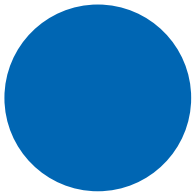


LARGE ENTERPRISES



Julian San Mateo

*Energy efficiency on
lighting improvement of
automotive industry*

Company:

**CONTINENTAL AUTOMOTIVE
SPAIN, S.A**

Spain

Products/Services:

Automotive

No. of employees:

600

● Energy concept description ●

Optimization from the point of view of energy efficiency of the lighting system of the two warehouses of the plant, warehouse of raw material and finished product.

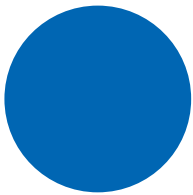
Both warehouses have an area of 1 500m² and 70 halogen-type luminaries with a unit consumption of 400w.

The project consists in designing a lighting system of lower consumption based on the installation of LED luminaries and automatic ignition systems by presence and twilight detectors.

● Results ●

Form of energy	Electrical power
Energy saving potential	193 MWh/a
Cost saving potential	38 000 EUR/year
CO ₂ – saving potential	56 t/a
Project total costs	30 000 EUR
Return of investment	1.6 Years

LARGE ENTERPRISES



Andrés Segovia

Heat recovery in the process of making “dulce de leche”

Company:

MASTELLONE HNOS

Argentina

Products/Services:

Dairy products

No. of employees:

3 500

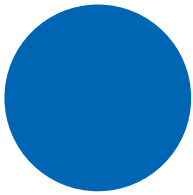
● Project description ●

The proposal consists of the recovery and use of the heat lost in the process of making “dulce de leche”. The preheating of the syrup that enters the pails with the heat provided by the sweet that comes out of them, through an intermediate fluid is proposed, achieving savings in the consumption of heating steam, a reduction in the consumption of cooling water and the reduction of cooking time in the pails and the consequent increase in productivity.

● Results ●

Energy saving potential	1 018 MWh/a
Cost saving potential	35 000 EUR/year
CO ₂ – saving potential	267 t/a
Project total costs	48 400 EUR
Payback period	2.2 Years

LARGE ENTERPRISES



Peter Scheer

Reduction of load peaks by using a storage battery fed by PV

Company:
Rewe International AG
 Austria

Products/Services:
Food retail market

No. of employees:
42.800 (in Austria)

● **Energy concept description** ●

Aims
 Reduction of load peaks in stores of at least 10 kW as well as covering a part of the yearly power consumption through a PV-system.

Base situation
 An average store has an usage of about 284 000 kWh of a yearly power consumption and a monthly load peak up to 80 kW.

Optimization potentials / weak points
 The load peaks occur in the early morning. Around this time it is not possible for them to be reduced by using only the PV-system.

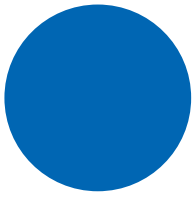
Proposals of solution / Optimization possibilities
 Additionally to the PV-system a storage battery is going to be installed. This will charge the PV-system during the off-peak period.

Effects
 Through the PV-system up to 15% of the electricity purchase from the grid through renewable energy can be replaced and an additional load peak of 10 – 15 kW can be reduced. These measurements can be carried out in many locations in Austria. The potential is estimated with 250 locations.

● **Results** ●

Form of energy	Electrical power
Energy saving potential	8 750 MWh/a
Additionally through Energy project installed renewable Energy	35 x 250 MWp
Cost saving potential	1 037 500 EUR/year (cost reduction for power consumption and peak load)
CO ₂ – saving potential	1 164 t/a
Project total costs	6 975 000 EUR
Payback period	6.7 Years

LARGE ENTERPRISES



Martin Vrba

Reducing the energy intensity of ceramic sludge drying by utilizing the waste heat of flue gases from gas kilns in the spray dryer

Company:

LASSELSBERGER, s.r.o.

Czech Republic

Products/Services:

Wall and floor tiles

No. of employees:

1 570

● Project description ●

The production of ceramic wall and floor tiles is a very energy-intensive process. It requires high consumption of electricity and especially high consumption of natural gas.

The subject of the project is utilization of the energy potential of flue gases from burning gas kilns for optimization of the ceramic sludge drying process in the spray dryer at the RAKO 3 plant of LASSELSBERGER, s.r.o. The project will save the primary energy - natural gas. The intent is to use waste heat from the gas kilns and thereby reduce the consumption of natural gas in the spray dryer. The proposed measures will use waste energy from the end of the production process back at the beginning of the production process.

● Results ●

Form of energy	Natural gas
Energy saving potential	8 900 MWh/a
Cost saving potential	160 000 EUR/a
CO ₂ – saving potential	1 800 t/a
Project total costs	1 030 000 EUR
Payback period	5.0 Years