

BEAD – YOUR SMART ENERGY MANAGER

**Sustainable Energy
Efficiency Projects**

Case Studies



Project OFFICE BUILDING

Property

The office building is located at Istanbul. The building is used as HQ of Insurance company.

- 26 floors
- Floors are between 1.000-2.000m2
- Total size of the building is 45.000m2
- Annual Energy consumption is 210.000 USD.
- Energy Efficiency target is 20%

Project Measures

- Real time energy consumption monitoring
- Energy consumption analysis according to occupancy changes
- Analysing day-cycle of the building
- Ventilation and lighting analysis during the day.
- HVAC system optimization according to real time data that BEAD provides
- Optimization of the operations during the day
- Real time energy analysis reporting
- Predictive analysis for budgeting the energy costs
- Energy profiling for Renewable energy investments
- BMS system optimization
- Human-less operation of the building with BEAD AI
- Change of the old HVAC units

Installation

- 520 BEAD IoT devices
- 26 Energy Power Meters
- Analysing day-cycle of the building
- 26 Communication modules for HVAC (heating/ventilating/air conditioning) systems
- Energy Management and Analysis Software
- Retrofit of HVAC

Investment

- 150.000 USD for all locations
- 25.000 USD Installation

Total Investment:
175.000 USD

Savings after 2 years

- Energy Savings:
42.000 USD
- Operation Optimization:
10.000 USD

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Project HEALTH CLINIC

Property

The Clinic is a German chain is operating for over 10 years in Turkey

- 26 branches across Turkey
- Stores are between 500-1.000m²
- Annual Energy consumption is 80.000 USD.
- Energy Efficiency target is 25%

Project Measures

- Real time energy consumption monitoring
- Energy consumption analysis according to occupancy changes
- Analysing day-cycle of the building
- Ventilation and lighting analysis during the day.
- HVAC system optimization according to real time data that BEAD provides
- Optimization of the operations during the day
- Real time energy analysis reporting
- Predictive analysis for budgeting the energy costs
- Energy profiling for Renewable energy investments
- BMS system optimization
- Human-less operation of the building with BEAD AI
- Change of the old AC units

Installation

- 100 BEAD IoT devices
- 20 Energy Power Meters
- 50 Communication modules for HVAC (heating/ventilating/air conditioning) systems
- Energy Management and Analysis Software
- 30 A++ AC units

Investment

- 48.000 USD for all locations
- 5.000 USD Installation

Total Investment:
53.000 USD

Savings after 2 years

- Energy Savings:
20.000 USD
- Operation Optimization:
5.000 USD

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Project SUPERMARKET

Property

The supermarket chain is operating for 20 years in Turkey.

- 500 branches across Turkey
- Stores are between 500-8.000m²
- Annual Energy consumption is 25 Mio. USD.
- Energy Efficiency target is 20%

Project Measures

- Real time energy consumption monitoring
- Energy consumption analysis according to occupancy changes
- Analysing day-cycle of the building
- Ventilation and lighting analysis during the day.
- HVAC system optimization according to real time data that BEAD provides
- Optimization of the operations during the day
- Real time energy analysis reporting
- Predictive analysis for budgeting the energy costs
- Energy profiling for Renewable energy investments
- BMS system optimization
- Human-less operation of the building with BEAD AI

Installation

- 10.000 BEAD IoT devices
- 1.500 Energy Power Meters
- 5.000 Communication modules for HVAC (heating/ventilating/air conditioning) systems
- Energy Management and Analysis Software

Investment

- 1.350.000 USD for all locations
- 250.000 USD Installation

Total Investment:
1.600.000 USD

Savings after 2 years

- Energy Savings:
5.000.000 USD
- Operation Optimization:
250.000 USD

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