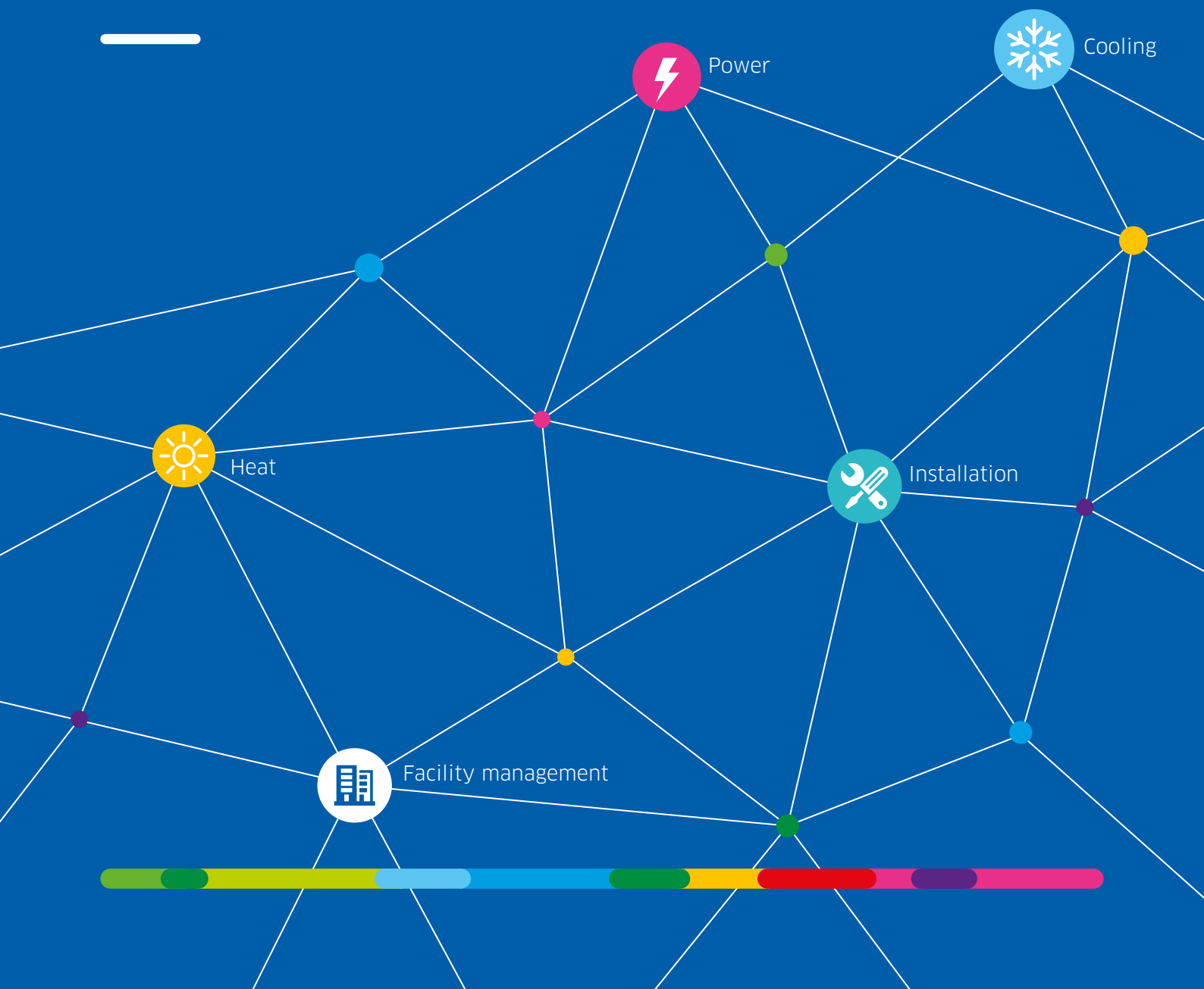
ENERGY EFFICIENT SOLUTIONS



ENGIE GROUP

70 COUNTRIES

60.6 REVENUES BN. € (2018)

14 BN. € INVESTMENTS IN 2016-2018

160,000 EMPLOYEES

POWER

- Solar energy
- Hydropower
- Offshore wind power
- Onshore wind power
- Biomass
- Onshore geothermal
- Thermal
- Nuclear

NATURAL GAS

LNG
2nd largest capacity in Europe
33,000 km of transportation network (worldwide)

Storage
3rd largest gas storage in the world
600 wells drilled

Distribution
260,000 km of pipelines worldwide

Hydrogen
Projects in France: Jupiter 1000, Hydrogen Buses line GRHYD

Biogas
70 GWh/year In Bemmel, Netherlands

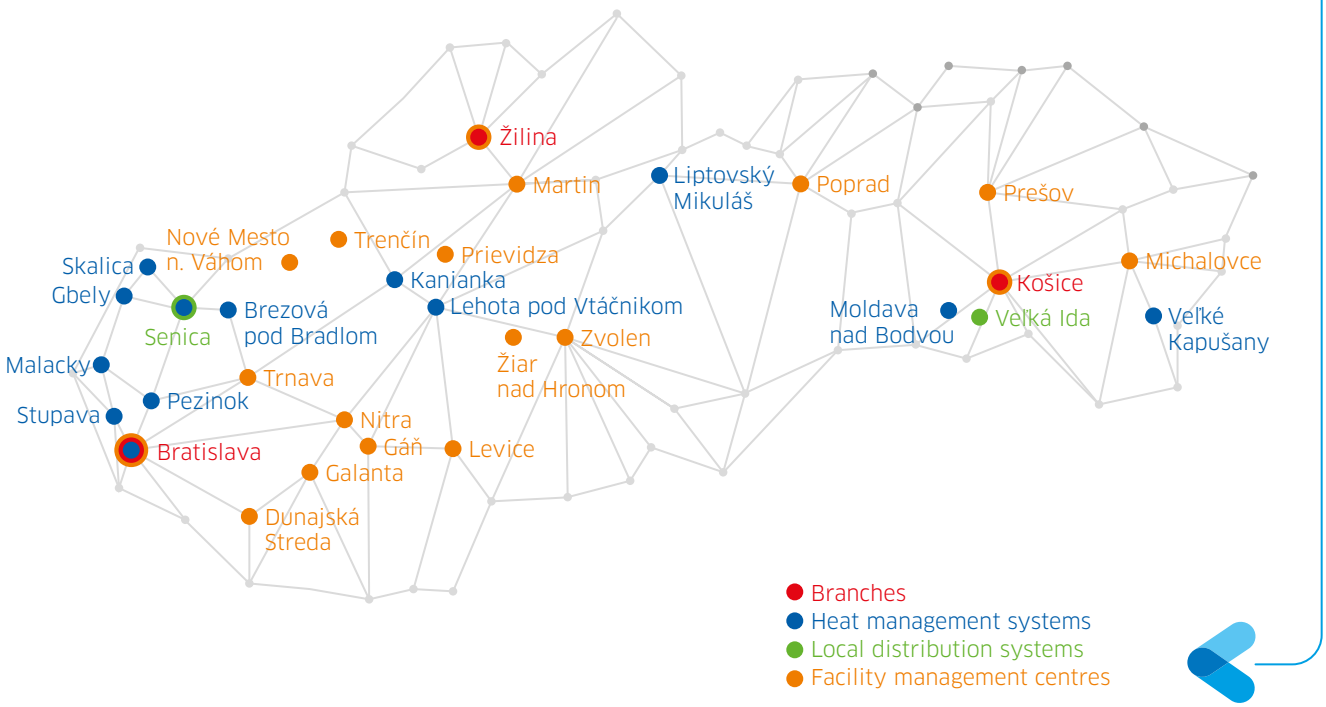
ENERGY SERVICES

- Engineering and energy infrastructure projects
- Decentralised energy supply: Natural gas, biogas, power and heating
- IT systems
- Facility management
- Coordination of energy performance for equipment and buildings
- Multi-technical services and industrial maintenance
- Electrical and climate engineering

ENGIE IN SLOVAKIA

ENGIE in Slovakia is a leader in the field of energy and comprehensive facility management in Slovakia whilst also being one of the largest private producers of heating and a leading provider of energy services.

NATIONWIDE COVERAGE



TURNOVER
ENGIE IN SLOVAKIA
882
MIL. € (2018)

711
EMPLOYEES

10
SUBSIDIARIES

COMPREHENSIVE SERVICES


Measurement and regulations
Electromobility
Cooling and HVAC
TECHNOLOGY INSTALLATION
Technical service
Heating
Public lighting
Heavy current and low current installations
ENGIE

HEATING AND COOLING

ENGIE ADDED VALUE

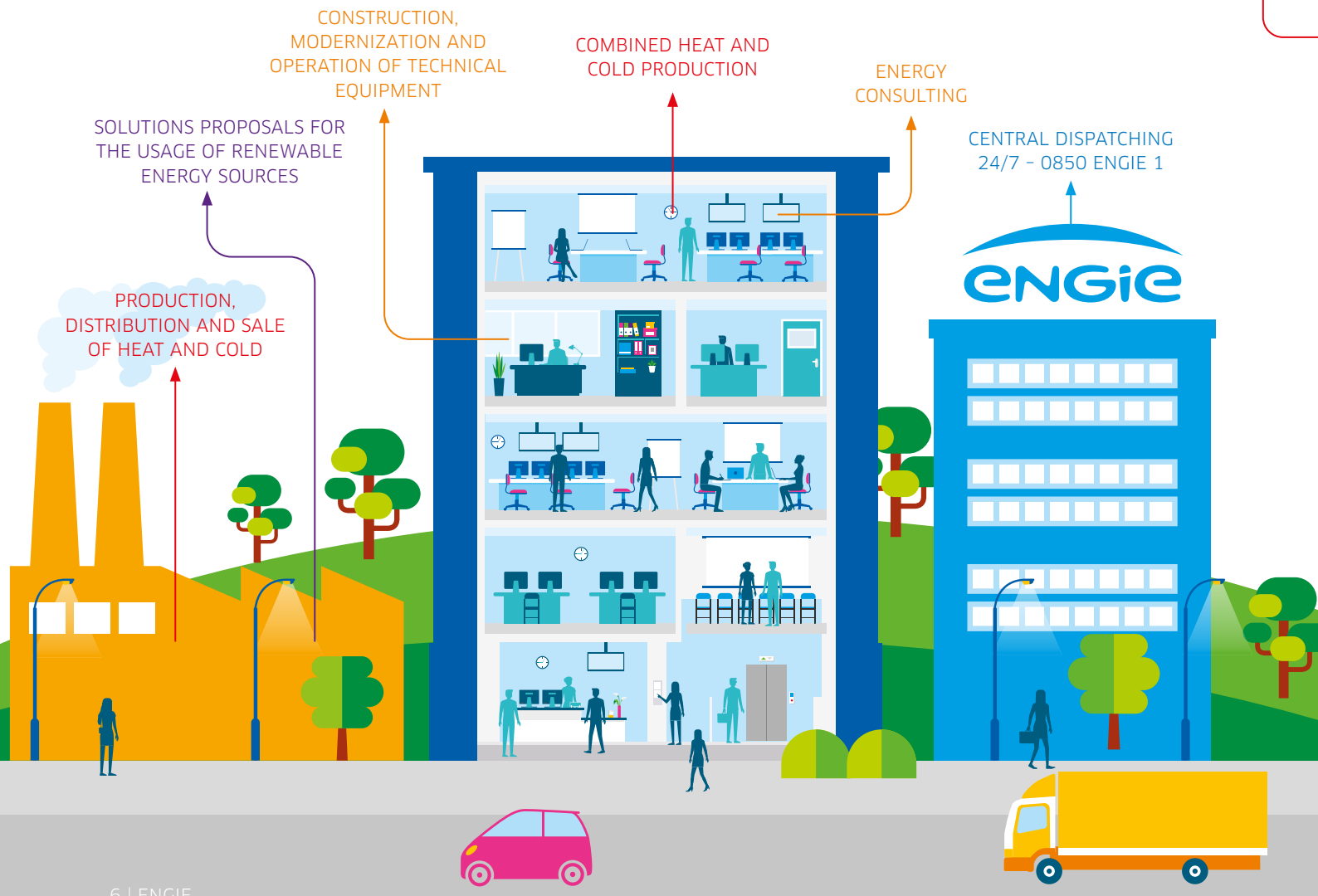
- Investments into modernization of heat management systems.
- Nationwide coverage.
- In-house technical operational staff in boiler plant.

164 KM LENGHT OF PIPES

403 MW – TOTAL INSTALLED POWER (43 MW OF BIOMASS)

455 HEAT SOURCES

570,000 MWH – HEAT SUPPLY



DISTRICT HEATING MANAGEMENT SYSTEM IN MALACKY

- **Installed power:** 23.27 MW
  - natural gas: 18.27 MW
  - biomass: 5 MW
  - cogeneration of heat and electricity: 0.828 MWt, 0.699 MWe
- **Length of pipes:** 10 km
- **Heating substations:** 13
- **Investment into modernization:** 7.2 mil. €

DISTRICT HEATING MANAGEMENT SYSTEM IN PEZINOK

- **Installed power:** 18.15 MW
  - natural gas: 15.15 MW
  - biomass: 3 MW
- **Length of pipes:** 10 km
- **Heating substations:** 62
- **Investment into modernization:** 5.3 mil. €

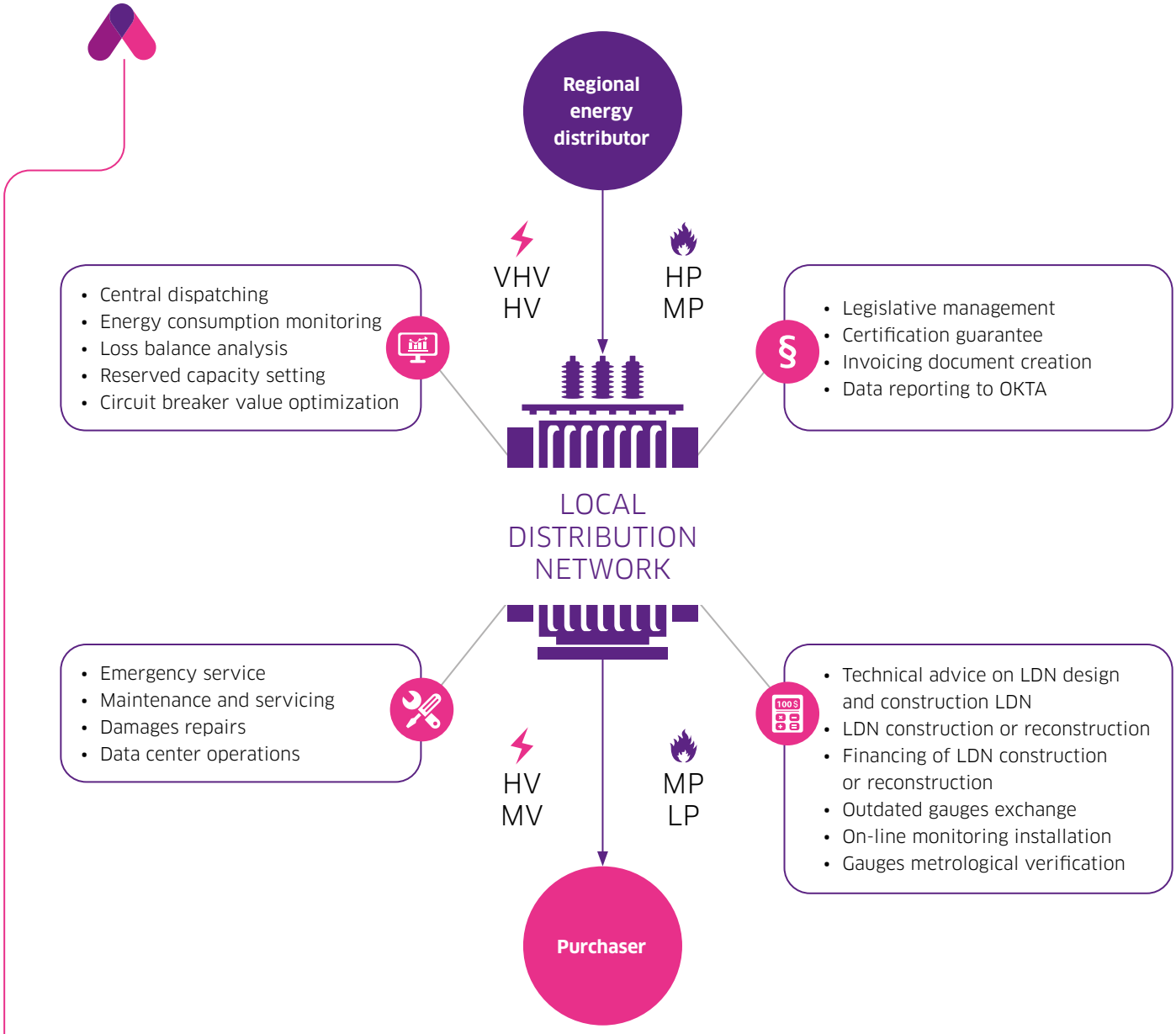
Modernization of biomass boiler plant in Pezinok

POWER AND NATURAL GAS

ENGIE ADDED VALUE

- In-house team of experts from the energy sector and technology installations.
- Project refinancing.
- Synergy use of the other services from ENGIE porftolio.

CONSTRUCTION, MODERNIZATION AND OPERATION OF LOCAL DISTRIBUTION NETWORK



LOGISTICS AND INDUSTRIAL PARK VEĽKÁ IDA

110/22 KV TRANSFORMATION STATION

- **Project goal:** constructing and operation of 110/22 KV transformation station, including refinancing
- **Total investment:** 2.765 mil. €
- **Start of operations:** July 2018
- **Project specifics:** Automated control and monitoring of transformation station via remote ENGIE dispatching and SCADA control system.

Construction of 110/22 kV transformation station

INDUSTRIAL PARK IN SENICA

110/0.4 KV TRANSFORMATION STATION

- **Project goal:** purchase, modernization and operation of transformation station with power of 25 MW, including refinancing.
- **Total planned investment:** 2.5 mil. €
- **Start of operations:** December 2018
- **Project specifics:** Power and natural gas supply for industrial, residential and retail part of industrial park (30 ha).

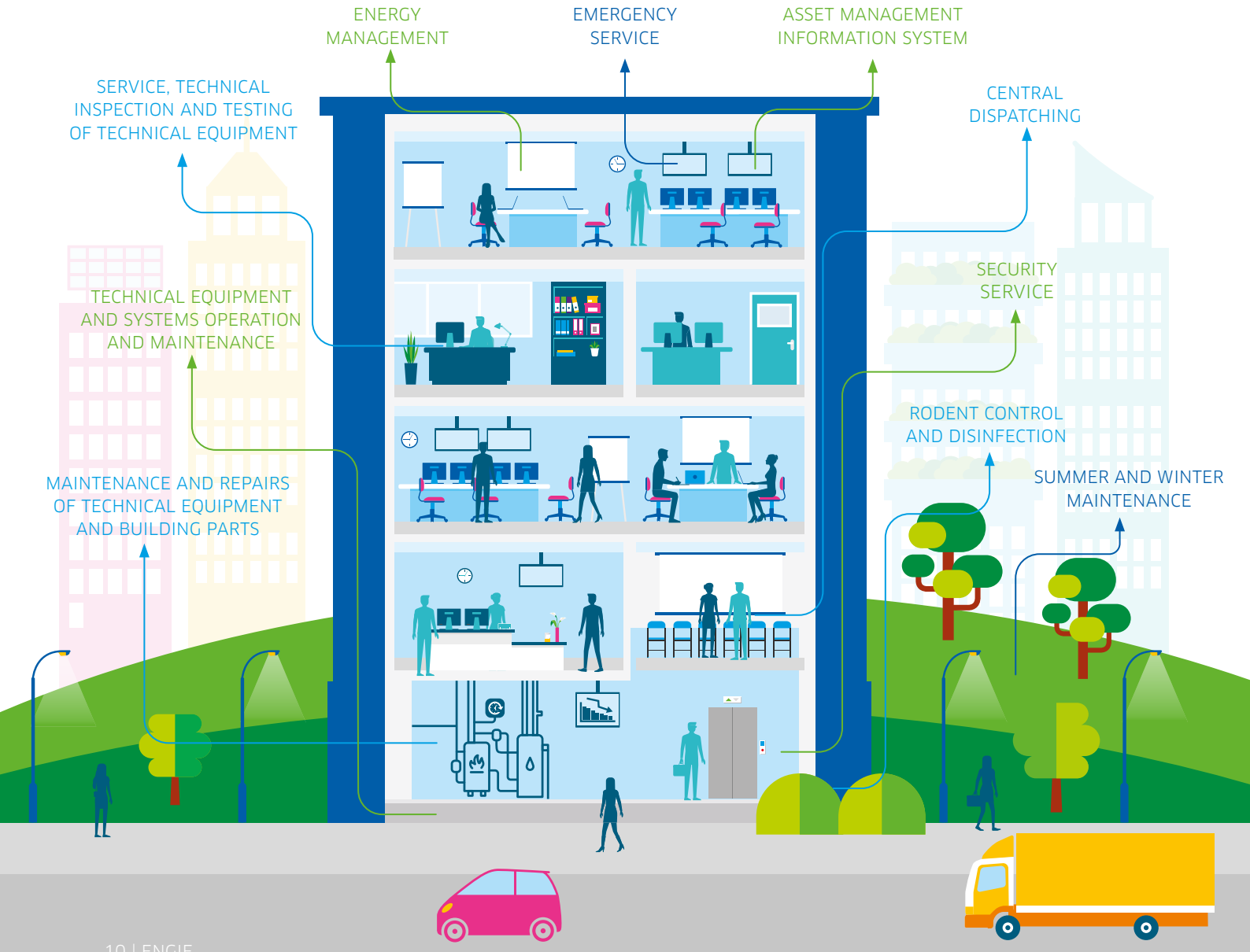
FACILITY MANAGEMENT

ENGIE ADDED VALUE

The synergic connection with the other services from ENGIE comprehensive portfolio: energy supply, energy management, electromobility and technology installations.

3 MIL. M^2 MAINTAINED AREA

1800 OBJECTS



MULTIFUNCTIONAL COMPLEX

CASSOVAR KOMPLEX, KOŠICE

- **Start of management:** December 2009
- **Maintained area:** 57,600 m²
- **Scope of services:**
  - comprehensive facility management for Cassovar Business Center I and II: operation, maintenance and service of technical equipment, dispatching, security service and cleaning services.

LOGISTICS PARK

CNIC PARK GALANTA – GÁŇ

- **Start of management:** April 2018
- **Maintained area:** 147,000 m²
- **Scope of services:**
  - comprehensive facility management in the halls of logistics companies DHL and YUSEN,
  - operation, maintenance and service of technical equipment, dispatching, security service and cleaning services.

SHOPPING CENTRE

AUPARK, BRATISLAVA

- **Start of management:** July 2014
- **Maintained area:** 54,000 m²
- **Scope of services:**
  - comprehensive management: operation, maintenance and service of technical equipment, dispatching, energy management.

TECHNOLOGY INSTALLATIONS

ENGIE ADDED VALUE

- In-house team of: engineers, designers, technical specialists, energy specialists and partners.
- Unique solutions tailored to customer requirements.
- Guaranteed achievement of defined energy parameters and savings.

LOW CURRENT INSTALLATIONS
- Fire alarm systems
- Security systems (security systems, CCTV, access control systems)
- Data systems

HIGH CURRENT INSTALLATIONS
- Public lighting
- Design and installation of interior and exterior lighting
- Transformation stations (high voltage)
- Electrical installations (low voltage)

MEASUREMENT AND REGULATIONS
- Measurement and regulations for administrative, retail, polyfunctional and residential objects
- Technical measurement and regulation for industry

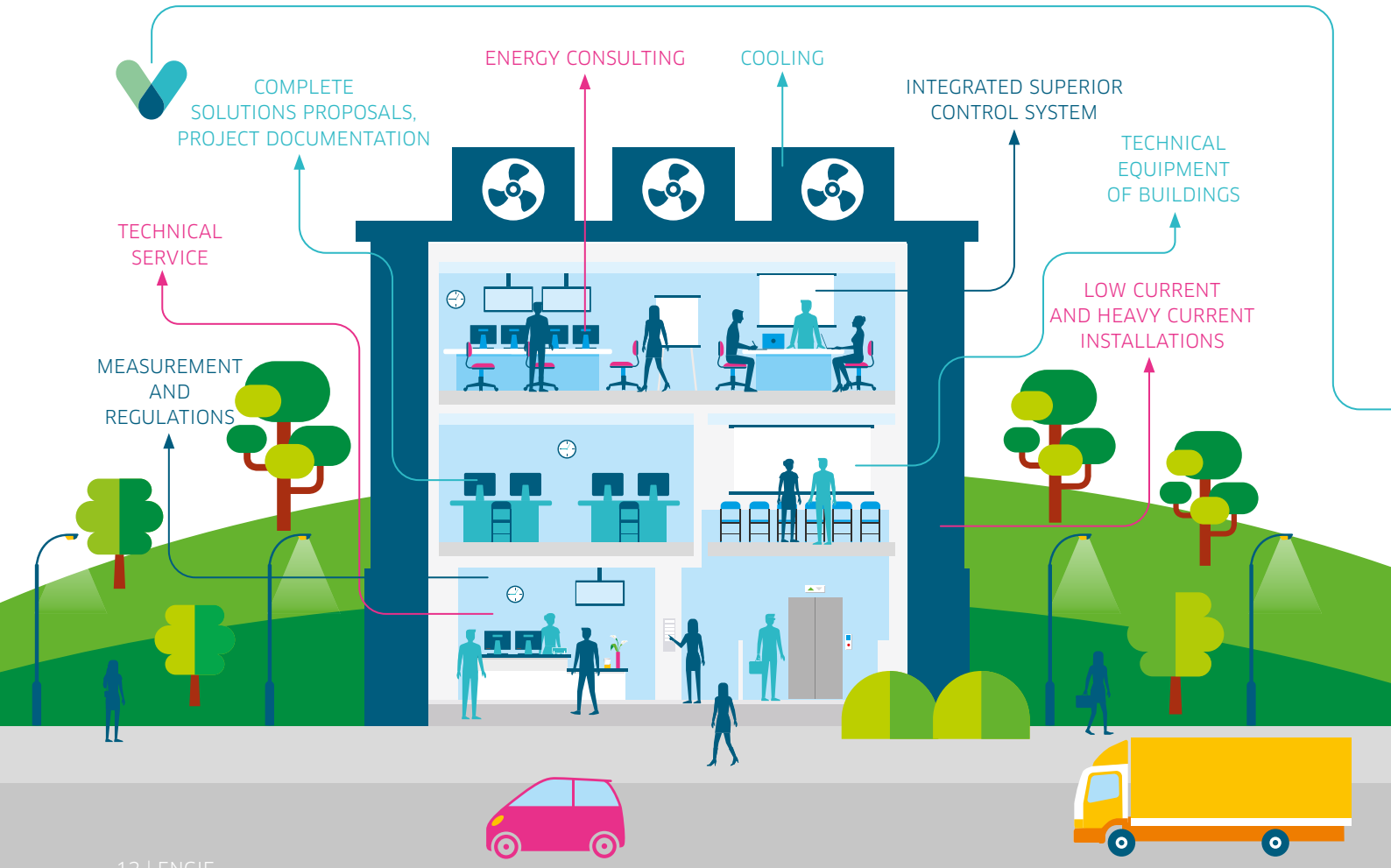
INTEGRATED SUPERIOR CONTROL SYSTEMS
- Superior SCADA control systems

COOLING
- Building cooling and air conditioning
- Technological cooling

TECHNICAL SERVICES
- Operative and regular service
- Maintenance and repairs
- Specialised inspections and tests

TECHNICAL BUILDING EQUIPMENT
- Installation of technical building equipment

ENERGY CONSULTING
- Energy audits
- Proposals for optimisation measures
- GES solutions proposals



AUTOMOTIVE PLANT

MAGNA PT, KECHNEC

- **Project:** Delivery and installation of technical equipment for extention of the technical building at the MAGNA PT plant.
- **Duration:** December 2015 – September 2016
- **Installed equipment:** Compressor and cooling tower with power of 4035 kW
- **Scope power of services:** Delivery and installation of technical equipment and its connection to existing technical distribution systems, electrical installation, measurement and regulations.
- **Project:** Adjustment of the HVAC system in MAGNA PT Kechnec production hall
- **Duration:** December 2016 – June 2017
- **Installed equipment:** 2 air handling units with power of 140.00 m^3/h and 870 kW
- **Scope of services:** Installation of steel construction and air handling units on the roof of the building, including connections to existing ducts and systems, electrical installation, measurement and regulation.
- **Project specifics:** Installation involved the use of a helicopter during full plant operations.

OFFICE COMPLEX

ECOPOINT II, KOŠICE

- **Project:** Delivery and installation of low current installations
- **Duration:** November 2017 – June 2018
- **Scope of services:** Delivery and installation of low current installations (fire alarm system, evacuation intercom, alarm announcement system, access control system and CCTV) and measurement and regulation for control and monitoring of HVAC and air quality in underground garage areas.
- **Project specifics:** Green building: designed and built with the focus on environmental protection and support of sustainable construction in Slovakia.

PRINTING PLANT

SLOVENSKÁ GRAFIA, BRATISLAVA

- **Project:** Cooling for new Manroland printing press
- **Duration:** April 2018 – June 2018
- **Installed equipment:** Cooling engine room with installation of BlueBox Tetris 2 SLN FC compact chiller
- **Equipment output:** Qch=336.7 kW (at temperature gradient of 10/16°C)
- **Scope of services:** Solution design, delivery, installation and service of cooling equipment.
- **Project specifics:** Cooling is provided at a precise temperature of individual cooling circuits depending on the specific needs of the printing press.

ENERGY SERVICES

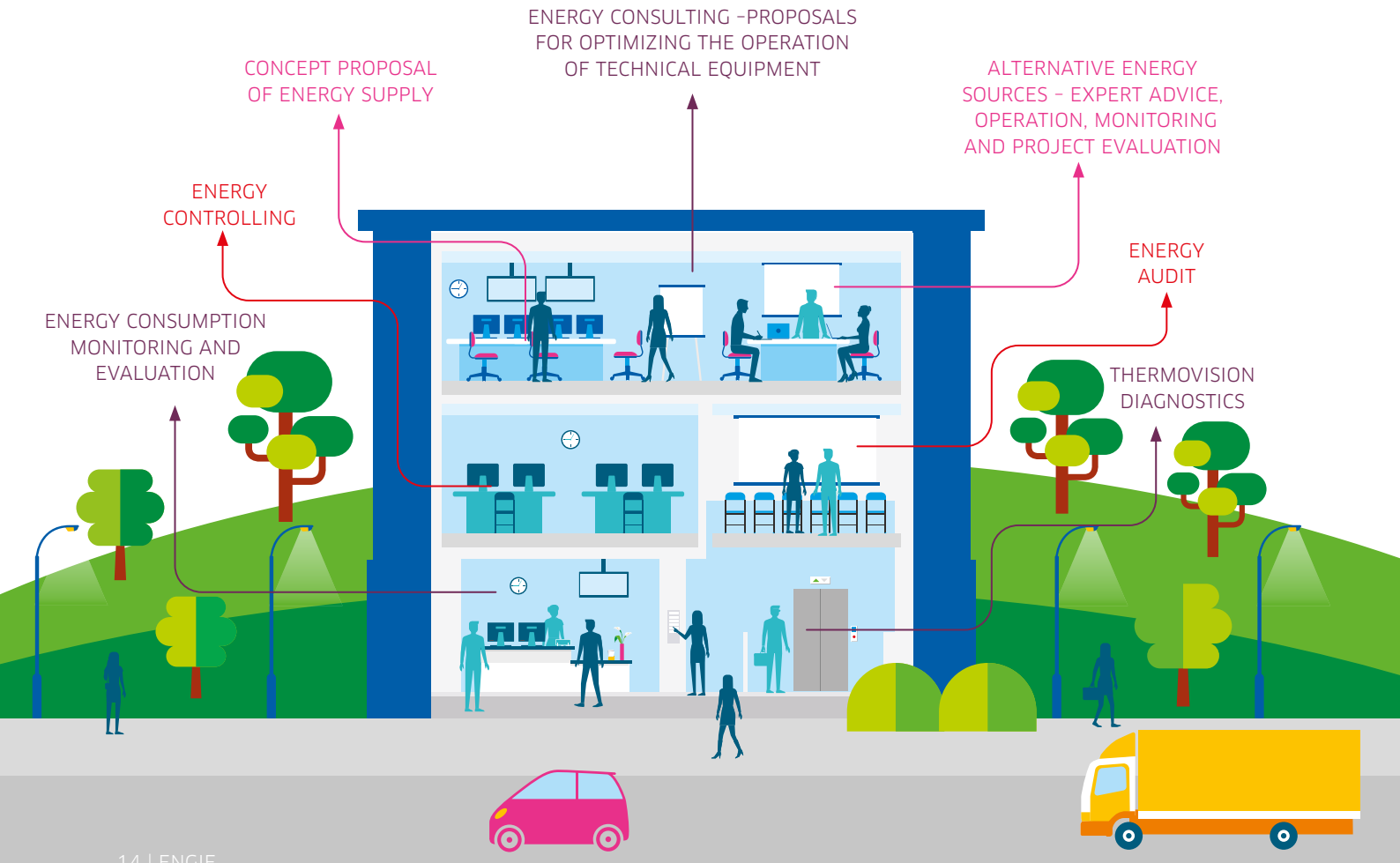
ENGIE ADDED VALUE

- In-house team of professional specialists (engineering, design and consultancy).
- Within IoT solutions ENGIE offers its own measurement and data collection independent from customer infrastructure (sensors, data transmission, platforms).

DIGITAL ENERGY MANAGEMENT

- real-time consumption evaluation,
- development of consumption model and comparison with actual consumption,
- separate meters – data monitoring and evaluation,
- warning of non-standard situations and inefficiency,
- data actualization with the possibility to compare consumption,
- analysis options of characteristic data processing (regression analysis, machine learning algorithms).

Dynamic visual display



INVESTMENTS IN MODERNIZATION ARE REPAID FROM FUTURE GUARANTEED ENERGY SAVINGS

BUILDINGS
TECHNICAL EQUIPMENT AND BUILDING EXTERIOR STRUCTURES

MODERNIZATION OF BUILDINGS

GUARANTEED **SAVINGS**

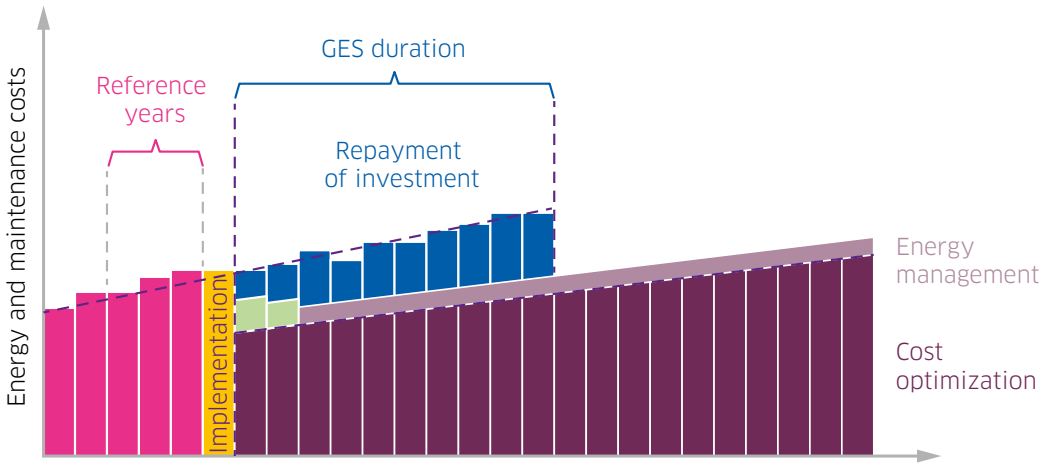
ENERGY CONSUMPTION COST SAVING

FOR THE **PRIVATE SECTOR**

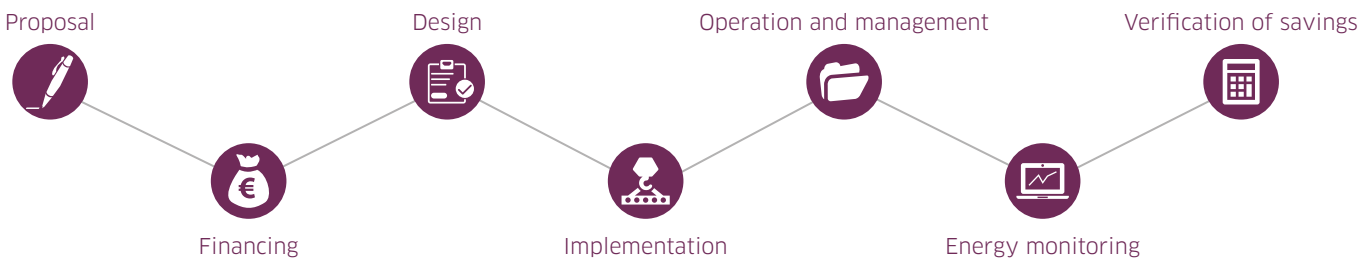
FOR THE **PUBLIC SECTOR**

GUARANTEED ENERGY SERVICE

GES MODEL



GES PROJECT IMPLEMENTATION



ELECTROMOBILITY

ENGIE ADDED VALUE

- Local and international know-how.
- Installation and operation of stations combined with energy management and mobility management offers.

COMPREHENSIVE ELECTROMOBILITY SERVICES

Consultation and solution proposal

Delivery and installation

Maintenance and operation

Energy management

Mobility management

Service and repairs

CONSULTATION AND DESIGN PROPOSALS

- Cooperation with ENGIE subsidiary EVBox, (60,000 installations in 45 countries around the world).

MAINTENANCE AND OPERATION

- Preventative and reactive maintenance.
- Remote operation of stations using remote access via the EVERON platform (technical monitoring and charging optimalization).

SERVICE AND REPAIRS

- Immediate failure reporting to ENGIE's dispatch centre (24/7).
- Nationwide coverage – fast response time for troubleshooting.

MOBILITY MANAGEMENT

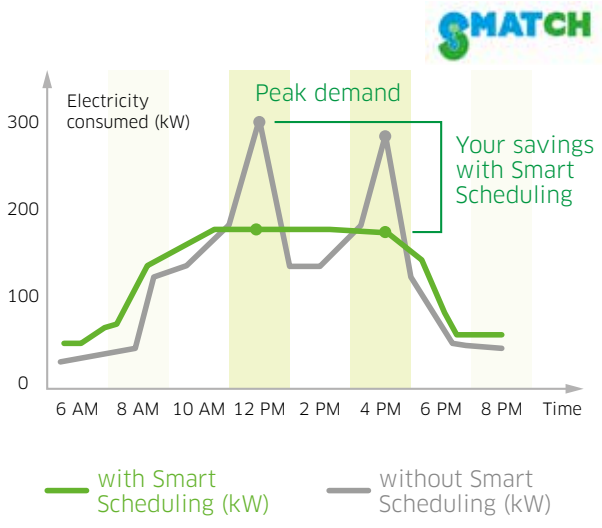
- Charging station search feature (Filtering by price or charging location) using the SMATCH application.

CHARGING AS A SERVICE (CAAS)

- Delivery, installation, operation and service of ENGIE charging stations at the client's site.
- Administration, user management and invoicing of fees for delivered electricity.

ENERGY MANAGEMENT

- Optimisation of available electricity distribution for electric cars, while reserved capacity of building or parking area remains the same.



CHARGING STATIONS
DELIVERY AND INSTALLATION

- **Charging station AC**
  (up to 2 x 22 kW/32A)

- **Quick charging station DC**
  (25 – 50 kW/32A)

- **Ultra-fast charging station**
  (175 – 350 kW)

INTERNATIONAL REFERENCES
FAST CHARGING STATIONS

- **Nationwide coverage:** 350 stations
  - France: EDF-Sodetrel, CNR
  - England: Charging station service
- **Regional coverage:** 250 stations
  - Bouygues – Révéo (Occitanie)
  - Vinci – MobiVE (Aquitaine)
- **Cities:** 50 stations
  - Bordeaux
  - Toulouse

INTERNATIONAL REFERENCES
ULTRA-FAST CHARGING STATIONS

ALLEGO
- **First public ultra-fast charging station in Europe** – Kleinostheim, Germany
- In service since December 2017

ALLEGO
- **Germany** – Bernau am Chiemsee
- In service since July 2018

SMATRICS
- **Austria** – Vienna
- In service since March 2018

ENGIE ECO SCHOOLS

PROJECT GOALS:

- support environmental education in schools,
- introduce students to the world of energy and the efficient use of renewable resources,
- actively engage students, pedagogues and ENGIE employees in improving the environment, specifically by planting the trees and greenery in the school yards.

TO THE THREE YEARS OF THE PROJECT WERE INVOLVED:

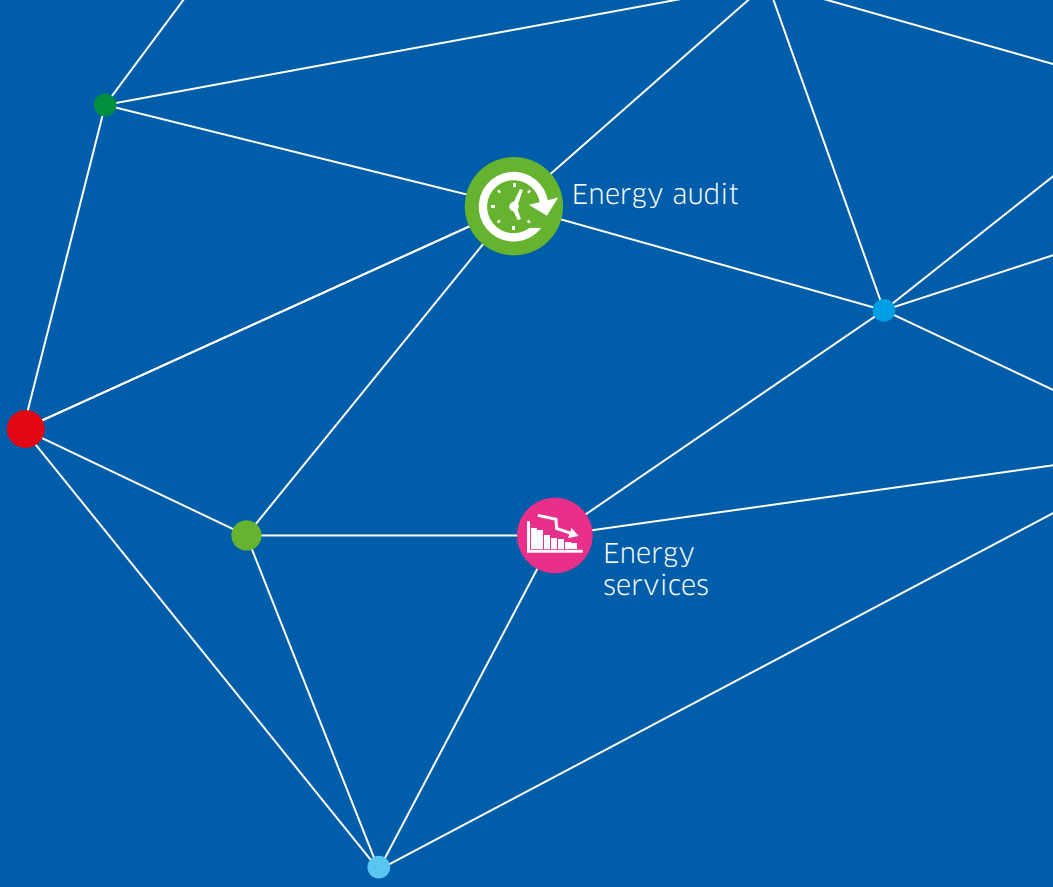
- more than 250 students, pedagogues and pupils from primary schools in cities where the ENGIE Slovakia operates heat management systems: Pezinok, Senica, Malacky, Skalica, Moldava nad Bodvou and the Bratislava city districts – Vrakuňa, Rača and Ružinov,
- 60 employees of the ENGIE Slovakia and volunteers from OZ KOZEL (civil association), Senica.

3 PARTS OF THE PROJECT:

1. **Interactive presentation** through which ENGIE's specialists introduce students the production and distribution of heat, use of renewable energy sources and the world of energy.
2. **Visit to a local boiler plant** combined with an expert explanation and inspection of heat generation equipment.
3. **Planting trees** and greenery in school yards

"Projects such as ENGIE ECO schools have social importance not only for people who are living in the area, but also for all those who are involved – colleagues from ENGIE Group, pupils, students, pedagogues and also volunteers from OZ KOZEL. Thanks to such an activities, we are able to present to children the world of energy, its functioning and the future, we expect in connection with efficient use of energy. It is important to educate children about the environmental topics, to encourage their willingness to learn new things, help others and improve the environment they live in."

František Sás, Director of Energy controlling and support activities deparment, ENGIE Services.



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