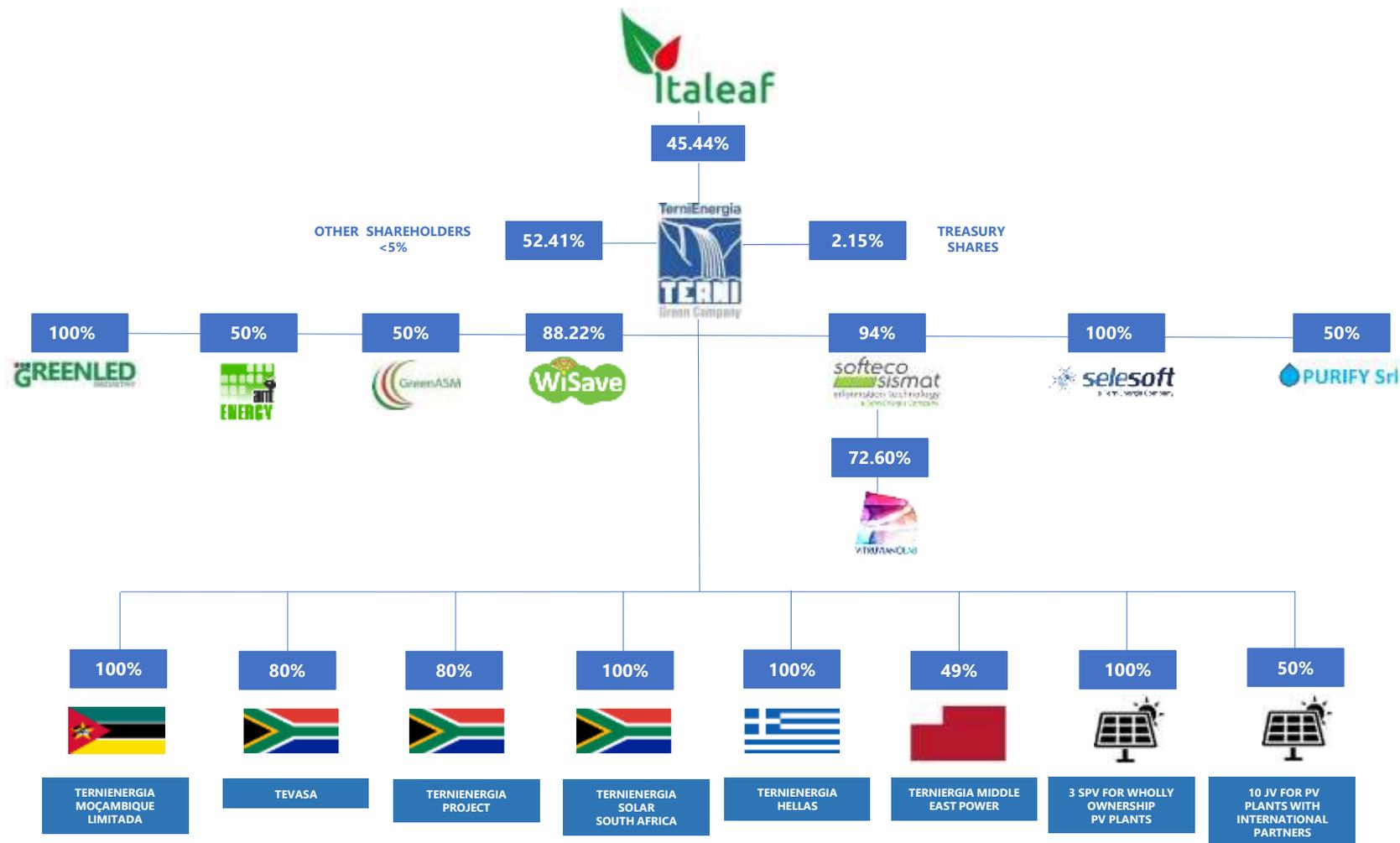




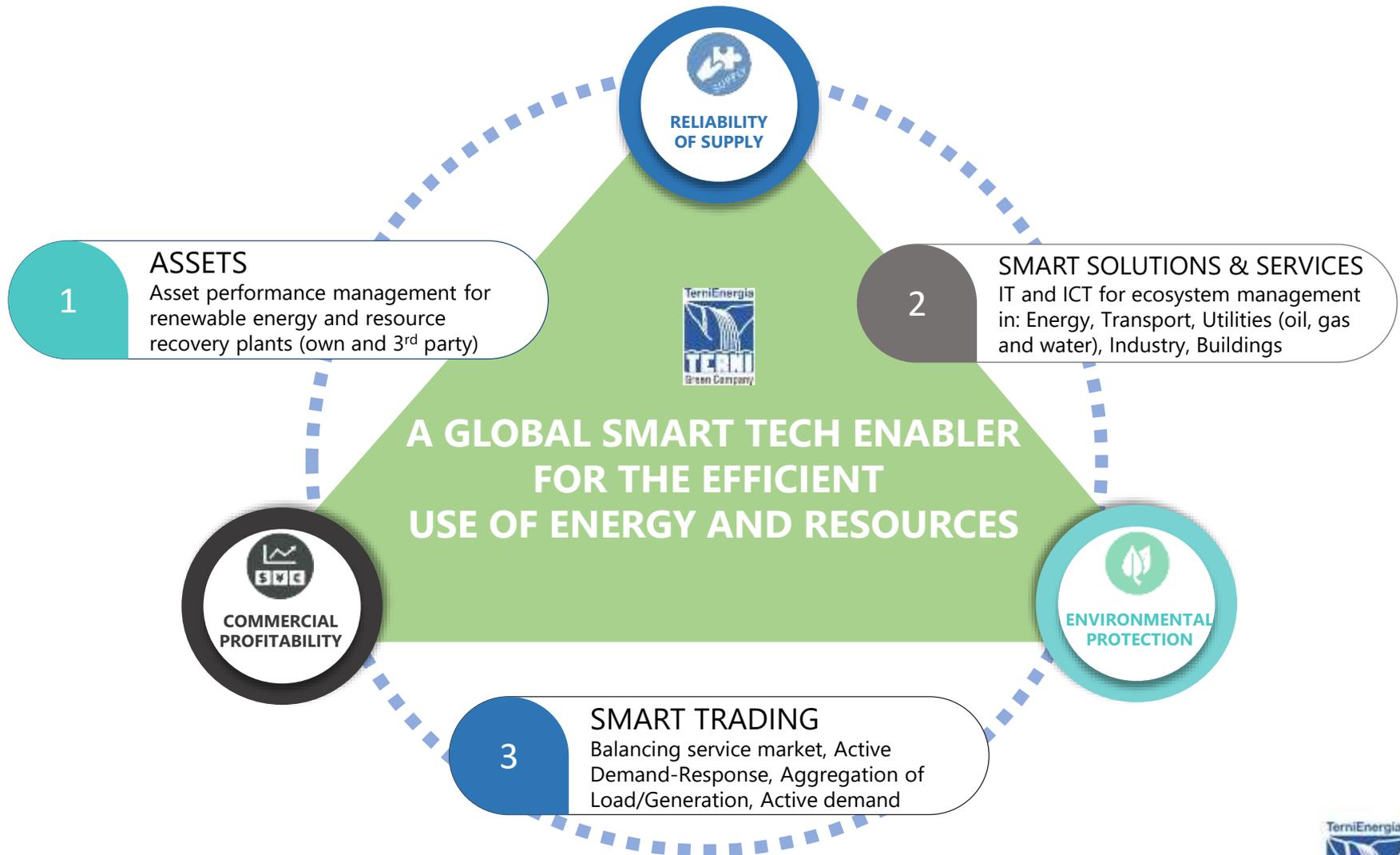
# A global smart technology enabler for energy and environmental efficiency

Strategic guidelines 2018-2020  
Change as an opportunity

# TerniEnergia simplified Group chart



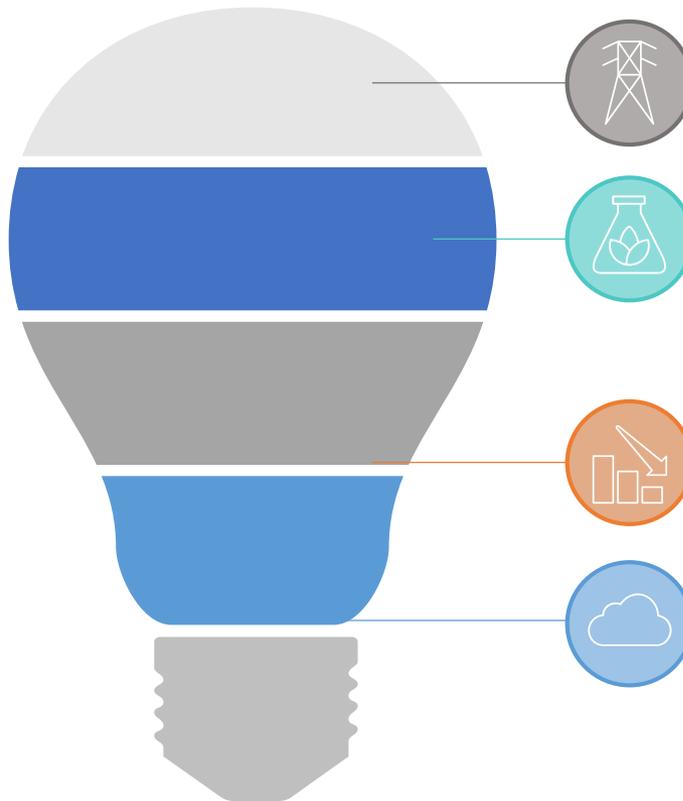
# Repositioning into a new playing field



# The results of Softeco and Selesoft integration

In November 2016 TerniEnergia acquired Softeco Sismat and Selesoft consulting. The digital companies provide consultancy, solutions, services and products for energy, transport and industry. These include Energy Efficiency, Building Management Systems, ERP for electricity and gas, Interruptibility, Smart Cities and Smart mobility for public and private transport

An ecosystem becomes "smart" and "sustainable" through strategic deployment of ICT solutions and services to achieve objectives on some key areas: energy efficiency, smart grids, transportation, utilities (oil, gas and water) and buildings (areas where IT intersects industry). "Exponential improvement in core digital technologies is fueling exponential innovation across industrial sectors".



## ENERGY AND RESOURCE EFFICIENCY

ICT deployed to increase energy efficiency in industry, commercial, transport, buildings and beyond, including urban planning; Digital optimized water and waste management, oil & gas, etc.

## CARBON NEUTRALITY

ICT deployed to decrease carbon footprint of private and public real estate, to feed distributed renewables into the grid, to optimize traffic management, to manage public lighting, etc.

## COST-EFFECTIVENESS

ICT deployed to achieve savings through reduced peak energy demand, to turn consumers into prosumers, to optimize logistics; to reduce technical complexity in services, etc.

## FURTHER EMERGING OBJECTIVES

such as cybersecurity, open data, interoperability, simulation, gamification, prediction, hybridization, etc.

# R&I : new knowledge for new business

[www.research.softeco.it](http://www.research.softeco.it)

## Softeco Sismat R&I Key facts

- 5-8% of company resources to R&I activities
- 90+ R&I projects since 1993
- 500+ international partners

## 2017 Key figures

- 12 running projects
- 8 new projects starting 2017
- Over 3 Million € new grant awarded (2017-2019)



## New projects 2017

### PODCAST

*Smart distribution network balancing and monitoring with distributed storage and capillary smart metering data*

### PredICT

*Model predictive energy management and control for non residential building for efficiency improvement and assessment*

### ANASTACIA

*Security/trust assessment in IoT and distributed systems including Smart Grids*

### IMOVE

*Mobility as a service (MaaS) piloting in Berlin, Greater Manchester, Goteborg and Turin*

### PROSFET

*Smart city logistics training network*

### INCLUSION

*Accessible and sustainable mobility services, piloting in Barcelona, Florence, Flanders, Cologne, Budapest, Scotland*

### WInSiC4AP

*Smart power converters validation*

### ROC-POP Life

*Monitoring sustainability in marine ecosystem*

Digital energy

Cybersecurity

Smart Mobility

Industry 4.0

Clean environment

# A flexible approach to drive strategic change

## WHAT WE WERE



Research and innovation have a critical role to play in making TerniEnergia a smart technology enabler capable of shaping the digital energy market and setting trends in circular economy

## WHAT WE ARE BECOMING



- 2 new strategic business units
- Transitioning from EPC player to provider of on-site engineering and operations services
- Leveraging on O&M expertise (in PV and Cleantech) to become a leading asset performance manager
- Making technology central to the energy market
- Implementation of truly innovative smart energy concepts ranging from microgrids, demand respond and capacity aggregation to virtual power plants (VPPs)
- Strengthening smart energy trading activities
- Giving industry access to the latest technologies for energy efficiency (advanced BMS, software development, hardware supply, IoT)
- Providing consultancy services to allow our international partners to develop innovative solutions across industrial sectors
- Contributing to the development of smart mobility with digital, ITS and EV solutions which are the forefront of market innovation

# TerniEnergia Group's References





# STRATEGIC BUSINESS UNIT: ASSETS

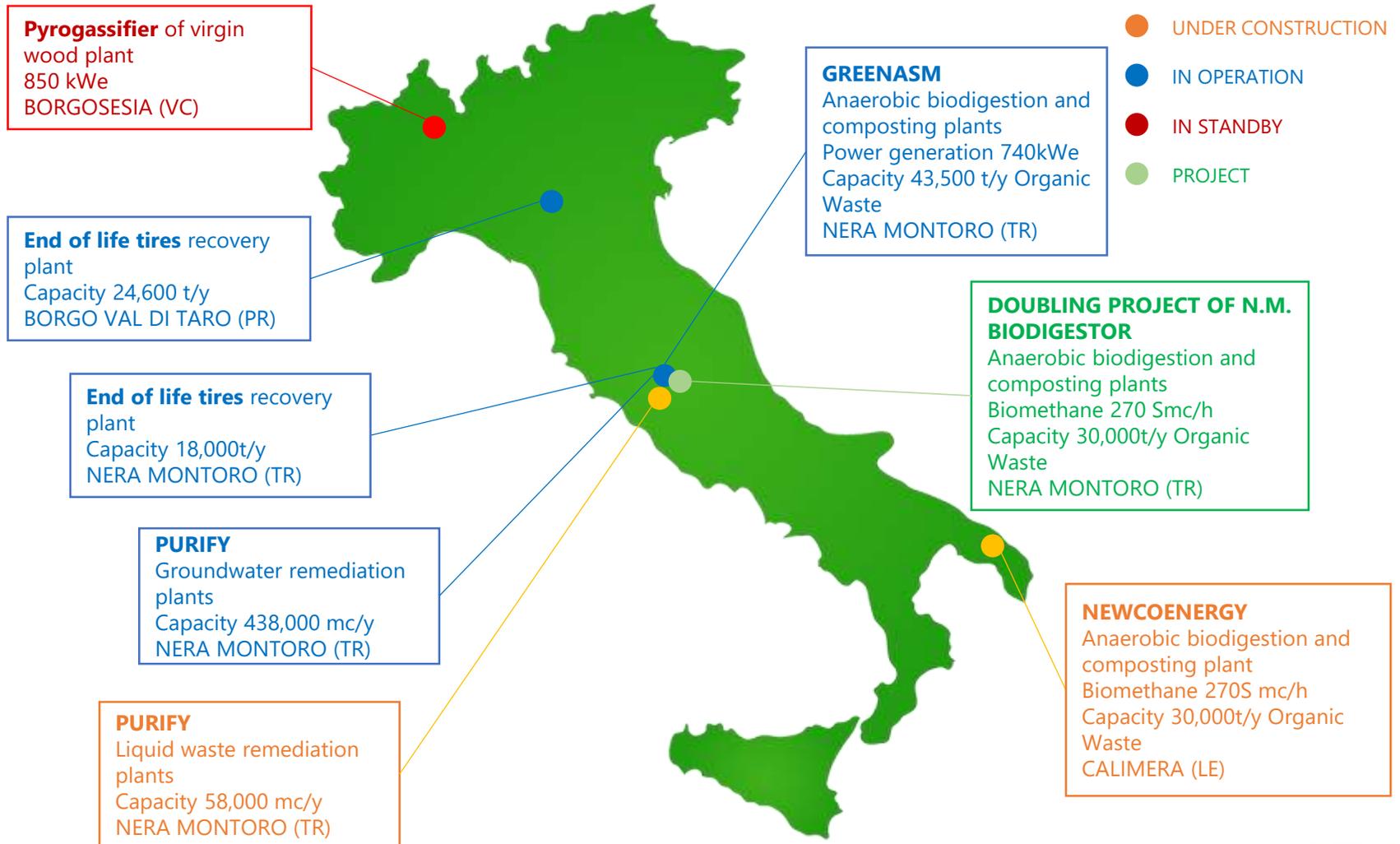
# PV power generation assets



- 45 PV plants in Italy
- All the plants entirely built and operated by TerniEnergia
- 42 MW of total capacity
- 12 MW in full ownership
- 30 MWp in JV with funds, investors and industrial partners
- The total power generation is equal to around 60.4 million kWh/year
- The energy produced is sold to trading companies and to the national energy services management company (GSE)



# Circular economy assets



# STRATEGIC BUSINESS UNIT: SMART SOLUTIONS AND SERVICES

# On-site engineering and operations



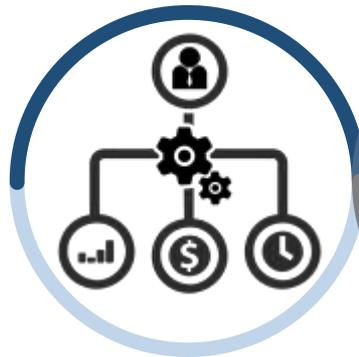
As an EPC contractor and a system integrator TerniEnergia has built over 420 MW of solar PV globally.

Two further PV plants are currently being completed:

- 10 MW PV plant in Tunisia in Tozeur, Tunisia
- 34 MW PV plant in Lusaka, Zambia

Solar PV remains an area of activity in this transitional phase from EPC player to provider of on-site engineering and operations services. These services ensure maximized energy production, minimal downtime, reduced O&M costs and, ultimately, highly performing assets.

## Asset performance management



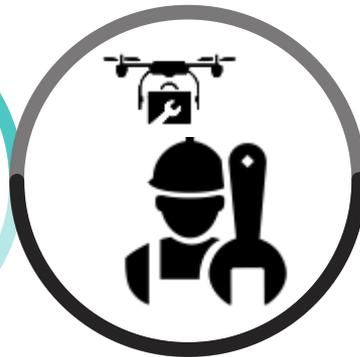
**1** ASSET SUPERVISION



**2** ENGINEERING



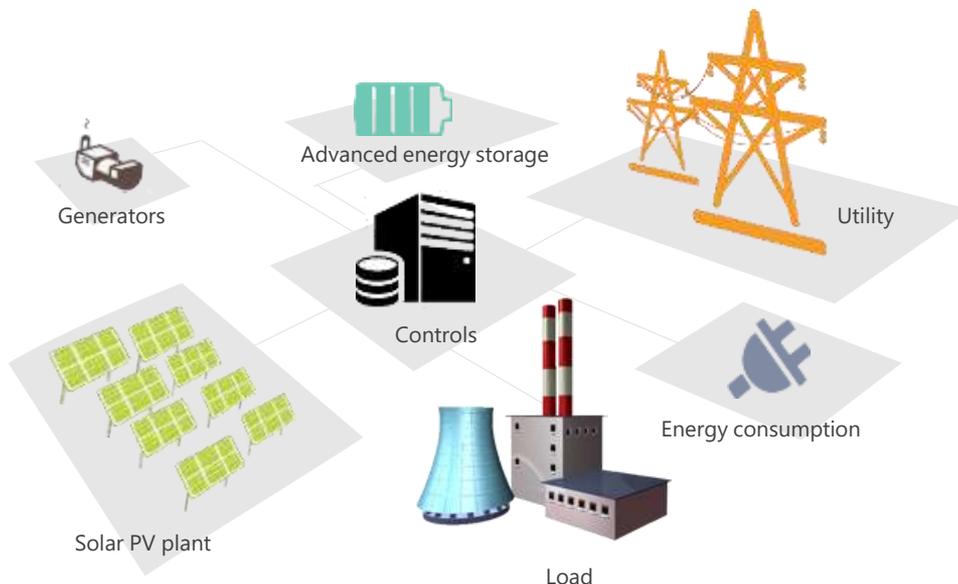
**3** OPERATION MANAGEMENT



**4** MAINTENANCE

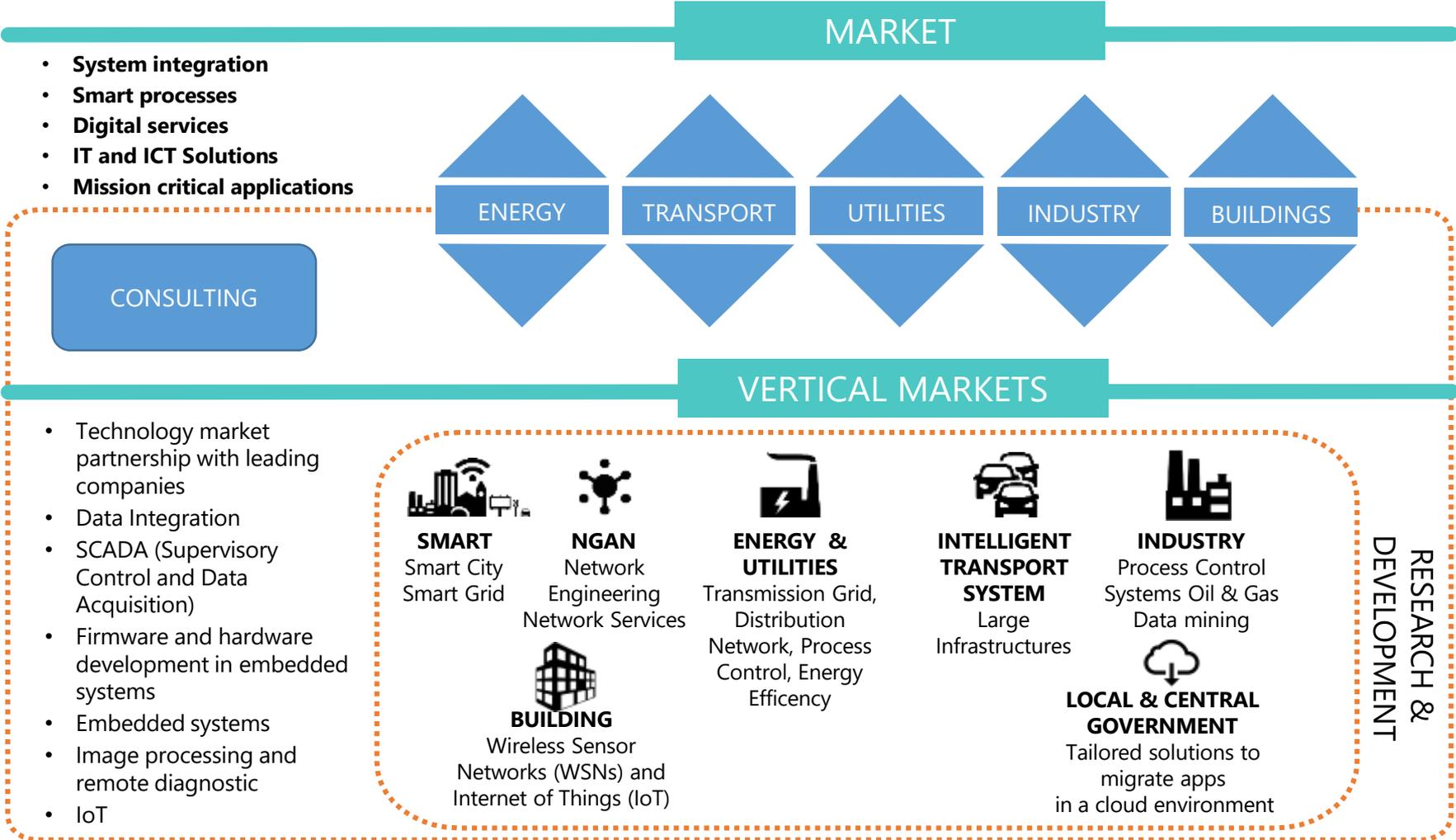
# Microgrids, a future TerniEnergia is ready for

As a pioneer in digital energy solutions, TerniEnergia is increasingly focusing on activities with a highly innovative technological content. By combining its considerable track record as a system integrator and the proven world class expertise of Softeco and Selesoft, TerniEnergia is perfectly prepared for the emerging microgrid market

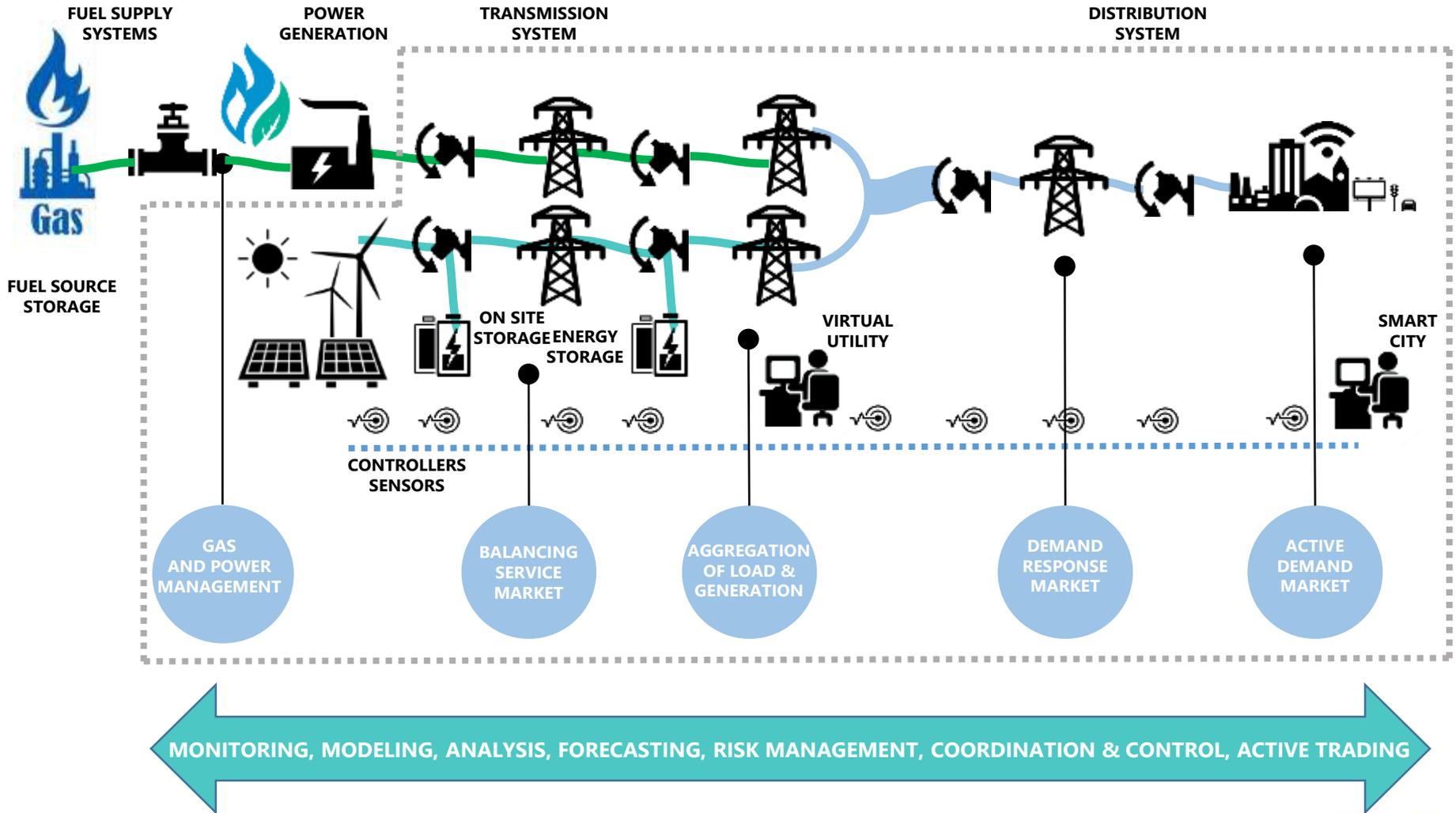


- Intelligent energy storage, based on special weather-related or process needs;
- Full optimization of combined heating and power (CHP);
- DER functionality without a dedicated generator control system, because the EMS will dispatch only voltage and power;
- Microgrid operation based on the energy market predictions for both gas and electricity;
- Optimization of heating, ventilation and air conditioning (HVAC) through advanced control strategies;
- Minimized pollution based on sophisticated algorithms that consider CHP and displaced emissions;
- Enhanced power quality where, for example, a loss of grid power causes a seamless transfer to standalone power involving only a loss of non-critical loads within the microgrid;
- Support of the future grid through an array of ancillary services, such as voltage regulation and reserve power.

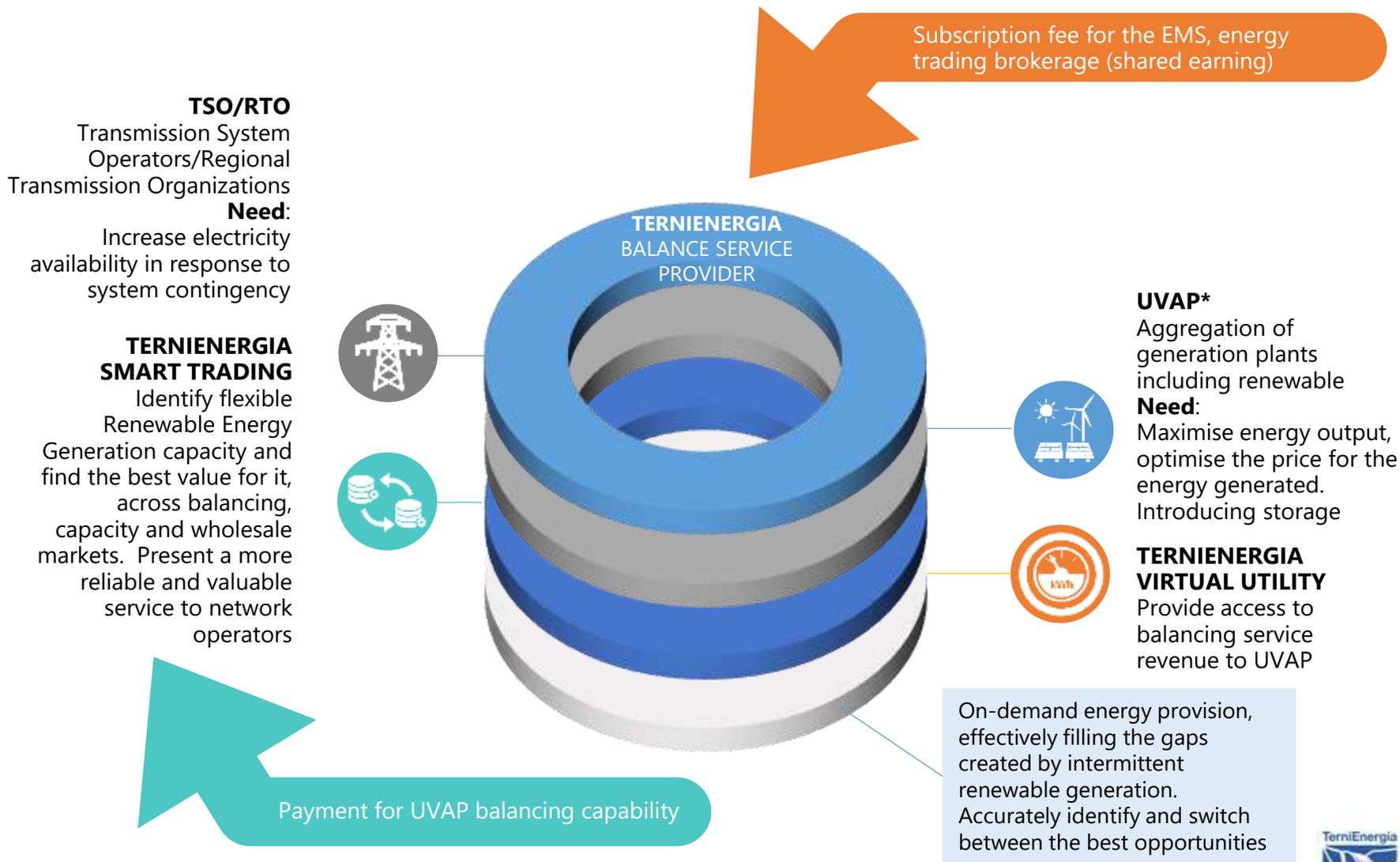
# Softeco and Selesoft: the smart side of the Group



# A first mover in Italian smart energy trading

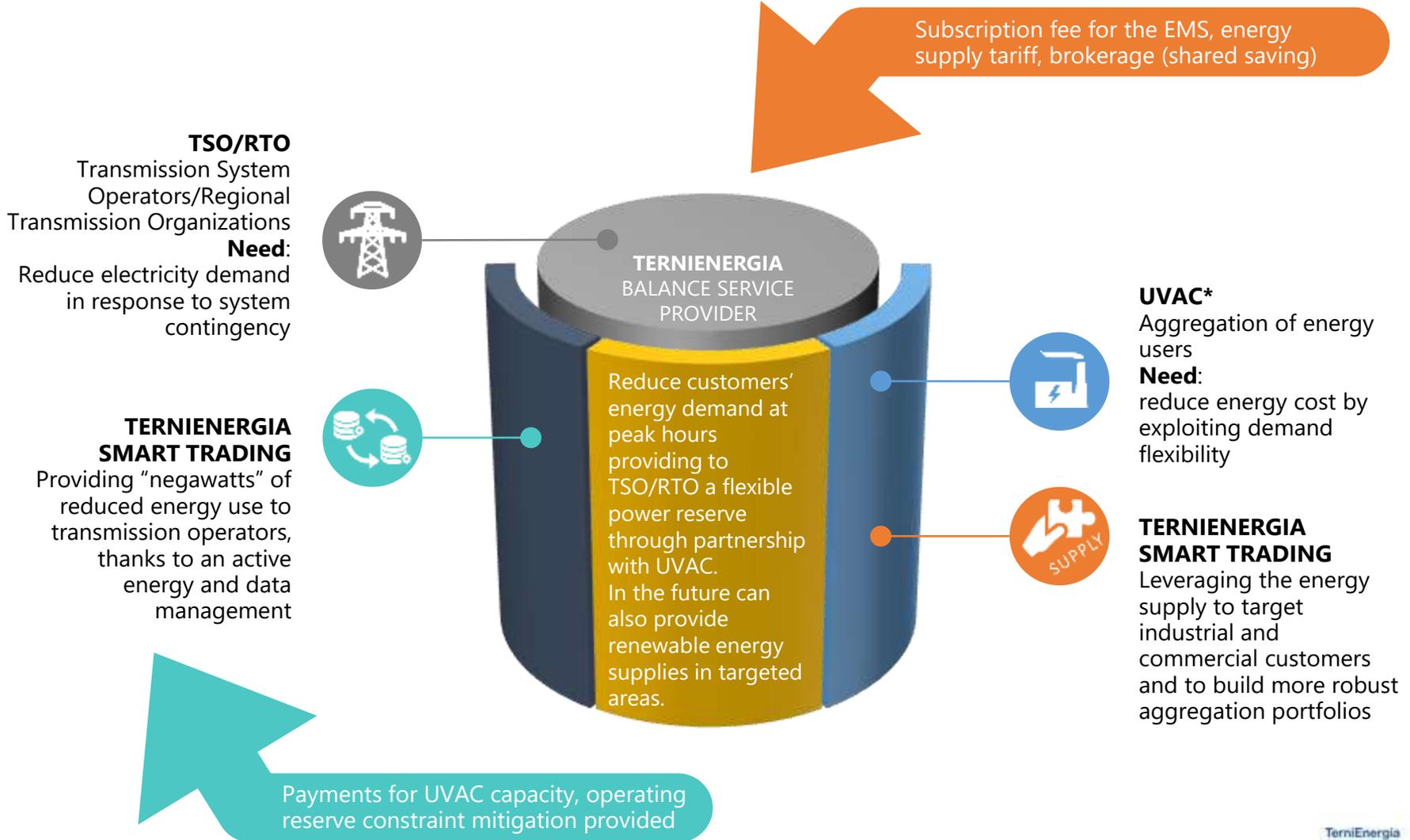


# Distributed energy management on balancing



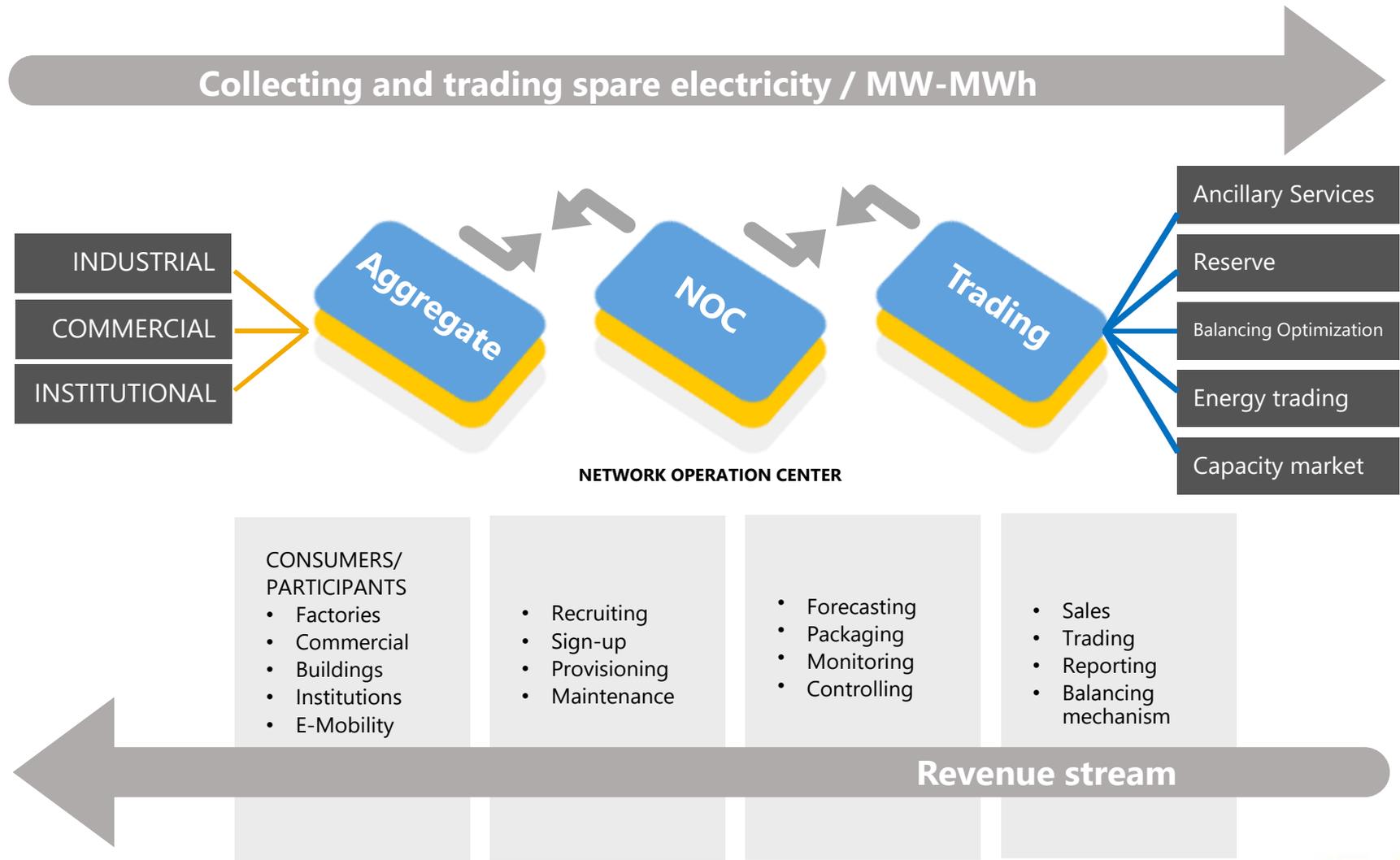
\*UVAP: Unità Virtuali Abilitate di Produzione / Virtual generation units enabled to balancing service market

# Aggregated electricity management on balancing



\*UVAC: Unità Virtuali Abilitate di Consumo / Virtual demand units enabled to balancing service market.

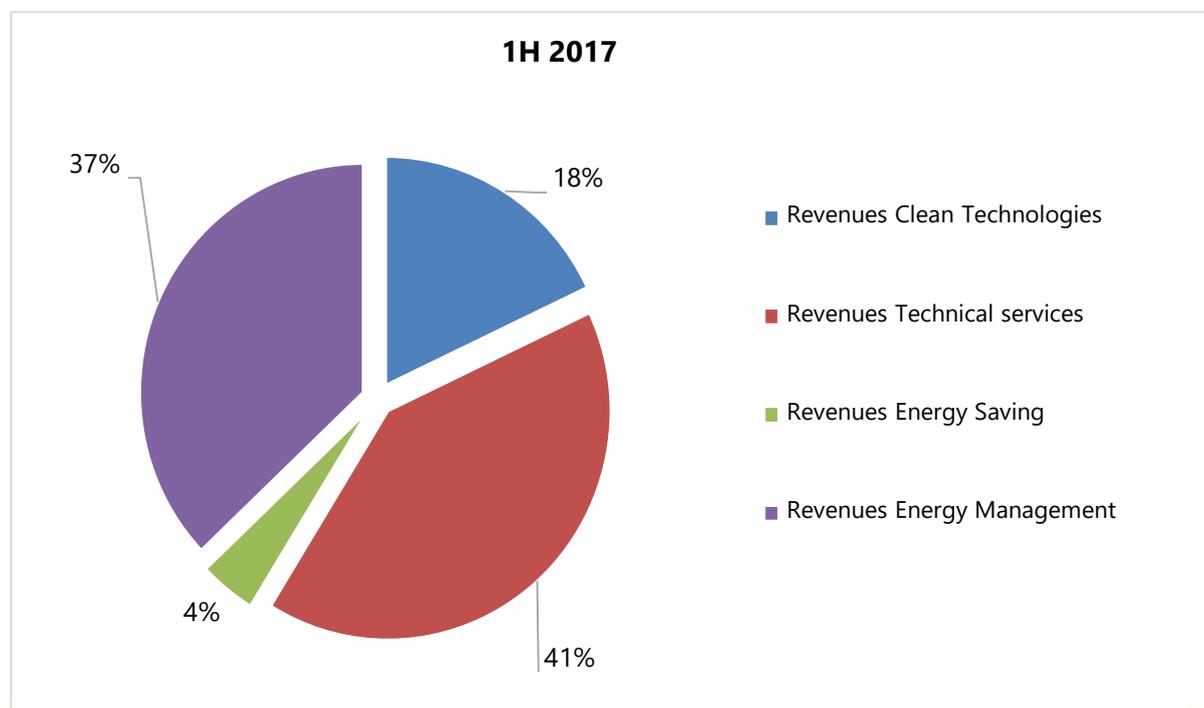
# Demand Response and Active Demand



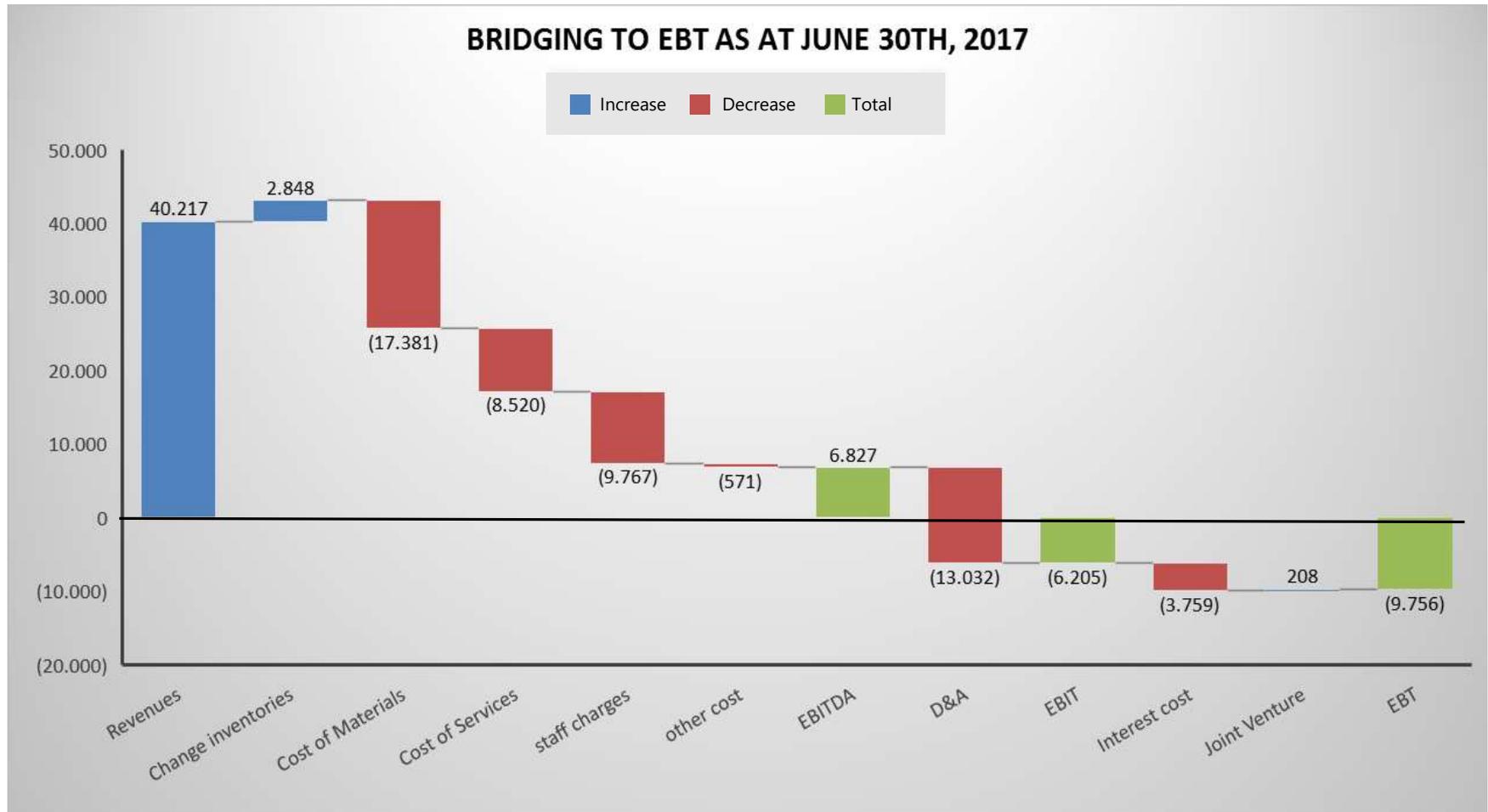
# SOLID FINANCIAL FOUNDATIONS ON WHICH TO BUILD

# Consolidated financial results 1H 2017

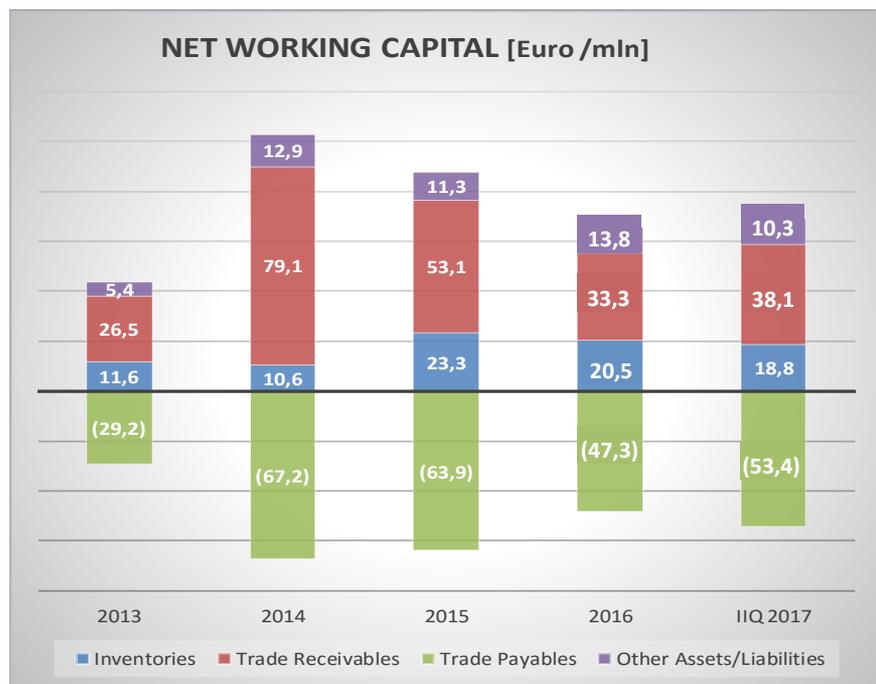
<i>(in Euro)</i>	<b>Six months June 30, 2017</b>	<b>Six months June 30, 2017</b>	<b>Change</b>	<b>Change %</b>
Revenues Clean Technologies	7,225,074	4,572,924	2,652,150	58,00%
Revenues Technical services	16,418,668	41,423,960	-27,760,119	-61,30%
Revenues Energy Saving	1,651,989	884,954	767,035	86,70%
Revenues Energy Management	14,921,584	3,889,048	11,022,536	n,a,
<b>Total</b>	<b>40,217,315</b>	<b>50,535,713</b>	<b>-10,318,899</b>	<b>-20.4%</b>



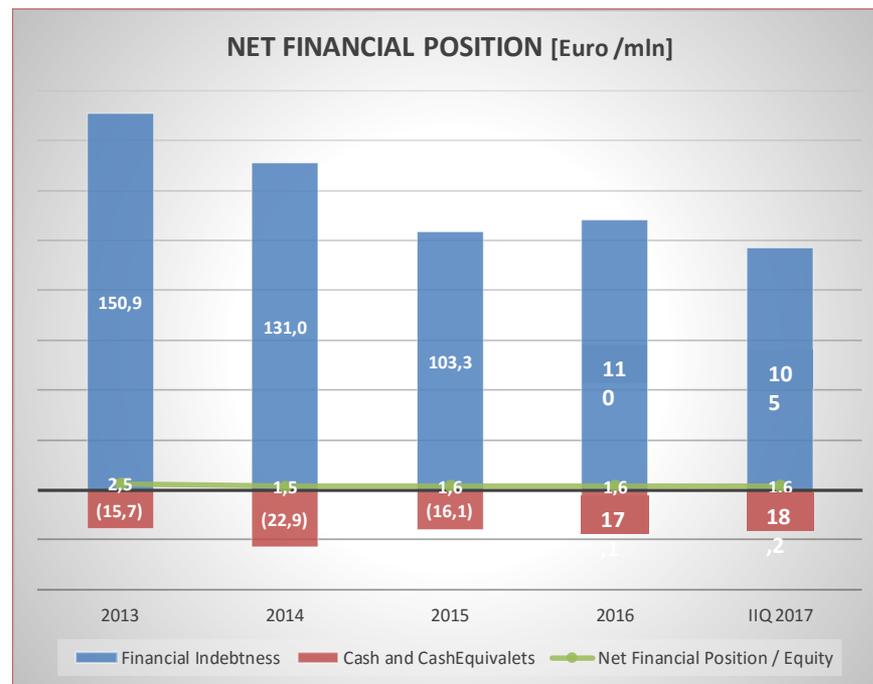
# Consolidated Financial Results – Bridging To Ebt



# Consolidated Financial Results – Balance sheet



	2013	2014	2015	2016	1H 2017
Inventories	11,6	10,6	23,3	20,5	18,8
Trade Receivables	26,5	79,1	53,1	33,3	38,1
Trade Payables	(29,2)	(67,2)	(63,9)	(47,3)	(53,4)
Other Assets/Liabilities	5,4	12,9	11,3	13,8	10,3
<b>Net Working Capital</b>	<b>14,4</b>	<b>35,4</b>	<b>23,7</b>	<b>20,3</b>	<b>13,8</b>
<b>NWC/Sales (%)</b>	<b>29,6%</b>	<b>37,2%</b>	<b>6,4%</b>	<b>24,2%</b>	<b>18,7%</b>



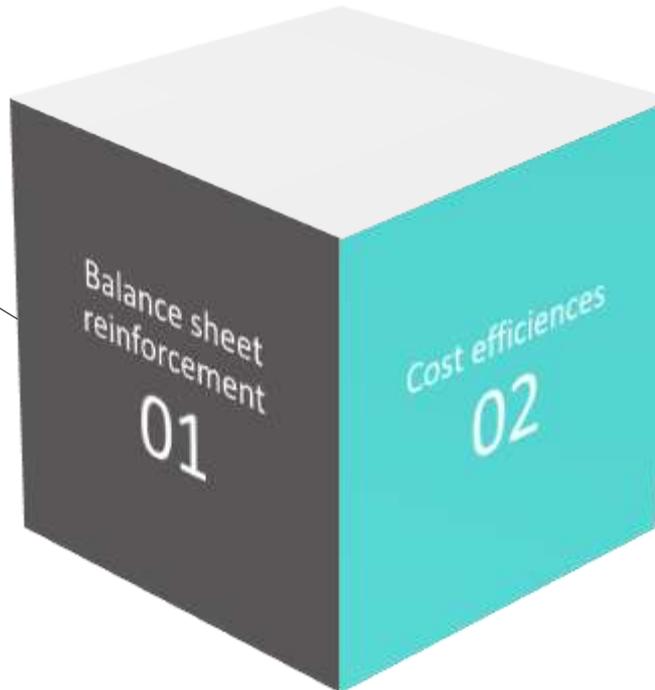
	2013	2014	2015	2016	1H 2017
Financial Indebtness	150,9	131,0	103,3	110,9	105,7
Cash and Cash Equivalents	(15,7)	(22,9)	(16,1)	(17,1)	(18,2)
<b>Net Financial Position</b>	<b>135,2</b>	<b>108,2</b>	<b>87,2</b>	<b>93,8</b>	<b>87,5</b>
<b>Current Net Financial Position</b>	<b>18,2</b>	<b>18,3</b>	<b>8,0</b>	<b>14,7</b>	<b>10,9</b>
<b>Non Current Net Financial Position</b>	<b>117,0</b>	<b>89,8</b>	<b>79,2</b>	<b>79,1</b>	<b>76,6</b>
Short Net Financial Position/ Equity	0,3	0,3	0,1	0,3	0,2
Net Financial Position / Equity	2,5	1,5	1,6	1,6	1,6

# Deleveraging and cost efficiencies



01

TerniEnergia has begun a deleveraging process in order to strengthen its balance sheet. This process, which has the objective of guaranteeing the financial resources necessary to support development over the next three years, may involve current shareholders as well as potential investors and/or industrial partners.

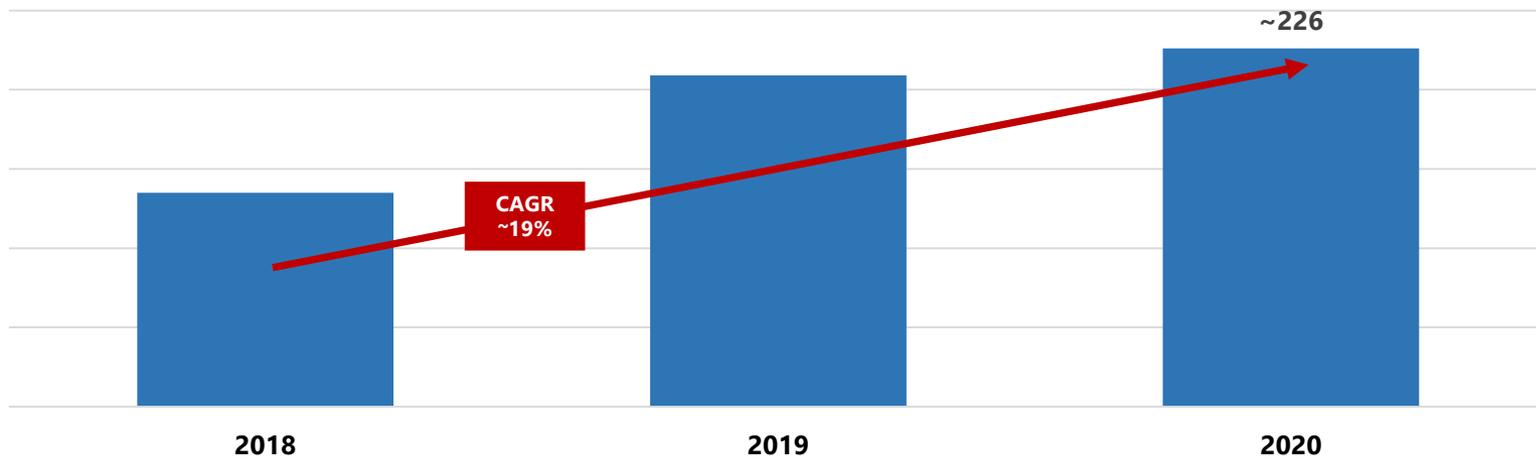


02

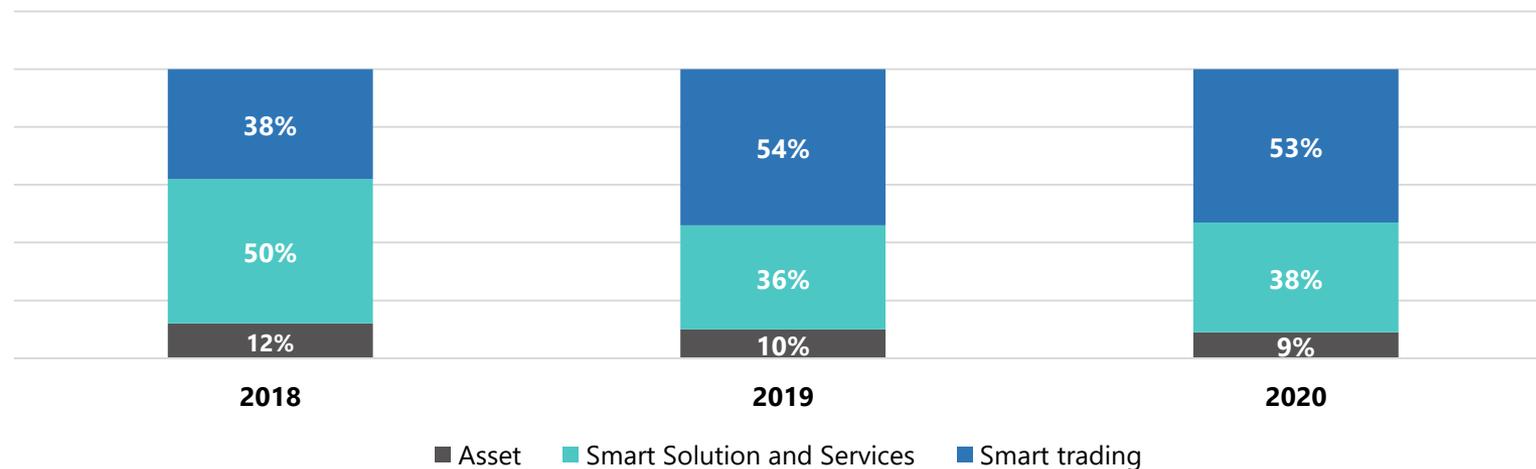
Cost efficiencies will be pursued through activities which aim to improve internal processes in relation to working capital, procurement, human resources and plant management. TerniEnergia is undergoing corporate repositioning to focus on service activities which do not require significant investments.

# Revenue growth and breakdown

## Revenue trend (€ Mio)

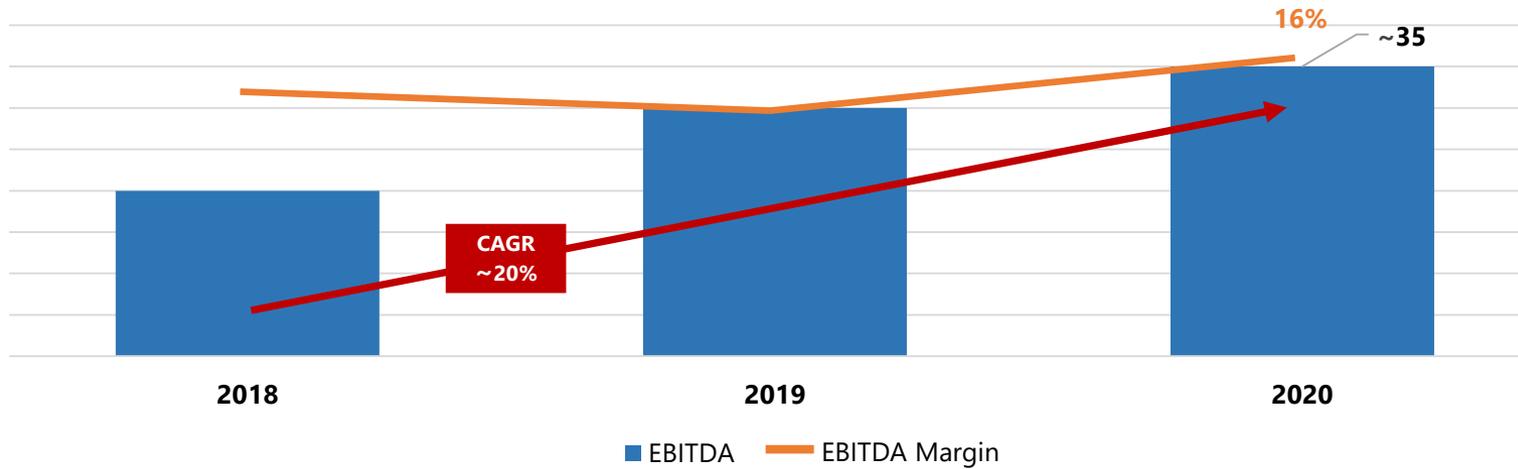


## Revenue breakdown

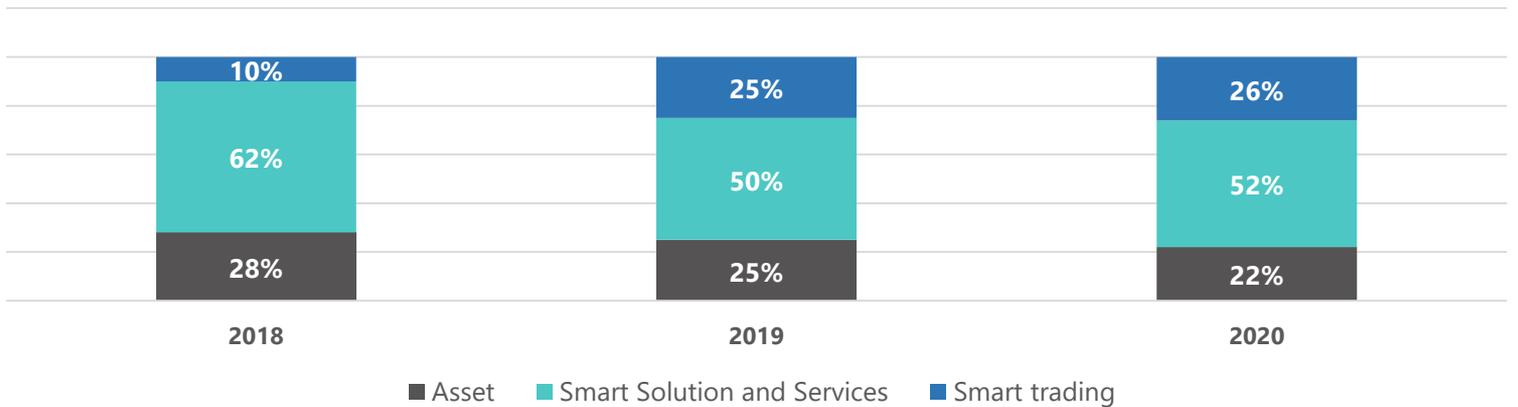


# Ebitda and breakdown

## EBITDA evolution (€ Mio)

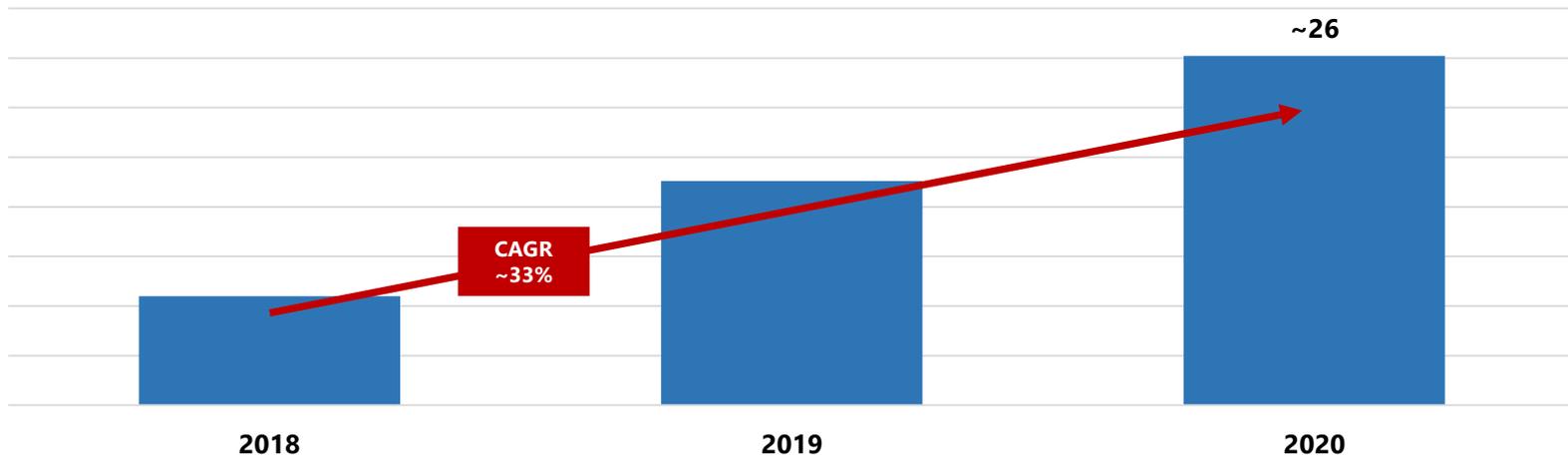


## Ebitda breakdown



# Ebit trend

EBIT (€ Mio)



# Disclaimer

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Some information contained here in and other material discussed at the meetings may include forward-looking information based on TerniEnergia's current beliefs and expectations. These statements are based on current plans, estimates, projections, and projects and therefore you should not place undue reliance on them.

Forward-looking statements involve inherent risks and uncertainties. We caution you that a number of important factors could cause actual results to differ materially from those contained in any forward-looking statement. Such factors include, but are not limited to: changes in global economic business, changes in the price of certain commodities including electricity and gas, the competitive market and regulatory factors.

Moreover, forward-looking statements are current only at the date they are made.

**For further information**

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