

PROGRAM

6th International Conference on Energy and Environment

Bringing together
Engineering and Economics



June, 2024

Welcome Message from the Conference Chair



It is my great pleasure to welcome you to the 6th International Conference on Energy & Environment: Bringing together Engineering and Economics (ICEE 2024).

The conference is organized by the ALGORITMI Research Center of the School of Engineering, University of Minho, and the CEF.UP Research Center of the School of Economics and Management, University of Porto.

This year, the Conference will take place at the School of Engineering, University of Minho, in Guimarães, Portugal, on the 6th and 7th of June, 2024.

Get ready to explore cutting-edge insights, innovative solutions, and interdisciplinary dialogues that are shaping the future of energy and the environment. Don't miss this opportunity to connect, learn, and inspire change at ICEE 2024.

We are looking forward to meeting you in Guimarães in June 2024!

Paula Ferreira
Conference Chair

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MUNICÍPIO DE
GUIMARÃES

DAY 1, THURSDAY, JUNE 06, 2024

08h30-12h30
and
14h00-16h30

REGISTRATION & HELPDESK

Session A Renewable Energies

115 - HOW THE GROWTH OF RENEWABLE ENERGY CAN CONTRIBUTE TO A COMPREHENSIVE SOCIO-ECONOMIC AND ENVIRONMENTAL APPROACH

Palloma Silva, Roberta Amaral, Patricia Fortes, Isabel Soares

A1- ASSESSMENT OF PUBLIC ATTITUDE TOWARD WIND ENERGY DEVELOPMENT THROUGH SOCIAL MEDIA ANALYSIS

Ali Danesh, Shima Yazdanmehr

297 - NAVIGATING THE SUSTAINABLE SUPPLY CHAIN IN MARINE RENEWABLES ENERGIES: CURRENT PRACTICES, CHALLENGES, AND FUTURE DIRECTIONS

Seyedasghar Bayatghiasi, João Carlos de Oliveira Matias, Mohamadreza Kamali, Fátima L. Alves

302 - ROBUST PRIORITIZATION OF RENEWABLE HYDROGEN SUPPLY CHAIN CONFIGURATION ALTERNATIVES CONSIDERING RISK IN CRITERIA AND WEIGHTINGS

Yovany Arley Erazo-Cifuentes, Juan Pablo Orejuela, Diego F. Manotas-Duque

104 - UNDERSTANDING THE IMPLEMENTATION OF RENEWABLE ENERGY COMMUNITIES IN PORTUGAL – HURDLES AND BENEFITS

Michel da Silveira Cardaretti, Susana Silva

Session B Climate Change

133 - TECHNICAL AND ECONOMIC RISK OF POST-COMBUSTION CARBON CAPTURE AND STORAGE SYSTEMS INTEGRATED INTO CEMENT PLANTS

Caterina Brandoni, Sotiris Kaldis, Angelos Lappas, Colin Snape, Mohammad Jaffar, Angela Rolfe, Neil J. Hewitt, Juan Carlos Martinez, Beata Lysiak, Ye Huang

A2 - Aviation and the EU ETS: a data-driven approach for carbon price prediction

Riccardo Colantuono, Massimiliano Mazzanti, Michele Pinelli

137 - A MARKOV-CHAIN MODEL FOR ASSESSING HEATWAVES AND DROUGHTS IN IBERIAN PENINSULA

Ebenezer Takyi, Pedro G. Lind, Ana Russo

257 - IMPACT OF CLIMATE INVESTMENT POLICIES ON CITIZENS' PERCEPTION OF POLLUTION DAMAGE IN THE EUROPEAN UNION

Vítor Miguel Ribeiro, Gustavo Soutinho, Isabel Soares

191 - THE EVOLUTION OF CARBON CAPTURE, UTILIZATION AND STORAGE: INNOVATIONS, CHALLENGES, AND PATHWAYS TO A LOW-CARBON FUTURE

William Monteiro, Patrícia Pereira da Silva, Nelson Soares, Catarina R. Matos

Session C Natural Resources and Materials

347 – GREEN INFRASTRUCTURES IN SOCIAL HOUSING IN BRAZIL: A SYSTEMATIC LITERATURE REVIEW

Bruno Noronha Rodrigues, Eloisa Dezen-Kempter, Vitor Eduardo Molina Junior, Felipe Benavente Canteras

131 - CAN PORTUGAL ENSURE SELF-SUFFICIENCY IN LITHIUM FOR NATIONAL MOBILITY BY 2050?

Bernardo Teixeira, Miguel Centeno Brito, Antonio Mateus

203 - BIOGAS SECTOR POTENTIAL IN ISLANDS ENERGETIC SYSTEMS: CRETE AS THE STUDY CASE

Jacek Dach¹, Stelios Rozakis, Patrycja Pochwatka, Jakub Mazurkiewicz, Alina Kowalczyk-Juško, Petros Gikas, Damian Janczak, Wojciech Czekala, Wei Qiao

62 - IDENTIFICATION OF ENVIRONMENTAL IMPACTS FROM COOPER USAGE IN SOLAR AND OFFSHORE WIND ENERGY SYSTEMS

Thashmika Bandara, Dasantha Wickramanayake, Mahinsasa Rathnayake, Veselin Rakocevic

206 - CYANOBACTERIAL BIOMASS AS A NATURAL AND SUSTAINABLE AGRICULTURAL FERTILIZER

Mariana Reimão, Diogo Lameirinhas, Liliana Almeida, Vítor Vasconcelos, Alexandre Campos, Marisa Freitas

Session D Sustainable Development and Technologies

214 – ACCOUNTING FOR SUSTAINABILITY IMPACTS IN PROJECTS: A SYSTEMATIC REVIEW

Filipe Machado, António Amaral, Nelson Duarte, Madalena Araújo

283 - STRATEGIC ZONING FOR WIND ENERGY IN PORTUGAL

Pilar Díaz-Cuevas, Paula Ferreira, Héder López, Belén Pérez-Pérez

348 - THE IMPACT OF LAND COVER ON SURFACE TEMPERATURE REGULATING SERVICE PROVIDED BY GREEN INFRASTRUCTURE: A CASE STUDY IN CAMPINAS, BRAZIL

Ana Laura Fragoso Favoreti, José Wellington Albuquerque, Bruno Noronha Rodrigues, Felipe Benavente Canteras, Vitor Eduardo Molina Junior

111 - ANALYSIS OF THE BARRIERS TO THE ENERGY TRANSITION JOURNEY IN DEVELOPING COUNTRIES

Salvador Pereira, Cristóvão Silva, Luis Miguel D. F. Ferreira

296 - RESOURCE-EFFICIENT REGIMES FOR GROWING VEGETABLE CROPS IN GREENHOUSE COMPLEXES

Wojciech Czekala, Kamil Witaszek, Alla Dudnyk, Natalia Pasichnyk

09h15
-
10h45

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10h45-11h15

COFFEE BREAK

11h15-11h45

WELCOME SESSION

11h50-12h30

Keynote Speaker
Henrik Lund
Aalborg University, Denmark

12h30-14h00

LUNCH BREAK

14h00-14h40

Keynote Speaker
Ales Fiala
European Research Executive Agency

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**Special Session
Wind Energy**

**Session E
Circular Economy**

**Session F
Energy Economics**

**Session G
Energy Efficiency**

213 - MODELING ENERGY SCENARIOS FOR THE IMPLEMENTATION OF WIND ENERGY FACILITIES: R3EA PROJECT

Max López-Maciél, Fátima Lima, Edimar Ramalho, André Oliveira, José Villar, Mara Madaleno, Marta Ferreira Dias, Mónica Meireles, Margarita Robaina

A3 - A REVIEW OF JOB CREATION ESTIMATIONS IN WIND POWER INDUSTRY

Luis Ramirez Camargo

340 - IS EU'S WIND POWER FLEET GREEN FOR ALL? EXPLORING REGIONALISED SOCIO-ENVIRONMENTAL IMPACTS

Miquel Sierra, Alexander de Tomás, Laura À. Pérez Sánchez, Cristina Madrid López

308 - COMMUNITY-LED LOCAL DEVELOPMENT – SLOGAN OR PROGRAM FOR THE DEPLOYMENT OF WIND POWER PROJECTS?

Jens Lowitzsch, Monika Bucha, Ranim Nassar

A4 – LEVELIZED COST OF ENERGY AND WAKE EFFECT ACROSS DIVERSE DESIGNS OF FLOATING OFFSHORE WIND FARMS WITHIN THE AREAS SPECIFIED BY THE SPANISH MARITIME SPATIAL PLANNING

Brieuc Thomas, Xurxo Costoya, Maite de Castro, Moncho Gómez-Gesteira

300 – CLOSING THE LOOP: THE INFLUENCE OF RECYCLING OF ETFE FOILS WITHIN THE LIFE CYCLE ASSESSMENT (LCA) APPROACH

Ketankumar Solanki, Torsten Balster, Carol Monticelli, Carl Maywald

176 - CHARTING A SUSTAINABLE FUTURE: BASIC PARAMETERS OF CIRCULAR ECONOMY AND BIOCOSMOPOLITAN INNOVATIONS IN KOSOVO'S CONSTRUCTION INDUSTRY

Arlinda Rexhepi Ademi, Festina Avdija Dema, Naser Kabashi

207 - ASSESSMENT OF CIRCULAR SOLUTIONS FOR SOLAR PHOTOVOLTAIC WASTE IN PORTUGAL

Marcela Jorio, António Amaral, Paula Ferreira

322 - A SOCIAL LIFECYCLE IMPACTS ASSESSMENT OF IMPLEMENTING A CIRCULAR ECONOMY SYSTEM IN THE ALBERTA FURNITURE INDUSTRY

Israel Dunmade

196 - CIRCULARITY IN WASTE MANAGEMENT SYSTEM: AN ASSESSMENT OF THE RECYCLING RATE PERFORMANCE OF DEVELOPING COUNTRIES

Rafaela Vital Caetano, António Cardoso Marques, Tiago Lopes Afonso

215 - FINANCIAL, ENERGY AND ENVIRONMENTAL INDICATOR FOR COMPANIES

Maryam Hajishams, Sh. Rasekh, Margarita Robaina, J.C.O. Matias

A5 – HOW TO OVERCOME CONSUMER'S ELECTRICITY CONSUMPTION INDIFFERENCE? A MICROECONOMIC APPROACH

Diogo Santos Pereira, Sónia Almeida Neves, António Cardoso Marques

287 - ANALYSIS OF THE DIFFERENTIAL EFFECT OF THE DETERMINANTS OF URBAN AND RURAL ENERGY POVERTY: EVIDENCE FROM 36 AFRICAN COUNTRIES

José Venal, Vítor Moutinho, Ernesto Ferreira

195 - OPTIMIZING CPPAs IN THE RENEWABLE ENERGY MARKET: CONTRACT PERFORMANCE ASSESSMENT

Francisco Simões, Carla Henriques, Nuno Carvalho Figueiredo, Patrícia Pereira da Silva

220 - THE ROLE OF COST SAVING ON DEMAND RESPONSE ACCEPTANCE IN HOUSEHOLD ELECTRICITY CONSUMER

Sara Golmaryami, Paula Ferreira, Manuel Lopes Nunes

194 - STRATEGIC ENERGY RESERVES REQUIREMENTS IN THE PORTUGUESE POWER SYSTEM WITH LARGE-SCALE DEPLOYMENT OF VARIABLE RENEWABLE ENERGY SOURCES

Luis Carvalho, Alvaro Gomes, Fernando Martins

256 - THE ENERGY EFFICIENCY ANALYSIS OF SORGHUM WASTE BIOMASS GROWN IN A TEMPERATE CLIMATE

Wojciech Czekala, Jakub Frankowski, Dominika Sieracka, Patrycja Pochwatka, Alina Kowalczyk-Juško, Aleksandra Zielińska, Kamil Witaszek, Jacek Dach

290 - CYANOBACTERIAL AND MICROALGAL NATURAL PIGMENTS: PROMISING ATTRIBUTES FOR SUSTAINABLE COLORING APPLICATIONS

Mariana Reimão, Liliana Almeida, Manuela Vieira da Silva, Vítor Vasconcelos, Nádia Eusébio, Marisa Freitas

309 - ECONOMIC AND EFFICIENCY ANALYSIS OF A NEW CONVERTER TOPOLOGY FOR MULTIFUNCTIONAL AC/DC HYBRID GRIDS

Martim Machado

313 - REMOTE IoT IN DTN CONTEXT – IMPACT ON ENVIRONMENT MONITORING AND AGRICULTURE

Eusebio Chicapa, Joaquim Macedo

14h45
-
16h00

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COFFEE BREAK

Session H
Sustainable Transport
277 – OPTIMIZING FUEL EFFICIENCY IN NON-EMERGENCY PATIENT TRANSPORTATION SERVICES FOR SUSTAINABLE HEALTHCARE IN PORTUGAL

José António Oliveira, António Vieira, Manuel Figueiredo, Luís Dias, Guilherme Pereira

212 - WIND ENERGY INTEGRATION FOR SUSTAINABLE TRANSPORTATION: A TECHNICAL-ECONOMIC ANALYSIS FOR METROPOLITANO DE LISBOA

Diogo Esteves, Fernando Neto, Nuno Duarte

201 - A SYSTEMS APPROACH TO ENERGY JUSTICE: THE CASE OF ELECTRIC VEHICLE ADOPTION

Alaize Dall-Orsoletta, Rudolph Oosthuizen, Géremi Gilson Dranka, Paula Ferreira

259 - DEVELOPMENT OF A DECISION SUPPORT SYSTEM FOR LOGISTICAL CHALLENGES IN HOME HEALTH CARE TEAMS IN BRAZIL

William Emiliano, Thylyta Cristina Mansano-Schlosser, Luiz Henrique Ferranda

Session I
Life Cycle Analysis and Impact Assessment
79 – THE ROLE OF ENVIRONMENTAL EXTERNALIZATION IN MATERIAL CRITICALLY ANALYSIS

Alejandro C. Finkelstein, Jesús Ramos Martín, Emilio Padilla Rosa, Yoana Chavdarova Kisyova, Cristina Madrid López

129 - VALUE-STREAM MAPPING ADAPTED TO SUPPORT PROCESS ANALYSIS AND REDUCTION OF BOTTLENECKS IN SMALL GRAPHIC BUSINESS

Shirley Suellen Thesari, Mauro Lizot, Flavio Trojan, Renato Tonello, Sérgio Gouvêa da Costa, Paulo Afonso

250 - WHAT'S NEXT? BEYOND THE IMPACT IN OPERATIONAL PHASE OF WIND FARMS. A CASE OF STUDY IN SOUTHERN SPAIN

Patricia Márquez-Sobrino, Belén Pérez-Pérez, Pilar Díaz-Cuevas

252 - ENVIRONMENTAL ANALYSIS OF MUNICIPAL SOLID WASTE MANAGEMENT SCENARIOS IN THE ABC REGION OF SAO PAULO STATE, BRAZIL

Ana Carolina Jimenez, Reynaldo Palacios Bereche, Maria Luiza Grillo Renó, Silvia Azucena Nebra

Session J
Natural Resources and Materials
198 – SUBSTRATES USED IN POLISH BIOGAS PLANTS: ENERGETIC EFFICIENCY, RENTABILITY AND FUTURE PERSPECTIVES

Alina Kowalczyk-Juško, Jacek Dach, Patrycja Pochwatka, Wojciech Czekala, Wolfgang Merkle, Andrzej Mazur, Jakub Pulka

A6 – DO RIVERS WITH HIGHER ECOLOGICAL STATUS HAVE LOWER MICROPLASTIC ABUNDANCE?

Andreia Ribeiro, Carlos Gravato, João Cardoso, Carlos A. Ribeiro, Maria Natividade Vieira, Carolina Rodrigues

202 - ENABLING INDUSTRIAL WASTE HEAT RECOVERY WITH THERMOELECTRICS USING SUITABLE MATERIALS, GEOMETRIES AND HEAT TRANSFER STRATEGIES

Francisco P. Brito, Diogo Oliveira, Jorge Ortega, Tiago Crespim, Ana Cristina Ferreira, A. P. Gonçalves, Jorge Martins, Theodora Kyratsi, Óscar Carvalho

326 - EMPOWERING CITIZENS TO TACKLE INVASIVE ALIEN SPECIES IN URBAN CITIES

Ana Pinheira, Francisco Carvalho, Carolina Rodrigues, Carlos A Ribeiro

Session K
Energy Production, Management and Storage
109 – INTEGRATED DESIGN STRATEGIES FOR HIGH-PERFORMANCE MICROCAES Jacek Leszczynski, Jan Markowski, Dominik Grybos

130 - CRITERIA SELECTION AND RANKING OF DIGITAL TECHNOLOGIES FOR ENERGY APPLICATIONS

Breno Pallu, Nathalia Monteiro, Flavio Trojan, Mauro Lizot, Sergio Gouvea da Costa, Edson Pinheiro de Lima, Fernando Deschamps

328 - EVALUATING RETROFIT MEASURES TO ACHIEVE THE ENERGY GOALS OF GUIMARÃES

Jaime Cevallos-Sierra, Ricardo Gomes, Carlos Santos-Silva

331 - EXAMINING THE TECHNOLOGICAL AND ENVIRONMENTAL IMPACT OF SOLID-STATE TRANSFORMERS IN SMART GRIDS AND MICROGRIDS

Sergio Coelho, Jose Cunha, Vitor Monteiro, Joao L. Afonso

16h20

-
17h30

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CONFERENCE DINNER

20h00

Hotel Guimarães

Rua Eduardo Manuel de Almeida, 202
4810-440, Guimarães, Portugal (Guimarães city center)

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DAY 2, FRIDAY, JUNE 07, 2024

08h30-12h30
and
14h00-16h30

REGISTRATION & HELPDESK

Session L Energy Policy

205 – CITIZEN-LED TRANSFORMATION OF MULTILEVEL GOVERNANCE IN CLIMATE AND DIGITAL TRANSITIONS: THE CASE FOR DEMOCRATIC PARTICIPATION IN POLICYMAKING

Asmaa Khadim, Sofia Simou, Esteban Szmulewicz, Sarah Giest, Maria Kaufmann

90 - A FRESH LOOK ON VERTICALLY DIFFERENTIATED PEER-TO-PEER ELECTRICITY TRADING PLATFORMS WITH AND WITHOUT SERVICE CUSTOMIZATION

Vitor Miguel Ribeiro, Gustavo Soutinho, Isabel Soares

275 - DIVERSIFICATION IN ENERGY PLANNING THROUGH MODERN PORTFOLIO THEORY: A REVIEW

Javier Afonso-Arevalo, Fernando de Llano Paz

242 - SUSTAINABILITY REPORTS – WHAT THEY SAY, THEY SHOULD, AND WHAT THEY STILL DO NOT SAY: A GENERAL ASSESSMENT

Mara Madaleno, Elisabete Vieira, Daniel Magueta, Manuel Carlos Nogueira

Session M Renewable Energies

136 - UTILISATION OF LIGNOCELLULOSIC BIOMASS FROM TOMATO PRODUCTION FOR ENERGY PURPOSES

Kamil Witaszek, Marcin Herkowiak, Alla Dudnyk, Viktoriia Chubur, Wojciech Czekala, Hynek Roubík

135 - RISK MANAGEMENT IN RENEWABLE ENERGY POWER PURCHASE AGREEMENTS – A BIBLIOGRAPHIC REVIEW

Andrews Danquah, Pedro André Cerqueira, Patrícia Pereira da Silva

222 - A MULTIDIMENSIONAL AUDIT FRAMEWORK FOR RURAL PHOTOVOLTAIC SYSTEMS IN BRAZIL

Géremi Gilson Dranka, Roberto Candido, Jorge Assade Leludak, Álvaro Alencar, Isadora Zanella Zardo, Rodrigo Manoel Aguiar Ferreira, Rafael Solheid Jacobs

A7 – ANALYSING THE ENERGY AND ECONOMIC EFFICIENCY OF WAVE ENERGY CONVERTERS IN NORTHWESTERN IBERIAN PENINSULA UNDER NEAR FUTURE CONDITIONS

B. Arguilé-Pérez, M. de Castro, X. Costoya, A. S. Ribeiro, G. Lavidas, P. Carracedo, N. G. de Castro, M. Gómez-Gesteira

Session N Sustainable Development

219 – THE NAVAL INDUSTRY’S CONTRIBUTION TO SUSTAINABLE DEVELOPMENT IN ANGOLA

Josério da Silva, Jorge Cunha, Paula Ferreira

105 - DESIGNING EFFICIENT TECHNOLOGY PORTFOLIOS FROM AN ENVIRONMENTAL COST-RISK PERSPECTIVE USING MPT AND LCA RESULTS

Paulino Martínez-Fernández, Juan José Cartelle Barros, Fernando de Llano-Paz

298 - INTEGRATING NARRATIVES IN ENERGY MODELLING: SOCIAL ASPECTS OF THE ENERGY TRANSITION IN SPAIN

Yoana Kisyova, María Cassinello Toscano, Cristina Pérez Sánchez, Diana Süsser, Johan Lilliestam, Cristina Madrid López

303 - LOCAL GOVERNANCE AND RENEWABLE ENERGY PROJECTS: LOCAL IMPACT PERCEPTION

Fátima Lima

Session O Climate Change

110 – THE POTENTIAL CONTRIBUTION OF GREEN HYDROGEN TO THE DECARBONATION OF THE GLASS INDUSTRY IN PORTUGAL

Laura Louro, Susana Silva, Erika Laranjeira

189 - CARBON MARKETS: ASSESSING PROGRESS, CHALLENGES AND PERSPECTIVES

William Monteiro, Mateus Gomes de Siqueira e Salles, Ana Luiza Ferreira Manzo, Nuno Carvalho Figueiredo

268 - LINKING CIRCULAR ECONOMY PRACTICES TO SUSTAINABLE DEVELOPMENT GOALS: A MULTI-CRITERIA DECISION-MAKING APPROACH

Ana Rita Fernandes, Vanessa S. M. Magalhães, Luís M. D. F. Ferreira

199 - ANALYSIS OF FACTORS AFFECTING THE EFFICIENCY OF BIOGAS PLANTS USING ARTIFICIAL INTELLIGENCE TECHNIQUES

Patrycja Pochwatka, Andrzej Lewicki, Alina Kowalczyk-Juško, Wojciech Czekala, Andrzej Mazur, Jacek Dach

09h00
-
10h10

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10h10-10h35

COFFEE BREAK

10h35-11h15

Keynote Speaker João Gonalo Maciel

NEW – Centre for New Energy Technology

Session P Energy Economics

294 – USE OF DIFFERENT THERMAL INSULATION MATERIALS IN A MASONRY BUILDING: TRADE-OFF BETWEEN ENERGY AND ECONOMIC PERFORMANCE

Rafael Saraiva, Ana Carneiro, Pedro Gonalves, Ana Ferreira, Daniel Oliveira, Senhorinha Teixeira

22 - ASSESSMENT OF EMISSIONS FROM ENERGY USE IN AGRICULTURE USING MACHINE LEARNING METHODOLOGIES

Vitor Joo Pereira Domingues Martinho

265 - HOW COULD SOARING ELECTRICITY PRICES BE A CONSEQUENCE OF DISRUPTIVE ENERGY TRANSITION MEASURES? AN ANALYSIS OF THE PORTUGUESE ELECTRICITY SYSTEM

Daniela Pereira Macedo, Antonio Cardoso Marques

193 - THE ROLE OF INDUSTRIAL CLUSTERS IN THE DEVELOPMENT OF THE HYDROGEN ECONOMY: A COMPARISON BETWEEN UNITED STATES, EUROPE, AUSTRALIA

Kalyne Brito, Ana Carolina Chaves, Thereza Aquino, Luiza Masseno, Caroline Chantre

11h20
-
12h30

Session Q Energy Production, Management and Storage

A8 – INTEGRATION OF MICROCAES WITH DISTRIBUTED RENEWABLES IN A MICROGRID

Jan Markowski, Paula Ferreira, Geremi Gilson Dranka, Jacek Leszczyński

217 - CHALLENGES AND PROSPECTS OF ELECTRICITY GENERATION AND USAGE IN SUB-SAHARAN AFRICA

Budareld Mbuma, Geremi Dranka, Paula Ferreira

120 - EXTRACTING KEY BEHAVIORAL HOUSEHOLD ASPECTS WITH FEATURE SELECTION TECHNIQUES TO IDENTIFY OUT-PROFILED ENERGY CONSUMERS

Lucas Henriques, Felipe Prata, Cecilia Castro

138 - TECHNO-ECONOMIC ASSESSMENT OF BATTERY ENERGY STORAGE SYSTEMS IN RENEWABLE ENERGY COMMUNITIES USING A MIXED INTEGER PROGRAMMING INVESTMENT DECISION MODEL

Sergio Perinhas, Jorge Sousa, Carla Viveiros, Filipe Barata

Session R Sustainable Technologies

92 – CONTROL STRATEGY OF STABLE DISCHARGE OF MECHANICAL ENERGY STORAGE THROUGH PISTON EXPANDER IN MICRO COMPRESSED AIR ENERGY STORAGE

Dominik Gryboś, Piotr Kubala, Jan Markowski, Jacek Leszczyński

343 - RELEVANT INDICATORS FOR A DIVERSITY OF STAKEHOLDERS: THE NEED FOR MULTI-SCALE SOCIO-ENVIRONMENTAL ASSESSMENTS OF THE ENERGY TRANSITION

Samuel Marot-Robinson, Cristina Madrid-Lopez, Laura Perez-Sanchez

142 - OPTIMAL SELF-SCHEDULING OF HOME APPLIANCES AND ELECTRICAL VEHICLES WITH HOME ENERGY MANAGEMENT SYSTEM

Farideh Ghanavati, Gerardo J. Osorio, Joo C. O. Matias

301 - FEASIBILITY ASSESSMENT OF INTRODUCING SOLAR PHOTOVOLTAIC MODULES IN BUILDING FACADES

J.G. Pinto, L. A. M. Barros, L.M. Goncalves, Lucas Lopes, Daniel Reis, M. Almeida

Session S Sustainable Transport

344 – DEMAND FLEXIBILITY FROM ELECTROLYSERS AND ELECTRIC VEHICLES: IMPACT ASSESSMENT ON RENEWABLES CURTAILMENT, BACKUP CAPACITY, STORAGE, AND DISPATCHABLE GENERATION WITH APPLICATION TO THE PORTUGUESE POWER SYSTEM

Jorge Sousa, Joo Lagarto, Filipe Barata,

197 - IS ELECTRIC MOBILITY EFFECTIVE IN SMOOTHING THE LOAD DIAGRAM? EVIDENCE FROM THE EUROPE

Sonia Almeida Neves, Diogo Santos Pereira, Antonio Cardoso Marques

221 – MATERIAL FLOW ANALYSIS APPLIED TO LITHIUM-ION BATTERIES OF ELECTRICAL VEHICLES IN THE CZECH REPUBLIC WITH A CIRCULAR ECONOMY PERSPECTIVE

Francisco Mikus, Marcela Jorio, Paula Ferreira

216 - THE FUTURE OF ELECTRIC VEHICLES BATTERIES: PATHWAYS, CHALLENGES AND OPPORTUNITIES

Anna Luiza Souza Vieira Santos, Wellington Alves, Paula Ferreira

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LUNCH BREAK

	Session T Modelling and Planning	Session U Sustainable Development	Session V Energy Transition	Session W Energy Planning
	<p>21 – ENERGY USE IN THE AGRICULTURAL SECTOR WORLDWIDE AND MACHINE LEARNING APPROACHES Vítor João Pereira Domingues Martinho</p> <p>346 - LCOE AT RISK FOR PV SOLAR FARMS IN DIFFERENT LOCATIONS IN COLOMBIA Yessenia Martínez-Ruiz, Camilo Micán, Diego Fernando Manotas-Duque</p>	<p>200 – STRUCTURAL DESIGN FOR THE EVALUATION FRAMEWORK OF DEVELOPMENTS PROJECTS Thomaz Fagá, Jorge Cunha</p> <p>321 - SUSTAINABILITY VERSUS URBAN WELL-BEING: AN ANALYSIS OF THE PARAMETERS FOR CERTIFIED BRAZILIAN CITIES Márcia Yara de Oliveira Silva, Carlos Augusto Uchôa da Silva, Bruno Noronha Rodrigues</p>	<p>330 - CONSEQUENCES OF THE ENERGY TRANSITION ON POVERTY: EVIDENCE FROM THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY António Cardoso Marques, Diogo Santos Pereira, Querubim Capimolo Lucamba</p> <p>231 - PUBLIC POLICIES TO PROMOTE A JUST ENERGY TRANSITION IN THE BRAZILIAN ELECTRICAL SECTOR Ana Carolina Chaves, Lorrane Câmara, Leonardo Gonçalves, Cristina Rosa, Rubens Rosental</p>	<p>101 – BALANCING THE DYNAMICS BETWEEN GREEN HYDROGEN AND RENEWABLE ENERGY PRODUCTION IN BRAZIL Cosme Polese Borges, Mauricio U. Maldonado, Rainer Walz, Yvonne Beck</p> <p>246 - LOOKING INTO INDIA’S FUTURE IN SOLAR PHOTOVOLTAICS: A SYSTEM DYNAMICS MODEL Mauricio Uriona Maldonado, Rhythm Singh</p>
14h00 - 16h30	<p>A9 – NUMERICAL SIMULATION OF CAPILLARY RISE IN MILLIMETRIC CYLINDRICAL TUBES Shivam Sharma, Nuno Dourado</p> <p>312 - ASSESSING UNCERTAINTY CASCADES IN ENERGY AND ENVIRONMENTAL MODELLING: A CASE FOR PORTUGAL Alexander de Tomás-Pascual, Miquel Sierra, Ramin Soleymani</p>	<p>299 - GREEN INFRASTRUCTURES AS A MITIGATOR OF URBANIZATION PROBLEMS: A CASE STUDY IN THE CITY OF SOROCABA, SÃO PAULO/BRAZIL Jakeline Pertile Mendes, Letícia Santana Pereira, Bruno Noronha Rodrigues, Ana Laura Fragoso Favoreti, Vitor Eduardo Molina Junior, Felipe Benavente Canteras</p> <p>208 - ELASTICITY OF SUBSTITUTION BETWEEN GREEN AND NON-GREEN JOBS Sergey Volozhenin, João Cerejeira, Rita Sousa</p>	<p>A10 - MODELLING CHOICES AND FIT-FOR-PURPOSENESS IN THE ENERGY TRANSITION: AN EXPERIENCE FROM QTIDIAN, CALLIOPE AND ENBIOS Cristina Madrid-López, Alexander de Tomás-Pascual, Miquel Sierra Montoya, Ramin Soleymani, Stefan Pfenninger, Diana Süsser, Johan Lilliestam</p> <p>A11 - A SYSTEMATIC APPROACH FOR A JUST ENERGY TRANSITION TO INCLUDE RENEWABLE IN A SMALL ISLAND DEVELOPING STATE (SIDS) Randy Ramadhar Singh, Ricardo M. Clarke, Xsitaz T.Chadee</p>	<p>66 - SUSTAINABILITY IN PUBLIC TRANSPORTATION: MODELING THE ADOPTION OF ELECTRIC BUSES IN SÃO PAULO/BRAZIL Tainara Volan, Caroline Rodrigues Vaz, Mauricio Uriona-Maldonado</p> <p>204 - IMPACT ASSESSMENT OF LARGE HYDROPOWER: THE CASE OF BELO MONTE IN BRAZIL Rodrigo Pimentel, Lígia M. Costa Pinto, Paula Ferreira</p> <p>218 - INSIGHTS ON SHALE GAS DEVELOPMENT IN BRAZIL: AN EXPERT-BASED ASSESSMENT Andréa Gomes, Luiz Borges, Paula Ferreira</p>

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