**GREENING POST**

**Savings Galore Expected as Country Office Plans to Go Solar**

In a bid to reduce energy costs and carbon footprint, the Country Office (CO) is taking the next steps to installing solar photovoltaics (PV) technology in Block 10. The move will bring the CO operations at par with international best practice in promoting low emission and climate-resilient development as advocated for by UNDP globally.

When installed, the solar system will use panels to generate electricity.

“All the office operations will run on solar power, except for heating and cooling” explains Mr Yusuf Size from UN Common Services, the unit tasked with coordinating the initiative on behalf of UNDP. “We expect 60-70 percent savings in energy use,” he adds.

It is expected that the corporate UNDP Green Fund will contribute towards the initiative. The Fund is a new corporate financing facility created to make a significant contribution by individual country offices towards attaining a global step forward in combating climate change.

PV technology is a method of generating electrical power by converting solar radiation into direct current electricity using semiconductors that exhibit photovoltaic effect. PV operations are noise and emission free and provide a reliable source of electricity, which is particularly attractive in offices with frequent power outages. By reducing consumption of grid electricity and generator fuels PV electricity reduces our carbon footprint and likely provides cost-saving opportunities. Solar panels are easy and cheap to maintain and very durable.

In other UNDP offices where the technology has been applied successfully, there has been significant increase in energy savings. For instance, Eritrea installed a solar system composed of 104 solar modules, each providing 145 watts and totaling close to 15.5 kilowatts of power being generated to serve the Offices of all the UN agencies in the compound.

The capacity of battery bank is 120KWH and the system can run for 8 hours per day. The system was procured at a cost of $113,000 through contribution by the UN Agencies operating in the same complex.

“It will take close to 2 years for the office to recover the initial cost of solar,” said Mr. Araia Kidane, the UN Common Services Manager for Eritrea who coordinated the implementation of the project.

Similar systems have been installed in Armenia, Ethiopia Regional Services Centre, Bratislava Regional Centre, and Jamaica.

In Zimbabwe, UNDP is working with WFP Global Humanitarian Services as the technical partner in implementing the initiative.

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To achieve this, the CO has undertaken various activities such as:

- **Green Information Management System (GIMS)**
  - The GIMS is now in operation and is accessible on the UNDP public L: drive. The purpose of this system is to measure the office’s consumption of energy, water, waste and overall efficiency against the number of employees. This in turn will produce an estimated carbon footprint which the CO, with the participation of all staff members can aim to lower.
  - Representatives from various departments have been elected to input data on travel, vehicle and generator fuel consumption, water and paper usage, as well as electricity consumption. The inputs of each of these parameters will produce various statistics within the GIMS which will enable the CO to measure progress, assess challenges and opportunities, and therefore develop strategies on office ‘greening’ options.

All UNDP staff are encouraged to view this document and provide feedback for future improvements.
Taking stock of greening progress in the Country Office

It has been 9 months since the Green Audit was undertaken and greening recommendations made. In this interview, a member of the Green Committee leading the team in implementing the energy saving recommendations, talks about the successes so far and the unforeseen, pleasant ramifications of the greening initiatives.

What are some of the major successes the greening efforts have achieved?

The Country Office has successfully de-lamped the entire building without compromising the quality of light. Most of the air conditioning units, about three quarters, are now energy compliant. All radiant heaters that used a lot more energy have now been de-commissioned. In addition, the entire office switching system has now been optimised, meaning that when everyone leaves the office, all non-essential lights and electronic equipment can be switched off.

Have any changes been done in reducing paper usage?

Yes, printing has now been optimised to use less paper and ink and as a result less energy. Paper usage can now be tracked down to unit level. As procurement of energy efficient printers is awaited, it is the intention to complete making double sided printing the default on all office printers.

What is the team currently working on?

In addition to de-lamping the entire office, fluorescent lighting is being phased out and replaced by Light Emitting Diodes (LED) lamps that use significantly less energy. Additional energy savings should be realised when the exercise is complete.

Are the efforts only being made inside the office building?

No. Significant work has also been undertaken in the gardens. Watering now happens at night. A lot of water is saved due to less evaporation. Consequently, electricity usage from watering is also reduced.

With all these changes, when can the impact of the initiatives be realised?

The impact has been immediate. Already the energy bill has reduced by as much as 40%.

What can we expect in the near future?

The lessons learnt from the exercise will be used to inspire other agencies to also initiate their own greening exercise. After the UNDP office, the Global Fund/UNFPA building will be next. However, our biggest project will be to run the entire office on solar energy, relying only on the national grid as a backup. Fuel consuming generators will be de-commissioned. When completed, savings of about 70-80% of the current energy usage are anticipated.

How responsive has the Country Office staff been to this work?

Staff response has been very positive. They have been very cooperative when inconvenienced by the handy work required.

In addition, one of the unforeseen but pleasant developments has been the ripple effect of the greening efforts. Many have been requesting information on how they can also save energy in their homes. Coupled with electricity pre-paid meter installation exercise by the national electricity authority, the Zimbabwe Electricity Transmission and Distribution Company (ZETDC), energy saving is expected to cascade into staff households.

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Towards a Green Information Management System

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feedback. This is meant to be an interactive, open system. If you have any further questions on how it works, please do not hesitate to contact a member of the UNDP greening committee or Mr Adrian Zirata from ICT. Below is a snapshot of the system, showing how to navigate the main features on the public drive (L ).
Focus on Wetlands as World Environment Day is Celebrated in Zimbabwe

Focus on the issues that surround water and wetlands, UNDP will commemorate the World Environment Day (WED) in Block II on 25 June, 2014 under the theme “Wetlands and Waters: a Combination for Life”.

The highlight of the event is an exhibition-cum-market day for organic goods and arts and crafts from a variety of UNDP-supported community development groups.

“We hope to raise awareness about the importance of Zimbabwe’s water and wetlands, an issue of great environmental concern in the country,” related Ms. Daisy Mukarakate who oversees the UNDP environment and energy portfolio. “It’s the small changes that we make in our daily lives that can eventually make the biggest differences in conserving our wetlands and water resources.”

Zimbabwe has a number of ecologically sensitive areas that house critical aquatic ecosystems which are currently under threat throughout the country. These include inland lakes and rivers, wetlands and marshlands. In addition, the national water supply is also unreliable due to overuse, pollution and service delivery issues.

“Small Islands and Rising Sea Levels” is the UN theme for 2014 World Environment Day, commemorated on the 5th of June, 2014, under the slogan, Raise Your Voice, Not the Sea Level. In his message to mark the day, UN Secretary-General Ban Ki-moon urged everyone to think about the plight of Small Island Developing States and to take inspiration from their efforts to address climate change, strengthen resilience and work for a sustainable future. “Raise your voice, not the sea level. Planet Earth is our shared island. Let us join forces to protect it.”

Small island nations share a common understanding that we need to set our planet on a sustainable path. This demands the engagement of all sectors of society in all countries. On World Environment Day, millions of individuals, community groups and businesses from around the world take part in local projects –from clean up campaigns to art exhibits to tree-planting drives;” stated the UN Secretary General.

World Environment Day (WED) is the United Nations’ principal vehicle for encouraging worldwide awareness and action for the environment. Over the years it has grown to be a broad, global platform for public outreach that is widely celebrated by stakeholders in over 100 countries. It also serves as the ‘people’s day’ for doing something positive for the environment, galvanizing individual actions into a collective power that generates an exponential positive impact on the planet.

The session is expected to bring over 1300 high level participants, ministers, chief justices, economists and civil society leaders from around the world to the Kenyan capital to deliver a series of outcomes that would spell out concrete actions to address the key environmental challenges discussed at UNEA.

UNEA enjoys universal membership of all 193 UN member states as well as other stakeholder groups. Major issues on its agenda include the illegal trade in wildlife; environmental rule of law; financing the Green Economy; and the Sustainable Development Goals and the Post-2015 Development Agenda, including sustainable consumption and production.

For many, the creation of UNEA is the coming of age of the environment as a world issue, as it places environmental concerns on the same footing with those of peace, security, finance, health and trade for the first time. (Source: UNEP)

THE TEAM
Editorial
Verity Nyagah, Daisy Mukarakate, Sammy Mwiti, Anesu Freddy, Thomas Cameron

Green Committee Members
Verity Nyagah, Daisy Mukarakate, Yusuf Size, Tinashe Mariga, Bertha Charowedza, Tina Sibanda, William Tsuma, Jairos Chikakayi, Seth Mushongera, Rugare Mukanganise, Tsitsi Wutawunashe, Luckson Chapungu, Thomas Cameron, Sammy Mwiti, Lorraine Bgoya

Any staff member committed to the environment cause can speak to the Chair of the greening committee, Daisy Mukarakate, daisy.mukarakate@undp.org, or Thomas Cameron, thomas.cameron@undp.org to join