Project

Replacement of lighting fixtures in the production and administrative part of the Petrich plant

Project Steps
1. Calculation of the illumination of the production hall and administration;
2. Supply of necessary materials and lighting equipment - LED;
3. Modification of the existing lighting system;
4. Installation of luminaires.

Savings
- 64 855 kWh/a el. energy
- 513 t/a CO2 emissions
- 1,25 years payback

Company
ABB Bulgaria EOOD - local branch Petrich

ABB has five branches in the country. ABB’s second production facility in Petrich was built in 1995 on a total area of 5 000 square meters. The main activity of the company is the production of electrical switches, switchboards, including welding/ wiring/ assembly, system components for high and medium voltage electrical systems. The other two branches are located in Petrich - for low voltage products, and in Sevlievo - for high voltage products. ABB also has a transformer service center in Varna.

Operating through four major businesses - Power Supply and Electrical Equipment, Protection, Robust and Digital Information and Energy Networks - ABB Bulgaria successfully participates in projects for the national energy system, the development of charging infrastructure, and public transport projects. ABB operates in over 100 countries and employs over 147 000 employees.

* payback - the value is subject to change due to the current bidding period

Project

Replacing a Skoda Superb diesel car with a Hyundai Kona Electric car

Project Steps
1. Electric vehicle market research;
2. Choice of the best electric cars;
3. Comparison of technical and price parameters;
4. Choosing an electric car;
5. Test of the selected model of electric vehicle in real urban conditions;
6. Calculations and comparative analysis.

Savings
- 1 207 294 mg. NOx emissions
- 5 296 BGN yearly
- 1 month payback

Company
ABB Bulgaria EOOD

ABB has over 2 800 employees in Bulgaria and operates a headquarters in Sofia and five branches of the company in the country. Two of the production facilities are located in Rakovski and produce low and medium voltage electrical components, while the other two branches are located in Petrich - for low voltage products, and in Sevlievo - for high voltage products. ABB also has a transformer service center in Varna.

Dynamics Lab Ltd is an innovative solution provider of practical business training and coaching programs. Through the use of experiential learning tools, teams gain a competitive edge by significantly strengthening their understanding of teamwork, leadership, and development-related challenges. The company’s development program is focused on practical results and is driven by a unique experiential approach and brought to life by a qualified and experienced trainer.

Main advantages of Dynamics Lab Ltd.:  
- Experiential Learning tools;  
- Practical exercises and models;  
- Content and design customization;  
- A delivery process that actively engages participants and drives sustainable results;  
- Assessment and benchmarking of training areas before and after the training execution;  
- Result-oriented solutions;  
- Quality in materials and design.

Project

Replacing company office space lighting with energy efficient LED lighting.

Current, the office has 12 lights of 60W, which after the project will be replaced by 12 LED lamps of 15W. This will result in significant energy savings and costs saving.

Savings
- 1 154 kWh/a el. energy
- 912 kg/a CO2 emissions
- 1,7 years payback

Company
Dynamics Lab Ltd.
Team
Tsvetomir Gerasimov (Mechanical engineer)
Mentor: Lyubomir Gerasimov (Mechanical engineer)

Project
Additive Manufacturing/ 3D printing in the optimization of the molding process used to produce composite parts.

Savings
- 97% reduction in the amount of material thrown away
- 61% less CO2 emissions

Company
Dronamics Ltd. is a Bulgarian startup company in the field of aviation logistics.

Our mission at Dronamics is to democratize speed in the form of same-day delivery even to the most remote locations.

Team
Planina Kirov (Business administrator)
Ani Ivancheva (Chemist)
Ina Karova (Sustainable communities, Sustainable transport and mobility)
Daniela Kostova (Energy auditing and energy management in buildings)
Peter Krayov (Energy auditing and energy management in buildings)
Mentor: Milena Agopyan (Sustainable management and modelling)

Project
Energy Monitoring and Management System at Energy Agency – Plovdiv

Project description
In order to reduce some of its electricity costs, the Energy Agency – Plovdiv is introducing a real-time energy management and monitoring system. The system monitors the energy consumption of 10 workstations, office equipment, lighting and air conditioning.

It is equipped with an electronic interface for individual and automatic control of the equipment and it is possible to determine operating modes, such as hours, when the lighting is not active.

Savings
- 426 kg/a CO2 (for 2019)
- 2 221 kg/a CO2 (for 2020)
- 3 years payback

Company
Energy Agency of Plovdiv is a science-based organization developing and implementing technical, environmental and social innovations in the field of EE&RES, energy efficient engineering solutions, advanced renewable biofuels and materials. The activities of EAP cover: energy and environmental modelling, development and planning at local and regional level, energy and environmental analyses, emission inventories, energy auditing and modeling, optimization of the molding process used to produce composite parts and services.

Team
Martin Ganchevski (Technical safety engineer)
Asen Romanov (Technician manufacturing structures, environmental protection)
Lyubomir Georgiev (Electronics engineer)
Dimiter Dimitrov (Electronics engineer)
Mentor: Yordan Nedelchev (Head of safety and environmental protection department)

Project
Optimization of compressed air production at Liebherr-Hausgeräte Marica EOOD

Project description
Replacement of drinking water dispensing systems located in over 20 locations in Overgas Head Office building, as well as plastic mineral water bottles offered during meetings and events, with filtration systems powered by the water supply network. The project aims at perpetuating the use of single-use plastic products, reducing the carbon footprint resulting from water supplies, and improving the quality of drinking water for company employees.

In the long term, with successful implementation and positive results, the effect can be multiplied by the introduction of systems in the offices of companies throughout the country.

Savings
- 10 800 pc. plastic bottles (0.5l.)
- 2,23 t/a CO2 emissions
- 7 months payback

Company
Overgas Mrezhi AD SPARK Fitness & SPA is the largest Bulgarian private gas company. The company was established in 1991 and is the only company in Bulgaria to produce and distribute natural gas to end users.

The purpose of our activity is to develop a comprehensive approach to sports activities involving members of the whole family. From babies, children to adults. In addition to sports, this approach also includes various trainings and seminars for information, literacy and training in physical activities, training seminars on healthy nutrition, psychology for children and parents, social activities with a sports orientation.