery Energy Storage for power generation in Power Plants**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Energy Storage
Student's Name	Evangelos Stamatiou
Students Reg. Number	16820
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. Nicholas Christofides, Asst. Professor, Electrical Engineering Department
Semester	Fall Semester 2020
Thesis Title	**UPS as a Back-Up of an Oil Refinery**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Energy Storage
Student's Name	Marios Theodosiou
Students Reg. Number	8422
Supervisor	Dr.-Ing. Paris A. Fokaides, Ass. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. Nicholas Christofides, Asst. Professor, Electrical Engineering Department
Semester	Fall Semester 2020
Thesis Title	**Optimization of solid biomass boiler's combustion chamber using CFD**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Sustainable Energy Technologies – Biofuels
Student's Name	Theoklitos Klitou
Students Reg. Number	18755
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2021

Thesis Title	**Pyrolysis of Plastic Waste into Hydrocarbons**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Sustainable Energy Technologies – Biofuels
Student's Name	Maria Mela
Students Reg. Number	18682
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2021
Thesis Title	**CNG Health & Safety for fueling stations**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Process Engineering
Student's Name	Rafaella Othonos
Students Reg. Number	19278
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2021
Thesis Title	**The advancements in the field of Hybrid Electric – Fuel Cells Vehicle**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Sustainable Transportation
Student's Name	Petros Petrou
Students Reg. Number	18462
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr. Nicholas Christofides, Assoc. Professor, Electrical Engineering Department Dr. Julios Vasileiou, Mechanical Engineering Department
Semester	Fall Semester 2021
Thesis Title	**Design And Development of A Small Scale Biogas Reactor**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Sustainable Energy Technologies – Biofuel
Student's Name	Andreas Sofokleous
Students Reg. Number	19264
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2021

Thesis Title	**Comparison in performance between segmental, and helical baffles; on a single pass- shell and tube heat exchanger, set to operate within a crude oil refinement environment**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Process Engineering
Student's Name	Stephanos Philippou
Students Reg. Number	19257
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2021
Thesis Title	**Calculation of the potential of Cyprus for the promotion and implementation of floating photovoltaic parks in dams**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Sustainable Energy Technologies – Photovoltaics
Student's Name	Maria Christodoulou
Students Reg. Number	20969
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr. Nicholas Christofides, Assoc. Professor, Electrical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2022
Thesis Title	**Geothermal energy and how it can be applied for a sustainable climate building**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Sustainable Energy Technologies – Geothermal Energy
Student's Name	Alexandros Andreas Ellinas
Students Reg. Number	20790
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2022
Thesis Title	**Numerical simulation of the temperature distribution in ground, for the purpose of the implementation of geothermal installations**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Sustainable Energy Technologies – Geothermal Energy
Student's Name	Petros Ioannou
Students Reg. Number	20282
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2022
Thesis Title	**East Med Pipeline Project**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Process Engineering
Student's Name	Antonis Konstantinou
Students Reg. Number	12969
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2022

Thesis Title	**Reward and Punishment measures to reduce energy consumption in the building sector**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Energy Policy
Student's Name	Vasilis Mezos
Students Reg. Number	21116
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Ass. Professor, Architectural Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2022
Thesis Title	**A Comprehensive Framework for Replacing Solar Thermal Systems**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Sustainable Energy Technologies – Solar Energy
Student's Name	Demetra Papanicolaou
Students Reg. Number	13068
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2022
Thesis Title	**Evaluation of Technical and Economic Feasibility of interventions in heritage buildings**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Computational Building Physics – Buildings Assessment
Student's Name	Efstratios Kyritsis
Students Reg. Number	13137
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Assoc. Professor, Architectural Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2022
Thesis Title	**Life cycle analysis model for newly constructed buildings in order to achieve CO2 neutralit**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Computational Building Physics – Building Information Modelling – Life Cycle Assessment
Student's Name	Christos Kythreotis
Students Reg. Number	10601
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Assoc. Professor, Architectural Department Dr. Michalis Menicou, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2022

Thesis Title	**Assessment of heritage buildings towards decarbonization of built environment**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Computational Building Physics – Building Information Modelling – Life Cycle Assessment
Student's Name	Chyrstalla Menelaou
Students Reg. Number	20594
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Assoc. Professor, Architectural Department Dr. Michalis Menicou, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2022
Thesis Title	**Energy Performance Analysis of an Academic Building**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Computational Building Physics – Buildings Assessment
Student's Name	Andreas Pelopida
Students Reg. Number	11380
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Assoc. Professor, Architectural Department Dr. Michalis Menicou, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2022
Thesis Title	**High Temperature Heat Pumps: Advancements in Technology and Application**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Sustainable Energy Technologies – Heat Pump
Student's Name	Marios Demetriou
Students Reg. Number	21875
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2022
Thesis Title	**Design and Feasibility of a 60MW Wind Farm in Cyprus**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Sustainable Energy Technologies – Wind Energy
Student's Name	George Karagiannis
Students Reg. Number	10336
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2022

Thesis Title	**Development of Predictive Models for Energy Consumption in Buildings using Machine Learning Techniques: A Pilot Study with Python Programming**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 MSc Thesis
Area of Study	Computational Building Physics – Building Information Modelling
Student's Name	Maria Andreou
Students Reg. Number	22970
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Ass. Professor, Architectural Department Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2023
Thesis Title	**Development and Performance Evaluation of a Small Scale Model for an Oscillating Water Column System for Electricity Generation from Ocean Waves**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 MSc Thesis
Area of Study	Sustainable Energy Technologies – Wave Energy
Student's Name	Marinos Charalampous
Students Reg. Number	23005
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2023
Thesis Title	**Feasibility assessment of tidal energy technologies for electricity generation in the island of Cyprus**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 MSc Thesis
Area of Study	Sustainable Energy Technologies – Wave Energy
Student's Name	Constantinos Constantinou
Students Reg. Number	23660
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2023
Thesis Title	**Development and Numerical Investigation of an Innovative Roof Vertical Wind Energy Harvester**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 MSc Thesis
Area of Study	Sustainable Energy Technologies – Wind Energy
Student's Name	Michalis Evripidou
Students Reg. Number	14804
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2023

Thesis Title	**Elemental and Proximal Assessment of Spent Coffee Grounds**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 MSc Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
Student's Name	Stavros Georgiou
Students Reg. Number	14730
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2023
Thesis Title	**Investigating Future Grid Needs to Support the Expansion of Electric Vehicles in Cyprus until 2030**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 MSc Thesis
Area of Study	Sustainable Transportation
Student's Name	Andreas Papaconstantinou
Students Reg. Number	22314
Supervisor	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
Supervisory Committee	Dr. Nicholas Christofides, Assoc. Professor, Electrical Engineering Department Dr. Julios Vasileiou, Mechanical Engineering Department
Semester	Fall Semester 2023
Thesis Title	**Numerical and Experimental Investigation of the Performance of Solar Thermal Systems for Domestic Hot Water Use**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Experimental and Computational Solar Thermal Systems
Student's Name	Constantina Kyriacou
Students Reg. Number	16422
Supervisor	Dr.-Ing. Paris A. Fokaides, Associate Professor, Mechanical Engineering Department
Co-supervisor	Dr Theoklitos Klitou, Sustainable Energy Research Group
Supervisory Committee	Dr Byron Ioannou, Assoc. Professor, Architectural Department Dr. Gregoris Kalnis, Asst. Professor, Architectural Department
Semester	Fall Semester 2024
Thesis Title	**Numerical Simulation of Thermal Performance of Buildings and Improvement Proposals Using Revit**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Computational Building Physics – Energy Simulation and BIM
Student's Name	Maria Christou
Students Reg. Number	18519
Supervisor	Dr.-Ing. Paris A. Fokaides, Associate Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Assoc. Professor, Architectural Department Dr. Gregoris Kalnis, Asst. Professor, Architectural Department
Semester	Fall Semester 2024

Thesis Title	**Hydrogen: The Transition to the Next Future Fuel for Internal Combustion Engines**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Sustainable Transport – Hydrogen Technologies
Student's Name	Michalakis Constantinou
Students Reg. Number	24348
Supervisor	Dr.-Ing. Paris A. Fokaides, Associate Professor, Mechanical Engineering Department
Supervisory Committee	Dr Byron Ioannou, Assoc. Professor, Architectural Department Dr. Gregoris Kalnis, Asst. Professor, Architectural Department
Semester	Fall Semester 2024
Thesis Title	**Decarbonization of Limassol Port with Green Hydrogen Energy Systems**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Sustainable Transport – Hydrogen Technologies
Student's Name	Constantinos Constantinou
Students Reg. Number	23660
Supervisor	Dr.-Ing. Paris A. Fokaides, Associate Professor, Mechanical Engineering Department
Co-supervisor	Ms Kyriaki Koumenidou, Sustainable Energy Research Group
Supervisory Committee	Dr George Karagiorgis, Professor, Mechanical Engineering Department Dr Chris Christodoulou, Professor, Mechanical Engineering Department
Semester	Spring Semester 2025
Thesis Title	**Renewable Energy System for Mesana Village**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Sustainable Transport – Hydrogen Technologies
Student's Name	Foivos Sokratous
Students Reg. Number	25570
Supervisor	Dr.-Ing. Paris A. Fokaides, Associate Professor, Mechanical Engineering Department
Supervisory Committee	Dr George Karagiorgis, Professor, Mechanical Engineering Department Dr Byron Ioannou, Professor, Department of Architecture
Semester	Spring Semester 2025
Thesis Title	**Life Cycle Assessment (LCA) of Aluminium Profiles Using Industrial LCA Software Tools**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Sustainable Transport – Hydrogen Technologies
Student's Name	Leontios Mina
Students Reg. Number	25906
Supervisor	Dr.-Ing. Paris A. Fokaides, Associate Professor, Mechanical Engineering Department
Co-supervisor	Ms Kyriaki Koumenidou, Sustainable Energy Research Group
Supervisory Committee	Dr George Karagiorgis, Professor, Mechanical Engineering Department Dr Chris Christodoulou, Professor, Mechanical Engineering Department
Semester	Spring Semester 2025

Thesis Title	**CFD-Based Investigation of Ventilation Strategies for Indoor Air Quality Enhancement**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Computational Building Physics – Finite Elements Methods
Student's Name	Georgios Konstantinou
Students Reg. Number	14769
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Ms Artemis Georgiou, Sustainable Energy Research Group
Supervisory Committee	Dr George Karagiorgis, Professor, Mechanical Engineering Department Dr Byron Ioannou, Professor, Architectural Department
Semester	Fall Semester 2025
Thesis Title	**Experimental and Numerical Analysis of Heat Transfer in Thermosyphon Solar Thermal Systems**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Sustainable Built Environment – Solar Thermal Systems Analysis
Student's Name	Marios Kyriakou
Students Reg. Number	16958
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Dr Theoklitos Klitou, Sustainable Energy Research Group
Supervisory Committee	Dr. George Karagiorgis, Professor, Mechanical Engineering Department Dr. Byron Ioannou, Professor, Architectural Department
Semester	Fall Semester 2025
Thesis Title	**Experimental and Numerical Analysis of Heat Transfer in Forced-Circulation Solar Thermal Systems**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Sustainable Built Environment – Solar Thermal Systems Analysis
Student's Name	Marios Michael
Students Reg. Number	27627
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Dr Theoklitos Klitou, Sustainable Energy Research Group
Supervisory Committee	Dr. George Karagiorgis, Professor, Mechanical Engineering Department Dr. Byron Ioannou, Professor, Architectural Department
Semester	Fall Semester 2025
Thesis Title	**Development of a Smart Home Energy Management System Integrating Digital Twins and AI**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Computational Building Physics – Smart Buildings
Student's Name	Nicos Nicolaou
Students Reg. Number	7269
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Mr Christos Kythreotis, Sustainable Energy Research Group
Supervisory Committee	Dr Byron Ioannou, Professor, Architectural Department Dr. Gregoris Kalnis, Asst. Professor, Architectural Department
Semester	Fall Semester 2025

Thesis Title	**Life Cycle Assessment of Electric Vehicle Charging Infrastructure**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Sustainable Transportation
Student's Name	Constantinos Othonos
Students Reg. Number	27649
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Ms Kyriaki Koumenidou, Sustainable Energy Research Group
Supervisory Committee	Dr Byron Ioannou, Professor, Architectural Department Dr. Michalis Menicou, Assoc. Professor, Mechanical Engineering Department
Semester	Fall Semester 2025
Thesis Title	**Scan-to-BIM for Automated As-Built Modeling and Building Renovation**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Experimental Building Physics – In-situ Measurements
Student's Name	Eugenia Papapanaretou
Students Reg. Number	16371
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Dr Nicholas Afxentiou, Sustainable Energy Research Group
Supervisory Committee	Dr Byron Ioannou, Professor, Architectural Department Dr. Gregoris Kalnis, Asst. Professor, Architectural Department
Semester	Fall Semester 2025
Thesis Title	**Assessing Building Resilience to Heat Waves Using ENVI-met**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Computational Building Physics – Urban Modelling
Student's Name	Maria Sergiou
Students Reg. Number	20701
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Mr Christos Kythreotis, Sustainable Energy Research Group
Supervisory Committee	Dr. George Karagiorgis, Professor, Mechanical Engineering Department Dr. Byron Ioannou, Professor, Architectural Department
Semester	Fall Semester 2025
Thesis Title	**Operational Energy Assessment of Buildings Using the Frederick Digital Twin Model**
Programme of Studies	MSc in Energy Engineering
Course	MEE 540 - MSc Thesis
Area of Study	Computational Building Physics – Smart Buildings
Student's Name	Ioannis Zambas
Students Reg. Number	18848
Supervisor	Dr.-Ing. Paris A. Fokaides, Professor, Mechanical Engineering Department
Co-supervisor	Ms. Artemis Georgiou, Sustainable Energy Research Group
Supervisory Committee	Dr Byron Ioannou, Professor, Architectural Department Dr. Gregoris Kalnis, Asst. Professor, Architectural Department
Semester	Fall Semester 2025

6. Frederick University, School of Engineering, MSc in Oil and Gas and Offshore Engineering

Thesis Title	**Environmental Assessment of Natural Gas liquefaction Plants**
Programme of Studies	MSc in Oil and Gas and Offshore Engineering, Frederick University, Cyprus
Course	MOE 518 Master Thesis
Area of Study	Processes Modelling and Simulation – Life Cycle Assessment
Student's Name	Demetris Georgiou
Students Reg. Number	4774
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr Antonis Papadakis, Ass. Professor, Electrical Engineering Department
Semester	Fall Semester 2014
Thesis Title	**Thermochemical assessment of fossil fuels**
Programme of Studies	MSc in Oil and Gas and Offshore Engineering, Frederick University, Cyprus
Course	MOE 518 Master Thesis
Area of Study	Sustainable Energy Technologies – Fossil Fuels Assessment
Student's Name	Spyros Spyrou
Students Reg. Number	3182
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr Antonis Papadakis, Ass. Professor, Electrical Engineering Department
Semester	Spring Semester 2015
Thesis Title	**Simulation of Natural Gas dehydration process using triethylene glycol**
Programme of Studies	MSc in Oil and Gas and Offshore Engineering, Frederick University, Cyprus
Course	MOE 518 Master Thesis
Area of Study	Processes Modelling and Simulation
Student's Name	Paris Kyriakou
Students Reg. Number	8228
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr Antonis Papadakis, Ass. Professor, Electrical Engineering Department
Semester	Spring Semester 2015
Thesis Title	**Analysis of properties, structure, characteristics and compatibility of Natural Gas pipelines**
Programme of Studies	MSc in Oil and Gas and Offshore Engineering, Frederick University, Cyprus
Course	MOE 518 Master Thesis
Area of Study	Processes Modelling and Simulation
Student's Name	Kyriakos Kyrizis
Students Reg. Number	8227
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr Antonis Papadakis, Ass. Professor, Electrical Engineering Department
Semester	Spring Semester 2015

Thesis Title	**Acid Gas Removal Unit – An Application in the case of Cyprus Natural Gas Liquefaction Facility**
Programme of Studies	MSc in Oil and Gas and Offshore Engineering, Frederick University, Cyprus
Course	MOE 518 Master Thesis
Area of Study	Processes Modelling and Simulation
Student's Name	Nicholas Kountouris
Students Reg. Number	8229
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr Antonis Papadakis, Ass. Professor, Electrical Engineering Department
Semester	Spring Semester 2015
Thesis Title	**Design of Offshore Drilling Process**
Programme of Studies	MSc in Oil and Gas and Offshore Engineering, Frederick University, Cyprus
Course	MOE 518 Master Thesis
Area of Study	Processes Modelling and Simulation
Student's Name	Antonis Kalogirou
Students Reg. Number	8122
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr Antonis Papadakis, Ass. Professor, Electrical Engineering Department
Semester	Spring Semester 2015
Thesis Title	**Modelling and Simulation of Naturally Fractured Oil Reservoir Using BOAST-NFR**
Programme of Studies	MSc in Oil and Gas and Offshore Engineering, Frederick University, Cyprus
Course	MOE 518 Master Thesis
Area of Study	Processes Modelling and Simulation
Student's Name	Benedict Solomon
Students Reg. Number	9815
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr Antonis Papadakis, Ass. Professor, Electrical Engineering Department
Semester	Fall Semester 2016
Thesis Title	**Technical and Economic Aspects of Oil Refinery and Oil Products**
Programme of Studies	MSc in Oil and Gas and Offshore Engineering, Frederick University, Cyprus
Course	MOE 518 Master Thesis
Area of Study	Processes Modelling and Simulation
Student's Name	Georgia Christodoulou
Students Reg. Number	8741
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr Antonis Papadakis, Ass. Professor, Electrical Engineering Department
Semester	Fall Semester 2016

Thesis Title	**Numerical assessment of a pyrolysis reactor for lignocellulosic biomass**
Programme of Studies	MSc in Oil and Gas and Offshore Engineering, Frederick University, Cyprus
Course	MOE 518 Master Thesis
Area of Study	Processes Modelling and Simulation
Student's Name	Vasilis Argiriadis
Students Reg. Number	9605
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr Antonis Papadakis, Ass. Professor, Electrical Engineering Department
Semester	Fall Semester 2016

7. Frederick University, School of Engineering, MSc in Engineering Management

Thesis Title	**Development of an Energy Management System for the Electromechanical Service Department Ministry of Communication and Works, Based on ISO50001:2011**
Programme of Studies	MSc in Engineering Management, Frederick University, Cyprus
Course	MEM 590 Master Thesis
Area of Study	Energy Management
Student's Name	Christos Efthyvoulou
Students Reg. Number	6943
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christoforos Charalambous, Assoc. Professor, Computer Science Department Dr. Christos Anastasiou, Ass. Professor, Civil Engineering Department
Semester	Fall Semester 2012
Thesis Title	**Design, commissioning and management of building services in an experimental building employed for field measurements**
Programme of Studies	MSc in Engineering Management, Frederick University, Cyprus
Course	MEM 590 Master Thesis
Area of Study	Facilities Management
Student's Name	Constantinos Panagiotou
Students Reg. Number	375
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Andreas Kanarachos, Professor, Mechanical Engineering Department Dr. Christoforos Charalambous, Assoc. Professor, Computer Science Department
Semester	Fall Semester 2012
Thesis Title	**Environmental Assessment tools and evaluation of traditional building materials: the case of adobe**
Programme of Studies	MSc in Engineering Management, Frederick University, Cyprus
Course	MEM 590 Master Thesis
Area of Study	Computational Building Physics – Life Cycle Assessment
Student's Name	Pantelitsa Christodoulou
Students Reg. Number	5968
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Marios Fyrillas, Assoc. Professor, Mechanical Engineering Department Dr. Petros Christou, Ass. Professor, Civil Engineering Department
Semester	Spring Semester 2013

Thesis Title	**Quality Assessment Methods in Construction Industry- Renovation Projects**
Programme of Studies	MSc in Engineering Management, Frederick University, Cyprus
Course	MEM 590 Master Thesis
Area of Study	Facilities Management
Student's Name	Constantinos Fraggou
Students Reg. Number	5829
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Andreas Kanarachos, Professor, Mechanical Engineering Department Dr. Christoforos Charalambous, Assoc. Professor, Computer Science Department
Semester	Spring Semester 2013
Thesis Title	**Management strategies towards reducing the ecological footprint of Limassol port**
Programme of Studies	MSc in Engineering Management, Frederick University, Cyprus
Course	MEM 590 Master Thesis
Area of Study	Environmental Management – Ecological Footprint
Student's Name	Christos Erdas
Students Reg. Number	6783
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christoforos Charalambous, Assoc. Professor, Computer Science Department Dr. Petros Christou, Ass. Professor, Civil Engineering Department
Semester	Spring Semester 2014
External Reference	http://www.sciencedirect.com/science/article/pii/S0959652615010161
Thesis Title	**Queuing theory modelling towards accelerating the licensing of construction projects in Cyprus**
Programme of Studies	MSc in Engineering Management, Frederick University, Cyprus
Course	MEM 590 Master Thesis
Area of Study	Energy Policy
Student's Name	Panagiotis Fasoulis
Students Reg. Number	7583
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christoforos Charalambous, Assoc. Professor, Computer Science Department Dr. Michalis Menoikou, Ass. Professor, Mechanical Engineering Department
Semester	Spring Semester 2014
External Reference	http://link.springer.com/chapter/10.1007/978-1-4471-5595-9_10#page-1
Thesis Title	**Optimization of economic and environmental benefits of buildings restoration**
Programme of Studies	MSc in Engineering Management, Frederick University, Cyprus
Course	MEM 590 Master Thesis
Area of Study	Facilities Management
Student's Name	Neoklis Gregory
Students Reg. Number	750
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Marios Fyrillas, Assoc. Professor, Mechanical Engineering Department Dr. Petros Christou, Ass. Professor, Civil Engineering Department
Semester	Spring Semester 2013

Thesis Title	**Design, commissioning and management of a photovoltaic (PV) modules assembly line in Cyprus**
Programme of Studies	MSc in Engineering Management, Frederick University, Cyprus
Course	MEM 590 Master Thesis
Area of Study	Facilities Management
Student's Name	Panagiotis Nicolaou
Students Reg. Number	1396
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Marios Fyrillas, Assoc. Professor, Mechanical Engineering Department Dr. Petros Christou, Ass. Professor, Civil Engineering Department
Semester	Spring Semester 2013

8. Open University Cyprus, MSc in Sustainable Energy Management

Thesis Title	**Conversion of a 100 building community to a Zero Energy Community**
Programme of Studies	MSc in Sustainable Energy Systems, Open University Cyprus
Course	SES 515 Capstone Project I
Area of Study	Sustainable Energy Technologies
Student's Name	Thomas Paraskevas
Students Reg. Number	11502620
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Agis Papadopoulos, Professor, Aristotle University Thessaloniki Dr. George Karagiorgis, Assoc. Professor, Frederick University
Semester	Fall Semester 2015
Thesis Title	**Pre Engineering of a Comprehensive System for Building Heating by Exploiting Geothermal Energy**
Programme of Studies	MSc in Sustainable Energy Systems, Open University Cyprus
Course	SES 515 Capstone Project I
Area of Study	Sustainable Energy Technologies
Student's Name	Konstantinos Kanellos
Students Reg. Number	11500068
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Agis Papadopoulos, Professor, Aristotle University Thessaloniki Dr. George Karagiorgis, Assoc. Professor, Frederick University
Semester	Fall Semester 2015
Thesis Title	**Definition of passive solar heating of buildings with the use of BIM**
Programme of Studies	MSc in Sustainable Energy Systems, Open University Cyprus
Course	SES 515 Capstone Project I
Area of Study	Computational Building Physics – Building Integrated Modelling
Student's Name	Anastasia Filippou
Students Reg. Number	100005381
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Frederick University Dr. Constantinos Hadjiyiannis, Special Scientist, Frederick University
Semester	Fall Semester 2017

7. Open University Cyprus, MSc in Sustainable Energy Management (cont'd)

Thesis Title	**Energy recovery in a brewery with the use of solar thermal panels**
Programme of Studies	MSc in Sustainable Energy Systems, Open University Cyprus
Course	SES 515 Capstone Project I
Area of Study	Sustainable Energy Technologies
Student's Name	Nektarios Constantinou
Students Reg. Number	100004105
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Frederick University Dr. Constantinos Hadjiyiannis, Special Scientist, Frederick University
Semester	Fall Semester 2017
Thesis Title	**Use of renewable energy sources for the production of lithium-ion batteries**
Programme of Studies	MSc in Sustainable Energy Systems, Open University Cyprus
Course	SES 515 Capstone Project I
Area of Study	Sustainable Energy Technologies
Student's Name	George Stavropoulos
Students Reg. Number	100000458
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Frederick University Dr. Constantinos Hadjiyiannis, Special Scientist, Frederick University
Semester	Fall Semester 2017
Thesis Title	**Electricity storage systems in renewable energy sector: characteristics, cost and applications. A wind power plant case**
Programme of Studies	MSc in Sustainable Energy Systems
Course	SES 515 Capstone Project I
Area of Study	Sustainable Energy Technologies
Student's Name	Spyridon Tagartzakis
Students Reg. Number	100002876
Supervisor	Dr.-Ing. Paris A. Fokaides, Asst. Prof., Frederick University
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Frederick University Dr. Constantinos Hadjiyiannis, Teaching Staff, Frederick University
Semester	Fall Semester 2018

Thesis Title	**Indoor thermal conditions in dwellings in Cyprus**
Programme of Studies	MSc in Sustainable Energy Systems, Open University Cyprus
Course	SES 525 Capstone Project II
Area of Study	Computational Building Physics – Whole Building Energy Analysis Experimental Building Physics – In-situ Measurements
Student's Name	Eleni Efthymiou
Students Reg. Number	11500063
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Agis Papadopoulos, Professor, Aristotle University Thessaloniki Dr. Fryni Giama, Lab. Teaching Staff, Aristotle University Thessaloniki
Semester	Spring Semester 2016

Thesis Title	**Building Automation Systems for Energy Efficiency**
Programme of Studies	MSc in Sustainable Energy Systems, Open University Cyprus
Course	SES 525 Capstone Project II
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Alexia Panou
Students Reg. Number	11502606
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Agis Papadopoulos, Professor, Aristotle University Thessaloniki Dr. Fryni Giama, Lab. Teaching Staff, Aristotle University Thessaloniki
Semester	Spring Semester 2016

Thesis Title	**Investigation of the energy performance of school buildings**
Programme of Studies	MSc in Sustainable Energy Systems
Course	SES 701 Maser Thesis I + II
Area of Study	Experimental Building Physics – In-situ Measurements
Student's Name	Virginia Arvaniti
Students Reg. Number	11502606
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Agis Papadopoulos, Professor, Aristotle University Thessaloniki Dr. Fryni Giama, Lab. Teaching Staff, Aristotle University Thessaloniki
Semester	Spring Semester 2017
Thesis Title	**The impact of the implementation of the European Energy Performance of Buildings Directive on the European building stock: The case of the Cyprus Land Development**
Programme of Studies	MSc in Sustainable Energy Systems
Course	SES 701 Maser Thesis I + II
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Kyriakos Polycarpou
Students Reg. Number	100001751
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Agis Papadopoulos, Professor, Aristotle University Thessaloniki Dr. Fryni Giama, Lab. Teaching Staff, Aristotle University Thessaloniki
Semester	Spring Semester 2017
Thesis Title	**Solar Energy in Industrial Processes**
Programme of Studies	MSc in Sustainable Energy Systems
Course	SES 701 Maser Thesis I + II
Area of Study	Sustainable Energy Technologies
Student's Name	Anastasia Filippou
Students Reg. Number	11502606
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Agis Papadopoulos, Professor, Aristotle University Thessaloniki Dr. George Karagiorgis, Assoc. Professor, Frederick University
Semester	Spring Semester 2018
Thesis Title	**Seawater Desalination Using Renewable Energy**
Programme of Studies	MSc in Sustainable Energy Systems
Course	SES 701 Maser Thesis I + II
Area of Study	Sustainable Energy Technologies
Student's Name	Alexia Panou
Students Reg. Number	11502606
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Agis Papadopoulos, Professor, Aristotle University Thessaloniki Dr. George Karagiorgis, Assoc. Professor, Frederick University
Semester	Spring Semester 2018

Thesis Title	**Stirling Engines for Low-Temperature Solar-Thermal-Electric Power Generation**
Programme of Studies	MSc in Sustainable Energy Systems
Course	SES 701 Maser Thesis I + II
Area of Study	Sustainable Energy Systems
Student's Name	Theodoros Diavatis
Students Reg. Number	100003252
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Agis Papadopoulos, Professor, Aristotle University Thessaloniki Dr. George Karagiorgis, Assoc. Professor, Frederick University
Semester	Spring Semester 2018
Thesis Title	**Numerical Application for the Calculation of Thermal Transmittance of Building Elements**
Programme of Studies	MSc in Sustainable Energy Systems
Course	SES 701 Maser Thesis I + II
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Eleni Efthymiou
Students Reg. Number	11500063
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Aspasia Efthymiadou, Researcher, Hellenic Agricultural Organization - Demeter Dr. George Karagiorgis, Assoc. Professor, Frederick University
Semester	Spring Semester 2018
Thesis Title	**Numerical Modelling of Seasonal Solar Thermal Energy Storage**
Programme of Studies	MSc in Sustainable Energy Systems
Course	SES 701 Maser Thesis I + II
Area of Study	Sustainable Energy Technologies
Student's Name	Phivos Koumides
Students Reg. Number	100005912
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Efrosyni Giama, V. Lecturer, Aristotle University Thessaloniki, Greece Dr. Constantinos Hadjiyiannis, V. Lecturer, Frederick University
Semester	Spring Semester 2020
Thesis Title	**Stirling Engines for Low-Temperature Solar-Thermal-Electric Power Generation**
Programme of Studies	MSc in Sustainable Energy Systems
Course	SES 701 Maser Thesis I + II
Area of Study	Sustainable Energy Technologies
Student's Name	Yiannos Ioannou
Students Reg. Number	100001080
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. George Karagiorgis, Professor, Frederick University Dr. Constantinos Hadjiyiannis, V. Lecturer, Frederick University
Semester	Spring Semester 2020

Thesis Title	**Energy Management Practices in Office Buildings Develop a comprehensive energy management system for an office building Law Firm "Stelios Americanos & Co LLC "**
Programme of Studies	MSc in Sustainable Energy Systems
Course	SES 701 Maser Thesis I + II
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	George Louca
Students Reg. Number	100006053
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Efrosyni Giama, V. Lecturer, Aristotle University Thessaloniki, Greece Dr. Constantinos Hadjiyiannis, V. Lecturer, Frederick University
Semester	Spring Semester 2020

9. University of Cyprus, School of Engineering, MSc in Energy Technologies and Sustainable Design

Thesis Title	**Κύκλος ζωής θερμομονωτικών υλικών και βέλτιστο πάχος θερμομόνωσης**
Programme of Studies	Μεταπτυχιακό Πρόγραμμα στις Ενεργειακές Τεχνολογίες και τον Αειφόρο Σχεδιασμό
Course	ΠΠΜ 689 Ερευνητική Εργασία
Area of Study	Υπολογιστική Δομική Φυσική
Student's Name	Μιχάλης Ιωάννου
Supervisor	Δρ. Πάρις Α. Φωκαΐδης, Ειδικός Επιστήμονας, Παν. Κύπρου
Supervisory Committee	Δρ. Μαρία Νεοφύτου, Επ. Καθηγήτρια, Παν. Κύπρου
Semester	Εαρινό Εξάμηνο 2010
Thesis Title	**Παραμετρική Μελέτη Θερμικών Απωλειών Δαπέδου πάνω στο έδαφος για τυπική κατοικία στην Κύπρο**
Programme of Studies	Μεταπτυχιακό Πρόγραμμα στις Ενεργειακές Τεχνολογίες και τον Αειφόρο Σχεδιασμό
Course	ΠΠΜ 689 Ερευνητική Εργασία
Area of Study	Υπολογιστική Δομική Φυσική
Student's Name	Σάββας Βλάχος
Supervisor	Δρ. Πάρις Α. Φωκαΐδης, Ειδικός Επιστήμονας, Παν. Κύπρου
Supervisory Committee	Δρ. Μαρία Νεοφύτου, Επ. Καθηγήτρια, Παν. Κύπρου
Semester	Εαρινό Εξάμηνο 2010
Thesis Title	**Περιβαλλοντικές και κοινωνικές επίπτωσεις από την λειτουργία του πρώτου αιολικού πάρκου στην Κύπρο**
Programme of Studies	Μεταπτυχιακό Πρόγραμμα στις Ενεργειακές Τεχνολογίες και τον Αειφόρο Σχεδιασμό
Course	ΠΠΜ 689 Ερευνητική Εργασία
Area of Study	Αειφόρες Ενεργειακές Τεχνολογίες
Student's Name	Ειρήνη Χρυσοβαλάντω Μιλτιάδους
Supervisor	Δρ. Πάρις Α. Φωκαΐδης, Ειδικός Επιστήμονας, Παν. Κύπρου
Supervisory Committee	Δρ. Μαρία Νεοφύτου, Επ. Καθηγήτρια, Παν. Κύπρου
Semester	Εαρινό Εξάμηνο 2010
External Reference	http://link.springer.com/article/10.1007%2Fs10098-013-0642-2
Thesis Title	**Παρουσίαση και αξιολόγηση μεθόδων πραγματοποίησης ενεργειακών ελέγχων στα κτήρια**
Programme of Studies	Μεταπτυχιακό Πρόγραμμα στις Ενεργειακές Τεχνολογίες και τον Αειφόρο Σχεδιασμό
Course	ΠΠΜ 689 Ερευνητική Εργασία
Area of Study	Υπολογιστική Δομική Φυσική
Student's Name	Στέλλα Αργυρού
Supervisor	Δρ. Πάρις Α. Φωκαΐδης, Ειδικός Επιστήμονας, Παν. Κύπρου
Supervisory Committee	Δρ. Μαρία Νεοφύτου, Επ. Καθηγήτρια, Παν. Κύπρου
Semester	Εαρινό Εξάμηνο 2010
Thesis Title	**Παραμετρικό Μοντέλο για επίτευξη κτηρίων μηδενικής ενεργειακής κατανάλωσης**
Programme of Studies	Μεταπτυχιακό Πρόγραμμα στις Ενεργειακές Τεχνολογίες και τον Αειφόρο Σχεδιασμό
Course	ΠΠΜ 689 Ερευνητική Εργασία
Area of Study	Υπολογιστική Δομική Φυσική
Student's Name	Γεωργία Γρηγορά
Supervisor	Δρ. Πάρις Α. Φωκαΐδης, Ειδικός Επιστήμονας, Παν. Κύπρου
Supervisory Committee	Δρ. Μαρία Νεοφύτου, Επ. Καθηγήτρια, Παν. Κύπρου
Semester	Εαρινό Εξάμηνο 2010

10. Karlsruhe University of Technology, Department of Process and Chemical Engineering

Titel der Diplomarbeit	**Experimentelle Untersuchung des Einflusses von Druckverlust , Luftvorwärmtemperatur und Stöchiometrie auf die Tropfen-Ausbreitung unter Verwendung eines Airblast Zerstäubers**
Fakultät	Bachelorstudiengang Maschinenbau
Forschungsfeld	Experimentelle Prozessmodellierung
Name	Dimitris Tosidis
Betreuer	Dipl.-Ing. Paris A. Fokaides, Wiss. Mitarbeiter, Universität Karlsruhe
Aufgabensteller	Dr.-Ing. Nikolaos Zarzalis, Professor, Universität Karlsruhe
Semester	Wintersemester 2004
Titel der Diplomarbeit	**Experimentelle Untersuchung des Einflusses von Druckverlust , Luftvorwärmtemperatur und Stöchiometrie auf die Tropfen-Ausbreitung unter Verwendung eines Airblast Zerstäubers**
Fakultät	Masterstudiengang Chemieingenieurwesen & Verfahrenstechnik
Forschungsfeld	Experimentelle Prozessmodellierung
Name	Plamen Kasabov
Betreuer	Dipl.-Ing. Paris A. Fokaides, Wiss. Mitarbeiter, Universität Karlsruhe
Aufgabensteller	Dr.-Ing. Nikolaos Zarzalis, Professor, Universität Karlsruhe
Semester	Wintersemester 2004

Keynote Speeches

2025 – Keynote Speeches

1st Building Digital Twin Scientific Conference (BDTSC) , 15 May 2025 Kaunas, Lithuania
Transforming Built Environment Research through Digital Twin Integration

2024 – Keynote Speeches

EU-CONEXUS EENVIRO Research Conference, 31 October 2024, Bucharest, Romania
Digital Twins in Building Engineering: Pioneering Sustainable Solutions for Environmental Challenges / The coastal context
SpliTech 24, 9th International conference on smart and sustainable technologies, 25-28 June 2024, Bol, Brac, Croatia
Enhancing Building Intelligence: Key Advances in SRI through EU Research Initiatives

2023 – Keynote Speeches

Smart Built Environment, Student Scientific Conference, November 2023 Kaunas University of Technology, Lithuania
The need of Buildings Operational Rating for a Smart Built Environment
SpliTech 2023: 8th International conference on smart and sustainable technologies, 20-23 June 2023, Sp[lit - Bol, Croatia
Tools for Digitizing Buildings Energy Audits: Case Studies and First Evidences
The 15th "Romanian Conference on Energy Performance of Buildings" (RCEPB-XV) 8-9 June 2023, Bucharest, Romania
The role of operational rating for achieving the NZEB Target: The Need for New Standards.

2020 – Keynote Speeches

SpliTech 2020: 5th International Conference on Smart and Sustainable Technologies, Split, Croatia, September 2020
How can Building Information Modelling make building smarter
Advanced Construction and Architecture 2020, Kaunas, Lithuania, September 2020
How are the Smart Readiness Indicators expected to affect the Energy Performance of Buildings: First Evidences and Perspectives.

Conference Presentations

2025 – Conference Presentations

10th International Conference on Smart and Sustainable Technologies (SpliTech), 16-20 June, 2025, Split, Croatia.
Recent Developments in Life Cycle Assessment Implementation in the EU: Advancing Sustainability Through Level(s) and the New European Bauhaus.
1st International Conference on Building Digital Twin and Smart Cities (BDTSC), 14 May 2025, Kaunas University of Technology (KTU), Kaunas, Lithuania.
Overview of the Use of Co-Creation Tools for the Design of Sustainable Buildings.
International Conference on Renewable Energy Systems (ICRES) with focus on Solar Technologies. 09-11 April 2025 Thessaloniki, Greece
A digital model for the monitoring of a solar thermal system: development and analysis.

2024 – Conference Presentations

9th International Conference on Smart and Sustainable Technologies (SpliTech) 25 - 28 June 2024, Split, Croatia
Bridging the Gap: A Comprehensive Review of EPC and SRI Calculation Tools in Europe.
9th International Conference on Smart and Sustainable Technologies (SpliTech) 25 - 28 June 2024, Split, Croatia
Enhancing Smart Readiness through Simplified Financial Indicators.
13ο Εθνικό Συνέδριο για τις Ήπιες Μορφές Ενέργειας, Αθήνα 15-17 Μαίου 2024, Αθήνα, Ελλάδα
Κατάταξη ευφυίας και οικονομική ανάλυση συστημάτων αυτοματισμού και ελέγχου για τεχνικά συστήματα κτηρίων.

2023 – Conference Presentations

International Conference & Exhibition for Science (ICES2023) 6-8 February 2023, King Saud University, Riyadh, Saudi Arabia.
Europe's bleak energy winter: Exploring energy alternatives in the Middle East.
Innovative Seismic Protection and Structural/Community Resilience 2-4. September 2023, Democritus University of Thrace (DUTh), Xanthi, Greece.
Buildings Minimum Energy Requirements, The Cyprus Case Study: Lessons Learnt
Sustainable Built Environment Conference (SBE2022), 22-24 March 2023, Thessaloniki, Greece
First evidences of energy performance certificate operational rating: The case of Cyprus..
Sustainable Built Environment Conference (SBE2022), 22-24 March 2023, Thessaloniki, Greece
Heritage Life Cycle Assessment (HLCA): Evaluating the sustainability of heritage buildings. International Council for Research and Innovation in Building and Construction.

2022 – Conference Presentations

2022 IEEE Smart Cities International Conference (ISC2), 26-29 September 2022 · Paphos, Cyprus
Boosting Research for a Smart and Carbon Neutral Built Environment with Digital Twins (SmartWins)

International Symposium and Workshops Sustainable Solutions at Times of Transition (SuST) 14-17 July 2022, Nisyros Island, Greece

1. Numerical Investigation of the thermal performance of a solid biofuel boiler.
2. First evidence of sustainability assessment of educational building units with the use of Building Information Modelling tools.

2021 – Conference Presentations

Συνέδριο για τις Ήπιες Μορφές Ενέργειας, Ινστιτούτο Ηλιακής Τεχνικής, Θεσσαλονίκη, Ελλάδα 7-9 April, Thessaloniki, Greece.
Αριθμητική ανάλυση κάθετων δομοστοιχειωτών ηλιακών πλαισίων με την χρήση πεπερασμένων στοιχείων. 12ο Πανελλήνιο
Συνέδριο για τις Ήπιες Μορφές Ενέργειας, Ινστιτούτο Ηλιακής Τεχνικής, Θεσσαλονίκη, Ελλάδα 7-9 April, Thessaloniki, Greece.
Δείκτες Ευφυούς Ετοιμότητας Κτηρίων (Smart Readiness Indicator): Υφιστάμενη κατάσταση, δυνατότητες βελτίωσης και μελλοντικές προοπτικές.

2019 – Conference Presentations

SBE19 "Sustainable Synergies from Buildings to the Urban Scale", Thessaloniki, Greece

1. Numerical Investigation of the impact of longitudinal thermal bridging on energy efficient buildings under humid continental climate conditions: The Case of Lithuania.
2. Sustainability Assessment of the Building Construction Stage Using Building Sustainability Assessment Schemes (BSAS).
3. Recent Advancements in the Energy Performance of Intelligent Green Houses: A Case Study.
4. A SIPOC based model for the sustainable management of facilities in social housing.

2018 – Conference Presentations

EuroSun 2018, 12th International Conference on Solar Energy for Buildings and Industry, Switzerland
Environmental assessment of industrial solar thermal systems.
EUBCE - 27th European Biomass Conference and Exhibition, Copenhagen, Denmark
Energy recovery alternatives of the olive oil industry by-products.
11ο Πανελλήνιο Συνέδριο για τις Ήπιες Μορφές Ενέργειας, Ινστιτούτο Ηλιακής Τεχνικής, Θεσσαλονίκη, Ελλάδα

1. Βελτιστοποίηση σχεδιασμού προβόλου σκίασης με χρήση μοντέλων ψηφιοποίησης κτηρίου (BIM) και ανάλυσης κύκλου ζωής (LCA)
2. Ενεργειακή και περιβαλλοντική αξιολόγηση πελλετών παραγόμενων από στερεά υπολείμματα βιομηχανίας οινοποιίας.

2016 – Conference Presentations

International Symposium and Workshop ReGreece, Nisyros, Greece
Eco-Hestia: A Whole-Building Life Cycle Assessment (LCA) Tool.
SBE16 "Sustainable Synergies from Buildings to the Urban Scale", Thessaloniki, Greece

1. A high-performance controlled temperature building shell for the sustainable upgrading of buildings.
2. Eco-Hestia: A comprehensive building environmental assessment scheme, based on Life Cycle Assessment.

20th International Passive House Conference, Darmstadt, Germany
Monitored performance of a Passive House under subtropical climatic conditions.

2014 – Conference Presentations

10ο Πανελλήνιο Συνέδριο για τις Ήπιες Μορφές Ενέργειας, Ινστιτούτο Ηλιακής Τεχνικής, Θεσσαλονίκη, Ελλάδα.
Ανάλυση κύκλου ζωής ήπιας πυρόλυσης (φρύξης) στερεάς βιομάζας. (2014).

2013 – Conference Presentations

4th International conference on Renewable Energy Sources & Energy Efficiency (MSE), Nicosia, Cyprus,
Quality Assessment: Methods in Construction Industry. (2013).
3rd International Exergy, Life Cycle Assessment, and Sustainability Workshop & Symposium (ELCAS3), Nisyros, Greece
Promotion of sustainable renovation in Europe.
Power Options for the Eastern Mediterranean Region (POEM) Conference, Nicosia, Cyprus
European Roadmap for Energy and the Role of Cyprus Hydrocarbons (2013).

2012 – Conference Presentations

Power Options for the Eastern Mediterranean Region (POEM) Conference, Nicosia, Cyprus

1. The Exploration of Hydrocarbons in Cyprus: Implications, Problems and Perspectives.
2. The role of biomass exploitation towards zero energy buildings.

2011 – Conference Presentations

RoomVent 2011 Conference: „12th International Conference on Air Distribution in Rooms", 19-22 June 2011, Trondheim, Norway

„Favourable Scenarios towards Zero Energy Buildings", Technical Session 24: New technologies for heating and cooling or ventilating A/C.

FIABCI World Congress: „Influence of Culture and Civilization on Real Estates", 16-21 May 2011, Nicosia, Cyprus
„Development and Environment", Business Forum 4: Sustainable Real Estates Development.

World Renewable Energy Congress (WREC 2011), 09-13 May 2011, Linköping, Sweden
„Towards optimization of urban planning and architectural parameters for energy use minimization in Mediterranean cities", Paper Session: Sustainable Cities and Regions.

Center of Renewable Energy Sources Conference: Architecture, Energy and Environment in Buildings and Cities, 03-04 May 2011, Athens, Greece
„Investigation of the Urban Heat Island Effect in the city of Nicosia", Paper Session: Microclimate.

Cost Action C25 Final Conference: Sustainability of Constructions, Integrated Approach to Life-time structural engineering, 03-05 February 2011, Innsbruck, Austria
„Aiming at sustainability through multi-layering for the Cyprus News-Agency building proposal", Paper Session: Innovative Construction Systems.

2010 – Conference Presentations

9th HSTAM International Congress on Mechanics, 12 – 14 July 2010, Nicosia, Cyprus
„Flow and exchange processes in homogeneous urban street-canyon geometries: An experimental study using Particle Image Velocimetry", Paper Session: Fluid Mechanics.

2009 – Conference Presentations

Hellenic Scientific Conference on Chemical Engineering, Jun. 03-05, 2009, Patras, Greece
„Interaction between built environment and Urban Microclimate", Session: Transport Phenomena.

Wessex Institute of Technology, Conference on Sustainable Development and Planning IV, May. 13-15, 2009, Nicosia, Cyprus
„Ventilation characteristics of the built environment and their effects on the urban microclimate", Paper Session: Sustainability in the built environment.

Institute of Solar Technology, 9th National Conference on Renewable Energy Sources, Mar. 26-28, 2009, Paphos, Cyprus
"Interaction between built environment and Urban Microclimate", Paper Session: Climate – Renewables Applications."

2007 – Conference Presentations

ASME Turbo Expo 2007: Power for Land, Sea and Air, May 14-17, 2007, Montreal, Canada
GT2007-27126: „Experimental Investigation of the Stability Mechanism and Emissions of a Lifted Swirl Non-Premixed Flame", Paper Session: Combustion & Fuels.

Workshops and Panels

2026 – Workshops and Panels

04 Feb. 2026 Speaker, Concerted Action EPBD (CA EPBD) – Plenary Meeting, Dublin, Ireland
"Next-Generation EPCs: From Asset Ratings to Measured, Operational and Indicator-Enriched Certification"

2025 – Workshops and Panels

03 Dec. 2025 Speaker, Sustainability for Buildings Conference – Conference, Athens, Greece
"Smart Readiness Indicator (SRI): From Digital Technology to the Strategic Value of Buildings"
Fireside Chat Moderator: From Building Automation to Smart Readiness
"Smart Readiness Indicator (SRI), AI, and Adaptive Automation in Sustainable Buildings"

06 Nov. 2025 Panelist, Effective Dialogue Conference – Conference, Athens, Greece
" AI and Energy Without Limits: Building a Sustainable Tomorrow or Racing into the Void?"

22 Oct. 2025 Speaker, 4th SRI Joint Event (European Commission) – Policy Workshop, Brussels, Belgium
"SMART^2: Integrated SRI Auditing Solution and Standardisation - Policy Support Tools for SRI Implementation and the Transition towards an SRI/EPC Cluster"

16 Oct. 2025 Speaker, Built4People 3rd Clustering Event – European Clustering Event, Brussels, Belgium
"CRedIBlE Project: Circular REDesign for a Resource-Efficient, Innovative, and Transformative Built Environment"

06 Oct 2025 Speaker, MDPI – Seminar / Evaluating Building Smartness as a Driver for Resilient and Adaptive Architectural Design
"Smart Readiness Indicators (SRI) as a Framework for Energy Efficiency, Grid Interaction, and Occupant-Centric Buildings"

26 Sep. 2025 Panelist, INSPIRE 2025 Entrepreneurial Festival – Conference Panel, Nicosia, Cyprus
"The Internet of Things (IoT): How IoT Transforms Our Homes, Cities, and Industries
Internet of Things Applications in Smart Homes, Cities, and Industrial Systems"

05 Jun. 2025 Speaker, CLIMA 2025 – Decarbonized, Healthy, and Energy-Conscious Buildings in Future Climates International Conference, Milan, Italy
"The SmarterEPC Project: SmarterEPC Hub, Joint EPC & SRI Certificate, and Harmonized On-Site Audit"
"Smart Square: Innovations in SRI for Smarter Buildings and Market Transformation"

07 May 2025 Speaker, 3rd SRI Joint Event (European Commission) – Joint Workshop, Brussels, Belgium
"Overview of Roadmapping Activities and CEN WS Agreement on Standardized On-Site SRI Building Audits"
17 Mar. 2025 Speaker, Marie Skłodowska-Curie Actions (MSCA) – National Documentation Centre (EKT), Greece and Research Innovation Foundation, Cyprus, Information Day Webinar, - Virtual
"Best Practices and Success Factors in MSCA Staff Exchanges (ERA4CH Case Study)"
13 Mar. 2025 Speaker, MIPIM 2025 – International Real Estate Event, Cannes, France
"Introducing the Smart Readiness Indicator (SRI) to the Real Estate Sector and Its Role in Europe's Sustainable Building Transformation"

2024 – Workshops and Panels

06 Dec. 2024 Speaker, MSCA-NET (Horizon Europe) – Twinning Programme for Staff Exchange, Virtual
"Staff Exchange Success Story from Cyprus"
27 Nov. 2024 Speaker, ECTP IW5 Buildings – Workshop, Virtual
"Smart Tools for Smart Buildings: Enhancing the Intelligence of Buildings in Europe – Smart^2 - Project Overview"
14 Nov. 2024 Panelist, DiGiNN (European Digital Innovation Hub) – Event, Nicosia, Cyprus
"Bootcamp on Energy: Utilising Digital Tools for the Development and Growth of the Energy Sector"
15 Oct. 2024 Speaker, iSRIC 2024 – International Smart Readiness Indicator Conference, Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany
"Streamlining Smart Readiness: An Innovative Tool for Quick SRI Assessment in European Buildings"
03 Oct. 2024 Panelist, Cyprus Forum – Conference, Energy Security and Eastern Mediterranean, Nicosia, Cyprus
"Energy Security, Sustainability, and Regional Cooperation in the Eastern Mediterranean"
23–25 Sep. 2024 Speaker, Luxembourg Institute of Science and Technology (LIST), Sustainable Places (SP2024), Luxembourg
„1. Digitalisation of Energy Performance Assessment to Enable Retrofits"
„2. Smart Tools for Smart Buildings: Enhancing the Intelligence of Buildings in Europe – Smart^2"
06 Sep. 2024 Speaker, SRI Implementation Workshop (Smart Readiness Indicator) – Workshop, Thessaloniki, Greece
"Implementation of the Smart Readiness Indicator Pilot Phase in Cyprus"
Panelist - Open Discussion:
"The Role of Promoting Measures and Policies for Smart Buildings and the Importance of the Smart Readiness Indicator"
25 Jun 2024 Panelist, BUILD UP – Webinar, Smart Energy Transition: From Ideal to Reality, Virtual
"Smart Readiness Indicators for Energy Transition: An Overview of the Idea"
21 May 2024 Speaker, CINEA Cross-Programme Buildings Clustering Meeting – European Clustering Event, Brussels, Belgium
"Smart^2 Project: Main Project Idea, Implementation Aspects, and Success Stories"
16 Apr 2024 Speaker, BDTIC 4CH, – Building Digital Twin International Congress, Barcelona, Spain
"Smart Wins Project – Boosting Research for a Smart and Carbon-Neutral Built Environment with Digital Twins"

2023 – Workshops and Panels

01 Nov 2023 Main Speaker, Open University, Aradippou Municipality, Larnaca Cyprus
„Smart Buildings and Smart Cities: Advancements in the field, and how they affect our everyday life".
31 Oct 2023, Moderator, SEI forum public conferences and national roundtables, European Commission, Nicosia, Cyprus
„First Roundtable on Finance for Energy Efficiency in Cyprus. ".
17 Oct 2023 Speaker, Network Against Poverty, Nicosia, Cyprus
„Energy Poverty: Definitions and Policies for facing the challenge".
14 Sep 2023 Speaker, World Trade Centers (WTCs) European Regional, CyENS, Nicosia, Cyprus
„Digital twins for smart buildings energy audits: First evidence and case studies".
13 Sep 2023 Speaker, Joint Build Up webinar: SmartLivingEPC & CHRONICLE, Virtual
„Advanced Energy Performance Assessment towards Smart Living in Building and District Level (SmartLivingEPC)".
14-16 June 2023 Speaker, Universidad Politécnica de Madrid, Sustainable Places (SP2023), Madrid, Spain
„1. Digitalisation of Energy Performance Assessment to Enable Retrofits"
„2. Smart Readiness Indicator: Collaboration for Efficient and Sustainable Buildings"
01 Jun. 2023 Speaker, BUILD UP – Workshop, Virtual
"Smart Tools for Smart Buildings: Enhancing the Intelligence of Buildings in Europe – Smart^2 - Project Overview"
24 May 2023 Speaker, Next Generation Energy Performance Assessment, Rating and Certification: Towards a Decarbonised Future for European Buildings, Cities, Brussels, Belgium
„D^2EPC: Activities for a new EN standard on buildings operational rating".
04 May 2023 Speaker, Frederick University Cyprus. Climate Crisis, Cities, Nicosia, Cyprus
„Development of Utilities Management Platform for the case of Quarantine and Lockdown (eUMaP)".

08 Apr 2023 Speaker, ASHARE, Cyprus Chapter. Technical Seminar Energy in Buildings 2023, Nicosia, Cyprus
„Smart Tools for Smart Buildings".

2022 – Workshops and Panels

28 Nov 2022 Speaker, Institute of Politics and Democracy Studies The day after the UN Climate Conference (COP27): A first estimate, Nicosia, Cyprus
„In the wake of COP27: The role of liquefied natural gas (LNG) and its infrastructure as an "energy transition solution" for Cyprus and Greece".
21 Nov 2022 Speaker, RINA S.p.A: frESCO project workshop: Next Generation EPC Workshop, Virtual
„Advanced Energy Performance Assessment towards Smart Living in Building and District Level (SmartLivingEPC)".
18 Nov 2022 Speaker, Kaunas University of Technology Konferencija „Lietuvos mokslas ir pramonė 2022", Kaunas, Lithuania
„Boosting Research for a Smart and Carbon Neutral Built Environment with Digital Twins (SmartWins)".
16 Nov. 2022 Speaker, SRI Workshop (European Commission – LIFE SRI Cluster) – Workshop, Brussels, Belgium
"Smart Square: Advancing the Smart Readiness Indicator through Digital Tools"
15 Nov 2022 Speaker, FEDARENE; final conference of QualDeEPC project: Deep Renovation of buildings: what Energy Performance Certificates can do, Brussels, Belgium
„Next-generation Dynamic Digital EPCs for enhanced quality and user awareness (D2EPC)".
26 Oct 2022 Speaker, Research and Innovation Foundation, .Cyprus. Workshop and Networking Event for Marie Curie Sklodowska projects, Nicosia, Cyprus
„Recommendations for successful drafting and implementation of Marie Curie Research projects".
25 Oct 2022 Speaker, Research and Innovation Foundation, .Cyprus, Nicosia, Cyprus
„Evaluating Research Proposals for Horizon Europe: Myths and Realities".
6-9 Sep 2022 Speaker, Université Côte d'Azur, Sustainable Places (SP2022), Nice France.
„EPCs: Measuring building performance and adding operational rating"
08 June 2022 Speaker, Sustainable Energy Week, Building performance assessment towards Next generation EPCs, Virtual
„Energy performance & LCA Indicators Analysis for EPCs".
07 Apr 2022 Main Speaker, Nea Agrotiki Kinisi (New Agricultural Movement), Peristerona, Cyprus.
„Agricultural Photovoltaic Parks – An innovative application for the Agricultural World of Cyprus".

2021 – Workshops and Panels

14-15 Dec 2021 Speaker, TIMEPAC-21, International Workshop, Virtual
„Enriched set of KPIs in Next-generation Dynamic Digital EPCs for enhanced quality and user awareness (D^2EPC) project".
08 Dec 2021 Speaker, Cyprus Energy Agency. 3rd Living Lab and Incubator Workshop witnin HAPPEN MedYeb Certified Project, Nicosia, Cyprus
„Smart Readiness Indicator".
23 Nov 2021 Speaker, Department of Environment, Ministry of Agriculture, Rural Development and Environment, Get informed and join us in the circle.: European Waste Prevention Week, Nicosia, Cyprus
„Measuring and Documentation of Waste Food".
21 May 2021 Speaker, Cyprus Energy Agency, Workshop for Interreg V Greece Cyprus Project Synergin (Cooperation for energy saving in Public Buildings of the Cross-Border Region of Greece Cyprus), Virtual
„Smart Readiness Indicator: Challenges and Perspectives for the Municipalities in Cyprus".

2020 – Workshops and Panels

25 Sep 2020 Speaker, IsZEB: A new Digital Era for the Construction Section in Greece through BIM Technologies, Virtual
„Adoption of BIM practices in the Lithuanian building system: The BIM LT project".

2018 – Workshops and Panels

19 Nov. 2018 Speaker, Ministry of Finance – Event, Nicosia, Cyprus (European Week for Waste Reduction), Nicosia, Cyprus
"Μείωση και Αξιοποίηση Βιοαποικοδομήσιμων Αποβλήτων"
24 Jul 2018. Speaker, European Youth Parliament, Cyprus. 1st Academic Forum of European Youth Parliament (EYP), Cyprus. Panel Discussion: EU-Energy: A paradigm shift, Nicosia, Cyprus
„Realising the 2020 Cyprus and EU Energy Strategy".

2017 – Workshops and Panels

13,14 Dec 2017. Speaker, Ministry of Agriculture, Rural Development and Environment. Training seminar on prevention and rationale management of food waste, Nicosia, Cyprus
„Prevention and Utilization of Food Waste: Towards a Circular Economy".
05 Dec 2017 Speaker, SWIM-H2020 SM Regional Training on the Sustainable Management of Olive Oil Mills' Waste Support on olive oil mills waste Expert Facility Activity Regulation and methods, Athens, Greece.
„Waste to Energy Exploitation of Olive Mills Waste Streams"
07 Nov 2017 Speaker, Ministry of Environmental Protection, State of Israel - SWIM-H2020 SM EFH-IL-2, Support on olive oil mills waste Expert Facility Activity Regulation and methods, Nicosia, Cyprus
„Waste to Energy Exploitation of Olive Mills Waste Streams"
24 Jan 2017 Speaker, Frederick University – Workshop - Valgreen Erasmus+ KA2 Project, Nicosia, Cyprus
„Design and development of collection, management and distribution centers for the exploitation of olive solid waste energy purpose"

2016 – Workshops and Panels

05 Dec 2016 Speaker, Department of Law, University of Nicosia - Workshop: Energy Developments and Lessons for Cyprus, Nicosia, Cyprus
„European Energy Policy: Projects of Common Interest"
24 Nov 2016 Speaker, Department of Town Planning and Housing, Department of Environment, Ministry of Agriculture, Cyprus: Impact of Soil Sealing on the Built Environment – Workshop, Nicosia, Cyprus
„The impact of soil sealing on the urban heat island effect"
02 Nov 2016 Speaker, Cyprus Civil Engineers Association, Ministry of Energy – Workshop - Passive Houses and Nearly Zero Energy Buildings, Nicosia, Cyprus
„Zero Energy Buildings and Passive Houses in Cyprus: Presentation of case studies"
24 Oct 2016 Speaker, University of Cyprus – Workshop – Research Project Phase Change Material (PCM) enhanced plaster for upgrading the energy efficiency of con-temporary and historic buildings – PC Plaster, Nicosia, Cyprus
Computational Analysis of PCMs and PCPLASTER thermal properties
05 May 2016 Speaker, Frederick Research Center – Workshop – CLIMASP Research Project, Nicosia Cyprus
"Development of an Interdisciplinary Programme in Climate Change and Sustainability Policy" - CLIMASP: Frederick University Research and Teaching Activities in the field of Sustainable Energy Technologies

2015 – Workshops and Panels

27-28 Apr 2015 Speaker, Faculty of Civil Engineering and Architecture, Kaunas University of Technology, Lithuania. International Workshop „Future of the construction and indoor environment, Kaunas, Lithuania.
„1. Zero Energy Buildings: The Magic Formula",
„2. State of the art in the Life Cycle Assessment of Building Materials"

2014 – Workshops and Panels

16 Oct. 2014 Speaker, 2nd Oil & Gas: Technology, Equipment, Supplies, Services International Exhibition - CYP Gas Tech 2014, Nicosia, Cyprus
„Postgraduate education in the field of oil and gas: Challenges, opportunities and the vision of Frederick University"

2013 – Workshops and Panels

02 Oct 2013 Speaker, IMA Architecture - Workshop – Research Project „Energy Efficiency Knowledge Transfer Framework for Building Retroffiting in the Mediterranean Area - eeWise", Nicosia, Cyprus
Energy Efficiency, Knowledge Transfer Framework for Building Retrofitting in the Mediterranean Area
01-02 Jul. 2013 Speaker, Frederick University - Workshop - Workshop - Research Project "Whole Life Management of Sustainable Constructions", Nicosia, Cyprus
Integrated Sustainability Assessment
18 Jun. 2013 Speaker, Foreign Affairs Magazine (Hellenic Edition) & University of Nicosia – Workshop, Nicosia, Cyprus „Cyprus' new era: Geostrategic parameters, economy and foreign policy"
«Ευρωπαϊκός Οδικός Χάρτης για την Ενέργεια 2050 και ο Ρόλος των Κυπριακών Υδρογονανθράκων»
16 Apr. 2013 Speaker, Frederick Research Center - Workshop – Research Project, Nicosia, Cyprus
„A concept for promotion of sustainable retrofitting and renovation in early stages – ACES Project": „Presentation of project's main findings"
14 Feb. 2013 Speaker, Frederick Research Center – Workshop – Research Project „Square Mile Retrofit Project", Nicosia, Cyprus
„Developments in Cyprus after the implementation of the buildings energy efficiency directive"

2012 – Workshops and Panels

07 Mar. 2012 Speaker, University of Cyprus, Free University at Nicosia, Nicosia, Cyprus
„Technological advances in the energy sector in Cyprus at the beginning of the 20th century"
26 Jan, 2012 Speaker, Meteorological Service Cyprus - Workshop – Research Project „Study of Urban Heat Island Effect in Cyprus Research Project" (HEAT ΑΕΙΦΟΡΙΑ/ΑΣΤΙ/0308(ΒΕ)), Cyprus, Nicosia, Cyprus
„Towards optimization of urban planning and architectural parameters for energy use minimization in Mediterranean cities".

2011 – Workshops and Panels

23 Mar. 2011 Speaker, Junior Chamber International (JCI) Cyprus, Seminar, Nicosia, Cyprus
„Energy Policy – Renewable Energy Sources in Enterprises"
26 Jan. 2011 Speaker, University of Cyprus, Department of Civil and Environmental Engineering, Seminar Series, Nicosia, Cyprus.
„Experimental investigation and field measurements for the determination of the Urban Heat Island Effect"
11 Jan. 2011 Speaker, University of Cyprus, Free University at Larnaca, Larnaca, Cyprus
„Towards Zero Energy Buildings: European action plan and feasible scenarios"

2010 – Workshops and Panels

26 Nov. 2010 Speaker, University of Cyprus, Free University at Paphos, Paphos, Cyprus
„Towards Zero Energy Buildings: European action plan and feasible scenarios"10-11 Nov. 2010"
29 Sep. 2010 Speaker, 6th Real Estate and Construction Conference, Round table discussion, Nicosia, Cyprus
„Buildings Energy Efficiency"
17 May. 2010 Speaker, University of Cyprus - Workshop – Research Project Classification of Buildings in Cyprus Based on Their Energy Efficiency, Nicosia, Cyprus
„Application of IR Thermography and in-situ Measurement Techniques for the Evaluation of Buildings Energy Efficiency"

2009 – Workshops and Panels

06 May. 2009 Speaker, University of Cyprus, Graduates Office Event, Nicosia, Cyprus
„Eco Architecture - Buildings Energy Design: Current Status and Future Perspectives"

2007 – Workshops and Panels

01 Feb. 2007 Main Speaker, Presentation in the „Seminar Verbrennungstechnik" of the Division for Combustion Technology of the Engler-Bunte-Institute of the University of Karlsruhe, Germany
"Abgehobene Verbrennung: Literaturübersicht und Darstellung der eigenen Arbeit"