## PROGRAMMA PROVVISORIO 80° CONGRESSO ATI 2025

	10 settembre											
15.00-18:00 Cerimonia inaugurale presso Aula Magna dell'Università degli Studi del Sannio: Chiesa Sant'Agostino, Via G. De Nicastro, 13												
15:00-16:00	Saluti Istituzionali Clemente Mastella	indaco Città di Benevento										
	Clemente Mastella, Sindaco Città di Benevento Gerardo Canfora, Rettore dell'Università degli Studi del Sannio											
		dente Confindustria Benevento idente ATI Nazionale										
		sidente ATI Campania										
16:00-17:00	sout 17 de Relazioni ad invito											
	Giorgio Graditi, Enea											
	Guido Massimo Dell'Omo di Eni SpA											
17:30-17:45	Maurito Zara, Ufficio Energia Legambiente Rappresentari degli Sponsor											
	Davide Matarazzo, Digi+											
	Massimo Capaldo, Koala           5-18:00         Dissusera											
	Emma Frosina e Maurizio Sasso											
18:00-19:00	Visita Museo S'ADII	1 - Complesso Sant'Agostino (è Necessaria Preno	tazione)									
						11 settembre						
dalle 08.30						Registrazione		1				
		Aula SA1		Aula SA2		Aula SA3		Aula SA	9	Aula SA7		
		Efficient energy use and conversion in systems	s and processes I	Refrigeration and heat		Internal combustion engines and s		Hydrogen production, transpor				
9:00-9:20		Chairman: Andrea Fragnito  Adsorbent composite materials using inorganic salts and their blends for adsorption-based desalination systems	Roberta De Salvo	Chairman: Angelo Ma A Systematic Framework for Optimizing Working Fluids and Configurations in High-Temperature Heat Pumps for Industrial Applications	Mohamed Hamada	Chairman: Davide I Assessment of the operation of a pre-chamber marine engine fuelled by ammonia-hydrogen mixtures at full and partial load	Davide Lanni	Chairman: Agostino Hydrogen Valley Resilience: conceptual background and core KPIs	Claudio Petti			
9:20-9:40	Sessione Poster	Advancing Sustainability in Agri-Food Systems: Energy and Environmental Analysis of a Milk and Cream Processing Facility	Orlando Corigliano	Evaluating the Potential of CO2 as a Sustainable Refrigerant for HVAC&R Systems on Cruise Ships	Martina D'Onofrio	SOFC-based propulsion systems for maritime applications	Gabriella Di Cicco	Could hydrogen play a role in the defossilization of airport ground vehicles?	Costanza Saletti			
9:40-10:00	Corridoio Primo Piano	Cost-Effective Electrification of Tissue Paper Production Through Infrared Heater and Heat Pump Integration	Alessio Ciambellotti	Experimental characterization of a carbon-dioxide dual source heat pump	Francesco Di Salvatore	A simulation study for the retrofitting of a conventional high-performance vehicle to different plug-in HEV architectures and selection of optimal configuration based on MABAC technique	Luigi Teodosio	Volatility in Hydrogen pricing: the effect of electricity market variability on sustainable refueling	Enrico Bocci			
10:00-10:20		From Sunlight to Syngas: enabling Solar-enhanced Biomass Gasification through Thermal Energy Storage Integration	Arianna Baldinelli	Quadratic unconstrained binary optimization for refrigeration ejector design	Giulio Malinverno	Powertrain Optimization for Efficient Range Extension in eVTOL Eight-Rotor Drone for Sustainable Urban Air Mobility (UAM)	Enrico Corti	Numerical Assessment of Hybrid PEMFC–Battery vs. Battery-Only Propulsion for Sustainable Light Aviation	Abolfazl Movahedian			
10:20-10:40		Clean, sustainable and renewable energy produ	etion and starage			Coffe Break- Piano Terra		T				
		systems  Chairman: Giuseppe Langella		Thermal control in electric and Chairman: Giovanna F		Hydraulics, pneumatics and drive systems I Chairman: Massimo Borghi		Climate change mitigation in t Chairman: Gerardo				
10:40-11:00	Sessione Poster	Effect of Blockage Ratio on the Performance of a Ducted Savonius Turbine for OWC Applications	Massimiliano Chillemi	Investigating Lithium-ion Battery Sleep Mode Cooling in Extreme Ambient Conditions with Experimental and Predictive Modeling	Hossein Darvish	Preliminary Thermodynamic Characterization of a Pneumatic Actuator for Fish-Like Propulsion: Work Domain and Efficiency Assessment	Roberto Ricciu	A new paradigm for environmental energy sustainability and well-being in the perspective for climate change and urban heat island mitigation. The ESCAPOS-LIFE project for Florence	Maria Chiara Lanini			
11:00-11:20	Corridoio Primo Piano	Modeling of hydrogen and biomethane production via biomass gasification	Stefano Piazzi	Multi-Objective Design and Optimisation of a Compact Crossflow Heat Exchanger for a 2025 Formula SAE Electric Single- Seater	Lorenzo Dambrosio	A Preliminary Design of a Thermal Management System for High-Performance Electric Vehicles: Numerical Simulation and Experimental Validation	Luca Romagnuolo	A preprocessing framework to assess air temperature and humidity sensor data reliability for urban microclimate analysis	Nicola Borgato			
11:20-12:00		Pyrolysis of biomass in fluidized-bed reactors: towards a data-driven approach for reactor design and control	Matteo Baldelli	Thermal behaviour of Li-ion battery cells in natural convection: modelling approach and experimental validation	Claudio Cilenti	Simulation and Control of an Advanced Metering Valve for Hydrogen-Powered Aircraft Fuel Systems Using Simscape Language	Francesco Sciatti	Characterization of hydrophobic surfaces by experimental study of static and dynamic contact angles	Viviana Nebbioso			
12:00-13:00 13:00-14:00						Assemblea generale ATI-Aula Magna Lunch- Piano Terra						
		Renewable Energy Communities III Energy efficiency in buildings III Hydraulics, pneumatics and drive systems IIII Hydrogen production, transport, storage and utilization II										
	Chairman: Fabio Armanasco Chairman: Antonio Gigante Chairman: Fabrizio Pattrinieri Chairman: Rosario Lanzafame  Preliminary analysis of Indyrogen  Preliminary analysis of Indyrogen											
14:00-14:20		Evaluation of a Renewable Energy Community for enhancing renewable energy use: An Italian case study	Filippo Onori	A data-driven retrofit framework for historic buildings: the case study of Villa Farnesina in Rome	Riccardo Serafino	Development and Validation of a Mini Excavator Model: A Numerical Tool for Hydraulic and Control System Design	Alice Betti	demand for meeting the fuel needs of turbofan engines operating on short-haul flights at a European airport	Simona Di Micco			
14:20-14:40		Forecasting the Growth of Renewable Energy Communities in Italy: A Regional and National Analysis	Antonino Rollo	Application of Earth-to-Air Heat Exchangers (EAHE) for Sustainable Energy Management in School Buildings	Diana D'Agostino	Energy Savings Assessment on a Mid-Size Excavator with Common Pressure Rail Architecture	Carmine Conte	Metal Hydrides-Based Hydrogen Storage for Light Mobility Applications: Performance Assessment through 1D Numerical Modeling	Edoardo Cennamo			
14:40-15:00	Italiana della Fisica Tecnica- Aula Magna	Machine Learning-Based Energy Forecasting for Energy Management in Renewable Energy Communities	Muhammad Akram	Operational vs embodied energy: focus on EPS insulation and PV panels for residential buildings	Gerardo Maria Mauro	Numerical and experimental analysis of an external gear pump efficiency – literature review and lumped parameter approach capability	Alfonso Rosario Apuzzo	Experimental Characterization of a Small-Scale PEM Water Electrolyzer for Hydrogen Production	Marco Russo Cirillo			
15:00-15:20		Technical-economic evaluation for maximizing the self-consumption contribution in an energy community: The case study of Pattada in Sardinia	Manuela Piga	Efficiency and resilience of temporary housing complexes in L'Aquila 16 years after the earthquake	Annamaria Ciccozzi	Analysis, Modeling, and Testing the Control Valves of an 8-Ton Excavator	Elio Galeotti	Environmental impacts study of high temperature electrolyzers	Fabiana Romano			

		Towards a fair revenue distribution of a		Evaluating the role of thermal mass in				Hydrogen as sustainable option for				
		Renewable Energy Community through a		energy flexibility: A comparative study of				non-electrified rail lines:				
15:20-16:00		proportional energy consumption model	Ilenia Perugini	insulated concrete forms and	Hajar Djellal			preliminary analysis on the supply	Giovanni Di Ilio			
		application		conventional building materials				chain development				
16:00-16:20		аррассион		Conventional building materials		Coffe Break- Piano Terra		Criain development		+		
10.00 10.20				Renewable Energy Communities II- District	t Heating and Cooling-							
		Efficient energy use and conversion in systems and processes IE  Chairman: Carlo Roselli		Positive Energy Distroits∄ Chairman: Alberto Fichera		,	Clean, sustainable and renewable energy production and storage systems II		Turbomachines I <sup>®</sup>		Hydrogen production, transport, storage and utilization III	
						Chairman: Rosa De Masi		Chairman: Marcello Manna		Chairman: Antonio Ficarella		
16:20-16:40		How Energy Efficiency can help decarbonization in hard to abate industry: Energy Efficiency trend in air separation process	Marco Bassetti	Assessing the impact of electric vehicle charging hubs on shared energy in Renewable Energy Communities according to the Italian regulation	Elisa Ghirardi	Techno-Economic Analysis of a Hybrid Renewable Energy System (HRES) with Biogas- Powered Combined Heat and Power (CHP) and Photovoltaic (PV) Systems	Benedicta Croce	Fast Turbomachinery Design Tools for Multi-Good Plants Based on sCO2 Cycles: the MUSIC Project Experience	Federico Nesi	High-temperature electrolysis for industrial decarbonisation: a real-scale demonstration in the steel sector	Martina Fantini	
16:40-17:00	Assemblea	Influence of Geometric Parameters on Torque and Losses in Coaxial Magnetic Gears for High- Efficiency Applications	Silvia Roscioli	Comparative analysis of Renewable Energy Community simulators	Andrea Presciutti	Power-to-Fuel Systems for Direct Coupling with Intermittent RESs: Layouts and Comparisons	Chiara Monacchini	Numerical Investigation of Low Engine Order Excitations on the Last Rotor Blade of Steam Turbines	Niccoló Tani	Numerical modeling of Nafion membranes to predict their performance under different operating conditions	Francesca Mennilli	
17:00-17:20	AIMSEA- Aula Magna	Intermediate step towards integrated energy planning: case study, sardinia	Pier Luca Maria Buonomo	Energy management strategies in Positive Energy Districts: A multi-agent modelling approach	Rosaria Volpe	Energy Efficiency and Hydrogen Demand of Atmospheric Fast Catalytic Hydropyrolysis of Residual Lignocellulosic Biomass	Pietro Mele	Numerical Study of Fluid-Structure Interaction of the UHBR ECL5/CATANA Fan	Carlo Vecchietti	Performance analysis of hydrogen refueling stations adapting light-duty infrastructures for heavy-duty vehicles	Michele Martorelli	
17:20-17:40	20-17:40	Model-based optimization of a twin-screw pump for engine cooling applications	Giammarco Di Giovine	A comparison between the software EUReCA and UrbanEnergyPro on a district in Germany	Mohamad Hasan Khajedehi	Minimizing LCOA in green ammonia production: optimization of components size and scheduling under varying curtailment scenarios	Davide Micheletto	Study of sheet cavitation on a pitching hydrofoil	Tingyun Yin	Integration study of biomethane and synthetic methane production plant	Giovanni Cinti	
17:40-18:00		Optimal chiller loading analysis for a multi-chiller Computer Room Air Handler (CRAH) system feeding a data center	Valeria Piscopo	Integrating routing costs into the design of district heating network paths	Mohamad Hasan Khajedehi	Valorisation of digestate through nitrogen and phosphorus recovery via chemical-physical precipitation and microbubble insufflation to reduce COD in the liquid	Martina Bove			From Biomass to Hydrogen: AB2H's Triple-Pathway Blueprint for Low-Carbon Bio- Syn/hydrogen	Orlando Corigliano	
20:00												

						12 settembre					
dalle 08.30	lalie 08.30 Registrazione										
		Aula SA1  Efficient energy use and conversion in systems and processes III- Policies to aid energy transition and Smart Energy Systems® Chairman: Maurizio Sasso				Auta SA3  Clean, sustainable and renewable energy production and storage systems IIIE  Chairman: Roberto Cipollone		Auta SA9  Hydrogen production, transport, storage and utilization IV® Chairman: Paolo Tamburrano		Auta SA7  Turbomachines II - Measurement and monitoring in energy systems®  Chairman: Raffaete Fuccillo	
9:20-9:40		Sustainable energy recovery of agriculture residues in small companies: the case of vines pruning	Simona Di Fraia	Development of load curves for power-to- power system based on hydrogen technology within a residential context	Alessandro Russo	Supporting defossilization of the metallurgy sector with bio-coal and green hydrogen: A CO <sub>2</sub> emissions assessment	Viviana Negro	A modeling approach for sizing on- site hydrogen refueling stations	Davide Lanni	High-Fidelity Digital Twins of In- Service High-Pressure Turbine Blades	Pierluca Dessi
9:40-10:00		Techno-economic analysis of high-temperature PEM fuel cells integration in cogeneration systems	Carlo Alberto Niccolini Marmon Du Haut Champ		Stefania Liuzzi	Data-driven wind farm power forecasting with Numerical weather predictions and SCADA data	Gianmarco Bianchi	Design and simulation of a fuel cell electric vehicle powertrain: thermal management and hydrogen supply systems	Simona Palmigiano	Extending the operating range of an electrodynamic filter for gas turbines through geometry optimization	Michele Pinelli
10:00-10:20	Sessione Poster Corridoio Primo Piano	The role of biomethane and hydrogen towards a climate friendly steel production in Italy	Noussan Michel	Space cooling demand of office buildings: impact of common retrofit actions and climate change	Francesca Villano	Wave Energy Converters: a Design Optimization through RSM analysis	Piofrancesco Barone	A lumped parameter model of fuel system and heat exchangers for a hydrogen-powered aircraft turbine engine	Stefano Li Veli	Development and validation of a fast CFD workflow for accurate wind turbine airfoil simulations by means of a native GPU solver	Stefano Mauro
10:20-10:40		Solar Energy: Thermo-economic principles in the perspective of global economic sustainability	Roberto Baccoli	Thermal analysis of 3D-printed panels for enhanced building envelope performance	Andrea Fragnito	Crafting KOH Electrolyte for AEM Water Electrolysis: From Faucet to Fuel	Omneya Koriem	Sealing performance of pipes and joints in pure hydrogen	Federico Passoni	Multivariate Statistical Control of Energy Signatures in Brewery Production Process	Martina Barrasso
10:40-11:00		Polygeneration Grid Equipped With Atmospheric Water Generation and Phase-Change Material for Energy Storage: Tests in Cyber-Physical Mode	Ferrari Mario Luig	Towards Real-Time Building Energy Modeling: Investigating Autodesk Revit's Capabilities in Integrating BIM and BEM	Mohamad Hasan Khajedehi			A Preliminary Study on the Experimental Characterization and Modelling of a 20kW fuel cell system for Ultralight Aviation	Teresa Donateo		
11:00-11.30		Energy Efficiency in Buildings III-Climate Change	e mitigation in built	Carbon sequestration and carbon	negative applications.	Coffe Break- Piano Terra		Clean, sustainable and renewab	le energy production and		
		environment II		Innovation in Heat Transfer2		Internal combustion engines and sustainable mobility II		storage systems IV®		Energy storage systems	
		Chairman: Diana D'Agostino		Chairman: Oronzio Manca		Chairman: Massimo Cardone		Chairman: Elisa Marrasso		Chairman: Adolfo Senatore	
11:30-11:50		Chlorine gas and ultrafine particle emissions from bleach disinfection: exposure risk characterization	Luigi Fappiano	Techno-economic analysis of renewable e-fuels powered by undispatchable RES	Carlo Alberto Niccolini Marmont Du Haut Champ	Preliminary Design and Assessment of a Waste Heat Recovery System for a Hybrid-Electric Heavy-Duty Vehicle	Teresa Donateo	Experimental campaign on the chemical composition of aluminium powders for hydrogen production	Matteo Venturelli	Fin geometry influence on the performance of a latent heat thermal energy storage	Fabrizio Rossi
11:50-12:10	Sessione Poster	Natural vs. Mechanical Ventilation in Schools: A Numerical-Experimental Study for Energy-Efficient Design	Leonardo Guglielmi	The Effect of Steam-Oxygen Gasifying Medium on Syngas Upgrading for Nitrogen Reduction	Marco Puglia	Assessment of an Adaptive Model Predictive Control for Energy Management of a Parallel Hybrid Electric Vehicle	Francesco Tufano	Model-based optimization of an ORC-based unit integrated in a Carnot Battery	Davide Di Battista	Heat Transfer Equipment for a Compressed Air Energy Storage (CAES) Integrated with a Concentrated Solar System	Jacopo Romani
12:10-12:20	Piano 20 40	Using Multi-scale CFD Simulations to Improve Pedestrian Comfort within Built Areas in Complex Terrains	Pier Francesco Melani	Numerical modeling of low-enthalpy geothermal systems. Velocity field vector analysis for extraction system optimization.	-	Using driver behavior classification to implement an H2-powered motor control system	Marco De Santis	A Hybrid Approach for Wind Power Forecasting: Combining Wake Effect Modelling and Clustering	Fabio Famoso	CFD and Experimental Validation of a Gas-Based Thermocline TES System for CSP Applications with Nanofluid Modeling Perspective	Mario Petrollese
12:20:12:40				Optimization of a novel biomethane small-scale liquefaction plant by means of a Multi-Objective Genetic Algorithm	Francesco Sciatti	POD analysis of coherent structures in under- expanded hydrogen jet	Alessandro Giannotta	Development of a novel bi-axial solar concentrator for biomass assisted gasification	Marco Antonelli	Smart Energy Flows Management of Battery Energy Storage Systems in a Photovoltaic Plant Located in ENEA Casaccia Research Center	Matteo Spegne Schiavoni
13:00-15:00 15:00-16:30						Lunch-Piano Terra /isita guidata Città di Benevento (è Necessaria Pre					

	POSTER		
Codice	Titolo	Autori	Topic
P01	Integrating wearable and traditional sensors for the experimental calibration and validation of a historical urban model in ENVI-met	Khawaja Talha Ejaz, Yorgos Spanodimitriou, Massimiliano Masullo, Adriana Galderisi, Sergio Sibilio	Climate change mitigatior in the built environment
P02	Using Multi-scale CFD Simulations to Improve Pedestrian Comfort within Built Areas in Complex Terrains	Pier Francesco Melani, George Pechlivanoglou, Alessandro Bianchini	Climate change mitigation in the built environment
P03	Valorisation of digestate through nitrogen and phosphorus recovery via chemical-physical precipitation and microbubble insufflation to reduce COD in the liquid	Martina Bove, Fabrizio Adani, Miriana Carmela Chincoli, Mario Fedele	Climate change mitigation in the built environment
P04	Preliminary design analysis of an organic Rankine cycle powered by the exhaust gases of an engine-generator set	Emanuele Giusti, Zakaria Badaoui, Federico Fagioli, Maria Manieri, Gianmarco Agostini, Francesco Taddei, Maurizio De lucia	Efficient energy use and conversion in systems and processes
P05	Durability of insulating materials: a comparison between traditional and nanocomposite mortar thermal insulating, basing on the thermal conductance measured by means of the heat flow meter approach	Stefano Bergero, Alessandro Cavalletti, Anna Chiari, Chiara Maraβioti	Energy efficiency in buildings
P06	Energy efficient lighting of public buildings with architectural restrictions: the challenges and limits of the glare assessment approach applied to the case study of San Salvatore Hall	Stefano Bergero, Alessandro Cavalletti, Stefano Lazzari	Energy efficiency in buildings
P07	Energy retrofit of heritage buildings: A literature review on adopted solutions for balancing efficiency and heritage	Benito Andreozzi, Mariano Nuzzo, Gianfranco De Matteis, Clementina Donisi, Giovanni Ciampi	Energy efficiency in buildings
P08	Grey-box models for energy consumption prediction in large scale buildings: the case of an Italian hospital facility	Leonardo Andrea Bisogno Bernardini, Umberto Desideri, Francesco Leccese,	Energy efficiency in
P09	Integrated Atmospheric Water Generators For Energy And Water Sustainability: A	Giacomo Salvadori roberto figoni, Lucia Cattani, Anna	buildings Energy efficiency in
	Simulation-Based Approach	Magrini, Mathilde Serena Rosa	buildings
P10	Numerical Analysis of Performance of Dynamic Second-Skin Façades with Photovoltaic panels integrated in a Residential Building in Southern Italy	Luigi Tufano, Luigi Maffei, Massimiliano Masullo, Antonio Rosato, Michelangelo Scorpio, Sergio Sibilio, Giovanni Ciampi	Energy efficiency in buildings
P11	Numerical analysis on passive thermal control or vertical plate heat sink with phase change materials partially filled with metal foam	Aanandsundar Arumugam, Oronzio Manca, Bernardo Buonomo, Sergio Nardini	Innovation in heat transfer
P12	Numerical investigation on natural convection with nanofluids in inclined channels asymmetrically heated	Maria Barbato, Oronzio Manca, Bernardo Buonomo, Sergio Nardini, Giantuca Sarti	Innovation in heat transfer
P13	Performance Analysis of Magnetic Refrigeration Systems Using Nanofluids with Propylene Glycol Mixture as Base Fluid	Luis David Misale, Johan Augusto Bocanegra Cifuentes, Federico Scarpa	Refrigeration and heat pumps
P14	EnerCmed Project: Advancing Energy-Positive and Climate-Resilient Hinterlands through Renewable Energy Communities and Nature-Based Solutions	Jonathan Roberts, Johan Augusto Bocanegra Cifuentes, Davide Borelli, Elisa Fracchia, Emanuela Pallavidino,	Renewable Energy
P15	Energy Efficiency and Environmental Impact of Cooking Systems in Rural Communities of Developing Countries	Juliana Peshku, Corrado Schenone Rachele Schiasselloni, Fabio Bozzoli, Luca Cattani	Communities Renewable Energy Communities
P16	Evaluation of a Renewable Energy Community for enhancing renewable energy use: An Italian case study	Filippo Onori, Mattia Paoletti, Mosé Rossi, Leonardo Pelagalli, Gabriele Comodi	Renewable Energy Communities
P18	Development of an energy management system for the hybridization of high-power EV charging stations	Claudio Galli, Alessandro Bianchini, Francesco Balduzzi, Luca Romani, Stefano Rossi, Luca Collegiani, Michele Pinzi, Daniele Farruggia, Giovanni Ferrara	Smart Energy Systems, Smart Grid and distributed power production
P19	Fuel cells-based trigeneration system powered by hydrogen for a small-medium airport: numerical analysis upon varying the control strategy	Emiliano Lustrissimi, Bonifacio Bianco, Sebastiano Caravaggi, Luigi Maffei, Sergio Sibilio, Antonio Rosato	Clean, sustainable and renewable energy production and storage systems
P20	Thermodynamic evaluation of a novel solar-powered cascade Rankine cycle system adopting volumetric expanders in combination with solar dish collector.	Paolo Iodice, Giuseppe Langella, Amedeo Amoresano	Clean, sustainable and renewable energy production and storage systems
P21	Performance analysis of a vertical axis micro wind turbine coupled with two different batteries serving a single-family house in Italy and Norway	Antonio Rosato, Achille Perrotta, Tania Kalogiannidis Bracchi, Luigi Maffei	Clean, sustainable and renewable energy production and storage systems
P22	Smart Energy Flows Management of Battery Energy Storage Systems in a Photovoltaic Plant Located in ENEA Casaccia Research Center	Matteo Spegne Schiavoni , Francesco De Lia, Valentina Lucaferri, Gabriele Comodi	Energy storage systems
P23	Preliminary design of a storage module based on nanoparticle-enhanced phase-change materials to assess the use of magnetic fields for miltigating sedimentation issues	Francesco Rovense, Teresa Castiglione, Anna Pinnarelli, Michela Lanchi, Walter Gaggioli, Giorgio Graditi, Luigi Mongibello	Energy storage systems
P24	Hydrogen from Renewable Sources: Decentralized Solutions for Small Manufacturing and Chemical Companies	Alessandro Franco, Michele Rocca, Elisa Martinelli, Andrea Roggi	Hydrogen production, transport, storage and utilization
P25	Foster Hydrogen Technologies into Mediterranean Ports Areas: The Transnational Project H2MOVE	Elisa Fracchia, Johan Augusto Bocanegra Cifuentes, Davide Borelli, Emanuela Pallavidino, Juliana Peshku, Jonathan Roberts. Corrado Schenone	Hydrogen production, transport, storage and utilization
P26	High-temperature electrolysis for industrial decarbonisation: a real-scale demonstration in the steel sector	Martina Fantini, Elena Crespi, Andrei Denissenko, Minna Toivola, Claudio Leoncini, Felix Kaiser, Silvia Rossetti, Stephen J. McPhail, Giovanni Camarda, Giulio Guandalini, Paolo Colbertaldo, Stefano Campanari	Hydrogen production, transport, storage and utilization

P27	Performance analysis of hydrogen refueling stations adapting light-duty infrastructures for heavy-duty vehicles	Michele Martorelli, Matteo Genovese, Francesco Piraino, Orlando Corigliano, Petronilla Fragiacomo	Hydrogen production, transport, storage and utilization
P28	Numerical modeling of Nafion membranes to predict their performance under different operating conditions	Francesca Mennilli, Irene Peñas Fuertes, Julia Isidro, Mosé Rossi, Flavio Caresana, Gabriele Comodi, Roberto Campana, Jesús Rodríguez Ruiz	Hydrogen production, transport, storage and utilization
P29	Energy analysis and greenhouse gas emissions intensity of green hydrogen production by a 1 MW innovative Proton Conducting Ceramic Electrolysis system	Fabiana Romano	Hydrogen production, transport, storage and utilization
P30	Energy performance and durability assessment of carbon fiber-reinforced polymeric materials to enhance sustainable mobility	Tiziana Cardinale, Corradino Sposato, Franco Bernardo, Maria Bruna Alba, Piero De Fazio	Internal combustion engines and sustainable mobility
P31	Assessing the Environmental Impact and Operational Performance of HVO Use in Shipping: A Case Study on Lake Maggiore.	A Valese, F Inzoli, M Bocciolone, Fittavolini , Florio , Limiroli , Tilocca , Tincani	Internal combustion engines and sustainable mobility
P32	Energy Management Strategies for different Aircraft Parallel Hybrid-Electric Propulsion Systems	Enrico Fornaro, Valerio D'Agostino, Massimo Cardone	Internal combustion engines and sustainable mobility
P33	Development of an experimental apparatus for Characterization of Thin-Film Heat Flux Sensors under Vacuum Conditions.	Annalisa Di Napoli, Eliana Gaudino, Paolo Strazzullo, Roberto Russo, Marilena Musto	Measurement and monitoring in energy systems
P34	Development and validation of a CFD-based Actuator-Disk/Blade-Element-Theory method for the performance analysis of wind turbines	Rodolfo Bontempo, Bernardino Castellano, Marcello	Turbomachines
P35	Techno-Economic Analysis of a Hybrid Renewable Energy System (HRES) with Biogas- Powered Combined Heat and Power (CHP) and Photovoltaic (PV) Systems	Benedicta Croce , Lorenzo Rocchetti, Mosè Rossi, Flavio Caresana, Leonardo Pelagalli, Gabriele Comodi	Clean, sustainable and renewable energy production and storage systems
P36	Energy performance of agrivoltaic systems: state of the art and future prospects	Giuseppe Langella, Simone Coluccia, Paolo Iodice, Michelina Ruocco, Patrizio Della Porta	Clean, sustainable and renewable energy production and storage systems

## Sponsor e patrocini/patronages













