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Harnessing Physical and Technological Resources

There is no gainsaying that to harness The UWI's human capital – students, faculty and staff – towards the region's social and economic development, investment in the physical and tech-nological infrastructure of The UWI's plant must be one of our priorities.

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CAMPUS SOME**

**\$16M OR
40%**

MONTHLY ON WATER BILLS

UTILITIES INFRASTRUCTURE

The Caribbean's "brightest and best" students and faculty have limitless opportunities for education and employment in the global, competitive market. The efficiency and attractiveness of a university's infrastructure are integral in the delivery of first-world teaching and learning, and are selling points to prospective students and staff. For these reasons, one of the priorities of the 2012-2017 Strategic Plan was the development and upgrading of our physical and technological Infrastructure.

The current administration is particularly pleased about its radical action in addressing the Campus's inadequate and unreliable water supply. In December 2016, the Campus switched its source of potable water supply from the National Water Commission to the Campus's own well. The well was constructed, and is being operated by North Star Development, and has saved the Campus some \$16m, or 40% monthly on water bills.



The Mona School of Engineering's (MSE's) Energy Management Unit (EMU) assumed all the roles of the now disbanded Energy Conservation Project Office (ECPO). Its aims are to ensure that all campus buildings and spaces function at high energy performance. Hence, the EMU assumes the responsibility for leading the development of findings and recommendations regarding campus buildings and facilities. During the reporting academic year, the EMU worked with the Office of the Campus Principal in the development of a Campus-wide light emitting diode (LED) lighting upgrade project.

The Mona Technology Unit (Mona-Tech), the commercial arm of the Mona School of Engineering, redeveloped a proposal to complete the development of the Combined Heat and Power (CHP) plant (Co-Gen plant). Seven Megawatts (7 MW) of electrical generators will be installed to provide for all the Campus's electrical energy needs. The exhaust and hot water from these engines will be used to power the absorption and hot water chillers to provide 2200 tons refrigeration of cooling. Expected cost saving to the Campus is in excess of J\$300m per year. Mona-Tech introduced New Fortress Energy to the campus and successfully negotiated very competitive LNG prices.



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**MONA-TECH INTRODUCED
NEW FORTRESS ENERGY
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SUCCESSFULLY NEGOTIATED
VERY COMPETITIVE LNG
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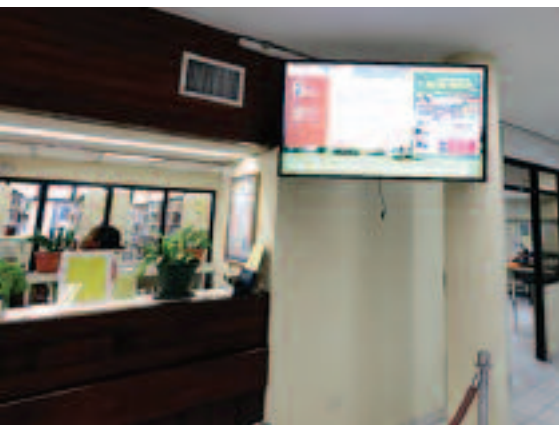
MITS ALSO DEPLOYED AND INTEGRATED NEW WEB TECHNOLOGIES WITH THE CAMPUS'S LEARNING MANAGEMENT SYSTEM (OURVLE), ENABLING STUDENTS TO BENEFIT FROM ONLINE COLLABORATION, WEB CONFERENCING AND VIRTUAL CLASSROOM CAPABILITIES FOR ALL COURSES OFFERED IN AN ONLINE OR BLENDED MODALITY

INFORMATION TECHNOLOGY INFRASTRUCTURE

The Mona Information Technology Services (MITS) Division continued to enable teaching spaces throughout the Campus. In the reporting year, MITS quadrupled the Internet bandwidth capacity serving the Campus, and upgraded the coverage and capacity of the Campus's wireless local area network in multiple locations. The unit installed additional multimedia and videoconferencing facilities in the Faculties of Medical Sciences and Humanities and Education (FHE), and the Western Jamaica Campus to improve the efficacy of teaching and learning and online modalities between the Mona and Western Jamaica campuses. As examples, a seminar room and computer laboratory in the Department of Library and Information Studies were retrofitted with videoconferencing codecs to facilitate online delivery of courses, and two more classrooms were outfitted with multimedia facilities in the FHE. Videoconferencing facilities were also installed in the School of Education to enhance the teaching and research endeavours of the newly established Caribbean Centre for Educational Planning (CCEP), as well as the Dudley Grant Early Childhood Resource Centre.

MITS also deployed and integrated new web technologies with the Campus's learning management system (OurVLE), enabling students to benefit from online collaboration, web conferencing and virtual classroom capabilities for all courses offered in an online or blended modality.

The Campus expanded its enterprise computer-based information systems to assist in improving academic and administrative process efficiency. Notably, MonaView, a gift from the UWI Development Fund (UWIDEF), operates a digital signage indoor screen system located across the Mona and Western campuses of the UWI. Two screens are also located at the University Hospital. The system allows for immediate communication and thereby provides a service to all departments of the University. It is also extremely useful in times of emergency to communicate vital information effectively. Signage has a maintenance cost of some \$2m per annum, which the UWI Development Fund (UWIDEF) donates to the Campus.



One of the Digital Screens located at the UWI



A team comprising staff members from the Library, the Projects Office and Howard University developed and submitted a project proposal to ASHA/USAID for funding of a state-of-the-art digitisation lab, the Caribbean Digital Centre of Excellence (CDCE). As part of transforming the physical facilities of the Library, the CDEC will be built at Mona. The main objective of having this digitisation centre at Mona is to help improve access to the rich resources of the Caribbean.

CAMPUS BUILDINGS / PHYSICAL INFRASTRUCTURE

The Campus continued with the ongoing efforts to refurbish and renovate its ageing physical structures to enhance the attractiveness of the learning environment. Plans were far advanced during the reporting year to renovate the “New Humanities Building” with a view to making it more user-friendly for both staff and students.

The Caribbean Institute of Media and Communication (CARIMAC), to be known from August 2017 as the Caribbean School of Media and Communication, also upgraded aspects of its physical structure. This upgrading activity to enhance the aesthetic appeal of the physical learning environment happened against the background of innovative developments in the areas of new academic programme offerings and increased student enrolment.

Renovations, sponsored by Mona School of Engineering, for the Department of Physics Materials Science Lab and the Science Library were completed. The Science Library was rebranded as the Science and Engineering Branch Library and was officially opened in mid-2017 by the Minister of Science, Energy and Technology, Dr the Hon. Andrew Wheatley.

MSE’s own electronics lab facilities benefited from the addition of a soldering room and an assembly room, enhancing facilities for students completing their projects.

↑ 57%
**INCREASE IN THE
 NUMBER OF STUDENTS
 RESIDING ON THE
 CAMPUS AS A RESULT OF
 THE AGGRESSIVE EFFORT
 MADE TO CONSTRUCT
 AND REDESIGN HALLS OF
 RESIDENCE**



The 2012-17 Strategic Plan period saw an impressive 57% increase in the number of students residing on the Campus as a result of the aggressive effort made to construct and redesign halls of residence. During the reporting year, some 432 beds were added with the commissioning of the reconstructed Irvine Hall.

Official ceremony to mark the re-branding and dedication of the SBL as the Science & Engineering Branch Library (SEBL), at which the Minister of Science, Energy & Technology, Dr the Honourable Andrew Wheatley brought remarks