

U.S. Agency for Global Media 2020 Sustainability Report and Implementation Plan June 30, 2020

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U.S. Agency for Global Media 2020 Sustainability Report and Implementation Plan Executive Summary

The U.S. Agency for Global Media (USAGM) is the U.S. Government's civilian international media agency, encompassing the Voice of America (VOA), Radio Free Europe/Radio Liberty (RFE/RL), Radio Free Asia (RFA), the Middle East Broadcasting Networks (MBN), and Radio and TV Martí (under the Office of Cuba Broadcasting – OCB). USAGM provides content in 58 languages to more than 100 countries via radio (satellite, FM, medium wave (AM), and shortwave), terrestrial and satellite TV, the web, live streaming, mobile devices, and social media to a weekly global audience of more than 278 million people. The USAGM's Transmitting stations are located in foreign countries or remote locations with limited to no access to outside personal. Due to this, we have a limited vehicle fleet make up and our technology needs are based on power for the Transmitters and antennas. We do have leased office space but it is minimal.

- 1. **Implementation Status and Progress for FY 2019 and FY 2020 (as applicable)**: The Agency reports the following accomplishments, actions, and initiatives:
 - a. Energy Efficiency:
 - In FY19, a design build construction project was awarded to the Greenville, NC transmitting station for the in-kind replacement of the two existing chillers and the three pumps serving the administration building. The new system will operate more efficiently increasing the possibility of significant energy savings in the future.
 - The Sao Tome and Principe Transmitting Station has begun implementation of a directive
 within the Hanson 2016 Condition Site Survey Report, to reduce cooling costs within the
 Transmitter & Administrative Building. The lowest-cost option in the Architectural and
 Engineering firm" Hanson report is being implemented as a Maintenance & Repair
 (M&R) project over a 3-year period.
 - For 2019, the Kuwait Transmitting Station staff replaced many incandescent, and compact fluorescent lamp (CFL) lights with energy-saving LED lights whenever possible. Fifteen split-unit air conditioners were replaced with inverter type units, saving an estimated 30% power usage for each unit replaced. The new units also use ozone friendly R134a vice R22.
 - In FY20, Kuwait's M&R plans to award a construction project for the in kind replacement of the two existing chillers, the three pumps, the chilled water piping, and chilled water coils serving the administration building. This replacement will also result in energy savings in the future.
 - In FY 2019, Thailand replaced all Hi Sodium Pressure Lamp 250W (total 14,025 w/h) streetlights with LED 140W (total 7,854 w/h) lamps. This reduced approximately 45% streetlight power consumption along the street of the distribution building at the station.

- The Tinian Transmission Station on the Mariana Island continues efforts to shift schedule to transmitters with the lowest power consumption and cost per Broadcast Hour. Before the end of FY19, the Tinian Station incorporated the power of three ASEA Brown Boveri (ABB) transmitters to further reduce overall energy consumption for FY20. The Station completed the replacement of 14 standard high-pressure sodium (HPS) streetlights to LED. Other efforts are underway to replace all standard T8 Fluorescent Bulbs to Ballast Bypass LED lightings by the end of FY20.
- The Philippines Transmitting Station has been purchasing 100% renewable energy for over three years now. The station selected the Aboitiz Power offering electricity from the southern part of the country's geothermal power plant.
- FY 2019, was the first year of implementation of VRF systems at Philippines station. The air-conditioned volume of the serval offices, warehouses and equipment rooms were halved by lowering or installing conventional Armstrong suspended grid panels. Also, LED lighting panels were inserted into the ceiling grid to replace the mercury vapor lamps located in the roof trusses. Furthermore, grid-suspended split unit air conditioners were purchased to replace the chiller-dependent cooling in the TX hallway. There is still a need to add three more A/C units in TX hallway.
- When the Admin area split-units are installed at the Philippines Transmitting Station using FY 2020 M&R funds, the cost of cooling these areas will be reduced substantially despite the room volume remaining constant. This is due to the return air circuit to the existing chiller's air-handler uses the attic of the building as a plenum, which actually doubles the volume of the cooling circuit. The chiller will be decommissioned and removed in 2020. The new efficient system will produce maximum savings at that time, meanwhile providing built-in redundancy, affording peace of mind for the critical TX infrastructure.

2. Priority Strategies for Energy and Environmental Performance will remain mostly the same for 2020 and 2021:

- a. The Agency will continue its focus on advancing energy efficiency and cost savings at the transmitting stations by making use of more efficient modes of transmitter operations and replacing inefficient lighting and HVAC systems. In addition, the Agency will continue investigate the following forward-looking strategies:
 - The use of direct digital control systems for heating, ventilating, and air conditioning (HVAC) equipment at transmitting stations, Initiating a new cycle of energy audits at the transmitting stations and the feasibility of small-scale renewable energy systems at the transmitting stations.
 - A. In FY19, USAGM researched the possible implementation of a renewable energy project at the Sao Tome station by posting a request for information (RFI). The intention of the RFI was to receive feedback regarding the feasibility of a solar array photovoltaic system at the transmitting station. However, the use of Power

Purchase Agreement (PPA) presents challenges and difficulties to implement this energy project. This FY, because of our priority strategies for energy and environmental performance we are looking for station to evaluate for possible small scale renewable energy projects that we could recommend for implementation.

(Below is an update on a possible project)

- Utilizing a new Orban AM/MW/SW audio processor to capture energy savings.
 - At the Kuwait Station, there has been a slight improvement in audibility, based on audio and reception reports from our monitoring team since acquiring the Orban AM/MW/SW audio processor. The station is currently working on the transmitters audio system settings. With the adjustment to the audio system settings there will be better potential improvements, which the manufacturer of the audio processing equipment has suggested, could yielded a greater energy savings in the future.
- Agency's fleet management system.
 - Although the Agency's vehicles do not constitute a fleet—owing to the number of vehicles and their locations—the Agency will continue its focus on advancing energy efficiency and sustainability by reducing the size of its vehicle complement and taking other steps to improve efficiency. After a thorough analysis of the cost benefits in association with the GSA fleet leased vehicles telematics program, the USAGM has determined that due to our small fleet of vehicles and their primary mission the cost benefit of utilizing the telematics system would not be feasible for the Agency.