

STRABAG PROPERTY AND FACILITY SERVICES SP. Z O.O.

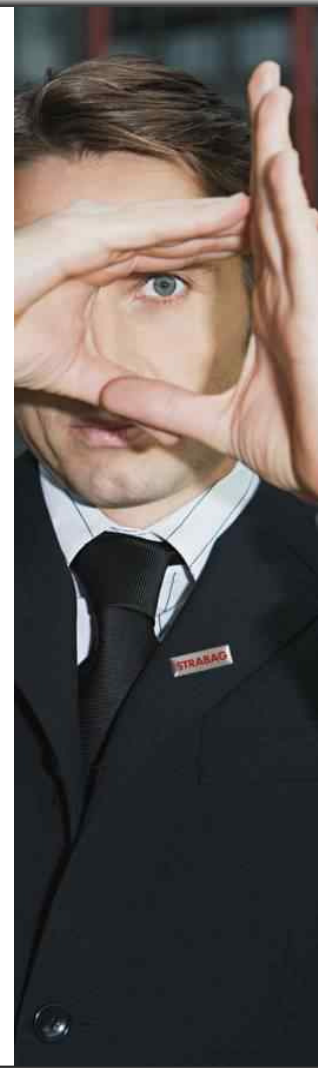
Media optimization actions in Hotele Warszawskie SYRENA Sp. z o.o.

SUMMARY

STRABAG

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PORTFOLIO HOTELI WARSZAWSKICH SYRENA SP. Z O.O.



MDM Hotel



Polonia Palace



Metropol Hotel

Hotele Warszawskie SYRENA

Technical maintenance provide by
STRABAG
Property and Facility Services

SCHEDULE OF ELECTRIC ENERGY CHARGES

Hotele Warszawskie Syrena; Energy deliverer: RWE Stoen

Hotel	MDM	Polonia Palace / Metropol
Charge	C21	B22
Previous price PLN/MWh	306,00 zł	274,00 zł
New price PLN/MWh	273,00 zł	254,00 zł
Difference in profit in percentage	11%	7%
Saving in PLN/MWh	33,00 zł	20,00 zł
Forcasted annual saving	<u>50.000 zł</u>	<u>116.000 zł</u>



RESULTS OF PEAK POWER ANALYSIS IN HOTELE WARSZAWSKIE

Syrena Sp. Z O.O.

MDM Hotel has two main terminals and one stand-by terminal.

Main terminals are:

- Switching station for tenants (contracted power 230 kW)
- Hotel switching station (contracted power 190 kW)
- In winter months (December – March) in hotel switching station **contracted power is exceeded**
- This is because of **heating** by **electric energy** of „U Szwejka” open-air restaurant
- Effect of such solution was, that the ordered power was **exceeded** in heating months, and **additional charge** was in amount **5.527,50 PLN**
- In **2009 9.359,00 PLN**
- By reason of necessity of **temporary** isolation of tenant „U Szwejka” circuit there was no possibility to execute a meter circuit of load control in **MDM hotel**.
- **Compensation** of wattless power will cause forecasted **decrease** for this expenses **18.650,00 PLN**

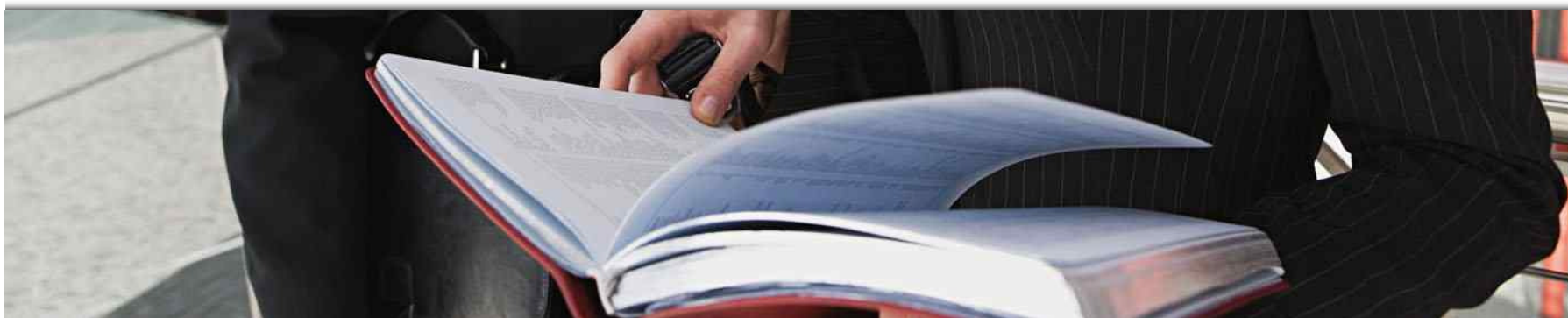
METROPOL and POLONIA PALACE Hotels

have two main terminals:

- Average annual load in 2008 **didn't exceed 80% of contracted power** for the first terminal.
- For the second terminal it **didn't exceed 50%**.
- **To limit the expenses for electric energy it was submit a proposal of decrease of contracted power:**
 - **750 kW for 650 kW –Ist Terminal**
 - **750 kW for 550 kW –IInd Terminal**
- **Decrease** of contracted power will allow to **limit the expenses** for electric energy for forecasted annual : **12.000,00 PLN**

INTRODUCTION OF ENERGY - SAVING LIGHT

Sources – Forecasted Cost of expenditure of introduction of energy-saving light sources



	ANNUAL EXPENDITURE	ANNUAL ENERGY SAVINGS	COST OF EXPENDITURE RETURN/MONTHS
MDM	28.996,00 PLN	23.341,00 PLN	15
POLONIA PALACE	44.815,00 PLN	38.106,00 PLN	14
METROPOL	32.620,00 PLN	21.842,00 PLN	18
TOTAL	11%	83.289,00 PLN	16

INTRODUCTION OF ENERGY-SAVING LIGHT SOURCES

MDM Hotel

ANNUAL SAVINGS IN TOTAL				
	N	Annual energy savings	Extra expenditure	Return time in months
GUEST ROOMS / APARTMENTS	1	13 372 PLN	22 247 PLN	20
LOBBY / CORRIDORS	1	8 911 PLN	5 140 PLN	7
CONFERENCE ROOM	1	1 058 PLN	1 609 PLN	18
TOTAL	PLN	23 341 PLN	28 996 PLN	15



INTRODUCTION OF ENERGY-SAVING LIGHT SOURCES

Metropol Hotel

ANNUAL SAVINGS IN TOTAL				
	N	Annual energy savings	Extra expenditure	Return time in months
GUEST ROOMS / APARTMENTS	1	13 748 PLN	23 329 PLN	20
LOBBY CORRIDORS	1	5 209 PLN	4 486 PLN	10
BACK	1	1 385 PLN	1 552 PLN	13
RESTAURANTS	1	1 500 PLN	3 252 PLN	26
TOTAL	PLN	21 842 PLN	32 620 PLN	18



INTRODUCTION OF ENERGY-SAVING LIGHT SOURCES

Polonia Palace

ANNUAL SAVINGS IN TOTAL				
	N	Annual energy savings	Extra expenditure	Return time in months
GUEST ROOMS / APARTMENTS	1	12 425 PLN	18 899 PLN	18
LOBBY_ CORRIDORS	1	9 965 PLN	6 999 PLN	8
BACK	1	1 787 PLN	5 652 PLN	38
CONFERENCE ROOM	1	12 480 PLN	11 531 PLN	11
RESTAURANTS	1	1 450 PLN	1 736 PLN	14
TOTAL	PLN	38 106 PLN	44 815 PLN	14



BACK-UP

Further activities being realized in Hotele Warszawskie SYRENA

MDM HOTEL

- Inventory of light sources
- Analysis of costs of light sources exchange for energy-saving
- Crane perlators exchanged
 - decrease of water use
 - perlators exchange at other floors is planned.
- Heater valves exchanged and heaters and installation rinsing
 - Increase of capacity
 - Full use of heat delivered by SPEC
- Electric energy meters in hotel kitchen and in Board offices
 - Checking the possibility to get another savings in use of electric energy
 - installation of recorders

Polonia Palace and Metropol HOTELS

- Inventory of light sources
- Analysis of costs of light sources exchange for energy-saving
- Change of ordered power
- Optimization of BMS's time program
- During hotel rooms renovation it was installed a Master Card system (Metropol Hotel)
- Heat center revitalization in Metropol hotel
 - decrease of failure frequency and loses of heat energy
- Analysis of movement detectors introduction
 - local exclusion for savings
- Concept of heating in guest rooms

For all objects

- **Current:**
 - monitoring and analysis of use of heat energy, water, gas on base of 2009 – according to invoices and existing measuring devices

TOTAL FORECASTED SAVINGS IN COMPARISON

Savings for changes in energy charges rates:

- MDM 50.000,00 PLN
- POLONIA PALACE/METROPOL 116.000,00 PLN

Compensation of watt less power:

- MDM 18.650,00 PLN

Decrease of contracted power:

- POLONIA PALACE/METROPOL 12.000,00 PLN

Introduction of energy-saving lights sources:

- MDM 23,345.00 PLN
- POLONIA PALACE 38,100.00 PLN
- METROPOL 21,843.00 PLN

TOTAL ANNUAL SAVINGS

ca. 280,000.00 PLN



WOULD YOU LIKE MORE INFORMATION?

Please come and have a chat - we are happy to be of assistance.



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