



Date: Friday 10th of December 2021

Time range:

09⁰⁰-16⁵⁵

REEHUB PLUS / 1ST CROSS BORDER EVENT

"SMART CITY OPEN INNOVATION FORUM"



BARLETI INSTITUTE FOR RESEARCH AND DEVELOPMENT SUPPORTED BY:



Relation:

Speaker: Angelo Raffaele Colucci DiTNE Scarl



Smart Cities and Energy efficiency of public buildings













Summary



- DITNE:
 - The Shareholders
 - The Board of Directors
 - The Steering Committee
 - Skills and infrastructures
 - Some ongoing activities
- Smart City definition
- Smart City dimensions: the environment dimension
- The REEHUB and REEHUB PLUS projects
- The regional energy efficiency HUB in Brindisi
- The evolution of the HUBs thanks to REEHUB PLUS











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"SMART CITY OPEN INNOVATION FORUM" DITNE: the Shareholders



- The majority of the DiTNE share capital is owned by public entities (universities and national research center)
- The numerous **private companies** in the share capital are among the main producers of energy and energy services both national and international

Socio	%	Socio	%
CNR	15,84	Edison S.p.A.	1,79
ENEA	15,84	ENEL Produzione S.p.A.	1,79
Università del Salento	15,84	ENGIE Servizi S.p.A.	1,79
Politecnico di Bari	5,28	ENIPOWER S.p.A.	1,79
Università di Bari	5,28	ETA Energie Tecnologie Ambiente S.r.l.	1,79
Università di Roma 3	2,64	EXPRIVIA S.p.A.	1,79
Università di Catania	2,64	GE AVIO S.r.l.	1,79
Università di Enna "Kore"	2,64	Ital Green Energy S.r.l.	1,79
A2A S.p.A.	1,79	ITEA S.p.A.	1,79
AC Boilers S.p.A.	1,79	SNAM S.p.A.	1,79
ACEA S.p.A.	1,79	SOL S.p.A.	1,79
Ariete Soc.Coop.	1,79	TERNA S.p.A.	1,79
Cerano Energreen S.r.I.	1,79	Trans Adriatic Pipeline AG	1,79
СЕТМА	1,79		













"SMART CITY OPEN INNOVATION FORUM" DITNE: the Board of Directors



Name and surname	Shareholder	Appointment	Deadline
Arturo de Risi (Presidente)	Università del Salento	13.05.2019	04.2022*
Giacobbe Braccio (Vicepresidente)	ENEA	"	u
Enrico Elio De Tuglie	Politecnico di Bari	17.06.2021	"
Francesco Taveri	A2A S.p.A.	13.05.2019	u
Concetto Sergio Tosto	ENEL Produzione S.p.A.	u	u

* Till the date of the Shareholders' Meeting for the approval of the Financial Statements at December 31, 2021













DiTNE: the Steering Committee



Name and surname	Shareholder	Appointment	Deadline
Vincenzo Antonucci	C.N.R.	13/05/2019	4/2022*
Angela Dibenedetto	Università Studi Bari	"	"
Marco Manchisi	ETA S.r.l.	22/06/2020	"
Roberto Camussi	Università Studi Roma 3	دد	"
Giovanni Melone	Exprivia S.p.A.	13/05/2020	"
Alessandro Saponaro	AC Boilers S.p.A.	"	"
Marino Sforna	TERNA S.p.A.	22/06/2020	"
Giovanni Russo	SNAM S.p.A.		"
Francesco Vetrò	GSE S.p.A.		"

* Till the date of the Shareholders' Meeting for the approval of the Financial Statements at December 31, 2021

- The Steering Committee is composed of qualified representatives of the national and international scientific community, having regard of their preparation, expertise and experience
- The establishment of the Committee responds to the need to further develop the comparison and every possible operational synergy between the sharehholders and stakeholders of DiTNE, accompanying the commitment of the Board of Directors in the implementation of the strategic guidelines adopted















- DiTNE has some researchers but does not have its own research and development facilities; DiTNE uses the labs and skills of its shareholders and it is able to make the best use of their abilities and specificities by enhancing and integrating them with their own project management skills and cluster coordination.
- DiTNE obtained the certification of the Quality Management System according to UNI EN ISO 9001:2015 for the following scope: "Technology transfer through projects/commissioned research; management of projects/commissioned research and training projects even if they are not related to research projects; technical consultancy services to the energy and environmental sectors" (IAF 34, 35).













DiTNE: some ongoing activities



- Cycle of webinars on "The words of sustainability": started in May with fortnightly webinars and finished last December 9, 2021. Webinars have been created on: "Green Deal", "Energy Efficiency", "Decarbonisation", "National Recovery and Resilience Plan", "Photovoltaic", "Mobility", "Hydrogen", "Networks", "Wind Power", "Biomethane", "Storage", "Gas", "Circular Economy"
- Collaboration agreement, signed in July 2021, with ENEA to provide support to ARCA Nord Salento (public housing management institute) to establish one or more energy communities
- Collaboration in drafting the document "Puglia Green Hydrogen Valley" in collaboration, among others, with Saipem, Alboran Hydrogen, University of Salento and La Sapienza University
- Green Ports: support for the preparation of the Document of Environmental Energetic Planning of the Harbour System of the Southern Adriatic Sea (Ports of Bari, Barletta, Brindisi, Manfredonia and Monopolies); support to the Energy Manager and support in the definition of the Integrated Management System (Quality, Environment and Energy) according to ISO 9001, 14001 and 50001
- Consortium for Industrial Development Area (ASI) of Brindisi: support for the definition of the Integrated Strategy of Development of Industrial Areas; analysis and strategic planning of possible projects in the field of renewable energy sources (RES) on areas of competence of the ASI Consortium of Brindisi (industrial area of Brindisi and the peripheral industrial areas of Fasano, Francavilla Fontana and Ostuni)















- As defined by the European Union (<u>https://ec.europa.eu/info/eu-regional-and-urban-development/topics/cities-and-urban-development/city-initiatives/smart-cities_en</u>):
 - A smart city is a place where traditional networks and services are made more efficient with the use of digital solutions for the benefit of its inhabitants and business.
 - A smart city goes beyond the use of digital technologies for better resource use and less emissions. It means:
 - smarter urban transport networks
 - upgraded water supply
 - waste disposal facilities
 - more efficient HVAC systems for buildings and low-energy lighting strategies.
 - It also means:
 - a more interactive and responsive city administration
 - safer public spaces
 - meeting the needs of an ageing population.





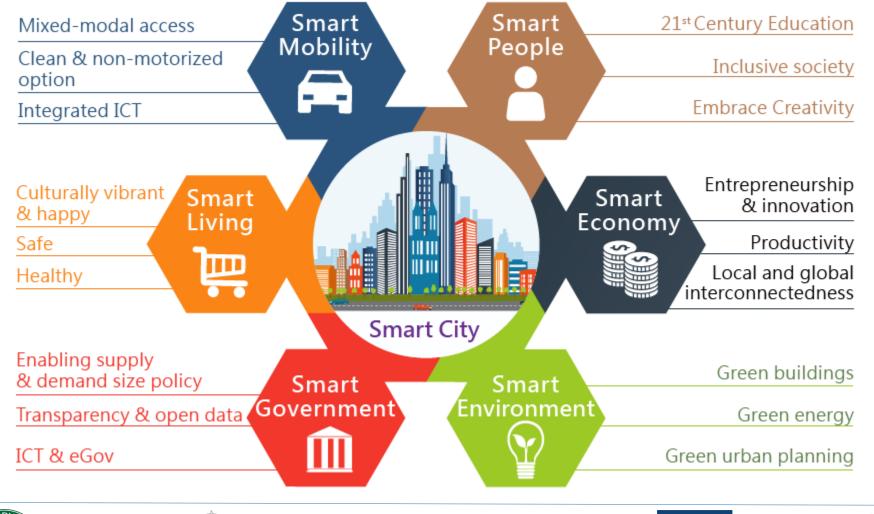








Smart City dimensions: the environment dimensico













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- The last annual report on public property in Italy (data relating to 2018 -<u>http://www.dt.mef.gov.it/it/attivita_istituzionali/patrimonio_pubblico/</u>) tells thet the public real estate assets consist of 1,150,512 real estate units for a total of 377,270,889 sqm
- For the most part they are **old buildings and not energy efficient**
- Intervening in such buildings with energy efficiency methodologies and technologies would allow significant energy savings and a considerable reduction in CO2 emissions













"SMART CITY OPEN INNOVATION FORUM" The REEHUB and REEHUB PLUS projects



- Thanks to the projects financed by IPA CBC Interreg Italy-Albania-Montenegro (REEHUB and REEHUB PLUS):
 - Best energy saving practices in public buildings have been shared with the Albanian and Montenegrin partners through the adoption of innovative energy diagnosis and energy qualification design techniques
 - **4 regional Hubs for energy efficiency** have been built (in Tirana, Podgorica, Brindisi and Agnone) which are being upgraded thanks to REEHUB Plus













"SMART CITY OPEN INNOVATION FORUM" The regional energy efficiency HUB in Brindisi

 The HUB of Brindisi is located in two rooms of **Palazzo Guerrieri**, a historic building on the port of Brindisi, built in the seventeenth century on the ruins of a Roman building and, later, medieval; has been owned by several historical families of Brindisi and became the property of the City of Brindisi in 1872 hosting several schools: it was renovated in the early 2000s and is still the subject of archaeological excavations campaigns (some already carried out between 2009 and 2011)







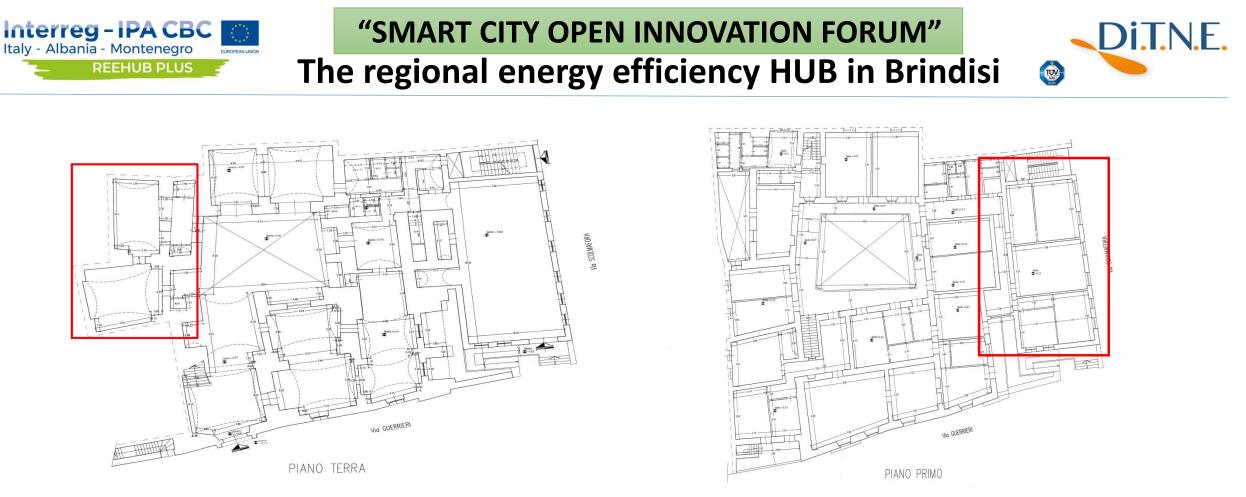






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- On the first floor of Palazzo Guerrieri there are the offices of DiTNE
- On the ground floor there are the two rooms of the HUB





"SMART CITY OPEN INNOVATION FORUM" The regional energy efficiency HUB in Brindisi



- The two rooms were in poor condition due to numerous infiltrations
- Following the energy diagnosis carried out with the simplified method developed in the REEHUB project and in collaboration with ENEA colleagues, some interventions have been carried out that have allowed the full recovery of the premises of the HUB



















The regional energy efficiency HUB in Brindisi









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- From network structures able to:
 - promoting and disseminating energy efficiency in public buildings by taking direct actions in favor of designers, technicians and policy makers
 - promote the dissemination of the culture of energy efficiency
 - encourage the exchange of best practices not only in the Balkan area but also in the areas of the south-east of the Mediterranean
- To the extension of the support to enterprises and public entities in the actions functional to the implementation of the energetic transition:
 - activation of energy audit actions also on private buildings intended for both residential and productive activities
 - implementation of actions and systems functional to the management and monitoring of energy, to promote the ability to reduce CO2 emissions, to encourage the creation of distributed systems for energy generation
 - accompaniment and support in the implementation of actions for the energy efficiency of buildings and the obtaining of incentives and/or bonuses













- Brindisi HUB:
 - Discussions are under way with the professional bodies and local authorities to organize specific training actions on the issues of energy efficiency and distributed energy production;
 - Is under definition an agreement with the Municipality of Brindisi to constitute a "onestop-shop"
 - The recent **Directive 2018/844/EU** of the European Parliament and of the Council introduced the "one-stop-shop": <<Financial mechanisms, incentives and the mobilisation of financial institutions for energy efficiency renovations in buildings should have a central role in national long-term renovation strategies and be actively promoted by Member States. Such measures should include encouraging energy efficient mortgages for certified energy efficient building renovations, promoting investments for public authorities in an energy efficient building stock, ..., providing accessible and transparent advisory tools and assistance instruments such as one-stop-shops that provide integrated energy renovation services...>>











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