

*Photo Hazveneï

PSDP implemented energy efficiency management model for SMEs

In his article about the process of capacitating the local private sector, the Head of the Private Sector Development Programme (PSDP), Sid Boubekeur, mentioned that the specific coaching of SMMEs targets a range of advanced business aspects including increasing productivity and environmental awareness in the interests of streamlining their use of energy for the success of their enterprises.

Botswana is one of the countries in Southern Africa experiencing electricity shortages with a negative impact on its economic development. The country's proportion of imported electricity from the region has gone down during the past few years, placing pressure on local power generation. Therefore, the Government is contemplating the development of renewable energy technologies as well as implementing energy efficiency and conservation (clean energy) as one of the most promising options to meet the domestic demand.

In order to raise awareness on clean energy, the PSDP provided technical assistance to eight (8) selected Small, Medium & Micro-sized Enterprises (SMMEs). The main objectives of the technical assistance were to raise awareness on energy management among the six established enterprises and to assist in business planning and mentoring of the two start-up enterprises.

The benefits to the 8 selected enterprises for participating in the PSDP were; capacity building on energy and environmental management, detailed plant assessments in order to identify energy saving opportunities, an economic appraisal of the identified energy efficiency measures, development of action plans for implementation of energy efficiency measures as well as identifying financial institutions that support new business ventures and energy projects.

The six established enterprises were assisted with plant assessments to identify the issues on site and determine opportunities for improvement. Among the issues identified were a low level of awareness on energy management among employees and good housekeeping practices; poor understanding of how electricity (demand and consumption) is charged by the power utility, challenges in the service and maintenance of production equipment and unnecessary energy consumption due to machines that are left idling when there is no production, amongst other challenges.

The two start-up enterprises were assisted with business planning and mentoring. Among the issues identified at the start-up enterprises included the lack of skills in business planning and management, bookkeeping, budgeting, cash flow management and investment analysis and challenges with the access to finance.

Some successes have already been achieved among the participating enterprises. So far, five of the established enterprises have implemented some of the recommended low cost energy efficiency measures using their own resources. These energy efficiency measures include training on energy management, behavioural change, monitoring of electricity consumption, replacing existing inefficient lights with more energy efficient lights, installing translucent roof sheets and painting of factory walls to improve lighting levels, and implementing maintenance schedules of equipment in the factory. The enterprises have also started addressing occupational health and safety issues including improving on ventilation and implementing good housekeeping practices. One of the established enterprises has started mobilising financial resources for the complete upgrade of its production facilities to improve on production efficiency and reduce environmental impacts.

The two start-up enterprises were assisted with business planning and mentoring. At the beginning of the project, the enterprise that is involved in supplying LED lights did not have a proper sales office but now it has a fully-fledged office to display and market its products. The enterprise is facing challenges in accessing cheap finance to establish a manufacturing facility for LED lights. The enterprise that is involved in waste management was also not operational at the beginning of the project but now it is operating from rented premises and has purchased basic equipment for waste collection and recycling. The company is seeking finance to expand its operations.

PSDP will continue following the progress of the established enterprises in implementing energy efficiency measures and provide further training where required. On the issue of access to finance by start-ups, PSDP will assist in identifying suitable financial institutions and linking them with the enterprises. The enterprises will have to engage with these financial institutions in order to meet the financing requirements.

To raise awareness on energy management among SMMEs, the PSDP conducted an awareness training workshop for 19 enterprises. The workshop focused on the basic principles of energy management, methodology for energy auditing, case studies on energy efficiency measures including LED lighting and demonstrations on how energy can be saved in various operational systems of the business environment. Gauging from the positive evaluation of this workshop, the PSDP is recommended to conduct more workshop to raise awareness on energy management among SMMEs.

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Hazveneji Mujoma is the PSDP expert on Energy Efficiency Management for Entreprises