

SUSTAINABILITY REPORT 2023

VRA... We Add Value to Lives



**VOLTA
RIVER
AUTHORITY**

Electro Volta House
P.O. Box MB 77 Accra, Ghana
Digital Address: GA-145-7445
Email: corpcomm@vra.com

+233 302 664 941-9
+233 302 218 540
+233 302 744 400



Vision

To be a Model of Excellence for Power Utilities in Africa



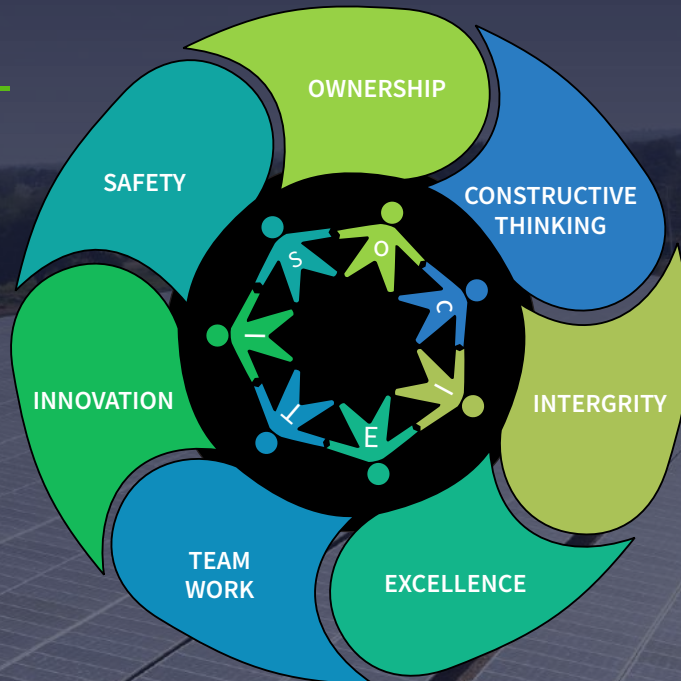
Mission

The Volta River Authority exists to power economies and raise the living standards of the people of Ghana and West Africa. We supply electricity and related services in a reliable, safe and environmentally friendly manner to add economic, financial and social values to our customers and meet stakeholders' expectations.

Values

S.O.C.I.E.T.I

“It begins with me”



CONTENTS

01 Corporate Leadership

02 Chief Executive's Message

04 About Us

05 Corporate Strategy

06 Strategic Plan

07 Corporate Organizational Chart

08 Customer Relations

09 Our Subsidiaries

11 About This Report

12 Social Performance

34 Environmental Performance

41 Governance Performance

CORPORATE LEADERSHIP



**Mr. Kofi Tutu
Agyare**
Chairman



**Mr. Emmanuel
Antwi-Darkwa**
Chief Executive



**Rev. Dr. Joyce
Rosalind Aryee**
Member



**Chief Musah
Badimsugru Adam**
Member



**Mad. Janet Akosua
Opare-Kodom**
Member



**Mr. Richard
Obeng Okrah**
Member



**Most Rev. Dr. Cyril
Kobina Ben-Smith**
Member



**Mr. Solomon
Adjetey Sowah**
Member



**Hon. Kwame
Anyimadu-Antwi**
Member



**Mrs. Claudia
Gyeke-Aboagye**
Board Secretary, VRA

CHIEF EXECUTIVE'S MESSAGE

This decade has been designated by many including the World Economic Forum (WEF), as the decade of disruption. Quite unexpectedly, patterns in the energy market, which was sparked in part by the Russian-Ukrainian crisis, indicates a greater desire for an energy transition as countries work to achieve their goals of net-zero and energy security. The integration of artificial intelligence (AI) and electric mobility into daily life has brought about significant changes in the digital environment. These point to structural shifts in the way businesses would be managed going forward.

The state of the economy has not been exempt. According to the IMF's July 2023 World Economic Outlook, high borrowing rates and ongoing inflation will see the global recovery continue to be sluggish. These projections are symbolic of the challenges impacting economies of all sizes and jurisdictions.



In Ghana, the Volta River Authority (VRA) is spearheading the push for environmentally conscious corporate practices and sustainable business practices by promoting affordable, efficient, clean, and sustainable energy; a necessary component of contemporary and digital economies.

The Authority is broadening its power generation portfolio to capitalize on readily available and sustainable energy sources, particularly in the renewable energy arena, particularly through hydro and solar power generation, as part of its efforts to ensure environmentally sustainable operations.

Ensuring sustainable development on the African continent is a leadership responsibility of the Authority due to the evolving power generation landscape, the VRA's commitment to combating climate change, and compliance with the Kyoto Protocol and the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC).

Sustainability is fundamental to VRA's core operations demonstrated by a commitment to using only natural gas to run its thermal power plant in order to minimize emissions. The VRA has also initiated the Smart City concept in Akosombo, which is anticipated to transform the Akosombo Township into a center for industrial technology.

In cooperation with other government agencies, VRA implemented important interventions in clean cooking by introducing Climate Smart Stoves to riparian communities, thereby reducing their dependence on wood as a fuel source. Additional interventions include the VRA waste-to-energy program, which aims to recycle waste into energy by segregating solid waste as well as the tree-planting initiative around the Volta River basin, which restores the Volta Gorge to function as a carbon sink. In the area of renewable generation, the Authority is working on a feasibility study for a 150 MW wind power project in order to increase the amount of renewable energy that is used in electricity generation, in addition to its rooftop and commercial solar installation systems around the country.

Within the past few years, the VRA has transformed its core organizational structures through digitalization, innovation and creativity, business sustainability, and a work culture centered around the idea of delivering public services with a private sector perspective.

As a Power Utility that values society's input VRA has mainstreamed the demands of the communities where it operates and created initiatives to allay their worries. Interactions with stakeholders are designed to ensure ongoing cooperation with the communities and to create a corporate culture that will support partnerships with them.

The Authority's business is sustained by the combined skills of past and present employees, along with a working environment that offers opportunities for advancement. We will persist in providing top-notch services to our primary stakeholders while we work to incorporate sustainability into our operations. We value our business partners' contributions and support, as well as their part in upholding our corporate social responsibility and promoting sustainable development.

Sincerely,



Emmanuel Antwi-Darkwa

Chief Executive

ABOUT US

Established on April 26, 1961, under the Volta River Development Act, Act 46 of the Republic of Ghana, the Volta River Authority (VRA) was mandated to generate and transmit Electricity. However, following the promulgation of an amendment to the VRA Act in the context of Ghana Government Power Sector Reforms in 2005, VRA's mandate has been largely restricted to the Generation of Electricity. The amendment created an enabling environment for attracting Independent Power Producers (IPPs) into Ghana's Energy market.

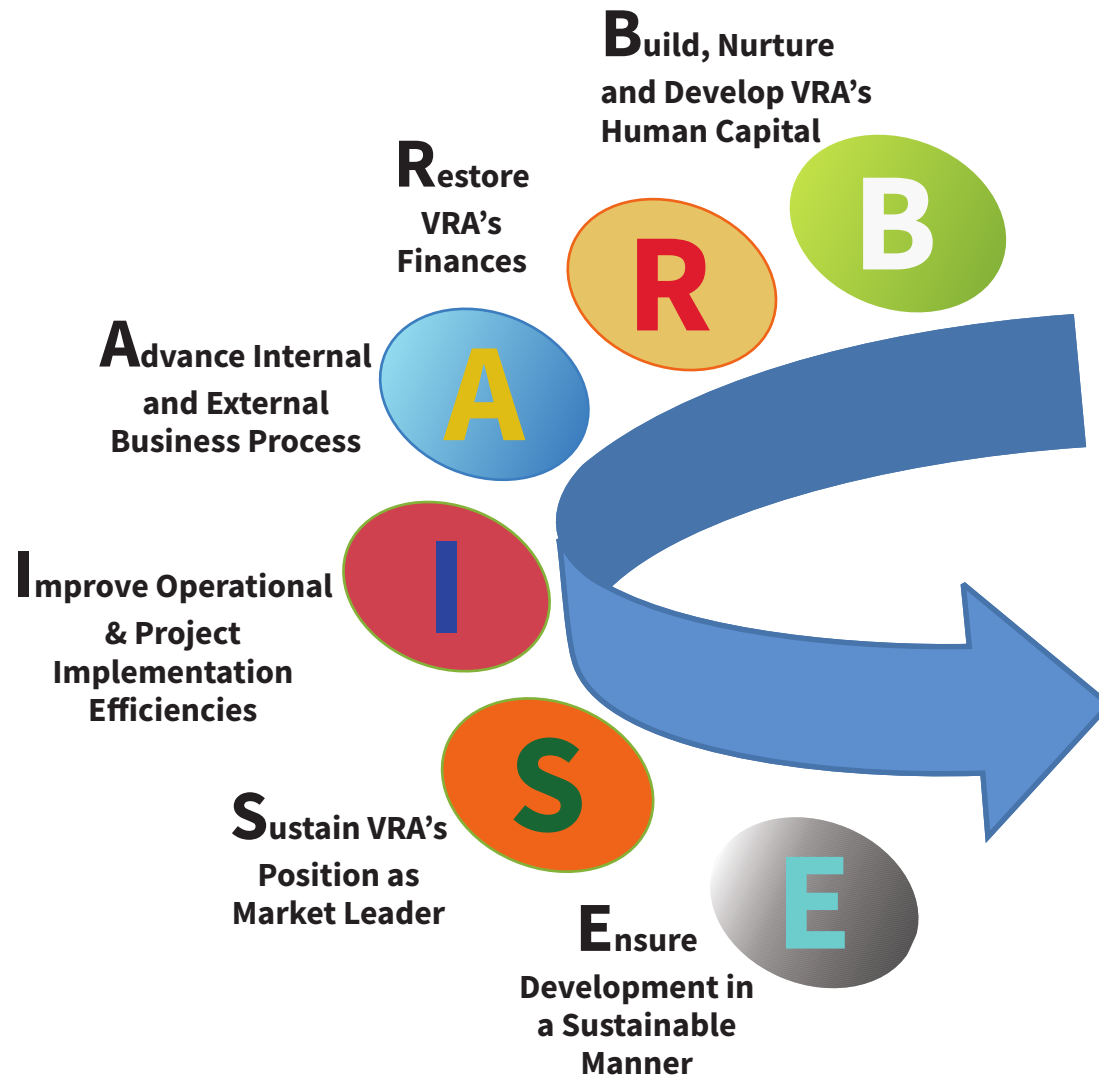
Following the amendment, the transmission function has been hived off into an entity designated Ghana Grid Company (GRIDCo), while VRA's Northern Electricity Department (NED), has been transformed into the Northern Electricity Distribution Company (NEDCo), a wholly owned subsidiary of VRA.

VRA has over the years diversified its power generation portfolio to take advantage of available and sustainable sources of energy, mainly from hydro and thermal (Natural Gas and Liquefied Petroleum Products) as well as Solar Energy sources. VRA in 2023 operated a total generation installed capacity of 1,942MW.

Plant	Installed Capacity (MW)	Type of Plant	Fuel Type
Akosombo GS	1,020	Hydro	Water
Kpong GS	160	Hydro	Water
TAPCO (T1)	330	Thermal	Gas/LCO
TICO (T2)	340	Thermal	Gas/LCO
Tema Thermal 1 Plant (TT1PP)	110	Thermal	Gas/LCO
Tema Thermal 2 Plant (TT2PP)	80	Thermal	Gas
Kpone Thermal Power Station (KTPS)	220	Thermal	Gas/Diesel
Anwomaso Thermal Power Station	250	Thermal	Gas
Navrongo Solar Plant	2.5	Renewable	Solar
Lawra Solar Plant	6.5	Renewable	Solar
Kaleo Solar Plant	13	Renewable	Solar
Kaleo Solar Plant (Phase II)	15	Renewable	Solar
TOTAL CAPACITY	2,547		

CORPORATE STRATEGY

As part of measures to transform the fortunes of VRA, the Authority's Board in 2018 approved a 5-year strategic plan, headlined “B.R.A.I.S.E”, to steer the affairs of VRA to ensure that it fulfills its mission and mandate. The implementation of initiatives under the BRAISE strategy has been largely successful, following full rollout occurring in 2018. “BRAISE” has six strategic themes, as captioned by the respective acronyms below;

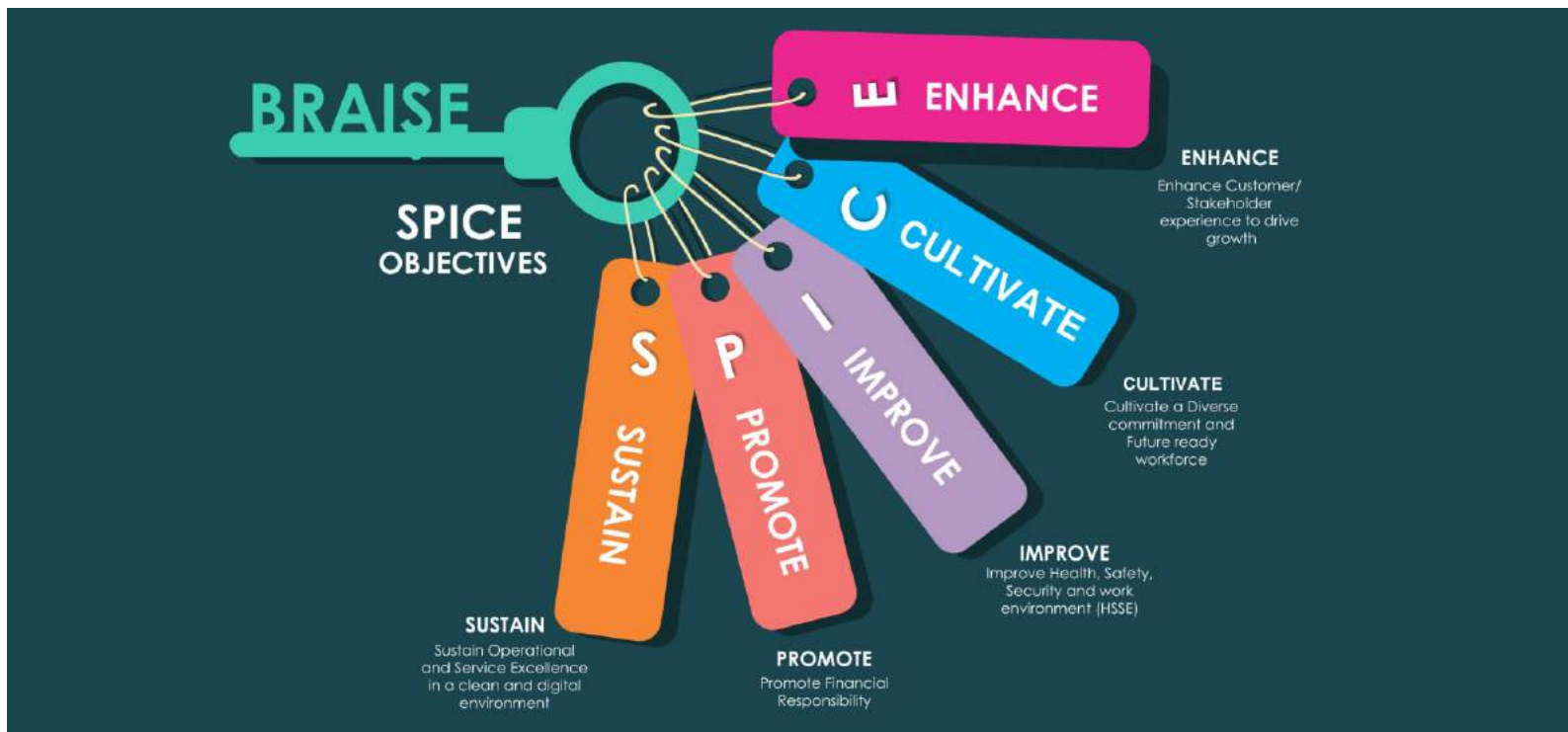


STRATEGIC PLAN

A review of the BRAISE strategy was carried out after three(3) years of implementation. It was determined that core aspects of the strategy, such as the financial recovery plan, had run their course. Some targets within the “BRAISE” also required revision due to increased competition in the local and sub-regional markets. A Sustainability Plan was developed as a new strategic plan to help the Authority achieve financial and operational sustainability over the next five years. The overall objective was to help maintain VRA's position as a market leader in Ghana's power market. The Plan still had “BRAISE”, which had been in implementation since 2018, as the overarching strategy. The Sustainability Plan, therefore, is to ensure that aspects of “BRAISE” that have been fully implemented are replaced with initiatives that will improve corporate performance and sustain the business.

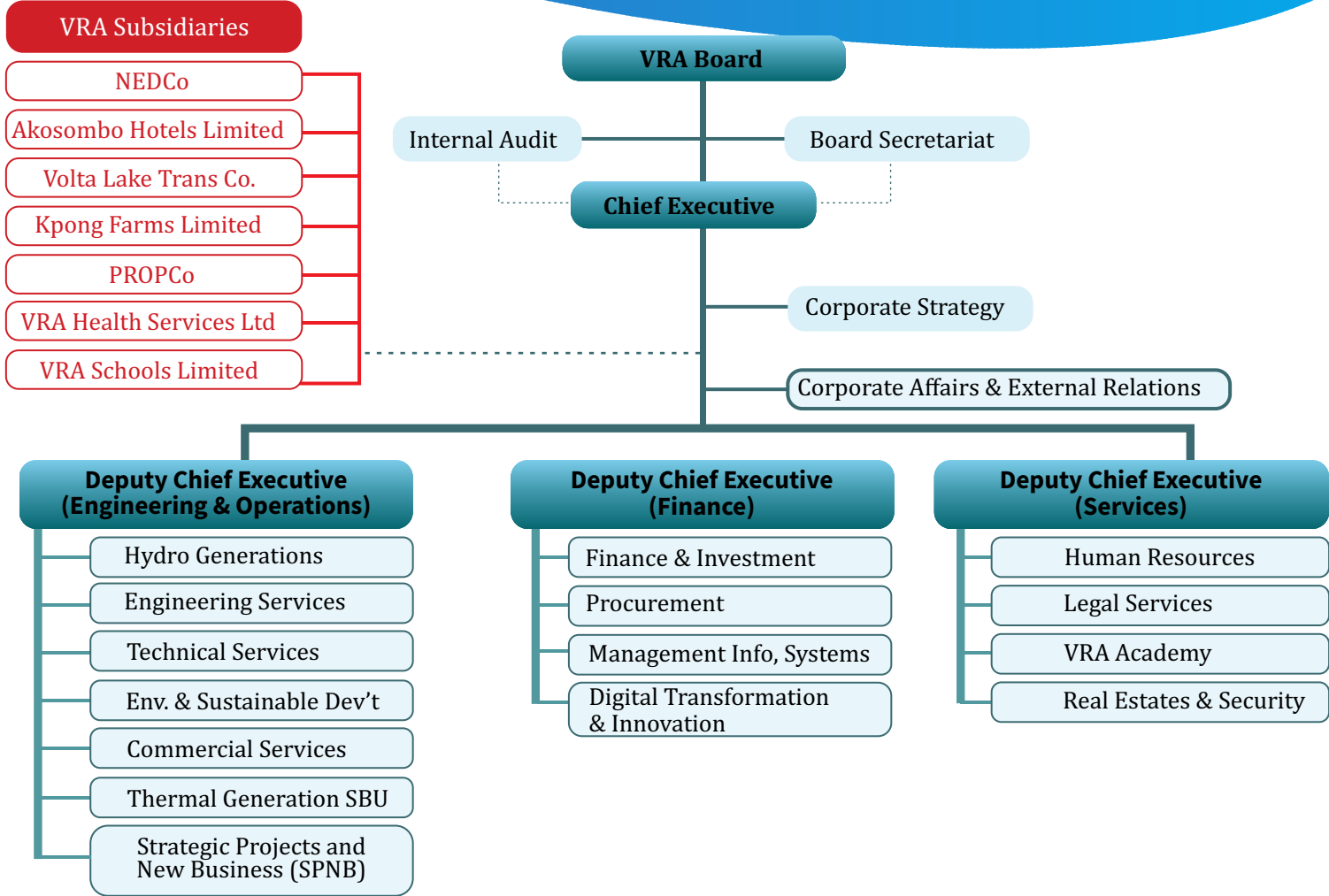
REVISED STRATEGIC OBJECTIVES (S.P.I.C.E.)

The COVID-19 pandemic and the ensuing Russia-Ukrainian war triggered a reshuffling of business dynamics worldwide, causing organizations to re-think and embrace agility in their strategies. In line with this and following a review of the internal and external business environment, the Authority revised its 15 strategic objectives, into 5 objectives under the acronym S.P.I.C.E. The S.P.I.C.E. objectives, as indicated below, are to spur the Authority on to excellence in corporate performance.



CORPORATE ORGANIZATIONAL CHART

www.vra.com **VOLTA RIVER AUTHORITY**
Corporate Organizational Structure



CUSTOMER RELATIONS

DOMESTIC CUSTOMERS

The VRA reaches its customers in Ghana and neighbouring countries through Ghana Grid Company's (GRIDCo's) transmission system, which covers the entire country and links up with the national electricity grids of Cote d'Ivoire Compagnie Ivoirienne d'Electricité (CIE), Togo and Benin Communauté Electrique du Benin (CEB), as well as Burkina Faso Société Nationale d'électricité du Burkina Faso (SONABEL).

01

Electricity Company of Ghana (ECG) remains VRA's major bulk customer. Power sold to ECG and NEDCo caters mainly for domestic, industrial, and commercial concerns within Ghana.

02

Bulk supply are also made to a number of mining companies including Newmont Ghana Gold, Newmont Golden Ridge, AngloGold Ashanti (Iduapriem) Ltd., AngloGold Ashanti Limited (Obuasi), Asanko Gold Mining Limited, Goldfields Limited, Future Global Resources.

03

Bulk Sales to other industries such as Akosombo Industrial Company Limited, Diamond Cement Ghana Limited, Savanna Diamond Limited, VALCo. Volta Aluminium Company

EXTERNAL CUSTOMERS



Cote d'Ivoire, Compagnie Ivoirienne d'Electricité (CIE).



Compagnie Energie Electrique du Togo (CEET)



Société Béninoise d'Énergie Electrique (SBEE)



Société Nationale d'électricité du Burkina Faso (SONABEL)

Communauté Electrique du Benin (CEB), Togo and Benin

OUR SUBSIDIARIES

Northern Electricity Distribution Company

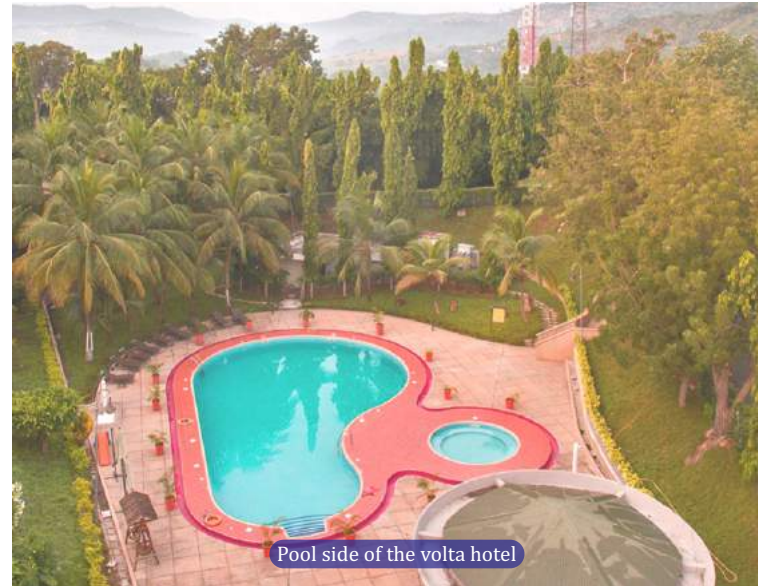
The Northern Electricity Distribution Company (NEDCo) is the sole distributor of electricity in the Ahafo, Brong Ahafo, Bono East, Savannah, Northern, North East, Upper East, and Upper West as well as parts of Ashanti, Western North and Oti Regions, thus covering 64% of the geographical area of Ghana.

NEDCo manages the distribution infrastructure that supplies electricity to customers of VRA in border towns like Hamele, Leo and Bittou in Burkina Faso as well as Dapong in Togo. NEDCo also supplies electricity to Chache' which is a border town in Cote d'Ivoire via Power Purchase Agreement between NEDCo and CI-Energies.



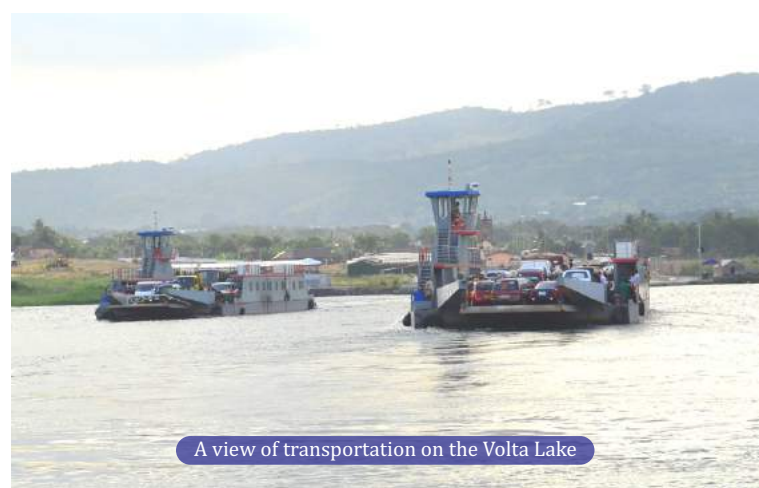
Akosombo Hotels Limited

The Akosombo Hotels Limited runs a three (3) star hotel, restaurant, modern conference/seminar facilities, pleasure activities, including cruising on the lake by MV Dodi Princess, and promotes tourism.



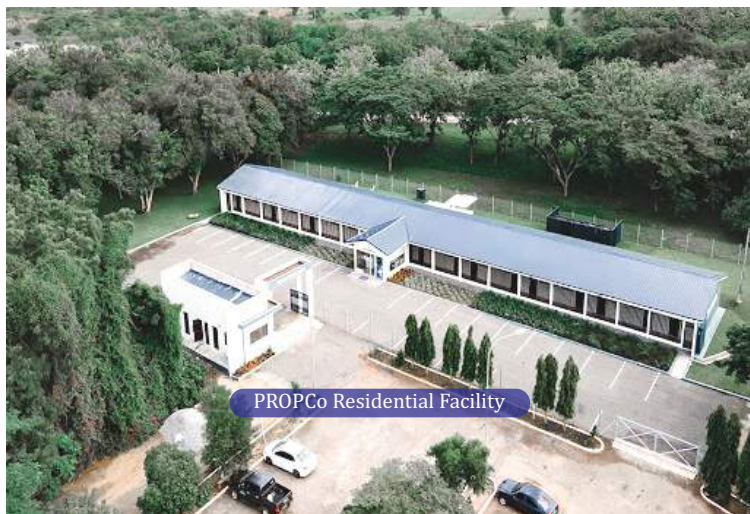
Volta Lake Transport Company Limited

The Volta Lake Transport Company (VLTC) operates river transport for passengers, and haulage of petroleum products and cargo such as cement. VLTC also provides ferry services across various parts of the Volta Lake.



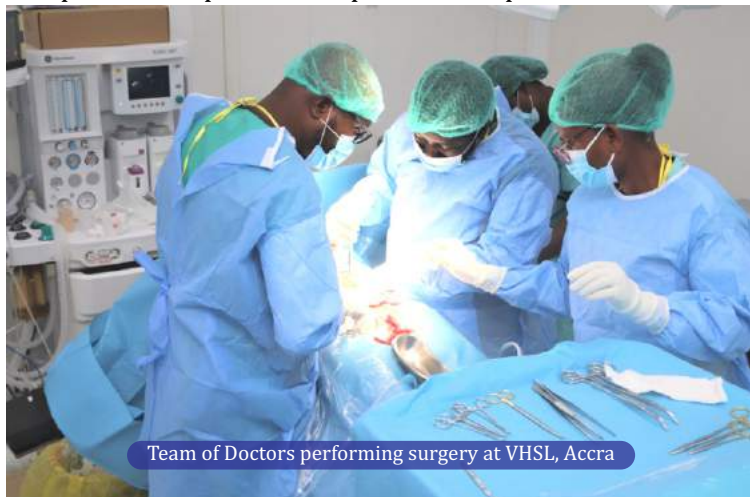
VRA Property Holding Company

VRA Property Holding Company is responsible among others for the efficient management of all commercial real estate assets of VRA and its operational subsidiaries.



VRA Health Services Limited

The VRA Health Services Limited (VHSL) provides medical care for Staff and their dependants as well as the general public. Its services are currently in the Authority's operational enclaves such as Akosombo, Akuse, Accra and Aboadze. VHSL also provides in-patient, out-patient and specialist services.



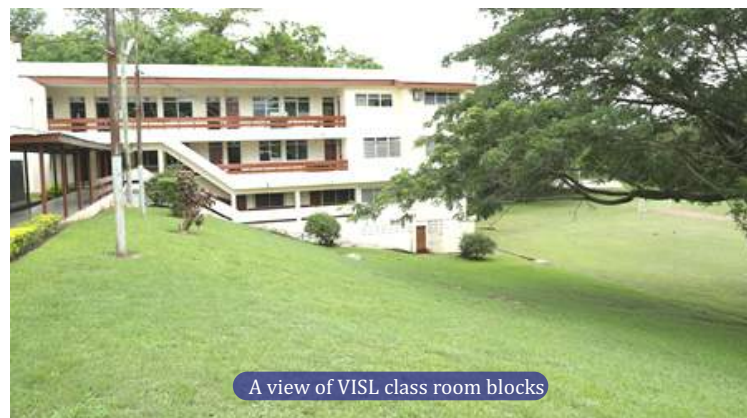
Kpong Farms Limited

The Kpong Farms Limited (KFL) plays a significant role in agricultural development through commercial farming, agro-processing and provision of machinery services. In recent times however, KFL's concentration is on commercial rice production ; that is the cultivation, processing and packaging to the final consumers.



VRA International Schools Limited

The VRA International Schools Limited (VISL) offers study opportunities in international curricular such as the Cambridge International Examination (UK) and the Scholastic Aptitude Test (USA) certificates. The VISL provides quality and affordable first and second cycle education in Akosombo, Akuse and Aboadze to wards of stakeholders of the Authority and the general public.



About this Report

This is a report on the Environmental, Social and Governance (ESG) aspects of VRA's performance. The report examines VRA's business operations in detail in relation to sustainability performance and contribution to the seventeen (17) Sustainable Development Goals (SDGs) of the United Nations (UN).

The SDGs encourage businesses to think about how they can best help address global challenges. VRA has been a signatory to the United Nations Global Compact (UNGC) since 2003. The report, which explicitly covers concerns relevant to the seventeen SDGs, was created with reference to the UNGC's ten (10) principles using the Global Reporting Initiative (GRI) and ESG framework for reporting



SOCIAL PERFORMANCE



ALTERNATIVE LIVELIHOOD

The Authority's beekeeping and fruit-tree development projects, serve as alternative livelihood interventions aimed at reducing the prevalence of inimical activities along the Volta Lake by substituting them with environmentally friendly alternatives that supports the socio-economic development. These alternative livelihood interventions have become a major source of income, helping to alleviate poverty among members of Community Based Organizations (CBO) in our communities.

VRA in partnership with CBOs embarked on beekeeping projects in fifteen (15) riparian communities to produce honey in commercial quantities to benefit the Community Based Organization (CBO) members as sources of incentive for providing voluntary labor towards the Buffer Zone reforestation programme at the Volta and Oti Regions.

In 2023, a total of ninety-nine (99) beehives were installed in the fifteen (15) communities. Sixty-three (63) were colonized with bees and a total of 205 liters of pure honey were harvested and sold as additional income to augment the income of the CBO members.



Inspection of a bee hive for honey



VRA is committed to alleviating hunger amongst its stakeholders. To this end, the Authority continues to create an enabling environment for individuals, Community Based Organizations, and companies to carry out fish farming on the Volta Lake in order to provide for the protein needs of the Communities

and Ghanaians as a whole. The Volta Lake also serves as a major source of irrigation for carrying out farming activities within the Volta basin. The water is used to irrigate crop, rice and vegetable farms scattered across the Volta basin.

Food Donation to Flood Victims

In 2023, VRA was compelled to spill excess water from the Akosombo and Kpong dams, to preserve the integrity of the dam resulting in a number of downstream communities becoming inundated. Some community folks lost their farmlands and food stuffs. The Authority as well as the VRA Senior Staff Association and VRA Ladies Association in collaboration with National Disaster Management Organization (NADMO) donated various food items ranging from Nan 1 Baby food, Gari, Milk, Sugar, Rice, Canned Tomatoes, Canned fish, Maize, Beans, Red Oil etc to support the carbohydrate and protein needs of the flood victims.



Members of the VRA Senior Staff Association presenting food items through North Tongu NADMO to the flood victims.

VRA donated these food items to affected Municipal/District assemblies (North Tongu, Central Tongu, South Tongu, Ada East,

Keta, Anlo, Shai-Osudoku, Asuogyaman and Lower Many), for distribution to the people.



Left: Representatives of VRA SSA in a group photograph with North Tongu MP Hon. Samuel Okudzeto Ablakwa after the donation
Right: VRA CE Mr. Emmanuel Antwi Darkwa addressing the flood victims



HEALTH AND WELL-BEING

VRA is committed to ensuring good health and well-being as anchored on the provisions of Volta River Development Act, Act 46. The Authority takes reasonable measures to ensure the health and well-being of the affected communities in its operational areas.



Chief Executive, Senior Staff Association Members support Agbetikpo flood victims with medical supplies

Medical Supplies to Flood Victims

In 2023, the spillage from the Akosombo and Kpong dams, resulted in health challenges for some affected downstream communities. VRA donated Medical supplies to the following affected Municipal/District assemblies: (North Tongu, Central Tongu, South Tongu, Ada East, Keta, Anlo, Shai-Osudoku, Asuogyaman and Lower Many). Various VRA Staff groups complemented the efforts by donating mosquito nets, mosquito coils, repellents, sanitary pads, diapers, protective clothes as well as other health related items. VRA also provided medical items and personnel to screen and administer medical treatment to emerging health issues.

Schistosomiasis Control Programme

The Authority is resolute in contributing to the attainment of Sustainable Development Goals, (Goal 3) which seeks to ensure healthy lives and promote well-being for all at all ages. Our mandate as enshrined in the VRA Development Act 46 Section 13 (1) of 1961, imposes the responsibility of safeguarding the health and safety of our employees, their families, and dependents as well as inhabitants of Akosombo Township and lakeside areas. To achieve these, various programmes such as the Schistosomiasis Control Programme have been put in place.

Mass Drug Administration (MDA) at AIS

VRA collaborated with the Asuogyaman District Health Directorate of the Ghana Health Services (GHS) and the Ghana Education Service (GES) through its School Health Education Programme (SHEP) to undertake a districtwide MDA exercise for Schistosomiasis control in Basic and Junior High Schools between January and February 2023. VRA ensured the exercise was undertaken successfully by assisting teachers of the school in administering tablets of Praziquantel to the students in line with the WHO guidelines. No adverse reactions were reported as students were advised to have their main meals before taking the medication.

District Disease Control Officers engaged VRA, Akosombo International School (AIS) Teachers and the District SHEP Coordinator.



VRA, AIS Teachers, District SHEP Coordinator and Disease control officers in a group photograph

Health Education and Awareness Creation at AIS

Prior to the MDA exercise at the Akosombo International School on January 27th and February 1, 2023, VRA undertook Health Education and Awareness Creation activities to sensitize the pupils about the disease. A lot of them decided to take the medication after the educational campaign and after a teacher took it in front of them to demonstrate to them that it was safe.



Education and Awareness Creation and Demonstration

Awareness Creation

VRA delivered 650 pieces of A3 Posters and five (5) signboards to facilitate health education and awareness creation activities within schistosomiasis endemic communities in the Volta Basin.

VRA undertook an extensive health education and awareness creation program between June and July 2023. The programme was geared at influencing the attitudes, beliefs, and practices of riverine communities with the expectation of behaviour modification.



Schistosomiasis Health Education and Awareness Creation Promotional materials

The key strategy employed was the use of the newly acquired JBL Party Box 710 which enhanced our audio communication greatly. It enabled communities to reckon there was a special program happening in their vicinity thus came out in their numbers to hear the message we had for them.

Adhesive A3 Posters with detailed information on the disease were also posted at vantage points in the communities such as the bus terminals, community leaders' houses, and community centers. Signboards with Bilharzia awareness creation messages provided to the Kpong Ahundzo, Mafi Aklamador, Alikekope, and Dzimahkope communities.

The team also displayed visuals including PowerPoint presentations which demonstrated the life cycle of the Schistosomiasis parasites and how they adversely affect the health and wellbeing of infected persons.

The communities were also educated on pre-impoundment and post-impoundment dynamics of the disease, the causes, mode of transmission, symptoms, effects, prevention, diagnosis, and treatment as well as the various intervention programs VRA has instituted to reduce the prevalence rates in impacted communities. Prior to the education programs, their awareness level was tested through questioning and responses received. In general, the awareness levels increased from an average of 35% to 60%.

In all, 52 communities, some listed in the preceding Table were visited in four (4No.) districts; Ada East, Central, North, and South Tongu districts of the Greater Accra and Volta Regions. Details of the communities as well as key issues or questions raised are outlined in Table 1. Some photographs of the hugely successful programs are shown below. Other communities include; Agave Agorme, Kisseihkope, Dedo, Adigbli, Morkordzie, Aveyime Dugame, Agorpopanya, Kadjadornya, and Kebenu.

Table 1: Beneficiary Communities of the Health Education and Awareness Creation Programme

No	Date	District	Community	No. of Attendees	Key Concern/Question
1	28.6.23	Central Tongu	Old Bakpa	61	
2	28.6.23	Central Tongu	Bekpo	114	
3	28.6.23	Central Tongu	Kebegodo	67	
4	29.6.23	Central Tongu	Bakpa Tademe	71	
5	29.6.23	Central Tongu	Mafi Dokpo	69	Residents, who number approximately 700, claimed they were in desperate need of a boat, a signboard, and a toilet facility.
6	29.6.23	Central Tongu	Mafi Atitekpo	92	
7	29.6.23	Central Tongu	Mafi Aklamador	125	
8	30.6.23	North Tongu	Patamia	52	
9	30.6.23	North Tongu	Vome	38	Residents stated that they were in desperate need of a toilet facility.
10	2.7.23	South Tongu	Tsatsukope	51	
11	2.7.23	South Tongu	Adzake	49	In need of two poly tanks and two pumps
12	2.7.23	South Tongu	Avegagome	32	
13	3.7.23	North Tongu	Gbagbavuinu	27	Residents praised VRA for constantly assisting them in times of need. They stated that they need the implements to maintain a clean environment.
14	3.7.23	North Tongu	Titikope	35	At what temperature does the cercaria die?
15	3.7.23	North Tongu	Husikope	36	
16	4.7.23	Central Tongu	Mafi Dekpoe	34	Residents desperately requested a sign board and a toilet facility.
17	4.7.23	Central Tongu	Kumikpo	63	
18	4.7.23	Central Tongu	Agbenyokope	48	Residents asked that a signboard be created for them.
19	6.7.23	South Tongu	Alikekope	31	
20	6.7.23	South Tongu	Tadze	49	
21	6.7.23	South Tongu	Agorme	27	In need of a toilet facility
22	7.7.23		Gblornu	29	In need of a pipe-borne water
23	7.7.23		Attratidzi	49	In need of implements to clear the aquatic weeds
24	8.7.23	Ada East	Adonorkope	32	In need of implements to clear the aquatic weeds
25	8.7.23	Ada East	Dikanya/Dikato	32	They requested VRA come to their aid when it's time for MDA
26	8.7.23	Ada East	Agorkpo	14	In need of a toilet facility
27	8.7.23	Ada East	Tekpekope	63	
28	9.7.23	North Tongu	Dzimakope	28	Residents claimed about 99% of the children urinate blood so they should be attended to for treatment. In need of a boat and other implements to clear the aquatic weeds
29	9.7.23	South Tongu	Vume	47	In need of implements to clear the aquatic weeds.
	Total			1,465	

Some Questions and Contributions Include:

- Most of the communities were concerned about the Lower Volta Dredging and Aquatic Weeds Harvesting Project as they claim it will alleviate their plight and also boost their health and socio-economic livelihoods and improve their quality of life.
- Majority of the communities pleaded for Water and Sanitation facilities and others asked that VRA provides them with the Bilharzia signages they have seen in other communities as a means of creating more awareness on the disease.



Partnerships Established

Implementation Research in the Management of Schistosomiasis in the Volta Basin

A Memorandum of Agreement (MOA) between the Authority and the University of Health and Allied Sciences (UHAS) to guide

an Implementation Research in the control and management of Schistosomiasis in the Volta Basin was executed by the Authority and UHAS on March 27, 2023. The Authority subsequently paid UHAS the first tranche payment per Invoice No. UHAS-VRA/IR-SCVB/03.23/01 on March 29, 2023, to a tune of Three Hundred and Forty-Five Thousand, One Hundred and Thirty-Four Ghana Cedis, Twenty-One Pesewas (GHS 345,134.21) and set in motion the Exploratory Phase of the Research.

As part of the process, a Team from UHAS visited the Authority to interview key staff who are involved in administering various levels of intervention programs aimed at managing the menace of Schistosomiasis in the Volta Basin. Another team led by Professor Margaret Gyapong; Director of the Institute of Health Research of the University together with the Program Co-Ordinator Dr. Alfred Manyeh and Dr. Maxwell Dalaba were invited to the 2023 Environmental Management Plan Steering Committee Meeting on September 7, 2023, to deliver a presentation on the Implementation Research and indicate their status in terms of deliverables and timelines. Dr. Manyeh delivered the presentation on behalf of UHAS.



Collaboration with Neglected Tropical Diseases Programme (NTDP) of Ghana Health Service (GHS)

Through a Memorandum of Agreement (MOA), the Authority intended to partner the NTDP of the Ghana Health Services (GHS) in the management and control of Schistosomiasis through Mass Drug Administration in the Volta Basin. The NTDP however, at the very last stage advised the Authority to rather sign the Agreement with the District Health Directorates, stating

their willingness to provide the needed support for the training, supervision and monitoring progress of work. Further engagements were held for more detailed discussions on the matter to facilitate program implementation at the District level. Below are photographs of some of the engagements.



Meetings with District Directorates of Health

The MOAs with the Volta and Greater Accra Regions were subsequently executed by both institutions.

Kick-off meetings were held to discuss key issues, project objectives and scope, roles and responsibilities, budget and communication plan, risks and quality control as well as schedules and milestones.



Kick of Meetings with Volta and Greater Accra Regional Health Directorates

Snail Vector Prospection

The Authority undertook an assessment of Schistosomiasis Snail Vector population density and infectivity levels at the water contact sites of Twenty-Nine (29) Schistosomiasis endemic communities as listed in the Table below in the Eastern and Volta Regions. Details of analysis are presented in the Table below.

Table 2: Schistosomiasis endemic communities

No.	Community	Date	<i>Biomphalaria pfeifferi</i>			<i>Bulinus truncatus</i>		
			No. Examined	No. Positive	Infectivity (%)	No. Examined	No. Positive	Infectivity (%)
1	Abume	16/05/23	0	0	0.0	0	0	0.0
2	Tusker (Abuakwa)	16/05/23	4	1	25.0	1	0	0.0
3	Ghanakpe	17/05/23	0	0	0.0		0	0.0
4	Kokontekpedzi	17/05/23	0	0	0.0	0	0	0.0
5	Mangoase	16/11/22	20	2	10.0	4	1	25.0
6	Akwamufie	19/05/23	0	0	0.0	0	0	0.0
7	Adome	17/05/23	0	0	0.0	0	0	0.0
8	Asafo	19/05/23	3	0	0.0	0	0	0.0
9	Small London	17/05/23	5	0	0.0	3	1	33.3
10	MamiWaterkope	17/05/23	3	0	0.0	0	0	0.0
11	Atimpoku	19/05/23	0	0	0.0	0	0	0.0
12	Atimpoku Mamakope	31/05/23	0	0	0.0	0	0	0.0
13	Dzidzorkope	31/05/23	0	0	0.0	0	0	0.0
14	South Senchi	31/05/23	0	0	0.0		0	0.0
15	Old Akrade	31/05/23	0	0	0.0	5	0	0.0
16	Old Apaaso	01/06/23	0	0	0.0	0	0	0.0
17	Kudikope	02/06/23	0	0	0.0	0	0	0.0
18	Apanawu	02/06/23	0	0	0.0	0	0	0.0
19	Konkodeka	02/06/23	0	0	0.0	0	0	0.0
20	Surveyline	02/06/23	0	0	0.0	0	0	0.0
21	Mpampoase	02/06/23	0	0	0.0	0	0	0.0
22	Marine Villages	05/06/23	3	0	0.0	3	0	0.0
23	Metekpor	05/06/23	0	0	0.0	0	0	0.0
24	Sedorm	05/06/23	0	0	0.0	29	6	20.7
25	Adjena Dornor	05/06/23	10	2	20	4	0	0.0
26	Dzemeni	06/06/23	0	0	0.0	0	0	0.0
27	Dzekiti	06/06/23	0	0	0.0	0	0	0.0
28	Gyanyor	06/06/23	0	0	0.0	0	0	0.0
29	DodiAsantekrom	06/06/23	0	0	0.0	0	0	0.0
	Total		48	5	23.97	49	9	29.6

Forty-Eight (48) *Biomphalaria pfeifferi* and Forty-Nine (49) *Bulinus truncatus* snails were found per man hour. Five (5) of the snails found had cercariae indicating infectivity and therefore the ability to cause disease. Infectivity rates for both species of snails in all twenty-eight (29) communities assessed was 26.44%.

Prevalence Assessment

VRA carried out an evaluation of previous Mass Drug Administration (MDA) activities carried out in Thirty (30) riparian communities in the Ada East, Central Tongu, North Tongu and the South Tongu Districts of the Volta Basin. The outcome of this activity was to also serve as baseline data for the impending MDA to be carried out by the GHS on behalf of the Authority as part of efforts to reduce the incidence of the disease in the communities.

In all, one thousand, five hundred and seventy (1,570) people were examined for Urinary Schistosomiasis using the urine filtration method. A total of 818 representing 52% of the people assessed were adults 18 years and above, while 752

representing 48% were children from ages 4 to 17. The gender distribution of persons assessed was equally distributed at 50%, with 786 males and 784 females. 57% of the people assessed were pupils and students while 19% were farmers, 10% were traders and 7% were fisher folks with the remaining 7% consisting of other occupations.

One hundred and sixty-four (164) of the total population assessed tested positive for urinary schistosomiasis (*Schistosoma haematobium*) representing an average prevalence rate of 10.45% as compared to the previous average prevalence rate of 10.10% in the same communities. Average prevalence levels ranged from 0.00 – 46.88%. Dzimahkope located in the North Tongu District recorded the highest prevalence rate of 46.88%. The disease was most prevalent in male children aged 6-17 years old who represented 42% of persons testing positive. Adult females representing 17% were the least infected category of positive persons. By District, the North Tongu District recorded the highest prevalence of 14.41% followed by Central Tongu District with a prevalence of 13.24%. The Ada East District recorded a 10.2% prevalence rate while only 7.47% of persons tested positive in the South Tongu District of the Volta Region.

One hundred and ninety-one (191) stool samples were also examined. Only three (3) of them were diagnosed positive for *Schistosoma mansoni*, making the average prevalence of Intestinal Schistosomiasis for the year under review 1.57%. All three were females above 50 years with 2 of them being fishmongers from Agorkopanya in the Ada East District of the Greater Accra Region and the other from Dzimahkope of the North Tongu District of the Volta Region.

VRA's analyses revealed an increase of 37.04% in prevalence rates. Efforts are being made to extend various Schistosomiasis control interventions such as MDA and provision of Water Sanitation and Health (WASH) facilities to most of the communities evaluated in Table 3 below.

Table 3: MDA and WASH facilities assessment

District/Community	Urinary Schistosomiasis					Intestinal Schistosomiasis			
	No. Examined	No. Pos	Current Prev. (%)	Previous Prev. (%)	% Change in Prev.	No. Examined	No. Pos	Current Prev.	Previous Prev. (%)
Ada East	147	15	10.20	5.51		27	2	7.41	0.00
Kadjadornya	49	7	14.29	6.45	121.48	10	0	0.00	0.00
Agorkopanya	47	6	12.77	6.67	91.49	17	2	11.76	0.00
Kpotsonu	26	2	7.69	4.69	64.10				0.00
Dikanya	25	0	0.00	4.26	-100.00				0.00
Central Tongu	340	45	13.24	9.71		35	1	2.86	0.00
Bakpa Kebenu	186	11	5.91	0.00	0.00	17	0	0.00	0.00
Bakpa Tademe	90	15	16.67	1.61	933.34	3	0	0.00	
Sikor	32	4	12.50	7.23	72.92	2	0	0.00	
Dzimahkope	32	15	46.88	30.00	56.25	13	1	7.69	0.00
North Tongu	333	48	14.41	16.71		64	0	0.00	1.13
Aveyime Dugame	126	8	6.35	6.25	1.59	25	0	0.00	0.00
Aveyime Mangoase	85	17	20.00	7.14	180.00	23	0	0.00	0.00
Fordzoku	55	16	29.09	54.39	-46.51				4.50
Memordzi	48	2	4.17	3.77	10.42	11	0	0.00	
Fumadorkope	19	5	26.32	12.00	119.30	5	0	0.00	0.00
South Tongu	750	56	7.47	9.09		65	0	0.00	8.82
Dedo	96	26	27.08	0.00	0.00	5	0	0.00	0.00
Agave Agorme	82	7	8.54	3.15		30	0	0.00	
Agave Afedume	72	7	9.72	First Visit					First Visit
Gamenu	59	0	0.00	8.40	-100.00				35.70
New Agave	57	0	0.00	0.00	0.00				0.00
Agortaga	56	6	10.71	4.03	165.86				0.00
Morkordzie	53	2	3.77	39.53	-90.47	14	0	0.00	0.00
Adigbli	51	3	5.88	First Visit		11	0	0.00	First Visit
Bekpo	36	0	0.00	10.08	-100.00				
Kove	32	0	0.00	First Visit					First Visit
Adzake	29	4	13.79	0.00	0.00				0.00
Tsatsukope	25	0	0.00	22.00	-100.00				52.50
Dalive	22	0	0.00	7.02	-100.00				0.00
Kissiehkope	21	1	4.76	10.30	-53.77	5	0	0.00	0.00
Afedume	21	0	0.00	First Visit					First Visit
Agordome	20	0	0.00	5.26	-100.00				
Sonukpo	18	0	0.00	8.41	-100.00				0.00
Grand Total	1,570	164	10.45	10.10	37.04*	191	3	1.57	4.28



VRA officers conducting prevalence assessments



Chart 1: 2023 Average Prevalence of Schistosomiasis in Four Districts of the Lower Volta Basin

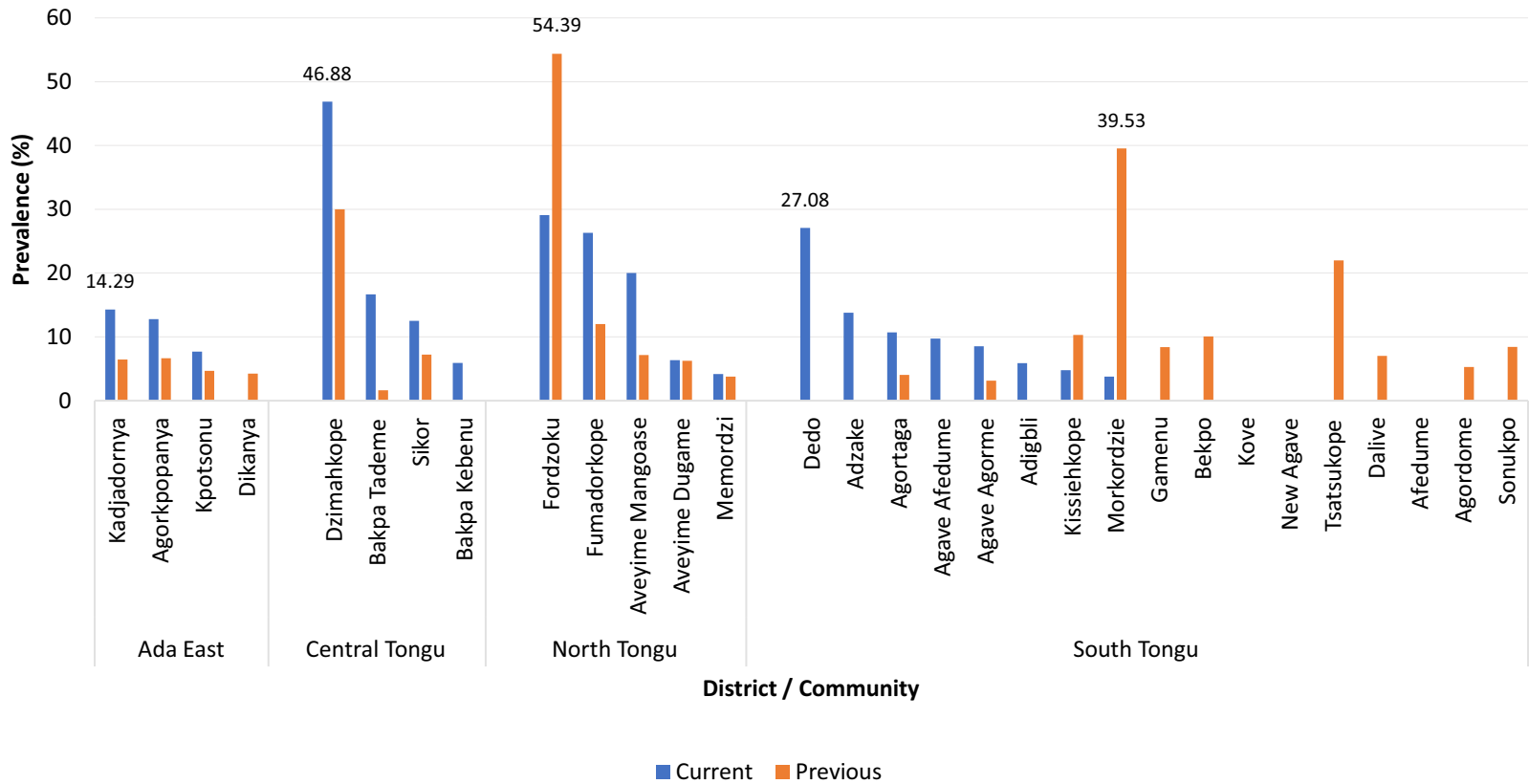


Chart 2: Socio-Demographic Assessments of prevalence in Four Districts of the Lower Volta Basin

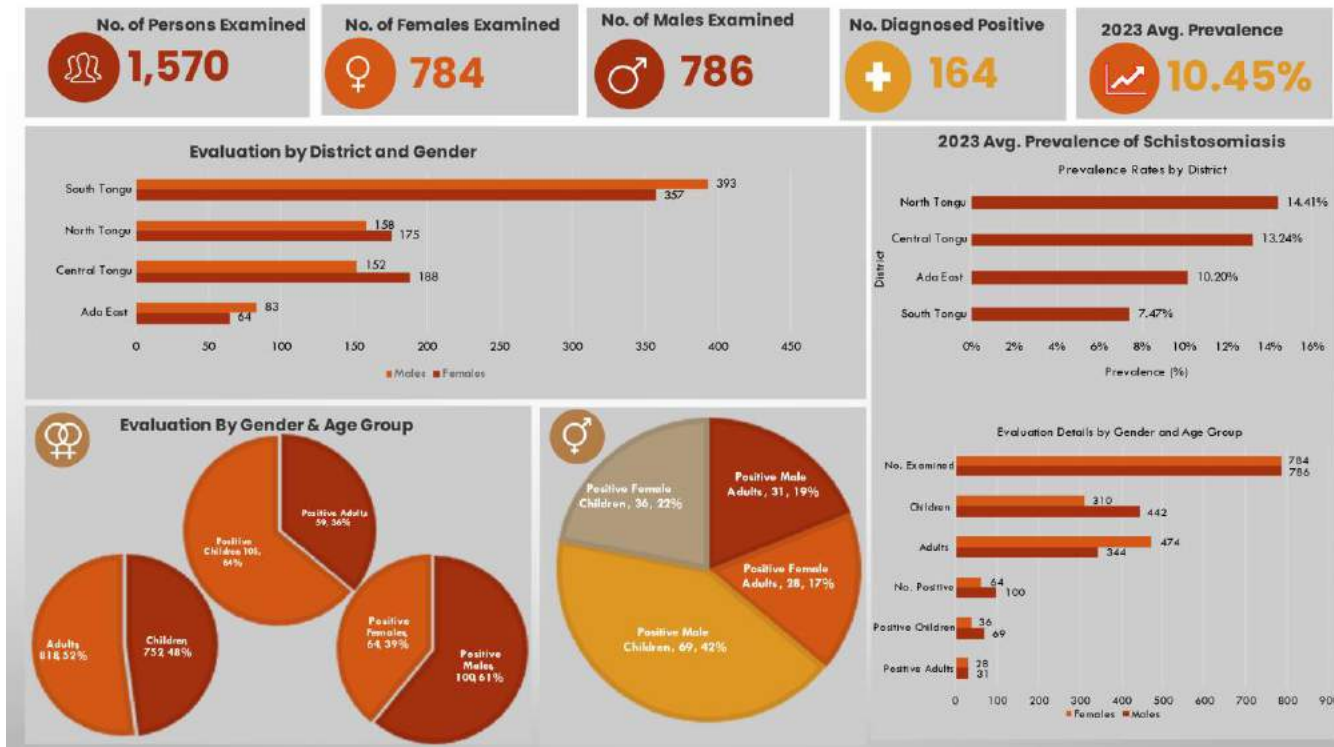
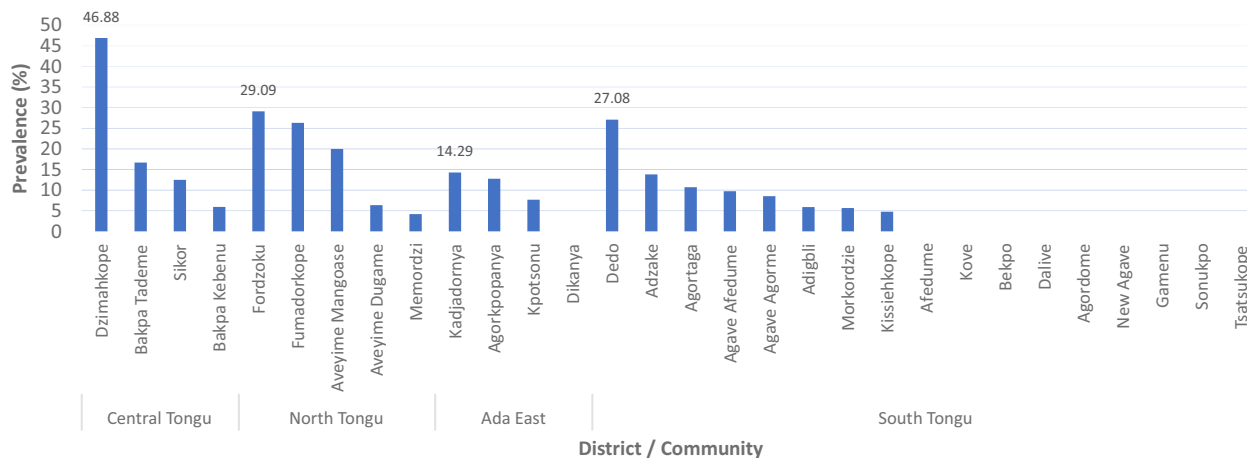


Chart 2: Percentage (%) of prevalence in Four Districts of the Lower Volta Basin



Provision of Psychological Services

The Authority has made a Clinical psychologist available at the Akosombo and Accra Hospitals to provide professional help and counselling on mental wellness, work stress, emotional problems as well as relationship difficulties to staff as part of its commitment to ensuring the health and wellbeing of its employees.

Breast Cancer Awareness

Breast Cancer Awareness month is observed annually in the month of October, to help raise awareness of the disease and for early detection. In 2023, the VRA Ladies Association organized a health walk through some impacted communities to sensitize the community folks about Breast Cancer.

Safety Awareness Celebration

VRA holds Health, Safety, Security and Environment (HSSE) very paramount and therefore has a strategy embedded in its Corporate Objectives to help deal with the dynamic business environment. The Authority is committed to ensuring the health and wellbeing of its employees as evident in the “I” in its SPICE objectives that stands for “Improve Health, Safety, Security and work Environment (HSSE)”.

In November 2023, the Authority organized its Annual Safety Awareness Day Celebration, during which VRA recognized and awarded Departments that adhered to safety in the Operational and Non-Operational Work Area safety Committees (WASACo).

The following Departments/Staff were awarded;

Table 4: Winners of safety awards

Operational Areas

Winner	1st Runner-up	2nd Runner-up
Tema Therma Power Complex (TTPC)	Kpong Generating Station (KGS)	Takoradi Thermal Power Station (TTPS)

Non-operational Area

Winner	1st Runner-up	2nd Runner-up
Pwalugu Multi-Purpose Dam Project	Corporate Strategy Department	Environment and Sustainable Services Department

Most Eco-Friendly Department

Real Estate and Security Services

Safety Personality of the Year Awards

Non-operational Areas - Augustine Ohene Adutwum (Corporate Strategy)

Operational Areas

- Lily Essah (KTPS - Thermal)
- Augutus Inkum (KGS - Hydro)
- Gideon Formson (TTPS - Thermal)

Emergency Response and Flood Simulation Exercise

In 2023, as part of VRA's Emergency Management Plan (EMP), the Authority collaborated with some State and International Agencies to carry out a number of simulation exercises to test the response and preparedness of staff, other stakeholder agencies and communities with relation to how they would react to real life emergency situations such as the unlikely event of a dam break in our Hydro plants or fire outbreak in our Thermal plants.

Operation “Da Woho so”: The Authority organized a flood simulation exercise, which was in collaboration with the National Disaster Management Organization (NADMO) was dubbed: VRA EPP EXERCISE “DA WOHO SO 2023” to wit “Be vigilant”. As a champion for safety, quality, credibility, and value addition to lives, the exercise was to test the effectiveness of VRA's Emergency Preparedness Plan on a large scale; build and strengthen inter-agency collaboration and relationships; and also identify resource gaps of the VRA and responding agencies in the management of dam related emergencies. That notwithstanding, the exercise provided the unique opportunity to practically assess VRA's notification system, explore the 'what if...' questions and the concomitant responds by the participating agencies including the Ghana Police Service (GPS), National Ambulance Service, Ghana National Fire Service (GNFS), the Ghana Navy, the National Signals Bureau, etc. Exercise “Da Woho So” 2023, which was undertaken in three of the nine districts likely to be impacted in the event of a spill from the Akosombo dam or the event of a dam break of the Akosombo and Kpong Dams, revealed resource gaps, while improving coordination and collaboration among state agencies with support from the US Embassy and the North Dakota National Guard.



Response to relocation of victims

The simulation exercise involved total voluntary and compulsory evacuations, search, and rescue for residents in hotspot communities of Asuogyaman, North Tongu and Ada East districts of the Eastern, Volta and Greater Accra regions respectively. Role players in these locations demonstrated how they would respond to real emergency flood disasters.



Response to resuscitation of victims



Response to rescue of victims

KTPS Fire Drill: The Kpone Thermal Power Station (KTPS) conducted a Fire Drill simulation exercise in collaboration with the Ghana National Fire Service (GNFS) and Medical staff from Narh Bitra Hospital. The exercise aimed at testing the response of stakeholders including staff, customers, visitors to the plant and communities, to educate them to know exactly what to do in case of fire emergency. In addition, the Fire drills provided the opportunity for the Authority to ensure that all fire safety equipment and hardware were working effectively

and were being maintained appropriately.



SUPPORT FOR EDUCATION

VRA supports quality education. The Authority's Educational Scholarship programme for needy but brilliant students, as well as Employee Volunteer Programmes in Senior High Schools within its operational areas attest to this fact. The Authority also donates educational materials and

offers financial support towards Science, Technology and Mathematics (STEM) projects as well as quiz competitions in schools within its impacted communities. These programmes are intended to support national education efforts and maximize the potential of students in contributing to Ghana's development.

Tertiary Education Scholarship

The Volta River Authority (VRA), in 2023 awarded tertiary educational scholarship at a total value of GHS 1,000,000.00 to Sixty (60) brilliant but needy students from communities impacted by the Authority's operations. The beneficiaries were admitted into various programmes in the Sciences and Humanities at the tertiary level.

The scholarship scheme, which falls under the Authority's Community Development Programme (CDP), is aimed at contributing to the sustainability and the growth of communities, as well as national development. The Scholarship Awards was a testament of the Authority's commitment to adding value to lives.

Since its inception in 2011, a total of four hundred and forty-nine (449) students from the Akosombo, Akuse, Tema/Kpone and Aboadze operational areas have benefitted from the scholarship

awards. Two hundred and thirty-four (234) students benefitted at the Senior High School and two hundred and fifteen (215) benefitted at the Tertiary level.



Pictures from 2023 Tertiary Educational Scholarship Award Ceremony



Employee Volunteer Programme (EVP)

The Authority's flagship CSR initiative Employee Volunteer Programme (EVP) was organized twice in 2023. The EVP aims at encouraging the Authority's Staff to give back to society by participating in career guidance, counselling and teaching in selected Senior High Schools within VRA's operational areas.

In 2023, VRA held its career guidance, counselling, ICT Boot Camp and teaching sessions in various subjects for the students of Anglo Senior High School (SHS) in the Volta region, Tema Manhean Senior High Technical School in Tema Newtown in the Greater Accra Region and Ahantaman Girls Senior High School in the Western Region respectively. The two events mobilized over Sixty (60) Staff from various work locations to guide the students in their academic and career development.



Career Guidance, Counselling, ICT Boot Camp at Anlo SHS



EVP at Tema Manhean Senior High Technical School and Ahantaman Girls Senior High School

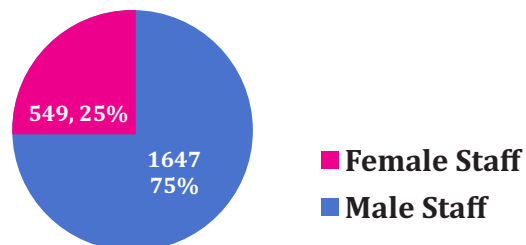


STRIVING FOR GENDER EQUALITY AND BALANCE

VRA is mindful of implementing policies to ensure gender equality and balance. The Authority is conscious of the fact that some professions like engineering are dominated by men, however VRA gives equal opportunity

to all individuals irrespective of gender. The number of women in key Management positions in 2023 were 22 and the number of women in male dominated jobs were 30.

In all, the Authority had a female population of about 25% and is committed to increasing the target to at least 30% in accordance with its Gender Action Plan (GAP) towards gender equality in partnership with the Agence Française de Développement (AFD). **Chart 4: indicates current male to female ratio.**



VRA GAP and KPIs are designed to benefit everybody.

Over 60 female and male staff, managers and executives, together with women’s organizations and VRA Academy teams, assessed VRA gender gaps, with the support of the consulting firm AETS.

The GAP analysis pointed out that VRA is still a male-dominated organization. Very few women occupied technical and leadership roles and gender-based stereotypes still exists at the generating station.

From 2023 - 2026 VRA is committed to increasing female representation

- To increase total female workforce from 25% to 28%
- To increase female in executives position from 0% to 25%
- To increase female Directors and Managers from 18% to 25%
- To increase female engineers from 16% to 24% and female technician engineers from 3% to 9%
- 25% of energy Projects Implementation Units (PIU) team will be female
- 70% of procurements will be gender inclusive



CLEAN WATER AND SANITATION

In fulfilling the Authority's objective of curbing the spread of Schistosomiasis in riverine communities, VRA provides water and sanitation facilities for communities impacted by its operations. The intervention allows for a more sustainable approach in curbing the spread of water borne diseases that are prevalent and geared towards the attainment of SDG goal 6.

VRA's Water Project

VRA in the month of October 2023, initiated a controlled release of water from the Akosombo and Kpong Dams. This measure was taken to safeguard the dams from potential overtopping.

The increased water flow in the Volta River unfortunately, led to flooding in low-lying areas along its course, impacting communities such as Mepe, Battor, Sogakope, Mafi, Adidome, Ada, and others, displacing over 26,000 individuals.

The flood disaster in the Lower Volta basin carried in its wake the release of pollutants into the environment thereby raising concerns about water quality and public health due to polluted water supply systems. VRA restored the damaged water supply system in the affected areas and also made available daily water supply services to the impacted communities.

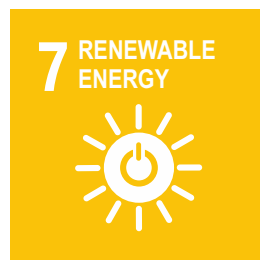
The Volta River Authority (VRA) restored the supply of clean water to the Aveyime Community in line with efforts to alleviate the plight of communities affected by the spillage of excess water from the Akosombo and Kpong Dams.



VRA's Deputy Chief Executive (Services) hands over refurbished water supply system to Aveyime community

VRA's Sanitation Project

The Authority in 2023, also carried out a needs assessment and mapped out communities like Fakpoe and Madavenu, both in the Volta Region. The two Communities were earmarked for Micro Flush Bio Digester Sanitation facilities in future.



RENEWABLE ENERGY PROGRAMME

VRA is striving to provide affordable renewable and clean energy to ensure that it increases its renewable energy footprints. The Authority is vigorously implementing its Renewable Energy Development Programme (REDP),

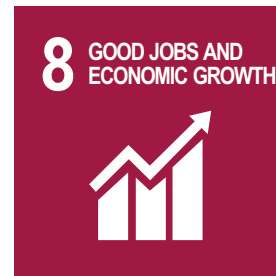
which it started in 2011, to diversify its generation portfolio, assist in achieving the Government's Renewable Energy (RE)

Policy Objective, and reduce its carbon footprint as well as that of its customers.



Ariel view of VRA's 15MWp Kaleo Solar Power Plant

VRA progressed with the construction of the 15MWp Kaleo Solar Power Plant. The plant was substantially completed in 2023 and is awaiting commissioning.



CONTRIBUTION TO GOOD JOBS AND ECONOMIC GROWTH

VRA is the leader in the electricity supply market in Ghana, with a market share of 56.57% as at 2023, followed by Independent Power Producers (IPPs) with a share of 37.87% and Bui Power Authority (BPA) with a share of 5.56%.

VRA generates the needed power that positively contributes to the growth of Ghana's Gross Domestic Product. The Authority is a distinguish employer, and offers decent and fulfilling jobs that are satisfactory and competitive. VRA is determined to protect labour rights devoid of modern slavery and child labour in accordance with SDG8.

The Authority is wholly managed by Ghanaians and has an enviable place in the minds of stakeholders due to many years of consistency in generating reliable and quality power.

Relocation of Ameri to Anwomaso near Kumasi for Grid Stabilization.

In 2023, Government handed over the erstwhile Ameri Plant to VRA to be dismantled, relocated, reassembled and repowered within one year at Anwomaso in the Ashanti Region to contribute to grid stabilization in the middle and northern sector of Ghana.

VRA commenced work on the Anwomaso project in earnest in 2023 with an anticipation of completing and commissioning in 2024



VRA Managers Undergo Ethical Leadership Training

In accordance with corporate objectives to cultivate a diverse, committed, and future ready workforce, line Managers in the various work locations of the Authority received training in “Ethical Leadership” in 2023. The training was aimed at building the capacity of the Managers able to recognize ethical dilemmas and develop strategies for responding to ethical challenges.



Recruitment of Security Guards

The Authority together with its subsidiary, the Volta Lake Transport Company (VLTC) recruited and absorbed Twenty-Six new security guards to beef up internal security. The guards, comprising 20 personnel from VRA and six from VLTC Ltd., officially graduated in August 2023, following successful completion of a five-week train in Basic Security at the Naval Training Command at Nutekpor, near Sogakope in the south Tongu District of the Volta Region.



Passing out ceremony of VRA/VLTC Security Guards

9 INNOVATION AND INFRASTRUCTURE

INNOVATION AND INFRASTRUCTURE

VRA Launched its Creativity and Innovation day under the theme “Creativity and Innovation-The Anchor for our Sustainability” in 2023, during which a team was inaugurated to lead Creativity and Innovation.

The Authority initiated and brought to life many Creativity and Innovation ideas from various Departments within the Authority.

Overview of Committee's First Year Activities

The Committee initiated various programmes and activities to infuse creativity and innovation into the VRA work culture. The initiatives carried out between 26th April 2022 and April/May 2023 included the following:

Table 5: Innovation Initiatives and Activities

No	Initiative	Activities	Remarks
	Sensitization/ Education	Road shows in all work locations to educate staff on the VRA Creativity and Innovation agenda. Print and electronic advertisements displayed at selected places at all work locations.	Two (2) times
		Reward schemes to celebrate the most innovative ideas.	
		Overall best 1st runner up (Joint submission by two (2) staff) 2nd runner up	Learning visit to Amazon Innovation Center, Dubai Learning visit to Rwanda Innovation Center Learning visit to West African Power Pool Information and Coordination Center

		4th to the 10th best idea All staff who submitted ideas	Monetary awards and certificates Lunch with Chief Executive, Gift vouchers and certificates
	Capacity Building (Committee Members)	Educational tours to some local and foreign institutions that have implemented creativity and innovation as part of their work culture. Places visited included the Nile University in Egypt, the Stellenbosch University in Cape Town, South Africa and Ashesi University Ghana	8 members of the committee benefitted from overseas study tour. Committee members also undertook a study tour to Ashesi University, Ghana.
	Organizational Capacity Building	Webinar on various topics (Details in Appendix 1): Webinar topic: - Importance of Creativity & Innovation to VRA's Business - Design Thinking Process - Creativity and Innovation; Telling the VRA Story - Thinking outside the 'Box' - Breaking the Cultural Barriers - Future of AI in Business; Building a Resilient Cyber Security Environment - Amazon's Culture of Innovation	

Table 6: Innovation Webinars and Training Programmes

No	Activity	Rationale	Timeline	Speaker/Presenter
1	Webinar – Design Thinking Process Training for C&I Team – Design Thinking (3 Days In-person)	Acquire knowledge and skills in the generation of value-adding creative ideas	Jan 25, 2023, and Jan 31 – Feb 2, 2023	Prof. Emmanuel S. Asamoah Esq. Ass. Professor/Acting Dean (Faculty of IT & Comm. Serv. UPS)
2	Webinar - Creativity and Innovation; Telling the VRA Story	To recognize and promote existing creative and innovative initiatives by staff while encouraging others to come up with creative ideas.	February 16, 2023	Mr. Edem Akli-Nartey (Risk Software VRA, GRIDCo and NEDCo) & Insyte (VRA-HR) Mr. Dennis Brown (PLC to VoIP & Project Portfolio Mgt. Solution) Awurama Ofori-Ani (Laserfiche)

3	Webinar – Thinking outside the 'Box'	How to transition from “impossibility mindset” to “creative mindset”.	March 09, 2023	Mr. Patrick Otieku-Boadu (CEO, Spearhead Consult)
4	Webinar – Breaking the Cultural Barriers	Help staff move away from the old VRA ways of doing things to doing things differently in a competitive energy industry	April 13, 2023	Ing. Kofi Ellis Former DEC(S), VRA/Consultant, Deloitte Ghana
5	Future of AI in Business; Building a Resilient Cyber Security Environment	To give participants a glimpse into the future of Business in AI and how to Safeguard the Potential Risk (ie. Cyber Security)	April 21, 2023	Mr. Bernard Acquah – CIO, MTN Ghana Mrs. Awurama Ofori Ani – Director MIS, VRA
6	Amazon's Culture of Innovation	How Staff can learn from Amazon's Culture of Innovation to impact on the Authority's business.	April 25, 2023	Mr. Faisal Iqbal – Head of Innovation, Amazon Web services- Middle East & Africa

VRA Honours Staff for Creativity and Innovation.

VRA awarded the winner of the maiden edition of the VRA Creativity and Innovation competition, Mr Dennis Sitsofe Anyomi, a Mechanical Engineer, in April 2023. According to Mr. Anyomi, he thought he was just contributing to a pool of ideas that will sustain the VRA brand business, when the ideation platform for Creativity and Innovation was opened. As an astute Engineer, his desire is to see growth not necessarily by inventing new stuff or designing new products, but by also reviewing processes to make things better, more efficient, and effective payed off.

Mr. Anyomi developed a Paperless system that uses a QR code to improve Service Delivery within the Authority. The code is deployed in all VRA departments and subsidiaries to address various levels of challenges they may be facing. The code is used to share reports and other

documents with very limited need to print. This makes reporting and circulation of documents easier.

VRA's 100% Electric Buses

For 63 years, VRA has been at the forefront of powering economies and adding value to lives. In line with the Authority's commitment to reduce greenhouse gases arising out of VRA's operations, and to ensure development in a sustainable manner, VRA took the lead in going green by introducing 100% electric buses in Ghana.



This initiative is among several efforts to use digitization and technology to reposition the VRA. By introducing electric buses into VRA's fleet, together with the proposed Akosombo Smart City project, VRA aims at redesigning the Akosombo township into a resilient city and technology hub.



VRA "Front Desk" Application

The VRA Front Desk has a fully featured software application for Real Estate bookings. The introduction of this application is boosting productivity, allowing for adaptability and fostering growth for both internal and external customers of the Authority.



10 REDUCED INEQUALITIES



REDUCED INEQUALITIES

VRA in an effort to reduce inequality, operates a fair wages & salaries structure, coupled with a fair HR system that fosters career growth through progression and promotion. The Authority offers equal opportunities for employment and publicizes its vacancies first internally, and also externally to attract the best employees. It also strives to bridge the inequality gap through a Collective Bargaining Agreement (CBA) with staff groups. Below is the table showing the new entrants, internal advertisements, promotions and retirements during the year 2023.

Table 7: Vacancy, Recruitment and Retirement

New Entrants	62
Internal Advertisements	30
Promotions	372
Retirement	62

11 SUSTAINABLE CITIES AND COMMUNITIES



STAKEHOLDER ENGAGEMENT

To address issues, execute decisions, and sustain a cordial relationship with all stakeholders, VRA often interacts with Traditional Leaders, Opinion Leaders including Municipal and District Assemblies and Transport Union officials in its impacted communities. Several stakeholders, communities and Municipal/District Assemblies participated in engagements held in 2023.

Community Engagement and Sensitization programme

The 2023 community engagement and sensitization was focused on the Cashew for Land project under the theme “Benefit of Cashew Cultivation 2” for ten (10) communities. This was done in collaboration with the District Ministry of Food and Agriculture division. A total of 646 participants, participated in the sensitization programme. Details are captured in the table below:

Table 8: Community Engagement and Sensitization

Community	No. of Participant	Number of males	Number of females	Number of Children
Bayibome	53	10	13	30
Avetikorpe	67	12	20	35
Gborfe	94	23	26	45
Dafor tornu	64	17	14	33
Daor	91	35	37	19
Odomitor	89	36	41	12
Ablorga	50	16	19	15
Awate	52	20	22	10
New Adomi	30	10	20	0
Aveme	56	16	20	20
Total	646	195	232	219



RESPONSIBLE CONSUMPTION PROGRAMME

In line with the Authority's strategy to ensure development in a sustainable manner, VRA continued to focus on issues related to sustainability, environmental conservation, as well as improving the livelihood of people in the riparian communities. The activities implemented include afforestation and reforestation, bush fire prevention and management, alternative livelihood programmes, etc. The objective of the long-term investment in environmental sustainability in the Authority's operational areas is to mitigate the impact of the Authority's operations on the people and the environment.

Community sensitization and environmental education was carried out for communities within the Volta Gorge Protected Area (VGPA). The sensitization focused on climate change, wild fire; its effects and how to manage them, as well as planting bamboo for the protection of the Volta Lake. The exercise was carried out together with the Ghana National Fire Service. In all five communities were engaged and these were Ampanawu, Mpamproase, Survey line, Kotokuakra and Dodi Asantekrom.



Staff of VRA and Ghana National Fire Service (GNFS) Engaging the Kotokuakra Community

The objectives of the community education on the climate change and wild / bush fire management were as follows:

- To create awareness on climate change and the effect of global warming.
- To improve the understanding of riparian communities around the volta lake, the importance of tree conservation and the effect of forest degradation with regards to the hydro - electric power generation.
- To educate the people on the proper understanding of the fire triangle and how to handle fire in their environments.
- The need for the populace, especially students, to understand the concept of “when the last tree dies the last man dies”

A total of 413 people attended the programme in the riparian communities. There were 122 males, 139 females, 152 children as indicated in Table 9.

Table 9: Participation in Community Engagements

DISTRICT	COMMUNITY	MALE	FEMALE	CHILDREN	TOTAL
	Survey Line	14	18	30	62
	Ampanawu	22	23	20	65
	Mpamproase	34	33	42	109
	Dodi Asentekrom	35	34	33	102
	Kotokuakra	17	31	27	75
Asuogyaman	Sub Total	122	139	152	413
GRAND TOTAL	5 COMMUNITIES	122	139	152	413

The following recommendations were made:

1. VRA – E&SDD should continue to give Fire Training for Volunteer groups within the VGPA at regular intervals.
2. The VRA-E&SDD should continue with constant environmental education to create awareness on the Climate Change and anti-bush/wildfire campaign to reduce forest degradation within the VGPA
3. The Authority should continue to employ more indigenous alternative livelihood avenues for the riparian communities so that they desist from destroying the environs of the Volta Lake.

As an institution whose origin is rooted in the history of Ghana, VRA in 2011 instituted the an Emergency Preparedness Plan (EPP) in addition to the Environmental Management Plan (EMP) and the Dam Safety Assessment (DSA) reports.

The EPP among other things; provides a framework for carrying out monitoring activities, early detection of emergencies, classification of a potential emergency according to its magnitude of impact and notification procedures to facilitate prompt dissemination of information during emergencies. In May 2023, VRA carried out an EPP simulation to assess the sufficiency of the EPP protocols as a form of validation for the plan. Prior to this, VRA held annual EPP workshops which permitted continuous sensitisation and training of downstream impacted communities with a population of over 300,000 in the case of Akosombo dam break.

ENVIRONMENTAL PERFORMANCE



ENVIRONMENTAL SUSTAINABILITY

The Volta River Authority (VRA) is committed to ensuring continual improvement in the sustainability of the operations of VRA and 'Go Green' by reducing its Environmental Footprints, achieving Net Zero emissions, implementing effective Environmental Management Systems, promoting the inclusion of environmental sustainability indicators in Project Management, and demonstrating leadership and innovation in Environmental Service Delivery.

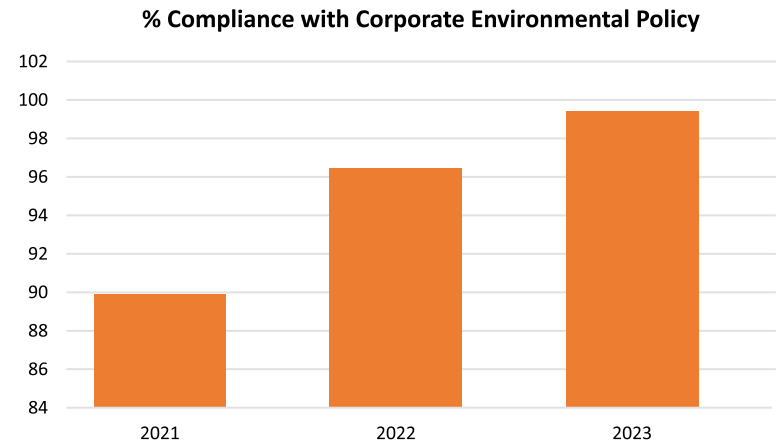
The VRA continually assesses its environmental management performance through the implementation of these key strategic initiatives and programmes described in the subsections below.

Environmental Stewardship & Compliance Monitoring

Managing our physical and social environment effectively and responsibly, in line with sustainability principles, is crucial for our success. The VRA's Corporate Environmental Policy embodies our commitment to sound environmental stewardship. It articulates our resolution to meet and exceed all applicable environmental laws, regulations, and standards. This is evaluated by our Environmental Policy Compliance Index and our Environmental Quality Compliance Index. Our obligation for sound environmental stewardship also requires acquiring all requisite social and environmental licenses and permits for sustainable power generation whilst avoiding and mitigating any adverse environmental impacts our operations may have on our stakeholders, particularly host communities.

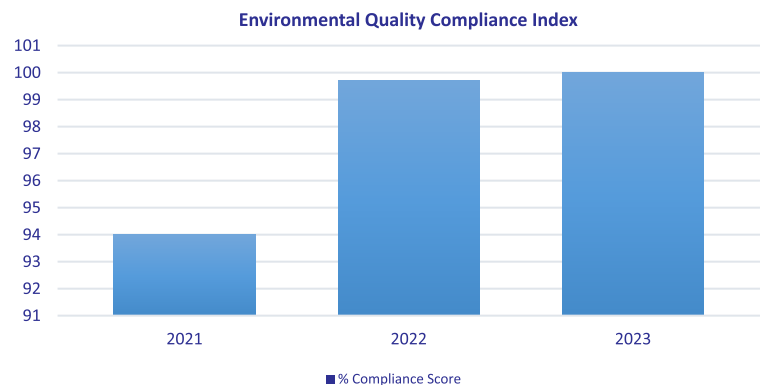
Environmental Policy Compliance Index

The Environmental Policy Compliance Index evaluates progress made in terms of carrying out activities that will help the Authority comply with all of its environmental policies. The VRA performed creditably well for the year under review.



Environmental Quality Compliance Index

The Environmental Quality Compliance Index assesses the Authority's compliance with local environmental quality standards for emissions and discharges into the environment from its thermal power operations. The VRA achieved a corporate score of 100% for the year under review.



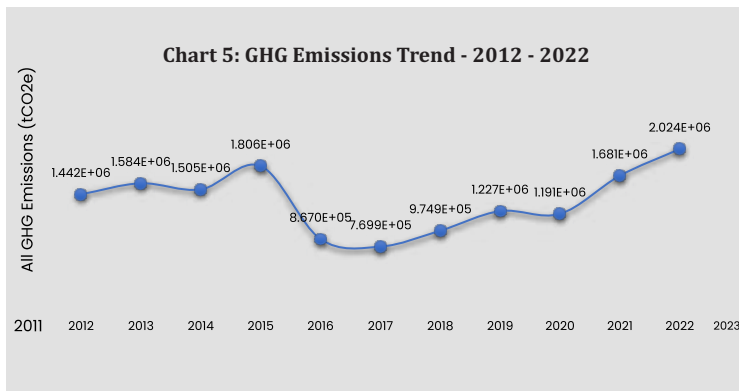
Environmental Permitting

Permits for some of the operational facilities which expired in 2022 were duly renewed for 2023 in line with the Environmental Assessment Regulations, LI 1,652. The Authority concluded the Permit renewal processes by ensuring timely submission of the respective Environmental Management Plans of the various operational facilities.

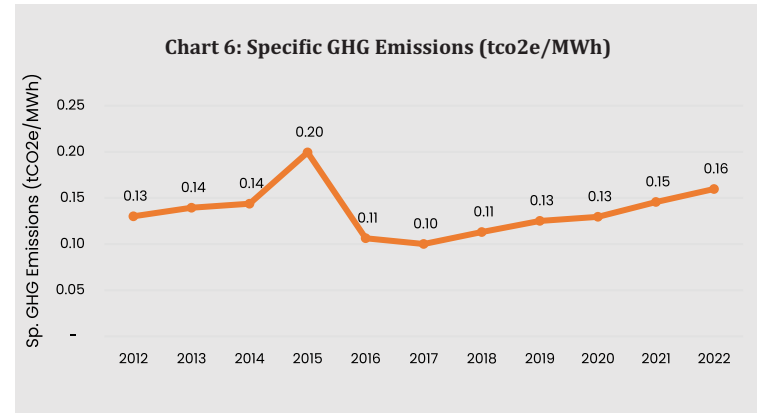
Carbon Footprint Management Programme

The VRA in 2016 initiated a “Corporate Carbon Footprint Management Programme” (CFMP) as part of its Corporate Strategic Objectives to allow for the measuring, reporting and management of its Greenhouse gases (GHG) emissions. The VRA, accordingly, published the 2012-2022 GHG Inventory Report on its corporate website (www.vra.com) during the period under review.

The report which compares GHG emission from 2012 to 2022, measures the impact of implemented reduction initiatives, and identifies further reduction opportunities for future action. Total GHG emissions for the years 2012-2022 was 15,071,129.45 tCO₂e. GHG emissions trend from 2012 to 2022 is presented in Chart 5 below



The results indicate a decrease in specific GHG emissions by 27% and 20% from 0.2 in 2015 (which is the baseline year) to 0.15 and 0.16 in 2021 and 2022 respectively as shown Chart 6 below. The increased use of natural gas in combine cycle mode for thermal power generation during the years 2021 and 2022 accounted for this result.



GHG Emission Reduction Strategies

In line with national actions in the renewable energy sector, VRA in February 2010 adopted a Renewable Energy Generation Policy in order to develop and operate RE plants in an efficient, cost-effective and environmentally sustainable manner. To achieve the purpose set out in the VRA RE Generation Policy, the Renewable Energy Development Programme (REDP) was formulated. The VRA REDP sets a 5-10 years' Renewable generation capacity target, taking cognizance of the local and export electricity demand as well as grid constraints and is being rolled out in phases. Details of planned renewable energy projects are as listed in Table 10

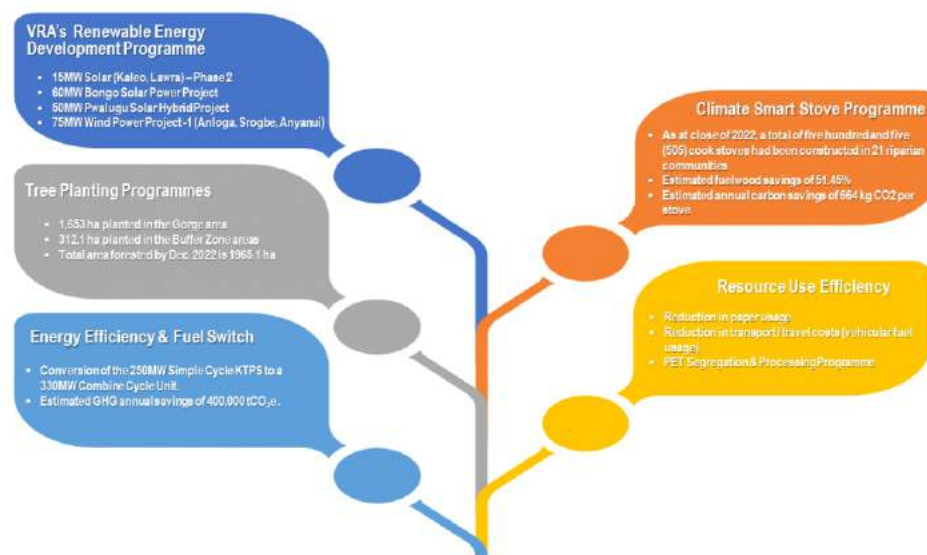


Chart 10: Planned Renewable Power Projects

	Project
15 MW	Solar (Kaleo, Lawra) – Phase 2 (to be commissioned in 2024)
60 MW	Bongo Solar Power Project (EIA Study concluded, Environmental Permit obtained)
0.448 MW	Akuse Residential & Institutional Office Buildings Solar PV Rooftop Project
0.057 MW	Head Office Solar Car Park
0.079 MW	Head Office Rooftop Project
75 MW	Wind Power Project -1 (Anloga, Srogbe, Anyanui) (EIA Study concluded, Environmental Permit obtained)
50 MW	Solar Power Component - Pwalugu Multipurpose Dam
50 MW	Sawla Solar Power Project
20 MW	Sherigu Solar Power Project
20 MW	Zebilla Solar Power Project
70 MW	Loagri Solar Power Project
5 MW	Akuse Floating Solar Power Project

Annual GHG emissions savings are estimated at 207,506 tCO₂e for the solar power projects (291 MW) and 98.077 tCO₂e for the wind power projects (75MW).

Some efforts towards climate change



Other GHG emission reduction strategies currently being implemented include retooling existing simple cycle thermal power plants to combined cycle, fuel switching from light crude oil to natural gas in thermal power generation, increasing reforestation program coverage, utilization of fuel-efficient climate smart stoves in impacted riparian communities, reduction in paper usage, sound solid waste management practices and leveraging on IT infrastructure to reduce business travels and transportation through video conferencing.

Climate Smart Stove (CSS)

The Authority has collaborated with Akosombo Zonal Office of Fisheries Commission since 2016 to construct climate smart stoves (fuel efficient and energy saving cook stoves) also known as VRA “Ahobanbo” Stove for riparian communities in the Eastern, Volta and Oti Regions. Beneficiary household's members mostly women were also trained in the construction and maintenance of the stoves for the sustainability of the project. A total of 610 stoves have so far been constructed in 21 riparian communities and 520 are currently in use.

The objectives of the climate smart stoves are to:

- Reduce the consumption of firewood and eventually reduce the rate of deforestation in the Volta Lake basin;
- Enhance carbon savings;
- Reduce financial cost of firewood usage;
- Improve health conditions of beneficiary households as a result of non-contact of smoke and heat during cooking.



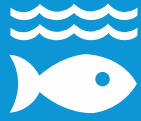
PET Bottles Segregation

VRA in conjunction with proposed Partners (Environment 360+Miniplast Ltd.) drafted an MOU in 2023 to guide the establishment of a PET Bottles Recycling Plant in Akosombo. A review of the Draft MOU is scheduled for May, 2024.

Electronic waste (cartridges and toners)

The VRA Procurement Department has been tasked to be responsible for the collection of the used cartridges and toners for safe disposal. Discussions are ongoing to identify a potential partner to assist in the collection and disposal and electronic waste.

14 LIFE BELOW WATER



PROTECTING THE VOLTA LAKE

The Volta River Authority (VRA) has been implementing various activities over the years, to mitigate the impact of aquatic weed infestation and sand siltation following the construction and operation of the Akosombo and Kpong Hydroelectric power dams.

To effectively carry out these activities, the VRA has entered into a public-private partnership agreement with two private sector companies to carry out the aquatic weed harvesting and sand dredging in the lower Volta river.

VRA manages pollution in the Volta Lake by monitoring and assessing the water quality of the reservoir. The monitoring is carried out on effluent from the tailrace of the Akosombo and Kpong dams, as well as pollutant-laden effluents from suspected pollution sites along the shorelines of the Volta. This is done by bench-marking the pollution monitoring performance against World Health Organisation (WHO) and Environmental Protection Agency (EPA) targets.

Dredging and Aquatic Weed Harvesting

VRA dredges the Lower Volta river to remove sand sediments from the base of the river to foster free flow. Dredging the river also limits the incidence of water hyacinth, reduces water borne diseases and improves aquatic life.

The Kpong Hydropower Reservoir is occasionally infested with different species of water weeds, beneath the calm waters of the vast reservoir. These weeds threaten the life of the ecosystem and can disrupt the delicate balance of power and ecology. Some form dense mats, blocking sunlight from penetrating the water and leading to significant reduction in oxygen levels. This, in turn, disrupts the ecosystem (affecting the diverse array of fish species that thrive in the reservoir) and power generation.

In response to this ecological crisis, the Volta River Authority (VRA) has expanded on its prior tactics to fight the invasion of aquatic weeds at the Kpong dam. The most recent innovation is the use of a dipper dredge system, consisting of a floater (barge) with an excavator attached, another barge to hold collected weeds, and a tug to move the barges.



This new system is expected to systematically cut through the dense weed beds and gather the weeds onto the receptacle barge for final disposal. This arduous process requires skilled operators who will maneuver through the intricate network of waterways, ensuring every inch of the river is covered to rid the Kpong Dam of aquatic weeds. The initiative, together with previous strategies involving manual weed clearing, biological control of weeds, and collaboration with environmental experts and relevant stakeholders, will culminate in a comprehensive plan to combat the menace of aquatic weeds on the Kpong Dam. This will help restore the ecosystem leading to socioeconomic advantages and power generation.

Community Engagement on Dredging

VRA undertook a Community Engagement with the Agbeve Community located in the South Tongu District of the Volta Region. The intended dredging was placed on hold due to a Court Injunction granted by the community to halt the Authority from undertaking its Lower Volta Dredging activities in the Angor River.



VRA also visited Tefle, Mepe and Ada Foah and their surrounding communities in the South Tongu, North Tongu and Ada East Districts respectively within February 2023 to undertake similar Community/Stakeholder Engagement programmes.

These communities were eager and very happy about the commencement of the long-awaited dredging Project. They all pledged their full support and cooperation during the project life cycle.



REFORESTATION PROGRAMME

The Volta Gorge Reforestation programme includes Environmental Education in Communities and Schools, tree nursing for forest trees seedlings and grafted seedlings, tree planting, clearing of tree seedlings (beating-up), wild fire management,

survival surveys and monitoring activities.

Cash for Land Project

VRA continued its reforestation programme along the Volta Lake to reduce greenhouse emissions and ensure the continuous flow of water into the Volta Lake Basin for sustainable hydroelectric power generation. Plantation development is also a key activity in the Authority, primary for the protection of the Volta Lake and to reduce the impact of climate change in the local communities.

The total protected area of the Volta Gorge is 5,149.24 hectares. Fifteen (15) hectares of Forest trees were planted during the 2023 planting season. By the end of the year, about 3,190.00 hectares of the Volta Gorge area had been covered by dense forest vegetation, consisting of both plantation and natural forest. The forest plantation area is 1,688 hectares, the natural forest covers 1,502 hectares and the area of land with rocks and grass vegetation is 1,959.24 hectares.

Within the Buffer Zone Project site, a total area of 40 hectares

was targeted for planting activities in 2023 in the Volta and Oti Regions. In total, 40 hectares of degraded lands were planted comprising 25 hectares of cashew and 15 hectares of assorted forest tree seedlings. The objective of the Cashew for Land project is to develop cashew plantation for Landowners along the Volta Lake as source of alternative livelihood, as well as provide watersheds for the cashew plantation.



Reforestation along the Volta Lake

VRA undertakes annual Survival survey exercises on the previous year's tree plantation to assess the survival rate of the plantation. The 2022 forest plantation of 41.5 hectares were assessed in 2023. Total seedlings of 17,054 (Forest trees and Cashew) Survived out of 17,900 seedlings planted representing 96.07% survival rate: 846 seedlings died representing 3.93%.



Within the Volta Gorge Protected Area (VGPA), a total of 11,840 assorted seedlings were planted on 16.00 hectares. Assorted seedlings of Acacia, Cassia, Mahogany, Leuceana, Ofram and Cedrella were planted. Out of the total of 11,840 seedlings planted in 2022, the survived seedlings in 2023 were 11,355 representing 95.90%. 485 representing 4.1% failed to survive.

Bamboo for the Protection of the Volta Lake

The Authority continued with efforts to protect the shoreline of the Volta Lake to preserve the water body for sustained hydro power generation. This follows the collaborative venture between VRA, the Bamboo & Rattan Unit of the Forestry Commission, Council for Scientific Research and the forest Research Institute of Ghana.

During the year 2023, ten (10) hectares of bamboo were planted as a continuation of phase 1 with 5,000 bamboo plantlets at Dodi Asantekrom, Survey line and Kotokuakra. It is the Authority's view that, successfully executing this venture would create the needed buffer zone to avert encroachment of VRA's acquired lands, protect the land against erosion and prevent or reduce the rate of evaporation of the Volta Lake. It will also protect the Volta Lake by serving as a means of demarcation of the 85 meters above mean sea level (280 feet contour) restoration.

Most of the bamboo were however affected by the high water level during the 2022/23 raining season.



Drone Technology Services

VRA adopted drone technology as part of efforts to protect the Volta Basin and halt illegal undertakings/projects along the Volta Lake. The program received a major boost following the appointment of A-M Surveys Limited in 2023, to provide the services. The project is expected to generate detailed maps and photographs of land use changes, erosion, human activities, aquatic weeds coverage, vegetation coverage and aquaculture developments, etc. along the volta riverine system. The service will allow for enhanced environmental planning and conservation activities for sustained hydro power generation.



GOVERNANCE PERFORMANCE



PEACE AND JUSTICE AT THE WORKPLACE

The Volta River Authority has at all times strived to exhibit the best of conduct in the area of Governance, Economic, Human rights and Business performance. The Authority does not do business at the expense of its stakeholders and communities. It is always mindful that its conduct does not negatively impact its people, planet and profit.

Governance and Ethics

In accordance with the Organisation for Economic Co-operation and Development (OECD) Governance Principles, VRA relates well with the State Interests and Governance Authority (SIGA), the VRA Board, Regulators, Supervising Ministries and relevant Stakeholders; with a system of structuring, operating and controlling the Authority to achieve specific results. Transparency, Accountability, Responsibility and Fairness are the pillars of the Authority's Corporate Governance culture. The Authority's quest to achieve good Corporate Governance is therefore anchored on the above pillars.

VRA as a state institution is guided by its contract with the State Interest and Governance Authority (SIGA), which sets performance targets for the Authority. VRA therefore conducts its businesses in a manner that portrays it as a strong institution that strives to attain peace and justice for all and not profit at the expense of others.

Transparency

The Chief Executive's planning letter to Staff at the beginning of 2023, set the tone for Management's engagement with Staff on operational and budgeting matters, bringing everyone on board. This letter clearly outlined the Authority's strategies for achieving the identified targets, with expectations from specific Departments and Staff in general. Corporate targets were set for 2023 from which Departmental and Individual targets were also derived for Staffs of various Departments.

Compliance

VRA also ensures that Procurement Laws, Policies, Procedures and best practices as required by the Public Procurement Act 663 (as amended) are adhered to. The Authority had a dedicated compliance unit within its Corporate Strategy Department that ensures compliance with all applicable laws, regulations, government policies and presidential directives.

Anti-Corruption Compliance

VRA encourages high ethical standards and behaviour among employees with continuous education on the Authority's code of conduct and values. VRA carries regular assessment of Staff understanding on its core values. These exercises augment efforts to develop systems and strategies to promote dedicated and faithful service to the Authority. They also signal to contractors, suppliers and customers, the Authority's expectation regarding proper conduct and generally acceptable standards of behaviour.



PARTNERSHIPS AND AWARDS

In ensuring partnership for mutually beneficial relations, VRA permits all professionals to freely choose and belong to various professional groups and supports in the payment of their subscription.

Partnerships with Professional Bodies

The Authority also partners with reputable professional bodies for the achievement of mutual goals. Professionals in VRA belong to external bodies like the Ghana Institution of Engineers (GhIE), Ghana Institute of Architects (GIA), Institute of Chartered Accountants (ICA), Ghana Bar Association (GBA), Ghana Institute of Surveyors (GhIS), Ghana Journalists Association (GJA) and Institute of Public Relations (IPR), Ghana Institute of Procurement and Supply Chain (GIPS), Ghana, Chartered Institute of Human Resource Management (IHRMP), Chartered Institute of Administrators and Management Consultants (CIAMC), Corporate Ghana Hall of Fame, Institute of Directors Ghana (IoD) etc.

Award and Recognitions

The Volta River Authority (VRA), emerged a big winner at the 7th **Sustainability and Social Investments (SSI) Awards** held on November 17, 2023 in Accra, walking away with three (3) prestigious awards. The awards presented to the VRA were: **Best Company in Net Zero Carbon Strategy, Best Company in Employee Volunteer Programmes** and **Best Company in Supporting Government Institutions & Initiatives**. The annual SSI Awards recognizes Organizations that prioritize Sustainability, Corporate Social Responsibility (CSR) and Environmental, Social, and corporate Governance (ESG), and has endorsements and support from various Government Ministries and International Agencies

Ghana's energy sector prestigious award, the **Ghana Energy Awards**, inducted Mr. Emmanuel Antwi-Darkwa, the Chief Executive of the VRA, as its first-ever **Hall of Fame Member** at its 2023 awards that saw His Excellency President Nana Addo Dankwah Akufo-Addo in attendance. Mr. Antwi-Darkwa's induction was in recognition of his immense and invaluable contributions to the power sector in Ghana.

The Chief Executive of VRA, Mr. Emmanuel Antwi-Darkwa has been yet again recognized as the **Best Energy Personality in the Public Sector** for his outstanding contributions towards the growth of the energy sector, which is touted as the 'engine of growth'.

He was presented with the '**CEO OF THE YEAR 2022-ENERGY**' award at the **7TH CEO SUMMIT** held in Accra on May 22, 2023. The award was received on his behalf by the Director, Human Resources, Mr. Eric Mensah Bonsu.

The Volta River Authority (VRA) won four awards at the maiden edition of the **Ghana Finance Focus Awards** held on Friday, March 24, 2023, at the La Palm Royal Beach Hotel, Accra.

The Authority was decorated with the enviable title of the **Best Finance Team of the Year (Power and Energy Sectors)**. Dr. Ebenezer Tagoe, the Deputy Chief Executive (Finance), was adjudged the **Finance Personality of the Year 2022**. Mr. Paul O. Seniagya, Director, Finance and Investment, was also recognized as one of the **Top 30 Public Sector Finance Leaders in Ghana**.

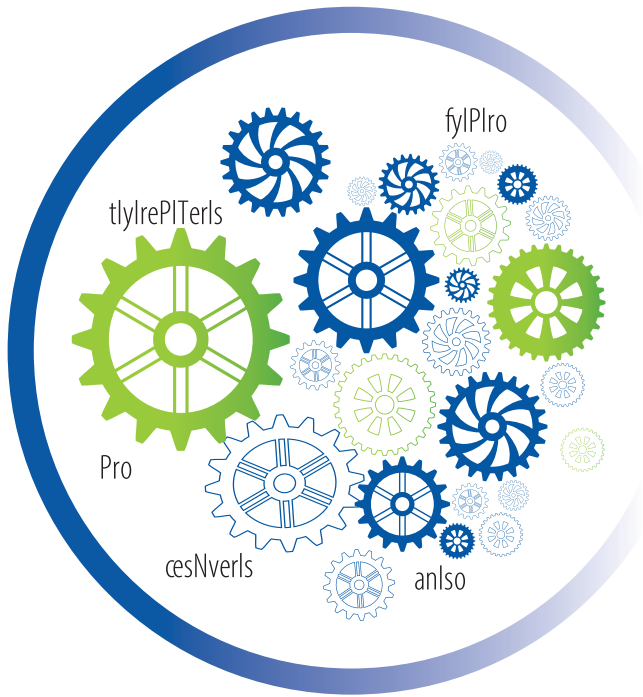
The Manager, Learning, Development and Talent Management at the Human Resources Department of VRA, Ing. (Mrs.) Sophia Abena Tijani was presented with the '**Industry Trailblazer Award 2023**' thereby placing honour and value on Women in Engineering especially those in VRA. She was rewarded at the third edition of the **Women In Mining and Energy Awards (WIMEA 2023)** on Friday, September 8, 2023.

The awards ceremony also conferred on VRA the '**Excellence in Diversity Programs and Performance Award (Energy) 2023**' and '**Best Company In Women Empowerment Initiatives Award 2023**'.

Awards and Recognition from Patrons

AWARD	WINNER	ORGANISERS
Best Company in Net Zero Carbon Strategy	Volta River Authority (VRA)	7th Sustainability & Social Investment Awards
Best Company in Employee Volunteer Programmes	Volta River Authority (VRA)	7th Sustainability & Social Investment Awards
Best Company in Supporting Government Institutions & Initiatives	Volta River Authority (VRA)	7th Sustainability & Social Investment Awards
Hall of Fame Member	VRA's Mr. Emmanuel Antwi-Darkwa	Ghana Energy Awards
CEO of the year 2022	VRA's Mr. Emmanuel Antwi-Darkwa	Ghana Energy Awards
Best Finance Team of the Year (Power and Energy Sectors).	Volta River Authority (VRA)	Ghana Finance Focus Awards
Finance Personality of the Year 2022	VRA's Dr. Ebenezer Tagoe	Ghana Finance Focus Awards
Top 30 Public Sector Finance leaders	VRA's Dr. Ebenezer Tagoe	Ghana Finance Focus Awards
The Industry Trailblazer Award	VRA's Ing. (Mrs.) Sophia Abena Tijani	Women In Mining and Energy Awards
Excellence in Diversity Programs And Performance Award (Energy)	Volta River Authority (VRA)	Women In Mining and Energy Awards
The Energy Personality of the Year	VRA's Mr. Emmanuel Antwi-Darkwa	Women In Mining and Energy Awards





Creativity & INNOVATION

The Anchor for Our Sustainability

VRA... We Add Value To Lives



**VOLTA
RIVER
AUTHORITY**



Scan for Current Report

Electro Volta House
28th February Road, Ministries, Accra
www.vra.com



Scan for Previous Reports