



GEA
GUYANA ENERGY AGENCY

Milestones, Challenges,
and 2018 budget

Milestones and Key Accomplishments – Renewable Energy Programme

- The RE programme for 2017 resulted in the award of contracts for the installation of solar photovoltaic (PV) systems on the rooftops of 70 government buildings and the 400kW Solar PV Farm, totaling 1.36 megawatts (MW).

Culture, Youth & Sport Office



Ministry of Natural Resources



Leonora Vocational Institute



Ministry of Communities and Government Electrical Inspectorate



Energy Efficiency Programme

- The Government's energy efficiency programme for 2017 also resulted in a Contract for the replacement of inefficient lights and the installation of 10,427 light-emitting diode (LED) lamps and 3,766 occupancy sensors at 46 government buildings, as well as 360 energy efficient outdoor lights.

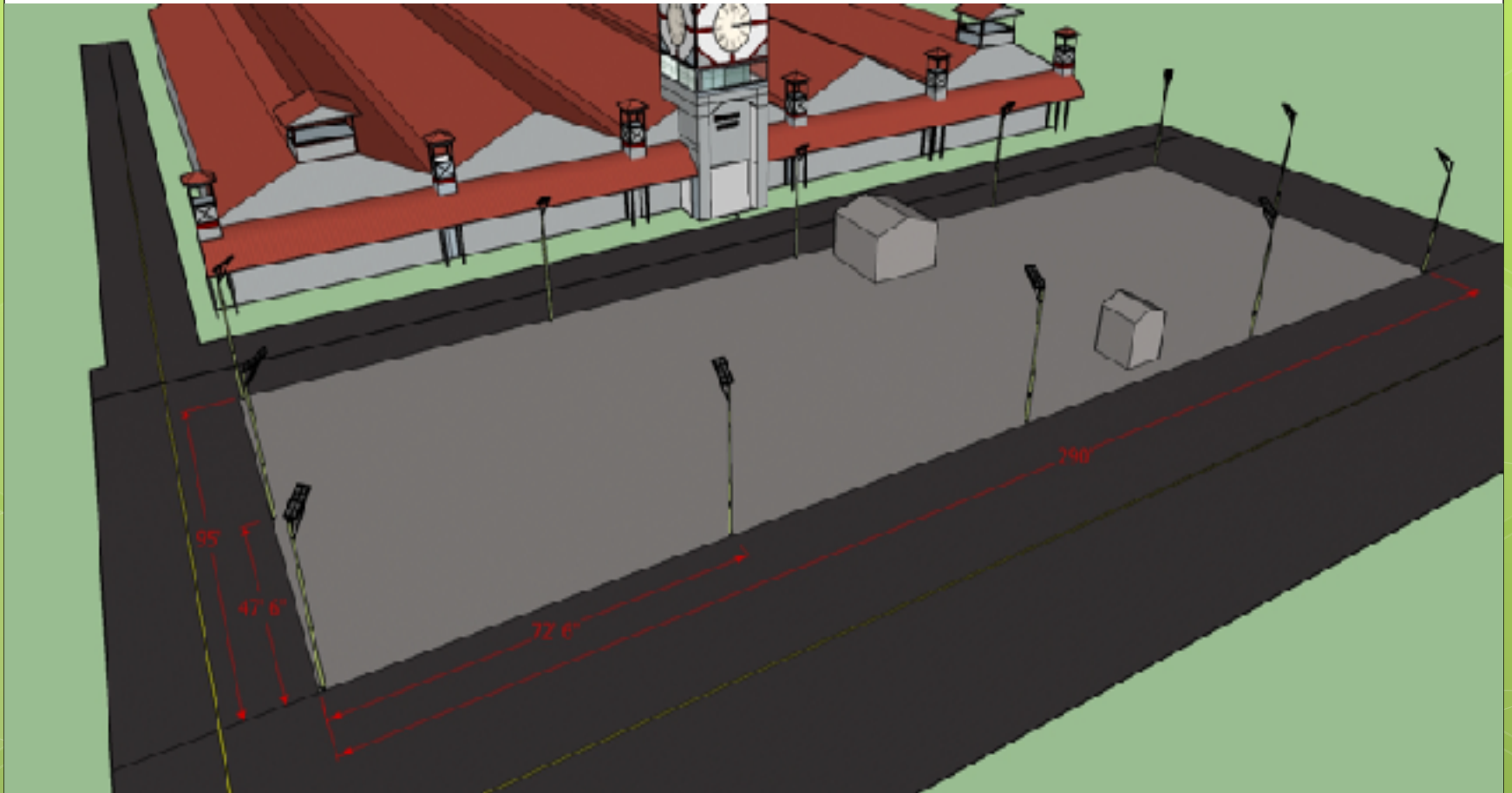
Some locations include:

- Vergenoegen Secondary School
- Uitvlugt Secondary School
- Stewartville Secondary School
- Patentia Secondary School
- Cotton Field
- Charity Secondary School
- Anna Regina Secondary School
- Ministry of Business
- National Centre for Educational Resource Development (NCERD)





- GEA awarded a contract for the
- Installation of 12 integrated 80W solar powered Light Emitted Diode (LED) street lights around the Stabroek Market Square, Georgetown
- Replacement of 750 x 13 Watts CFLs on the eastern façade of the Stabroek Market with 7-Watts LED bulbs.









- GEA's engineers supervised the construction and installation of six solar-powered bus sheds:
 - Agricola
 - Land-of-Canaan
 - Friendship
 - Plaisance
 - Tuschen
 - Diamond

The Bus sheds feature solar-powered LED lights, sensors (to turn the lights on at nights and turn them off when there is no occupancy) and ports available to commuters for charging of mobile devices from renewable solar power.



- In September GEA replaced 100 x 250 Watt inefficient High-Pressure Sodium Vapour (HPSV) lamps with 100 x 120 Watt energy efficient Light Emitting Diode (LED) lamps along the Timehri carriageway.

- This will reduce energy consumption from the national grid by approximately 56,560 kWh while saving the Government of the Corporative Republic of Guyana G\$2,559,453 annually. The reduction of carbon dioxide emissions is estimated at 53,732 kg while the payback period for the lamps is 2.53 years.



- Twenty (20) integrated solar powered LED street lights were installed in September 2017 at Agatash Village, Bartica. This Demonstration Project, financed by the Government of Guyana, was completed at a cost of G\$3.97 million, translating into a unit cost of G\$198,500 installed.

Milestones and Key Accomplishments – cont'd



- GEA supervised the installation of solar powered freezers, solar PV Panels, solar fruit dryers and energy efficient cook stoves in the villages of Powaikoru (Region 1), Moraikobai (Region 5) and Shulinab (Region 9) with support of OLADE to the Village Council, Women's Group, Youth Group and the Communities.

Milestones and Key Accomplishments – cont'd



- Advanced the procurement, tendering and financing for a 20kW hydropower power plant at Hosororo, Region 1.
- Revised the design, updated the feasibility study and prepared tender-ready documents for the 300kW Kato Hydropower Project and supported HECl in the advance of the Project.
- Revised the design, updated the feasibility study for a proposed 1MW hydropower plant at Ikuribisi, Region 7, for supply to the Bartica grid.

- Designed and prepared a feasibility study for a proposed 1.5MW hydropower plant at Kumu, Region 9 along with review of a proposed rehabilitation and upgrade of the Moco-Moco hydropower plant of 0.7MW to be pursued as a combined development.
- Reviewed and proposed a 12MW hydropower development at Tiger Hill on the Demerara River.
- Four potential locations/sites along Guyana's coast have been identified by GEA to conduct detailed wind resource assessment and consequently the development of utility scale (grid connected) wind farms.

- The staff of the Licensing Division worked closely with License-holders to ensure compliance with the Licensing requirements resulting in a 5% increase in Licenses granted compared to 2016.
- The GEA continues to generate revenue not only from the issuance of licenses but also from the implementation of penalty fees, which act as deterrent against future non-compliance with the Petroleum and Petroleum Products Regulations 2014.
- Work continues on the design of the Online Licensing Submission Hub/Platform, the launching of which should occur in the first quarter of 2018.

Under the Fuel Marking Programme, GEA:

- ◉ Conducted more than 12,800 site visits.
- ◉ Collected and tested more than 34,500 fuel samples.
- ◉ Conducted 36 Joint Operations with the Police and GRA.
- ◉ Seized 20,925 gallons of illegal fuel.
- ◉ Detected 29 incidents of illegal fuel.
- ◉ Compensation in the sum of \$1,273,000 was accepted as compensation from four individuals in lieu of prosecution for the offence of possession of illegal petroleum.
- ◉ The Fuel Marking Programme recorded five convictions and one dismissal. Seven prosecutions are ongoing before the Courts.

Milestones and Key Accomplishments – Fuel Marking Programme



Milestones and Key Accomplishments – Fuel Marking Programme



Challenges in 2017

- Delays in the tendering process:
 - Additional time needed for tender preparation due to a large number of buildings.
 - Non-compliance by bidders with the administrative and technical criteria of the Bidding documents resulting in retendering.
 - Availability of appointed Evaluators.
 - Bids exceeding Engineer's estimates.
- Delays in responses from some Government entities where GEA provided support in supervising the procurement and installation of Renewable Energy and Energy Efficiency Projects under the respective budget lines.

GUYANA ENERGY AGENCY

2018 BUDGET

GEA Budget 2018

- The Guyana Energy Agency will continue to manage, facilitate and monitor fuel imports. Licensing activities of the various fuel installations across the country and related inspections will continue in 2018. The Fuel Marking and Testing Programme, administered by the GEA to counter the smuggling of fuel will also continue.
- sensitization and education, through information dissemination and technological interventions, are required.
- The Government's commitments towards "greening" the economy, in recognition of our Nationally Determined Contributions (NDCs) to the Paris Agreement on Climate Change as well as the Sustainable Development Goals (SDGs), remains at the forefront of national priorities.

GEA Budget 2018

- 2018 renewable energy (RE) and energy efficiency (EE) programmes – installation of approximately 648 kilo Watts peak of grid-connected and energy storage solar photovoltaic (PV) systems at 44 government buildings across all 10 regions of Guyana. The investment cost of this initiative is estimated at G\$260 million with a simple payback period of 4 years.
- 31 additional government buildings will receive a sum of 756 kilowatts of new solar PV systems in 2018.
- **A total of 1,404 kilowatts of new solar PV will be installed in 2018.**

GEA Budget 2018

- Replacement of more than 10,839 inefficient lights with energy saving LED lamps and 965 manual operated switches with energy saving occupancy sensors at 54 government buildings.
- The buildings were selected based on a request by GEA to the various Ministries and Government entities to identify buildings for the installation of solar PV systems and the replacement of inefficient lighting systems.

THANK YOU!



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