



pag. 1 di 8

Distretto Tecnologico Nazionale sull'Energia S.C.a r.l. National Energy Technological Cluster

Mission Objectives	National Energy Technological District (DiTNE) is a limited liability consortium, established on 1st August 2008 to foster scientific relationships and collaborations between research system and industry in the energy and environment sectors and promote quali-quantitative growth of skills and entrepreneurial system.						
	DiTNE vision:						
	• support the re	esearch development in produ	ctive sectors of energy and en	vironment;			
	 encourage technology transfer; foster links between research, the production of goods and services, the financial world and local stakeholders. 						
	Consequently our miss enable structures stakeholders enhance inve promote and strengthen and arena; promote the promote	enable structured network of relationships and technical/scientific collaborations between research stakeholders and the business system; enhance investment in dedicated technological and technical/scientific infrastructures; promote and support the creation of new high-tech companies; strengthen and improve the visibility of local energy and environment excellence in the national arena;					
Date of establishment	August 1 st , 2008						
Offices		Registered office	Local unit				
		S.S. 7 "Appia" km 706+030 SNC c/o Cittadella della Ricerca 72100 Brindisi Tel. 0831/1871223 Fax: 0831/1871301	Palazzo Guerrieri Via Guerrieri, 7 72100 Brindisi Tel. 0831/1871223 Fax: 0831/1871301				
	E-mail: <u>segreteria@di</u>	tne.it					
	Certified e-mail (PEC): <u>ditne@pec.it</u> Web site: <u>www.ditne.it</u>						
Subscribed capital	€451.877,93						





Shareholders	Public shareholders:					
	Consiglio Nazionale delle Ricerche	Agenzia nazionale per le nuove tecr l'energia e lo sviluppo economico sos	ologie, tenibile	NIVERSITÀ El salento	Politi di B	ecnico ari
	UNIVE Brausto Private shareholders:	RSITÀ DI DI BARI MORO	degli STUDI di CATANIA	UNIVERSITÀ DEG	MA RE LI STUDI	
	🤹 aza	Errory Ansaldo Caldale	QC	eq	FLEORAN	
	Servizi integratio	A GE Aviation Business	OUR INNOVATION STA	SILK®	CERANO ENER	GREE
	CENTRO DI RICERORE EUROPEO DI TECNOLOGIE DESGNI E MATERIALI	Steelison .	er	el a	engi	e
	eni power		ехрг	n (ia	Istituto di I	Ricerca
	ITAL GREEN ENERGY SAL			ans Adriatic Deline	SOLGROUP SOL	L
Board of	Name and surname		Shareholder	Appointment	Deadline	1
Directors	Arturo de Risi	Univers	ità del Salento	28/04/2022	04/2025*	
	Giacobbe Braccio	ENEA		"	"	
	Angelo Dibenedetto	Univers	ità di Bari	"	"	
	Caterina De Masi	A2A S.	A2A S.p.A.		"	-
	Stefano Liguori ENEL Produzione S.p.A. * Till the date of the Shareholders' Meeting for the approval of the Financial Statements			" nents at December 31,	" 2024	
Internal statutory	Name and surname			Appointment	Deadline	
auditor ** Laura Genchi * Till the date of the Shareholders' Meeting for the approval of the Financial Statements a **The internal statutory auditors execute also the statutory audit of the accounts					04/2023* 2022]
Corporate	Chairman of the board of directors	s:	Arturo De Risi			
positions	Vice-president of the board of dire	ctors:	Giacobbe Braccio			
				4		
	Internal statutory auditor:		Laura Genchi			





pag. 3 di 8

Committee	Marco Manchisi	ETA S.p.A.	28/04/2022	04/2025*			
	Vincenzo Antonucci	CNR	"	"			
	Antonio Gravina	Snam S.p.A.	"				
	Giovanni Melone	Exprivia S.p.A.	"				
	Marco Milanese	Università del Salento	"				
	Alberto Pasanisi	Edison S.p.A.	"	"			
	Alessandro Saponaro	AC Boilers S.p.A.	"	"			
	Marino Sforna	Terna S.p.A.	••	"			
	Giuseppe Marco Tina	Università di Catania	••	"			
	* Till the deadline of the board of directors						
Competences, research and development infrastructures	The District is a very lean non-profit organisation and does not have its own research and development facilities: it makes use of the laboratories and expertise of its Members and is able to make the most of their skills and specificities, enhancing and integrating them with its own project management and administrative/management coordination skills in the implementation of projects and consultancy activities. DiTNE has obtained Quality Management System certification in accordance with UNI EN ISO 9001:2015 for the following field of application: "Technology transfer through the implementation of research projects/orders; management of research projects/orders and any training projects, including those not related to research projects; technical consultancy in the energy and environmental fields" (IAF 34, 35).						
Details of support services	 DiTNE offers the following main services: 1. Access to venture capital for innovation. DITNE supports companies to conceive innovative ideas and start-up a new enterprise. Additionally it promotes joints between new enterprises, venture capitalist and/or business angels. 2. Training. DITNE is a promoter of education and training on several issues, connecting several stake holders, such as municipalities, universities, companies and associations: a) renewable energy, energy saving and environmental protection; b) energy and environmental buildings certification; c) Horizon 2020 project; d) Intellectual Property and Patent Rights. 3. Information and guidance to public/private funding access. DITNE shares its resources and knowhow to support companies in participation to public calls for research and experimentation in energy fields, such as power plants, renewable energy, environmental sustainability. 4. Energy Audit. DITNE offers to companies and Public Administration energy audit service, which consists in detailed analysis of energy consumption and definition of strategies to achieve high standards of efficiency and energy savings. 5. Other services. DITNE provides: a) Feasibility studies for renewable energy power plants construction; b) Optimization of public lighting; c) Promoting technology transfer and development of innovation in renewable energy sources d) Analysis of energy-saving systems 6. Other services: Green Ports. DiTNE can support the activity of the Port System Authority in all the functional planses to realize a strategic planning document of the Port System Mathority in all the functional phases to realize a strategic planning document of the Port System that meets environmental sustainability or the energy saving softenses or energy by the Ministry of Infrastructures and Transport and by the Ministry of the Environment, of the Protection of the						





pag. 4 di 8

Main projects	Project title – Acronym	Summary	Funding	Start - End	Total budget
	Gasification of wet organic waste with supercritical water for biomethane and LNG production – WWGF	The project aims to develop an integrated process for the energy valorisation of wet organic matrices (biomasses, organic waste/reflluents, sludge) into liquid biomethane (CH4), in order to promote its use in the transport sector, in industries and in isolated networks	PON R&I 2014-2020	07.2021 – 12.2023	€8.849.720,00
	Bioproduct extraction processes from agro-industrial waste and cascade valorisation – PERCIVAL	The project partnership will be engaged in the development of innovative processes for the pre-treatment, extraction/separation and subsequent valorisation of agro- industrial waste, using a 'cascade' biorefinery approach to obtain bioactive compounds (e.g. antioxidants, polyphenols), chemicals (e.g. ABE solvents, lactic acid) and materials (e.g. high-tech fibres). In the perspective of a circular bio-economy based on zero-waste processes, processing residues/by-products will be converted into energy carriers (e.g. biomethane) and products for agriculture (e.g. soil conditioners, biostimulants). Finally, the economic and environmental sustainability of the identified supply chains will be assessed and business cases for the products obtained will be developed.	PON R&I 2014-2020	07.2021 – 12.2023	€7.840.886,00
	Regional Energy Efficiency HUB Plus – REEHUB Plus	Partners of the project share the idea that public buildings should be an example of best practise to energy saving, improving energy efficiency through innovative techniques and good habits and consumers' behavior. HUBs will be get stronger in REEHUB Plus, capitalizing results of REEHUB and connecting experience with similar Mediterranean regions, as a network, to increase energy efficiency awareness at regional levels. The main results of REEHUB was the energy efficiency audit model for public building sector. This will serve as an input for REEHUB Plus, as a tool to boost new energy policy and energy efficiency approach for future building local rules. REEHUB Plus aims to strengthen the role of HUB as an "agora" where local policy maker of Italian and Balkan coasts can have open dialogue with citizen, building material industry, designer and green SMEs for the implementation of local energy plan.	Interreg IPA CBC Italy– Albania– Montenegro Programme – 2nd call for projects – TARGETED	09.2020 – 08.2022	€718.200,00
	Dissemination of the European measures for Renewable Energy Shared and Sustainable: analysis of a practical case – DE-RESS	 Energy Communities are a strategic aspect in terms of penetration of renewable sources and environmental awareness of consumers. The introduction of new self-consumption methods introduced by the recent EU Directive requires an evolution of the final customer role through its active participation in energy production and consumption. The introduction of the figure of the Renewable Energy Community (REC) defines a model based on many producers / many consumers and on the possibility of exploiting synergies between the electrical and thermal vector thanks to the integration between RES (biomass, heat pumps, geothermal energy, heat recovery from biogas) and energy storage. The dissemination of energy communities able to self-generate part of the energy they consume (self-consumption) is one of the objectives proposed by the European Union towards the member countries: Italy has implemented it in its Energy and Climate Plan as a priority asset to achieve the decarbonization objectives envisaged under the international agreements signed (Paris Agreement, Energy Union of the European Commission). Specific objectives that can be more easily achieved with the dissemination of this tool: achievement of the Community objectives in the renewables industry; more efficient production as it is carried out near the consumption centers; 	Interreg IPA CBC Italy– Albania– Montenegro Programme – 2nd call for projects - TARGETED – Small Scale	07.2020 - 12.2021	€55.000,00
		- minor interventions to upgrade the transmission networks, because renewables and well-managed			





pag. 5 di 8

	 accumulations significantly discharge the loads on the local electricity networks; reduction of energy bills for families (especially the poorer) and enterprises; creating industrial development opportunities and so for qualified employment in highly technological sectors with enormous prospects; reducing the countries energy dependencies without raw materials; strengthening social cohesion of local community; consolidate the feeling of belonging and social cohesion of a local community; greater health and environmental protection. 			
Regional Energy Efficiency HUB – REEHUB	Energy Efficiency (EE) has been described as the EU's biggest energy resource and one of the most cost effective ways to enhance the security of its energy supply and decrease the emissions of greenhouse gases and other pollutants. REEHUB partners (<i>Ministry of Infrastructure and Energy and Barleti</i> <i>Institute for Research and Development - BIRD in Albania</i> , <i>ENEA-Italian National Agency for New Technologies, Energy</i> and Sustainable Economic Development, DiTNE and Municipality of Agnone in Italy, University of Montenegro) agree that building sector, particularly public buildings, represent the largest energy-consuming sector in the economy, with over one-third of all energy and half of global electricity consumed. REEHUB create regional Hub (DiTNE, Municipality of Agnone, BIRD, University of Montenegro), connected as a network, located in public buildings in each region, where will be organized capacity building actions and collect educational materials for energy efficiency audit in the building sector. HUBs will become, connecting experience with similar Mediterranean regions, an "agora" where local policy maker of Italian and Balcan coasts can have open dialogue with citizien, building material industry, designer and green SMEs for the implementation of local energy plan.	Interreg IPA CBC Italy– Albania– Montenegro Programme - 1st call for proposals for standard projects	03.2018 – 09.2020	€744.800,00
Building Refurbishment with Increased Competence, Knowledge and Skills – BRICK	The BUILD UP Skills BRICKS (Building Refurbishment with Increased Competences, Knowledge and Skills) project aims at developing tools and methodologies to set up training systems to increase the knowledge, skills and competences of workers in the field of buildings refurbishment in order to intensify the introduction of Renewable Energy Sources (RES) and improve Energy Efficiency (EE) in the old as well as in the new buildings to reach Almost Nearly Zero Building (ANZB) stocks by 2020.	IEE (Intelligent Energy Europe) – Build Up Skills – FP7	10.2014 – 03.2017	€1.156.270,00
EFFicient Energy builDing Innovative soLutions – EFFEDIL	The project aims at the development of innovative and sustainable solutions, for improving energy efficiency in buildings of countries with temperate and warm climate, in order to satisfy the requirements for the voluntary LEED (Leadership in Energy and Environmental Design, Green Building Rating System) certification. The project has been developed on two complementary and interacting research lines, one aimed at developing energy-efficient materials and systems for the opaque envelope of the building (for example, creating innovative bricks using innovative materials such as PCM – Phase Change of Materials) and the other relating to energy balance management and optimization systems of the building itself with the development of an innovative ICT system for active optimization of energy consumption in buildings in the presence of RES (Renewable Energy Sources)	PON Ricerca e Competitività 2007-2013	07.2012 – 12.2015	€5.022.958,91





pag. 6 di 8

	realized with 7 scholarships for "High qualified researcher in ICT systems for managing and optimizing energy balance of the buildings".			
Development of innovative solar concentration technologies – INNOVASOL	 The aim of the project was to develop advanced solar powergenerating technologies based on high-temperature thermodynamic solar systems, photovoltaic systems and heat recovery systems from concentrating solar systems. Main results: New technologies within the CSP both in terms of production systems and in terms of control logic. In the thermodynamic high temperature solar industry. In addition, photovoltaic cells based on nano-wire technology are more suitable for the construction of solar-powered systems; Development of a process that exploits the low and medium temperature thermal solar resource (heat losses from the solar concentration plant) for the disposal of sewage sludge in a cogeneration plant; Development of a solar reactor heating reactor process in coal-fired power plants to reduce emissions and increase both the yield and the ability to extend the use of hard coal; Development of new technologies for the disposal of photovoltaic panels by oxicombustion processes, combined with the development of CO2 reduction processes for the synthesis of a combustible gas streams. 	PON Ricerca e Competitività 2007-2013	07.2012 – 12.2015	€ 11.141.089,85
Systems research and development of electrical and thermal energy efficient generation, management and storage, integrated and interconnected in a Virtual Power Plant – SMART ENERGY BOXES	 The goal of the project was to deep the knowledge in advanced systems to improve the efficiency and the environmental impact of industrial processes and energy production. Main results: the development of units, called Smart Energy Boxes (SEB), equipped with high-efficiency technologies, able to manage different energy carriers in an integrated and optimized way in order to satisfy the energy demand of residential and industrial complex of medium size; the implementation of innovative technologies for the production of energy generation, which can be integrated with the management of a SEB, like other technologies currently more developed (photovoltaic, mini/micro wind, etc.) and with: the development of a turboexpander for the recovery of energy from a plant to oxycombustion vertical reactor optimized for use of fuels with low calorific value; the development of an electrochemical system based on innovative fuel cell for power generation and energy storage; the development of the logic for supervision, management and control of aggregate energy sources with the widespread distribution of energy carriers. 	PON Ricerca e Competitività 2007-2013	01.2012 - 12.2015	€4.742.680,73
Off-shore	The objectives were to create a framework for knowledge	FP7 UE – call	01.2010 -	€1.797.870,73





pag. 7 di 8

	Renewable Energy Conversion platforms Coordination Action – ORECCA	sharing and for developing a research roadmap for activities in the offshore renewable energy (RE) sector.	FP7- ENERGY- 2009-1	06.201	1
Main anwing			a .		
Main services		Description	Customer	•	Start - End
	Elaboration of the main output of the Re-Sources project "Renewable Energy for the Optimisation of Resources in Industrial Areas", financed by the Interreg IPA CBC Italy-Albania-Montenegro programme, entitled "Smart Industry Development Strategy", i.e. a smart industrial development strategy for the use of renewable energy in the Adriatic area in the industrial field with special reference to Renewable Energy Communities				06.2022 - 11.2022
	Research contract Facilitation Program new technologies for circular economy subsequent ennoblin innovative surface t agricultural soil con	within the framework of the NewTreat project, Integrated nme (PIA) financed by the Apulia Region, aimed at developing or the transformation of waste into secondary raw materials in a logic, through hydrothermal carbonisation processes and ng, either through transformation into carbon pellets or through reatments that allow their use in the fluid treatment sector or as ditioners with controlled release of nutrients into the soil	G.A.I.A. Ge Ambientale In Altamura S.r.l.	estione tegrata	01.2022 -
	Prospective energy a	supply chain study province of Brindisi	ARTI Puglia		12.2021 -
	Definition and qualification of regional targets for renewables (so-called Burden Sharing) with special reference to Apulia		Odra Energia S.r.l. Kailia Energia S.r.l.		11.2021 - 05.2022
	Technical support for a case study of the EU-funded ENTRANCES project to make available to policy-makers, institutions and enterprises analyses and assessments on the economic and social impacts of the transition to a low-carbon economy in areas with high levels of climate-changing emissions through the study of adaptation strategies of an area			06.2021 – 06.2022	
	Support to the Head of Energy Conservation and Rational Use (Energy Manager) as well as support in the definition of the Energy Management System and the Environmental Management System according to ISO 14001 and ISO 50001 Adriatico Meridionale standards		istema Mare onale	11.2020 -	
	Analysis of the emp Brindisi energy sect	loyment impact expected following the next restructuring of the or	ARTI Puglia		05.2020 - 03.2021
	Analysis and strateg energy sources (RI (agglomeration of 1 Fontana and Ostuni)	Analysis and strategic planning of the possible actions in the field of the renewable energy sources (RES) in competence areas of the Consortium ASI of Brindisi (agglomeration of Brindisi and peripheral agglomerations of Fasano, Francavilla Fontana and Ostuni).			12.2019 - 09.2021
	Research and development contract on the following topics: - Zn-air fuel cells with fluted electrolyte; - New design high efficiency CO2 conversion system.		Società Chimica SpA – SPAF Srl	Bussi	12.2019 - 06.2021
	Support to the AS Development Strate	I Consortium of Brindisi for the definition of the Integrated gy of the Industrial Areas	Consorzio AS Brindisi	SI di	09.2018 - 12.2018
	Development of adv combustion process environmental impa proposals MISE rese	vanced systems for the control of thermo-acoustic phenomena in sees for gas turbines with high efficiency and reduced act (as part of the ARTEC-GT project funded under the call for earch projects H2020)	Centro Combu Ambiente S.p.A.	ustione	07.2018 - 12.2022
	Designing and ad agglomerations of jurisdiction of the A	ministering questionnaires to companies in the industrial Brindisi, Fasano, Francavilla Fontana and Ostuni under the SI Consortium of Brindisi and processing the results.	Consorzio AS Brindisi	SI di	07.2018 - 11.2018
	Technical-scientific Planning Document	support for the preparation of the Environmental Energy	Autorità di S Portuale del Adriatico Meridi	istema Mare onale	05.2018 - 12.2018
	Research contract advanced burners financed under Apu	for the study of atomization techniques and development of for boilers (within the framework of the B4GreenS project lia region programme contracts)	Centro Combu Ambiente S.p.A.	ustione	02.2018 - 08.2021
				_	





pag. 8 di 8

Collaboration in the elaboration, free of charge, of the technical-descriptive report accompanying the candidacy of the "Cittadella della Ricerca" site in Brindisi for the establishment of the DTT (Divertor Tokamak Test) research infrastructure based on the Notice published on November 24, 2017 by ENEA and assessed with a maximum score of 200/200	Regione Puglia, Provincia e Comune di Brindisi	12.2017 - 01.2018
Feasibility study for the cultivation of medicinal plants within a thermodynamic solar plant and for the subsequent transformation and sale of derivative products	3SP S.r.l.	09.2017 - 09-2018
Scientific advice on the following topic: "Analysis and Studies for the development of technological applications based on Surface Plasmon Resonance (SPR) useful for the control of lubricants"	Istituto di ricerca Ingenia S.r.l.	11.2016 - 08.2017
Smart Industrial Grid – Pre-feasibility study for the creation of an Industrial Park within the industrial area of Brindisi	Confindustria Brindisi	07.2016 - 12.2016