

Appendix A

APPENDIX A: MONTHLY ENERGYWISE REPORT

University of Pretoria

Energywise Report

July 1999



The EMSup says that during this month on Main Campus and Lynnwood Campus...

The Maximum Demand was 10 269 kVA
The Total Energy Consumed was 4 779 631 kWh

THE TOP 10 CONTRIBUTORS TO THE COST OF ELECTRICITY WERE.....

Rating	Group	Cost Contribution	% Contribution to the overall Electricity Account																																	
1 st	Women's Hostels	R 132,197.73	<table border="1"> <caption>Data for Bar Chart: % Contribution to the overall Electricity Account</caption> <thead> <tr> <th>Rating</th> <th>Group</th> <th>% Contribution</th> </tr> </thead> <tbody> <tr><td>1st</td><td>Women's Hostels</td><td>14.8%</td></tr> <tr><td>2nd</td><td>Men's Hostels</td><td>11.8%</td></tr> <tr><td>3rd</td><td>Merensky Library</td><td>7.0%</td></tr> <tr><td>4th</td><td>Chancellor's Building</td><td>6.2%</td></tr> <tr><td>5th</td><td>Human Sciences Building</td><td>6.1%</td></tr> <tr><td>6th</td><td>Nature Sciences I Building</td><td>6.0%</td></tr> <tr><td>7th</td><td>Engineering Tower</td><td>5.8%</td></tr> <tr><td>8th</td><td>Education and Law Building</td><td>5.5%</td></tr> <tr><td>9th</td><td>Agricultural Sciences Building</td><td>4.8%</td></tr> <tr><td>10th</td><td>Heavy Machine Laboratory</td><td>3.8%</td></tr> </tbody> </table>	Rating	Group	% Contribution	1 st	Women's Hostels	14.8%	2 nd	Men's Hostels	11.8%	3 rd	Merensky Library	7.0%	4 th	Chancellor's Building	6.2%	5 th	Human Sciences Building	6.1%	6 th	Nature Sciences I Building	6.0%	7 th	Engineering Tower	5.8%	8 th	Education and Law Building	5.5%	9 th	Agricultural Sciences Building	4.8%	10 th	Heavy Machine Laboratory	3.8%
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7 th	Engineering Tower	R 52,261.19																																		
8 th	Education and Law Building	R 50,692.32																																		
9 th	Agricultural Sciences Building	R 42,756.05																																		
10 th	Heavy Machine Laboratory	R 32,367.62																																		

The Pretoria City Council says that during this month...

ON MAIN CAMPUS

The Maximum Demand was 8 120 kVA
The Total Energy Consumed was 3 690 566 kWh

ON LYNNWOOD CAMPUS

The Maximum Demand was 2 770 kVA
The Total Energy Consumed was 1 088 850 kWh

THE COMBINED ACCOUNT OF MAIN CAMPUS AND LYNNWOOD CAMPUS

The Maximum Demand was 10 270 kVA @ R44.95/kVA = R 461,636.50
The Total Energy Consumed was 4 779 416 kWh @ 8.76 c/kWh = R 418,676.84
R 880,313.34

THE SAVINGS DUE TO DIVERSITY

620 kVA @ R44.95/kVA = R 27,869.00

THIS REPORT WAS PREPARED BY THE CENTRE FOR NEW ELECTRICITY STUDIES

.....home of the EMSup System

VISIT OUR WEBSITE FOR MORE INFORMATION

<http://snesweb.ee.up.ac.za>

APPENDIX B: MONTHLY HOSTELWISE REPORT

University of Pretoria

Hostelwise Report

July 1999



The Separate Hostel benchmarks for this month are...

Hostel	Cost per Student per Month (R/Student/Month)	Energy per Student per Month (kWh/Student/Month)
Katjeepering	R 61.73	357.31
Maroela	R 61.73	357.31
Mopanie	R 61.73	357.31
Kollege	R 58.16	347.13
Taalbos	R 58.16	347.13
Boekenhout	R 63.03	345.10
Olienhout	R 63.03	345.10
Klaradyn	R 58.13	299.65
Jasmyn	R 58.13	299.65
Erika	R 58.13	299.65
Asterhof	R 58.13	299.65
Madelief	R 58.13	299.65
Nerina	R 58.13	299.65
Magrietjie	R 58.13	299.65
Tuksdorp	R 58.13	299.65

These benchmarks are based on the energy consumption and contribution to the system maximum demand for each hostel at sub-station level (hence the duplicate values in the table above). The security lighting and kitchens are also taken into account in the calculation of these benchmarks and the actual occupancy for the month is used.

The Average Hostel benchmarks for this month are...

Tukkies Hostel Average	R 59.72	323.07
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APPENDIX C: COMPACT FLUORESCENT LAMP POSTER

SAVE

Money
&
Energy



With

CFL'S

Compact Fluorescent Lamps



- The initial cost of a CFL is 20 times that of an incandescent lamp.

$$1 \times R_{\text{CFL}} = 20 \times R_{\text{Inc}} \quad \text{CFL} \quad \text{Incandescent}$$



- The lifetime of a CFL is 10 times longer than that of a normal incandescent bulb!

$$1 \times \text{CFL} = 10 \times \text{Incandescent}$$



- An incandescent bulb that is on for 1 hour uses the same amount of energy as a CFL that burns for 5 hours!

$$5 \text{ hr} \times \text{CFL} = 1 \text{ hr} \times \text{Incandescent}$$



- A 20 Watt CFL produces the same amount of light as a 100 Watt incandescent bulb!

$$20\text{W} (\text{CFL}) = 100\text{W} (\text{Incandescent})$$



- Replacing a 100 W incandescent bulb with a CFL will pay for itself within one and a half years!



Isn't that a bright idea!

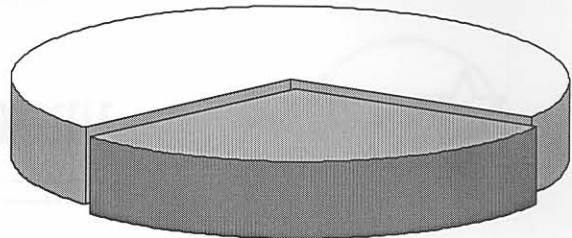
For more information on this and other energy management information please contact us at the Centre for New Electricity Studies (012) 420-2059/2587.

APPENDIX D: HOSTEL INFORMATION POSTER

DID YOU KNOW...

that the electricity on
Campus has cost us
R5,358,498 since
January this year alone!

**THE HOSTELS ARE THE LARGEST END-USER
GROUP ON CAMPUS AND CONTRIBUTE
29.67%
TO THE TOTAL COST**



In fact, each student residing in the hostels uses
nearly R70 of electricity each month!

Help us to minimise this cost and ensure a better, cost
reflective, service to you through improved comfort with
higher reliability!

- ☺ Report all leaking taps and broken lights to the one-stop service at
☎420 2244 or ☎420 2301 or ☎420 2042
- ☺ Don't leave your lights on in your room when you go out
- ☺ Turn off your appliances such as hi-fi and computer when you go out
- ☺ Don't stand in the shower for hours - it wastes electricity and water
- ☺ Don't overfill your kettle - if you need a mug-full, only boil a mug-full
- ☺ Rather use an electric blanket than a heater - it's healthier too

LET'S WORK TOGETHER TO MAKE OUR CAMPUS YOUR HOME-AWAY-FROM-HOME!

For More Information Contact us at the
Centre for New Electricity Studies

Prof Johan Delport (012) 420 2587

James Calmeyer (012) 420 2059

Chris Fourie (012) 420 2274

<http://snesweb.ee.up.ac.za>

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Centre for New Electricity Studies
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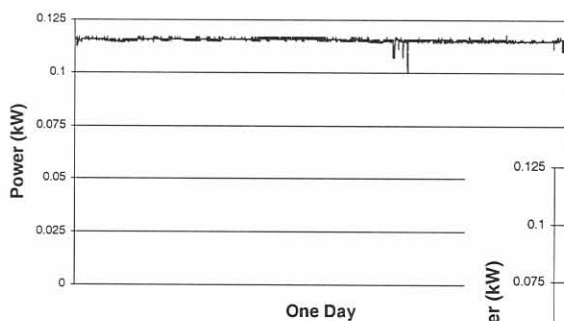
APPENDIX E: COMPUTER EFFICIENCY POSTER

DID YOU KNOW...

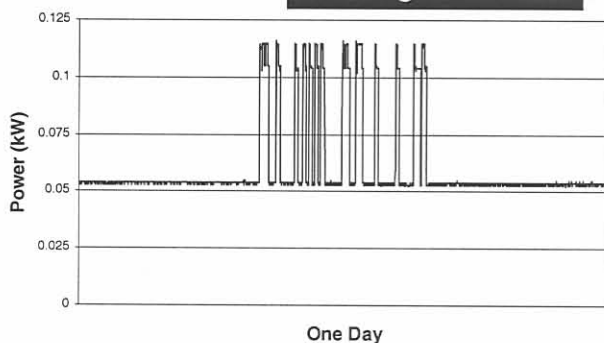
that activating the "low power standby" setting on your computer could reduce the energy consumption by

49%

SEE THE RESULTS FOR YOURSELF...



Setting Not Activated



Setting Activated

In this specific case the electricity cost for the month was reduced by nearly R4.00. This may not seem much... but when multiplied by the number of computers on Campus the saving potential is awesome!

LET'S WORK TOGETHER TO MAKE OUR CAMPUS ENERGY EFFICIENT!

For More Information Contact us at the
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