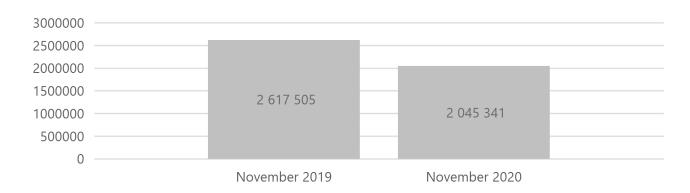
## **UCT Benchmark Energy Report**

Year on year Total kWh comparison for UCT



## **Total Monthly Electricity Cost**

The figure below summarize monthly energy costs.

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**LECTURE VENUE** 

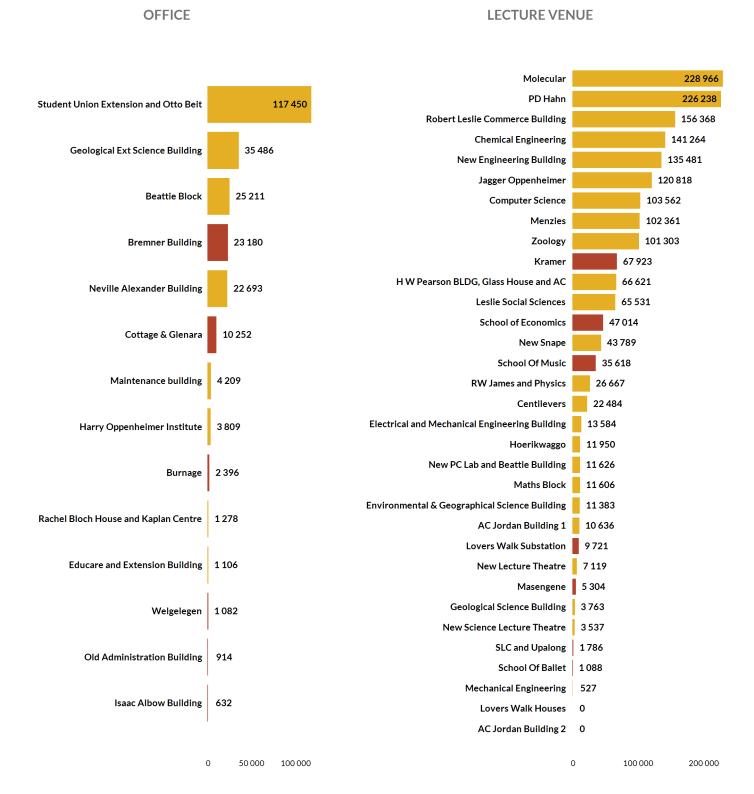
|                                       |           | Molecular                                      | R 292 285  |  |  |
|---------------------------------------|-----------|--|------------|--|--|
| Student Union Extension and Otto Beit | R 152 735 | PD Hahn  | R 277 668  |  |  |
|                                       |           | Robert Leslie Commerce Building                | R 188 171  |  |  |
| Geological Ext Science Building       | R 53 241  | Chemical Engineering                           | R 171 718  |  |  |
|                                       | R 53 241  | New Engineering Building                       | R 164 766  |  |  |
| Beattie Block                         | R 34 559  | Jagger Oppenheimer                             | R 148 542  |  |  |
|                                       |           | Zoology  | R 133 421  |  |  |
| Neville Alexander Building            | R 29 941  | Menzies  | R 123 038  |  |  |
|                                       |           | Kramer   | R 101 252  |  |  |
|                                       | _         | Leslie Social Sciences                         | R 94 498   |  |  |
| Bremner Building                      | R 27 488  | H W Pearson BLDG, Glass House and AC           | R 80 818   |  |  |
|                                       |           | School of Economics                            | R 53 943   |  |  |
| Cottage & Glenara                     | R 15 370  | New Snape                                      | R 53 842   |  |  |
|                                       |           | School Of Music                                | R 53 780   |  |  |
| Maintenance building                  | R 5 747   | RW James and Physics                           | R 35 072   |  |  |
|                                       |           | Centilevers                                    | R 28 067   |  |  |
| Harry Oppenheimer Institute           | R 4 945   | Computer Science                               | R 27 782   |  |  |
|                                       |           | Electrical and Mechanical Engineering Building | R 18 277   |  |  |
|                                       |           | Maths Block                                    | R 15 729   |  |  |
| Burnage                               | R 3 319   | New PC Lab and Beattie Building                | R 14 588   |  |  |
| Dumage                                |           | Hoerikwaggo                                    | R 14 063   |  |  |
| Rachel Bloch House and Kaplan Centre  | D 0 0 40  | Environmental & Geographical Science Building  | 📕 R 13 734 |  |  |
|                                       | R 2 248   | Lovers Walk Substation                         | R 12 601   |  |  |
|                                       |           | AC Jordan Building 1                           | R 12 365   |  |  |
| Educare and Extension Building        | R 2 008   | New Lecture Theatre                            | R 8 815    |  |  |
|                                       |           | Masengene                                      | -          |  |  |
| Old Administration Building           | R 1 532   | New Science Lecture Theatre                    | -          |  |  |
|                                       |           | Geological Science Building                    |            |  |  |
| Welgelegen                            | R 1 490   | SLC and Upalong                                |            |  |  |
|                                       |           | School Of Ballet                               |            |  |  |
| Less Allesse Dediction                | D 4 000   |  | R 1 097    |  |  |
| Isaac Albow Building                  | R 1 092   | AC Jordan Building 2                           |            |  |  |
|                                       |           | Lovers Walk Houses                             | RO         |  |  |

Region Key: ower Campus



## Monthly Energy Usage (kWh)

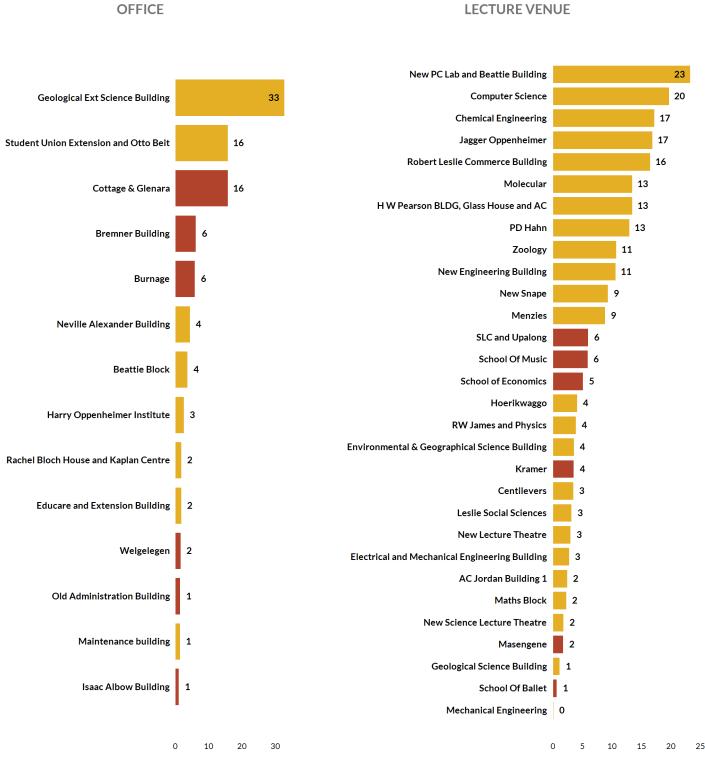
The figures in the graphs above represent the total energy consumption measured in kWh's over the reporting period. The less kWh's consumed within a particular month directly equates to alower electricity bill.





## Monthly Energy Usage per Square Meter(kWh/m2)

The monthly energy usage per square meter is a benchmarking metric to determine energy usage intensities. The benchmarking metric compares energy intensity figures of similar operations.



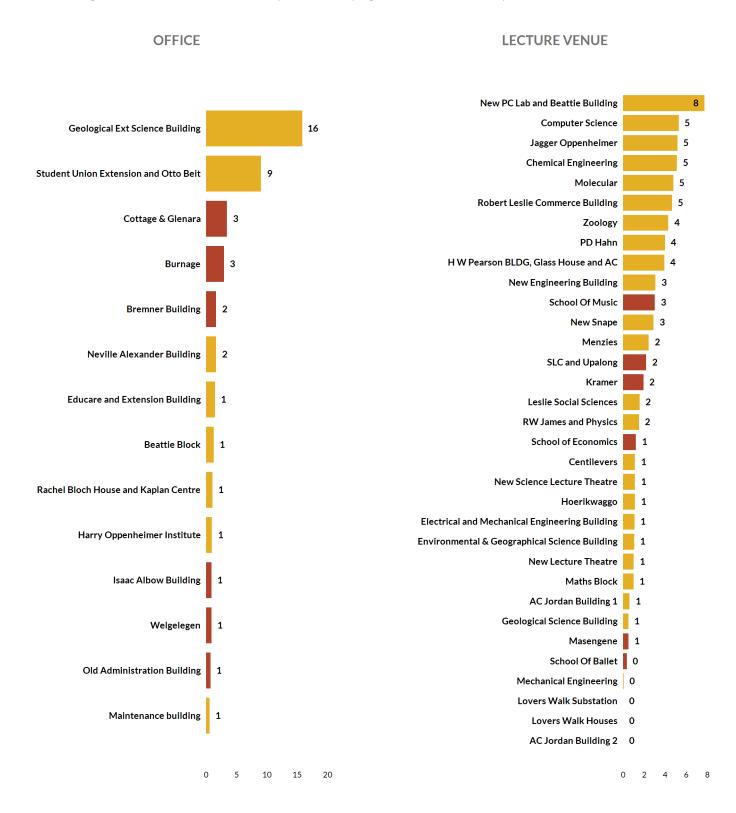
**LECTURE VENUE** 

Region Key: ower Campus.



## Monthly Energy Cost per Square Meter(R/m2)

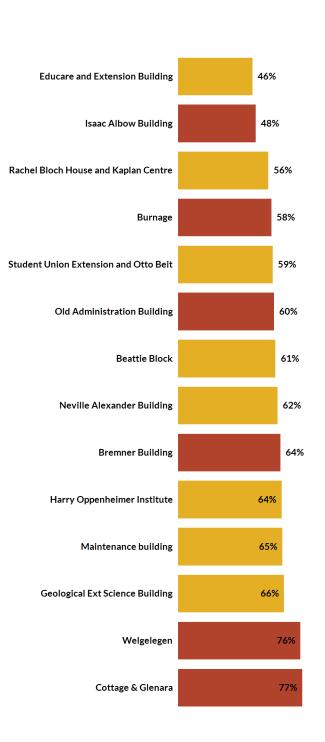
The monthly cost (R) per square meter (m2) is a benchmarking metric to determine energy cost intensities. The benchmarking metric is useful in order to compare intensity figures to other similar operations.





## Monthly "Night" Time Energy Usage (kWh)

The figures below compares your energy usage during open hours to energy usage during closed hours. The aim is to minimise your closed time energy usage (lowest % possible). Open hours used : (Weekday: 08:00 - 17:30, Saturday : 08:00 - 13:00, Sunday: 08:00 - 13:00)



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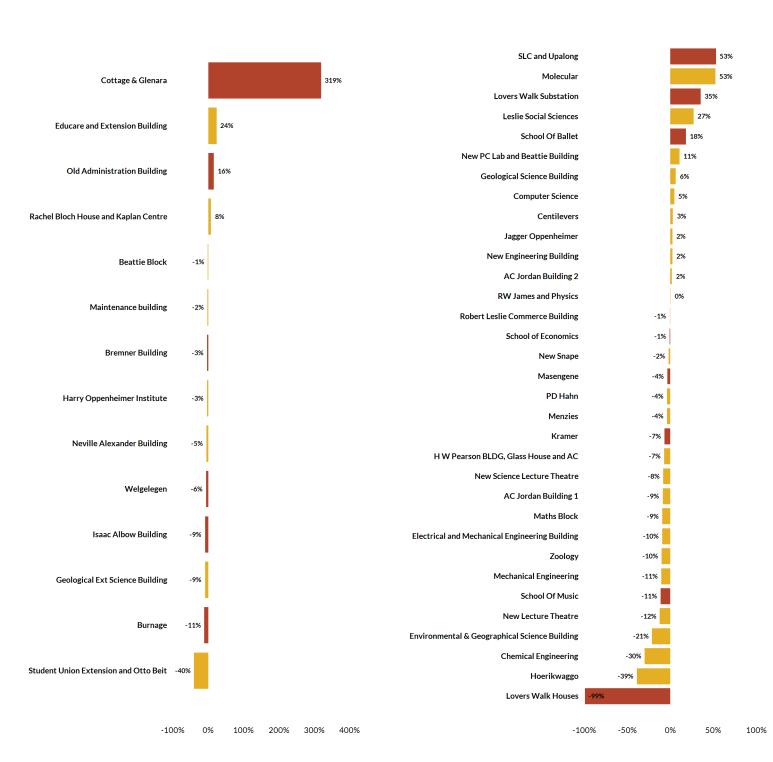
### LECTURE VENUE

| AC Jordan Building 2                           |    | 100% |
|--|----|------|
| New Lecture Theatre                            |    | 66%  |
| Masengene                                      |    | 66%  |
| School of Economics                            |    | 66%  |
| Hoerikwaggo                                    |    | 65%  |
| Environmental & Geographical Science Building  |    | 63%  |
| Maths Block                                    |    | 63%  |
| Centilevers                                    |    | 63%  |
| New Snape                                      |    | 62%  |
| Zoology  |    | 62%  |
| PD Hahn  |    | 62%  |
| Robert Leslie Commerce Building                |    | 62%  |
| School Of Ballet                               |    | 62%  |
| Molecular                                      |    | 61%  |
| Jagger Oppenheimer                             |    | 61%  |
| New PC Lab and Beattie Building                |    | 60%  |
| Chemical Engineering                           |    | 60%  |
| H W Pearson BLDG, Glass House and AC           |    | 60%  |
| New Engineering Building                       |    | 60%  |
| Menzies  |    | 60%  |
| RW James and Physics                           |    | 59%  |
| Mechanical Engineering                         |    | 59%  |
| SLC and Upalong                                |    | 58%  |
| Leslie Social Sciences                         |    | 58%  |
| Kramer   |    | 56%  |
| Electrical and Mechanical Engineering Building |    | 55%  |
| Geological Science Building                    |    | 54%  |
| School Of Music                                |    | 40%  |
| New Science Lecture Theatre                    |    | 39%  |
| Computer Science                               | 0% |      |
| Old Snape                                      | 0% |      |
| Lovers Walk Houses                             | 0% |      |
|  |    |      |



# Change in Month on Month Energy Usage (Change in kWh as a %)

The figure below compares energy used last month to this month, shown as a percentage. A positive number shows an increase in energy usage and a negative number shows a decrease in energy usage form last month to this month.



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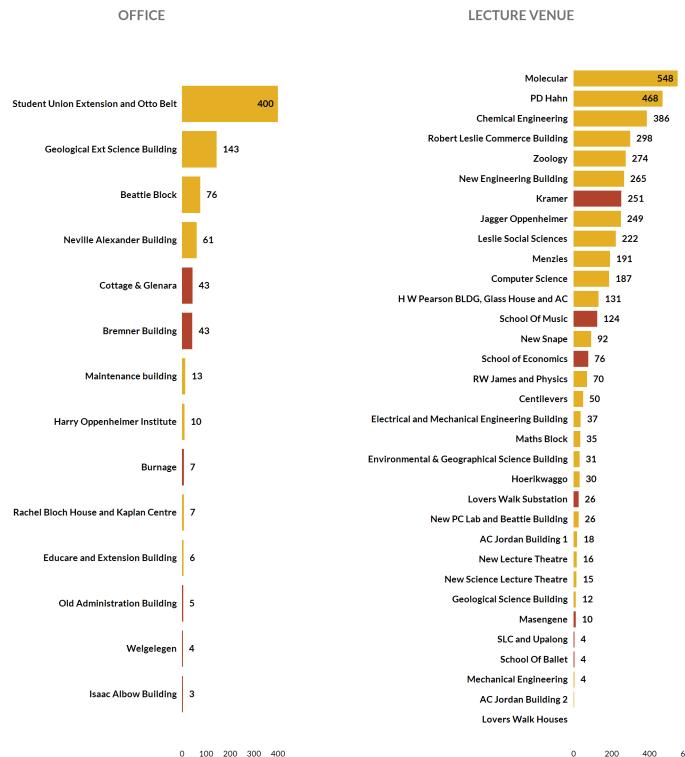
#### Region Key: Lower Campus Upper Campus



**LECTURE VENUE** 

## Monthly Maximum Demand (kVA)

Maximum demand is the single highest peak power requirement over a billing period. Maximum demand is an important value to watch as maximum demand charges can amount up to 50% of the total electricity bill.



200 400 600

100 200 300 400



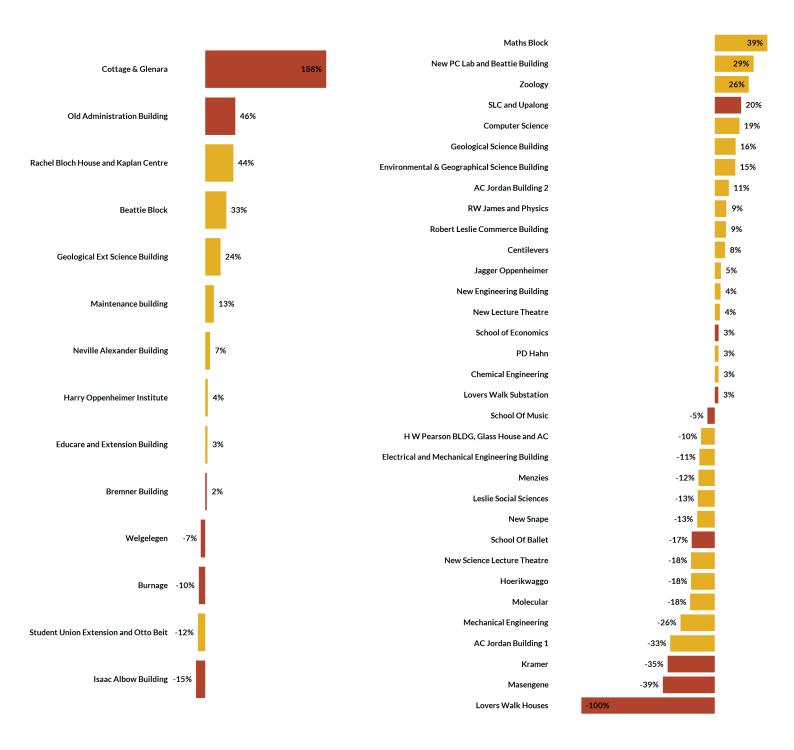


## Change in Month on Month Maximum Demand (Change in kVA as a %)

The figure below compares maximum demand value from last month to this month, shown as a percentage. A positive number shows an increase in maximum demand and a negative number shows a decrease in maximum demand.

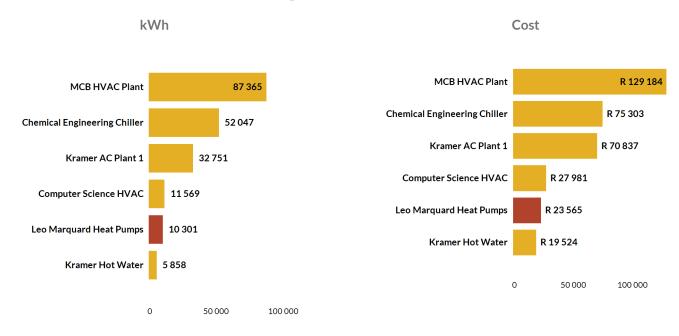
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#### LECTURE VENUE





### **HVAC and Water Heating**



## **Generator Monthly Energy Usage (kWh)**

| Upper Campus Maintenance Generator         |   |  |  | 9561 |
|--|---|--|--|------|
| Animal House Generator                     | 8 |  |  |      |
| Hiddingh Generator                         | 0 |  |  |      |
| Upper Campus Data Centre Generator         | 0 |  |  |      |
| New Civil Engineering Generator            | 0 |  |  |      |
| New Chemical Engineering Generator         | 0 |  |  |      |
| <b>OBS Square Residence Generator</b>      | 0 |  |  |      |
| Bremner Data Centre Generator              | 0 |  |  |      |
| ICTS Mowbray Generator                     | 0 |  |  |      |
| ICTS Mowbray DC Generator                  | 0 |  |  |      |
| Kramer Law School Generator                | 0 |  |  |      |
| Werner Beit Cryogenics Generator           | 0 |  |  |      |
| Mill Court Generator                       | 0 |  |  |      |
| School of Economics Generator              | 0 |  |  |      |
| Falmouth Generator                         | 0 |  |  |      |
| Werner Beit South Generator                | 0 |  |  |      |
| Anatomy Building Generator                 | 0 |  |  |      |
| Rochester House Generator                  | 0 |  |  |      |
| Wolfson Pavillion Generator                | 0 |  |  |      |
| Chris Barnard BLD - Level 8 Roof Generator | 0 |  |  |      |
| Chris Barnard BLD Level 7 RM3 Generator    | 0 |  |  |      |
| Chris Barnard BLD - Level 7 RM2 Generator  | 0 |  |  |      |
| Chris Barnard BLD Level 7 RM1 Generator    | 0 |  |  |      |
| Psychology PD Building Generator           | 0 |  |  |      |
| Maintenance Building Generator             | 0 |  |  |      |
| Sports Centre Generator                    | 0 |  |  |      |
| PD Hahn Flammable Store Generator          | 0 |  |  |      |
| NLT Generator                              | 0 |  |  |      |
| PD Hahn Building Generator                 | 0 |  |  |      |
| <b>RW</b> James Building Generator         | 0 |  |  |      |
| Engeo Building Generator                   | 0 |  |  |      |
| Beattie Building Generator                 | 0 |  |  |      |
| Jameson Hall Generator                     | 0 |  |  |      |
| Molecular Biology Building Generator       | 0 |  |  |      |
| Leslie Com Building Generator              | 0 |  |  |      |

