

#### **RESIDENTIAL BUILDINGS & HOTEL** JAGERSHORST, GOLDEN TULIP HOTEL\*\*\*\* NETHERLANDS ..... BLUE LAGOON VILLAGE HOTEL\*\*\*\* .10 GREECE ..... PARCUL PRIVIGHETORILOR RESIDENCE ..12 ROMANIA ..... HOTEL OPERA GARDEN\*\*\*\* ..14 HUNGARY ...... ESTALAGEM DOS ZIMBROS HOTEL\*\*\*\* ...16 PORTUGAL .... RAC ANTWERPEN .18 BELGIUM ..... HEALTHCARE & EDUCATIONAL FACILITIES CLINICA RADELFE .22 PORTUGAL ...... ESKULAP CLINIC .24 POLAND..... CAMPUS TOR VERGATA ITALY ..... .26 SWISSMED HOSPITAL .28 POLAND .....

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### HISTORY OF LG ELECTRONICS

#### **LG AE VISION**

LG Air Conditioning & Energy solutions Company is one of the four different business entities in LG Electronics. Using its experience and knowledge through the years in the HVAC industry, LG has demonstrated its commitment to provide its customers with close and valuable support, advice, solutions and services. LG AE is building the foundations of a durable trustworthy relationship with its customers, to become a top leading HVAC and Energy Solution company in the AE market throughout Europe. LG AE promises to "Vitalize you and your environment." Using market-leading, state-of-the-art technologies, LG AE is committed to invigorate its consumers' lives by enriching their living environment. Our residential and commercial air-conditioning and heating flagship products have made LG a world leader in a number of markets, and our new businesses in solar energy and lighting solutions will also have a global impact. We are now positioned to become the "No.1 HVAC and Energy Solutions Company." To ensure the success of this vision, we will continue our steadfast efforts to design comfortable environments for our end users and business partners using state-of-the-art green technologies. LG AE is really proud to present you its success stories around Europe through this catalogue, divided in various applications such as residential buildings & hotels, healthcare & educational facilities; retail & commercial buildings, offices and public facilities. Please do not hesitate to contact your subsidiary for more details about any specific project.

#### **BRIEF HISTORY**

#### **ESTABLISHMENT**

1947 The LG Group was founded1958 LG Electronics Inc was founded

### GROWTH

1968 Manufactured Korea's first air conditioner

1985 Introduced Korea's first inverter air conditioner

1990 Produced rotary compressor

995 Changed company name to LG Electronics

Produced scroll compressor

1998 Produced Korea's first commercial air conditioner

DOO Became world's number one seller of residential air conditioners Developed solution for the world's first

Internet-enabled refrigerator

Introduced the world's first picture frame

2002 Launched the LG HomNet brand of Integrated home networking solutions

2004 Achieved world's highest annual sales in air

conditioners with 10 million units

Reached total global sales of 100 million air conditioners for the first time in the industry

Split off into independent business units as part

of LG Electronics' reorganization

To create B2B-focused business structure, reorganized into five units: residential air conditioning, commercial air conditioning, solution, solar energy and lighting







### **JAGERSHORST** GOLDEN TULIP HOTEL\*\*\*\*

LEENDE I **NETHERLANDS** 

**BLUE LAGOON VILLAGE** HOTEL\*\*\*\*\*

KOS ISLAND I GREECE

PARCUL PRIVIGHETORILOR RESIDENCE

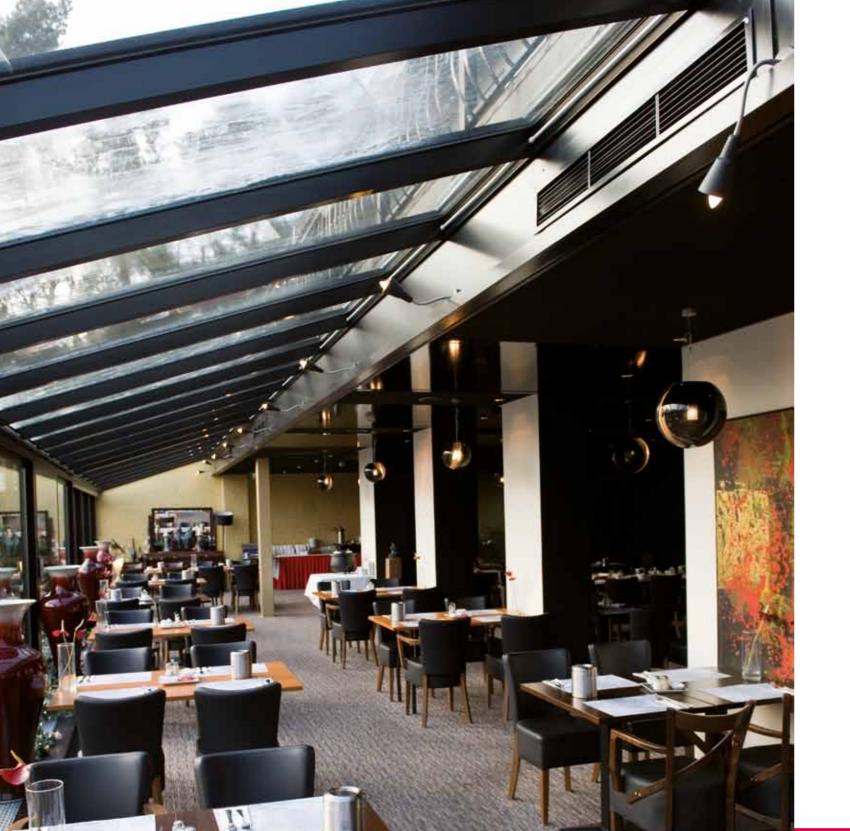
BUCHAREST I ROMANIA

HOTEL OPERA GARDEN\*\*\*\* BUDAPEST I HUNGARY

**ESTALAGEM DOS ZIMBROS** HOTEL\*\*\*\*

SESIMBRA I **PORTUGAL** 

RAC ANTWERPEN ANTWERPEN I **BELGIUM** 



## **JAGERSHORST** GOLDEN TULIP HOTEL\*\*\*\*

This luxurious four-star hotel opened its doors in August 2007 and is situated in the Leenderbos, in rural surroundings with areas of great natural beauty such as De Kempen as well as archaeological sites of interest and other monuments. This new hotel is the perfect place for a weekend getaway, a longer holiday or a business trip.

The hotel has 88 luxurious rooms and suites available as well as an indoor swimming pool, sauna, fitness area, beauty salon and outdoor terraces. Various well-equipped meeting halls are available for conferences and celebrations. The customer needed a comfortable cooling and heating system for both the rooms and the other areas, and was looking for an energy saving system in order to reduce energy costs. LG suggested its Multi V Heat Recovery, as it provides simultaneous heating and cooling with one outdoor unit. The hotel environment is ensured to benefit from optimum conditions regardless of season or space. Multi V Heat Recovery ensures the comfort of all customers and is the best solution for any type of hotel. •

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT

INDOOR UNIT

CONTROLLER

Multi V Sync II

Low static duct, High Static duct, AC Manager











# BLUE LAGOON VILLAGE HOTEL\*\*\*\*\*

KOS ISLAND I GREECE

The Blue Lagoon Village is a newly built luxurious complex with 370 guest rooms of luxury village style construction, most rooms with a sea view.

The 110,000 sq m hotel and garden is at a stone's throw distance from the sandy beach.

The hotel is located only 10 km away from the centre of Kefalos Town, 5 km away from the airport and 30 km away from Kos town, the capital of the island.

Blue Lagoon Village hotel is ideal for families, couples and incentive groups, offering a comfortable and noiseless relaxation experience for adults and a safe playing area for children. There are 5 outdoor pools, a Jacuzzi and a sauna in the hotel. The project was very large, which made central control and management highly complex. The customer was rather concerned about new AC central management, low energy consumption products and high efficiency VRF systems. The system installed by LG consists of duct systems in the rooms with centralised ACP control system and AC manager. •

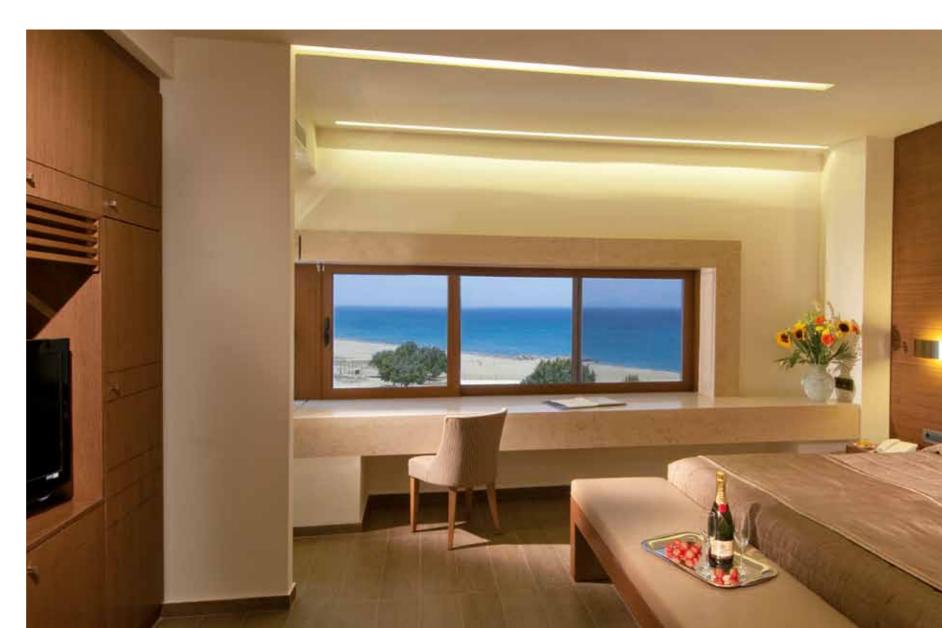
### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT CONTROLLER

122 x Multi V II 730 x Duct ACP & AC Manager















### PARCUL PRIVIGHETORILOR RESIDENCE

**BUCHAREST I ROMANIA** 











Nightingale Park is located up North, in a very well known area for the most dynamic real estate development in Romania. The project area amounts to 4,685 sq m and includes 118 luxury apartments. Nearby you can find the biggest trade centre in Romania, Feeria Park, housing many shopping places.

The Nightingale Park is the result of a fusion between traditional and modern architectural concept. The customer was looking for a reliable and flexible cooling solution. The parking space and green space outside could not be used for the outdoor units while the facade design could not be altered either; thus LG used as little space as possible on terraces for outdoors units. The technical solution provided by LG consists of Multi Split systems with wall mounted indoors. LG Air conditioners are not only designed cooling and heating; our wall mounted stylish ARTCOOL indoors are well known for their innovative design that enriches any home interior. •

### **INSTALLED** SYSTEMS

INDOOR UNIT

CONTROLLER

118 x Multi Split 312 x Wall Mounted





### HOTEL OPERA GARDEN\*\*\*\*

The Opera Garden hotel is located in the centre of Budapest. The building was an old apartment house, and after a complete indoor and outdoor reconstruction the investor worked out a very nice 4 star hotel of 40 rooms for a total of 2,000 sq m.

The outside of the building and the inside court kept the original archive design, contrarily to the rooms inside which are now modern and stylized. Though different, the inside and the outside of the building remain in harmony with each other. The investor was after an energy efficient heating and cooling solution as well as a reliable product. The indoor units design also represented a heavy constraint. The LG system that was suggested and which fitted this project perfectly was the Multi V Heat Pump, and the Multi V Heat Recovery. For indoor units in the hotel bedrooms, LG proposed its Artcool Gallery and Artcool Mirror.

LG creates design-conscious indoor units that compliment any interior decoration. LG has also innovatively improved air flow in order to provide the most silent systems in the world, as well as a more pleasant and convenient indoor environment.

### **INSTALLED** SYSTEMS

OUTDOOR UNIT

INDOOR UNIT

CONTROLLER

7: Multi V Plus II & Multi V Sync II 204 kW

21 x Artcool Mirror, 6 x Floor Standing,

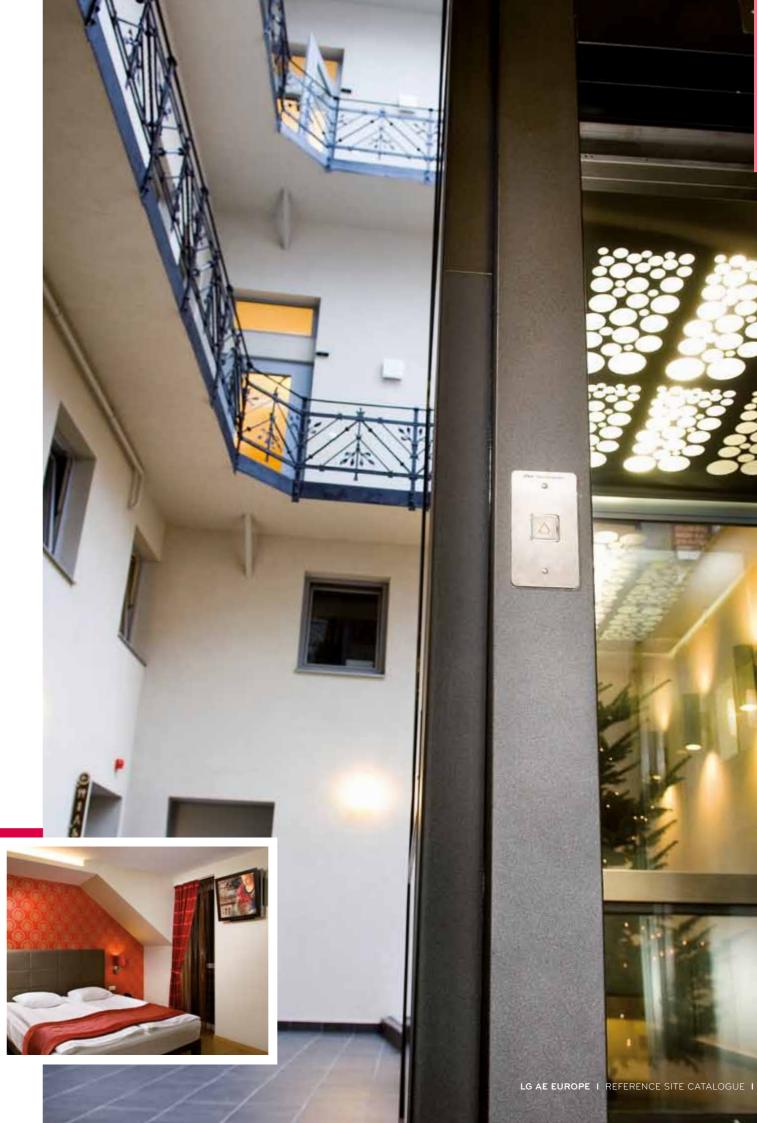
42 x Artcool Gallery, to external BMS











# ESTALAGEM DOS ZIMBROS HOTEL\*\*\*\*

SESIMBRA I **PORTUGAL** 











This four star Hotel is located near "Cabo Espichel" and benefits from a breathtaking natural environment. It was built inside a beautiful garden and is surrounded by the luxurious landscape of Sesimbra. Complete with an outdoor pool and a large terrace with an incredible view on the Atlantic Ocean, this Hotel is only a 20-minute drive away from the Arrábida Natural Park (PNA) which enjoys recognition by the UNESCO World Heritage.

With two suites, 35 rooms and a total of 76 beds, it is decorated in a modern and elegant style and the rooms all open onto private balconies, providing customers with peace and intimacy to enjoy the surrounding natural environment. All rooms are equipped with LG LCDs. This hotel features the AC Smart LG advanced central controller allowing for remote management of all the units from the hotel Director's office. Dry contacts were also installed in all the rooms for on/off key holders. LG supported all AC Smart configurations and training for easy unit identification, monitoring and control. During this project, LG provided all the necessary support from start to finish to ensure end-user satisfaction. •

### **INSTALLED** SYSTEMS

OUTDOOR UNIT

CONTROLLER

Multi V Plus II 115 kW

47: Low static ducts, Wall mounted

INDOOR UNIT

Wall mounted, 4 x Way-Cassettes





LG AE EUROPE I REFERENCE SITE CATALOGUE I

### RAC ANTWERPEN

ANTWERPEN I BELGIUM

The matter was a simple one: the owner of the house had a beautiful place with a stunning interior design. He was looking for an air-conditioning that would fit his style and personality. When the customer saw the indoor unit in an Artcool shop in Breda for the first time, he was blown away.

The owner wanted to give the indoor units a special personal touch, so LG made the coat of arms for him. Actually, the LG Artcool system certainly beautified his place whilst providing him with powerful cooling at the same time. This product is known in the air-conditioning market as world-recognized refined designs. LG can provide solutions to owners and tenants that achieve a comfortable indoor climate, suit the decoration of the home well and are energy efficient, 3 essential requirements of a residential building. With LG's revolutionary customizable Artcool frame, you can simply change the look of your air conditioner to what you want, whenever you like it. The customer can now enjoy a cool breeze from his own personal AC system picture frame. Artcool series with outstanding designs have received the International Forum Design Award, the Reddot Design Award and G Mark.

### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT

CONTROLLER

1 x Multi

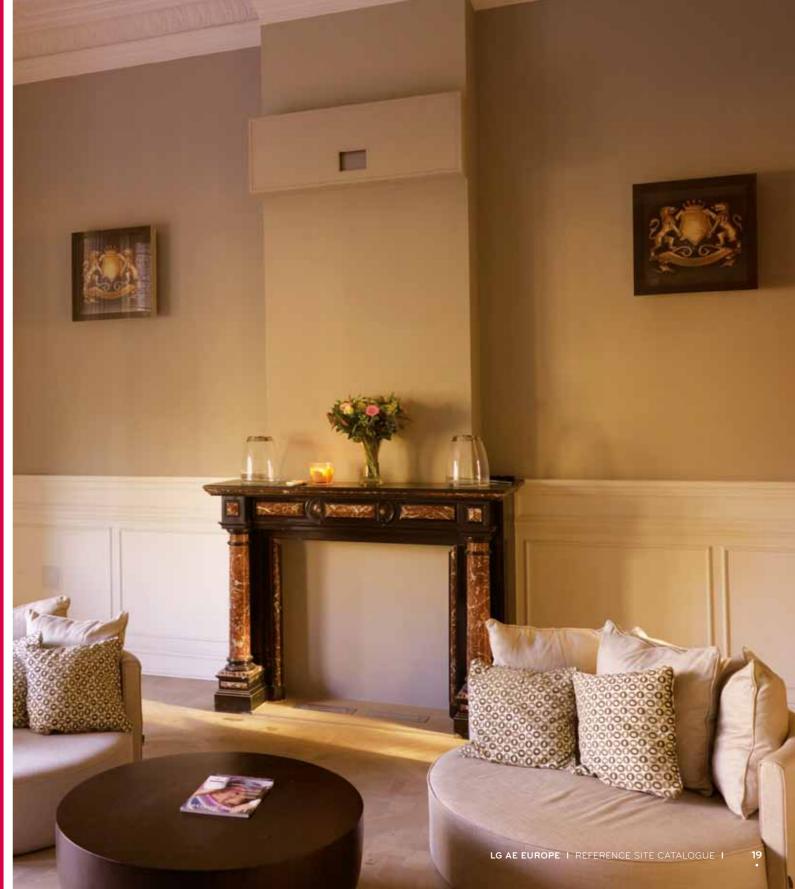
4 x Artcool Galleries With a deluxe













### **CLINICA RADELFE**

PACOS DE FERREIRA I **PORTUGAL** 

### **ESKULAP CLINIC**

ESKULAP I **POLAND** 

**CAMPUS TOR VERGATA** 

ROMA I **ITALY** 

SWISSMED HOSPITAL

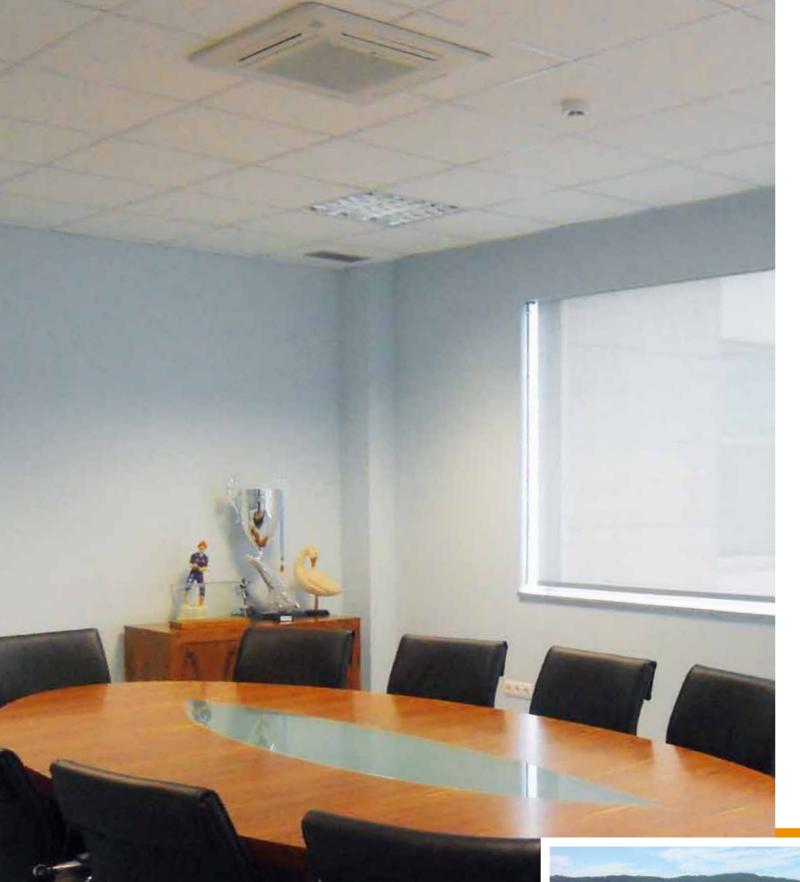
WARSAW I **POLAND** 

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24

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# CLINICA RADELFE

PACOS DE FERREIRA I PORTUGAL



Paços de Ferreira is a young city under transformation. Over the last years, the once rural town consisting of small patches of land and granitic houses has slowly turned into a modern city. The Clinic established in 1982 constituted a challenging new project to provide the North region with one of the biggest Healthcare Facilities. This new Clinic is a revolution in the health sector, fully or partially answering local needs.

This modern unit comprises a basement and 6 floors over a total area of 10,500 sq m, also housing an outpatient department and an operating block besides all the medical specialisations. LG's AC offers comfort through all office rooms, bedrooms, waiting areas, corridors, laboratories and physiotherapy areas. The network control was possible with Deluxe control, one switch and 2 LG Gateways. The control network was integrated into the building network to allow for remote access. The support provided by LG during the project, system installation, later on during the exploration phase and all through maintenance activities conducted with the installer to provide the customer with the best comfort, was considerable. •

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT

cassette, Mural, EcoV

CONTROLLER

Multi V Plus 700 kW 174: Concealed duct, Connected cassette, to external BMS











### **ESKULAP CLINIC** ESKULAP I **POLAND**



ESKULAP is a new and very modern cardiologic clinic located in Bydgoszcz, in central Poland. This privately owned cardiologic clinic is located in a new 4-floor building.

ESKULAP Clinic represents a significant progress in the area of health services in answering local needs.

The owner of the building was highly interested in modern, high-efficiency systems. He therefore changed from a waterborne system to our MultiV III in order to achieve significant savings on electricity consumption.

The LG's MultiV III system offers cooling comfort through all office rooms, bedrooms, waiting areas, corridors, laboratories and physiotherapy areas. Other areas (operating rooms) were equipped with 13 AHU's with the MultiV system as a cooling source. The MultiV III control network was integrated into the BMS system by Lon Works gates to optimize energy efficiency and allow the remote access to all parts of the system. LG provided a significant support during this project, from system installation to startup.

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT CONTROLLER

6 x Multi V III 428 kW 53 x 4 Way-Cassettes

Connected to external BMS









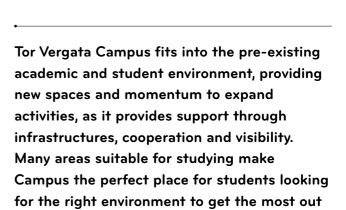
### CAMPUS TOR VERGATA











of their experience at university.

Tor Vergata Campus comprises a wide and modern residential district for students, close to all Tor Vergata University departments, featuring single and double apartments with all the necessary comforts and services. The University wanted to have a cooling and heating system installed in their building. They needed a control solution with BMS based on ACP and AC Manager, which meant that LG had to focus on determining the maximum power consumption inside the rooms with PDI.

The technical solution that was finally provided by LG lies in the flexible installation of the single indoor units. •

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT CONTROLLER

Multi V plus II 3500 kW

Cassettes, ceilling suspended 1600 ID; 2,2/2,8/3,6/4,5 kW

8 ACP + AC Manager





# SWISSMED HOSPITAL

Swissmed Hospital is a new 45-bed, 4,404 sq m multidisciplinary hospital open to every patient. Swissmed Hospital is a polish-swiss company that offers high-quality medical services. This is the second medical facility of the company in Poland, located in Warsaw.

The customer required LG to deal with the cooling and heating of the hospital using VRF systems. It is the first hospital in Poland to be equipped with air conditioning units from LG.

In order to comply with the polish law, written authorization from the National Institute of Health allowing the use of equipment working in recirculation in patients' rooms was required and obtained.

The air conditioning systems were selected so that the maximum concentration of refrigerant in the smallest room does not exceed 0.44 kg/m3 volume.

LG provided Swissmed hospital with a high quality installation of air conditioning systems based on 4 x Way-Cassettes, ducts and wall mounted indoor units.

#### **INSTALLED** SYSTEMS

**OUTDOOR UNIT** INDOOR UNIT

CONTROLLER

8 x Multi V III 282 kW

(Total 75) Wall Mounted, 4 x Way-Cassettes



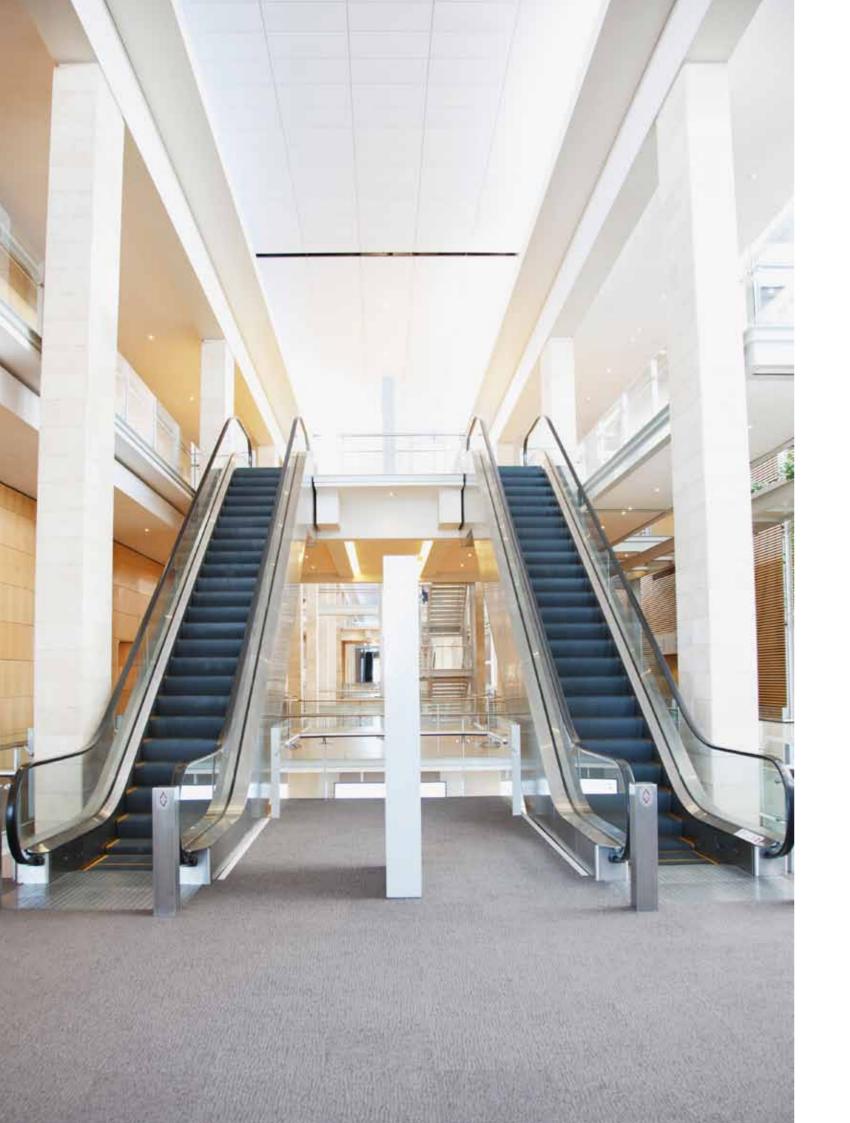












### **NAC STADION**

BREDA I **NETHERLANDS** 

**CASHPOINT** 

VIENNA I **AUSTRIA** 

**PUNTO COM** SHOPPING CENTRE

CAMPODIPIETRA I **ITALY** 

**CEC BANK** 

GALATI I **ROMANIA** 

SOCAR GAS STATION BOTOSANI I ROMANIA

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### NAC STADION

BREDA I **NETHERLANDS** 



NAC Breda, known as NAC, is a Dutch professional football club, based in Breda, Netherlands. NAC won one national title in 1921 and won one Cup in 1973. NAC was founded on September 19th, 1912, when the two clubs, ADVENDO and NOAD, merged into one.

The matter arose from the business club of NAC Breda. In the VIP room after the game, the temperature was rising, so Air Group installed air-conditioning in this room in 2008. After this project, the NAC members were so satisfied with their system that in 2009, Air Group went back to install air conditioning in the players' area and in the restaurant which is also in the stadium. The installed system was the Multi V Heat Pump and the Multi V Heat Recovery. The MULTI V Inverter system offers one of the world's largest capacity units, essential for high-rise buildings together with high energy efficiency. The LG system will ensure the highest level of customer satisfaction. Now every visitor can enjoy a cold drink in a nice temperature, in air-conditioned rooms at an optimized energy cost. •

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT

INDOOR UNIT

CONTROLLER

Multi V Plus II & Multi V Sync II 120 kW

High static ducts, 4 x Way-Cassettes



Ability to cool and/or heat









### **CASHPOINT** VIENNA I AUSTRIA

Cashpoint was founded in 1996 and has since earned the right to be referred to as one of the leading providers in the sports betting and entertainment industries. Betting shops, terminals and an online platform provide extensive market coverage for a broad target group.

The customer wanted an all year round efficient heating and cooling system. The technical solution provided by LG is the highly efficient H Inverter system. The installer who won the project is committed to LG and the quality of their systems. He therefore suggested LG to Cashpoint. LG has since furnished several branches of Cashpoint betting shops across Austria. The systems are highly efficient and perfectly fit for the modern architecture of the shops. The USP of the cassette type is that the exhaust openings are individually adjustable and so contribute to a better atmospheric environment.

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT

INDOOR UNIT

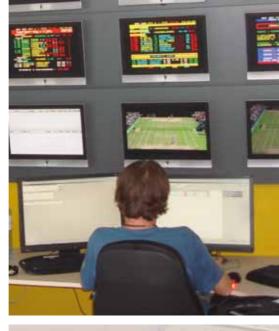
CONTROLLER

35 x single split H inverter & 1 x Multi Split

34 x Cassettes 3 x High static ducts





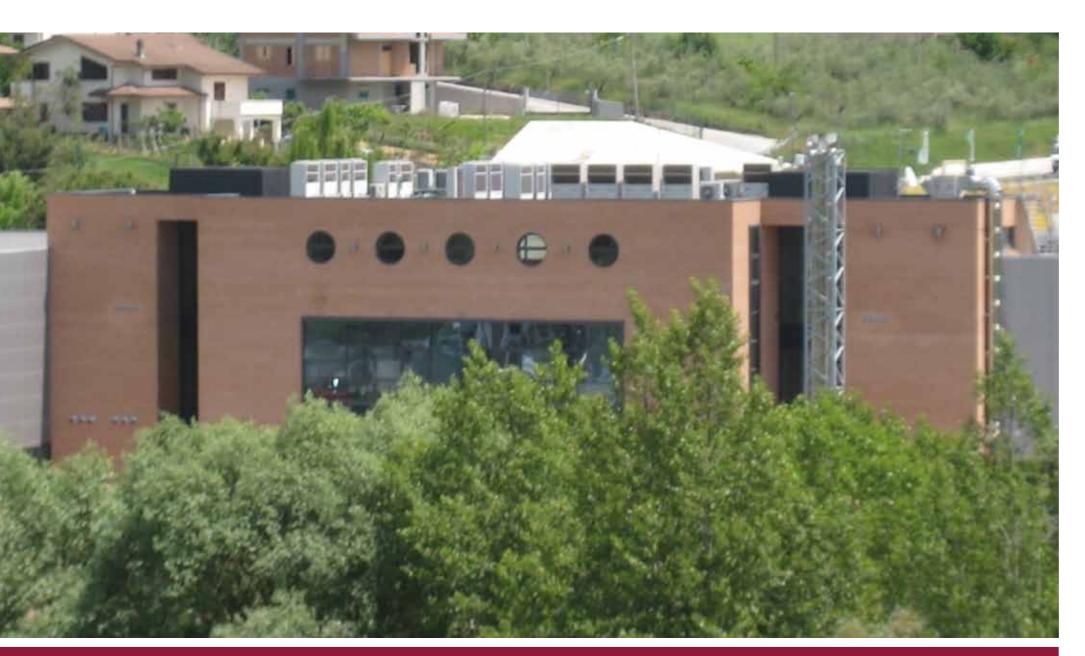








### PUNTO COM SHOPPING CENTRE











The PUNTO COM shopping and fitness centre is located about 3 km away from the urban centre of the city, in the municipality of Campodipietra near Campobasso. The structure is characterized by 4 floors. The lower floors are used mainly for sports activities, recreational and commercial activities. The top floor is used mainly as parking space. This floor also houses the offices .

The customer needed a heat pump system that would meet different needs to ensure comfort for the various users of the structure.

Because they are used differently, each floor has its own independent air conditioning system. The outdoor units were gathered around the riser hole on the roof to minimize the development of a distribution line.

Different needs were therefore met by LG with a system of heat pumps and heat recovery ventilation for the renewal of the primary managed by a centralized control. •

### **INSTALLED** SYSTEMS

OUTDOOR UNIT

INDOOR UNIT

CONTROLLER

MultiV Plus II 700 kW

ceiling suspended, EcoV

78 x Cassettes, ducts, AC smart II





LG AE EUROPE I REFERENCE SITE CATALOGUE I

# CEC BANK GALATI I ROMANIA



CEC Bank is a competitive universal commercial bank with the ability to offer diverse and high-quality banking products and services to its clientele, focusing mainly on financing SMEs, agriculture, public administration, as well as those banking projects that, through their nature, contribute to the economic development, generate new jobs and provide better job security.

CEC bank has the biggest national coverage between all financial players in the market with over 1000 outlets. CEC Bank decided to renovate and rebrand all their bank offices, following their new branding philosophy. They discussed the matter with LG and the main objective for LG was to redesign HVAC equipment for each outlet customizing by size, needs and location. Here under there are two examples of the installation of the outlets of CEC Bank. Multi V Heat Pump was chosen to serve bank offices, because of the latest technology and features deployed by LG outdoor units. 4 x Way-Cassettes, wall mounted, and high static duct were selected for the indoor units of each branch. The 4 x Way-Cassettes was chosen as its installation does not require any room space.

### **INSTALLED** SYSTEMS

OUTDOOR UNIT

INDOOR UNIT

UNIT CONTROLLER

Multi V Plus II 110 kW 22: 4 Way-Cassettes, wall mounted, High static duct



Latest technology providing intelligent climate control Wide range of indoor types to fil into each concept High reliability in cooling and



Easy to design and wide operation zone Intuitive installation procedure and smart software cross checking solution Commissioning support from local LG subsidiary







### SOCAR GAS STATION

**BOTOSANI I ROMANIA** 











The State Oil Company of Azerbaijan Republic (SOCAR) is the state-owned oil and natural gas corporation of Azerbaijan. It is considered to be one of the largest oil companies in the world, having well known oil networks as their clients. SOCAR ranks 68th among the largest companies in the world and is worth \$20 billion. Today the company owns gas stations in Azerbaijan, Georgia, Ukraine and Romania.

SOCAR has over 14 gas stations in North Romania. The gas stations are located in the northeast of Romania near the border with the Republic of Moldova. The main objective of this project was to provide cooling and heating for all the gas stations especially for indoor open space (shop, cafeteria, offices) and LG was chosen to supply its AC equipment. An essential aspect required by SOCAR was equipment reliability because gas stations are open 24 hours/day all year round and have no alternative heating source. •

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT

CONTROLLER

MultiV III, MultiV Mini

4 x Way-Cassettes, Ducts, Wall mounted



gas or GPL for heating



2011 technology in a high tech n the most unfriendly weather



### **BAUER ENERGY**

KRISTIANSAND I **NORWAY** 

RIVAS FUTURA MADRID I SPAIN

HANKOOK DORMITORY
RACALMAS I HUNGARY

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JTI LAS PALMAS

LAS PALMAS | CANARY ISLAND | **SPAIN** 

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AMADA TECHNICAL CENTRE PONTENURE I ITALY

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JET OIL HEAD OFFICE KIFISSIA I GREECE

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JEFATURA POLICIA

SEVILLA I **SPAIN** 

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KRISTIANSAND I **NORWAY** 

The building is a new warehouse with offices located in Kristiansand, Norway. The total size of the building is 2,500 sq m, and the total area heated by LG is 1,100 sq m. The Outdoor units had to be placed on the roof of the building.

**BAUER ENERGY** 

The customer needed a complete heating and cooling system to be fitted and LG suggested an efficient combination of solutions to Bauer Energy, which consisted of the Multi V Heat Recovery and Air to Water Heat Pump products. The Multi V Heat Recovery was chosen due to the need to heat some parts of the building at the same time as other parts of the building needed cooling. The system has worked perfectly even when the temperatures went below - 20° Celsius. The Air to Water Heat Pump has been used as floor heating on the first floor of 500 sq m, and there again, the system has been flawless since it was mounted. Both products controlled with AC Smart were a perfect solution for Bauer Energy.

In one year, the building only used a total of 199,461 kW.h, which is extremely good for Norway and gives this building a very good environmental grade. •

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT

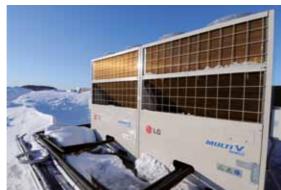
CONTROLLER

Multi V II Sync 80 kW ThermaV 16 kW

+ one EcoV

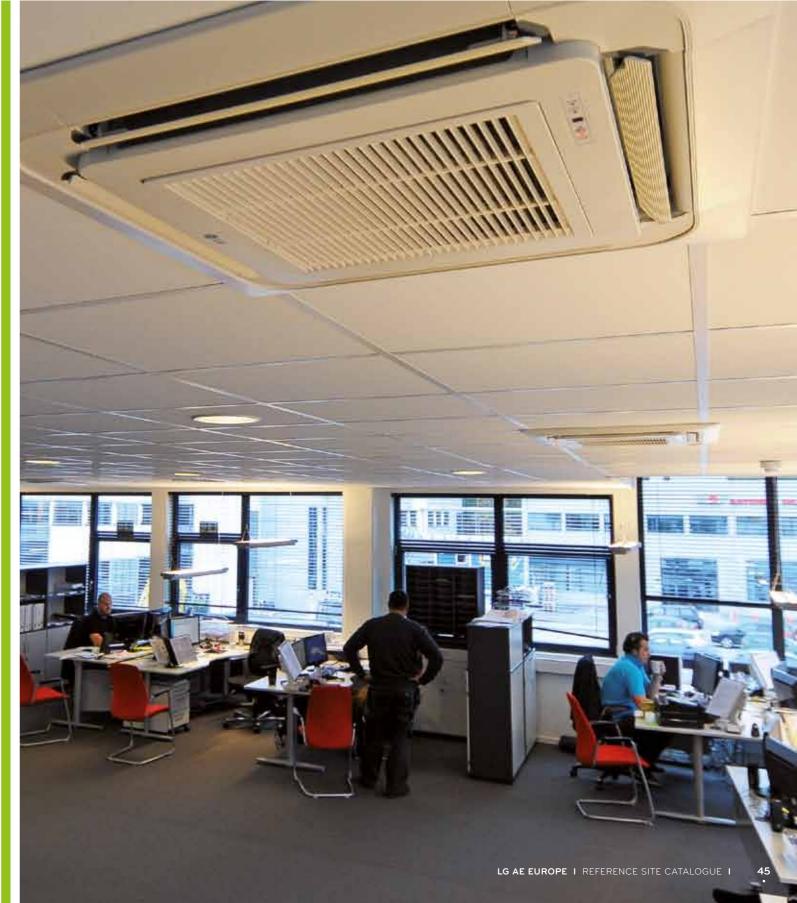
43: Celling cassettes AC smart II





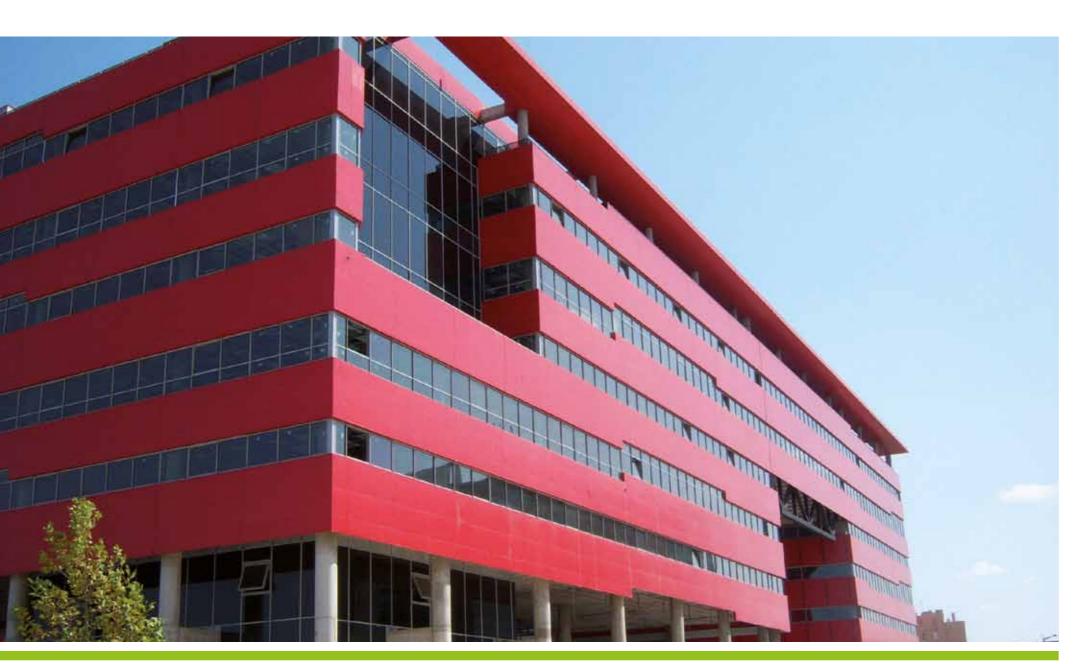






### RIVAS FUTURA

MADRID I **SPAIN** 











The project is located in Rivas, 17 km away from Madrid. It is a new office development of 45,000 sq m, in a prime position just opposite Chapman Taylor's Rivas Futura shopping and leisure park. The eco-friendly offices are situated around a central square softened with sparkling water features and trees which compliment the dynamic forms of the architecture.

The offices were air conditioned with LG concealed duct product. Multi V Heat Recovery was chosen to provide a simultaneous heating and cooling mode. Power Distribution Indicator (PDI) was used to mesure independent power consumption. The business owner needed a PDI in order to rent the offices to different companies.

It was important to provide a reliable and user-friendly Control Management system and the ACP controller was therefore chosen.

Besides, the use of ACP allows the user to control the units remotely through web access. •

### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT CONTROLLER

162 x Multi V Sync 1022 x Ducts 6 ACP + AC Manager + PDI



Control management, price, comfort



LG AE EUROPE I REFERENCE SITE CATALOGUE I

# HANKOOK DORMITORY

RACALMAS I HUNGARY



The Korean Hankook Tyre manufacturer built its first Hungarian factory in Dunaújváros in 2007 near Budapest, where the required cooling system was provided by LG. Besides the factory, the facility was extended to comprise a dormitory called "Hankook Haus" in 2011.

The aim of the investors was to satisfy their employees, providing them with a comfortable solution to their daily commute between work and home. The new building has over 250 rooms available. An energy-efficient heating and cooling solution was essential since the dynamic and modern style of this building resembles that of a hotel.

In order to meet the design and compliance requirements, the rooms were fitted with ducted indoor units, while the common areas were equipped with 4 x Way-Cassettes and wall-mounted type indoor units. The dormitory has ACP, AC Manager Central Control System, controlling all the 364 indoor units. In order to comply with design requirements, the outdoor units were carefully hidden on the roof.

### **INSTALLED** SYSTEMS

OUTDOOR UNIT

INDOOR UNIT

CONTROLLER

Multi V III 1000 kW

364: Low Static

ACP + AC manager

4 x Way-Cassettes, Wall Mounted









### JTI LAS PALMAS

LAS PALMAS | CANARY ISLAND | SPAIN













The reference site is the office of JTI (Japan Tobacco International) in Las Palmas in the Canary Islands. JTI is an import company of tobacco brands and their offices are located in one of the two towers that form the large shopping centre called Centro Commercial Las Ramblas.

They cover about 2,500 sq m and are split over two floors.

The consultant wanted a high efficiency air conditioning system that could be connected to the existing water loop of the shopping centre. They also needed a system to control humidity because of their location so near the sea, and they therefore chose to install Eco-V systems. Finally, their main concern was to dispose of centralised air conditioning management which is why they also chose AC Smart II. The complete HVAC system is managed by means of an AC Smart touch display control equipment, which is also intended to manage and reduce the total energy consumption of the system. •

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT CONTROLLER

8 x Multi V Water 224 kW

60 x High Static Ducts AC Smart II + EcoV



High efficiency system, less power consumption
Minimum space location Multi V Wate Easy control management



asv installation

LG AE EUROPE I REFERENCE SITE CATALOGUE I

### AMADA TECHNICAL CENTRE

PONTENURE I ITALY

The Japanese multinational Amada, a market leader in the production, marketing and installation of machinery for sheet metal work, chose the area near Piacenza for its new Italian headquarters. The office building is characterized by a gross floor area of 5,400 sq m. The showroom and a warehouse are located near the office".

The design is based on a now well established solution which consists in providing traditional systems for the management of common areas and areas of greater difficulty in controlling humidity, and the VRF system for office areas, where compliance with thermal parameters prevails over hygrometric ones. The response speed of the Multi V product is the most appropriate solution to rationalize the energy consumption induced by the heating and cooling of those areas. These solutions were chosen to meet Amada's expectations which are energy saving and environmental protection: a genuine corporate philosophy.

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT

CONTROLLER

Multi V Plus & Multi V Plus II: 700 kW

172: 4 Way-Celling AC smart II cassettes, 11: High Static Ducts















### JET OIL HEAD **OFFICE** KIFISSIA I GREECE



JETOIL is a purely Greek family business founded in the late 60's, for the storage, distribution and marketing of petroleum products in Greece and the Balkans. Today the company is one of the largest oil companies in the Greek market with a network of about 600 gas stations. Its head office recently moved to a new office area of 7,500 sq m in Kifissia, a northern suburb of Athens, a modern & high standard building equipped with on-the-edge technological systems.

The installed system consists in heat pumps with variable refrigerant flow (VRF), the LG Multi V Heat Pump product. The complete air conditioning and ventilation solution by LG ensures a high level of comfort in office premises, while achieving maximum energy savings. Moreover, LG provided an integrated BMS system (Building Management System) for this project. This system provides the ability to monitor and control the operation of air conditioning units in real time and provides a variety of control options such as adjustable air conditioning and programming depending on the needs and the office hours of the corporation, synchronization with the ventilation of rooms or even the shutdown of the system if necessary.

E3 E3

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT CONTROLLER Gateway BNU-BN (BACNET) 26 x Multi VII 136: Cassettes &









# JEFATURA POLICIA

SEVILLA I SPAIN

The reference site is the police headquarters of all southern Spain located in Sevilla, Andalucia, also known as Jefatura provincial de Sevilla. This is consequently the biggest police station in the area and covers a surface of 8,000 sq m. The end-user is the national police who belong to the central government.

The customer, the Jefatura provincial de Sevilla, decided to replace its old air conditioning system by a more efficient one and chose to implement the LG Multi V Heat Pump. With the Multi V III system, the energy consumption of the newly installed equipments is 50% less than the previous system. The building has an air handling unit, which is controlled by LG's AHU Communication and EEV Kits in order to reduce the energy consumption. The management of the total HVAC system is done by means of touch display control equipment called AC Smart, also intended to manage and reduce the total energy consumption of the system.

#### **INSTALLED** SYSTEMS

OUTDOOR UNIT INDOOR UNIT CONTROLLER 26 x MultiV Plus 1014 kW 167: 1 Way-Cassette & Ducts 1 AC Smart II + Expansion Kit















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