

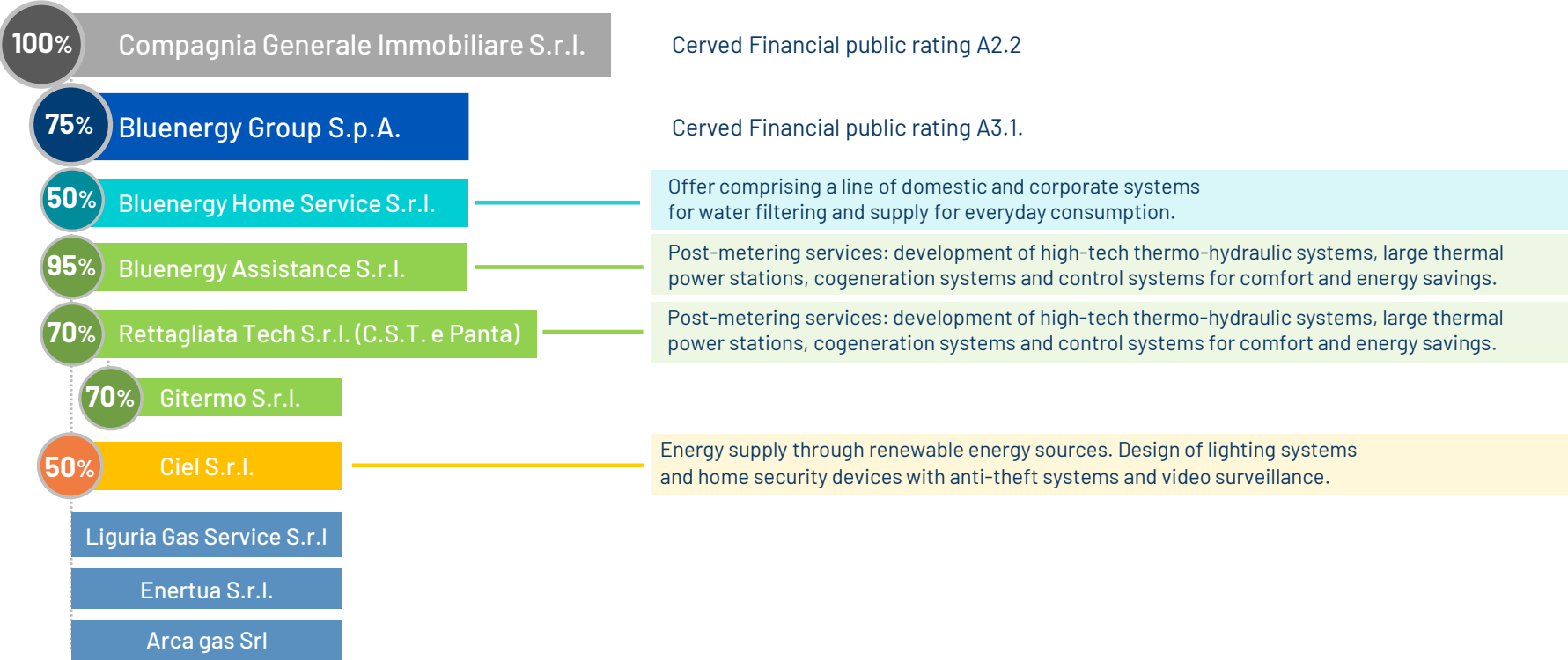


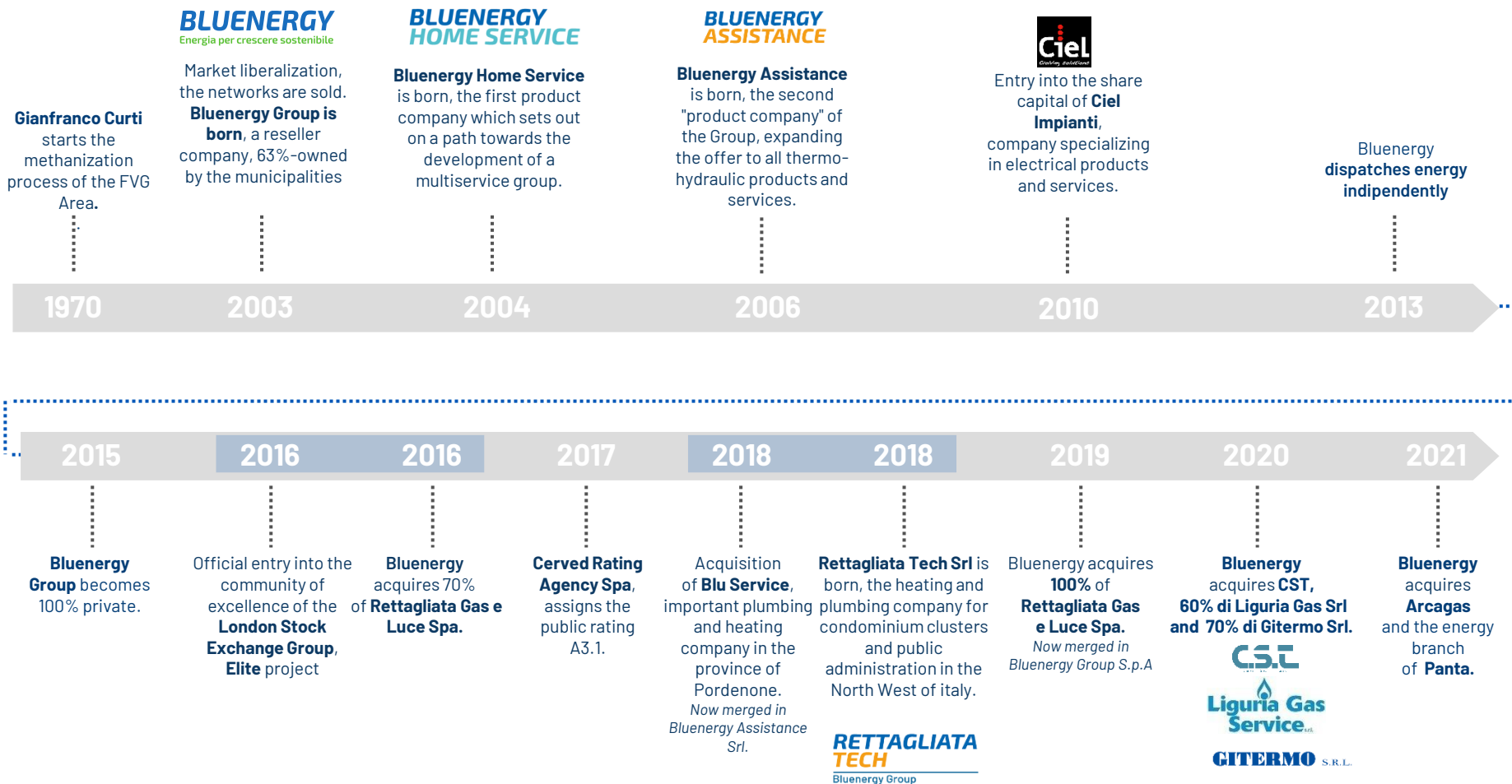
A change of perspective:
from a vertical metering solution to an horizontal IoT
solution

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Bluenergy Group Spa – Eurotech Spa

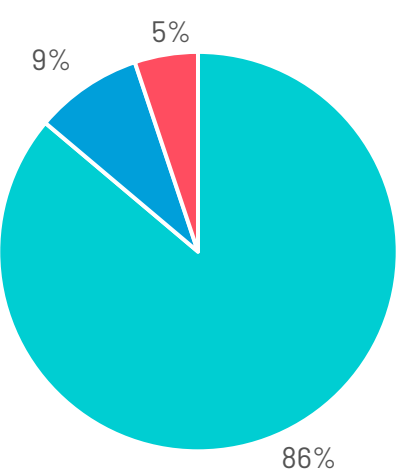
BUSINESS OVERVIEW. Bluenergy Group is a multiutility which deals with **the sale of natural gas and electricity in Northern Italy and the sale of additional services to the commodity.** Specifically, it is mainly present in **Friuli Venezia Giulia, Lombardy and Piedmont** and serves the **residential, business and condominium markets.** Currently the Group has a **Customer Base** of approximately **200,000** gas and electricity users, is present in the Northern Italy area with **55 branches, 4 operating offices (Trieste, Milan, Pordenone and Codroipo)** and has a **staff of approximately 230 people.**





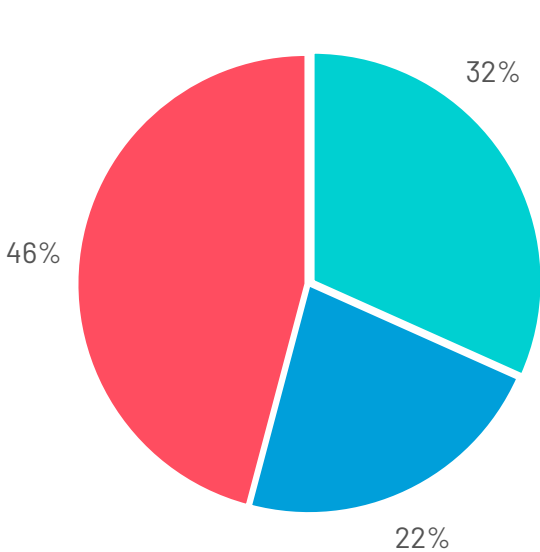
Bluenergy has a Customer Base of **200 thousand customers** equal to **547 Mln of cubic meters of Gas** and **761 Mln of kilowatts of Electricity**.

POD AND PDR
MAIN CLUSTERS



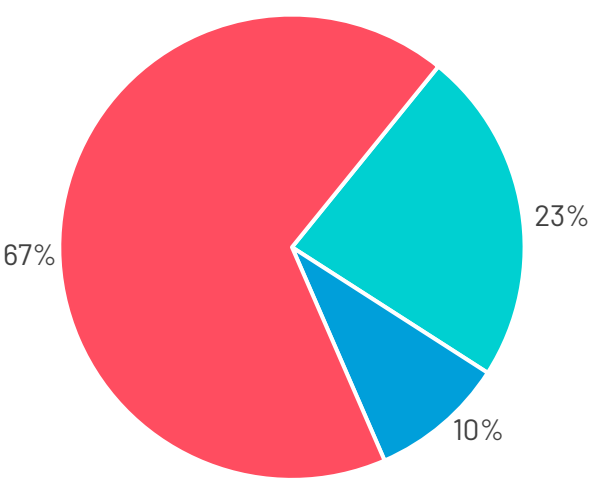
- Residential Buildings
- Condominiums
- Business and Public Administration

GAS VOLUMES















- Residential Buildings
- Condominiums
- Business and Public Administration

ELECTRICITY VOLUMES



The group undertook a significant path of offer differentiation by offering a wide range of additional solutions in the various segments together with the commodity.

		Commodity typical of target customers	Solutions applicable to the segment one-off revenue business model	Solutions applicable to the segment recurring revenue business model
	home	 	<ul style="list-style-type: none"> • HVAC (heater and cooling) • Photovoltaics and batteries 	<ul style="list-style-type: none"> • Scheduled maintenance HVAC (heater and cooling) • Insurance for boiler, gas and electrical system
	Condominium	 	<ul style="list-style-type: none"> • Boiler, heat pumps, cogeneration, thermal insulation 	<ul style="list-style-type: none"> • O&M management of Boiler
	Micro business	 	<ul style="list-style-type: none"> • HVAC (heater and cooling) • Photovoltaics and batteries • E-mobility home chargers 	<ul style="list-style-type: none"> • Scheduled maintenance HVAC (heater and cooling)
	SMEs/Industries /Public Administration	 	<ul style="list-style-type: none"> • Boiler, heat pumps, cogeneration, thermal insulation • Fleet management of electric vehicles, charging facilities for electric vehicles • Auditing and energy certifications • design and installation of photovoltaic systems, sensor lighting 	<ul style="list-style-type: none"> • Energy consulting, auditing and energy certifications • Energy efficiency diagnosis and subsequent feasibility studies • Obtaining energy efficiency certificates • Consumption reporting • Public lighting

Thanks to a team of qualified technicians and the presence of **4 operating offices (Milan, Pordenone, Codroipo and Trieste)** we are able to offer efficiency and quick interventions.

**BLUENERGY
HOME SERVICE**


Rental and sale
of different types
of water dispensers.

**BLUENERGY
ASSISTANCE**
**RETTAGLIATA
TECH**


Energy requalification.

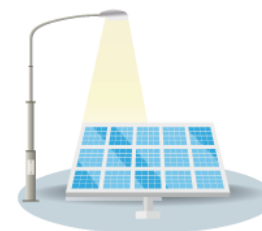
Credit assignment.

Installation and maintenance
of heating and cooling systems.

Support 24/7.

ESCO according to UNI 11352

**635 Condominiums in Heat Management
69 Requalifications**



Plant design and energy
requalification
with Project tool.

Installation, maintenance of
systems, photovoltaics and
accumulators.

ESCO according to UNI 11352

**Management of 11,000 lighting points
2,750 lighting points redeveloped**

Direttiva 2012/27/UE
del 25 ottobre 2012

- ✓ Each member state needs to achieve a global energy saving target

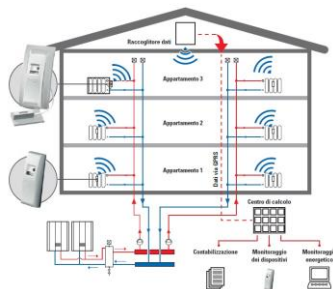
Norma UNI 10200

- ✓ Criteria for allocating individual energy consumption for condominiums with centralized heating

Sistema di contabilizzazione e
regolazione del calore

- ✓ Heat measurement devices (counters, partitioning devices et al);
- ✓ Design activity (mandatory according to n.10/1991),
- ✓ Installation (by certified professional) and test;
- ✓ A consumption partitioning criterion, according to UNI 10200;
- ✓ Management of the system which also includes information to customers.

Vertical metering solution

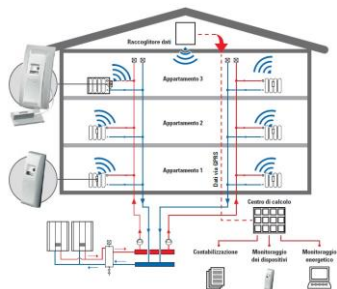


2016

Major producers of metering systems typically provide:

- ✓ Branded systems;
- ✓ Closed software solutions not compatible with other systems;
- ✓ Metering specifically designed for energy metering not compatible with other consumption metering (e.g. Electrical...);
- ✓ (usually) without remote communication capability;
- ✓ Not compatible with remote management (w/o possibility to create a unique environment for Data Analysis)
- ✓ Without future development capabilities

Bluenergy solution

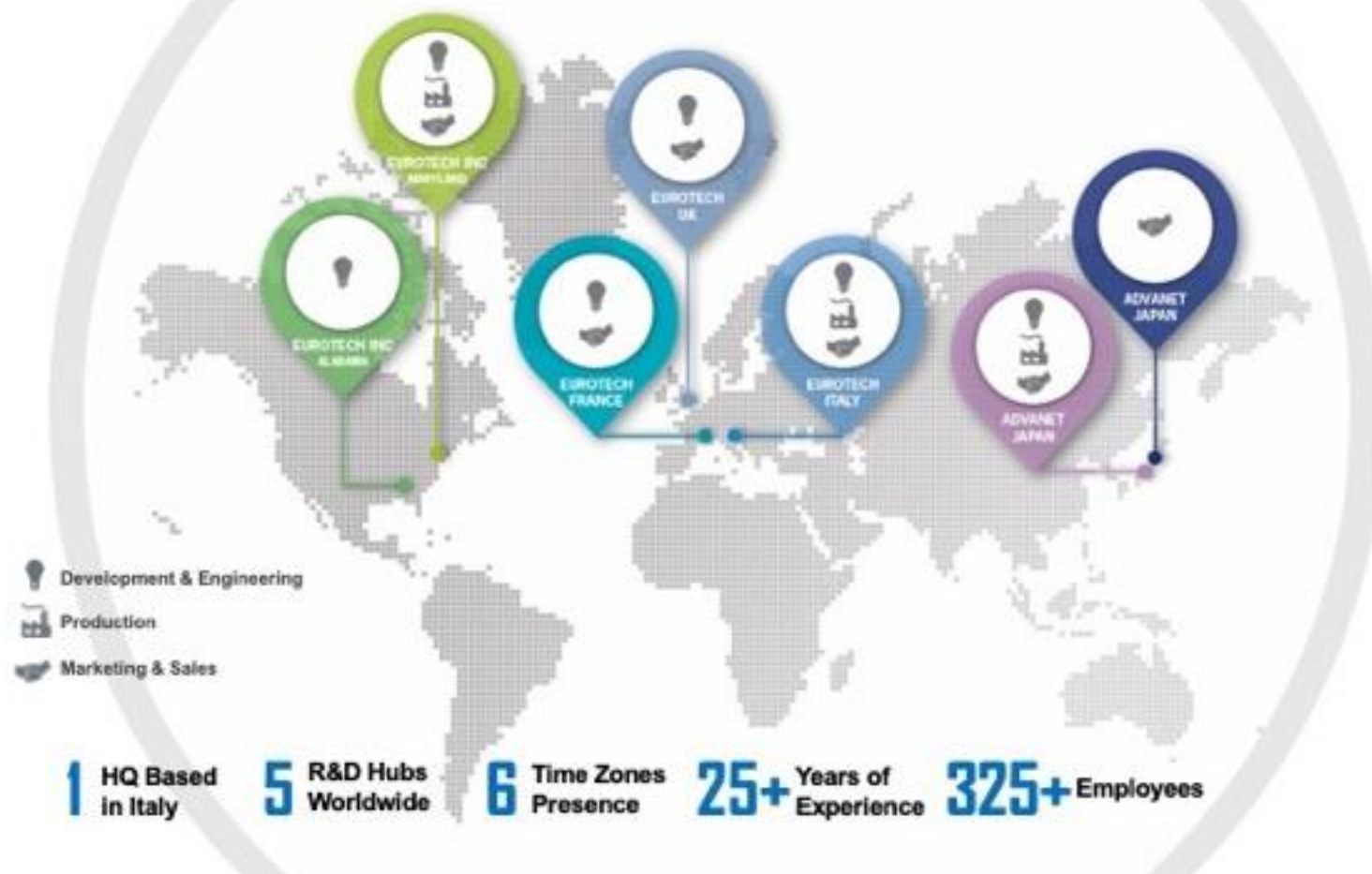


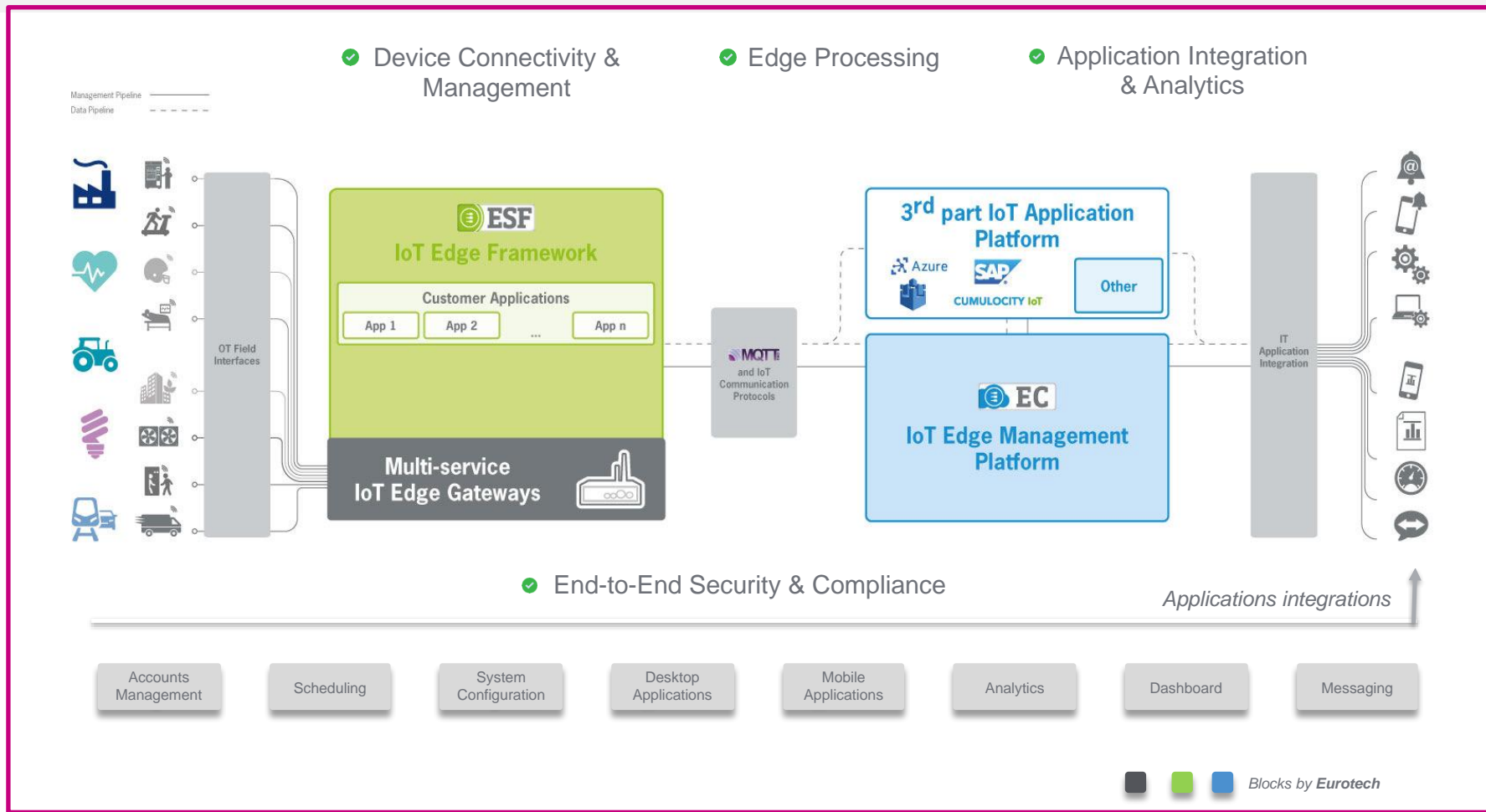
With a more future-oriented approach and with regards to management of other energy utilities, Bluenergy teamed up with a technological partner to create an alternative system with the following characteristics:

- ✓ Open to interface with principal products in the market;
- ✓ Open-Software compatible with other systems;
- ✓ Open Metering compatible with other energy sources;
- ✓ Remotely readable;
- ✓ Compatible with remote control systems of the heating plant (Unique system for Data Analysis)
- ✓ Open to future technology developments

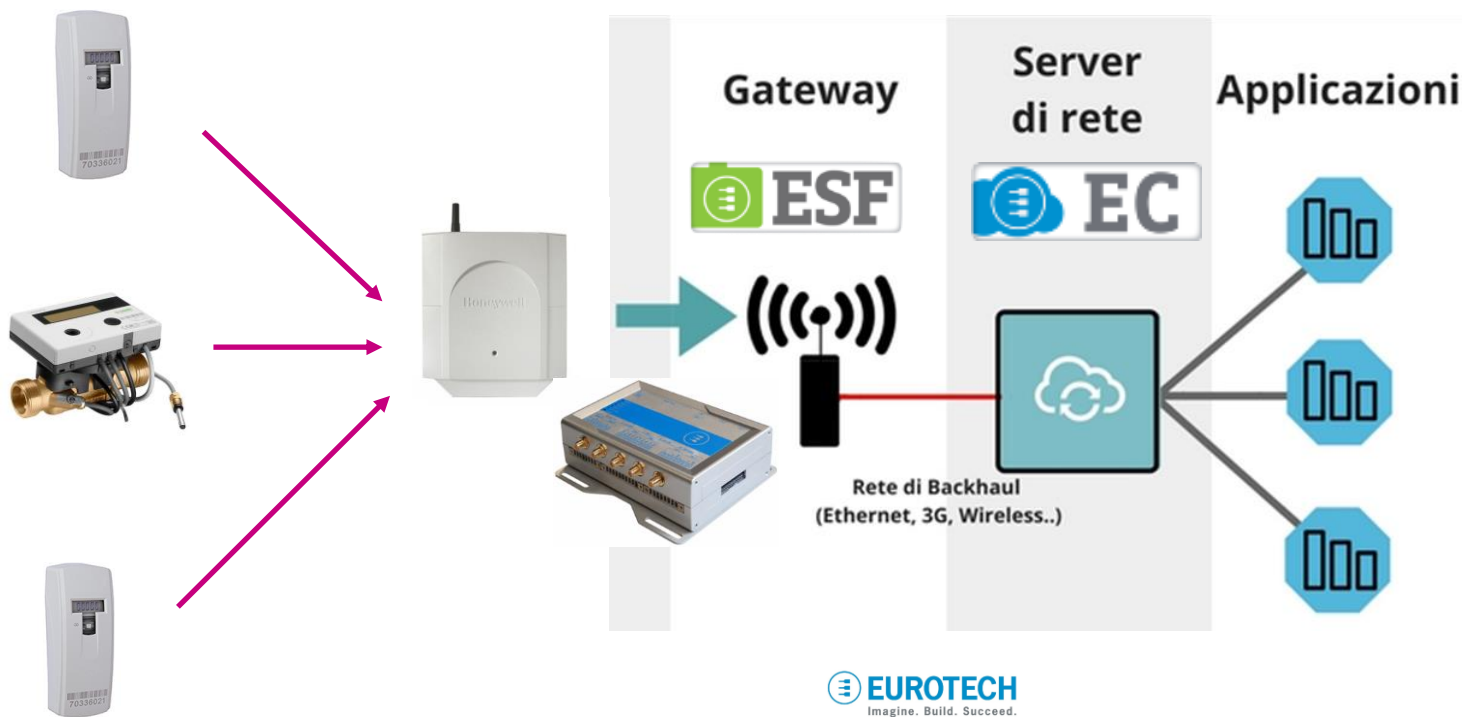
- Long-time leading provider of **Embedded System** and a global leader in IoT enablement;
- 20+ Years of experience in **M2M and IoT** systems:
 - 20+ Years experience in OT / embedded / gateway hardware & software;
 - 16 Years ago co-developed MQTT with IBM;
 - 10+ Years experience with Java in embedded;
 - 6+ Years history in M2M/IoT cloud platforms.
- Strong **vertical market** competencies:
 - Industrial & Logistics;
 - Transportation;
 - Defense & Security;
 - Healthcare & Medical.
- We are behind the products & services of **more than 20 Global 500 companies**.







**Bluenergy solution 4
condominium**



Bluenergy solution 4 condominium in 5 click

Periodo di riferimento dal 14/10/2016 al 09/04/2017
generato sabato 29 aprile 2017 10:20

Condominio Roma
Via Roma 1 - Fagagna (UD)



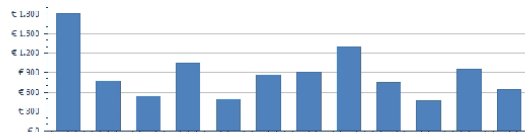
Spese condominio

Suddivisione spese	Importi	Consumi	Chiave ripartizione	Costi unitari
Riscaldamento	€ 8.818,31	95.480,00 kWh		
Quota involontaria	€ 1.343,07	12.620,00 kWh	1.000 mls.	
Quota consumo	€ 7.475,23	82.860,00 kWh	54.152,15 u.e.	0.1628 €/u.e.
Manutenzione ordinaria	€ 359,11		1.000 mls.	0.36 €/mls.
Servizio contabilizzazione	€ 0,00		N° ripartitori	0,00 €/rip.



Ripartizione unità immobiliari

Interno	Condominio	Unità elaborate	Quota inv.	Quota consumo	Quota man.	Totale
1	App1	10.274	€ 111,93	€ 1.673,03	€ 29,93	€ 1.814,89
2	App2	3.590	€ 143,72	€ 584,64	€ 38,43	€ 766,79
3	App3	2.748	€ 71,38	€ 447,55	€ 19,09	€ 538,02
4	App4	5.586	€ 102,05	€ 909,58	€ 27,29	€ 1.038,91
5	App5	2.370	€ 85,97	€ 385,94	€ 22,99	€ 494,89
6	App6	4.375	€ 119,21	€ 712,51	€ 31,87	€ 863,60
7	App7	4.270	€ 163,14	€ 695,28	€ 43,62	€ 902,04
8	App8	7.030	€ 122,05	€ 1.144,73	€ 32,63	€ 1.299,41
9	App9	3.686	€ 116,18	€ 600,23	€ 31,06	€ 747,47
10	App10	2.284	€ 76,61	€ 371,99	€ 20,48	€ 469,09
11	App11	4.714	€ 136,64	€ 767,69	€ 36,54	€ 940,87
12	App12	3.225	€ 94,19	€ 525,14	€ 25,18	€ 644,51
TOTALE		54.152	€ 1.343,07	€ 8.818,31	€ 359,11	€ 10.520,49



Periodo di riferimento dal 14/10/2016 al 09/04/2017
generato sabato 29 aprile 2017 10:20

Condominio Roma
Via Roma 1 - Fagagna (UD)

Int. App2



Spese condominio

Suddivisione spese	Importi	Consumi	Chiave ripartizione	Costi unitari
Riscaldamento	€ 8.818,31	95.480,00 kWh		
Quota involontaria	€ 1.343,07	12.620,00 kWh	1.000 mls.	
Quota consumo	€ 7.475,23	82.860,00 kWh	54.152,15 u.e.	0.1628 €/u.e.
Manutenzione ordinaria	€ 359,11		1.000 mls.	0.36 €/mls.
Servizio contabilizzazione	€ 0,00		N° ripartitori	0,00 €/rip.



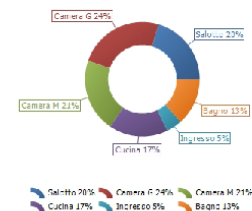
Dati letture ripartitori

Locale	Ripartitore	Letture al 14/10/2016	Letture al 09/04/2017	Fattore Kr	Unità elaborate	Importo
Salotto	81532515	0	304	2,4167	735	€ 119,64
Camera G	81532514	0	361	2,4167	872	€ 142,07
Camera M	81532513	0	352	2,1167	745	€ 121,33
Cucina	81532506	0	382	1,5667	598	€ 97,46
Ingresso	81532505	0	155	1,0500	163	€ 26,50
Bagno	81532507	0	427	1,1167	477	€ 77,65



Spese utente

Ripartizione dei tuoi consumi



Suddivisione spese	Quota utente	Importi
Riscaldamento		
Quota involontaria	107,01 mls.	€ 143,72
Quota consumo	3.590 u.e.	€ 584,64
Manutenzione ordinaria	107,01 mls.	€ 38,43
Servizio contabilizzazione	6 ripartitori	€ 0,00

Importo totale € 766,79



Carica le fatture
dei consumi.



Seleziona un
periodo di
riferimento.



Verifica
automatica della
presenza delle
letture.



Scarica il report
sul condominio.



Invia la
contabilizzazione
ai condomini.

Bluenergy solution 4 every
every kind of building



EE Analysis

Possibili applicazioni:

- ✓ Contabilizzazione del calore;
- ✓ Gestione impiantistica;
- ✓ Gestione comunità energetiche;
- ✓ **Gestione poli studenteschi ed universitari**



RB11E - 11E Wireless Occupancy & Temperature & Light Sensor



R311A-Wireless Window Sensor



R311G-Wireless Light Sensor



R311W-Wireless Water leak Sensor



Applicazioni



Rete di Backhaul
(Ethernet, 3G, Wireless..)



RA07A Wireless-PM2.5/Temperature/Humidity Sensor



R711-Wireless Indoor Temperature Humidity Sensor



R712-Wireless Outdoor Temperature Humidity Sensor



R72623B- Outdoor PM2.5/Noise/Temperature/Humidity Sensor with Solar Panel



S3UNICA

Interreg Europe



European Union
European Regional
Development Fund



Project media