

Hefmania

Volume 3, issue 2, 2009

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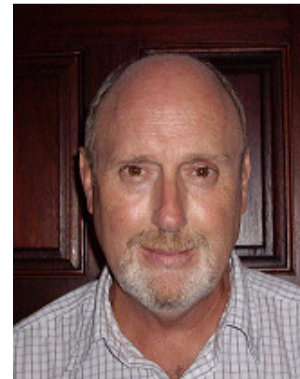
Mission statement

quality standards in the management, maintenance, operation, planning, utilization and development of the physical infrastructure of higher education institution campuses

To promote professional ideals and standards that would assure the best academic environment and to engage in such other related activities as may be desirable or required to fulfil the objectives of the HEFMA organization.

To provide the best professional service to Higher Education through constant education, information and resource creation.

WORD FROM THE HEFMA PRESIDENT



As you read through this edition of Hefmania, I am sure you will once again be impressed by the look and feel as well as the quality of our facilities management newsletter. It is a documented goal of the current Executive to produce a quarterly newsletter worth waiting for and worth reading from front to back. Please assist by becoming an active contributor by sending in newsworthy FM articles (with photos!) from your university.

The questionnaire for the 2008 HEFMA benchmarking project was sent out recently and is a much simplified version than used previously. The Executive is calling on all institutions to participate in this worthy project by reading through the simple instructions and filling in the data fields as indicated in the questionnaire.

A special effort is also currently underway to source a variety of service providers in the facilities management industry as Business Partners of HEFMA. Role players will include suppliers, contractors and consultants who wish to make use of the opportunity to do business with institutions of higher education in Southern Africa.

Registration for the 2009 HEFMA Conference, hosted by the University of Rhodes in Grahamstown, has opened. Register immediately to make use of the early bird offer!

Lastly, the Executive hereby invites members to contact the President regarding what you think HEFMA should offer to its members.

As always, more information is available on the website at www.hefma.org.

Marcel Theron, HEFMA President

Hefmania

Hefmania is the quarterly newsletter of the Higher Education Facilities Management Association of Southern Africa (HEFMA). The newsletter is distributed in the middle of every quarter.

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We encourage HEFMA members to share their stories. Please send us your contributions!



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Special Member

James Kwenani

Feedback on the Executive meeting

By Marcel Theron

The second quarter Executive meeting was hosted by Jimmy Kwenani, Director: Facilities Management of the University of Namibia and special co-opted member of the HEFMA Executive.

The meeting was held in the Kalahari Sands Hotel in Windhoek, Namibia, where a variety of topics were discussed. These focused on the more strategic issues that are important to HEFMA and its members.

Drive to increase membership

Initiatives were tabled to increase membership by means of personal contact with non-member institutions. Furthermore, an initiative was put forward to promote HEFMA with Higher Education South Africa (HESA), the Vice Chancellors' forum. The idea behind this step is to create top-down awareness of HEFMA and its activities amongst all higher education institutions in South Africa. Simultaneous initiatives to promote HEFMA amongst other Southern African institutions were also discussed. Apart from an affiliation with HESA, the Executive also discussed possible affiliations with other associations, including the South African Facilities Management Association (SAFMA), the Master Builders Association and the South African Property Owners Association (SAPOA).



Building relationships

The decision to source service providers in the facilities management industry as Business Partners was further developed and a strategy was formulated to realise the concept. Previous efforts proved unsuccessful. The Executive has therefore chosen a more personal strategy. Amongst other agenda items, the roll-out of the 2008 benchmarking project was discussed and the meeting was followed by an informative visit to the campus of the University of Namibia. The next formal meeting of the Executive will be on 17 August at the University of the Western Cape. •

HEFMA benchmarking exercise

Institutional members of HEFMA recently received the 2009 Benchmarking survey. The HEFMA executive calls on all members and associated members in particular to complete the survey.

This year's survey is much simplified than the survey that was used in the past. It only takes a few minutes to complete.

For questions, please contact:

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**2009 benchmarking
Survey**

**Have you submitted
your information?**

Deadline 14 August 2009

Dealing with class room capacity

By Gretha Jacobs

Gretha Jacobs of Stellenbosch University was the second HEFMA member to benefit from the HEFMA/TEFMA scholarship. In 2008 she spent four weeks observing and talking to FM professionals in Australasia.

Like universities in South Africa, universities in Australia and New Zealand are dealing with an influx of students. They constantly have to adjust their facilities to accommodate new requirements, especially as universities in Australasia accept all students based on their school performance results and other extramural achievements. As a consequence, several universities do not have the capacity to deal with the numbers registering.

Centrally controlled

In Australasia, other than departmental space in buildings, centrally controlled teaching spaces are being shared by all departments. This makes it difficult to determine precisely what is needed. The Classrooms and Events Booking Divisions are responsible for informing the Facilities Planning department about the required sizes when additional classrooms are required. The divisions use electronic time-table and booking programs to determine the need, but they also work directly with the academics. Such cooperation allows for pin-pointing the needs and assisting with investigations. To calculate the required need for classrooms, the universities use the TEFMA Space & Data guidelines. The guidelines are important as some universities have classrooms with 400 or even 1000 seats. The rooms are sometimes even linked electronically. By using TV video conference technology, one lecturer can lecture two classes at the same time. Students can ask questions through a roaming microphone in the second theatre, for which purpose extra support staff is brought in. And when lectures are taped students can review the lecture via the intranet in the student learning areas or they can even download it onto their i-pods.

Growing importance electronic equipment

The growing importance of electronic equipment is obvious. Most universities in Australasia have plug-points at each seat for laptops.

Wireless intranet allows for 'electronic class room' teaching. Audiovisual and electronic equipment in classrooms are maintained by a special service unit boasting a quick response time - thanks to a telephone in every classroom that is used to report problems. This unit often falls under the IT Services Unit. A special Classroom Maintenance Manager is responsible for general maintenance. Maintenance is reported by janitors, who also unlock class rooms when required. All classrooms are audited by external consultants every 2nd year. In bigger classrooms, fold-out table top is provided with each seat instead of a continuous table surface. This makes circulation easier and allows the facility more versatile to be used for other purposes, such as conferences and graduation ceremonies.

Growing above expectations

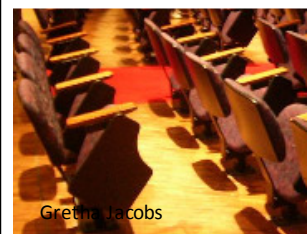
Stellenbosch University has grown above expectations in the last 5 years. But complaints regarding 'overflowing' and 'not enough large' classrooms are increasing. There is also a need for more electronic classrooms where each student has to have a computer. But before deciding to build additional lecture theatres, you have to be sure that all existing lecture theatres are used at maximum capacity right through the day, including lunch-time and the evening. At SU, lunchtimes was already used for classes that couldn't be fitted in anywhere else and evenings was used for writing tests. The time slot between 17h00 to 19h00 is traditionally sport time. During the normal day, the bigger classrooms were already used at more than 80% (mornings and afternoons) and some classes were too small for the amount of students in the class. New class rooms are expensive and are not built overnight. Careful, responsible and planning well in advance is required. It is also important to take new trends and changes into account such as the impact of continuous technology changes, the future student to staff ratios and the constant need for more multi-use spaces. Planners should consider that what may not be acceptable or the way we do things now, may be the rule in 5 year's time! •



Gretha Jacobs



Gretha Jacobs



Gretha Jacobs

Most South African universities are on par regarding the quality of facilities like lecture rooms and labs



Marcel Theron



Marcel Theron

Feedback from the 2009 AUDE Conference

By Marcel Theron

From 6 to 8 April 2009, the University of Wales hosted the 2009 AUDE Conference. HEFMA was represented by President Marcel Theron and Philip Nel of the University of Pretoria.

The University of Wales has enjoyed considerable success in recent years. Perhaps the most significant has been the embarking on the construction of an ambitious £35m City Campus, a new building which will embrace cutting edge technology with environmental awareness at the forefront of its design. The conference was preceded by an International Liaison meeting, titled 'Maximizing the Benefit'. Each of the international representatives presented their Association members' five most critical issues. On behalf of the HEFMA member institutions, Marcel highlighted the following five key issues which were obtained from inputs from the Executive prior to the conference:

- Inadequate funding
- Continued growth in student numbers
- Financial planning model
- Sustainable development
- Reduced skills levels

Issues mentioned by other speakers included accountability and performance measurement, ageing workforce, campus safety and security, backlog in maintenance and setting and achieving carbon reduction targets.

Three-day conference

The conference was presented over two and a half days, and included several plenary sessions. Topics that were discussed included 'Universities in challenging times; Key issues and leadership challenges'; 'Students: Customers or learners?'; 'Higher Education Funding Councils: Q&A'; 'Selling good: The future is sustainable'; 'Higher Education: Leading by example, cutting carbon and responding to regulation'; 'Eden project – a journey' and 'Mapping the maze of environmental regulations and attend requirements'. Each delegate was invited to three workshops where relevant matters were discussed in smaller groups. Since the focus of the conference was largely on sustainability,

Marcel attended the workshop on future trends in building design and on energy efficient renewables, as well as the workshop on the interdependence of IT and Estates. Much attention was paid to energy efficiency and what is required to reduce carbon emissions. It became quite clear that the AUDE member institutions (UK universities) in general are far more focused on reducing their carbon footprints. This was particularly visible when entering a building. A sign at the entrance of each building shows the building's position in terms of a national carbon footprint grading system.

Networking opportunities

Tea times and lunches were hosted in the exhibition hall where 50 business partners and sponsors manned stalls to discuss their products and services with conference delegates. From the exhibition it became clear that AUDE nurtures a very successful relationship with its business partners, something about which HEFMA can learn a lot.

Visiting colleagues

Together with Phillip Nel, UP's Director of Facilities Management, Marcel visited Reading, Bath, Bristol and Brighton Universities to exchange ideas and to learn more about their ways of operating. These visits proved to be extremely fruitful. The conference and visits gave him the impression that our colleagues at the British Universities are more advanced in terms of how they have organised their business. The universities visited had approved campus master plans, formal policies and procedures and rolling capital and maintenance budgets in place. All activities are aligned with sustainability and carbon reduction initiatives and much attention is paid to energy efficiency and renewable energies. But most South African universities are on par regarding the quality of facilities like lecture rooms and labs. In fact, most facilities that were viewed actually much older than the typical South African facility. The common denominator between universities here and in the UK is surely the rising backlog in maintenance liability. •

Hefma conference 2009-Outlook

By Leslie Reynolds

Preparations for the 2009 HEFMA conference are progressing. With accommodation and transport secured, focus has now shifted to the event programme.

With some of the delegates expected to arrive on Sunday, the organising committee has already arranged an opportunity to play some golf. Delegates will have plenty of time to meet other HEFMA members in an informal setting before the conference really hits off on Monday. A Campus tour can be organised before the registration for the conference opens at mid-day. Later in the afternoon, delegates will be welcomed during the welcoming function at 18h00.

On Tuesday, the programme will take on a serious note when the conference starts at 08h00. Proceedings are expected to continue until 15h30. The afternoon has been reserved for game drives at the Amakhala Game Reserve, approximately an hour from Grahamstown. Animals that you are likely to encounter are: lion, elephant, rhino, buffalo, cheetah, giraffe, zebra, wildebeest, monkeys, tortoise and plenty of antelope species. You might be lucky enough to see some of the more elusive and shy animals like hyena or banded fox. A traditional potjie will be served after the game drives.

The programme for Wednesday is expected to be similar to the Tuesday programme. Delegates will be treated to a visit to the Summerhill pineapple farm in the afternoon. There will be all sorts of entertainment including tractor and trailer rides around the farm, so it will be an interesting visit – especially for you folks who live in the 'Big Smoke'. The organising committee expects there will be entertainment and lots of merrymaking. The 'meal of the day' will be a spit-braai.

On Thursday, the programme will again start at 08h00 and finishes at 13h00. The remainder of the afternoon will be used for the Annual General Meeting, which will be followed by a gala-dinner and the Presidential induction at the Settlers Monument in a smart restaurant overlooking the city of Grahamstown

Interactive programme

Following a request by delegates after the 2008 conference, the organisers have decided

to adopt for a more interactive approach. Each session will include more than enough time to allow for questions and answers. Delegates who want to use the opportunity to visit the greater Grahamstown area for business or leisure can rest assured that transport will be available. An agreement to provide transport has been made with Europcar. The rental company will also ensure delegates will be transported from and to the airport on Monday, Tuesday and Friday as well as on any other trip delegates are expected to make during their stay in Grahamstown.

Finishing touch

A drive to line up speakers is currently under way. Speakers who have thus far agreed to present a paper will focus on matters like Geographic Information systems, 'Maintenance of grounds and gardens in a deteriorating climatic environment', 'Spalling concrete and the repair thereof', 'Solar heating as an alternative means of energy', 'Management of academic space, a scarce resource', 'The economy and its impact on Higher education' and 'Open plenaries, The best practice for saving on power and water'. A number of slots are still available, but the organisers expect the programme to be finalised in the coming weeks. A show-down of speakers and topics is therefore expected to be included in the August issue of Hefmania... so watch this space!

Early birds!

An invitation has been sent to HEFMA members to register, offering a special discount for the 'early birds'. Readers of Hefmania who have not received the invitation yet are advised to check out the HEFMA website or contact the organisers. •

Useful contacts:

Rhodes University
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Amakhala Game Reserve
<http://www.amakhala.co.za>

STOP PRESS!

**2009 HEFMA
Conference**

On

**19 – 23 October
2009**

Organized by:

**Rhodes
University**

in

Grahamstown

South Africa

Recycling initiative supports city's aim

By Guy Oldenkotte and Alan Bigger

Cape Town aims to become the world's environmental capital. The University of Cape Town is supporting this mission by implementing sets of bins that will contribute to the university's recycling operations. The new bins ensure separation of waste upfront.



According to the university's Vice-Chancellor, Dr Max Price, 80% of UCT's solid waste is fibre or paper-based, which is ideal for recycling. The university has, therefore, introduced more than 100 sets of bins around the various campuses in the city. Every day, five to eight tons of solid waste is collected. The University of Cape Town believes that more than 70% of the collected waste is recyclable. "We used to have a depot site on our Lower Campus, where we tried to separate the waste before it was removed by a professional recycling company. However, this posed certain health and safety issues," the university's media liaison manager, Raymond Hartle, explained the new approach. The university therefore decided to separate the waste as close as possible to the source.

Color-coded

Four colour-coded bins have been introduced for the separation of plastic, tin, paper and 'general' waste. "Almost 90% of the dry-waste is recyclable, while general waste goes directly to the landfill. By separating at the source, we prevent contamination and contribute to a higher recyclability output," Hartle adds. All bins are clearly labelled and have different shaped holes for identification. The content of the various bins is collected at a central point, from where it is removed by a professional recycling and waste removal company. Separation of glass is being considered for a later stage.

The human factor

The system was originally tested at the premises of the Botany Department of the university. At first, trials at the department showed the collection of 600 kg of paper and 20 kg of tin within eight weeks of the start of the trial. A success like this would have a serious knock-on effect; as 90% of the energy

used to produce a tin is saved by recycling one used tin, the positive impact on the environment became clear immediately. With 20 000 students, there is much more for UCT to achieve. "We try to make it a way of life for our students," Hartle says. "The impact will be even bigger when students adopt this initiative in their day-to-day lives." But the Botany Department trial also showed it was difficult to maintain momentum. The high turnover in staff and students requires the initiative to be promoted regularly while human effort must be reduced to the minimum. "Although the green-initiative on our campuses is driven by staff and students, we still have to make sure it takes as little effort as possible to achieve maximum results," Hartle adds. Environmental awareness is still not part of everybody's routine.

Financial relief

According to Duke Metcalf, manager estate and custodial services, the university spends up to R60 000 every month on solid waste. "The plan is to reduce this by half in the first year," he says, pointing out the awareness campaign the department has initiated in the residence kitchens. "People have been trained to separate cardboard and plastic before it can be contaminated by food waste." The university is currently considering incentives to stimulate separation even further. But guiding suppliers in using environmental friendly or less packaging material, which ultimately lands up on the university's premises, is currently not part of the program. "We are in the infancy stage of our waste management and recycling programme. The challenge is to bed this down as best we can before moving on to other challenges. There is definitely a desire to explore how we can take this further with our suppliers. But we have not considered any enforcement in respect of packaging materials used by suppliers yet," Ray Hartle points out. Hartle rather foresees that further improvement of the system will be achieved by expanding the number of recycling groups. "There are seven different types of plastic. I would envision that we reach a stage where each will be collected individually."



Alan Bigger, Director of Facilities Earlham College, USA and Immediate Past President of APPA, has the following suggestions for those who want to introduce waste separation.

Set realistic expectations. Start simply, with some of the easier products to be collected. Aim for recycling the maximum amount of a product generated at your facility that requires the minimum effort.

Collect items that you know you can recycle easily: The largest expenditure in recycling efforts is the labor cost.

Collect items close to the source of generation: Advocates of recycling have, for a long time, stressed source separation. In an office setting, the best place for recycling to start is right at the desk where it is generated or at photocopy centers. Encourage people to sort the paper into appropriate bins.

Develop markets for the material: You may have the greatest drive in the world and the maximum potential for recovering a certain material, but can you market the material or is there someone available to take it?

Collect items that you can prepare for the market place: For instance, old corrugated containers or cardboard can be collected and marketed either loosely or as bales. If you opt to bale the cardboard, it must be baled in industry sized bales. Different recycling brokers and mills may have various requirements!

Recycling containers should be located as near to the source as possible: If the location is right, it is much easier to sell recycling. Do not

expect people to walk long distances to recycle.

Stress quality of product to be recycled: The marketplace for recycled materials is a buyer's market and not a seller's market. The single biggest element that will destroy the marketability of your products is contamination. If you recycle products that are contaminated, your ability to market the materials may be minimal, the price will be minimal, and if there is too much contamination, the product will end up in the landfill - and you may end up footing the bill for the landfill!

Select companies that collect or purchase your recycled products with care: It is worthwhile researching your market area for reputable companies that can handle your recycled products. The company or companies that you select should be professional and offer you a fair market value for your product, based on the way you prepare the product for the end user.

Be wary of companies that offer you deals that seem too good to be true: if this occurs, the deal is probably flawed.

Keep good records: Keep good notes in order to document the progress of the program. Make notes of your definitions of the various materials you recycle. Record tracking is critical. There are many commercial waste tracking computer software packages that can be purchased in order to track such information. However, in most instances, a standard spreadsheet program should suffice. •

Almost 90% of the dry-waste is recyclable, while general waste goes directly to the landfill.

By separating at the source, we prevent contamination and contribute to a higher recyclability output

Libraries remain essential

By Guy Oldenkotte

In a time when the internet is essential for students to do research, libraries are still the cornerstone of universities. Hence the investments universities are currently making.



RU



RU

Libraries have been at the centre of universities since their earliest inception. Throughout this time, they have adapted and changed in response to changes in technology. Before the widespread use of printing, libraries were safe repositories for rare and expensive books and manuscripts. Access to them was carefully controlled. Nowadays, libraries play an even more diverse role in society, addressing the needs of a much wider community than students alone. But they are often neglected and it is sometimes believed they are not relevant to certain communities. A recent audit conducted in Khayelitsha found that only three out of 54 schools in that area have functioning libraries.

Digital revolution

The growth in the application of computer technology has significantly altered the pattern of student library usage in recent years. Far from decreasing, the percentage of students needing access to a library has risen. These days, a significant amount of information, particularly academic journals, is online and on copyrighted databases. Many libraries have licenses to access these databases. With the installation of computer terminal facilities alongside the books, already inadequate library facilities have become even more congested, posing a challenge to many.

Library for RU

Rhodes University is one of many universities that is currently expanding or refurbishing its library. The new Library at Rhodes University is about positioning physical space in the new learning environment, revitalizing and reinvigorating the role of the central library to make it relevant to the learning, teaching and research of the university. This trend coincides with new ways of learning and teaching, where peer learning and group work are encouraged, necessitating group study areas with computer access. Provision has been made for nine bookable break-away or syndicate rooms.

Seven of these rooms will be located in the Information Commons and two in the Commerce subject area. Here students can study together in small groups or rehearse their presentations.

Encouraging computer use

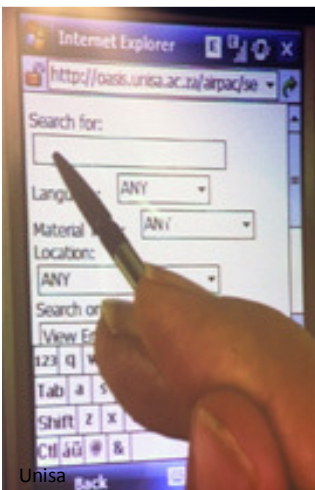
Rhodes estimates the cost of the project is R90 million all-inclusive. While the existing library will be refurbished to house a major part of the print collections, the new library will provide 54 computer workstations. All computers will have software that encourages both access to information and the means to create new information for assignments, spreadsheets or web pages. It will be a supported environment, staffed by a Librarian and trained student 'navigators'.

Open to all

The new library will be open to any user. An access control system is to be introduced to monitor and control traffic. This will be in line with most other academic libraries in South Africa. The Library will, however, continue to welcome students and staff of other universities, as well as registered 'visitors' (residents of Grahamstown). Infrequent 'walk-in' users will have to sign in at the control desk to gain access to the library. Although staff will be available, the university will encourage users to use a self-issue machine. They will also be encouraged to only consult staff at the issue desk for unusual requests.

One of many

Apart from Rhodes University, the Nelson Mandela Metropolitan University is also investing heavily in library facilities. The building at the South Campus is currently being upgraded, while a newly built library at the Missionvale Campus will also service students from the nearby community. Unisa has upgraded its library services by making its library catalogue available to cell phone users. Students can access the library through AirPAC, a wireless catalogue. Users can search, read full text articles and books, renew their loans and request books from their mobile phones. •



Unisa

Tukkie prepared for another 100 years

By Willem Lübbe

The University of Pretoria celebrated its centenary in 2008. Although the university has been able to deal with the increasing number of students every year, demand for energy has increased significantly in the last few decades. A short review of how the University of Pretoria has managed to keep up with the demand for electricity in the past 100 years.

Since 1908, the University has been a leading academic institution in South Africa. Over the past four decades the University has grown significantly in terms of its physical capacity. With the growth, demand for infrastructure and for electricity has also increased.

The 70's a time of crisis

In the mid-1970s, the University established its main 11 kV electrical substation at its main campus in Hatfield. The campus received its power supply from three 11kV supply cables, feeding from the City Council's Lynnwood load centre and delivering a total 'installed' supply capacity of 12 MVA. From this main substation, four 11 kV distribution rings were laid on the campus to distribute power to all the facilities on the main campus.

At the start of a new millennium

In 2006, the University saw, once again, a need to increase its electrical supply to cater for its growth. An additional 6 MVA capacity was granted by the City Council, by means of an additional (4th) supply feed to the main campus. This brought the total installed supply capacity to 18 MVA.

Consultants were appointed to facilitate the project implementation. Officially launched in 2007, the project initiated the transfer of the main substation from the Human Sciences Building to a new strategic location. A clever planning strategy ensured that the upgrade came at the same time as other energy capacity upgrade projects the city made to prepare the nearby Loftus Stadium for the 2010 FIFA World Cup. The additional 6MVA supply cable was laid through the University's sports grounds during the first half of 2008. The construction of another 11 kV substation was located east of the new Law Faculty.

Architects were appointed to enhance the aesthetic appeal of the substation building so as to match the adjacent buildings. Construction for the new substation building commenced during the second half of 2008 and is expected to be completed during the first quarter of 2009.

Ready for another 100

The new substation will be equipped with the latest switchgear technology. A second focus of the project is to introduce diversity in the internal electrical distribution rings by means of Ring Main Units (or T4 units); these allow for switching of supply sources between the various main 11kV rings. From the new substation additional supply cables will be laid to the T4 Units and will be terminated on the internal 11kV rings. During the first quarter of 2009, three large units are expected to arrive and civil works are currently being carried out.

The large nature of the initiative necessitates that phasing of the task be carried out.

Currently phase one of the project is being implemented. It is expected to be finally completed only towards the third quarter of 2009.

Transparent and democratic process

A Task Team (headed by the Executive Director), consisting of representatives from all key departments and divisions of the University, manages the initiative through engineering consultants. All considerations were made to ensure minimal environmental impact as a result of the project's implementation. Where deemed necessary, specialists from the relevant industries were called in to assess or give further input on environment and noise impacts.

For the coming 100 years

The University is currently looking at reducing energy and demand consumption through energy management initiatives. A project to create awareness amongst its staff and student population is currently rolled out and is expected to make a significant impact on the use of energy later this year. •

“The new substation will be equipped with the latest switchgear technology”

Vermiculture a recycling alternative?

By Don Boroughs

Separating waste might sound like the obvious thing to do, but when food and garden waste begin to rot in a landfill it gives off methane gas - a gas that is 21 times more potent than carbon dioxide.

Every day, the Mount Nelson Hotel in Cape Town provides the ultimate in accommodation and food for some 400 human guests . . . and over 400 000 worms. Living in their own suite at the back of the hotel, the worms dine on cucumber sandwiches, hearts of palm and shiitake mushrooms. In exchange, they provide the hotel with rich fertilizer, a reduced waste-disposal bill and a green reputation. The Mount Nelson Hotel has created a full circle of recycling. The hotel was amongst the first in South Africa to make use of worms that digest food and garden waste - something that took a change of mindset. Even Nick Seewer, the managing director of Orient-Express Hotels Africa, which owns the Mount Nelson, was very "skeptical" when the worm farm was first proposed. "I thought it would be dirty. But I have been very happily surprised: there are no smells at all. It's incredibly hygienic," he says, referring to landfills where rotting food disperses an awful smell and rats roam freely. Internationally, worm farming is an increasing popular solution to the problem of food waste. The old notion that 'biodegradable' is synonymous with 'benign,' has been thoroughly discredited. When food and garden waste begins to rot, it gives off methane. This gas is responsible for nearly a quarter of the human contribution to global warming. Landfills are one of the largest sources of methane and therefore all the more reason to consider other means of dissolving the garbage problem. "Food waste is the worst thing you can put in a landfill," says Mary Murphy, co-founder of FullCycle, the worm composting experts who have advised and supplied the Mount Nelson.

Clean process

Contrary to traditional methods of composting, worm farming has little or no side-effects. Traditional methods are not always suitable for food waste, which can attract pests, but worms eat almost everything. Worm-farming greatly speeds

up the composting process within self-contained bins that take up far less space than compost heaps. And a kilogram of worms can eat through more than their own weight in food scraps in 48 hours: a speed which is not met by a landfill. A worm farm can be scaled to any size by adding or subtracting the number of bins in the system. These bins are specially designed layers of 100% recycled plastic trays. The worms live and eat at the top, while their castings collect in a lower tray to be retrieved as compost. The bottom tray catches the liquid 'worm tea', a nitrogen-rich fertilizer that must be diluted with water before being applied to plants. The Mount Nelson has 60 of these bins lined up inside a greenhouse-like structure built to protect the worms from the elements.

Small investment

The first step when considering a wormery, is a waste audit. An audit for a moderately small campus restaurant may take as little as four hours. Murphy says that a large restaurant wanting to recycle about a half ton of food waste a month would need approximately 30 bins with worms. The entire package—waste audit, bins and worms—would add up to an investment of about R30 000. The only other cost might be a shelter, if the facility does not already have a covered location. With each bin having a footprint of less than half a square metre, a very small set-up for any type of business could cost less than R5 000.

Wormery solutions have become available for a wide variety of facilities. Wizzard Worms, near Greytown, KwaZulu-Natal, sells a basic, one-piece, unit designed to handle up to two tons of waste a month. The wormery resembles a double feeding trough, made of plastic on a steel stand, with an insulating fabric tarp to protect the worms from inclement weather. The unit takes up three square metres. At the far end of the spectrum, Wiggler Magic Worms of Cape Town has recently begun importing a massive, self-contained



Worm-farming composter called the Tat-G Onsite Organic Digester. Made of galvanized steel, the digester features an automated, solar-powered water pump to maintain moisture levels for millions of worms. It can process six tones of waste each month, in a fraction of the space required for systems using dozens of plastic bins.

'Picture' over 'price'

Since the Mount Nelson Hotel took the lead two years ago, worm farming, or vermiculture, is finding its way into South Africa. "Vermiculture is still pretty new in South Africa," explains worm farmer Stephan Kloppert of Organic Solutions, who mentions the slow level of acceptance and the lack of being acquainted with the technology. "We haven't even begun to figure out all the possibilities." The Spier wine estate in the Western Cape only started its wormery early 2008, but it is already reaping some financial rewards from its very large worm farm. By processing about 12 cubic metres of scraps each week, the facility will keep about 400 tons of organic waste out of landfills annually. According to Bertie Lourens of Waste Plan, the reduced hauling and landfill fees are saving the estate approximately R80 000 a year. In addition, Spier will also be earning more than R100 000 a year selling surplus worms into the expanding vermiculture market. But despite the contribution to the environment, worm farming is not an obvious choice for companies that only look at the financial bottom line without accounting for their environmental impact. The process is considerably more labour intensive than hauling waste to a landfill. Spier has three employees working full-time in vermiculture, feeding and harvesting worms, collecting the compost and keeping the facility clean. This didn't stop the wine estate from investing in the concept. Their primary motivator is Spier's very public commitment to sustainability. The company even processes its own sewerage with the help of reed beds. "We want to achieve zero-waste," says Lesley Joemat, Spier's sustainability coordinator.

Commitment required

Like many other 'environmental friendly' solutions, vermiculture takes a bit of effort and

adds a layer of complexity to waste handling. Though a worm may have a voracious appetite, it eats like a vegetarian with an ulcer. This requires kitchen staff to be trained to separate meat, spicy foods, onions and acidic food such as citrus fruits into bins. Mary Murphy of FullCycle finds that in the kitchens of most upmarket restaurants, she can keep the separation process simple. "The majority of chefs have a 'green' chopping board, reserved for fruits and vegetables, so we add a green bin at that point," she explains. Other favourite worm foods that can be more easily separated are eggshells and tea bags. And if the odd orange peel or chicken bone slips into the mixture, the worms will not die. "They can eat anything that was once living," Murphy says. •

This article was initially published on African Facilities Management Online.
www.gobetter.co.za



FullCycle

A kilogram of worms can eat through more than their own weight in food scraps in 48 hours: a speed which is not met by a landfill

AAU discusses greening campuses



GO Better Publishing

In his keynote address at the opening ceremony of the 12th General Conference of the Association of African Universities, Nigerian President Alhaji Umaru Musa Yar'adua called greening a campus a solution for many socio-economic problems.

The president commended the AAU for providing a platform to stimulate debates and discussions among African universities in order to bring about solutions to the various problems they experience.

The Conference took place from 6 to 9 May. Over 250 delegates from 28 African countries attended the event. Seven delegates represented other parts of the world. The conference theme was 'Sustainable Development in Africa, the Role of Higher Education'. The President charged African universities to live up to their mandates of being centers of excellence, not only in generating ideas, but also in pioneering research and inventions. "These," he

said "would serve the development needs of Africa and prepare the products of African universities to meet the challenges of achieving the Millennium Development Goals (MDGs)." During the conference, various papers were presented, including a presentation by Tony Petroutas about the 'Community University Partnerships and Greening the Campus'. All papers can be downloaded from the AAU website; www.aau.org•

New pitch for UB Stadium



BU

The **University of Botswana** Stadium is currently being re-grassed in preparations for the 2009 FIFA Confederations Cup and the 2010 Soccer World Cup. The closure is part of the larger government initiative to prepare the country for the 2010 World Cup event.

The government wants to ensure the readiness of the national infrastructure in case participating countries are interested in utilizing them. The University of Botswana stadium is among those the government has identified to be included in preparations for

hosting teams that may wish to camp in Botswana prior to the events. FIFA regulations stipulate that all venues that will be used, either for training or for the tournament itself, have to have the same quality grass pitch. •

Building a better campus



Wits

Wits University has embarked on a R1billion programme of infrastructure expansion and renewal to enable the goals of its 2022 vision. A key driver for the University is South Africa's demand for quality skills and leadership, determining the need for enhanced academic capacity. New and renewed infrastructure will transform campus life, teaching and studying, student accommodation as well as the University's impact on the City of Johannesburg. Some 100 projects have been identified. This includes the construction of a new building to accommodate the School of Public Health, refurbishment of other buildings and the Integration

of Education and Medical Campus. In 2007, Wits University received an allocation of R205 million for the 3-year MTEF period of 2007 – 2009. This year the university has received R268.7 million totalling at least R718million in the designated priority areas. Work has commenced on project plans for submission to the DoE by 31st July 2009. •

VOIP for SU

Stellenbosch University is currently testing a telephone system that uses the university's internet infrastructure. Known as a Voice Over Internet Protocol (VOIP) telephone system the new system is expected to reduce the University's telephone bill. There will also be integration of other communication systems in the future. •

VUT avoids election controversy

The **Vaal University of Technology** has avoided controversy in the run-up to the 2009 elections by making its Isak Steyl Stadium available for all political parties to address their constituencies. Vice

Chancellor & Principal, Prof I N Moutlana requested only a week's notice. Other universities were accused of political mingling after refusing to allow some of the parties entry to their facilities. •

First ever salary survey

A Salary, Rewards and Attitudes Survey amongst facilities management professionals in South Africa has revealed that South African facilities management professionals are increasingly being recognized by their employers. More than half of the respondents claimed to have received a salary increase in the last 12 months.

The average increase that South African facility management professionals received was 12.2% compared to 7.1% in Europe and 7.9% in the UK. 65% of the respondents claimed to have received an increase in the last quarter of 2008 and the first quarter of 2009.

The survey was conducted by professional recruitment consultancy firm Macdonald & Company. It is the first such survey to have been done in the country.

Close to 1300 people responded to a 5 minute online survey that was made available during January and February this year. According to the findings, facilities management in South Africa is still dominated by whites, while Asian people clearly form a small group in the industry. More than half of the respondents claimed to have a salary (excluding bonuses) in the range of R 100K to R500K.

The researchers also claim that, despite the fact that the lion's share of the respondents are employed in Gauteng, facilities management professionals in KwaZulu- Natal are being paid more.

The full report can be downloaded from:

www.macdonaldandcompany.com

Job vacancy UJ; Executive Director: Operations

Responsible in an executive management capacity for the full operational functions of the university. ■

23 March 2009

Adaptors save water

Water efficient adaptors onto taps, showers and toilets at schools and hostels in the Western Cape have shown savings between 15 and 35 percent. •

3 April 2009

These, and many more articles appeared in the (international) news recently. Read them at:

www.gobetter.co.za

Call for benchmarking exercise

International Facilities Management consultant Turner and Townsend calls on facilities managers in Southern Africa to submit their input for a benchmarking exercise.

Little information on facilities management in Southern Africa is available. Some organisations and institutions have tried to collect data in the past, but very often information was limited to a section of the industry. "We are looking for information regarding any type of facility," says Gina Skeens of Turner and Townsend, who heads the study. "Once we have received substantial input we will be able

get a better picture of the industry."

Turner and Townsend have drafted a questionnaire with 65 questions, focussing on the financial impact of facilities management related costs. All information obtained will be distilled in a final report. "There is not really a deadline, but the sooner the information comes in the better," Skeens emphasizes. •

You can download the questionnaire from:

www.gobetter.co.za
(look for the benchmarking section)

Calendar

SAFMA Conference

28 – 29 July
Indaba Hotel, Fourways
Johannesburg
Annual conference of the South African Facilities Management Association

Safety and Security

30 June and 1 July
Sandton Convention Centre
Johannesburg
Exhibition with the latest products on security matters

You will find more events in the calendar of;

www.gobetter.co.za

SAFMA Conference 2009

The South African Facilities Management Association (SAFMA) will hold its 2009 Conference on July 28th and 29th. The event will be held at the Indaba Hotel in Fourways, Johannesburg. The theme for this year's conference will be 'What now?,,,Business beyond 2010'.

Amongst the speakers who have been confirmed are Stuart Pennington of 'South Africa - The good News' a news website that highlights the positive developments in South Africa. Marie Puybaruad, an international workplace expert, will also present a paper during the two-day event in Johannesburg. With the Gautrain expected to rock public

transport in Gauteng, Errol Braithwaite of Bombela will provide a case study about the project. The first phase of the new train system, connecting OR Tambo International Airport with the business hub in Rosebank, is scheduled for completion in May next year. Apart from the conference delegates will also be able to learn more about the latest products and services that are available to support the African facility management industry. A number of service providers have already confirmed their attendance with a stand at the exhibition. For more information or to book a seat;
www.safma.co.za

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