

2023 Annual Report

& Financial
Statement



**VOLTA
RIVER
AUTHORITY**

2023

62nd Annual Report and Accounts

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Volta Lake Transport Company Ltd. (VLTC)

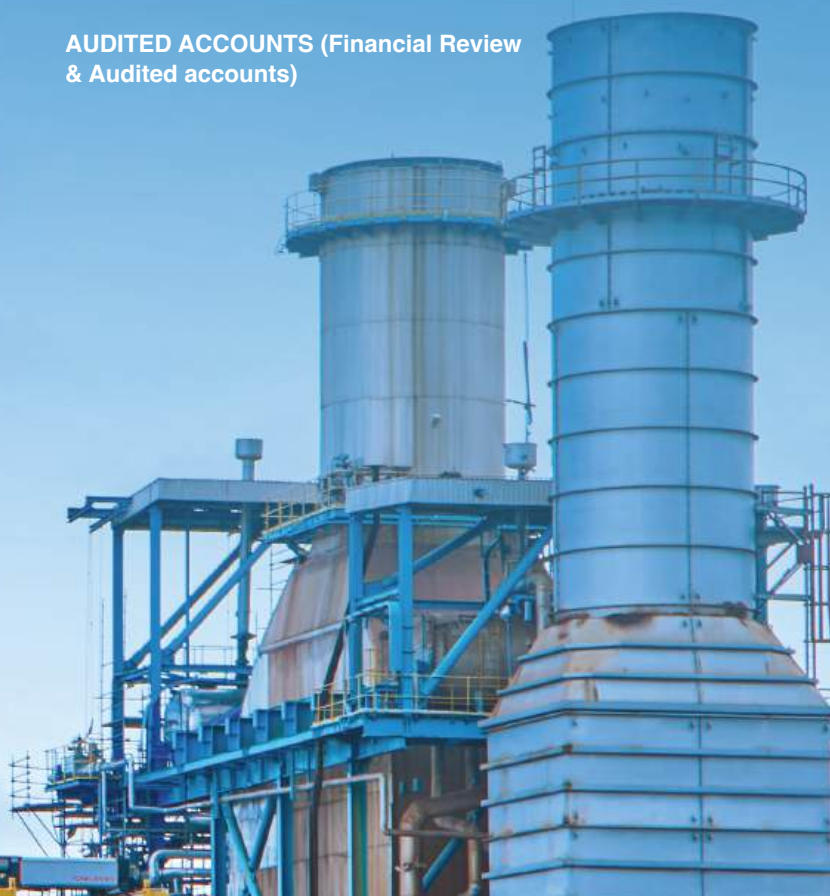
VRA Health Services Limited (VHSL)

Kpong Farms Ltd. (KFL)

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VRA Property Company (PROPCo) Ltd.

AUDITED ACCOUNTS (Financial Review & Audited accounts)





VISION STATEMENT

To be a Model of Excellence for Power Utilities in Africa.



MISSION STATEMENT

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.

Core Values

VRA CORE VALUES

S.O.C.I.E.T.I
...It Begins With Me



**VOLTA
RIVER
AUTHORITY**

VRA ... We Add Value to Lives

OUR STRATEGY FOR "THE NEW VRA"



VRA...We Add Value To Lives

LET'S 'SPICE' UP OUR 'BRAISE' STRATEGY



VRA... We Add Value To Lives



CORPORATE AWARDS

2023 Sustainability Social Investment Awards

- Best Company in Net Zero Carbon Strategy
- Best Company in Employee Volunteer Programmes
- Best Company in Supporting Government Institutions & Initiatives

2023 Finance Focus Award

- Best finance team of the year (power and energy)
- Finance Personality of the Year 2022 (Dr. Ebenezer Tagoe, the Deputy Chief Executive in Charge of Finance)
- Top 30 Public Sector Finance leaders in Ghana (Mr. Paul O. Seniagya)

2023 Ghana Energy Awards

- Best CSR Company of the Year
- Hall of Fame Member (Mr. Emmanuel Antwi-Darkwa)
- Women in Energy Excellence (Ing. (Mrs.) Sophia Tijani)

2023 2023 Ghana CEO Awards

- CEO of the Year (Energy)

2023 Ghana Business Awards

- Best Company in Women Empowerment Initiatives





KEY MILESTONES



1961-1970

- 1961 - Promulgation of ACT 46- Establishment of the Volta River Authority
- 1962 - Commencement of construction of the Akosombo Dam
- 1965 - First power produced on commercial basis from the Akosombo Generating Station (AGS)
- 1966 - Formal Inauguration of the Akosombo Hydro-Electric Project



1971-1980

- 1972 - Commissioning of the last two (2) units of the Akosombo Hydro-Electric Project for the full complement of 6 Units
- 1972 - Commissioning of Akosombo Expansion Project and Switch-On of Ghana-Togo-Benin Transmission Line
- 1974 - Acres International Limited and Shawinigan Engineering Limited both of Canada, were commissioned to conduct a detailed study of the Kpong Hydro-Electric Project
- 1978 - Commencement of construction of the Kpong Dam



1981-1990

- 1981 - Switching on of the first generating unit of Kpong Hydro-Electric Power Plant
- 1982 - Formal commissioning of Kpong Hydro-Electric Power Plant
- 1983 - Commissioning of the VRA and Compagnie Ivoirienne d'Electricite (CIE) Interconnection.
- 1987 - Establishment of the Northern Electricity Department.
- 1990 - Inauguration of national grid extension to the Upper East Region
- 1990 - Inauguration of the Medical Boat, "Onipa Nua"



1991-2000

- 1992 - AGS Retrofit project begins
- 1993 - AGS Retrofit Project suspended
- 1993 - Environmental impact assessment draft report on the Takoradi Thermal Power Project publicly discussed
- 1993 - Retrofitting of Kpong Generating Station begins
- 1994 - Pre-feasibility study for interconnection of Ghana-Burkina Faso Power System completed
- 1994 - VRA Resettlement Trust Fund instituted
- 1995 - Constructional works begin on Takoradi Thermal Power Project
- 1997 - First Unit of the Takoradi Thermal Power Plant Commissioned
- 1998 - Second Unit of the Takoradi Thermal Power Plant Commissioned
- 1999 - Power Purchase Agreement between VRA and Takoradi International (TICO) signed.
- 1999 - Shareholders Agreement executed between VRA, CSMG, TICO, TAPCO and CMST
- 1999 - Execution of Joint Development Agreement for Tema Thermal Power Plant between VRA and AES
- 2000 - Takoradi Thermal Power Station Inaugurated





2001-2010

2001 - VRA's 40th Anniversary celebration with Dr. Charles Wereko Brobby as Chief Executive
2002 - Mallam Substation commissioned
2002 - Aflao Substation Commissioned
2003 - Sawla Substation Commissioned
2005 - Official Handing over of the AGS Retrofit Project
2005 - Parliament Reviewed ACT 46
2007 - Lowest Reservoir Lake level ever recorded at 234.96ft
2007 - VRA appointed Implementation Agency for Liberia Emergency Power Programme (EPP)
End of EPP in Liberia
2008 - 126MW Tema Thermal 1 Power Plant Commissioned
2010 - Highest Reservoir level ever recorded at 277.5ft
2010 - Spillways of the Akosombo Dam opened



2011-2020

2011 - VRA's 50th Anniversary with Mr. Kweku Awotwi as Chief Executive
2011 - Inauguration of Northern Electricity Distribution Company (NEDCO) as a Subsidiary
2012 - Kpone Thermal Power Project recommended for construction
2012 - Burial of "VRA Time Capsule" at the Forecourt of the Akosombo Generating Station
2013 - Takoradi Thermal Power Plant Project (T3) commissioned
2013 - Inauguration of VRA's first utility-scale 2.5MW Solar Power Plant at Navrongo
2015 - Commissioning of Kpone Thermal Power Plant (KTPP)
2015 - Expansion of Siemens Plants at Tema Thermal Power Complex
2016 - KTPP GT11 and GT12 begin commercial operation
2016 - Commissioning of T2 Power Plant for Combined Cycle Operations (TICO Aboadze)
2016 - 2nd lowest reservoir level recorded at 235.01ft
2016 - Kpong GS Unit 2 returns to commercial operations after retrofit
2018 - Kpong GS Unit 1 returns to commercial operations after retrofit
2019 - Commissioning of TT1PS Gas flow metering Skid- Tema
2019 - Kpong GS Unit 3 returns to commercial operations after retrofit
2019 - Installation of 79kW rooftop solar PV project at the VRA Head Office
2019 - Sod-cutting for commencement of 17MWp Solar Power Project in the Upper West Region
2020 - Kpong Generating Station Unit 4 returns to commercial operations after retrofit
2020 - Official Commissioning of 6.5MWp Lawra Solar Power Plant.
2020 - Official Commissioning of the Kpong GS Retrofit Project
2020 - VRA launches its 60th Anniversary Celebration



2021-2023

2021 - VRA celebrates 60th Anniversary with Mr. Emmanuel Antwi-Darkwa as Chief Executive
2021 - VRA celebrates Past Chief Executives with the unveiling of life-sized busts at Akosombo, Akuse and Aboadze as part of its 60th anniversary
2021 - Upgrade and automation of existing systems and SCADA commences at Akosombo generating station
2021 - VRA in collaboration with relevant partners, conduct environmental and social impact assessment of the Pwalugu multipurpose dam project
2021 - Installation and commissioning of 60kW Head Office Solar Rooftop Car Park
2022 - GE TM 2500 Units AMERI Power Plant handed over to the Authority in Kumasi
2022 - Creativity and Innovation Day launched on the 61st anniversary – VRA Day
2022 - Establishment of Digital Transformation and Innovation Unit in VRA
2022 - VRA's 13MW Kaleo Solar PV Power Plant commissioned by the President of Ghana, His Excellency Nana Addo Dankwa Akufo-Addo
2022 - Commercial operation of 13MW Kaleo Solar Power Plant
2023 - VRA engages stakeholders in Flood inundation Simulation exercise "DA WOHO SO" as part of EPP
2023 - VRA engages with Volta Gorge Advisory Committee.
2023 - VRA engages stakeholders on Lower Volta Dredging & Aquatic Weed Harvesting Project
2023 - VRA commences quasi-classroom and industrial attachment programme with CPIT, Saskatchewan Polytechnic and Saskatchewan power
2023 - VRA begins Controlled Spillage from the Akosombo Dam
2023 - VRA commences TAPCO (T1) Rehabilitation, Modernisation and Life Extension Project
2023 - VRA commences civil works, dismantling and relocation of GE TM 2500 Units from Aboadze to Anwomaso in Kumasi.



Operational Areas

The Volta River Authority, Ghana's leading electricity provider has footprint in Seven (7) operational areas.



Eastern Region -

1180MW comprising of the 1020MW Akosombo and 160MW Kpong Hydroelectric Dams.

Greater Accra Region -

416MW of thermal generation comprising 110MW Tema Thermal 1 Power Plant (TT1PP), now designated Station 2, and the 80MW Tema Thermal 1 Power Plant (TT2PP), designated Station 3 in the Tema enclave, as well as the 220MW Kpone Thermal Power Station.

Western Region -

1052MW of thermal generation in the Aboadze enclave comprising of the 330MW Takoradi Thermal (T1) Power station, 340MW Takoradi International Company Thermal (T2) Power Plant, which is a joint venture (JV) between VRA and TAQA from Abu Dhabi, and the 132MW Takoradi Thermal Three (T3) Power Plant. The Authority also had oversight responsibility for the 250MW GE TM2500 Generating Units located in Aboadze (erstwhile AMERI Power Plant).

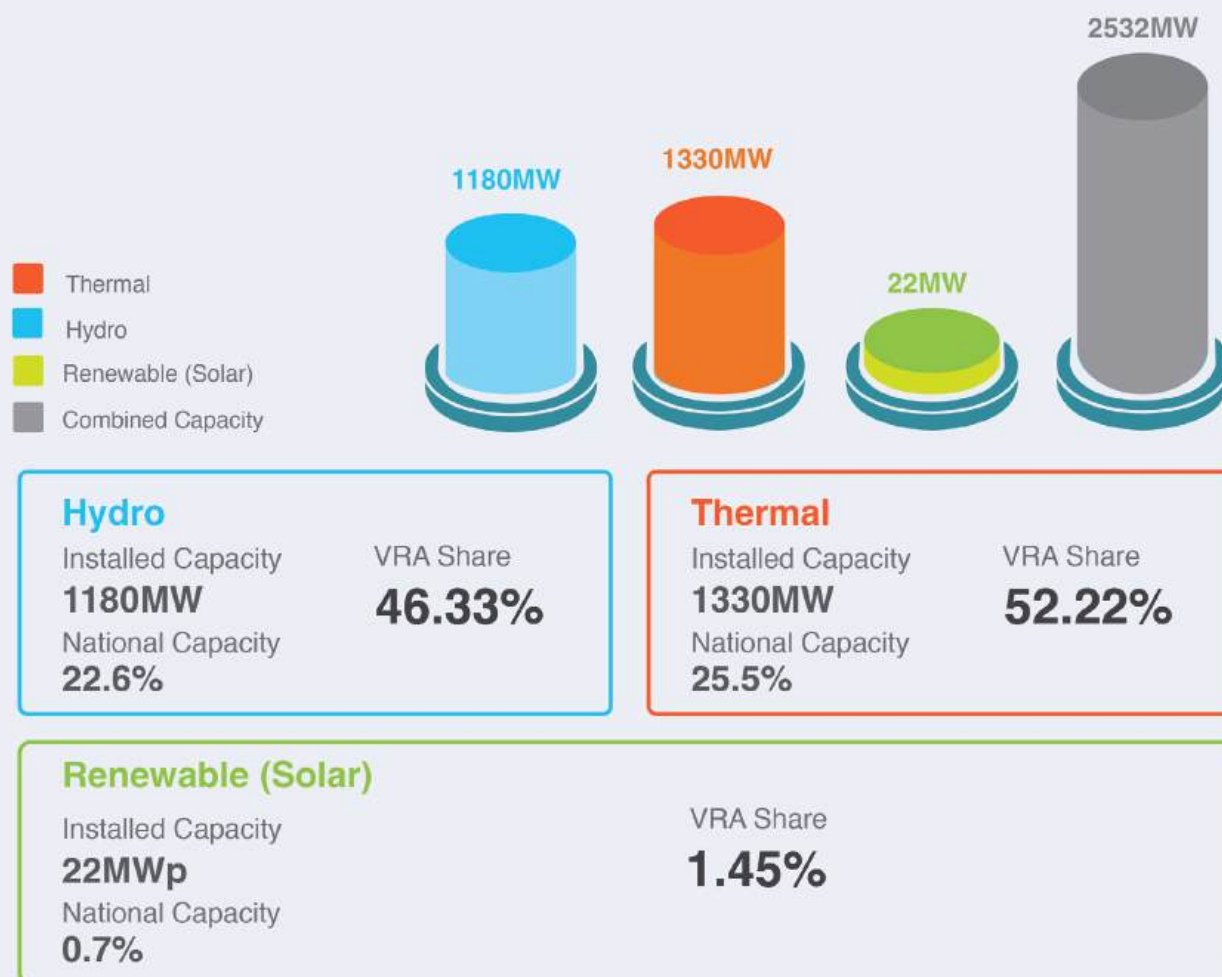
Upper East Region -

the 2.5MWp trailblazing utility scale Navrongo Solar Power Plant (NSPP).

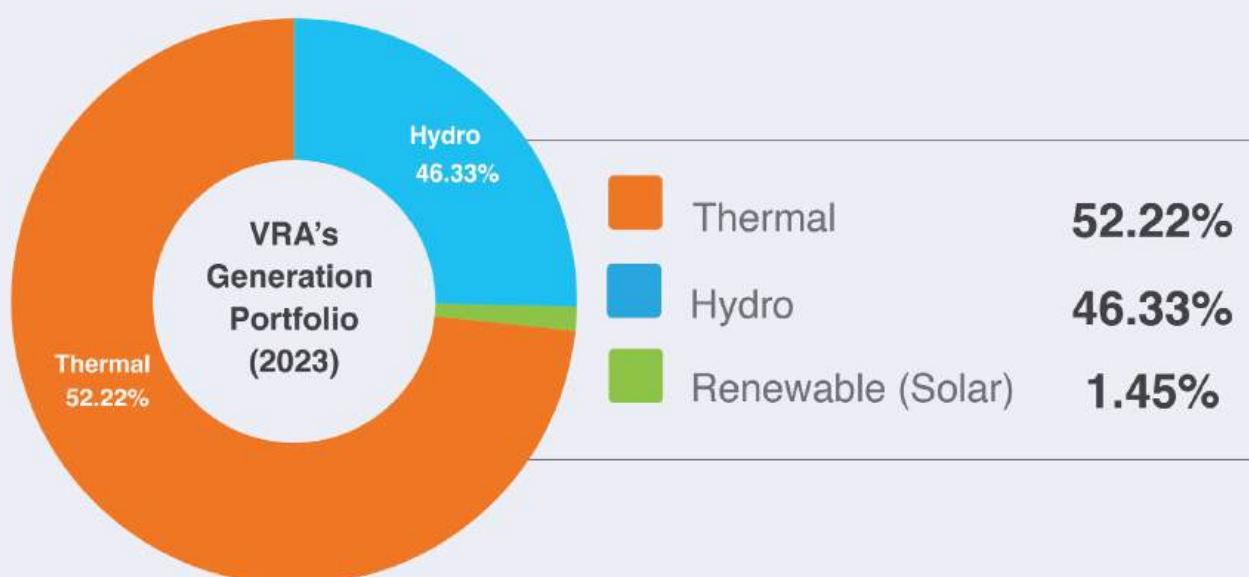
Upper West Region -

19.5MWp comprising the MWp Lawra Solar Power Plant, 13MWp Phase 1 Kaleo Solar Power Plant (KSPP A).

2023 National Installed Capacity



VRA's 2023 Generation Portfolio





Profile of the Volta River Authority

The Volta River Authority (VRA), Ghana's leading power producer with an unrivalled track record of over sixty-two (62) years of expertise in running hydro, thermal and solar power plants, was established on April 26, 1961, under the Volta River Development Act, Act 46 of the Republic of Ghana, with the mandate to generate, transmit and distribute electricity. However, following the promulgation of a major amendment to the VRA Act in the context of the Ghana Government Power Sector Reforms in 2005, VRA's mandate has been largely restricted to the generation of electricity. The amendment had a key objective of creating an enabling environment to attract Independent Power Producers (IPPs) into Ghana's energy market.

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

Organisational Restructuring

As part of efforts towards restructuring, VRA in 2018 rolled out a new corporate strategy to champion the transformation of the Authority into a "NEW VRA". Key pillars of the strategy with the acronym

"BRAISE" are:

- Build, Nurture and Develop our Human Capital
- Restore our Finances
- Advance Internal and External Business Processes
- Improve Operational & Project Implementation Efficiencies
- Sustain VRA's Position as a Market Leader
- Ensure Development in a Sustainable Manner

The overarching objective of the strategy is to re-focus and re-orient business operations and organisational mindset aimed at transforming the Authority into a resilient and viable public sector organisation, with a private sector business mindset.

As a precursor to the implementation of the new strategy, VRA introduced and implemented a three (3) year Financial Recovery Plan (FRP) to drive the restoration of the Authority's finances.

To protect the financial gains made, following the implementation of the three (3) year Financial Recovery Plan, VRA rolled out a 5-year (2021-2025) Sustainability Plan. The primary objective of the Plan is to ensure VRA remains a financially sustainable and resilient corporate organisation, and by extension,

forms the basis for the “VRA Beyond GoG Support” agenda. The VRA Sustainability Plan has the objective of:

- Increase Revenues
- Improve Operational Efficiency
- Increase Cash Flows
- Increase Renewable Footprints
- Improve Staff Competencies and Effectiveness
- Increase Strategic Alliances & Relationships
- Improve Business Processes Leveraging on Information Technology

Organisational Re-alignments

In line with the strategy to restructure the Authority into a resilient, sustainable & growing multi-business holding company, the Authority, over the years, has continued to undertake re-alignment of Departments and Units within the organisation.

POWER ACTIVITIES

Over the years, VRA has strategically diversified its power generation portfolio to take advantage of available sustainable sources of energy, mainly hydro, natural gas, liquefied petroleum products and renewables.

Presently, VRA operates a total installed generation capacity of 2,532MW. The Akosombo and Kpong Hydroelectric Plants have installed capacities of 1,020MW and 160MW respectively. The thermal generating facilities at Aboadze, Tema and Kpone with an installed total capacity of 1,330MW, in addition to the 22MWp solar power at Navrongo, Lawra and Kaleo, complement the hydro and thermal generating facilities. It is instructive to state that, the total installed capacity as indicated is exclusive of Takoradi Thermal 3 (T3's) generation capacity of 132MW but inclusive of the 250MW GE TM2500 Units (erstwhile AMERI Power Plant).

Capacity Expansion Programme

The Authority has the mandate to provide affordable, reliable, safe, and competitively priced electricity to meet stakeholders' expectations. We strive to achieve this by strategically focusing on measures and programmes that facilitate the diversification and expansion of our generation infrastructure.

Renewable Energy Development

In accordance with the Renewable Energy Development Programme approved by the VRA Board, and in line with the Government's policy on renewable energy, VRA is vigorously pursuing the development of solar and wind energy power projects. The successful execution of these identified projects in the long term would guarantee sustainable power generation, reduce the Authority's carbon footprints, and contribute positively to the global climate change agenda.

Customers and Power Interconnectivity

VRA sells power to the Northern Electricity Distribution Company (NEDCo), Electricity Company of Ghana (ECG) and Enclave Power Company (EPC), the main distribution companies in Ghana. Power sold to these entities caters for domestic, industrial, and commercial demands. NEDCo distributes power in the North of the country, ECG in the South, while EPC distributes power in the Free Zones Enclave in Tema and the Dawa Industrial Park Enclave. Bulk power is also sold to mining companies and industries across the country such as Newmont Ghana Gold Ltd., AngloGold Ashanti, Future Global Resources, Aluworks, Diamond Cement and Akosombo Textiles Ltd.

Sub-Regional Cooperation

The Volta River Authority reaches its esteemed customers in Ghana and neighbouring countries through the Ghana Grid Company's (GRIDCo's) transmission system. The transmission system covers the entire country and is connected to the national electricity grids of Cote d'Ivoire (Compagnie Ivoirienne d'Electricité), Togo, Benin (Communauté Électrique du Benin), and Burkina Faso (Société Nationale d'Electricité du Burkina Faso).

Additionally, VRA is a founding partner in the development of the West African Gas Pipeline (WAGP), a strategic relationship that guarantees its competitiveness in power delivery in the sub region. VRA is also a founding/principal member of the Association of Power Utilities of Africa (APUA), contributing significantly to policies governing power development and accessibility on the African continent. APUA is a permanent member of the Executive Council of the African Energy Commission, and a preferred partner of the New Partnership for Africa's Development (NEPAD). VRA is also an executive member of the West African Power Pool (WAPP).

Relations with Statutory Bodies

VRA has effective collaboration and working relations with the following statutory bodies:

- **Energy Commission:** Provides advice to the Government of Ghana on energy policy, conducts indicative planning/least cost expansion planning of wholesale supply of electricity, regulates licenses, establishes, and monitors standards of performance, as well as industry rules of practice for electric utilities.
- **Public Utilities Regulatory Commission:** An independent regulatory commission with oversight responsibility for tariff and rate setting while ensuring the provision of the highest quality of electricity to consumers.
- **Ministry of Energy:** Provides supervision and policy direction for the energy sector.
- **State Interest and Governance Authority:** Provides supervisory role for all state-Owned Enterprises, Joint Venture companies and other entities in which the state has an interest.

NON-POWER ACTIVITIES

In fulfilment of our responsibilities to provide facilities and assistance for the socio-economic development of the Volta Basin, VRA operates seven (7) subsidiary companies namely: Akosombo Hotels Limited, Kpong Farms Limited, VRA Property Holding Company (PROPCo), the Volta Lake Transport Company Limited, Northern Electricity Distribution Company and VRA Health Services Limited, and the VRA International Schools Limited (VISL).

2.0 Subsidiary Companies

a. Akosombo Hotels Ltd (AHL)

The Akosombo Hotels Limited (Volta Hotel), incorporated in 1991, runs a 3-star hotel with a restaurant, modern conference/seminar facilities and offers pleasure activities including cruises on the Volta Lake by MV Dodi Princess to promote tourism.

b. VRA Property Holding Company (PROPCo)

The Property Holding Company Ltd. (PROPCo) was incorporated on December 2, 2013, and commenced operations in June 2018, with a core mandate in property development, investment, and asset management. PROPCo is focused on the optimisation

of VRA's non-core real estate assets by converting them into commercially viable investment assets for income and capital growth. Its long-term objective is to build a diversified portfolio of income generating real estate assets for VRA.

c. Kpong Farms Ltd. (KFL)

Kpong Farms Limited (KFL) was incorporated in May 1982 as a wholly owned agricultural commercial venture, to carry out mechanised commercial farming, agro-processing, and provision of machinery services. It was established to harness the water resources of the Volta Lake at Kpong for viable agricultural ventures and for the farm to serve as a demonstration project in a modern agricultural system. KFL has evolved into a commercial venture, with huge potential for expansion in the private sector.

d. Volta Lake Transport Company Ltd. (VLTC)

Incorporated in 1970, the Volta Lake Transport Company Limited (VLTC) provides river transport for passengers, bulk haulage of petroleum products and significant quantities of cement, and cross-lake ferry services along the Volta Lake (Kpando, Yeji Mankago, Kete-Krachie, Dambai, Adwaso).

e. VRA Health Services Limited (VHSL)

Established initially as a Medical Service Unit in 1964, VRA Health Services Limited (VHSL) has evolved from a Health and Safety Department to a Health Services Department to its current status as a solely owned subsidiary of the Authority. VHSL was incorporated in February 2014 to safeguard the health and safety of VRA employees, their families and dependents, the inhabitants of the Akosombo Township and the lakeside area. The VRA Health Service Limited has now expanded its operations to the operational enclaves of the Authority (Akuse, Accra, Aboadze), providing in-patient, out-patient and specialist services to the public in those areas.

f. Northern Electricity Distribution Company (NEDCo)

VRA Schools Department was incorporated in February 2014 under the Companies Act 1963 (Act 179) as the VRA International Schools Limited. Established in 1961 in Akosombo, VISL has expanded its operations to other operational enclaves of the Authority; Akuse in 1982 and Aboadze in 1999. In consonance with the standards of the Ghana Education Service, VISL offers both first and second-cycle education in Akosombo, and only first cycle education at Akuse and Aboadze.

VISL also offers study opportunities in international

curricula such as the Cambridge International Examination, UK, and the Scholastic Aptitude Test (SAT), USA certificate. VRA International Schools Limited has at the core of its activities the provision of quality and affordable education to all wards of stakeholders of the Authority.

g. VRA International Schools Limited (VISL)

The Northern Electricity Department (NED) of the Volta River Authority (VRA) was established in 1987 to distribute electricity in the Brong-Ahafo, Northern, Upper East and Upper West Regions of Ghana as part of VRA's 161KV transmission and grid extension to the northern parts of Ghana. In June 1994, the Government of Ghana (GoG) initiated the Power Sector Reform (PSR) programme aimed at bringing efficient and managerial effectiveness in the Energy Sector to improve service delivery to all customers. In pursuit of the PSR, VRA Management, in 1997, registered the Northern Electricity Distribution Company (NEDCO) as a wholly owned VRA subsidiary with a Board of Directors, to take over the operations of NED. In May 2012, VRA Management operationalised NEDCO as a wholly owned subsidiary.

NEDCO is the sole distributor of electricity in the Upper East, Upper West, North East, Savannah, Northern, Bono, Ahafo, Bono East, parts of Oti, Ashanti and Western North regions. NEDCO manages VRA's electricity supply to some border towns in Burkina Faso, Cote d'Ivoire, and Togo. NEDCO has a customer population of one million, two hundred and two thousand, five hundred and forty (1,202,540) people, with (1.19 million) being active, and a peak load

demand of 355MW. NEDCO was originally developed as an integral part of the larger Northern Electrification and System Reinforcement Project (NESRP).

3.0 Akosombo Management Committee

Pursuant to Executive Instrument (EI) 42, 1989, VRA oversees and exercises Local Authority functions in the Akosombo Township by enforcing Local Authority enactments, resolutions, and by-laws.

3.0 Corporate Social Responsibility (CSR)

VRA demonstrates commitment to its social responsibility through initiatives outlined to enhance the socio-economic and physical environment of the lakeside and downstream communities. Notably, the VRA Resettlement Trust Fund, set up in 1995, supports development initiatives in the Fifty-Two (52) resettlement townships around the Volta Lake. In 2003, VRA established the Community Relations Unit (CRU) to promote its CSR activities. The objective of this intervention was to strengthen engagements with the communities impacted by the Authority's operations but not captured under the Trust Fund.

To enhance the Authority's partnership with the impacted communities, VRA, in 2012 introduced the Community Development Programme (CDP). The CDP is aimed at empowering the affected communities and stimulating economic and human capital development. The programme focuses on six (6) thematic areas, which are Social Infrastructural Projects, Environmental Protection Activities, Industrial Attachment, Educational Scholarship, Healthcare, and Support for Cultural Activities.

CHAIRMAN'S STATEMENT



Mr. Kofi Tutu Agyare
Board Chairman

“ As we look to the future, our strategic direction is clear. We aim to invest heavily in the development of our dedicated staff and equip them with new skills and tools so that we can continue to excel in all aspects of the business. ”

On behalf of the Board of Directors of the Volta River Authority, I am pleased to share the significant strides we have made in our commitment to providing reliable and sustainable energy solutions for Ghana during the 2023 operational and financial year.

I must say that our achievements in the year have been commendable, as we successfully navigated the challenges posed by the global energy and climatic landscape, thereby demonstrating our resilience and adaptability. Our collective efforts have resulted in commendable operational efficiency, financial stability, and increased capacity to deliver on our mandate.

Ladies and Gentlemen, one of the key issues that faced us in 2023 was the controlled spillage we undertook at the Akosombo and Kpong Dams. It is instructive to state that the decision to undertake the spill was unforeseeable, unavoidable, and statutory. We had a huge responsibility of ensuring the integrity of the Dams and protecting the lives of people in the downstream communities.

Our close engagement with local and international experts, along with our strategic implementation of emergency measures to ensure the safety of affected communities, enabled us to manage the situation effectively.

In spite of the myriad local and global challenges, the Authority in 2023 attained several key milestones including sustained financial health.

Operational Performance

Ladies and Gentlemen, our commitment to operational excellence is unwavering. Our implementation of rigorous quality standards and performance metrics across our operations was evidenced by a marginal increase in our market share from a projected share of 46.39%, to an actual share of 54.05% at the end of the year. This growth can be attributed to increased sales to export customers and to the Electricity Company of Ghana.

Ladies and Gentlemen, though we recorded a small drop in our market share as compared to the 55.6% market share recorded in 2022, our resilience and steady leadership in the highly competitive energy market, is a testament to our focus on continuous improvement and innovation.

For the year under review, the Authority's thermal portfolio recorded a decline in total generation; from 3,483GWh recorded in 2022, to 2,297.37GWh in 2023. This notable gap was because of several factors but predominantly due to an extended Rehabilitation, Modernisation and Life Extension Project (RMLEP) at the Takoradi Thermal Power Station. The project is expected to enhance the station's reliability for at least another 15 years.

Capacity Expansion Programme

In 2023, our overarching goal of diversifying our generation mix and maintaining our leading role in the energy generation portfolio drove us to continue development works on several generation expansion projects. Activities carried out included the following:

➔ Wind Power Project 1 (WPP 1):

The Authority started working on an Engineering, Procurement, Construction, and Financing (EPCF) strategy to develop the project.

➔ 60MW Bongo Solar Power Project (60MW BSPP):

To fund the project and carry out the Engineering Procurement Construction works under an EPC+F arrangement, a potential contractor was engaged. Additionally, arrangements have been made for AngloGold Ashanti to offtake the anticipated green energy from the project.

➔ 25MWp Floating Solar PV Project:

The Authority applied for the due registration from the Energy Commission and conducted workshops on assessing private sector financing for the project. Community stakeholder engagement also commenced as part of the Environmental and Social Impact Assessment (ESIA) for the project. The ESIA further included a Gender Assessment for the project.

➔ Kpone Thermal Power Plant (KTPP)

A pre-qualification tendering process on the conversion of the plant into a 330MW Combined Cycle led to the shortlisting of five (5) EPC companies. The Authority also engaged contractors who submitted unsolicited proposals to help secure the necessary funding for the project.

➔ Pwalugu Multipurpose Dam Project

Though construction has not yet started, the related Resettlement Action Plan (RAP) and Environmental Impact Statements (EIS) were developed.

The Project's solar component accordingly received an environmental permit from the Environmental Protection Agency (EPA).

➔ Anwomaso Thermal Power Plant

The Ministry of Energy made the strategic decision to move the GE TM 2500 Units of the erstwhile AMERI power plant from Aboadze to Anwomaso in the Ashanti region. The movement was to improve the nation's grid reliability and address the voltage stability issues in the middle and northern parts of the country. By year's end, recommissioning tests had started, and works on six (6) of the ten (10) GE TM 2500 gas turbines had been substantially completed in terms of reinstallation. To provide consistent fuel supply to the Plant, the Ghana National Petroleum Corporation (GNPC) together with Genser Energy Limited, extended the country's natural gas pipeline network from Atuabo to Kumasi.

➔ Thermal Power Plants in Tema

For the CENIT and TT1PC plants located in Tema, onsite assessments were conducted by Messrs. Ernst & Young (EY) Limited in October 2023 to assess and value the assets of both stations as part of intentions to convert the two simple cycle plants into a combined cycle plant. The project hopes to lower the plants' carbon emissions and reduce their overall cost of electricity production.

Corporate Social Responsibility

Our communities and stakeholders are still a priority and therefore a number of activities were carried out in line with our Community Development Programme. During the year, the Authority awarded scholarships to Sixty (60) brilliant but needy students from communities impacted by the Authority's operations at a total cost of One million cedis (GHS 1,000,000.00).

Clean water supply was restored to the Aveyime Community in the Volta Region, in line with efforts to alleviate the plight of communities affected by the spillage of excess water from the Akosombo and Kpong Dams.

Again, as part of actions towards our Aquatic Weed Management, the Authority conducted surveillance activities on the Oti arm of the Volta Lake. The goal was to assess the level of infestation of water hyacinth and prevent its migration beyond the frontline zone at Kpetsu.

Our support for research activities led to the execution of a Memorandum of Agreement (MoA) with the University of Health and Allied Sciences (UHAS). The expectation is that the MoU will support further research in the control and management of Schistosomiasis in the Volta Basin.

We are proud of these efforts and many others and remain dedicated to making a positive impact in communities that have been impacted by our operations.

Controlled Spillage and Associated Matters

Ladies and Gentlemen, in 2023 we continued to discharge our mandate of managing the resources of the Volta Lake and ensuring the integrity of all our generation facilities, including the Akosombo Dam.

To protect the lives of downstream communities and preserve the integrity of the Akosombo Dam, the Authority, on September 15, 2023, initiated the daunting but necessary task of spilling excess water from the Akosombo Dam. The spill began with a discharge of 20,000cfs and was progressively increased to a high of 185,000cfs on October 12, 2023. From October 22, 2023, to October 30, 2023, the spill gates were gradually lowered to end the spilling. The related inundation of communities downstream of the Volta Lake required that a series of coordinated efforts had to be carried out to preserve lives and property.

In partnership with the National Disaster Management Organisation, the Authority assisted in relocating affected persons to specified safe locations. Provision was then made for the affected persons to receive mattresses, hot meals, clean drinking water, portable toilets, and other necessary supplies. Specifically, the following vital services were provided to preserve lives and improve the living conditions of the affected communities:

- Search and Rescue Operations
- Food, Clothing, educational materials, and other household logistics
- Mobile Clinics and medical supplies
- Construction of alternative Access Routes
- Sanitation and Water Services
- Restoration of electricity supply
- Fumigation services

The affected individuals also received five thousand (5,000) solar lamps with charging ports, which were provided in cooperation with the Ministry of Energy.

The successful management of the impact of the controlled spillage, which ensured that no lives were lost, was achieved through the leadership of the inter-ministerial committee set up by the Office of the President, along with partnerships and engagements with key stakeholders, including our sector ministry.

Ladies and Gentlemen, let me use this occasion to reassure our valued stakeholders that the Authority will continue to prioritize the lives of the communities in and around our catchment areas, in all aspects of our operations.

Strategic Direction

It is worth noting that in line with our goal of becoming a multi-business holding entity, our Strategic Business Units and Subsidiaries recorded substantial improvement in their performance as compared with previous years. These successes are largely hinged on the implementation of the second phase of our corporate strategy, which has infused innovation and financial sustainability as key elements in the development and growth of the Authority's businesses.

In the face of hurdles presented by the global and local business environment, the Authority invested heavily in ICT infrastructure, coupled with innovative software applications developed by our staff, to enhance the efficiency of our business processes.

Future Expectations

As we look to the future, our strategic direction is clear. We aim to invest heavily in the development of our dedicated staff and equip them with new skills and tools so that we can continue to excel in all aspects of the business. We are keen on completing key projects planned for 2024 including the successful completion of the Kaleo Phase II Solar Plant in the Upper West Region, as well as the Anwomaso Thermal Power Station in the Ashanti region.

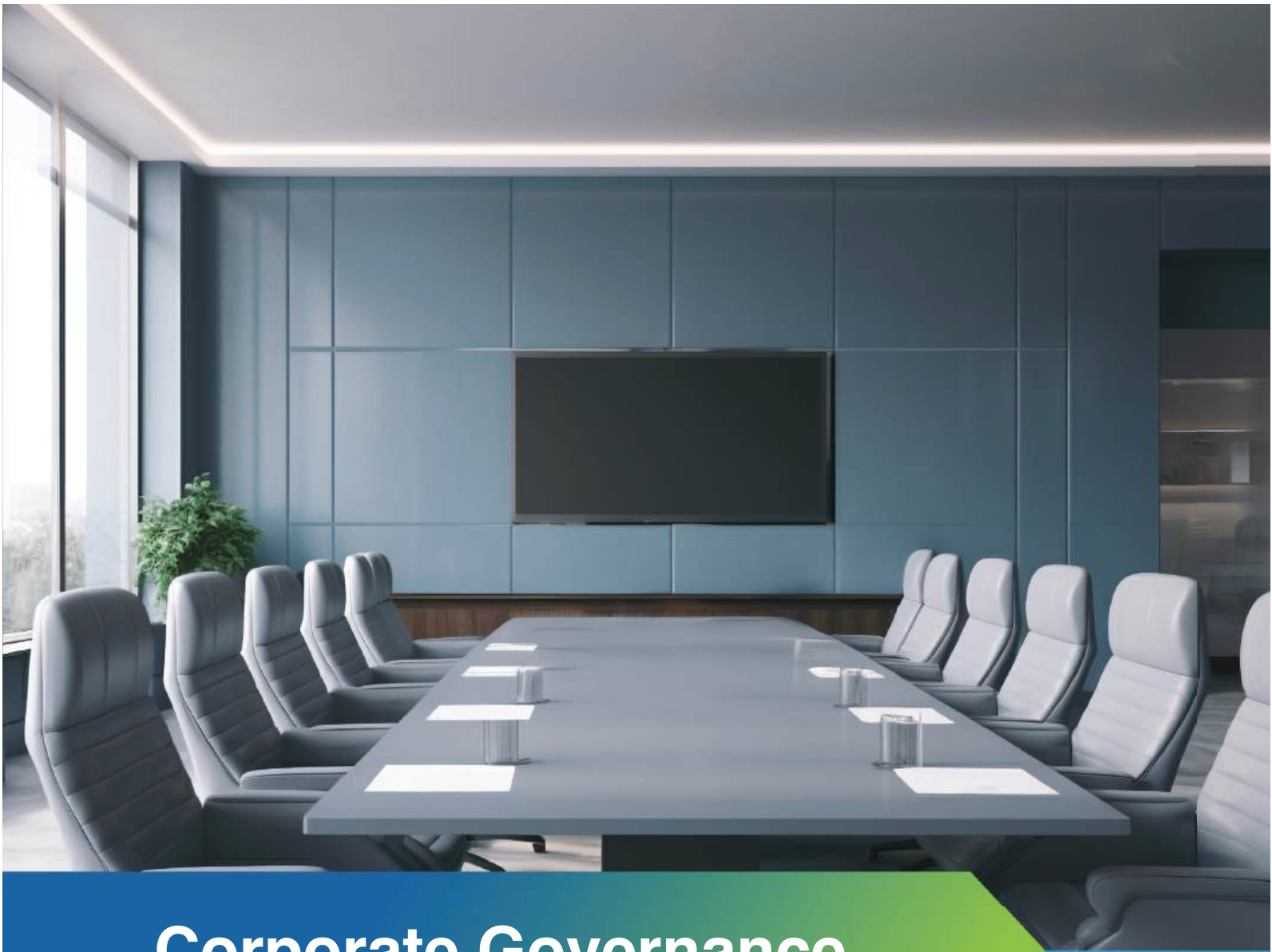
Conclusion

In conclusion, I wish to express my heartfelt gratitude to my fellow Board members, Management, Staff, Partners, and Stakeholders. Together, we have built a solid foundation, and held on firmly to our leadership in the energy sector. I look forward to another year of growth and success for the Authority.

Thank you for your attention.

KOFI TUTU AGYARE

BOARD CHAIRMAN



Corporate Governance

Board Chairman & Members

Executive Management

Corporate Governance Statement

BOARD CHAIRMAN AND MEMBERS AS AT DECEMBER 31, 2023

NAME	DESIGNATION
Mr. Kofi Tutu Agyare	Chairman
Ing. Emmanuel Antwi-Darkwa	Member
Hon. Kwame Anyimadu-Antwi	Member
Rev. Dr. Joyce Rosalind Aryee	Member
Chief Musa Badimsugru Adam	Member
Mad. Janet Akosua Gyasiwaa	Member
Mr. Solomon Adjetey Sowah	Member
Mr. Richard Obeng Okrah	Member
Most Reverend Dr. Cyril Kobina Ben Smith	Member
Claudia Gyekye-Aboagye (Mrs.)	Secretary

EXECUTIVE MANAGEMENT TEAM AS AT DECEMBER 31, 2023

Office of the Chief Executive

NAME	DESIGNATION
Emmanuel Antwi-Darkwa	Chief Executive
Mr. Ebenezer Kwadwo Omari-Mireku	Director, Internal Audit
Mr. Clement Boakye	Director, Corporate Strategy
Mr. Robert Ato Mensah	Director, Office of the Chief Executive

Engineering and Operations Branch

NAME	DESIGNATION
Ing. Edward Obeng-Kenzo	Deputy Chief Executive (Engineering & Operations)
Ing. Kwaku Sarpong Mensah	Director, Hydro Generation
Ing. Jacob Brown Yawson	Director, Thermal Generation
Ing. Kwaku Wiafe	Director, Engineering Services
Mr. Benjamin Arhin Sackey	Director, Environment & Sustainable Development
Ing. Samuel Odartey Lamptey	Director, Technical Services
Miriam Darke (Mrs.)	Director, Commercial Services
Mr. Daniel Onny	Director, Pwalugu Multipurpose Dam Project
Mr. Richard Ahenkora-Osei	Director, Office of the DCE (E&O)

Finance Branch

NAME	DESIGNATION
Dr. Ebenezer Tagoe	Deputy Chief Executive (Finance)
Mr. Jacob Kyei	Director, Procurement
Mr. Paul Seniagya	Director, Finance & Investment
Awurama Ofori-Ani (Mrs)	Director, Management Information Systems
Dr. Abubakari Obuama Addy	Director, Office of the DCE (Finance)

Services Branch

NAME	DESIGNATION
Ing. Kenneth Mensah Arthur	Deputy Chief Executive (Services)
Angela Heyman (Mrs.)	Director, Legal Services
Surv. David Adomako-Mensah	Director, Real Estates and Security
Mr. Eric Mensah Bonsu	Director, Human Resources
Mr. Kingsley Gyamfi	Chief Learning Officer, VRA Academy, with responsibility over the VRA Schools
Mr. Raphael Punamane	Manager, Akosombo Management Committee

Subsidiaries

NAME	DESIGNATION	REGISTERED COMPANY
Dr. Osmani Aludiba Ayuba	Managing Director	Northern Electricity Distribution Company (NEDCo)
Dr. Alexander Kwabena Omari-Yeboah	Medical Director	VRA Health Services Ltd. (VHSL)
Mr. William Bobie	Managing Director	Property Holding Company (PROPCo)
Mr. Stephen Kwadwo Ofori	General Manager	Akosombo Hotels Ltd. (AHL)
Mr. Tei Sarbah	Farm Manager	Kpong Farms Ltd. (KFL)
Rose Appiah Okyere (Mrs.)	Managing Director	Volta Lake Transport Company (VLTC)

Strategic Business Units

Staff on Secondment

NAME	DESIGNATION	REGISTERED COMPANY
Alexandra Totoe (Ms.)	General Manager, Finance & Administration	State Interest and Governance Authority (SIGA)
Dr. Isaac Adjei Doku	General Manager, Corporate Affairs	West Africa Gas Pipeline Company (WAPCo)

CORPORATE GOVERNANCE STATEMENT

The Volta River Authority (VRA) is a corporate body governed by the Volta River Development Act, 1961 (Act 46), as amended by the Volta River Development Act (Amendment) Act, 2005 (Act 692). Though not a company limited by shares, the enabling Act and other relevant regulations have over the years, provided the structure, systems, and processes of good governance to enable VRA operate in a sound and competitive environment to promote efficiency and sustainability. Good corporate governance practices as promoted in the Companies Act, 2019 (Act 992) and in the State Interests & Governance Act, 2019 (Act 990) are also adhered to.

1.0 The Board of Directors

As stipulated by the Volta River Development Act, 1961 (Act 46), and as amended by the Volta River Development Act (Amendment) Act, 2005 (Act 692), the Authority consists of the Chairperson, the Chief Executive and seven (7) other Directors appointed by the President. A Member of the Board, other than the Chief Executive, holds office for a period not exceeding four years, and is eligible for re-appointment. All Members, except for the Chief Executive, are non-Executive Members.

2.0 Membership of the Board

We began the year 2023 with a nine (9) member Board who were sworn into office on August 31, 2022, following their appointment by H.E the President. The Board Members were constituted with their diversity in experience, professional backgrounds, skills, age, and gender to ensure independent, objective, and balanced decision making.

The Members are:

PROFILE OF BOARD MEMBERS



Mr. Kofi Tutu Agyare

Board Chairman

Mr. Kofi Tutu Agyare was appointed as the non-Executive Chairman of the Board of Volta River Authority in August 2021. Mr. Agyare is the Managing Partner at Nubuke Investments, an FSA registered asset management and advisory firm focused solely on Africa, which he founded in

2007. Nubuke Investments is based in London and Accra. He previously had a 21-year career with UBS Investment Bank holding several senior management positions, most recently as the Head of European Emerging Markets and a member of the Investment Bank Board. He served as a non-executive Director of Tullow Oil from 2010 – 2019.

He is currently the Chairman of Kempinski Hotel, Gold Coast City, Accra, and ZEN Petroleum Ghana Limited. He has served on several Boards including the Development Bank Ghana and UBS Investment Bank, UK. He was a member of the Senior Advisory Group of Power Africa, the President Obama initiative, to significantly increase access to electricity, across Africa. He has a very strong network of African relationships both at the Government and Business level and is a sought after International Public Speaker and Advisor on his views, experiences, and knowledge of the Continent. He travels extensively across Africa advising Corporates on business strategy, Governments on Policy and looking for investment ideas for his international relationships and executing these.

He is a Founder and Director of the Nubuke Foundation, Ghana's Premier Private Arts Foundation, and was most recently voted one of the 100 most influential Africans by New African magazine. He is also a Director of 1-54, the world's Premier Contemporary African art fair. Mr. Agyare has a degree in Mathematics and Computing from University of Ghana, Legon.



Mr. Emmanuel Antwi-Darkwa

Chief -Executive / Member

Appointed: 2017 - Present

Mr. Emmanuel Antwi-Darkwa is the Chief Executive of VRA, a position he has held since February 2017. Prior to this, he was involved in private engineering consultancy services. Mr. Antwi-Darkwa commenced his career with VRA and served in various capacities until 2002, when he was seconded to the Ministry of Energy as Director of Power, until 2009. With over thirty years' experience in the energy sector, he has detailed knowledge in functional and infrastructural developments, regulatory influences in Ghana's energy sector, and the dynamics of international power system development. He possesses tremendous expertise in strategic planning, policy formulation and evaluation, contract negotiations as well as the management of several multi-disciplinary power projects.

He serves as a member on several professional bodies including the Ghana Institution of Engineers (GhIE), International Hydropower Association (IHA), Society of Petroleum Engineers (SPE), and the Editorial Advisory Board of the Hydro Review Worldwide, an international professional magazine on hydropower development.

Mr. Antwi-Darkwa holds a Master of Business Administration (MBA) in International Oil & Gas Management, University of Dundee, UK. He also holds a Master of Public Administration (MPA) from Harvard University, USA, and a Bachelor of Science (Hons) (Civil Engineering) from the Kwame Nkrumah University of Science and Technology, Ghana.



Mr. Richard Obeng Okrah

Non-Executive Board Member

Appointed: 2017 - Present

Mr. Richard Obeng Okrah has served as a non-executive Director of the Board of VRA since October 2017. Mr. Richard Okrah has professional training in Human Resource Management, Public Procurement and Electricity Sector Reform/Restructuring. He holds a Certificate in Reform of Electricity Sector awarded by the Adam Smith Institute, Purley, UK and a Graduate Diploma in Executive Management from the Wharton School, University of Pennsylvania. He is the current President of the Chartered Institute of Supply Chain Management of Ghana (CISCM). He was the Managing Director of Intravenous Infusions Ltd. from 2001 to 2016. Prior to that, he worked for 27 years with VRA, serving in various capacities to the highest position of Deputy Chief Executive in-charge-of Resources and Services.

Mr. Richard Obeng Okrah holds a Master of Public Administration (MPA) with emphasis in Investment Appraisal and Financial Management from Harvard University and a BA (Hons) Sociology from the University of Ghana, Legon, in 1995 and 1969 respectively.



Chief Musa B. Adam

Status: Non-Executive Board Member

Appointed: 2017 - Present

Chief Musa B. Adam has served as a non-executive Director of the Board of VRA since October 2017. Chief Musa B. Adam is the Board Chairman of RegencyNem Insurance Company Ltd. and the Managing Director of Primary Resources Ghana Ltd. Prior to this, he had been Managing Director of the Electricity Company of Ghana from May 1998 to October 2000.

Chief Musa Adam is a renowned Engineer who started his career at Ohio Bell Telephone Company and later at the General Electric Co. Lamp Division, both in the USA. He became the General Manager of GECAD Ghana in 1995. Chief Adam has served on the Boards of several government agencies, commissions and private companies including Tema Development Corporation, National Commission on Culture, Presidential Commission on Pension and Advisory Council of the Institute of Economic Affairs among others. He has also chaired the Board of Trustees, Volta River Resettlement Trust, and the West Mamprusi Community Bank.

He holds a Master of Business Administration from the Harvard Business School, Cambridge, Massachusetts, USA and a Bachelor of Science in Electrical Engineering from the Case Institute of Technology, Cleveland, Ohio. He has undertaken various management courses and international training in Utility Regulation and Strategy.



Hon. Kwame Anyimadu-Antwi

Non-Executive Member

Appointed: 2021 - Present

Hon. Kwame Anyimadu-Antwi was appointed as a non-executive Director of the Board of VRA in August 2021. He is currently the member of Parliament for Asante-Akim Central constituency in the 8th Parliament of the fourth Republic of Ghana, a position he has held since 2009.

Hon. Anyimadu-Antwi is an experienced legal practitioner and Solicitor of the Supreme Court of Ghana. Prior to joining the Parliament of Ghana, he worked at a Senior Level in government with duties that included legislative and policy in Intellectual Property Rights from 1997-2008. He has served in various capacities including an expert on legal aspects of consumer protection, worked in collaboration with Ghana Standards Board on appropriate equipment for testing standards of metals of value and provides legal advice and opinions to the Government, through the Copyright Administration Office on issues pertaining to Intellectual Property Protection.

He serves as the chairperson to the Parliamentary Select committee on Employment, Social Welfare and State Enterprises and the Ghana National Fire Service Council.

Hon. Kwame Anyimadu-Antwi holds an Executive Masters in Governance and Leadership from the Ghana Institute of Management and Public Administration (GIMPA). He also holds a Master of Law Degree in Intellectual Property of Law from the Queen Mary College, University of London, Post Graduate Certificate in Intellectual Property Rights from the Kyoto Comparative Law Centre, a Barrister-at-Law (BL) from the Ghana School of Law and a Bachelor of Law (LLB) from the University of Ghana, Legon, Ghana.



Most Rev'd Dr. Cyril Kobina Ben-Smith

Status: Non-Executive Board Member

Appointed: 2021 - Present

Most Rev'd Dr. Cyril Kobina Ben-Smith was appointed as a non-executive Director of the Board of VRA in August 2021. He is the Archbishop of the Anglican Church Province of West Africa and the Bishop of Asante Mampong, Ghana. He serves as Chairman of the Council of the Anglican University College of Technology and Board of Governors of the Mampong Babies Home.

Archbishop Ben-Smith has served in various capacities such as Vice Dean, St Nicholas Anglican Seminary, Cape Coast, Ghana (2007-2010), Chairman of the Academic Board of St. Monica's College of Education, Asante Mampong and St. Nicholas Anglican Seminary, Cape Coast, Ghana. He has also served as a Visiting Scholar to Selly Oak College, University of Birmingham, (2007-2008).

He holds a Doctor of Philosophy from the Manchester University, United Kingdom, a Master of Arts Degree in Religion from the Asia United Theological University, Seoul and a Master of Philosophy Research from the University of Wales, Cardiff, United Kingdom.



Mr. Solomon Adjetey Sowah

Non-Executive Member

Appointed: 2021 - Present

Mr. Solomon Adjetey Sowah was appointed as a non-executive Director of the Board of VRA in August 2021. Mr. Adjetey Sowah is the Director of Power at the Ministry of Energy with over 20 years' experience in the Energy Sector; 19 years in Ghana and one year in Germany. He has been working with the Ministry of Energy since 1998 in the Power Directorate.

He played significant roles in the National Electrification Scheme (NES) and led a team of engineers to develop a model for the calculation of access to electricity in Ghana in the year 2009. He contributed to the implementation of the NES, which saw the increase in the national electrification access rate to electricity from 43% in the year 2000 to the current 84.32% (by way of the population). He has undergone training in various areas, including Project Management in the field of mid-voltage sub-stations, short courses on PV Solar, Improvement of Operation of Electric Power Facilities, and Management of Wind Power Development amongst others. He has also been involved in Value for Money (VfM) Audit processes for several rural electrification projects (both local and foreign funded), Power Purchase Agreement (PPA) related issues, and served on various Evaluation Panels and Committees.

Mr. Solomon Adjetey Sowah holds a Masters in Engineering, Electrical Engineering (Dipl.-Ing.) from the Technical University of Dresden, Germany, at the Institute of High Voltage and Current Engineering. He also holds an Executive Masters in Business Administration from the Ghana Institute of Management and Public Administration (GIMPA).



Rev. Dr. Joyce R. Aryee

Non-Executive Board Member

Appointed: 2017 - Present

Rev. Dr. Joyce R. Aryee has served as a non-executive Director of the Board of VRA since October 2017. Rev. Dr. Joyce Aryee is the Founder and an Executive Director of Salt & Light Ministries, a Christian organisation, where she serves as a resource for other faith-based initiatives and organisations. Rev. Dr. Aryee is a Senior Executive with over 40 years' experience in various capacities, and an excellent record of accomplishment in strategic leadership and management, executive coach, and a passionate advocate for positive social change. She has played multiple roles in a variety of industries including mining, education, government, and media. She served as the Chief Executive Officer of Ghana Chamber of Mines and as Secretary (Minister) of Information and Education and Local Government respectively. She serves on the Boards of diverse organisations including Central University, University of Mines and Technology and Ghana Chamber of Mines, to mention but a few. She serves as the Chairman of Databank Ark Fund, Global Media Alliance, and Newmont Gold Ghana, among others.

She is a recipient of myriad awards for excellence in leadership at community and national levels including the Chartered Institute of Marketing, Ghana (CIMG), Marketing Woman of the Year Award for 2007 and the African Leadership on Centre for Economic Development's African Female Business Leader of the Year Award for 2009. Rev. Dr. Aryee was awarded the Order of the Volta of Ghana (Companion) (CV) in 2006.

Rev. Aryee is an Honorary Fellow of the Ghana

Institution of Engineers as well as the Institute of Directors. She received an Honorary Doctorate from the University of Mines and Technology in recognition of her immense contributions to the growth of the mining industry. She holds a Post Graduate Certificate in Public Administration from the Ghana Institute of Management and Public Administration and a Bachelor of Arts in English from the University of Ghana, Legon.



Madam Janet Akosua Gyasiwaa

Status: Non-Executive Member

Appointed: 2017 - Present

Mrs. Janet Opare-Kodom (previously Madam Janet Akosua Gyasiwaa) has served as a non-executive Director of the Board of VRA since October 2017. She is the Managing Director of Gentle Giant Company Limited. She is an astute entrepreneur and was adjudged the "Chamber Businesswoman" of the Year (2018). Prior to unlocking her entrepreneurial potential, she worked with the Ghana Police Service and the Canada Trust Bank.

3.0 Mandate

The Board is collectively responsible for formulating policies necessary for the achievement of the primary function of the Authority - the generation of electrical power for the operation of industrial and domestic uses in Ghana. The Chairman, individual Members and Chief Executive have clearly defined roles and responsibilities in the Board Charter. All Members have a fiduciary duty to the Authority and sign on to the Statement of Responsibilities acknowledging their individual and collective responsibility as Directors to Volta River Authority upon appointment.

4.0 Board Committees, Mandate and Membership

The Board discharges its responsibilities through Board Committees, with membership from amongst its members, to perform specific tasks to facilitate efficient decision-making. The selection of Chairpersons and Members to these Committees is done based on their relevant qualifications, skills, and experiences. The Executives of the Authority are required to attend meetings of the Board Committees. Other staff only attend the meetings, at the Committee's request or at the Chief Executive's discretion, as may be required.

The Board has established the following Standing Committees to assist in carrying out its functions:

- ◆ Engineering & Operations Committee
- ◆ Finance & Investment Committee
- ◆ Audit & Risk Committee
- ◆ Services & Employee Relations Committee

Ad-Hoc Committees are constituted as and when necessary.

4.1 Engineering & Operations Committee

The work of the Committee is to provide broad guidance to the Board and the Chief Executive on strategic engineering and technical undertakings of VRA's power generation system, namely the Planning, Development, Operation & Maintenance, and make appropriate recommendations for the consideration of the Board. It also has oversight of the Health, Safety, Security and Environment, (HSSE) Audits and Compliance including Environment Impact Assessments & Mitigation and Emergency Mitigation Plans

The Committee has a Membership of four (4) and is chaired by Chief Musa B. Adam.

4.2 Finance & Investment Committee

The Committee has the mandate to advise the Board on measures that will ensure the prudent and judicious management of the Authority's finances and investments towards achieving the objectives envisaged under Part II of the Volta River Authority Development Act 1961 (Act 46) as amended by Act 2005 (Act 692).

The Committee has a Membership of five (5) and is chaired by Mr. Richard Obeng Okrah.

4.3 Risk & Audit Committee

The mandate of the Committee is to assist the Board in fulfilling its fiduciary responsibilities as they relate to accounting policies, risk management, technical audits and reporting practices, the quality and sufficiency of internal and external audits, and the system of internal control. These include but are not limited to oversight of financial reporting, Risk Management, Internal Control, Compliance, Ethics, and audit issues.

The Committee has a Membership of four (4) and is chaired by Most Rev. Dr. Cyril Ben-Smith.

4.4 Services & Employees Relations Committee

The mandate of the Committee is to advise the Board on issues generally relating to non-power assets and the wellbeing of the Staff in the Authority.

The Committee has a Membership of four (4) and is chaired by Rev. Dr. Joyce R. Aryee.

5.0 Management

The Chief Executive, together with his team of Executives and Senior Management, is responsible for the day-to-day management of the business. There is a clear line of authority and accountability for key responsibilities at all levels and in all areas of the Authority. Senior Management is responsible for reporting all matters that fall within their materiality threshold to the Chief Executive.

6.0 Board Meetings

The Board always approves an annual calendar to guide its work plan in any particular year. Six (6) Ordinary Board meetings as required by the Board Charter, were held to consider issues of strategic and business performance importance in 2023. One (1) Emergency meeting was held in addition to consider issues, which came up during the intervening periods between planned ordinary meetings. A total of 17 Committee meetings were held prior to the Ordinary Board meetings, providing the platform for Committee Members to engage more with the Executive and

other Management Staff on issues and thereafter make recommendations to the Board. Members participated in all meetings held during the year, either through virtual mode or in-person.

At the beginning of each year, the Board sets aside two (2) days to hold its strategy session. At this session, the Board considers the overall corporate strategy of the Authority for the current year. It also affords the Board the opportunity to engage the Subsidiary companies and assess the effectiveness of their strategies in achieving their objectives and contributing to the overall performance of the Group VRA.

Any Member who may have a conflict of interest or a material personal interest in any matter to be discussed must declare it prior to the start of meetings. This is in addition to the Declaration of Conflict of Interest Form completed annually by each Member and maintained by the Board Secretary to flag for any potential conflicts. At no time during the year did any Member hold a material interest in any contract of significance with the Authority.

7.0 Transparency, Accountability and Stakeholder Relations

To ensure transparency and accountability, the Board maintains active communication and engagements with its shareholder, key stakeholders, and the public by providing information regarding Company strategy, operations, and performance. Disclosures on performance are communicated to relevant stakeholders in compliance with the Public Financial Management Act, 2016 (Act 921) and other regulations. The financial statements are audited annually by qualified and Independent External auditors and submitted to the State Interests & Governance Authority (SIGA), with a copy to the Ministry of Finance. The 2023 Financial Statements were audited by the Ghana Audit Service and submitted to the relevant authorities by the due date of April 30, 2023.

Each year, an Annual General Meeting dubbed, "Annual Stakeholders' Interface" is convened by the Board to share information on the performance of the Authority for the previous year to our Shareholder, represented by the State Interests & Governance Authority, and other key stakeholders. The 13th Annual General Meeting to consider the financial and operational performance of the Authority for the year 2022 was held on Wednesday, August 30, 2023.

Shareholders and other stakeholders are informed of all material matters affecting the Authority through media announcements, periodic communications and a range of fora and publications. The Board continues to strengthen its engagements with key stakeholders, significant being the institutions in the energy value chain (GRIDCo, ECG and NEDCo) to foster a collaboration that will facilitate the delivery of

reliable and good service to customers and resolve the shared challenges in the sector. In the wake of controlled spillage from the Akosombo and Kpong dams in September 2023, the Board in the company of Management, reached out to communities who were affected by the spillage.

8.0 Exercise of Responsibilities

The Board exercised its duty of ensuring that organisational goals are clearly established, and strategies are in place to achieve them. The Board ensured that Management is proactively seeking to sustain the operations of VRA through innovation and creativity initiatives, and the development of new markets/projects.

9.0 Board Training

To facilitate Members' fulfilment of their responsibilities, the Authority has committed itself to the continuous education and training of Members to enhance their knowledge in business operations and latest development in corporate governance. In 2023, the capacity building programmes for the Board focused on Members' attendance to conferences on subject matters relating to the Authority's core business, and familiarisation visits to the operations of some key business partners.

10.0 Board Training

The Non-Executive Members of the Board are entitled to a sitting allowance for Board and Committee meetings as well as official events attended on behalf of the Authority. The sitting allowances are in line with rates approved by the Government.

10.0 Board Evaluation

The Board has adopted a policy that each year it will critically evaluate its own performance, its processes, and procedures to ensure that they are effectively assisting Members to effectively fulfill their role. Accordingly, in 2023 a self-evaluation was done. The review covered the performance of the Board as a whole, the Board Committees and the Board Chairman. Feedback from the evaluation has been discussed by Members and shared with SIGA.

Acts and Regulations

The following are some of the Acts and Regulations VRA complies with.



Principles of Corporate Governance



The Corporate Governance principles are entrenched in VRA's strategic and operational objectives to facilitate growth and increase stakeholder value.

BOARD CHARTER



Board Charter Statement

The Board Charter outlines the respective roles, responsibilities, and authorities of the Members, both individually and collectively, and Management in setting the direction, management, and control of the Authority. It is subject to relevant provisions of the 1992 Constitution of the Republic of Ghana, the Volta River Development Act, 1961 (Act 46) as amended by Act, 2005 (Act 692), the Code of Conduct for Public Officers, the Public Financial Management Act, 2016 (Act 921); the Companies Act, 2019 (Act 992) as amended, good corporate governance practices as promoted under the State Interests and Governance Act, 2019 (Act 990), and any other statutory and legal provisions as well as practices that conform to normative advice on good corporate governance.



Power Operations

Electricity Demand & Supply

Operational Performance

Hydro Generation

Volta Lake Management

Thermal Generation

Renewable Energy

Capacity Expansion

Repowering of Generating Power Plants

Power Operations

Electricity Demand and Supply

Ghana's power system in 2023 recorded a system peak demand of 3,618MW. This demand represents an increase of 149MW and is about a 4.0% increase over the 2022 peak of 3,469MW.

Total energy consumed during the year, including losses, was 23,562GWh. Comparatively, the total energy consumed in 2023 as against the 22,490GWh consumed in 2022, represents a 4.8% increase in the annual growth in energy consumption.

During the year, VRA supplied an annual generation of about 12,734GWh compared to the estimated base case projection of 12,175GWh, which is 4.6% or 559GWh higher than the projected. The total VRA supply accounts for 54.05% of the total national supply. The increase in supply is due to a higher than-planned generation from VRA's hydro plants mainly because of system demand and support during periods of planned thermal outages in the year.

Operational Performance

The Authority's sources of generation include hydro, thermal, and solar energy. During the year, the various generating facilities recorded improved performance evidenced by higher availabilities compared to the previous years. Key highlights leading to the attainment of operational excellence include good operational and maintenance policies. The combined effect is the increased generation, which largely contributed to maintaining our position as market leaders.

Hydro Generation

Operations

In line with the mandate of managing, maintaining, and operating the Authority's hydroelectric dams safely and reliably, VRA continued to ensure the effective management of the Volta Lake for efficient and sustainable power generation.

In the review year, the reservoir at the Akosombo Generating Station (AGS) was drafted at an average daily rate of 18.394GWh compared to the 15.839GWh in the previous year. Total gross hydroelectric energy recorded at AGS was 6,713.925GWh and a net of 6,709.608GWh representing an 8.66% increase above the planned generation target of 6,175GWh. At the Kpong Generating Station (KGS), a gross generation of 1,081.013GWh and a net energy of 1,077.552GWh was recorded. This was 5.13% above the annual target of 1,025GWh.

Plant Availability

For the period under discussion, AGS and KGS achieved Plant availability of 95.83% and 98.84% respectively, compared to the 94.31% and 96.78% recorded in the previous year. This performance translates into a consolidated hydro availability of 96.24%, which was above the internal target of 94%. The improved availability of the Authority's hydro facilities can be attributed to optimized maintenance outages.

Forced outages recorded at AGS and KGS were 0.556% and 0.054% respectively. The weighted forced outage for the year was 0.488%, which is within the internal target of 1%, and the Electricity Utility Cost Group (EUCG's) benchmarked target of 5.2%.



Capacity Factor Analysis

On a month-on-month basis, the capacity factor for AGS and KGS shows that throughout the year, Akosombo GS had capacity factors above the 60% target. KGS recorded a capacity factor greater than the target of 70% in all months except for October. The annual capacity factor for Akosombo GS was 75.14%, 15.14% above the target of 60%. That of Kpong GS was 77.13%, which is 7.13% above the stated target of 70%. It is imperative to indicate that the least monthly capacity factor for the Akosombo GS was 61.72%. This was recorded in the month of June. That of Kpong GS, which was 55.04%, was attained in October. The low-capacity factor for Kpong GS in October was because of the high tail water level leading to low net head available for power generation. This is a result of the continuous controlled spillage occasioned by high inflows..

Volta Lake Management

Consistent with our strategy of ensuring our hydro generation resources are operated sustainably, the year commenced with the Akosombo reservoir recording an elevation of 83.09m (272.62ft) and dropping to a minimum elevation of 80.70m (264.77ft) at the end of the dry season. This represents a drop of 2.39m (7.85ft.), with the lowest elevation recorded on June 24, 2023, and the highest elevation of 84.54m (277.36ft.) recorded on October 18, 2023 (a total rise of 3.84m or 12.59ft.). The reservoir's elevation at the end of the year 2023 was 83.74m (274.75ft.).

Net Inflow

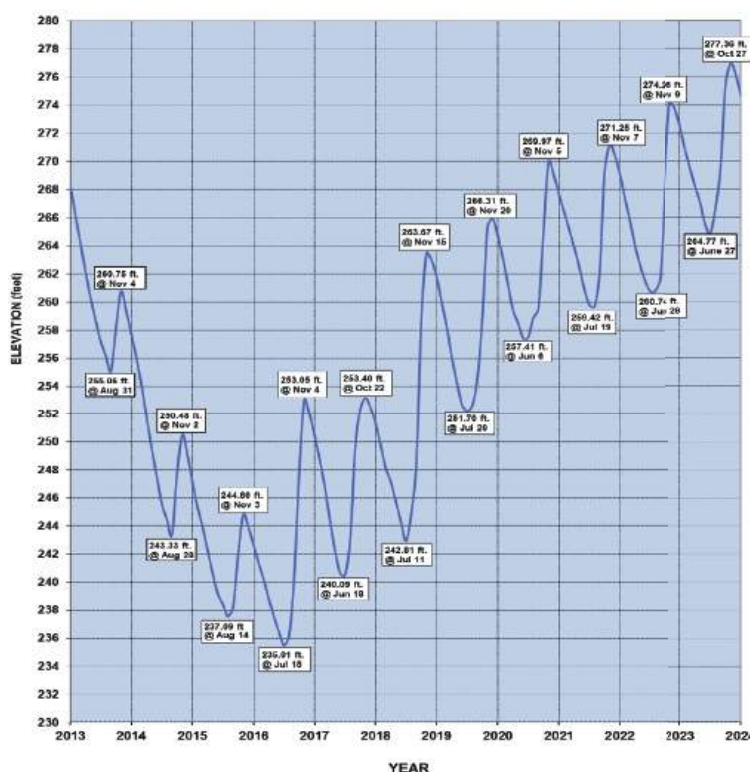
Rainfall activities within the southern part of the Volta Basin in 2023 were average to below average. This resulted in average to below-average rainfall activities in Ghana for that rainfall season. Annual rainfall for the seven (7) selected rainfall stations of interest to VRA within and around the Volta gorge was 1,413mm. This was higher than the Long Term Average (LTA) by 19%.

Tributary Flows

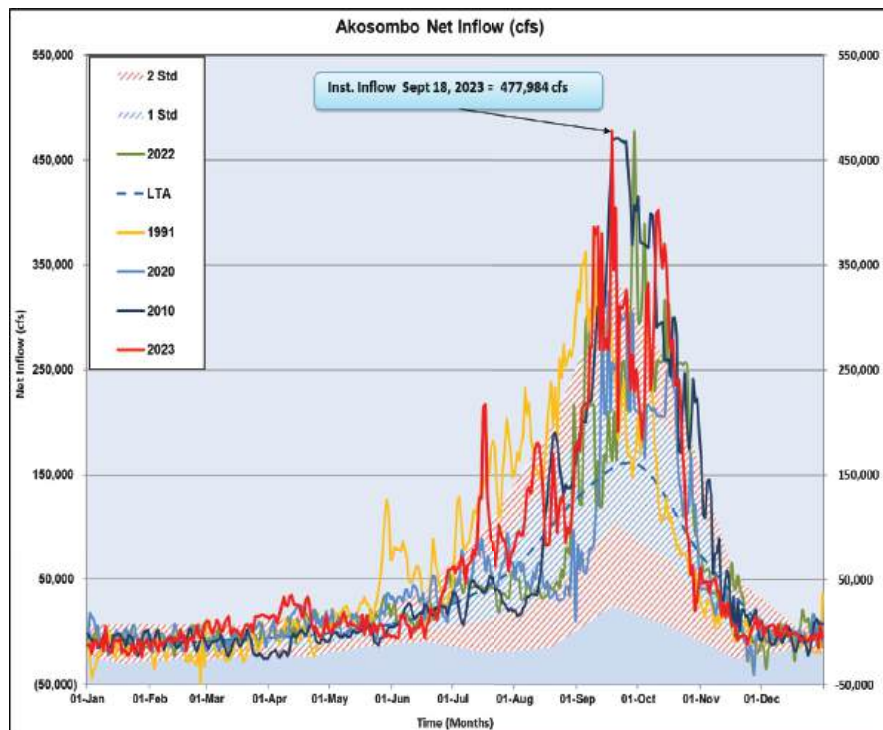
The major water bodies that contribute to inflows into the Akosombo reservoir are the Oti River, the White Volta, and the Black Volta. The Oti River at Saboba recorded an inflow of 10.08MAF. This was higher than the LTA for the Oti River by 46%. Inflow recorded on the White Volta at Nawuni for the same period was 8.53 MAF. This was 41% lower than the LTA for the White Volta at Nawuni. The flow recorded on the Black Volta due to energy generation at Bui Hydropower Station from January to December 2023 was 13.36 MAF.

On the other hand, the cumulative Net Inflow of water into the Akosombo reservoir was 46.27MAF. This was about 83% higher than the long-term average net inflow of 25.22MAF.

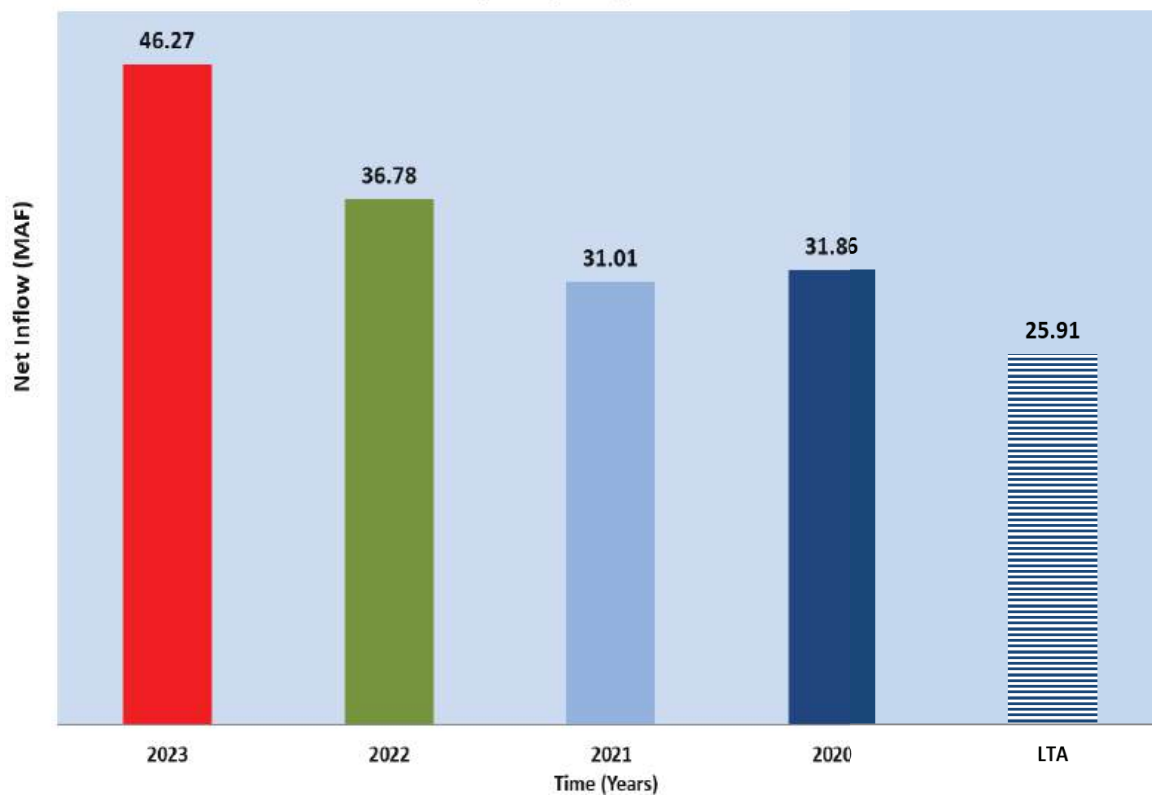
VOLTA LAKE REGULATION CHART (2013-2023)



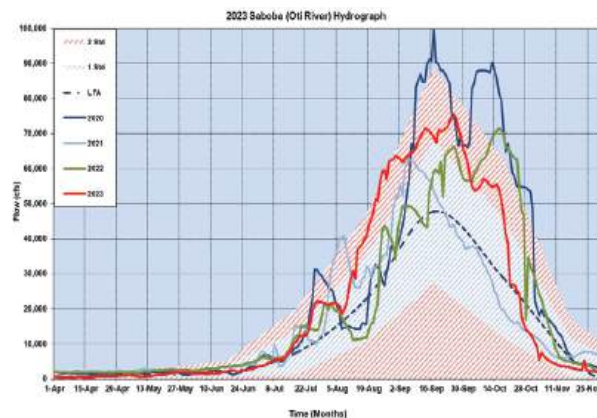
Volta Lake regulation chart from 2013 - 2023



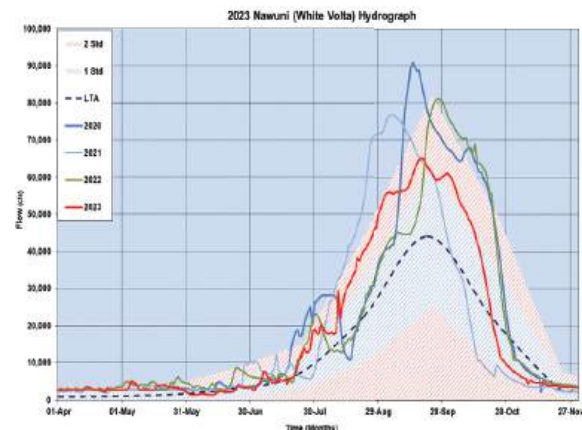
**Net Inflow LTA from January to December Ending
for 2023, 2022, 2021, 2020 and the LTA**



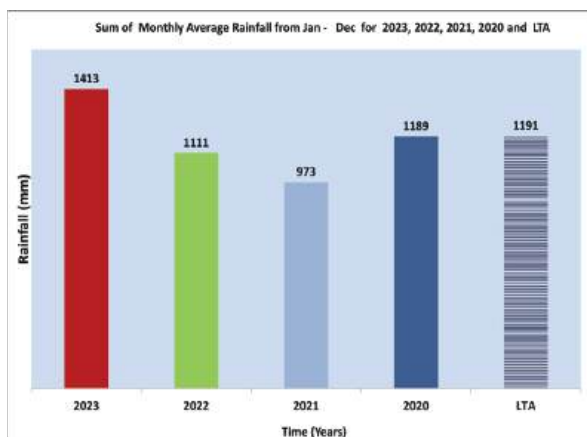
Annual Net Inflow Comparison for 2023, 2022, 2021, 2020, and LTA



Saboba Hydrograph for 2023, 2022, 2021, 2020 and LTA



Nawuni Hydrograph for 2023, 2022, 2021, 2020, and LTA



Sum of monthly average rainfall for 2023, 2022, 2021, 2020, and the LTA



Dam Safety Monitoring and Surveillance

In line with international best practices, VRA continued the monitoring and physical inspection, data collection, and other related surveillance activities on the Kpong and Akosombo Hydroelectric Dams. The goal is to ensure the dams were in good stead for sustainable power generation. A major event that took place in 2023 was the spillage of excess water from the Akosombo and Kpong Dams. To ensure the structural integrity of the dams to allow for sustainable generation power going forward, VRA undertook the following major activities.

- ◆ Implementation of the Rehabilitation of the Akosombo and Kpong Hydroelectric Dams Project - Phase III. This project seeks to improve the structural integrity of the Kpong Dam and appurtenance structures.
- ◆ Enhanced Monitoring of Dam appurtenances during the spilling exercise from September 15, 2023, to October 30, 2023. This was done in consultation with the "Dam Review Board" on issues relating to the safe operation of the dam, and optimum gate opening protocols for the spillways.
- ◆ Comprehensive condition assessment of the Akosombo and Kpong Dams and related remediation works.
- ◆ Commencement of the Consultancy Services for the Investigation of the Coarse Rockfill Displacement and benching of the Upstream Slope of the East and West Dykes and River Dam of the Kpong Generation Station. This has the objective of ensuring the stability of the east and west dykes of KGS.

Controlled Spillage from the Akosombo Dam



On September 15, 2023, the spillway gates of the Akosombo dam were opened to commence a controlled spilling operation to preserve the integrity of the dam, following significantly high inflows of water into the reservoir. With a head water level of 272.50ft and a tail water level of 50.25ft, the spill commenced with a discharge of 20,000cfs, and was gradually increased to a maximum of 185,000cfs on October 12, 2023. The spill volume was gradually reduced after the inflows subsided, and the spillway gates were finally closed on October 30, 2023.

It is instructive to report that about 46.27MAF (57.073 billionm³) of water was received into the Dam during the period, out of which only 8.42MAF (10.386 billionm³) was spilled. The spillage regime was highly successful as the effective coordination between relevant stakeholders led to a safe and effective spill operation. It would be recalled the last time the Authority spilled water was in November 2010.

Flooding/Relief Management

The spillage of water from the AGS and KGS occasioned the flooding of communities downstream of the Volta Lake leading to the displacement of people within the affected areas in about eight districts. As a socially responsible organisation, VRA, working in collaboration with NADMO, went to the aid of the victims by providing relief items including emergency shelters at identified safe havens, hot meals, potable water, mobile toilets, and essential supplies. The following essential services were extended to save lives and alleviate the living conditions of the affected persons in and outside the safe havens:

- ◆ Logistics and food supply
- ◆ Medical supplies and mobile clinics
- ◆ Search and rescue operations
- ◆ Construction of alternative access route
- ◆ Water and sanitation services

In collaboration with the Ministry of Energy, 5,000 solar lamps with charging ports were also distributed to the affected persons. The effective management of the impact of the spillage from the two Volta dams, for which no human lives were lost, can be attributed to the deepened engagement and partnerships with our stakeholders and the support of the government.



Renewable Energy Generation



Towards the Authority's strategy to operate in a sustainable manner and contribute to global climate change by reducing our carbon footprints, VRA vigorously pursued its Renewable Energy (RE) policy by focusing on the development of new projects as well as the successful operation and maintenance of existing RE facilities.

Navrongo Solar Power Plant (NSPP)

With a projected generation target of 3.0GWh, the Navrongo Solar Power Plant (NSPP) attained an actual total generation of 2.2427GWh, 25.2% less than the projected. The shortfall in generation was due to a faulty Inverter, defective panels, and faulty underground string cables. The necessary efforts have been initiated to procure and replace the defective parts to ensure optimal Plant performance. Notwithstanding the generation shortfall, the NSPP attained with an equipment availability factor of 88.6%. Other indicators recorded include a Specific Energy Yield (SEY) and capacity factor of 78.69KWh/KWp and 10.82% respectively. It is worth noting that, since its inception in 2013, NSPP, which is the Authority's premier utility solar power plant, has achieved an accumulated generation of 47.2003GWh, out of which, 45.9358GWh has been successfully delivered to the national grid.

Lawra Solar Power Plant (LSPP)

At Lawra in the Upper East Region, LSPP attained a total generation of 9.375GWh with a plant availability of 95.56%. LSPP achieved a specific energy yield of 110.17KWh/KWp and a capacity factor of 16.22%. All planned preventive maintenance activities for LSPP for the year were successfully executed. LSPP has been successfully operated since it was commissioned on October 10, 2020.

Kaleo Solar Power Plant (KSPP)

The total energy generated in 2023 by the Kaleo A/C and Kaleo B Solar Power Plants was 23.68GWh. This performance was 8.85% above the planned generation target of 21.76GWh. This impressive operational performance is attributable to the Plant's improved availability factor of 99.20% and a specific energy yield of 99.20%.

Head Office Rooftop/Car Park Solar

In 2023, the total energy generated by the Head Office rooftop and car park PV facility solar facilities was 0.1869GWh. This generation contributed 18.6% of the total energy supply to the head office building. The system recorded a 100% availability factor and a SEY of 1,246KWh/KWp. The system also recorded a capacity factor and performance ratio of 17.21% and 82.21% respectively.

Mini Grid facilities

Consistent with our maintenance practices, we continued to ensure the successful operation and maintenance of the government-owned mini-grid facilities at Pediatorkope, Aglakope, Kudorkope, Wayokope, and Atiagosome. Though the facilities' performance for the year were satisfactory, challenges with defective batteries at Pediatorkope, Aglakope, Atiagosome, Wayokope and Kudorkope, resulted in the unavailability of the facilities after sunset. VRA, together with the sector ministry, is working around the clock to have the defective batteries replaced. The objective is to ensure the beneficiary communities enjoy the full benefits of the facilities.

Thermal Generation



In consonance with our decision to reduce our carbon footprint and improve operational efficiency, VRA in 2023 maintained the policy on zero tolerance for light crude combustion for the Kpone Thermal Power Station (KTPS), Tema Thermal 1 Power Station (TT1PS), Tema Thermal 2 Power Station (TT2PS) and the Takoradi Thermal Power Station (TTPS). In all, a total of 23,562,111.23 MMBtu of gas and 17,505.35m3 of Distillate Fuel Oil (DFO) was used to deliver the combined thermal generation of 2,297.37GWh. 51.6GWh of the energy was delivered using DFO mainly due to emergency requirements, gas supply outages, and grid requirements.

Operations

As indicated, the combined thermal generation for the year was 2,297.37GWh. The weighted average thermal plant availability was 78.86%. The combined capacity factor for the same period was 41.27% as against a target of 47.89%. This situation was occasioned by the major inspections that were initially scheduled to be carried out in 2023. In terms of the combined forced outage factor, the Authority achieved a 4.52% ratio compared to the 5% target initially planned. The Plants recorded a weighted average heat rate 10,407.36Btu/kWh as against the target of 9,683.27Btu/kWh estimated for the year. The heat rate variance of 7.48% was above the tolerance limit of 3%. Forced outages, especially steam turbine-related events, greatly impacted the Authority's ability to operate at optimum heat rates. Distillate Fuel Oil (DFO) operations at KTPS also impacted negatively on the heat rate.

Kpone Thermal Power Station (KTPS)

The Kpone Thermal Power Station's (KTPS) generation for the year 2023 was 507.83GWh. This performance is an improvement over the 487.18GWh achieved the previous year. The improvement can be attributed to improved availability rate of 99.34%, a forced outage

rate of 0.01% and end-of-year capacity utilization of 28.28% compared to last year's record of 87.76%, availability rate, a forced outage rate of 8.67% and an end-of-year capacity utilization of 28.28%.

Takoradi Thermal Power Station (TTPS)

For the same period, generation at TTPS amounted to 1407.26GWh, at an availability rate of 65.25%. The below-average plant availability was due to the Rehabilitation, Modernisation and Life Extension Project (RMLEP), which began in Q4 2023. The project has the objective of improving the reliability and availability of the Plant by replacing and rehabilitating key components at the Station. The activities undertaken include:

- ➔ GTI Major inspection
- ➔ GTI Diverter Damper Replacement
- ➔ STG Major Inspection and Generator Rotor Replacement
- ➔ Condenser Water Box Replacement
- ➔ HRSG1 Minor Repair works
- ➔ HRSG2 Rehabilitation Works
- ➔ Seawater Pump Rehabilitation
- ➔ Debris Filter Replacement

The end-of-year capacity utilisation for TTPS was 51%. The poor capacity utilisation was due to the planned shutdown on October 6, 2023, for life extension works. On March 23, 2023, the Heat Recovery and Steam Generator 1 (HRSG1) experienced a catastrophic damage on its feedwater discharge piping, further damaging several valves and ancillary equipment. HRSG1 was restored on June 22, 2023, and remained in service for the remaining year.

Tema Thermal Power Complex (TTPC)

Generation from the Tema Thermal Power Complex (TTPC) was 382.28GWh. Comparatively, the 2022 generation of 516.86GWh was 92.86GWh higher than the 2021 generation of 404GWh. TTPC's performance comprises an energy generation of 350.06GWh at an availability of 79.71% (excluding TT2PS), forced outage of 2.79% and capacity utilisation of 38.06%. TT1PS carried Hot Gas Path Inspection (HGPI) on the gas turbine and a major inspection on the generator.

At TT2PS, energy generated amounted to 32.22GWh. This was realised at an availability of 33.81% (for the two units declared for the year) or 6.33% for all eight (8) units. It is imperative to state that the Station was not operational from August to December due to the unavailability of the Units.

Takoradi Thermal Power Station (T3).

At the Aboadze Thermal Complex, there was no generation from the T3 plant as all the generating Units were out of service.

GE TM 2500 Units

The GE TM 2500 Units in Aboadze were not available during the year as six (6) units out of ten (10) were dismantled and relocated to Anwomaso in the Ashanti Region. The Units are expected to be fully operational by the end of Q2 2024.

Takoradi International Company/TAQA

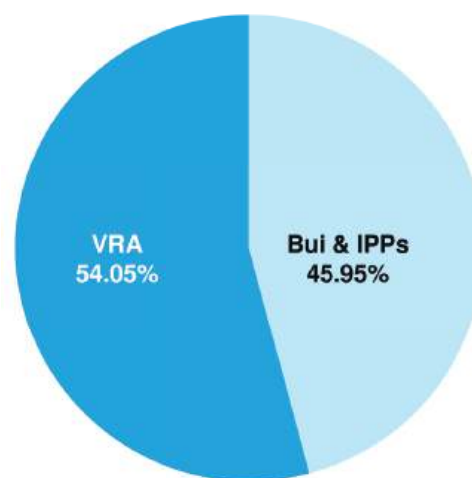
The Takoradi International Company (TICO) Power Plant operated 100% on natural gas, mostly in full combined cycle mode and at an average availability of 90.97%. Total generation for the year under review was 2,567.39GWh. This was delivered using 22,749,769MMBtu of natural gas received from the Ghana gas fields. During the year, the plant experienced some forced and maintenance outages which were expeditiously dealt with. The steam turbine however experienced a fault in December that caused it to remain unavailable for the remainder of the year.

Maintenance Accomplishments

VRA successfully completed 94.56% of all its maintenance activities planned for the year. Specifically, 93.56% of preventive maintenance and 95.7% of corrective maintenance were achieved. Most of the maintenance activities were undertaken at the Takoradi Thermal Power Station (TTPS).

Market Share

The Authority recorded a marginal increase in its market share from a projected share of 46.39% to an actual share of 54.05%. This was slightly below the market share of 55.6% achieved in 2022. The increase in market share (over the projected share) is attributed to increased supply to ECG and some export customers. Despite the marginal improvement in the market share, an analysis of VRA's share over the years points to a substantial decline from the 98.7% market share value recorded in 2010.



Capacity Expansion Activities

The Volta River Authority has a mandate to develop and supply reliable, affordable, safe, high quality and competitively priced electricity. Though no capacity additions were achieved in 2023, we strategically focused on the development of our renewable energy projects. Additionally, we progressed substantially in our efforts towards converting our simple cycle plants to combined cycle, as well as retooling others. The overarching objective is to diversify our generation mix, increase generation and sustain our role as market leaders in the highly competitive energy market.

Wind Power Project 1 (WPP 1)

VRA is set to develop, in a staged manner, its first utility scale 75MW onshore wind power project in Anloga in the Volta Region. Phase one of the project is expected to deliver up to 40MW of wind power. In delivering the project, the Authority intends to use an Engineering, Procurement and Construction (EPCF) financing approach. Completion of the project will affirm VRA's trailblazer status in the power generation sector, while deepening the Authority's footprint in the renewable energy space with the objective of diversifying our generation portfolio and reducing carbon emissions.

60MW Bongo Solar Power Project (60MW BSPP)

As part of efforts to attain the target set for Solar PV in phase 2 of our Renewable Energy Development Programme, we vigorously pursued activities relating to the development of our 60MW solar power PV Plant at Bongo in the Upper East region. During the year, a Memorandum of Understanding was signed with a prospective contractor to allow them to source for funds for the project under an EPC+F arrangement. Arrangements have also been put in place for AngloGold Ashanti to offtake 100% of the power expected to be delivered from the Bongo site.

25MWp Floating Solar PV Project

Further to the activities completed in 2022, the consultant, working on the feasibility studies for the project submitted the draft feasibility studies for VRA's review in 2023. The consultant also held a workshop with VRA discuss Private Sector Financing options for the project.

Pwalugu Multipurpose Dam Project

The Government of Ghana in 2019 cut sod for the construction of the Pwalugu Multipurpose Dam Project. The Project is one of the transformational projects identified to generate considerable economic growth in the Northern regions of Ghana with a direct impact on poverty reduction. Upon completion, the project, which comprises a 60MW hydro dam, 50MW solar facility as well as a 25,000ha irrigation scheme, will provide several benefits. These include the provision of water for irrigation to boost agricultural production; stability of power supply; and a boost in Ghana's renewable energy capacity, which supports the country's climate change commitment. Most significantly, the project will reduce the frequency of flooding downstream of the dam. During the year, significant project activities were undertaken though construction of the Dam was yet to begin.

Environmental Impact Statement (EIS)/ Resettlement Action Plan (RAP)

In 2023, the Environmental Protection Agency (EPA) approved VRA's Environmental Impact Statement (EIS) for the solar component of the project. EPA accordingly issued an environmental permit for the solar component of the Pwalugu Multipurpose Dam Project.

Land Acquisition (Project Lands)

To determine the mode of acquisition of the forest reserves, which will be affected by the project, we engaged with the Lands and Forestry Commissions. Following successful engagements, the Interim Valuation Report was revised to reflect the conclusions reached. In line with that, the Project Cadastral Map was signed off after the final Central Site Advisory

To facilitate the execution of the project, the Authority applied for the necessary permits from the Energy Commission Project. Community stakeholder engagement also commenced in 2023 as part of the Environmental and Social Impact Assessment (ESIA) for the project. Upon the German Development Bank's (KfW) request, the ESIA included a Gender Assessment. The ESIA consultant accordingly submitted the draft report and organized a workshop on the Gender Assessment Study.

Kpone Thermal Power Plant (KTPP)

In line with the medium to long term plans of improving plant efficiency and increasing our installed generation capacity, we assiduously worked towards conversion of the Kpone Thermal Power Plant into a 330MW Combined Cycle Plant. Five (5) EPC firms were shortlisted following a pre-qualification tendering process. The related report has been endorsed by the Entity Tender Committee. The Authority also held discussions with prospective developers on their unsolicited proposals to assist the Authority raise the requisite financing for the project.

Committee meeting. The Map was subsequently submitted to the Land Commission. A one-year extension has been granted by the court to allow for completion of the land acquisition process for the project lands.

Planning and Architectural Design of Resettlement Townships

In the year under review, we engaged Izmatrix Limited to undertake the Planning and Architectural Design of Resettlement Townships in the first quarter of 2023. The scope of work includes designing housing units, community infrastructure and township layouts. Upon completion of the task, officials of VRA and Izmatrix engaged with relevant stakeholders including the Municipal and District Assemblies, and the six (6) communities to be resettled for a review of the final architectural designs and masterplan of the resettlement townships.

Cadastral Survey of Resettlement Lands

In the year under discussion, we procured the services of Izmatrix to undertake a cadastral survey and demarcation of the resettlement farmlands. Surveying and pillaring of the farmlands for Nungu, Suhuluya, and Gubeo were duly completed in September. Surveys for Kparikpiri, Kulunga and Degaari were, however, suspended due to an objection raised by the Forestry Commission that the land earmarked for the purpose was within a forest reserve, and was part of a reforestation programme, funded by the World Bank. VRA, Forestry and Land Commission are scheduled to visit the site and come up with relevant resolutions on the outstanding issues.

Repowering and Conversion of Power Plants

132MW Takoradi Thermal 3 (T3)

With the decision to repower the 132MW Takoradi Thermal Power Plant, which has been out of service since 2015, Management has resolved to replace all existing four (4) Orenda gas turbine engines with four (4) GE TM2500 gas turbines from the erstwhile AMERI Power Plant. Proposals from prospective firms were received and reviewed. The project will take off after the successful completion of the necessary arrangements.

GE TM 2500 Units

To improve the nation's grid network performance and address the frequent voltage and power stability issues in the middle and northern parts of the country, the Ministry of Energy took the strategic decision to relocate the erstwhile AMERI Power Plant from Aboadze to Anwomaso near Kumasi in the Ashanti region. By close of the year, the re-installation of six (6) out of the ten (10) GE TM2500 gas turbine units had reached substantial completion with recommissioning tests also commencing. This was after the successful decommissioning, dismantling and transportation of the units from Aboadze to Kumasi. To ensure reliable supply of fuel to power the units, a natural gas pipeline was constructed from Prestea to Anwomaso by Genser Energy Limited in collaboration with the Ghana National Petroleum Corporation. The expectation is that the project would be completed in February 2024 to allow for the injection of about 250MW of power into the middle belt of the national grid.

CENIT & TT1PP Project

Following the engagement of Messrs. Ernst & Young (EY) Ltd as the consultant for the proposed CENIT/TT1PP combined cycle project and the subsequent execution of the contract document by the Parties, EY undertook its first site visit to both the TTPC and CENIT Power Plants on October 4, 2023, to mark the official commencement of the assignment. The visit allowed EY to assess the assets of the respective plants, which were to be valued.

The Consultant submitted its inception report on October 23, 2023, and followed it up with the draft final asset valuation report on December 11, 2023. The draft final report covers the consultant's independent valuation of the TT1PP and CENIT Plants for insurance purposes on a re-instatement cost basis, and market valuation for internal decision-making. The Consultant made a presentation on the conclusions of their valuation assessment to the Joint VRA/CENIT Steering Committee on December 21, 2023.

Power Business

Power Sales

In the review year, power sold to customers was 12,685GWh. This was 0.32% higher than the 2022 figure of 12,645GWh. Total power sales in 2023 comprised 6,844GWh to electricity distribution companies, 2,529GWh to export customers, 1,559GWh to bulk customers, 834GWh to VALCO and 919GWh to GRIDCo as transmission losses and substation use.

Power sold to the distribution companies constituted the following: 4,637GWh was sold to the Electricity Company of Ghana (ECG), 1,938GWh to Northern Electricity Distribution Company (NEDCo) and 269GWh to Enclave Power Company (EPC).

For export customers, the Authority sold 737GWh to Compagnie Energie Electrique du Togo (CEET), 247GWh to Société Beninoise d'Energie Electrique (SBEE), 1,280GWh to Société Nationale d'électricité du Burkina (SONABEL) and 265GWh to Compagnie Ivoirienne d'Electricite (CIE).

Power sold to bulk customers consisted of 1,337GWh to mining companies and 222GWh to industrial/commercial customers. The mining companies include AngloGold Ghana Limited, Newmont Ghana Gold Ltd (NGGL), Newmont Golden Ridge Ltd (NGRL), Adamus Resources Ltd, Talos Owere Mines, Prestea Sankofa Gold Ltd (PSGL), Asanko Gold Ltd, AngloGold Ashanti (Iduapriem) Limited and Drillworx.

The industrial/commercial customers also include Akosombo Industrial Company Ltd, Diamond Cement Ghana Ltd, Savanna Diamond Company Ltd., and Ghana Water Company.

Imports

In 2023, there was no deliberate import from CIE. However, due to inadvertent electricity exchanges, 60GWh of power was delivered to Ghana from the CIE network. This amount would be restituted to CIE in 2024.

Tariffs

Electricity tariffs for bulk and export customers were adjusted based on the terms and conditions of the respective Power Sale and Purchase Agreements. The Public Utilities Regulatory Commission (PURC) approved new electricity tariffs effective February 1, June 1, September 1, and December 1, 2023.

As at end of December 2023, the VRA Bulk Generation Charge (BGC) was GHp42.7963/kWh. Tariffs for ECG, NEDCo and EPC at year end were GHp31.6405/kWh, GHp62.0155/kWh, GHp78.6534kWh respectively.

Sale Contracts

We continued with our efforts at reviewing and executing Power Sale and Purchase Agreements (PSPAs) with our customers. By the close of the year, VRA had twenty-one (21) valid PSPAs.

Thermal Fuel Supply

In accordance with our strategy for zero tolerance for combustion with Light Crude Oil (LCO), we did not import LCO for the period under consideration. Nevertheless, 74,400MT of Diesel Fuel Oil (DFO) was imported. The Authority relied on natural gas as the major source of fuel for generation, and procured gas from various sources to facilitate its operations. For the Plants in the Aboadze enclave, VRA procured 35,503,166.71MMBtu of gas from the Ghana gas fields. 58.33% of the total gas secured representing 20,707,996.22MMBtu was supplied from Tullow (Jubilee/TEN fields, with 14.795,200MMBTu representing 41.67% coming from the ENI (Sankofa fields). Comparatively, the average delivery for the year was 97,238.9MMBtu as against 112,912.213MMBtu in 2022. The drop in delivery was due to reduced gas exports from Jubilee/TEN and maintenance works undertaken at the Aboadze enclave during the period.

Nigeria Gas (N-Gas) delivered a total of 23,522,558.81MMBtu of gas at the Tema delivery point. Of the total, 9,843,014.24MMBtu (41.85%) was delivered to our Plants while 13,679,541MMBtu (58.15%) was delivered to Sentuo Ceramic Company, Sunson Asogli, and other IPPs within the Tema Power Enclave. The average supply of gas via WAGP for the year was 64,445.43MMBtu as compared to the 54,555.17MMBtu recorded in the year 2022. Due to maintenance activities at the Akosombo Generating Station and other gas value chain issues, Cenpower, AKSA, CENIT and Bridge Power Limited consumed gas supplied from Nigeria.

Though we successfully received gas from the suppliers, we were constrained by occasional supply challenges caused by compressors trips at ENI-ORF, WAPCo's restriction of supply to the eastern part of Ghana due to nonpayment of bills by GNPC, maintenance activities, and low gas pressure from Nigeria.

Business Development

Potential Customers

Several Bulk Supply Customers (BSC) with existing connections to distribution networks expressed interest in procuring power directly from VRA in view of reliability challenges; however, regulatory constraints caused the engagement process to stall.

Power Supply to EDM, Mali and LEC, Liberia

In the year under review, we held discussions with Energy du Mali (EDM) and Liberia Electricity Corporation (LEC) on the possibility of supplying power to the two countries. The PSPAs for the arrangements have been drafted for consideration. Engagements on how to transmit the power from Ghana through Cote D'Ivoire commenced, pending the construction of the Ghana-Burkina Faso-Mali 330Kv transmission line.

OUR STRATEGY

Our Creativity and Innovation (C&I) Journey

As part of efforts to institutionalise and integrate a culture of creativity and innovation into the operations of the Authority, Management in 2023 instituted the Creativity and Innovation tournament. The tournament aims at recognizing and celebrating the ingenuity of our employees and most importantly, make creativity and innovation a way of life within VRA. Institutionalisation of the tournament is aligned with the United Nations Sustainable Development Goal (SDG) Goal 9, which aims at building resilient infrastructure, promoting sustainable Industrialisation and fostering innovation.

It is expected that ideas and recommendations from participants would posit strategies and actions aimed at accelerating the sustainable growth of the Authority. As part of efforts to formalise this strategy as a standard in the operations of the Authority, April 26th of each year, which was previously celebrated as 'VRA Day', was rechristened VRA-Creativity & Innovation Day. Subsequently on April 26, 2023, Mr. Dennis Sitsofe Anyomi of the Hydro Generating Department's idea of "deploying QR code to improve service delivery within the Authority as a way of reducing paper usage and digitising our processes" was adjudged the most innovative among ten shortlisted innovative ideas.

Mr. Anyomi's idea has brought attention to the

Introduction of Value-Added Service

To leverage the varied range of expertise within the Authority to provide additional value to our customers, the Authority's Value-Added Service (VAS) was introduced and launched in September 2023. The roll out of the service forms part of efforts to drive innovation within the organisation.



integration of the QR Code throughout the Authority with Departments utilising it for meeting attendance, survey and questionnaire administration, document sharing as well as distribution of flyers and brochures. Moreover, the VRA Akosombo Mess halls have implemented QR Codes to showcase available and updated food menu instead of the traditional book/paper menu display. Other potential uses of the QR Code are currently being explored, such as the monitoring of inventory levels of critical spare parts, staff complimentary cards, payment systems for the Technical Services Department and NEDCo, and the marketing of some of the Authority services in general.



Research on Accelerating Renewable Energy Financing

To facilitate the Authority's medium-term energy transition framework, VRA collaborated with a counterpart team from Georgetown University McDonough School of Business (USA). The engagement focused on the sharing of the relevant information as part of a joint research project on Accelerating Financing for the Authority's Medium Term Energy Transition Framework. The research brought out key recommendations on how the Authority could access financing to complete projects outlined in its Renewable Energy Development Programme.

Revision of Core Values

The implementation and enforcement of an organization's core values has the potential to increase profitably as well as solicit the support of well-engaged employees. In line with this, VRA's operational versatility was highlighted with the strategic revision of the Authority's core values from 'ACT IT' to "**SOCIETI.**" "The full of meaning of "SOCIETI" is as follows:

- ◆ Safety
- ◆ Ownership
- ◆ Constructive Thinking
- ◆ Integrity
- ◆ Excellence
- ◆ Teamwork
- ◆ Innovation

The revised values aim at ensuring employee consistency, business continuity and financial progress along with the steady implementation of the Authority's strategic plan. The strategic plan seeks to consolidate the gains made from the successful execution of the Financial Recovery Programme, which contributed to the realisation of the Authority's financial and operational objectives.

Spider Impact Strategy Performance Management Application.

To ensure proper monitoring and assessment of both staff and corporate performance, the Authority launched an innovative software, Spider Impact Strategy and Performance Management Application. This amongst other innovative tools, is geared towards ensuring well-aligned strategic performance management within the newly introduced performance cycle. The Authority's performance cycle was changed from the usual calendar year evaluation, to the new corporate year, which runs from October 1st to September 30th of the subsequent year.

It is expected that VRA will efficiently thrive and compete in the constantly evolving energy market and become the Model of Excellence for Power Utilities, heavily leveraging the above innovations and a series of consistent sensitisation of staff.

Digital Transformation

VRA's Digital Transformation & Innovation Unit is mandated to spearhead and coordinate the successful implementation of the Authority's digital transformation blueprint. The Unit serves as a strategic innovation incubator hub, catalysing research and thought leadership in digital transformation and cybersecurity. The Unit is also responsible for monitoring and responding to potential cyber threats, as well as the implementation of the Digital Blueprint strategy. The Blueprint strategy proposes a set of practical interventions, initiatives and a detailed roadmap to the achievement of the 5-year Digital Transformation Agenda, hinged on the following six strategic pillars:

- ◆ Digital Transformation Governance
- ◆ Cybersecurity Resilience
- ◆ Organisational Data Transformation
- ◆ Digital Readiness and Capacity Building
- ◆ Customer Touch Points
- ◆ Economic Value and Energy Research and Development

It is expected that the deployment of digital solutions in response to identified gaps, will remedy and improve our operations in a sustainable manner.

In furtherance to the above, processes were initiated towards the preparation of a data governance framework and policies that will guide the organisational data management process.

Data privacy and security remained high on the digital transformation agenda and accordingly, VRA deployed Microsoft Information Sensitivity Labels as part of proposed actions under its comprehensive data protection framework. This initiative sort sought to regulate access to data and information within the Authority.

To remain relevant in the growing global energy sector, VRA is deploying an Operational Data Management System. This system is aimed at enhancing our overall decision-making process in the power generation business through the management and provision of real-time and near real-time data on power generation activities.

In addition to deliberate investments in the upgrade of existing IT infrastructure, particularly in the area of cybersecurity, the Authority also invested in human capacity development in line with the needs of the evolving digital landscape. Routine staff sensitisation and awareness campaigns on cyber security threats were carried out, while training on data science management was also provided for some employees.

VRA also introduced a comprehensive automated software solution for the processing and delivery of power bills and customer receivables. This innovation has transformed the customer service delivery processes and enhanced engagement with bulk customers.

It is worth noting that VRA is party to the "Energy Sector Ministerial Computer Emergency Response Team" and all efforts are being made to solidify the Authority's cybersecurity preparedness in line with the project.

United Nations Global Compact Reporting

VRA's membership in the UN Global Compact is evidence of our leadership commitment to contribute to the attainment of the ten (10) principles of the United Nations Global Compact (UNGC) and the UN Sustainability Goals (SDGs). To enable transparency and dialogue between the Authority and its stakeholders, VRA submits an annual sustainability

report to the relevant environmental, technical, and state regulators. The report covers environmental, social, and economic sustainability, gender, equity, etc. Our commitment to sustainability reporting is in line with international best practices and the United Nations Global Compact Framework.



Sustainability

Environmental Sustainability

Economic Sustainability

Social Sustainability

Sustainability

At VRA, sustainability means doing business responsibly and responsively, empowering generations unborn, and building a resilient business that can stand the test of time and positively impact on the environment and society.

Environmental Sustainability

As a responsible corporate citizen, VRA remains steadfast in its dedication to advancing environmental sustainability within its operations. In 2023, we resolutely focused on diminishing our environmental impact by embracing the principle of “Go Green.” Our commitment in this regard extends to achieving Net Zero emissions, fostering the integration of environmental sustainability indicators in Project Development and Management, and displaying leadership and innovation in Environmental Service Delivery. Towards this, we continually assess our environmental management performance through the implementation of various key strategic initiatives and programs outlined in the subsections below.

Environmental Stewardship & Compliance Monitoring

Effective stewardship of our physical and social environment, guided by principles of sustainability, is fundamental to our business. At the heart of our efforts lies the VRA Corporate Environmental Policy which is a testament to our unwavering commitment to responsible environmental management. This policy not only pledges compliance with pertinent environmental laws, regulations and standards, but also sets forth our aspiration to surpass them. To monitor our adherence, we utilize the Environmental Policy Compliance Index and Environmental Quality Compliance Index (outlined below).

Central to our principles of environmental stewardship is the acquisition of requisite social and environmental licenses and permits for sustainable power generation. In addition, we actively worked to identify and address any potential negative environmental effects our operations may have on stakeholders, particularly, our host communities.

In sum, our approach embodies a holistic commitment to environmental sustainability, ensuring that our actions not only meet regulatory requirements but also contribute positively to the well-being of our surroundings and communities.

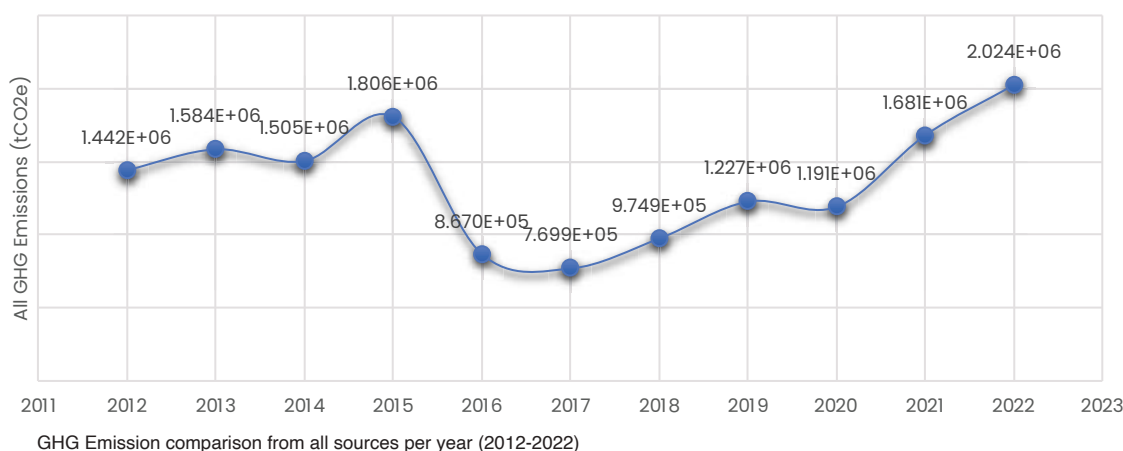
Carbon Footprint Management Programme

In 2016, the VRA launched the “Corporate Carbon Footprint Management Programme” (CFMP) as a component of its Corporate Strategic Objectives. This initiative aimed to facilitate the measurement, reporting, and management of Greenhouse Gas (GHG) emissions, bolstering the organization’s environmental credentials in the marketplace. Subsequently, VRA released the 2012-2022 GHG Inventory Report on its corporate website (www.vra.com). This comprehensive report encompasses GHG emissions data spanning from 2012 to 2022, detailing internal sustainability targets and accomplished emissions reduction initiatives.

By tracking the results of our annual GHG inventory, we monitored progress against emission targets, assessed the effectiveness of implemented reduction strategies, and identified opportunities for further emissions reductions in future endeavors. Notably, the total GHG emissions for the years 2012-2022 amounted to 15,071,129.45 tCO₂e.

The results highlight a notable reduction in specific GHG emissions, from 0.2 in 2015 (the baseline year) to 0.15 and 0.16 in 2021 and 2022, respectively. The decline is attributed to the increased utilisation of natural gas in combined cycle mode for power generation during the years 2021 and 2022.

GHG Emission Trend – 2012–2022



Environmental Policy Compliance Index

VRA's environmental policy compliance index measures the extent to which prescribed activities align with our environmental policy objectives. In 2023, VRA attained a corporate score of 99.7 percent, marking a 3.7 percent improvement compared to the previous year.

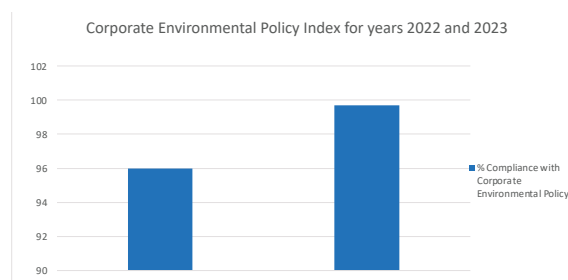
Environmental Quality Compliance Index

VRA's Environmental Quality Compliance Index, on the other hand, assesses the Authority's compliance with local environmental quality standards for emissions and discharges into environmental media from our thermal power operations. In the year under review, VRA achieved a corporate score of 99.7%, representing an increase of 6% from the previous year.

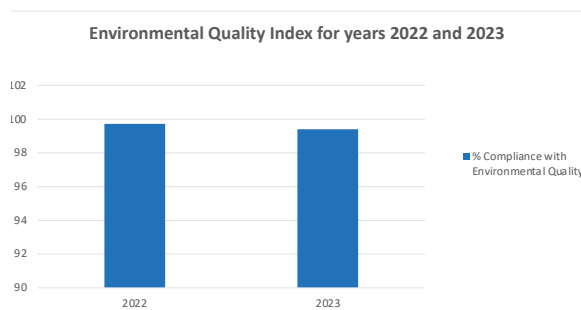
Environmental Permitting

In the year under review, VRA initiated the process to renew the permits for its business operations. This was in fulfilment of the Environmental Assessment Regulations of 1999, LI 1652. The permits cover the following business areas:

- ◆ The Akuse Oxidation Pond
- ◆ VRA Hospital (Accra /Aboadze)
- ◆ VRA Schools (Akosombo/Akuse/Aboadze)



Corporate Environmental Policy Index for years 2022 and 2023



Environmental Quality Index for years 2022 and 2023

GHG Offset and Reduction Strategy

In line with national actions in the renewable energy sector, VRA in February 2010, adopted a Renewable Energy Generation Policy to develop and operate Renewable Energy (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 5-10 years' renewable generation capacity targets, taking cognisance of the local and export demand and the system constraints. Details of planned renewable energy projects are listed in the table below.

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

Annual GHG savings are estimated at 196,697tCO₂e for the solar power projects (275.5MW) and 98,077tCO₂e for the wind power project (75MW).

Volta Gorge Protection Programme

As a demonstration of our commitment to enhancing environmental sustainability, VRA, during the period, engaged in rigorous reforestation endeavours within the vicinity of the Volta Lake in the gorge and buffer zones. The initiative aims at replenishing the forest cover, preserving existing vegetation and rejuvenating grassy and degraded lands through enrichment planting or comprehensive plantation development. A total of GHS112,500.00 was allocated among forty-five (45) Community-Based Organisations as a component of the buffer zone reforestation programme, offering incentives for their contributions during the period of assessment.

Payment of Environmental Services

In the year under consideration, VRA continued the Payment for Environmental Services initiated under the Volta Gorge Protection Programme. The initiative involves compensating landowners and paramount chiefs of Anum, Boso-Gua, Akwamu within the gorge area for releasing lands along the Volta Lake for reforestation activities aimed at ensuring sustainable hydro-power generation. To ensure that the rightful

owners received their payments, VRA conducted cadastral surveys to ascertain the ownership and extent of the land under the zones. The gorge areas were grouped into zones, A, B, C, and D. As at the end of the year, cadastral surveys had been completed for zones A&B whilst C&D were still ongoing.

Cashew For Land (CASHLAND) Project

To promote environmentally conscious practices while fostering economic resilience among local communities, VRA initiated the Cashew for land (CASHLAND) project. The intervention serves a dual purpose of establishing vital vegetative cover in the region. To achieve this, VRA collaborated with the District Assembly's Agricultural Department. By the close of the year, we had successfully planted cashew trees across 25 hectares of land as well as monitored the maintenance of 41.5 hectares of plantation by Community-Based Organisations (CBOs).



Community Education and Sensitization on Cashew Cultivation (Cashew for land Project)

Bamboo for the Protection of the Volta Lake

In consonance with our objective of ensuring sustained power generation through the protection of the Volta Lake, we continued our engagements with relevant stakeholders to champion the safety of the Volta Basin. In the year under review, VRA pursued the joint Barbarugo Foundation Project, a partnership between Ghana and the Netherlands. The partnership seeks to team up with the VRA and the Forestry Commission to plant a minimum of twenty-five thousand (25,000) bamboo seedlings throughout the Volta Basin. Discussions are underway to finalise a Non-Disclosure Agreement for the implementation of the project. Execution of this initiative will establish protective measures in flood-prone areas around the lake. That aside, we successfully achieved our target of planting ten (10) hectares of bamboo within the volta gorge protected area. This venture is expected to create the needed buffer to avert encroachment in the flood prone areas of the lake and protect the lake against inimical human activities.

Drone Technology Services

As part of efforts to keep an eye on the negative practices by encroachers that could have an adverse effect on the Volta Lake, A-M Surveys Limited conducted surveillance on the entire stretch of the Lake. The objective was to map out areas likely to be inundated in the event of a controlled spillage. This initiative follows the inundation of downstream communities resulting from the controlled spillage undertaken at the Akosombo Generating Station in 2023. The scenarios of inundation presented by the Consultant will impact decision-making in the event of a future spillage. A-M Surveys limited is the company contracted to provide drone consultancy services for the Authority.

Oil Spill Contingency Plan on the Volta Lake System

In the period under review, Messrs. Coastal and Reclamation Engineering Services (CARES), on behalf of VRA, successfully completed the development of the Oil Spill Contingency Plan and Framework for the Volta Lake Transport Company. The development, which is in line with our strategy to sustain operational and service excellence in a clean and digital environment, has the objective of mitigating the adverse effects of a potential an oil spill on the volta lake system as a result of bulk handling and transportation of oil on the Volta Lake. In furtherance to that, we submitted our revised oil spill contingency plan for the Kpone thermal power station to the Environmental Protection Agency as part of our regulatory compliance.

Waste Management Activities

Office Paper Waste Segregation and Recycling Programme

VRA executed a contract with Shinefeel Ghana Limited (SGCL) to continue the collection of shredded waste office paper in exchange for toilet rolls. Under the contract, we submitted 1.12 tons of office wastepaper within the year and received eleven bundles of toilet rolls, which amounts to 880 pieces of unwrapped toilet rolls from SCGL. VRA entered a contract with SCGL following the termination of an initial contract with the Akosombo Paper Mill Limited (APML) owing to production challenges at APML.

PET Bottles Segregation and Recycling Programme

The Authority's quest to establish a PET Bottles Recycling facility at Akosombo progressed during the year as two agencies discussed the collaboration agreement to govern the partnership. When successfully executed, the PET bottle facility will facilitate our objective of recycling various forms of plastic at various locations.

Social Sustainability

As a socially responsive organisation, we believe in making a difference in the areas in which we operate. We accomplish this through the implementation of our Community Development Programme (CDP). The CDP, which focuses on areas including education, socio-economic empowerment, sanitation, disease eradication and public health has the objective of improving the living standards of the people by empowering them to take charge of their future.

Support for Education

Quality Education is one critical area of support identified together with our key stakeholders in line with our Community Development Programme (CDP) and the United Nations Sustainable Development Goals (UN SDGs). Our flagship educational programmes: the Employee Volunteer Programme (EVP) and CDP Scholarship scheme, aim at supporting the development of human resources who will contribute to the sustainable development of communities impacted by the Authority's operations. The Authority also donates educational materials and offers financial support towards Science, Technology and Mathematics (STEM) projects and other educational programmes within its impacted communities.

CDP Tertiary Scholarship

The Volta River Authority (VRA), in 2023 awarded scholarships to Sixty (60) brilliant but needy students from communities impacted by the Authority's operations at a total value of GHS 1,000,000.00. The beneficiaries gained admission and were offered various programmes in the Sciences and Humanities in various public tertiary institutions. 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) at the Tertiary level. The Scholarship Award is a testament to the Authority's commitment to adding value to lives.



Employee Volunteer Programme (EVP)

The Employee Volunteer Programme (EVP) was organised at the Anlo SHS, Tema Manhean and Ahantaman Senior High Schools in 2023. The EVP aims at encouraging the Authority's Staff to give back to society by participating in a two-day ICT Boot Camp, career guidance, counselling and teaching of various subjects in selected Senior High Schools within VRA's operational areas. The two events mobilized over Sixty (60) Staff from various work locations to guide the students in their academic and career development.



Clean Water and Sanitation

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

Restoration of Aveyime Water System

In 2023, we 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.



Provision of Micro Flush Bio Digester

In the review year, we earmarked two communities, Fakpoe and Madavunu in the Volta region, to be provided with Micro Flush Bio Digester Sanitation facilities. The beneficiary communities were identified following a needs assessment that was earlier conducted, which mapped out the two communities as beneficiaries for the ensuing year.

Aquatic Weeds Management

Frontline Monitoring of Water Hyacinth

In 2023, we conducted surveillance activities on the Oti arm of the Volta Lake system. The goal is to assess the level of infestation of water hyacinth and prevent its migration beyond the frontline zone at Kpetsu, which is 25km from the Volta-Oti confluence. Following the assessment, water hyacinth was sighted at Kudikorpe, which is about 15km to the frontline zone and 40km to the Volta Oti confluence.

Community Shoreline Clearing Programme

To complement efforts aimed at supporting riparian communities with equipment to clear their water contact sites for access to open water surfaces, as well as reduce the incidence of Schistosomiasis within the community, VRA through the community shoreline clearing programme provided equipment including rakes, ropes, wheelbarrows, cutlasses, wellington boots, wader coats and hand gloves to forty-three (43) communities. The beneficiary riparian communities in the Lower Volta area include Alabonu, Gblornu Kasa, Tutukope, Memordzi, Gyimakope, Woetorkor, Amutinu, Mafi Afaleko, Mafi Dekpoe, Mafi Akpokorpe, Mafi Gbadakope, etc.

Schistosomiasis Control Programme

Snail Vector Prospection

To facilitate our efforts towards eradicating the menace of Schistosomiasis, VRA undertook a study on snail population density and infectivity. The study was undertaken in 29 communities including Abume, Kokontekpdzi, Dzidzorkope, Dzemeni, etc. The results of the study are represented in the charts below.

Mass Drug Administration

Towards the prevention of Schistosomiasis, the Asuogyaman District Health Directorate of the Ghana Health Services (GHS), in partnership with the Ghana Education Services (GES) through its School Health Education Programme (SHEP), conducted a district-wide mass drug administration (MDA) campaign for schistosomiasis control in basic and junior secondary schools. During the campaign, Praziquantel tablets were administered to the children based on body weight. Students from the VRA International School also participated in the initiative.

Prior to the Mass Drug Administration campaigns, health education sessions were organized for the children. The objective was to raise awareness of the disease.

Implementation of Research in the Management of Schistosomiasis

In 2023, VRA executed a Memorandum of Agreement (MOA) with the University of Health and Allied Sciences (UHAS). The expectation is that the MOU will guide implementation of the research in the control and management of Schistosomiasis in the Volta Basin.

Collaboration with Neglected Tropical Diseases Programme (NTDP)

Similarly, during the year, VRA and the Ghana Health Services Regional Health Directorates in the Greater Accra and Volta regions collaborated to treat schistosomiasis in the Volta Basin. To facilitate the process, a joint strategic partnership was held to discuss the progress of work as well as provide a platform to address the challenges and smooth implementation of the various projects.



Engagement involving VRA, AIS teachers, District SHEP Coordinator, and District Disease Control Officers

Marine Services / Economic Sustainability

The Authority's perspective of economic sustainability focuses on the provision of key support to commercial initiatives on the Volta Lake to take advantage of the full potential of the Lake. This we do by deploying our fleet of marine vessels, protecting the environment with the ultimate objective of improving the livelihoods of people in the riparian areas.

External Services

In 2023, VRA successfully provided marine support in the areas of navigation, diving, hiring of vessels and other river crafts. Beneficiaries of these services include Kete Krachi Timber Resources, Tropo Farms Limited, Adi Lake Resort, Volta Lake Transport Company (VLTC), JSC Mediterranean, Brave Hearts Company, and Akosombo Hotels Limited.

Additionally, the berthing gangway, floaters, and anchorage systems at Dodi World in Akosombo were restored. The listed sites serve as the mooring point for the Authority's vessels and those of the Akosombo Hotels Limited (AHL), including Dodi Princess, the tourism boat.

Internal Services

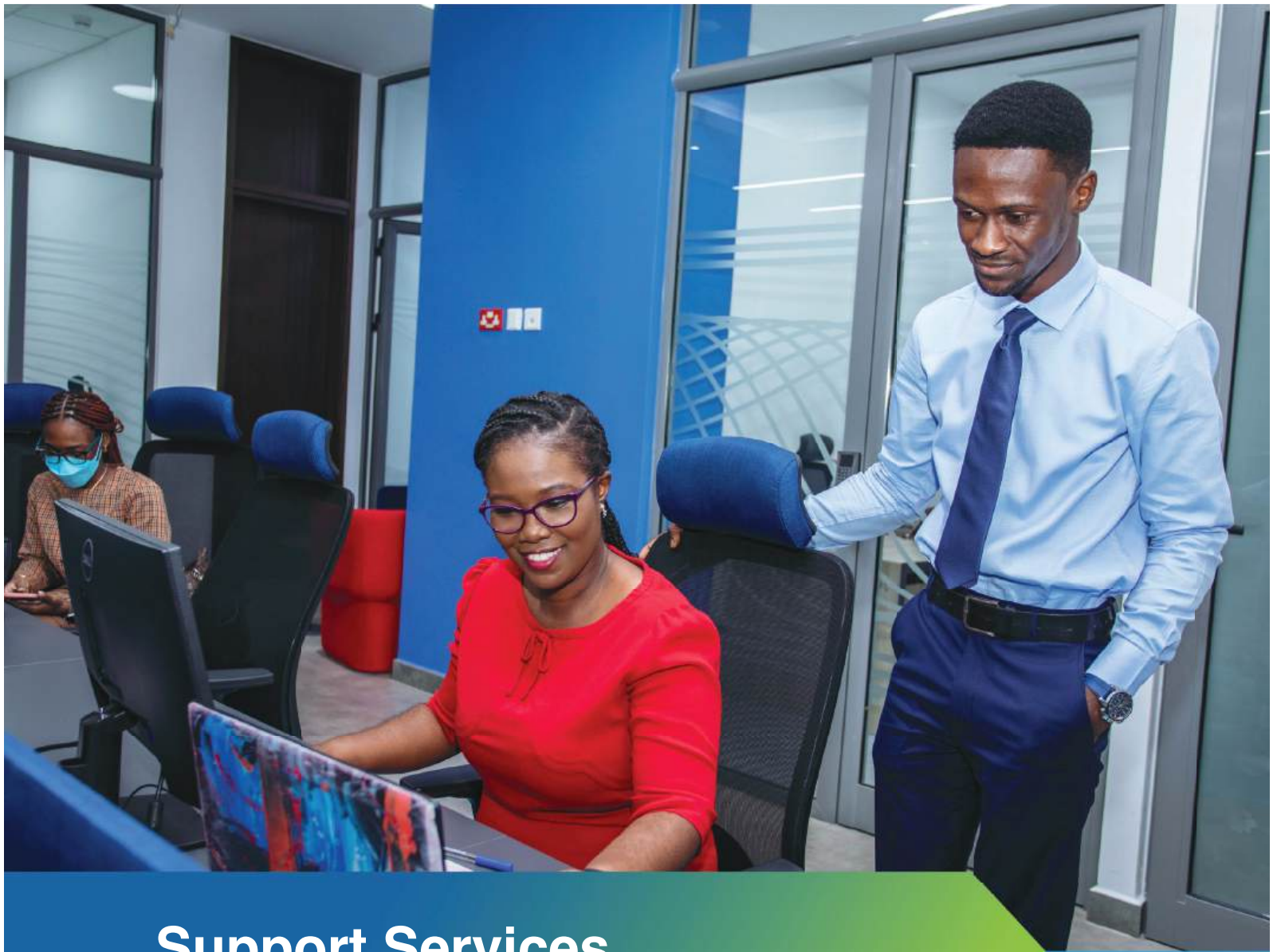
During the year under review, our Maritime Services Unit received and accomplished forty-eight general maritime service requests. These include two internal requests and forty-six external requests. Apart from that, internal marine services were provided during the period under discussion. The services provided included:

- ◆ Salinity monitoring on the river at Ada as well as lake patrols deployed to identify and stop destructive activities on the Volta Lake.
- ◆ Surveillance at the Kpong Generating Station at Akuse to prevent floating weeds from entering the turbine intake.
- ◆ Diving services at the Hydro Generating Station to conduct inspections at the intake.
- ◆ Aquatic weed harvesting at the Kpong wharf to ensure the Volta River's ecosystem value was sustained.
- ◆ Water sampling for pollution monitoring aimed at maintaining the quality of the Volta Lake.
- ◆ Bathymetry survey for the Volta Lake project feasibility studies.

Relocation of MV Black Volta Queen (Dredge Barge)

Due to aquatic weed infestation at the Kpong Head Pond (KHP), VLTC's MV Black Volta Queen (Dipper Dredger) was relocated from the Akosombo port to the Kpong Head Pond for aquatic weed activities. The process included transporting the dismantled barge from Akosombo Port and assembling it at the Kpong Head Pond.





Support Services

Industrial Relations

Legal Services

Information and Communication Technology

Real Estate & Security

Health, Safety, Security, and Environment

Support Services

Industrial Relations

2023 was a year characterised by industrial harmony. This was achieved through effective collaboration between Management and Staff, which led to a remarkable development in the operations of the Authority and yielded positive achievements as was recorded for the year under review.

Staff Strength

By the close of year, corporate labour strength stood at 2,196 compared to 2,222 for 2022. Out of the total, 2,160 were permanent. The remaining 36 were on contract. By gender, 1,646 out of the 2,196 were male whereas 550 were female.

Employee Engagement

For 2023, Management sought to reaffirm its position on openness and transparency. This policy direction was formalised with regular institutionalised consultative meetings between Staff groups (House Union and Senior Staff Association) and Management. In all a total of nine (9) standing negotiating committee meetings were held, three (3) between the Management Team and PSWU and the other six (6) between Management and VRA Senior Staff Association (SSA) on the review of conditions. It is worth noting that the above meetings served as healthy and cordial platforms for the exchange of ideas, which contributed to the growth and overall development of the organisation.

Apart from the consultative engagements, “HR Fairs” were also organised across all work locations. The Fairs, held under the theme: “Unlocking Creative Potentials and Professionalism for Efficiency and Sustainability” had the objective of building more collaboration, enhancing leadership skills, as well as expanding and broadening staff knowledge and exposure.

Training and Development

The Authority is committed to the growth and development of its employees towards the achievement of its vision. In line with this, we strategically provided opportunities and support for the development of the skills and knowledge of our employees. This intervention is a direct response to our strategy to cultivate a diverse, competent, well-motivated and committed future-ready workforce. Positioning ourselves within the rapidly evolving energy market is consistent with our quest to become an agile and responsive organisation working towards becoming the preferred power generator and a Model of Excellence in Africa.

Legal Services

At the core of the Volta River Authority’s mandate, is the operation and management of strategic national assets within the power generation sector on behalf



of the Government and people of Ghana. This huge responsibility requires that the Authority insures and ensures the optimal operation of both generating and non-generating assets to prevent and reduce potential risk elements in our business. Thus, to protect the Authority's business and prevent possible financial losses due to property damage or loss of physical assets, VRA in 2023 successfully renewed twenty (20) insurance policies and procured an additional two for both its generating and non-generating assets. This action is consistent with our "SPICE" objective that seeks to promote financial responsibility, as we pursue the path of sustainable growth and development. Assets insured include:

- ◆ AMERI Power Plant (for a period of 6 months, effective January 31, 2023)
- ◆ Tema Thermal Power Complex Station
- ◆ Akosombo and Kpong Generating Stations
- ◆ VRA Commercial Building
- ◆ Tema Thermal Complex T3
- ◆ Takoradi Thermal Power Station (TTPS) T1
- ◆ Gas Regulating & Metering Station in Tema
- ◆ Directors & Officers Liability for VRA Board
- ◆ Group/Personal Accident for VRA Board Members
- ◆ Akosombo Marine
- ◆ Ada Marine
- ◆ Kpone Thermal Power station
- ◆ Broker Services for Vehicles and
- ◆ Selected Building(s)

The two (2) additional policies procured were for the "AMERI Power Plant" and "Additional Marine Cover for 3-Trash Skimmers".

Aside ensuring compliance by providing insurance cover for our assets, VRA also monitored the legal environment with the objective of identifying legislative initiatives that have the potential to impact the Authority's business. The overarching objective for monitoring these initiatives is to ensure our strict adherence and responsiveness. For 2023, the focus areas were the Nuclear Regulatory Act, 2015 (Act 895); Contracts (Amendment) Bill, 2002, Education Regulatory Bodies Act, 2020 (Act 1023); Exemptions Act, 2022 (Act 1083) and the Energy Commission Bill 2023.

Again, to ensure our staff were legally empowered in the conduct of the Authority's business, VRA created an enabling environment for a cross-section of the staff to be provided with legal education on various aspects of the law. To this end, legal education was provided in Liquidated Damages, VRA Code of Ethics and Marriages in Ghana, as well as Wills and Filling of Beneficiary Nomination Forms. The reason for the intervention was to ensure that staff were properly aligned and compliant with the law.

Finally, leveraging information communication technology, VRA successfully captured sixty-seven (67) power and non-power related agreements in the fully automated Contracts Register. The initiative, which was introduced in 2022, is aimed at ensuring that VRA sustains operational and service excellence in a clean and digital environment.

Information and Communication Technology (ICT)

In line with our sustainability plan's objective of leveraging ICT to improve our business processes, VRA continued delivering initiatives and solutions recommended in its 5-year ICT strategy.

1. Digitalisation of Business Processes

As part of efforts to improve efficiency in our business operations, we leveraged the Authority's huge ICT infrastructure to roll out Four (4) solutions, that addressed various business objectives and needs.

◆ Safety Attendance Application

The Safety Attendance application enables the scheduling of safety meetings and the recording of staff attendance at safety meetings for both operational and non-operational work areas.

◆ Customer Billing Management System Rates & Rents Application

These modules are used to manage the billing and receivables of rents and rates in the Akosombo and Akuse work areas.

◆ Front Desk Application

This is used to manage the provision of accommodation for staff travelling across the Authority's locations.

◆ Volta Lake E-Ticketing Application

A ticket-sales solution for one of the Authority's subsidiaries, the Volta Lake Transport Company (VLTC). The solution provided precludes printing paper tickets to reduce costs and provides revenue visibility and protection to improve the revenue management process at the various ports of the VLTC.

2. Technology Infrastructure

◆ Data Centre Refresh (DCR)

In the Technology infrastructure space, upgrading equipment to support IT service delivery received adequate attention, with the Data Center Refresh (DCR) project remaining a top priority. The DCR project aims at replacing obsolete equipment at the Authority's Data Centre site and providing new equipment to upgrade the Recovery Site into a warmer recovery site. The overarching objective for this intervention is to ensure VRA is capable of effortlessly retrieving lost data at the Data Centre site in the event of an accident. Technical requirements for most of the equipment, services and systems of the Datacenter Refresh Project were completed for the subsequent preparation of a Request for Proposal (RFP) for the procurement of a contractor for the project.

◆ The Enterprise VOIP (Voice Over Internet Protocol)

Enterprise VOIP deployment commenced in late 2022 with the objective of improving telephone communication infrastructure within the Authority. The project was successfully rolled out, covering all work locations in 2023. Enterprise VOIP leverages the computer network to provide low cost-per-call or virtually free phone calls and allows the business to be more productive through its versatile features like conference calls, service mobility, as well as efficient client interactions.

3. Information Security

In 2023, VRA took steps to guarantee the security of its digital assets by creating security-conscious employees (users) as well as strengthening our capacity to mitigate cyber security attacks.

◆ Disaster Recovery Plan

To ensure the Authority is well positioned to timeously recover all critical IT services in the unlikely event of a disaster, VRA began the procurement of a consultant to develop the Disaster Recovery Plan (DRP) / IT Business Continuity project. As at the close of the year, technical evaluation of proposals received at the second stage of the two-stage procurement process had been completed successfully. Our expectation is that commercial evaluation will proceed successfully for an award to be given for the successful implementation of the project.

◆ Enterprise Cyber security Framework

In 2023, processes leading to the selection of a consultant to execute the Enterprise Cyber Security Framework project commenced. The Enterprise Cybersecurity Framework (ECF) project aims at improving the cyber security profile of both the Information and Operational Technology spaces of the Authority, in line with the Cybersecurity Act 2020, Directives for Protecting Critical Information Infrastructure (CII) issued by the Cyber Security Authority, guidelines from the National Institute of Standards Technology (NIST) as well as ISO (International Standards Organisation) standard 27001.

◆ Cyber Awareness & Sensitisation

Globally, cyber-attacks have become more sophisticated, requiring organisations to pay critical attention not only to their security infrastructure, but most importantly, employees or staff who are indeed considered the weakest link in the cybersecurity chain. To address this, VRA continued to provide the requisite awareness and sensitization to employees to ensure the Authority's cyber security infrastructure was not compromised. The security awareness programmes were facilitated by the VRA Academy.

◆ CSA Registration & CII Regulatory Compliance

During the year, the Authority successfully completed the registration of its Critical Information Infrastructure (CII) as required by the Directives of CII from the Cyber Security Authority (CSA). This infrastructure cuts across all the Authority's operational areas and includes both Operational and Information Technologies.

Real Estates & Security Services

Pursuant to Executive Instrument (EI) 42, establishing the Akosombo Township, the Akosombo Management Committee (AMC) on behalf of the VRA, continued to oversee the VRA's Local Authority functions in Akosombo. In 2023, revenue generated from local council activities by AMC, amounted to GHS15,401.28 compared to the 2022 figure of GHS376,435.64 representing a percentage increase of 36.91 percent. In line with the agreed existing protocols, the accrued receipts for 2022 are expected to be shared equally between the Authority and the Asuogyaman District Assembly.

In 2023, the revenue under property services which includes income from Catering Services, Club House, and accommodation, amounted to GHS14,673,405.52

in 2023. This represents an increase of 111.09 percent over the 2022 income of GHS6,950,995.03. Income from rent amounted to GHS1,788,154.75 compared to GHS1,846,210.57 achieved in 2022, a decrease of 3.14 percent.

The Department also realised revenues of GHS588,168.06 and GHS136,000.00 from Ground Rent and Lease respectively. The total revenue generated during the period under review was GHS17,285,714.84. The year 2023 ended with an overall revenue growth of 95.7 percent over that of 2022.

Below is the summary of 2022 as against 2023 Actual Revenue line items for the year::

Revenue Lines	2022 Revenue	2023 Revenue	Increase/Decrease
Rentals	1,846,210.57	1,788,154.75	(58,055.82)
Catering & Club House	5,621,047.03	11,659,272.02	6,038,224.99
Accommodation	1,329,948.00	3,014,133.50	1,684,185.5
Miscellaneous & Leisure	35,662.27	99,986.51	64,324.24
Ground Rent	-	588,168.06	588,168.06
Lease	-	136,000.00	136,000.00
Total	8,832,867.87	17,285,714.84	8,452,846.97

Health Safety, Security and Environment (HSSE)

To enhance our health and safety practices, VRA prioritized leading health and safety indicators over lagging indicators, achieving a corporate safety meeting organization rate of 97.91% and a safety attendance rate of 96.73%, compared to the corporate targets of 100% and 90%, respectively. The Authority also attained a Work Area Safety Committee Performance Index of 90.75% against a target of 100% and a safety-critical equipment availability rate of 100% at both Akosombo GS and Kpong GS, 97% at TTPC, 94% at TTPS, and 64% at KTPS. Beyond this, a corporate-wide safety climate survey conducted in August 2023 revealed that VRA outperformed the HSE Energy Sector and Industry HSE scores in seven dimensions, except for Accident and Near Miss Reporting. Additionally, 18 work area HSSE audits and three (3) project monitoring audits were conducted, with recommendations tracked for closure.

ISO Certifications

In line with our commitment to meeting stringent quality and management requirements, VRA initiated the process of acquiring integrated ISO certifications in 2023. These certifications include ISO 45001 (Health and Safety Management System), ISO 14001 (Environmental Management System), and ISO 9001 (Quality Management System). This initiative is aligned with international best practices and aims to ensure that the Authority can benchmark its health, safety, and environmental outcomes against global standards. By pursuing these certifications, VRA not only demonstrates a proactive approach to health, safety, and environmental stewardship but also reinforces its dedication to continuous improvement, operational excellence, and regulatory compliance. The integrated certification process underscores our commitment to maintaining a safe and sustainable workplace while enhancing our competitive edge and credibility in the international energy sector.

Regulatory Compliance

Demonstrating our commitment as a responsible corporate entity, we proactively engaged the Ghana National Fire Service (GNFS) and the Department of Factories Inspectorate to renew 64 fire and 12 factory inspectorate certificates. These renewed certificates were for premises and facilities across our operational and non-operational areas. This proactive approach to regulatory compliance aligns with our corporate objective of fostering a conducive work environment for our employees, ensuring their health, safety, security, and overall well-being. By adhering to regulatory standards, we uphold our commitment to excellence and responsible business practices, safeguarding not

only our workforce but also our reputation and the communities in which we operate.

Safety Awareness Day Celebration

The Safety Awareness Day celebration on November 16, 2023, marked the culmination of efforts to promote a robust safety culture within the organisation. The 2023 celebration was under the theme “Health and Safety: Our Number One Core Value,” with the slogan “Everything Begins with Safety”. The theme and slogan were informed by ILO’s theme for the 2023 World Safety Day and the reviewed VRA core values (S.O.C.I.E.T.I.). During the event, awards were presented to exemplary Work Area Safety Committees (WASACOs), with the Tema Thermal Power Complex (TTPC), Kpong Generating Station (KGS), and Takoradi Thermal Power Station (TTPS) securing top positions in operational areas. In non-operational areas, the Pwalugu Multipurpose Dam Project, Corporate Strategy Department, and Environment and Sustainable Development Services Department claimed the top positions. Beyond the WASACOs, safety personalities of the year were identified and awarded to encourage safety excellence within the Authority.



Corporate Safety Incidents

In our ongoing commitment to maintaining a safety-conscious organization, we made conscious efforts to achieve the Authority’s objective of zero fatalities and a maximum of 26 recordable accidents. By meticulously tracking all near misses and accidents in both operational and non-operational areas, we ensured that such incidents were reported and thoroughly investigated to prevent recurrence. As a result, we recorded a total of 18 recordable cases, achieving a Days Away Restricted Transfer (DART) rate of 0.09 and a Total Recordable Case Rate (TRCR) of 0.2, significantly lower than the corporate targets of 0.8 and 1.2, respectively.



Non Power Activities

Volta Lake Transport Company (VLTC) Ltd.

Akosombo Hotels Limited (AHL)

VRA Health Services Limited (VHSL)

Kpong Farms Ltd. (KFL)

VRA Property Company (PROPCo) Ltd.

Subsidiaries

In the year 2023, VRA continued to pursue the strategic objective of ensuring the best overall return on investment for its Subsidiaries and Strategic Business Units (SBUs).

The Subsidiaries and SBUs include:

- ◆ Akosombo Hotels Limited (AHL)
- ◆ Kpong Farms Limited (KFL)
- ◆ Volta Lake Transport Company (VLTC)
- ◆ VRA Property Holding Company (PROPCo)
- ◆ VRA International Schools Limited (VISL)
- ◆ VRA Health Services Limited (VHSL)

This effort aligns with VRA's corporate objective of transforming its non-power businesses into resilient, profitable, and self-sustaining enterprises that will add significant value to the Authority.

VRA remains committed to engaging the private sector in managing these Subsidiaries. Strategic partners are being sought for their potential to provide capital injection, introduce innovative business practices, and offer strategic leadership in operations, thus maximizing returns.

It is anticipated that successful partnerships with strategic partners will significantly transform the Subsidiaries' fortunes, positioning them to compete favorably in their respective industries and enhancing their value to the Authority.

Volta Lake Transport Company

Business Operations

The operations of the Volta Lake Transport Company for the year under review attained significant progress. The successes hinged heavily on the diverse business strategies and transformative solutions spearheaded by the Board and Management of the Company. This transformative agenda was characterised by infrastructural enhancements, digitisation of operational processes, brand awareness creation and an unwavering commitment to safety and customer satisfaction.

The overall impact of these efforts led to an increase in cargo shipment volumes from 45,228.81 tonnes in 2022 to 67,495.33 in 2023, signifying an improvement in the turnaround time for the cargo transportation operations and marine asset maintenance. The

business prospects of VLTC have also been heightened by the implementation of these strategies. An expression of business interests by Wilmar Africa, amongst others, paints a positive outlook for the future. Currently, a contract has been signed that allows VLTC to transport shea nuts from the North to the South of the Volta Lake on behalf of Ghana Specialty Fats Industries Limited (GSFIL). GSFIL is part of the Wilmar Group of Companies. VLTC is in discussions with other business entities that have expressed similar interests.

Public Enterprise League Awards (PELT)

The improvement in VLTC's operations over time has positively impacted on the company's performance in the Public Enterprise League Table (PELT). VLTC successfully moved from its previous 20th position to the 15th positions against 64 specified entities in the

2021 League Table. The PELT Awards is organised by SIGA, the entity established by the government to ensure state owned enterprises operate efficiently, effectively, and profitably. To conclude, VLTC during the year demonstrated stable revenue streams and prudent management of cost, in line with its financial sustainability agenda.

VRA Health Services Ltd. (VHSL)

VHSL is a frontline provider of medical care, set up by VRA to safeguard the health of the Authority's Staff (active and retired), their dependents and areas impacted by the Authority's operations. VHSL has four (4) facilities based in Akosombo, Akuse, Accra and Aboadze along with a host of panel hospitals through which it discharges this duty.

In addition to the above, VHSL also performs Public/Community Health duties on behalf of VRA in compliance with VRA's Corporate Social Responsibility towards the communities. VHSL also manages the Ill-health policy of the Authority.

Clinical services provided by VHSL comprise primary and specialist services in General Medicine, Obstetrics & Gynecology, Reproductive and Child Health, General Surgery, Ophthalmology and Optical care, Dentistry, Orthopedics, Urology, Dermatology, Physiotherapy, Nutrition and Dietetics, Psychiatry Clinical Psychology, Pharmacy Services, Laboratory Services, Diagnostic Imaging, Ambulance Services and Mortuary Services.

In the year 2023, total outpatient attendance was 198,765, which is an 8.6 percent increase over 2022's figure of 181,561. Admissions for the same period were 8,461, which is 18.7 percent higher than the 6,879 recorded in 2022. VHSL's paying population in all four (4) facilities was 24,199 whereas National Health Insurance Scheme (NHIS) clients were 93,219.

Total revenue recorded in 2023 was GHC65,658,671.00 compared to GHC38,336,826.00 recorded in 2022.

- ◆ Accra - GH¢14,380, 856.00
- ◆ Akosombo/Akuse - GH¢39,107,523.00 and
- ◆ Aboadze - GH¢12,170, 298.00

Infrastructure Improvement & Equipment

To improve client service delivery by facilitating the physical mobility of people and products, removing productivity constraints, and increasing competitiveness, VHSL continued its infrastructural improvement projects. Key amongst them include the expansion of the Akosombo Mortuary, which invariably increased the mortuary's capacity from 36 to 72. In 2023, the Emergency Response Unit at Akosombo, also received a facelift. In Accra, work on providing a major facelift to the old hospital building was initiated. Further to that, the hospital received approval for drawings presented for the children's ward/NICU. The related procurement process also commenced. Apart from infrastructural improvements, the Aboadze hospital also received a new ambulance and an Autoclave machine.

Kpong Farms Limited (KFL)

Business Operations

In the year under review, KFL increased the hectareage of its rice fields from fifty-one (51) hectares in 2022 to sixty-two (62) in 2023. The increase represents a growth of 22 percent. In terms of production, the total paddy rice produced in 2023 was 257 tons compared to the 203 tons produced in 2022. This performance resulted in a revenue growth of 22 percent. It is imperative to note that the adoption and deployment of various business strategies contributed to an increase in the orders received and supplied during the period. For the first time, KFL received orders from the VRA Mess Halls (Akosombo/Akuse/Aboadze), Accra Cafeteria, VRA Health Service, Volta Hotel, NEDCo, GRIDCo and Ecobank, among others. Additionally, as indicated, KFL fulfilled its commitment by adding vegetable production to its line of business. Vegetables included were Tomato, Cabbage, Carrot, and Green Pepper.

Akosombo Hotels Limited (AHL)

Business Operations

In 2023, the Volta Hotel (VL) succeeded in growing its operating revenue by GHS14,904,410, representing an increase of thirty (33) percent. This is compared to GHS11,198,040, representing a fourteen (14) percent increase achieved in 2022. The improved performance was recorded on the back of increased room capacity, as well as the aggressive marketing and business development initiatives implemented by the Management. The room capacity increase was attained following the conversion of our Nunya conference facility into five (5) additional rooms (one suite and four deluxe). The expansion increases the overall room capacity from forty-four (44) to forty-nine (49). By the close of year, the Volta Hotel's rooms comprised thirty-one (31) standard rooms, thirteen (13) deluxe rooms and five (5) executive suites.

Dodi Princess

The Dodi Princess cruise service recorded a marginal increase of 5 percent in the passenger population for 2023, as a population of 8,634 compared to the 8,234 attained in 2022 was recorded. Revenue recorded in 2023 was GHS2,753,497. This compares to GHS2,080,2379 realised in 2022 and represents an increase of 32.35 percent.

It is imperative to state that since it commenced operations in July 2019, the award-winning tourism facility has successfully cruised a total passenger population of 33,962.



VRA Property Holding Company Limited

PROPCo in 2023 continued with its diversification agenda through the upgrade of existing infrastructure to investment grade and income generating assets.

◆ Volta Residences Hotel - Lodges

In line with that objective, PROPCo pursued the Guest House renovation project at Akuse. Phase two (2) lot 1 of the Volta Residences project was started in September 2022 and completed in September 2023. The successful completion of the project brings the number of rooms completed to forty-seven (47). This comprises the thirty-two (32) room lodges and the 15 room Garden Lodge. The Lodge project was successfully operationalised for business on October 23, 2023.



Corporate Reputation

In keeping with our values as a good corporate citizen and a socially conscious organisation, VRA upheld various donations and sponsorship obligations by supporting several national priority programmes such as education, health, environment, culture, water resources, etc. These activities inured to the relatively positive image the Authority enjoyed during the year. The Authority's image, however, suffered a setback because of negative reports on the effects of the spillage of excess water from the Akosombo Dam on the downstream communities, occasioned by high inflows into the dam. Our expectation is that our continued engagement with the media and affected communities will positively impact on our image in the future.

Financial Health



Revenue from the sale of electricity in 2023 increased by 48% (GHS2,779.03 million) to GHS8,518.92 million from the previous year's sales of GHS5,739.88 million. This was due to the combined effects of a 9.49% average increase in the ECG tariff from GHS0.337957/kWh in 2022 to GHS0.370045 kWh in 2023.

The volume of energy sold to regulated customers decreased by 4.61% (292GWh) from 6,328GWh in 2022 to 6,036GWh in 2023. The volume of electricity sold to deregulated customers which attract relatively higher tariffs increased by 4.25% (238GWh) from 5,603GWh in 2022 to 5,841GWh in 2023 largely on account of sales to CEET and SBEE which increased from 743GWh in 2022 to 984GWh in 2023 (an increase of 241GWh or 32.44%) and SONABEL (Bolga-Ougadougou) which increased from 1,177GWh in 2022 to 1,255GWh in 2023 (an increase of 78GWh or 6.63%). In all, there was a 0.45% (54GWh) decrease in the volume of energy sold to all customers, from 11,931GWh in 2022 to 11,877GWh in 2023.



Audited Accounts

(Financial Review & Audited accounts)

CORPORATE INFORMATION

BOARD OF DIRECTORS

Mr. Kofi Tutu Agyare - Chairman
Mr. Emmnuel Antwi-Darkwa - Chief Executive
Most Rev'd. Dr. Cyril Kobina Ben-Smith
Rev. Dr. Joyce Rosalind Aryee
Hon. Kwame Anyimadu-Antwi
Chief Musa Badimsugru Adam
Mr. Richard Obeng Okrah
Madam Janet Akosua Gyasiwaa
Mr. Solomon Adjetey Sowah

SECRETARY

Mrs. Claudia Gyeke-Aboagye

REGISTERED OFFICE

Electro Volta House
P. O. Box M.77
Accra

AUDITORS

Ghana Audit Service
P .O. Box M96
Accra

BANKERS

Access Bank Ghana Limited
ABSA Bank of Ghana Limited
CAL Bank Limited
Consolidated Bank Ghana Limited
Ecobank Ghana Limited
Fidelity Bank Ghana Limited
First Atlantic Bank Limited
GCB Bank Limited
Ghana International Bank Plc
Guaranty Trust Bank Ghana Limited
Societe Generale Bank Ghana Limited
Stanbic Bank Ghana Limited
Standard Chartered Bank Ghana Limited
United Bank for Africa Ghana Limited
Universal Merchant Bank Limited
Zenith Bank Ghana Limited

FINANCIAL REVIEW FOR THE YEAR ENDED 31 DECEMBER 2023

The financial review relates to the Group, unless stated otherwise.

Power Production

The total electricity generated from both hydro and thermal sources increased by 601GWh (3%) from 9,598GWh in 2021 to 10,200GWh in 2022; this includes generation and transmission substations use of 59GWh (2021: 50GWh). Generation from hydro sources increased by 188GWh (3%) from 6,529GWh in 2021 to 6,717GWh in 2022. Thermal generation also increased by 13% (413GWh) from 3,069GWh in 2021 to 3,483GWh in 2022. VRA's 2022 generation from solar plants was 21GWh (2021: 6 GWh).

To supplement generation from VRA's own plants, gross power of 2,444GWh (2021: 1,998GWh) was purchased from Takoradi International Company Limited (TICO) of Ghana representing an increase of 22% (446GWh) from the 2021 power purchase from TICO. There was net inadvertent import of 37GWh from CIE in 2021 (2021: 43 GWh).

Summary of energy generated and purchased

	Change		2023		2022	
	GWh	%	GWh	%	GWh	%
VRA Hydro:						
Akosombo	925	16%	6,673	52%	5,748	55%
Akuse	88	9%	1,057	8%	969	9%
Total Hydro	1,013	15%	7,730	61%	6,717	64%
TTPS	350	16%	2,480	20%	2,130	20%
TTIPP	33	8%	437	3%	404	4%
TT2PP	(6)	-6%	85	1%	90	1%
KTPS	103	27%	481	4%	378	4%
AMERI	(67)	-100%	-	0%	67	1%
Total Thermal	(1,194)	-34%	2,289	18%	3,483	33%
Total VRA Hydro & Thermal	(181)	-2%	10,019	79%	10,200	97%
VRA Solar:						
Total Solar	14	67%	35	0%	21	0%
Total Energy by VRA	(167)	-2%	10,055	79%	10,221	97%
Purchases & Imports						
TICO	157	6%	2,601	20%	2,444	14%
CIE	42	114%	79	1%	37	1%
Total Purchases & Import	199	8%	2,680	21%	2,481	15%
Total Energy Generated & Bought	32	21%	12,734	100%	10,535	100%

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

Revenue

Revenue from sale of electricity in 2023 increased by 48% (GHS2,779.03 million) to GHS8,518.92 million from the previous year's sales of GHS5,739.88 million. This was due to combined effect of a 9.49% average increase in the ECG tariff from GHS0.337957/kWh in 2022 to GHS0.370045 kWh in 2023 even though there was a 0.45% (54 GWh) decrease in the volume of energy sold from 11,931 GWh in 2022 to 11,877 GWh in 2023. The volume of energy sold to regulated customers decreased by 4.61% (292 GWh) from 6,328 GWh in 2022 to 6,036 GWh in 2023. The volume of electricity sold to deregulated customers which attract relatively higher tariff increased by 4.25% (238 GWh) from 5,603 GWh in 2022 to 5,841 GWh in 2023 largely on account of sales to CEET and SBEE which increased from 743 GWh in 2022 to 984 GWh in 2023 representing an increase of 241 GWh (32.44%), and Sonabel (Bolga-Ougadougou) which increased from 1,177 GWh in 2022 to 1,255 GWh in 2023 representing an increase of 78 GWh (6.63%).

Cost of Sales

Cost of sales consisting of fuel usage, power purchase, depreciation, salaries, materials, repairs and maintenance and other operating cost, increased by GHS2,151.76 million (41%) from GHS5,235.22 million in 2022 to GHS7,386.98 million in 2023.

The increase in the Cost of Sales was largely due to a 24.64% increase in local gas price from US\$6.5165/MMBtu in 2022 to US\$8.1221/MMBtu in 2023 analyzed as follows:

- ◆ Gas usage from N-gas increased from 19,915,625.69 MMBtu in 2022 to 23,340,989.10 MMBtu in 2023.
- ◆ Thermal Generation from TICO increased by 6% from 2,444 GWh in 2022 to 2,601 GWh in 2023.
- ◆ An average depreciation of 32.92% between the GHS/US\$ exchange rate from GHS8.2695/US\$1 in 2022 to GHS10.9920/US\$1 in 2023 also contributed to the increase in cost of sales.
- ◆ Power import (actual and inadvertent) from CIE increased by 114% (42 GWh) from 37 GWh in 2022 to 79 GWh in 2023.

Administrative Expenses

Administrative expenses increased by GHS550.69 million (54%) from GHS1,012.92 million in 2022 to GHS1,563.61 million in 2023.

Repairs and maintenance increased from GHSS44.29 million in 2022 to GHSS142.22 million in 2023. Depreciation increased by 114.69% (GHS118.26 million) from GHS103.11 million in 2022 to GHS221.37 million in 2023 due to the indices applied in revaluing the Authority's assets, which was influenced by the depreciation of the Ghana Cedi against the US dollar over the year.

Other Operating Expenses

Other operating income increased by GHS349.74 (95%) from GHS369.81 million in 2022 to GHS719.54 million in 2023. The increase was due to increases in income from Operating Units and subsidiaries such as VRA Schools, VRA Health Services Limited, Property Holding Company Limited (PROPCo), Akosombo Hotel Limited (AHL), Volta Lake Transport Company Limited (VLTC) and Takoradi Power Company (TAPCo).

Operating Profit

The Group realized an Operating Profit of GHS287.97 million in 2023 compared to an operating loss of GHS138.45 million in 2022.

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

Net Profit

The Group ended the year 2023 with a Net Loss of GHS380.82 million (2022: Net Loss of GHS277.18 million). The Loss was largely due to Net Exchange Loss of GHS591.43 in 2023 (2022: GHS88.48 million).

2023 OPERATIONAL & FINANCIAL OUTLOOK

The forecast national system demand for 2024 is 25,529GWh, comprising customer demand of 24,239GWh, GRIDCo substation usage of 10GWh and transmission losses of 1,280GWh.

The Authority plans to generate a total of 13,475 GWh, Bui Hydro Plant would generate 1,008 GWh and the Independent Power Producers 12,054 GWh including Bui generation. The Authority's generation breakdown is as follows:

- ◆ 8,000 GWh from hydro sources,
- ◆ 1,936 GWh from the Takoradi Thermal Plant,
- ◆ 375 GWh from the TT1PP,
- ◆ 373 GWh from the Kpone Thermal Power Plant,
- ◆ 59 GWh from the Solar Plants, and no power imports.

The Takoradi International Company (TICO) is forecast to supply 2,369 GWh. Thus, VRA is forecast to generate 52.8% of the national electricity load whilst Bui Hydro Generating Plant and the IPPs will supply 47.2% with no additional supply required.

The forecast power sale revenue for 2024 is about GHS9,211million assuming a Bulk Generation Tariff of GHp42.8/kWh. The Other income of about GHS218 million, includes a premium of GHS79 million revenue meant for administrative charges on gas supply to SAPP. The estimated direct operating cost to be incurred on system generation by the Authority and supply from TICO is estimated at GHS7,240 million.

Interest expense is forecast at GHS223 million and net exchange loss is projected at GHS867 million.

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

Financial Summary (VRA)

	2019	2020	2021	2022	2023
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Income from Sale of Electricity	3,890,946	3,793,161	3,932,207	5,453,530	7,932,875
Other Operating Income	110,837	121,105	132,106	166,161	238,488
Operating and General Expenses including depreciation	3,310,366	3,161,441	3,618,285	5,086,251	7,330,104
Depreciation	424,903	535,675	365,613	780,270	1,327,260
Operating Profit/(Loss)	830,713	880,776	573,322	533,440	841,259
Financial Expenses	363,726	258,184	87,596	116,466	184,752
Financial Income	10,939	3,593	7,811	9,125	15,318
Exchange Fluctuation	(605,046)	(469,686)	(380,779)	(315,206)	(591,431)
Government Assistance/Subvention/Subsidy	139,296	127,951	127,294	-	-
Net Profit/(Loss)	(127,120)	156,499	112,757	110,893	80,394
Property, Plant and Equipment(Cost/Valuation)	17,778,816	18,914,285	24,627,519	35,784,821	53,071,499
Property, Plant and Equipment (Net Book Value)	8,469,329	8,648,585	16,832,940	24,063,689	33,285,510
Capital Work in Progress	815,969	827,780	961,369	1,285,719	1,966,364
Current Assets	8,864,931	9,201,999	8,631,569	11,751,611	18,361,713
Current Liabilities	7,626,322	7,812,410	6,861,038	8,659,535	13,834,299
Investment by the Rep. of Ghana	4,305,586	4,305,586	4,433,937	4,617,713	4,617,713
Capital Surplus	5,899,375	5,952,182	14,097,485	21,861,957	32,090,538
Retained Earnings	(1,326,931)	(750,510)	(279,085)	49,966	504,142
Principal portion of long term loans	824,691	845,598	946,521	1,352,008	1,861,234
Ghana Cedi (GH¢) to US\$ Exchange Rate	5.2150	5.7342	5.9961	8.3150	11.643

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

Financial Summary VRA

		2019	2020	2021	2022	2023
Return on Average Equity	%	10.2	9.54	4.12	2.38	2.64
Return on Average Net Fixed Assets -Plant in Operation	%	%10.4	10.29	4.50	2.61	2.93
Current Assets Ratio	Times	1.16	1.18	1.26	1.36	1.33
Debt Service Ratio	Times	0.9	0.77	0.75	0.55	0.66
Gearing Ratio	%	9.25	8.86	9.85	8.70	7.61
GWh Generated and Purchased less Station Use (X 106)	GWh		10,476	11,586	12,643	12,675
Total Production Expense including depreciation per MWh	GH¢		302	312	402	578
Total cost of production including depreciation and interest but excluding Debt Fluctuation per MWh	GH¢		275	288.00	354	370
Average Revenue/MWh Generated and Purchased	GH¢		367	497.00	350	488
Total Installed Capacity	MW	2,520	2,651	2,651	2,532	2,547
Ratio of gross hydro generation to firm capability of Akosombo and Kpong	%	%117	113.65	116.00	117	118.00
System Peak Demand	MW	2,881	2,857	2,886	3,007	3,092
Ratio of System Peak Demand to Installed Capacity	%	%114	107.77	108.86	118.76	121

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

REPORT OF THE DIRECTORS TO THE MEMBERS OF THE VOLTA RIVER AUTHORITY

The Authority's Directors are responsible for the preparation of the Consolidated and separate Financial Statements that give a true and fair view of the financial performance and position of the Volta River Authority, comprising the Consolidated and separate Statement of Financial Position at 31 December 2023, and the Consolidated and separate Statements of Comprehensive Income, Changes in Equity and Statement of Cash flows for the year then ended, and the notes to the Financial Statements which include a summary of significant accounting policies and other explanatory notes in accordance with International Financial Reporting Standards and in the manner required by the Volta River Development Act 1961, (Act 46), as amended by Act 692, (2005). In addition, the Directors are responsible for the preparation of the Report of the Directors.

The Auditor is responsible for reporting on whether the financial statements give a true and fair view in accordance with the applicable financial reporting framework.

FINANCIAL STATEMENTS

The results for the year are as set out in the attached Financial Statements.

NATURE OF BUSINESS

The Authority's primary function is to generate and supply electrical energy for industrial, commercial and domestic use in Ghana. The Authority is also responsible for safe-guarding the health and socio-economic well-being of inhabitants of the communities alongside the Volta Lake, and management of any incidental issues including maintenance of the environment. The Authority also provides ferry and hospitality services through its subsidiaries.

There was no change in the nature of business of the Authority during the year.

STATE OF AFFAIRS OF THE AUTHORITY

The Directors consider that the positive outcome of the implementation of its Financial and Operational Strategies which have sustained its profitability since 2020 would continue into the coming years. They have also made an assessment of the Authority's ability to continue as a going concern. Given that VRA is the State's sole electric generation utility, and Government's recent and on-going initiatives to remedy financial challenges in the sector, the Directors are confident and believe the Authority will be a going concern in the years ahead.

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

REPORT OF THE DIRECTORS TO MEMBERS OF THE VOLTA RIVER AUTHORITY

The positive bottom line of the Authority emanated from Management's strategic decision to switch to the use of relatively cheaper natural gas for power generation as opposed to Light crude oil and Distillate crude oil. The Authority's adherence to strict budgetary limits also accounted for the controlled costs which ultimately contributed to a strong financial performance.

The improved liquidity position of the Authority which has averted the recurrence of debt build up is largely attributable to the implementation of the Cashflow Waterfall Mechanism, being led by the Ministries of Energy and Finance. The Mechanism ensures that all stakeholders in the power supply chain benefit proportionately from the total revenue collected by the distribution company, Electricity Company of Ghana (ECG) thereby reducing the liquidity risk concerns that have plagued the power sector in recent years.

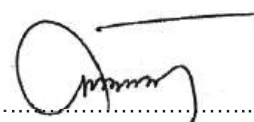
APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements were approved by the Board of Directors on 26th April, 2024 and are signed on their behalf by:



KOFI TUTU AGYARE
BOARD CHAIRMAN

Date: 26th April, 2024



EMMANUEL ANTWI-DARKWA
CHIEF EXECUTIVE

Date: 26th April, 2024

Corporate Governance

Introduction

The Authority is committed to the principles and implementation of good corporate governance. The Authority recognizes the valuable contribution it makes to long-term business prosperity by ensuring accountability to its stakeholders. The Authority is managed in a way that maximises long term stakeholders value, taking into account the interests of all of its stakeholders.

The Authority believes that full disclosure and transparency in its operations are in the interests of good governance. As indicated in the statement of responsibilities of directors and notes to the accounts, the business adopts standard accounting practices and ensures sound internal control to facilitate the reliability of the financial statements.

The Board of Directors

The board is responsible for setting the Authority's strategic direction, for leading and controlling the Authority and for monitoring activities of executive management. The board presents a balanced and understandable assessment of the Authority's progress and prospects. The board consists of the Chairman, seven non-executive directors and one executive director who is the Chief Executive. The board members, except the Chief Executive are independent of management and free from any constraints which could materially interfere with the exercise of their independent judgement. They have experience and knowledge of the industry, markets, financial and other business information to make valuable contribution to the Authority's progress. The Chief Executive is a separate individual from the chairman who implements the strategies and policies adopted by the board. The board meets at least four times each year.

The Risk and Audit Committee

The Risk and Audit committee as a committee of the Board is made up of four non-executive directors. The main board determines its terms of reference and they report back to the board. The role of the Risk and Audit Committee among others includes providing oversight of the independence of financial reporting process and objectivity of the external auditor, internal financial processes, compliance with laws and regulations and safeguarding assets.

Systems of Internal Control

The Authority has well-established internal control systems for identifying, managing and monitoring risks. These are designed to provide reasonable assurance that the risks facing the business are being controlled. The internal audit function of the Authority plays a key role in providing an objective view and continuous assessment of the effectiveness of the internal control systems in place. The systems of internal control are implemented and monitored by properly trained personnel with their duties and reporting lines clearly defined.

Code of Business Ethics

Management has communicated the principles in the Authority's Code of Conduct to its employees in the discharge of their duties. This code sets the degree of professionalism and integrity required for business operations which covers compliance with the law, conflicts of interest, environmental issues, obligations of business partners, reliability of financial reporting and bribery. Management ensures strict adherence to the principles so as to eliminate the potential for illegal practices.

Conflict of Interest

The Authority, as part of its progressive step to ensuring that there is no abuse of authority in the discharge of duties by the Directors, ensures full disclosure of directors with regards to their relationship with other competitors by virtue of other directorships held as well as other business engagements. With regards to internal dealings, none of the non-executive directors has placed himself or herself in situations that give rise to conflict of interest by virtue of being awarded a contract or taking up any significant role(s) in the general operations of the business.

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF THE VOLTA RIVER AUTHORITY AND ITS SUBSIDIARIES

A REPORT ON THE AUDIT OF THE VOLTA RIVER AUTHORITY'S CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS



Opinion

We have audited the consolidated ("the Group") and separate ("VRA") financial statements of Volta River Authority, which comprise the consolidated and separate Statements of Financial Position at 31 December, 2023, and the Consolidated and separate Statements of Profit or Loss and Other Comprehensive Income, Statement of Changes in Equity and Statement of Cash Flows for the year then ended, and the notes to the Financial Statements which include a summary of significant accounting policies and other explanatory notes, as set out on pages 22 to 63..

In our opinion, these consolidated and separate financial statements give a true and fair view of the consolidated and separate financial position of Volta River Authority as at 31 December, 2023, and of its consolidated and separate financial performance and consolidated and separate cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) and in the manner required by the Volta River Development Act, 1961 (Act 46), as amended by Act 2005 (Act 692) and the Companies Act 2019, (Act 992).

Basis of Opinion

We conducted our audit in accordance with International Standards for Supreme Audit Institutions. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code), together with the ethical requirements that are relevant to our audit of the financial statements in Ghana, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

The Directors are responsible for the other information. The other information comprises the information included in the Annual Report and the Report of the Directors as required by Volta River Development Act 1961, (Act 46), as amended by Act 2005, (Act, 692) but does not include the consolidated and separate financial statements and our auditor's report thereon. Our opinion on the consolidated and separate financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated and separate financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we concluded that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Directors for the Consolidated and Separate Financial Statements

The Directors are responsible for the preparation of the Financial Statements that give a true and fair view in accordance with International Financial Reporting Standards and in the manner required by the Volta River Development Act 1961, (Act 46) as amended by Act 2005, (Act 692) and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate Financial Statements, the Directors are responsible for assessing the Group and its subsidiaries' ability to continue as going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The Directors are responsible for overseeing the Group's financial reporting process.

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with International Standards of Supreme Audit Institutions (ISSAIs), which is consistent with the Fundamental Auditing Principles (ISSAIs 100-999) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with International Standards of Supreme Audit Institutions (ISSAIs) which is consistent with the Fundamental Auditing Principles (ISSAIs 100-999), we exercised professional skepticism throughout the audit. We also:

- ◆ Identify and assess the risk of material misstatement of the Consolidated and Separate Financial Statements, whether due to fraud or error, design and perform audit procedures responsive to those risk, and obtain evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- ◆ Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- ◆ Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Management.

- ◆ Conclude on the appropriateness of the Directors' use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertain exists related to events or conditions that may cast significant doubt on the ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Financial Statements or, if such disclosure is inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However future events or conditions may cause the Group to cease to continue as a going concern.
- ◆ Evaluate the overall presentation, structure, and content of the Financial Statements, including the disclosures, and whether the Financial Statements represent the underlying transactions and events in a manner that achieves fair presentation.
- ◆ Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated and separate financial statements. We are responsible for the direction, supervision, and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Directors regarding among other matters, the planned scope and timing of the audit and significant audit findings including any significant deficiencies in internal controls that we identify during our audit.

We also provide the Directors with a statement that we have complied with relevant ethical requirement regarding independence and to communicate with them all relationship and other matters that may reasonably be thought to bear on our independence and where applicable related safeguard.

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

Report on other legal and Regulatory Requirements.

The Companies Act, 2019 (Act 992) requires that in carrying out our audit we consider and report on the following matters. We confirm that:

1. we have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit.
2. in our opinion proper books of account have been kept by the Authority and its subsidiaries, so far as appears from our examination of those books; and
3. the Authority's Balance Sheet (included in as the statement of financial position) and profit and loss account (included in as the Statement of Comprehensive Income) agree with the books of account.
4. We are independent of the Authority and its subsidiaries pursuant to section 143 of the Act.



JOHN GODFRED KOJO ADDISON
DEPUTY AUDITOR-GENERAL / CAD
for: AUDITOR-GENERAL
GPS: GA-110-8787
MINISTRIES BLOCK "O"
ACCRA, GHANA

Dated: 26th April, 2024

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2023

		VRA		GROUP	
		2023	2022	2023	2022
	Note	GH¢'000	GH¢'000	GH¢'000	GH¢'000
ASSETS					
Property, Plant and Equipment	8b	35,251,874	25,349,408	49,716,942	35,655,159
Investment in Subsidiaries	9	460,825	460,825	-	-
Investment in Equity Securities	9b	-	-	1,335,344	856,270
Other long term investments	10	150,918	174,726	1,420,583	1,245,176
Trade and other Receivables	12	23,447	23,312	23,446	23,312
Non-current Assets		35,887,064	26,008,271	52,496,315	37,779,916
Inventory	11	571,704	502,485	660,199	567,883
Trade and Other Receivables	12	16,895,928	10,288,369	15,571,269	10,070,040
Current Tax Assets	7b	-	-	1,471	2,145
Short term investments	13	50,576	33,261	115,683	393,604
Cash and Cash Equivalents	14	843,505	927,495	2,488,777	1,779,544
Current Assets		18,361,713	11,751,611	18,837,398	12,813,216
Total Assets		54,248,777	37,759,882	71,333,713	50,593,133
Equity					
Investment by Republic of Ghana	17	4,617,713	4,617,713	4,617,713	4,617,713
Retained Earnings Account		504,142	49,966	(183,949)	(296,462)
Revaluation Surplus	18	32,090,538	21,861,957	44,291,211	33,135,435
Debt Contingency Fund Reserve	21	38,921	38,921	38,921	38,921
Government of Ghana Grant	20	-	-	3,963	2,598
Total Equity		37,251,314	26,568,557	48,767,860	37,498,205

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

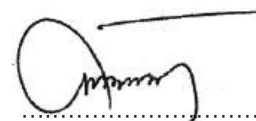
STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2023

		VRA		GROUP	
		2023	2022	2023	2022
	Note	GH¢'000	GH¢'000	GH¢'000	GH¢'000
LIABILITIES					
Employee Benefit Obligations	19	361,226	271,124	437,132	322,975
Trade and other Payables	15	270,067	270,067	322,897	270,067
Capital Grant	15	-	-	4,312,510	49,068
Deferred Tax	7c	-	-	133	272
Borrowings	16	2,531,871	1,990,600	2,699,530	2,150,247
Non-Current Liabilities		3,163,164	2,531,791	7,772,202	2,792,630
Trade and Other Payables	15	13,257,744	8,363,104	13,879,571	9,692,130
Current Tax	7b	-	-	505,184	473,384
Borrowings	16	576,555	296,431	408,896	136,783
Current Liabilities		13,834,299	8,659,535	14,793,651	10,302,297
Total Liabilities		16,997,463	11,191,326	22,565,853	13,094,927
Total Equity and Liabilities		54,248,777	37,759,882	71,333,713	50,593,133

The Financial Statements were approved by the Board of Directors on 26th April, 2024 and are signed on their behalf by:



KOFI TUTU AGYARE
BOARD CHAIRMAN



EMMANUEL ANTWI-DARKWA
CHIEF EXECUTIVE

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2023

		VRA		GROUP	
		2023	2022	2023	2022
		GH¢'000	GH¢'000	GH¢'000	GH¢'000
Note					
Revenue	2a	7,932,875	5,453,530	8,518,918	5,739,885
Cost of Sales	3	(6,153,076)	(4,358,801)	(7,386,976)	(5,235,220)
Gross Profit/(Loss)		1,779,799	1,094,729	1,131,942	504,665
Other Operating Income	2b	238,488	166,161	719,540	369,805
Government of Ghana Support on AMERI tariff shortfall	2c	(1,177,028)	(727,450)	(1,563,515)	(1,012,915)
Administrative Expenses	4	(938,540)	(561,289)	(843,975)	(643,110)
		(561,289)	(303,941)	(643,110)	(366,502)
Operating profit/(Loss)		841,259	533,440	287,967	(138,445)
Financial Income	5a	15,318	9,125	145,301	169,655
Financial Expenses	6	(184,752)	(116,466)	(191,000)	(120,833)
Net Exchange Loss		(591,431)	(315,206)	(591,430)	88,479
Profit / (Loss) before taxation		80,394	110,893	(349,162)	(178,102)
Taxation	7a	-	-	(31,661)	(99,081)
Profit / (Loss) for the year		80,394	110,893	(380,823)	(277,183)
Other Comprehensive Income					
<i>Items that will not be reclassified to profit or loss:</i>					
Revaluation gain on Equity		-	-	992,396	-
Revaluation of Property, Plant and Equipment	18	10,549,081	8,004,536	10,497,811	11,226,143
Other Comprehensive Income, net of tax		10,549,081	8,004,536	11,490,207	11,226,143
Total Comprehensive Income		10,629,475	8,115,429	11,109,384	10,948,960

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2023

VRA

2023

	Republic of Ghana Contribution	Retained Earnings Surplus	Capital Surplus	Debt Contingency Fund Reserve	Total Equity
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1st January, 2023	4,617,714	49,966	21,861,957	38,921	26,568,558
* Prior Year Adjustment	-	53,282	-	-	53,282
Profit (Loss) for the year	-	80,394	-	-	80,394
Other Comprehensive Income	-	-	10,549,080	-	10,549,080
					-
Total Comprehensive Income	-	80,394	10,549,080	-	10,629,474
Additional Investments in VRA	-	-	-	-	-
Transfer to Retained Earnings (Note 18)	-	320,500	(320,500)	-	-
Transfer to Debt Contingency Fund Reserve	-	-	-	-	-
Balance at 31st December, 2023	4,617,714	504,142	32,090,537	38,921	37,251,314

2022

Balance as at 1st January 2022	4,433,938	(279,085)	14,097,485	38,921	18,291,259
* Prior Year Adjustment	-	(21,907)	-	-	(21,907)
Profit (Loss) for the year	-	110,893	-	-	110,893
Other Comprehensive Income	-	-	8,004,536	-	8,004,536
Total Comprehensive Income	-	110,893	8,004,536	-	8,115,429
Additional Investments in VRA	183,776	-	-	-	183,776
Transfer to Retained Earnings (Note 18)	-	240,064	(240,064)	-	-
Transfer to Debt Contingency Fund Reserve	-	-	-	-	-
Balance at 31st December, 2022	4,617,714	49,966	21,861,957	38,921	26,568,557

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2023

GROUP

	Republic of Ghana Contribution	Retained Earnings Surplus	Revaluation	Debt Contingency Fund Reserve	Government of Ghana Grant	Other Reserves	Total Equity
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
2023							
Balance at 1st January, 2023	4,617,714	(296,462)	33,135,436	38,921	2,598	-	37,498,206
Profit / (Loss) for the year	-	(380,823)	-	-	-	-	(380,823)
Other Comprehensive Income	-	-	11,490,207	-	-	-	11,490,207
Total Comprehensive Income	-	(380,823)	11,490,207	-	-	-	11,109,384
Additional Investments in VRA	-	-	-	-	-	-	-
*Prior year adjustments	-	493,335	-	-	-	-	493,335
Government of Ghana Grant	-	-	-	-	1,366	-	1,366
Transfer to Retained Earnings (Note 18)	-	-	(334,431)	-	-	-	(334,431)
Balance at 31st December, 2023	4,617,714	(183,950)	44,291,212	38,921	3,963	-	48,767,860
2022							
Balance at 1st January, 2022	4,433,938	(397,449)	22,308,331	38,921	1,232	-	26,384,973
Profit / (Loss) for the year	-	(277,183)	-	-	-	-	(277,183)
Other Comprehensive Income	-	-	11,308,697	-	-	-	11,308,697
Total Comprehensive Income	4,433,938	(277,183)	33,617,028	38,921	1,232	-	11,031,514
Additional Investments in VRA	183,776	-	-	-	-	-	183,776
*Prior year adjustments	-	378,170	(85,264)	-	-	-	292,906
Government of Ghana Grant	-	-	-	-	1,366	-	1,366
Transfer to Retained Earnings (Note 18)	-	-	(396,329)	-	-	-	(396,329)
Transfer to Debt Contingency Fund Reserve	-	-	-	-	-	-	-
Balance at 31st December, 2022	4,617,714	(296,462)	33,135,435	38,921	2,598	-	37,498,205

* relates to transfer of capital reserves to retained earnings in 2023

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

STATEMENT OF CASH FLOW FOR THE YEAR ENDED 31 DECEMBER 2023

	Note	VRA		GROUP	
		2023	2022	2023	2022
		GH¢'000	GH¢'000	GH¢'000	GH¢'000
Net Cash from Operating Activities	22	693,744	637,248	1,274,118	964,059
Cash Flows from Investing Activities					
Interest Received		-	-	2,224	5,552
Purchasing of Property, Plant and Equipment		-	(6,481)	(227,388)	(121,227)
Proceeds from sales of Property, Plant and Equipment	8c	308	546	308	546
Deferred expenditure		-	-	-	-
Acquisition of short term investment		-	-	-	353,412
Acquisition of long term investments		-	(549)	(66,842)	(549)
Payments towards Capital Works-In-Progress		(680,645)	(324,350)	(681,898)	(324,334)
Net Cash used in investing activities		(680,337)	(330,834)	(973,597)	(86,600)
Cash flows from Financing Activities					
Net inflows from increase in stated capital		-	183,776	10,781	185,142
Proceeds from loans and borrowings		(20,034)	69,836	53,109	84,249
Repayment of borrowings		(60,048)	(163,426)	(268,572)	(224,867)
Payment of finance lease obligations		-	-	-	-
Shareholders advance		-	-	19,096	7,583
Net Cash used in financing activities		(80,082)	90,186	(185,585)	52,107
Net increase/(decrease) in Cash and cash equivalents		(66,675)	396,600	114,937	929,565
Cash and cash equivalents at the beginning of the year	14	960,756	564,155	2,173,147	1,106,328
Exchange rate fluctuation on cash and cash equivalents		-	-	285,966	137,253
Cash and cash equivalents at the end of the year		894,082	960,756	2,574,050	2,173,147

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

1.0 Reporting Entity

The Authority was incorporated by the Volta River Development Act 1961, (Act 46), as amended by Act 692, (2005) and it is domiciled in Ghana. These consolidated financial statements comprise of the Authority and its subsidiaries (together referred to as the "Group") for the year ended 31st December 2023 and the Group's interest in associates. The separate financial statements as at and for the year ended 31st December, 2023 comprise the financial statements of the Authority.

1.1 Basis of measurement

The Consolidated and separate Financial Statements ("Financial Statements") have been prepared on the historical cost basis, except for property, plant and equipment and available-for-sale financial assets that have been measured at fair value.

1.2 Statement of Compliance

The Financial Statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) and its interpretations adopted by the International Accounting Standards Board (IASB) in the manner required by the Volta River Development Act, (Act 46), as amended by Act 692, (2005).

1.2.1 Functional and Presentation

Currency

The financial statements are presented in Ghana Cedis which is the Authority's functional currency. All financial information presented in Ghana Cedis have been rounded to the nearest thousand, except where otherwise indicated.

1.2.2 Use of judgements and estimates

In preparing these consolidated and separate Financial Statements, Management has made judgements, estimates and assumptions that affect the application of the Group's accounting policies and the reported amounts of assets and liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions in estimates are recognised prospectively.

Information about judgements made in applying accounting policies that have the most significant effects on the amounts recognised in the Consolidated Financial Statements is included in the following notes:

- Note 16d - leases: whether an arrangement contains a lease.
- Note 16d - lease classification.
- Note 10 - consolidation: whether the Group has significant influence even though it holds less than 20 per cent of the voting rights of another entity.

Information about judgements made in applying accounting policies that have the most significant effects on the amounts recognised in the Consolidated Financial Statements is included in the following notes:

- Note 19c - measurement of defined benefit obligation: key actuarial assumptions.
- Note 1.8.2.9 - impairment losses.

Indexation revaluation of property, plant and equipment

In line with international best practice, it has been the Authority's policy to have its assets revalued by independent, professional valuers every five years. However, in order to avoid sudden large changes in the value of the assets base, and consequently in the return that the Authority is covenanted to achieve for both the International Lending Agencies and the Government of Ghana, the Authority applies indices to revalue its assets monthly.

The composite index used for the annual revaluation is therefore based on the premise that the Authority's assets base increase by the general price levels in the US Dollar and translated into Ghanaian Cedi terms for finance reporting. The computation of a composite index is based on the exchange rate between the GH¢ and the US dollar, and the annual CPI in the US. The assumption underlying the selection of the US inflation base is that the Authority's assets base is about 85% foreign-currency procured from the United States and Europe. Furthermore, most of the items are obtained from advanced countries like the United States, Europe and Asia (China) where price levels are fairly stable or increase marginally. The Authority thus assumed that

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

the US inflation rates fairly represents the general price levels for foreign purchases made by the VRA.

1.3 Basis of Consolidation

The Authority's 2023 Consolidated Financial Statements include the results of the Authority and its subsidiaries.

Business combinations

Business combinations are accounted for using the acquisition method when control is transferred to the Group. The consideration transferred in the acquisition is measured at fair value, as are the identifiable net assets acquired. Any goodwill that arises is tested annually for impairment. Any gain on a bargain purchase is recognised in profit or loss immediately. Transaction costs are expensed as incurred, except where they relate to the issue of debt or equity securities.

The consideration transferred does not include amounts that relate to the settlement of pre-existing relationships, such amounts are generally recognized in profit or loss.

Any contingent consideration payable is measured at fair value at the acquisition date. If the contingent consideration is classified as equity, then it is not re-measured and settlement is accounted for within equity. Otherwise, subsequent changes in the fair value of the contingent consideration are recognised in profit or loss.

Subsidiaries

Subsidiary is an entity which the Group has power over, rights to variable returns and the ability to use its power to affect those returns. The accounting policies of subsidiaries have been changed when necessary to align with the policies adopted by the Group. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date when control ceases. The financial statements of the subsidiaries used to prepare the consolidated financial statements were prepared as of the Authority's reporting date. The subsidiaries consolidated are Volta Lake Transport Company (VLTC), Akosombo Hotel Limited (AHL), Northern Electricity Distribution Company (NEDCo), Takoradi Power Company Limited (TAPCO), VRA Health Services Limited (VHSL), and VRA Property Holding Company Limited (PROPCo).

Transactions eliminated on Consolidation

Intra-group balances and transactions, and any unrealised income and expenses (except foreign currency transaction gains or losses) rising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealised gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

Loss of Control

When the Group loses control over a subsidiary, it derecognises the assets and liabilities of the subsidiary, any related non-controlling interests and other components of equity. Any surplus or deficit arising on the loss of control is recognised in profit or loss. Any retained interest in the former subsidiary is accounted for as an equity-accounted investee or in accordance with the Group's accounting policy for financial instructions.

Interests in investees

The investment in associates is recorded at historical cost. Any distribution from profits or dividends are recognised as income.

Separate financial statements

In the separate financial statements, investments in subsidiaries and associates are accounted for at cost less impairment. Cost also includes direct attributable costs of investment.

1.4 New standards and interpretations not adopted

IFRS 4 Insurance Contracts

IFRS 14 "Insurance Contracts" applies, with limited exceptions to all insurance contracts (including reinsurance contracts) that an entity issues and to reinsurance contracts that it holds. In light of IASB's comprehensive project on insurance contracts, the standard provides a temporary exemption from the requirements of some other IFRSs, including the requirement to consider IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors" when selecting accounting policies for insurance contracts. The IASB tentatively decided to defer the effective date

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

of IFRS 17, Insurance Contracts to annual periods beginning on or after January 1, 2022. The IASB also tentatively decided to defer the fixed expiry date so that all insurance entities must apply IFRS 4 for annual periods on or after January 01, 2023.

IFRS 17

IFRS 17 establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of the standard. The objective of IFRS 17 is to ensure that an entity provides relevant information that faithfully represents those contracts. This information gives a basis for users of the financial statements to assess the effect that insurance contracts have on the entity's financial position, financial performance and cash flows. The IASB also tentatively decided to defer the fixed expiry date so that all insurance entities must apply IFRS 17 for annual periods on or after January 01, 2023.

1.5.0 SUMMARY OF SIGNIFICANT ACCOUNTING STATEMENTS

1.5.1 Revenue

(i) Sale of Electricity

Revenue from sale of electricity is recognised when the significant risk and rewards of ownership have been transferred to the customer, recovery of the consideration is probable, the associated costs and possible return of goods can be estimated reliably, there is no continuing Management involvement with the goods and the amount of revenue can be measured reliably. Revenue from the sale of electricity is measured net of returns, trade discounts, taxes and volume rebates. Revenue from the sale of electricity is recognised when the electricity is transmitted to the customer.

1.5.2 Income from rendering of services

Revenue from rendering of services is recognised when the services have been rendered, recovery of the consideration is probable and the amount of revenue can be measured reliably.

1.5.3 Finance income and expenses

The Group's finance income and finance expenses include:

- interest income on funds invested or held in bank accounts
- interest expenses on loans and borrowings
- interest cost on finance lease obligation
- interest on delayed invoices

Interest income and expense is recognised, as it accrues in profit or loss, using the effective interest method.

1.5.4 Government Grant

Grant and assistance from the government are recognised as deferred income at fair value if there is reasonable assurance that the grant will be received and that the Group will comply with the conditions associated with the grant; they are then recognised in profit or loss as other income on a systematic basis over the useful life of the asset. A grant tied to non-current asset is deducted from the gross cost of the related asset to get the carrying value of the asset. A grant intended to cover expenses is reported in profit or loss on a systematic basis in the periods in which the expenses are recognised.

1.5.5 Foreign currency translations

Foreign currency transactions are translated into the functional currency using exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions, and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies, are recognised in profit or loss.

Non-monetary assets and liabilities are translated at historical exchange rates, if held at historical cost or exchange rates at the date that fair value was determined, if held at fair value and the resulting foreign exchange gains and losses are recognised in profit or loss.

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NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

(i) Foreign Operations

The assets and liabilities of foreign operations are translated into Ghana Cedi at the spot exchange rates at the reporting date. The income and expenses of foreign operations are translated into Ghana Cedi at the average exchange rates for the period.

Foreign currency differences arising on the translation of assets and liabilities of foreign operations are recognised in other comprehensive income and presented within equity.

When a foreign operation is disposed off, the cumulative amount in equity related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal.

1.5.6 Financial Instruments

The Group classifies non-derivative financial assets into the loans and other receivables category and classifies non-derivative financial liabilities into the other financial liabilities category.

The Group initially recognises loans and receivables and debt securities on the date when they originate and all other financial assets and financial liabilities on the date of trade when the entity becomes a party to contractual provisions of the instrument.

The Group derecognises a financial asset when the contractual rights to the cash flow from the asset expires, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all risk and rewards of ownership of the financial asset are transferred, or it retains control over the transferred asset.

Any interest in such derecognised financial asset that is created by the Group is recognised as a separate assets or liability. The Group derecognises a financial liability when its contractual obligation are discharged, cancelled or expire. The Authority's financial assets include cash and bank balances, trade and other receivables, short term investment and investments in equity securities.

1.5.7 Financial Assets

Loans and receivables comprises Cash and Bank Balances, short term investments, shareholder advances to subsidiaries and trade and other receivables.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. These assets are initially measured at fair value plus any directly attributable transaction cost. Subsequent to initial recognition, they are measured at amortised cost using the effective interest method. Short-term receivables with no stated interest rate are measured at the original invoice amount if the effect of discounting is immaterial.

Impairment

Financial assets not classified at fair value through profit or loss are assessed at each reporting date to determine whether there is objective evidence of impairment.

Objective evidence that financial assets are impaired includes default or delinquency by a debtor, restructuring of an amount due to the Group on terms that the Group would not consider otherwise, indications that a debtor will enter bankruptcy, adverse changes in the payment status of borrowers, economic conditions that correlate with defaults.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Losses are recognised in profit or loss and reflected in an allowance account against loans and receivables. When the Group considers that there are no realistic prospects of recovery of the asset, the relevant amounts are written off. Interest on the impaired asset continues to be recognised. When an event occurring after the impairment was recognised caused the amount of impairment loss to decrease, the decrease in impairment loss is reverse through profit or loss.

The Group considers evidence of impairment for these assets at both individual and collective level. All individually significant financial assets are assessed for impairment on an individual basis. Those found not to be impaired are then collectively assessed for any impairment that has been incurred but not yet individually identified. Assets that are not individually significant are collectively assessed for impairment. Collective assessment is carried out by grouping together assets with similar risk characteristics.

In assessing collective impairment, the Group uses historical information on the timing of recoveries and the amount of loss incurred, and makes an adjustment if current economic and credit conditions are such that

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NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

the actual losses are likely to be greater or lesser than suggested by historical trends.

1.5.8 Financial Liabilities

Non-derivative financial liabilities are initially measured at fair values less any directly attributable transaction cost. Subsequent to initial recognition, these liabilities are measured at amortised cost using the effective interest method.

Other financial liabilities comprise of loans and borrowing and trade and other payables.

1.5.9 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis.

1.5.10 Property, Plant and Equipment

(i) Recognition and Measurement

Property, Plant and Equipment are measured at revalued amount less accumulated depreciation and any accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment. When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components).

Any accumulated depreciation at the date of revaluation is adjusted to equal the difference between the gross carrying amount and the carrying amount of the assets after taking into account accumulated impairment losses. An increase in the carrying amount of property, plant and equipment as a result of a revaluation is recognised in other comprehensive income and accumulated in equity under revaluation reserve.

However, the increase is recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss.

A revaluation decrease is recognised in profit or loss. However, the decrease is recognised in other comprehensive income to the extent of any credit balance existing in the revaluation reserve in respect of that asset. The surplus on revaluation is transferred

to retained earnings as the relevant revalued assets is used. The amount transferred is the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost.

Valuations are performed with sufficient regularity to ensure that the fair value of a revalued asset does not differ materially from, its carrying amount.

Any gain or loss on the disposal of an item of property, plant and equipment (calculated as difference between the proceeds from disposal and carrying amount of the item) is recognised in profit or loss.

(ii) Subsequent cost

The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Authority and its cost can be measured reliably. The costs of the day-to-day servicing and maintenance of property, plant and equipment are recognised in profit or loss as incurred.

(iii) Depreciation

Depreciation is calculated and recognised in profit or loss on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. Freehold land is not depreciated.

Depreciation is charged in the year in which an asset is acquired or a capital work-in-progress is available for use. The annual depreciation rate and estimated useful lives for the current and comparative years of significant items of major classes of depreciation property, plant and equipment are as follows;

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NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

	Rate of Depreciation (%)	Useful Life
Dam, Powerhouse and Civil Works	Between 0.67 and 2.2	45 - 150
Transmission Network	Between 2.2 and 3.3	30 - 45
Akosombo/Akuse Township	2.5	40
Buildings	2.5	40
Hydro Generating Plant and Machinery	Between 2.2 and 3.0	33 - 45
Aviation and Marine Equipment	12.5	8
Motor Vehicles	Between 10.0 and 25.0	4 - 10
Equipment and Furniture	Between 12.5 and 25.0	4 - 8
Meters/Consumer Connections		20 - 25
Thermal Generating Plants and Machinery	Between 4.0 and 10.0	10 - 25
Distribution Network	Between 2.5 and 4.0	25 - 40
Computer Equipment	Between 20.0 and 25.0	4 - 5
Communication Equipment	Between 3.3 and 6.7	15 - 30

(iii) Depreciation (Continued)

Leased assets are amortised over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is amortised over the shorter of the estimated useful life or leased term.

Depreciation methods, useful lives and residual values are reassessed at each reporting date and adjusted if appropriate.

(iv) Capital work-in-Progress

Property, plant and equipment under construction are stated at initial cost and depreciated from the date the asset is available for use over its estimated useful life. Cost of capital work-in-progress include the cost of materials and direct labour, and any other cost directly attributable to bringing the asset to a working condition for its intended use.

Assets are transferred from capital work-in-progress to an appropriate category of property, plant and equipment when they become ready for its intended use.

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NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

(v) Impairment of Non-financial Assets

The carrying amount of the Group's non-financial assets, other than inventories and deferred tax assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists then the asset's recoverable amount is estimated. An impairment loss is recognised if the carrying amount of an asset or Cash Generating Unit (CGU) exceeds its recoverable amount.

For impairment testing, assets are grouped together into the smallest group of assets that generated cash inflows from continuing use that are largely independent of the cash inflows of other assets.

The recoverable amount of the asset is the greater of its value in use and its fair value less cost to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and risks specific to the asset of CGU.

An impairment loss is recognised if the carrying amount of the asset or CGU exceeds its recoverable amount.

All impairment losses are recognised in profit or loss. They are allocated to reduce the carrying amount of assets in the CGU on a pro rata basis.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

1.5.11 Intangible Assets

Software acquired by the Group is stated at cost less accumulated amortisation and accumulated impairment losses

Subsequent expenditure on software assets is capitalised only when it increased the future economic benefits embodied in the specific asset to which it related. All other expenditure is expensed as incurred. Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful life of the software, from the date that it is available for use. The estimated useful life of software is up to five-years.

1.5.12 Borrowing Costs

Borrowing costs are recognised, as an expense, in the period in which they are incurred, except to the extent that they are capitalised. Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised as part of the cost of that asset when it is probable that they will result in future economic benefits to the entity and that the costs can be measured reliably.

Borrowing cost that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method.

1.5.13 Inventories

Inventories are measured at the lower of cost and net realisable value. The cost of inventories is based on the weighted average principle, and includes expenditure incurred in acquiring the inventories and bringing them to their existing location and condition.

Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

1.5.14 Cash and Cash Equivalents

In the statement of cash flows, cash and cash equivalents include short term investments and bank overdrafts that are repayable on demand and from an integral part of the Group's cash management. Cash and short-term deposits in the statement of financial position comprises cash at bank and on hand and short-term deposits with an original maturity of three months or less.

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NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

1.5.15 Employee Benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

Defined Contribution Plans

A defined contribution plan is a post-employment benefit plan under which the Group pays fixed contributions to a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognised as an expenses in profit or loss in the periods during which services are rendered by employees.

The Group has the following defined contribution schemes:

Social Security and National Insurance Trust

Under the national pension scheme, the Group contributes 13% of employees' basic salary to the Social Security and National Insurance Trust (SSNIT) for employee pensions. The Group's obligation is limited to the relevant contributions, which have been recognised in the financial statements. The pension liabilities and obligations, however, rest with SSNIT.

Provident Fund

The Group has a Provident Fund Scheme for all employees who have completed their probation period with the Group. The Group contributes 10% of their basic salary to the Fund. Obligations under the plan are limited to the relevant contributions which have been recognised in the financial statements and are settled on due dates to the Fund Manager.

Defined benefit plans

The Group's obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefits that employee have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. Re-measurements of the net defined benefit liability, which comprise actuarial gains and losses is recognised immediately in other comprehensive income.

The Group determines the net interest expense (income) on the defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the defined benefit liability at the period end, taking into account any changes in the defined benefit liability during the period as a result of contributions and benefit payments.

Net interest expenses and other expenses related to defined benefit plans are recognised in personnel expenses in profit or loss. When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefits that relate to past services or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

The Group has the following defined benefit plans:

Long-service awards

The defined benefit scheme entitles employee to a benefit package at the end of their service with the Group. This benefit package is paid at the point of exit on scale that have been graduated based on the length of services ranging from 10 to 40 years and more.

Severance benefits

This relate to reward (packages) paid to employees who attain certain milestone with the Group and exit before their due date of retirement.

Post-retirement medical benefit

There is no contribution by the employee toward this benefit and no insurance scheme. The employer simply bears the medical costs (no cap defined) of the retiree and their spouse for as long as the retiree is alive. After the death of the retiree, the spouse will be taken care of for 6 months after which they will be removed from the scheme.

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NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

1.6.0 Leases

The Group has adopted IFRS 16 using the modified retrospective approach and therefore the comparative information has not been restated and continues to be reported under IAS 17 and IFRIC 4. The standard introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value.

The Authority as a lessee

A lease is defined as 'a contract, or part of a contract, that conveys the rights to use an asset (the underlying asset) for a period of time in exchange for consideration'. The Group assesses whether the contract meets the key evaluations which are whether:

- the contract contains an identified asset, which is either explicitly identified in the contract or implicitly specified by being identified at the time the asset is made available to the Group.
- the Group has the right to obtain substantially all of the economic benefits from use of the identified asset throughout the period of use
- the Group has the right to direct the use of the identified asset throughout the period of use.

Measurement and recognition of leases as a lessee

At lease commencement date, the Group recognises a right-of-use asset and a lease liability on the balance sheet.

The right-of-use asset is measured at cost, which is made up of the initial measurement of the lease liability, any initial direct costs incurred by the Group, an estimate of any costs to dismantle and remove the asset at the end of the lease, and any lease payments made in advance of the lease commencement date (net of any incentives received).

The Group depreciates the right-of-use assets on a straight-line basis from the lease commencement date to the earlier of the useful life of the right-of-use asset or the end of the lease term. The Group also assesses the right-of-use asset for impairment when such indicators exist.

At the commencement date, the Group measures the lease liability at the present value of the lease payments unpaid at that date, discounted using the interest rate

implicit in the lease if that rate is readily available or the Group's incremental borrowing rate.

Lease payments included in the measurement of the lease liability are made up of fixed payments (including in substance fixed), variable payments based on an index or rate, amounts expected to be payable under a residual value guarantee and payments arising from options reasonably certain to be exercised.

Leasehold Improvements

Leasehold improvement are measured at cost less accumulated depreciation and any accumulated impairment losses. Subsequent expenditure is capitalised only if it is probable that the future economic benefits associated with the expenditure will flow to the Group. Ongoing repairs and maintenance are expensed as incurred. Leasehold improvement are capitalised and depreciated over the shorter of the useful lives of the assets and the lease term.

1.6.1 Tax Expense

Tax expense comprise current and deferred tax. Income tax is recognised in profit or loss except to the extent that it relates to items recognised directly in equity or in other comprehensive income.

(a) Current Tax

Current tax comprises the expected tax payable or receivable on taxable incomes or losses for the year and any adjustment to the tax payable or receivable in respect of previous years. It is measured using tax rates enacted or substantively enacted at the reporting date. Current tax also includes any tax arising from dividends.

(b) Deferred Tax

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the corresponding amounts used for taxation purposes. However, deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred tax is measured at tax rates that are expected to be applied to temporary difference when they reverse, using tax rates enacted or substantively enacted at the reporting date. A deferred tax asset is recognised only to the extent that it is probable that future taxable profit will be available against which the asset can be utilised. Deferred tax assets are reviewed at each reporting

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date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or the tax assets and liabilities will be realised simultaneously.

1.7.0 Determination of Fair Values

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

Significant valuation issues are reported to the Group's Board of Directors.

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. prices) or indirectly (i.e. derived from prices).

Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability fall into different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

The Group recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change occurred.

1.8.0 Business and Financial Risk Management

The Group's operations are exposed to a number of risks. To address these risks, the Authority has established a risk management process that is based

on the following components:

- ◆ Standardised risk definition
- ◆ Reliable methods for measuring risks
- ◆ Identifying the origination of risks
- ◆ Effective risk management for manageable risks
- ◆ Reporting in accordance with established routines
- ◆ Management in accordance with established strategies and fixed rules

1.8.1 Risk Mandate and Risk Management Structure

The Board of Directors has overall responsibility for internal control and risk management at the Volta River Authority. The Board has, in turn, given the Volta River Authority's Management a risk mandate. Management allocates this mandate to the Volta River Authority's Business Units in accordance with a delegation structure. Each Unit manages its own risks and has some room to manoeuvre within its respective mandate. The results achieved by the Units are followed up on a continuous basis and reported to the Executive Management by an independent risk control function, Internal Audit, which is also responsible for monitoring the Group's overall risk mandate.

1.8.2 Risk

Political risks, operational risks, environmental risks and legal risks are general in nature and exist in all Units throughout the Group. Insurable risks are managed centrally by the Volta River Authority's Legal Services Department. The more specific risks in each part of the value chain are discussed below:

1.8.2.1 Political Risk

This refers to the commercial risk that can arise as a result of political decisions. Examples of this are price regulations in electricity distribution and transmission, uncertainty regarding changes in government, or changes in finance and energy policies.

A change in the rules governing the energy industry is another type of political risk faced by the Group. These may include factors such as changes in taxation, introduction of environmental surcharges and changes in the political goals in respect of the energy sector. This type of risk is more difficult to predict and manage.

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NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

To mitigate this, the group conducts active business intelligence activities and maintains contacts with key decision makers and relevant stakeholders. The Group also belongs to various national and international trade organisations.

1.8.2.2 Operational Risk

Operational risk refers to the risk of incurring financial loss, or loss of trust, due to errors or defects in the company's administrative routines. Operational risk can be divided into the following categories:

- ◆ Administrative risk - the risk of loss due to defects in the Group's division of responsibility, competence, reporting routines, risk measurement and evaluation models, and controls and follow-up routines.
- ◆ Legal risks - this includes risk of loss arising from the non-fulfilment of contracts due to shortcomings in documentation, counterparties lacking the right to enter into contracts or uncertainties regarding contract validity.
- ◆ IT risks - the risk of loss due to defects in IT systems.
- ◆ Safety risks - the risk of outages due to deficient safety work.

1.8.2.3 Electricity Price Risk

Electricity Price Risk is the risk that has the greatest bearing on the Group's operations. Electricity prices are determined by the Public Utilities Regulatory Commission (PURC).

To determine the value of electricity price risk in electricity generation, the Group simulates an anticipated outcome in the electricity tariffs. Forecasts of anticipated generation levels are drawn up, which then serve as the basis for how much is to be anticipated as losses due to tariffs.

1.8.2.4 Price Category Risk

Price Category risk arises when the price of electricity differs between various customer categories. Volta River Authority's price categories risk is controlled centrally and is managed by the Group's Commercial Services Department.

1.8.2.5 Volume Risk

Volume Risk consists of deviations in anticipated and actually delivered volumes to a customer. This is managed by improving and developing forecasts

of electricity consumption. In addition, volume risk is considered when drawing up the terms of contracts with customers.

1.8.2.6 Fuel Price Risk

Measurement and management of fuel price risk is conducted within the Finance Department. Fuel prices are affected by macroeconomic factors, among other things. The Group manages fuel price risk by forecasting and analysing price trends.

1.8.2.7 Investment Risk

The Group is a highly capital-intensive institution and, consequently, has an extensive capital investment program. Prior to every investment decision, a risk analysis is performed by simulating outcomes of price, cost, delays and cost of capital, the risk associated with each individual investment are assessed.

1.8.2.8 Plant Risk

The Group's largest insurable risks are associated with the operation of power generation plants. The Group's plants can be damaged as a result of incidents and breakdowns which, as a rule, give rise to substantial costs due to shutdowns. Such plant risks are minimised through loss-prevention measures, good maintenance, training and effective administrative outlines. The plants are also insured against unforeseen occurrence.

1.8.2.9 Credit Risk

Credit Risk is the risk of financial loss to the Authority if a customer or counter party fails to meet its contractual obligations and arises principally from the Authority's receivables from customers.

The Group's principal exposure to credit risk is in its trade and other receivables, and loans to related parties. Trade receivables principally represent amounts owed to the Authority by their customers and credit risk is managed at that level. Credit evaluations are performed on all customers requiring credit over a certain amount. The Group has no significant concentration of credit risk, with exposure spread over a large number of customers.

Exposure to Credit Risk

The carrying value of the Group's financial assets represents its maximum exposure to credit risk. The maximum exposure to credit risk at the reporting date was:

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NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

	VRA		GROUP	
	2023	2022	2023	2022
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade Receivables	9,369,577	5,751,756	10,979,822	7,192,180
Receivables from related parties	3,529,043	1,780,910	-	-
Other receivables including receivable from Government of Ghana but excluding fuel receivable from Tema Oil Refinery	2,716,285	1,724,616	1,642,385	1,740,285
Staff Debtors	44,414	41,175	51,591	47,598
Cash and cash equivalents (excluding cash-on-hand)	843,505	927,495	2,488,777	1,779,544
Long-term investments	150,918	174,726	1,420,583	1,245,176
Short-term investments	50,576	33,261	115,683	393,604
	16,704,318	10,433,939	16,698,840	12,398,387

The maximum exposure to credit risk for trade receivables at the reporting date by type of counter party was:

	VRA		GROUP	
	2023	2022	2023	2022
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Wholesale (ECG)	1,949,762	1,949,762	1,949,762	1,949,762
Distribution to end-users	7,419,815	3,801,994	9,030,060	5,242,418
	9,369,577	5,751,756	10,979,822	7,192,180

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NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

Impairment Losses

The ageing of trade receivables at the reporting date was:

VRA	Gross	Impairment allowance	Gross	Impairment allowance
	31-Dec-23	31-Dec-23	31-Dec-22	31-Dec-22
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Not past due nor impaired	598,609	-	598,609	-
Past due 30-60 days	319,701	-	319,701	-
Past due 60-90 days	115,582	-	115,582	-
Past due 90-120 days	515,039	-	515,039	-
Past due 120 days and above and impaired	7,820,646	251,166	4,202,825	230,666
	9,369,577	251,166	5,751,756	230,666

GROUP	Gross	Impairment allowance	Gross	Impairment allowance
	31-Dec-23	31-Dec-23	31-Dec-22	31-Dec-22
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Not past due nor impaired	695,902	-	695,902	-
Past due 30-60 days	356,924	-	356,924	-
Past due 60-90 days	150,700	-	150,700	-
Past due 90-120 days	551,930	-	551,930	-
Past due 120 days and above and impaired	9,224,367	315,531	5,436,725	292,484
	10,979,822	315,531	7,192,180	292,484

Impairment losses have been recognised for specific customers whose debts are considered impaired.

Management believes that the unimpaired amounts that are past due by more than 30 days are still collectible in full, based on historical payment behaviour and extensive analysis of customer credit risk.

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NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

1.8.2.10 Liquidity Risk

Liquidity risk is the risk that the Authority will not be able to meet its financial obligations as and when they fall due. The Authority has had liquidity challenges and defaulted in some repayment obligations.

December 31, 2023 - VRA	Total amount	Less than 6 months	6-12 months	1-2 years	3-4 years	More than 5 years
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade payables	12,778,092	12,755,788	22,304	-	-	-
Payable to related parties	275,146	-	275,146	-	-	-
Accrued Expenses	15,008	15,008	-	-	-	-
Sundry creditors, excluding statutory obligations	189,498	132,649	56,849	-	-	-
Borrowings, excluding finance lease obligations	3,108,426	937,354	771,334	592,593	425,827	381,318
Other payables- non-current	270,067	-	-	270,067	-	-
Finance Lease Obligations	-	0	-	-	-	-
	16,636,237	13,840,798	1,125,634	862,660	425,827	381,318

December 31, 2022 - VRA	Total amount	Less than 6 months	6-12 months	1-2 years	3-4 years	More than 5 years
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade payables	8,046,568	8,024,264+	22,304	-	-	-
Payable to related parties	275,783		275,783	-	-	-
Accrued Expenses	5,613	5,613	-	-	-	-
Sundry creditors, excluding statutory obligations	13,719	9,603	4,116	-	-	-
Borrowings, excluding finance lease obligations	2,284,560	719,442	536,016	407,275	375,827	246,000
Other payables- non-current	270,067	-	-	270,067	-	-
Finance Lease Obligations	2,470	2,470	-	-	-	-
	10,898,780	8,761,392	838,219	677,342	375,827	246,000

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

December 31, 2023 - GROUP	Total amount	Less than 6 months	6-12 months	1-2 years	3-4 years	More than 5 years
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade payables	13,586,979	10,365,646	3,221,333	-	-	-
Payable to related parties	-	-	-	-	-	-
Accrued Expenses	(41,255)	(41,255)	-	-	-	-
Sundry creditors, excluding statutory obligations	333,848	257,177	76,671	-	-	-
Borrowings, excluding finance lease obligations	3,108,426	808,171	628,225	513,241	866,202	292,587
Other payables- non-current	4,635,540	2,317,770	1,058,885	579,443	389,721	289,721
Finance Lease Obligations	-	-	-	-	-	-
	21,623,538	13,707,509	4,985,114	1,092,684	1,255,923	582,308

December 31, 2022 - GROUP

	Total amount	Less than 6 months	6-12 months	1-2 years	3-4 years	More than 5 years
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade payables	8,805,101	7,247,026	1,558,075	-	-	-
Payable to related parties	-	-	-	-	-	-
Accrued Expenses	5,613	5,613	-	-	-	-
Sundry creditors, excluding statutory obligations	881,415	760,622	120,793	-	-	-
Borrowings, excluding finance lease obligations	2,284,560	808,171	616,292	457,275	216,202	186,620
Other payables- non-current	319,407	270,067	-	49,340	-	-
Finance Lease Obligations	2,470	2,470	-	-	-	-
	12,298,567	9,093,969	2,295,161	506,615	216,202	186,620

1.8.2.11 Market Risk

Market risk is the risk that changes in market prices, such as foreign currency and interest rates etc. will affect the Authority's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on risk.

Currency Risk

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to the changes in the foreign exchange rates.

Financial Review for the year ended 31 December 2023

Exposure to Currency Risk

Group's exposure to foreign currency risk was as follows based on notional amount:

2023-in thousands	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Account receivable	849,731	-	-	-	-	-	-	-	-	-
Cash and Bank balances	45,581	743	-	-	-	-	-	-	-	-
Investments	22,218	-	-	-	-	-	-	-	-	-
Account payables	(1,217,901)	(12,110)	-	(261)	-	(254)	(286)	(15)	(11)	-
Borrowings	(175,212)	(50,477)	-	(4,234)	-	-	-	-	-	-
	(475,584)	(61,844)	-	(4,495)	-	(254)	(286)	(15)	(11)	-
2022-in thousands	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Account receivable	707,970	-	-	-	-	-	-	-	-	-
Cash and Bank balances	95,352	1,862	-	-	-	-	-	-	-	-
Investments	14,329	-	-	-	-	-	-	-	-	-
Account payables	(946,864)	(9,721)	-	(261)	-	(37)	(286)	(15)	(11)	-
Borrowings	(172,713)	(71,398)	-	(4,325)	-	-	-	-	-	-
	(301,926)	(79,257)	-	(4,586)	-	(37)	(286)	(15)	(11)	-
December 2023	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Reporting date spot rate	11.6430	12.9161	16.1606	39.0993	13.9100	14.8600	1.1689	8.8245	0.6305	15.9390
Average rate	10.9920	11.8890	15.5682	37.9601	12.2450	13.6722	1.0353	8.1443	0.5944	14.8802
December 2022	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Reporting date spot rate	8.3150	8.8558	13.6074	33.3232	8.9907	10.0084	0.7950	6.1373	0.4902	11.4133
Average rate	8.2695	8.6484	11.9647	29.2965	8.6421	10.1236	0.8104	6.3203	0.5013	11.5590

Sensitivity

A 5% strengthening of the GH¢, as indicated below, against the currencies above at 31st December, 2023 would have increased (decreased) profit or loss and equity by the accounts shown below. This analysis is based on foreign currency exchange rate variances that the Authority considered to be reasonably possible at the end of the reporting period. The analysis assumes that all other variable, in particular interest rates, remain constant. The analysis is performed on the same basis for 2022, albeit that the reasonably possible foreign exchange rate variance were different, as indicated below:

Financial Review for the year ended 31 December 2023

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

Effect in thousands of GH¢

	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
2023	(261,381)	(36,763)	-	(8,532)	-	(174)	(15)	(6)	(0)	-
2022	(124,839)	(34,272)	-	(6,718)	-	(19)	(12)	(5)	(0)	-

A 5% weakening of the Ghana Cedi against the currencies above at 31st December 2023 would have had the equal but opposite effect on the amounts shown above.

(ii) Interest rate Risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to the changes in market interest rates.

At the reporting date the interest rate profile of the Group's interest-bearing financial instruments was:

	VRA		GROUP	
	2023	2022	2023	2022
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Fixed Rate Instruments				
Financial Liabilities	-	2,470	-	2,470
Variable rate Instruments				
Financial Assets	50,576	33,261	115,683	393,604
Financial Liabilities	3,108,426	2,284,560	3,108,426	2,284,560

Fair value sensitivity analysis for fixed-rate instruments

The group does not account for any fixed rate financial assets or financial liabilities at fair value through profit or loss. Therefore, a change in interest rate at the reporting date would not affect profit or loss.

Cash flow sensitivity analysis for variable-rate instruments

A reasonably possible change of 10 basis points in interest rates at the reporting date would have increased (decreased) profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency exchange rates, remain constant.

	VRA		GROUP	
	10 bp increase	10 bp decrease	10 bp increase	10 bp decrease
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
31st December, 2023				
Financial Liabilities	0	(247)	0	0
31st December, 2022				
Variable rate instruments	310,843	(310,843)	310,843	(310,843)

Changes in market interest rates would not have any effect on equity.

Financial Review for the year ended 31 December 2023

Revenue	VRA				GROUP			
	2023		2022		2023		2022	
	GWh	GH¢'000	GWh	GH¢'000	GWh	GH¢'000	GWh	GH¢'000
2a. Sale of Electricity								
Electricity Company of Ghana	4,637	1,764,546	4,990	1,352,447	4,637	1,764,546	4,990	1,352,447
Mines	1,379	1,561,668	1,496	1,256,858	1,379	1,561,668	1,496	1,256,858
Akosombo Textiles	3	3,030.00	3	1,343	3	3,030	3	1,343
Aluworks	1	364.00	2	1,557	1	364	2	1,557
Diamond Cement	17	18,370.00	26	13,038	17	18,370	26	13,038
Volta Aluminium Co. Ltd.	834	255,473.00	772	171,993	834	255,473	772	171,993
Others	159	36,263	157	30,195	159	36,263	157	30,195
GRIDCo (Transmission Loss Recoveries)	908	272,051	922	156,960	908	272,051	922	156,960
Substation Use (GRIDCo.)	11	4,940	11	3,023	11	4,940	11	3,023
Northern Electircity Dist. Co.(NEDCo)	1,938	1,188,718	1,824	716,132	1,130	1,774,761	1,110	1,002,487
Local Customers	9,887	5,105,423	10,203	3,703,546	9,079	5,691,466	9,489	3,989,901
Communaute Electrique Du Benin	-	-	70	38,990	-	-	70	38,990
Compagnie Energie Electrique Du Togo	737	644,923	598	387,861	737	644,923	598	387,861
Societe Beninoise d' Energie Electrique	247	215,563	75	49,928	247	215,563	75	49,928
Compagne Ivoirienne d'Electricité	265	322,363	267	270,965	265	322,363	267	270,965.00
Société National D'elect Du Burkina	24	32,223	20	19,466	24	32,223	20	19,466
Sonabel Youga Mines	1	170	7	5,323	1	170	7	5,323
-Sonabel Bolga-Ougadougou	1,255	1,372,453	1,177	885,083	1,255	1,372,453	1,177	885,083
Free Zone Companies	269	239,757	228	92,368	269	239,757	228	92,368
Foreign Customers	2,798	2,827,452	2,442	1749,984	2,798	2,827,452	2,442	1749,984
Total Sale of Electricity	12,685	7,932,875	12,645	5,453,530	11,877	8,518,918	11,931	5,739,885

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

2b. Other Operating Income

	VRA		GROUP	
	2023	2022	2023	2022
	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Real Estates	20,856	15,710	20,856	15,710
Health Services	-	-	65,964	37,950
Schools	40,184	26,749	40,184	26,749
Service Charge	76,034	64,461	76,034	64,461
Profit on Sale of Fixed Assets	308	546	308	546
Gas Sales Proceeds	70,391	36,633	70,391	36,633
PROPCo	-	-	14,727	8,308
Other Income	30,715	22,062	376,694	144,394
Ferry Services	-	-	40,251	24,066
Hospitality Services	-	-	14,131	10,988
		-	-	-
Total	238,488	166,161	719,540	369,805

3. Cost of Sales/ Operating Costs

	VRA		GROUP	
	2023	2022	2023	2022
	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Analysis by budget center:				
Generation: Hydro	117,576	93,042	117,576	93,042
Thermal	2,040,620	1,829,477	2,040,620	1,829,477
Distribution(NEDCo)	-	-	614,391	440,205
Purchase of Electricity	2,866,709	1,739,147	2,866,709	1,757,309
Depreciation	1,128,171	697,135	1,747,679	1,115,186
Total	6,153,076	4,358,801	7,386,975	5,235,220
Analysis by cost element:				
Salaries and Related Expenses	246,646	209,650	518,955	424,694
Materials and Spares Consumed	-	-	16,638	38,869
Repairs and Maintenance	64,067	161,491	88,286	171,946
Fuel Handling and Usage	1,662,648	1,501,097	1,662,648	1,501,097
Purchase of Electricity	2,866,709	1,739,147	2,866,709	1,757,309
Transmission Service Charge	-	-	241,142	151,258
Depreciation	1,128,171	697,135	1,747,680	1,115,186
Other Operating Costs	184,835	50,281	244,918	74,859
Total	6,153,076	4,358,801	7,386,976	5,235,220

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

	VRA		GROUP	
	2023	2022	2023	2022
	Ghc'000	Ghc'000	Ghc'000	Ghc'000
4. Administrative Expenses				
Analysis by budget center:				
Central Services	753,695	442,590	1,021,147	604,916
Schools	59,889	50,157	59,889	50,157
Real Estates	137,910	104,661	137,910	104,661
Health Services	-	-	100,149	77,907
Depreciation	199,089	83,135	221,374	103,112
Impairment Loss on Receivables	20,500	46,907	23,046	72,162
Bad debt	5,945	-	-	-
Total	1,177,028	727,450	1,563,515	1,012,915
Analysis by cost element :				
Salaries and Related Expenses	581,886	397,651	782,322	555,811
Repairs & Maintenance	113,576	38,047	142,217	44,291
Other Administrative Cost	240,515	148,681	328,787	220,799
Depreciation	199,089	83,135	221,374	103,112
Employees Benefits	14,655	12,088	38,771	15,162
Audit Fees	-	-	96	32
Audit Expenses	244	218	596	344
Directors Remuneration	618	723	1,051	1,202
Impairment Loss on Receivables	20,500	46,907	48,301	72,162
Bad debt	5,945	-	-	-
Total	1,177,028	727,450	1,563,515	1,012,915
Total Operating & Admin Cost	7,330,104	5,086,251	8,950,491	6,248,134

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

5a. Financial Income	VRA		GROUP	
	2023	2022	2023	2022
	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Interest & Investment Income	15,318	9,125	145,301	169,655
	15,318	9,125	145,301	169,655

6. Financial Expenses	VRA		GROUP	
	2023	2022	2023	2022
	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Interest on Long Term Loans	9,203	7,159	9,277	7,159
Interest on Medium Term Loans	93,356	36,944	93,356	36,944
Interest on Short Term Loans	7,472	2,423	13,646	6,790
Finance Cost on Defined Benefit Obligations	37,778	33,287	37,778	33,287
Interest on Delayed Invoices	36,943	36,653	36,943	36,653
Total	184,752	116,466	191,000	120,833

7. Taxation (Group)

The tax position in the financial statements represent that of the subsidiaries of the Authority.

7a. Income Tax Expense

Income tax expense recognised in profit or loss includes:

	GROUP	
	2023	2022
	Ghc'000	Ghc'000
Current Tax Expense - Note 7 (b)	31,800	99,220
Deferred Tax Expense - Note 7 c.	(139)	(139)
	31,661	99,081

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

7b. Current Tax

Movement in current tax balance are shown below:

2023	Bal.at Jan 1	Payment	Charge for the year	Adjustments	Bal. at Dec.31
	Ghc'000	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Before 2020	270,019				270,019
2020	48,714				48,714
2021	55,431				55,431
2022	99,220				99,220
2023	-	-	31,800		31,800
	473,384	-	31,800	-	505,184

2022	Bal.at Jan 1	Payment	Charge for the year	Adjustments	Bal. at Dec.31
	Ghc'000	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Before 2019	185,710				185,710
2019	84,309				84,309
2020	48,714				48,714
2021	55,431				55,431
2022	-	-	99,220	-	99,220
	374,164	-	99,220	-	473,384

The Group does not have the right to offset tax assets and liabilities. The current tax balance is made up of:

	GROUP	
	2023	2022
	Ghc'000	Ghc'000
Current tax payable	505,184	473,384
Current tax receivable	(1,471)	(2,145)
Total	503,713	471,239

7c. Deferred Tax

Movements in Deferred Taxes are shown below:

	GROUP	
	2023	2022
	Ghc'000	Ghc'000
Balance at 1 January	272	411
Charged to profit or loss	(139)	(139)
Balance at 31st December	133	272

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

8a. Capital Work-in-Progress

GROUP	Generation Assets	Power Distribution Network	Others	Total
	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000
2023				
Balance as at Jan 1, 2023	975,332	213,636	213,636	1,380,578
Reclassification	-	-	-	-
	975,332	213,636	213,636	1,380,578
Additions during the year	524,885	260,400	113,189	898,474
Write off	-	-	-	-
Transfers	-	-	-	-
Balance as at Dec 31, 2023	1,500,217	474,036	304,799	2,279,052
2022	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000
Balance as at Jan 1, 2022	695,514	193,657	228,909	1,118,080
Reclassification	-	-	0	-
Additions during the year	279,818	81,831	0	361,649
Write off	-	-	-	-
Transfers	-	(61,852)	(37,299)	(99,151)
Balance as at Dec 31, 2022	975,332	213,636	191,610	1,380,578

VRA	Generation Assets	Power Distribution Network	Others	Total
	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000
2023				
Balance as at Jan 1, 2023	975,332	121,590	188,797	1,285,719
Reclassification	-	-	-	-
	975,332	121,590	188,797	1,285,719
Additions during the year	524,885	42,572	113,188	680,645
write off	-	-	-	-
Transfers during the year	-	-	-	-
Transfer to NEDCo	-	-	-	-
Balance as at Dec 31, 2023	1,500,217	164,162	301,985	1,966,364
2022	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000
Balance as at Jan 1, 2022	695,514	39,759	226,096	961,369
Reclassification	-	-	-	-
Additions during the year	279,818	81,831	-	361,649
write of	-	-	-	-
Transfers	-	-	(37,299)	(37,299)
Transfer to NEDCo	-	-	-	-
Balance as at Dec 31, 2022	975,332	121,590	188,797	1,285,719

Financial Review for the year ended 31 December 2023 (Continued)

8b. Property, Plant and Equipment

	Dam Power House and Civil Works	Generating Plant & Machinery	Townships	Building	Floating Craft	Motor Vehicles	Equipment & Furniture	Total
	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000
VRA 2023								
A. VALUATION								
Balance as at Jan 1, 2023	16,572,831	16,841,594	1,151,944	629,271	184,590	246,957	157,634	35,784,821
Transfer & Adjustments								-
Disposal						-		-
Revaluation surplus	7,809,778	8,502,926	514,164	281,155	82,271	56,861	39,523	17,286,678
Additions (including transfers from CWIP)	-	-	-	-				-
Balance as at Dec. 31, 2023	24,382,609	25,344,520	1,666,108	910,426	266,861	303,818	197,157	53,071,499
B. DEPRECIATION								
As At Jan.1, 2023	4,685,405	6,155,771	369,299	63,059	143,823	166,337	137,438	11,721,132
Disposal/Transfers						-		-
Charge for the period	272,275	918,215	59,355	27,927	5,493	32,797	11,198	1,327,260
Revaluation surplus	3,133,155	3,327,547	155,364	45,514	61,987	9,213	4,817	6,737,597
Balance as at Dec 31, 2023	8,090,835	10,401,533	584,018	136,500	211,303	208,347	153,453	19,785,989
C. Carrying Amount								
Balance as at Dec. 31, 2023	16,291,774	14,942,987	1,082,090	773,926	55,558	95,471	43,704	33,285,510
Work-in-Progress as at Dec 31, 2023 (Note 8a)								1,966,364
								35,251,874

Financial Review for the year ended 31 December 2023 (Continued)

8b. Property, Plant and Equipment

	Dam Power House and Civil Work	Generating Plant and Machinery	Townships	Building	Floating Craft	Motor Vehicle	Equipment & Furniture	Total
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
VRA 2022								
A. VALUATION								
Balance as at Jan 1, 2022	11,548,808	11,408,923	818,533	394,048	125,235	201,913	130,059	24,627,519
Disposal						-		-
Revaluation surplus	5,024,023	5,432,671	333,411	235,223	59,355	38,781	27,357	11,150,821
Additions (including transfers from CWIP)	-	-	-	-		6,263	218	6,481
Balance as at Dec. 31, 2022	16,572,831	16,841,594	1,151,944	629,271	184,590	246,957	157,634	35,784,821
B. DEPRECIATION								
As At Jan.1, 2022	3,372,955	3,823,644	229,618	24,120	94,190	139,876	110,175	7,794,578
Disposal/Transfers						-		-
Charge for the period	182,053	511,384	38,645	20,478	5,060	14,413	8,236	780,269
Revaluation surplus	1,130,397	1,820,743	101,036	18,461	44,573	12,048	19,027	3,146,285
Balance as at Dec 31, 2022	4,685,405	6,155,771	369,299	63,059	143,823	166,337	137,438	11,721,132
C. CARRYING AMOUNT								
Balance as at Dec. 31, 2022	11,887,427	10,685,823	782,645	566,213	40,766	80,620	20,196	24,063,689
								1,285,719
Work-in-Progress as at Dec 31, 2022 (Note 8a)								25,349,408

Financial Review for the year ended 31 December 2023 (Continued)

8b. Property, Plant and Equipment

	Dam Power House and Civil Works	Generating Plant & Machinery	Power Distribution Network	Townships	Building	Floating Craft	Motor Vehicles	Equipment & Furniture	Total
	Ghc'000	Ghc'000	Ghc'000	Ghc'000	Ghc'000	Ghc'000	Ghc'000	Ghc'000	Ghc'000
GROUP 2023									
A. VALUATION									
Balance as at Jan 1, 2023	16,572,831	16,842,105	14,354,758	1,151,944	940,264	636,174	446,298	241,606	51,185,980
Transfers/Adjustments			61,852	(4,803)	53	-	1,670	-	58,771.58
Disposal							-		-
Revaluation surplus	7,809,778	8,502,926	5,323,567	801,617	550,753	82,271	106,292	51,335	23,228,539
Additions (including transfers from CWIP)		511	-	-	455	497	2,228	1,924	5,614
Bal as at Dec. 31, 2023	24,382,609	25,345,542	19,740,177	1,948,758	1,491,525	718,942	556,488	294,864	74,478,905
B. DEPRECIATION									
As at Jan. 1, 2023	4,685,404	6,092,061	4,617,859	370,212	121,455	528,780	299,596	299,596	6,911,401
Disposal/Transfers							-	-	-
Charge for the period	414,654	919,006	446,391	59,502	33,914	28,234	48,950	48,950	1,969,053
Revaluation Adjustment	3,133,155	3,327,547	1,400,652	142,461	53,510	61,987	28,997	28,997	8,160,561
as at Dec 31, 2023	8,233,213	10,338,613	6,464,902	572,175	208,879	619,002	377,542	377,542	27,041,015
C. NET BOOK VALUE									
As at Dec 31, 2023	16,149,398	15,006,929	13,275,275	1,376,583	1,282,646	99,940	178,945	178,945	47,437,890
									2,279,052
									49,716,942

Financial Review for the year ended 31 December 2023 (Continued)

8b. Property, Plant and Equipment

	Dam Power House and Civil Work	Generating Plant and Machinery	Power Distribution Network	Townships	Building	Floating Craft	Motor Vehicle	Equipment & Furniture	Total
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
GROUP 2022									
A. VALUATION									
Balance as at Jan 1, 2022	11,548,808	11,408,923	9,662,243	835,883	634,936	576,322	354,189	200,513	35,221,817
Transfer/Adjustments			61,852	(4,803)	53	-	1,670	-	58,772
Disposal							-		-
Revaluation surplus	5,024,023	5,432,671	4,630,663	320,864	304,821	59,355	88,212	39,169	15,899,778
Additions (including transfers from CWIP)		511	-	-	455	497	2,228	1,924	5,614
Balance as at Dec. 31, 2022	16,572,831	16,842,105	14,354,758	1,151,944	940,264	636,174	446,298	241,606	51,185,980
B. DEPRECIATION									
As At Jan.1, 2022	3,372,954	3,759,143	2,820,816	243,287	68,533	456,406	237,198	154,130	11,112,467
Prior Year Adjustment									-
Disposal/Transfers							-		-
Charge for the period	182,053	512,175	396,391	38,792	26,465	27,801	30,566	15,441	1,229,684
Revaluation Surplus	1,130,397	1,820,743	1,400,652	88,133	26,457	44,573	31,832	26,462	4,569,249
as at Dec 31, 2022	4,685,404	6,092,061	4,617,859	370,212	121,455	528,780	299,596	196,034	16,911,400
C. NET BOOK VALUE									
As at Dec. 31, 2022	11,887,427	10,750,044	9,736,899	781,732	818,809	107,394	146,703	45,573	34,274,581
Work-in-Progress as at Dec 31, 2022 (Note 8a)									1,380,578
									35,655,159

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

8b. Property, Plant and Equipment

The net carrying amount of generating plant and machinery acquired under finance leases at the end of the year was GhS4,470.00 million (2022: GhS2,470.00 million)

There were no restrictions on the Group's title to items of property, plant and equipment at the end of the year. No equipment had been pledged as security for liabilities.

8c. Disposal of Property, Plant and Equipment

	VRA		GROUP	
	2023	2022	2023	2022
	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Cost	399	399	399	399
Accumulated Depreciation	(399)	(399)	(399)	(399)
Carrying amount	-	-	-	-
Revaluation on disposed assets	-	-	-	-
Net Carrying Amount	-	-	-	-
Proceeds from Disposal	308	546	308	546
Adjustment	-	-	-	-
Profit /(loss) on disposal	308	546	308	546

8d. Intangible Assets

Cost				
Balance as at Jan 1	-	-	160	160
Additions	-	-	-	-
Balance as at Dec. 31	-	-	160	160
Amortisation				
Balance as at Jan 1	-	-	160	160
Charge for the year	-	-	-	-
Balance as at Dec 31	-	-	160	160
Carrying Amount	-	-	-	-

9a. Investment in Subsidiaries

TAPCO(100% owned)	169,113	169,113	-	-
VLTC(100% owned)	1,123	1,123	-	-
AHL (100% owned)	5,624	5,624	-	-
PROPCO (100%)	36,046	36,046	-	-
NEDCo(100 %)	200,000	200,000	-	-
VHSL (100% Owned)	48,919	48,919	-	-
	460,825	460,825	-	-

All the subsidiaries are incorporated in the Republic of Ghana.

9b. Investment in Equity Securities managed by TAPCo

TICO (10% Owned)	78,967	4,516
WAGPCo (16.38% Owned)	1,256,377	851,754
	1,335,344	856,270

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

10. Other Long Term Investments

	VRA		GROUP	
	2023	2022	2023	2022
	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Debt Contingency Fund	81,522	119,146	81,522	119,146
Other Long Term Investment	69,396	55,580	1,339,061	1,126,030
	150,918	174,726	1,420,583	1,245,176

This represents the Group's investment in foreign currency money market instruments to enable the Group meet its debt obligations during periods of operational difficulties

11. Inventories

	VRA		GROUP	
	2023	2022	2023	2022
	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Inventory and spare parts	375,327	268,017	463,822	333,415
Write down for obsolescence	-	-	-	-
	375,327	268,017	463,822	333,415
Fuel for Thermal Plant	196,377	234,468	196,377	234,468
	571,704	502,485	660,199	567,883

Cost of inventory is determined by using the weighted average cost formula.

12. Trade and other Receivables

	VRA		GROUP	
	2023	2022	2023	2022
		Ghc'000	Ghc'000	Ghc'000
Trade Receivables	9,369,577	5,751,756	10,979,822	7,192,180
Provision for expected credit losses	(251,166)	(230,666)	(315,531)	(292,484)
	9,118,411	5,521,090	10,664,292	6,899,696
Prepayments	379,521	112,191	397,630	217,096
Amounts due from related parties	3,529,043	1,780,910	1,707,117	56,976
Amount due from Government of Ghana in respect of the AMERI transaction - Note 2(c)	1,131,700	1,131,700	1,131,700	1,131,700
Other Receivables	2,716,285	1,724,616	1,642,385	1,740,285
Staff Advances	44,414	41,175	51,591	47,598
	16,919,374	10,311,681	15,594,715	10,093,352
Current	16,895,928	10,288,369	15,571,269	10,070,040
Non-current	23,446	23,312	23,446	23,312
	16,919,374	10,311,681	15,594,715	10,093,352

Financial Review for the year ended 31 December 2022 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

13. Short Term Investments

Short-term investments are made up of investments in Government of Ghana treasury bills and money market instruments held with financial institutions.

14 Cash and Bank	VRA		GROUP	
	2023	2022	2023	2022
	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Foreign Currency	540,289	809,341	546,671	817,563
Local Currency	303,001	117,647	1,941,571	961,215
Cash on Hand	215	507	535	766
Cash and cash equivalents in the statement of financial position	843,505	927,495	2,488,777	1,779,544
Short term investments	50,576	33,261	115,683	393,604
Bank overdraft	-	-	-	-
Cash and cash equivalents in the statement of cash flows	894,081	960,756	2,604,459	2,173,147

*Short-term investment included as cash and cash equivalents in the Group's financial statements are investments in Government of Ghana treasury bills and other money market instruments with maturities of 3 months or less.

15 Payables	VRA		GROUP	
	2023	2022	2023	2022
	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Current Portion				
Trade Payables	12,778,092	8,046,568	13,586,979	8,805,101
Amount due to related parties	275,146	275,783	-	-
Sundry Payables	189,498	13,719	333,848	837,293
Capital Grant	-	-	1,715	44,122
Accruals and Provisions	15,008	27,034	(42,970)	5,613
	13,257,744	8,363,104	13,879,571	9,692,130
Capital Grant	-	-	-	-
Non-Current Portion				
Other Payables				
Deferred Tax	270,067	270,067	322,897	270,067
Capital Grant (Note 20)	-	-	133	272
	-	-	4,312,510	49,068
Total Payables	270,067	270,067	4,635,540	319,407
	13,527,811	8,633,171	18,515,111	10,011,537

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

16a	Borrowings	VRA		GROUP	
		2023	2022	2023	2022
		Ghc'000	Ghc'000	Ghc'000	Ghc'000
	Current Portion				
	Current portion of long and medium term loans	167,659	159,648	-	-
	Finance lease obligations due within 1 year	-	2,470	-	2,470
	Bank Overdrafts	-	-	-	-
	Loan interest and commitment charges	100,362	71,950	100,362	71,950
	Short-term borrowings	308,534	62,363	308,534	62,363
		576,555	296,431	408,896	136,783
	Non-Current Portion				
	Finance lease obligations due after 1 year	-	-	-	-
	Amount due after one year but before five years	670,637	638,592	838,296	798,239
	Amount due after five years but before ten years				
	Amount due after ten years	1,861,234	1,352,008	1,861,234	1,352,008
		2,531,871	1,990,600	2,699,530	2,150,247
	Total Borrowing	3,108,426	2,287,031	3,108,426	2,287,030

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

16b. Borrowings - Movement in loan balances

The following shows the movement in loan balances during the year.

VRA

	Balance as at 1-01-2023	Drawings	Repayments	Adjustment	Exchange Variation	Balance as at 31-12-2022
	GH c'000	GH c'000	GH c'000	GH c'000	GH c'000	GH c'000
Long Term Loans						
Kpong Hydro Project						
Kuwait Fund - 339	26,248				3,231	29,479
Kuwait Fund	117,886				6,452	124,338
Societe General - T3	575,504				230,340	805,844
AFD(Kpong GS Retrofit)	340,608		(24,459)		155,786	471,935
KfW GoG 17MW Photovoltaic System	168,243	4,425			77,493	250,161
KfW GoG 12MW Photovoltaic System II	55,006	-			25,220	80,226
EIB (Kpong GS Retrofit)	68,513	-			30,738	99,251
Subtotal: Long Term Loans	1,352,008	4,425	(24,459)	-	529,260	1,861,234
Medium Term Loans						
ABSA/STANBIC \$120M	798,240	-	(268,572)		308,629	838,296
Afrexim \$185m	-		-		-	-
Subtotal: Medium Term Loan	798,240	-	(268,572)		308,629	838,296
Total: Long and Medium Term Loans	2,150,248	4,425	(293,031)	-	837,889	2,699,530
Loans interest and commitment charges						
	71,950		-		28,412	100,362

VRA

	Balance as at 01.01.2023	Drawings	Repayments	Exchange Variation	Balance as at 31-12-2023
	GH c'000	GH c'000	GH c'000	GH c'000	GH c'000
Short Term Loans					
Ghib	62,363	95,348	(106,832)	24,795	75,674
TAPCo	-	220,008	-	12,852	232,860
Subtotal: Short Term Loans	62,363	315,356	(106,832)	37,647	308,534
Finance lease obligations - Note 16c					
Total Borrowings	2,284,561	319,781	(399,863)	875,536	3,108,426

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

16b. Borrowings - Movement in loan balances

The following shows the movement in loan balances during the year

GROUP

	Balance as at 1-01-2023	Drawings	Repayments	Adjustment	Exchange Variation	Balance as at 31-12-2022
	GH c'000	GH c'000	GH c'000	GH c'000	GH c'000	GH c'000
Long Term Loans						
Kpong Hydro Project						
Kuwait Fund - 339	26,248	-	-	-	3,231	29,479
Kuwait Fund	117,886	-	-	-	6,452	124,338
Societe General - T3	575,504	-	-	-	230,340	805,844
AFD(Kpong GS Retrofit)	340,608	-	(24,459)	-	155,786	471,935
KfW GoG 17MW Photovoltaic System	168,243	4,425	-	-	77,493	250,161
KfW GoG 12MW Photovoltaic System II	55,006	-	-	-	25,220	80,226
EIB (Kpong GS Retrofit)	68,513	-	-	-	30,738	99,251
Subtotal: Long Term Loans	1,352,008	4,425	(24,459)	-	529,260	1,861,234
Medium Term Loans						
ABSA/STANBIC \$120M	798,240	-	(268,573)	-	308,629	838,296
Afrexim \$185m	-	-	-	-	-	-
Subtotal: Medium Term Loan	798,240	4,425	(268,573)	-	308,629	838,296
Total: Long and Medium Term Loans	2,150,248	4,425	(293,032)	-	837,889	2,699,530
Loans interest and commitment charges	71,950	-	-	-	28,412	100,362

	Balance as at 01.01.2023	Drawings	Repayments	Exchange Variation	Balance at at 31-12-2023
Short Term Loans					
GHIB	62,363	95,348	(106,832)	24,795	75,674
TAPCo	-	220,008	-	12,852	232,860
Subtotal: Short Term Loans	62,363	95,348	(106,832)	24,795	308,534
Total Borrowings	2,284,561	99,773	(399,863)	862,684	3,108,426

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

16b. Long term loans

Details of the long term loans are shown below:

Loan	Currency	Contract Amount	Interest Rate	Maturity Date
KUWAIT 339	KWD	787,680	4%	2029
SOCIETE GENERAL-T3	USD	75,800,000	2.08%	2024
KUWAIT FUND	KWD	3,446,000	4%	2029
AFD(Kpong GS Retrofit Project)	EUR	50,000,000	1.99%	2041
EIB(Kpong GS Retrofit Project)	EUR	12,500,000	Variable	2046
KfW(Kaleo/Lawra Solar Project)	EUR	22,816,667	0.75%	2055
KfW(Kaleo Phase II Solar Project)	EUR	15,000,000	0.75%	2060

16c. Finance Lease Obligations

Finance lease liabilities are payable as follows:

VRA

	Minimum Lease Payments		Interest		Present Value of Minimum Lease Payment	
	2023	2022	2023	2022	2023	2022
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Less than one year	-	2,469	-	-	-	2,469
Between one and five years	-	2,469	-	-	-	2,469

GROUP

	Minimum Lease Payments		Interest		Present Value of Minimum Lease Payment	
	2023	2022	2023	2022	2023	2022
	GH¢'000	GH¢'002	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Less than one year	189	3,344	-	-	189	3,344
Between one and five years	-	-	-	-	-	-
	189	3,344	-	-	189	3,344

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

17. Investment by the Republic of Ghana

	VRA		GROUP	
	2023	2022	2023	2022
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at beginning of the year	4,617,713	4,433,937	4,617,713	4,433,937
Addition during the year	-	183,776	-	183,776
Balance at close of the year	4,617,713	4,617,713	4,617,713	4,617,713

18. The revaluation surplus arises as a result of revaluation of property, plant and equipment

	VRA		GROUP	
	2023	2022	2023	2022
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at beginning of the year	21,861,957	14,097,485	33,135,435	22,305,621
Surplus for the year	10,549,081	8,004,536	10,497,811	11,226,143
Adjustments	-	-	992,396	-
Transfer to Retained Earnings	(320,500)	(240,064)	(334,431)	(396,329)
Balance at close of the year	32,090,538	21,861,957	44,291,211	33,135,435

The revaluation surplus is not distributable to owners of the parent

19. Employee Benefits

a. Defined benefit obligations-schemes funded

VRA operates the following defined benefit schemes:

i. Long-Service Awards

This defined scheme entitles employees to a benefit package at the end of their service to the Authority. The benefit package is paid at the point of exit on a graduated scale based on the length of service ranging from 10 to 40 years.

ii. Severance benefit

This relates to rewards (package) paid to employees who attain certain milestone with the Authority and exit before their due date of retirement.

iii. Post-Retirement Medical Benefit

There is no contribution by the employee towards this benefit and no insurance scheme. The employer simply bears the medical costs (no cap defined) of the retiree and their spouse for as long as the retiree is alive. After the death of the retiree the spouse will be taken care of for 6 months after which they will be removed from the scheme.

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

The present value of the benefits at the end of the year are shown below:

	VRA		GROUP	
	2023	2022	2023	2022
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Long-service award	108,191	49,749	159,687	74,408
Severance Benefit	26,570	26,450	35,944	37,223
Post-Retirement medical benefit	226,464	194,925	241,502	211,344
	361,226	271,124	437,132	322,975

b. Defined benefit obligations - movement in net defined benefit liability

The following tables show recomputations from the opening balances to the closing balances for the net defined benefit liability and its components of the various employee benefit schemes:

Long-service award

	VRA		GROUP	
	2023	2022	2023	2022
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1 January	108,191	49,749	159,687	74,408
Included in profit or loss:				
Current service cost	11,420	4,895	15,358	6,795
Past service cost	-	-	-	-
Net interest	7,952	6,676	17,930	10,129
	19,372	11,571	33,287	16,924
Included in other comprehensive income:				
Actuarial loss (gain arising from):				
Actuarial loss (gain arising from)				
Demographic/Financial Assumptions	46,789	(684)	66,070	(360)
Other sources	46,789	(684)	66,070	(360)
Benefits paid	(7,719)	(7,597)	(14,078)	(11,227)
Balance at 31 December	166,633	53,039	244,966	79,745

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

Severance Benefit

	VRA		GROUP	
	2023	2022	2023	2022
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1 January	26,450	25,122	37,223	34,458
Included in profit or loss:				
- Current service cost	1,412	1,444	1,940	2,057
- Past services cost				
- Net interest	3,622	3,454	5,404	4,934
	5,034	4,898	7,344	6,991
Included in other comprehensive income:				
actuarial loss (gain arising from)			-	-
- Demographic/Financial assumptions	(1,566)	635	(4,106)	1,168
- Other sources	-	-		
	(1,566)	635	(4,106)	1,168
Benefits paid	(3,348)	(4,205)	(4,518)	(5,394)
Balance at 31 December	26,571	26,450	35,942	37,223

Post-retirement medical benefit

	VRA		GROUP	
	2023	2022	2023	2022
Balance at 1 January	194,925	172,381	211,344	186,801
Included in profit or loss:				
- Current service cost	6,640	5,749	7,260	6,308
- Past services cost				
- Net interest	26,203	23,156	29,010	25,364
	32,843	28,905	36,270	31,672
Included in other comprehensive income:				
actuarial loss (gain arising from)	-	-	-	-
Demographic/Financial assumptions	4,445	(612)	42	(1,081)
other sources				
	4,445	(612)	42	(1,081)
Benefits paid	(5,749)	(5,749)	(6,094)	(6,048)
Balance at 31 December	226,464	194,925	241,562	211,344

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

Total	VRA		GROUP	
	2023	2022	2023	2022
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1 January	271,124	243,963	322,975	290,331
Included in profit or loss:				
- Current service cost	19,472	12,088	24,558	15,162
- Past services cost	-	-	-	-
- Net interest	37,778	33,286	52,345	40,426
	57,250	45,374	76,903	55,588
Included in other comprehensive income:				
Actuarial loss (gain arising from)				
- Demographic/Financial assumptions	49,669	(662)	62,005	(273)
- Other sources				
	49,669	(662)	62,005	(273)
Benefits paid	(16,817)	(17,551)	(24,752)	(22,671)
Balance at 31 December	361,226	271,124	437,131	322,975

c. Defined benefits obligations-actuarial assumptions

The following are the principal assumptions at reporting date

	VRA		GROUP	
	2023	2022	2023	2022
Inflation rate	15.00%	10.00%	15.00%	10.00%
Discount rate	18.00%	13.00%	18.00%	13.00%
Nominal inflation gap	3.00%	3.00%	3.00%	3.00%
Withdrawal Rate	2.50%	2.50%	2.50%	2.50%
Retirement age	60 years	60 years	60 years	60 years

Mortality in 2023 was assumed to follow the mortality rates according to the SA85-90 table. This assumption was the same as what was used in 2022 to reflect the the SSNIT mortality.

20. Government Grant

These are grants in the form of crafts and other assets received by Volta Lake Transport Company Ltd from the Government of Ghana during the year to support the company's operations.

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

21. Debt contingency fund reserve

The debt contingency fund reserve was established by the Authority to enable the Authority meet its debt obligations during periods of operational difficulties. The fund is supported by investments in foreign currency money market instruments. At the end of every year, an amount (equal to the change in the value of the investments) is transferred from retained earnings to the debt contingency fund service.

Changes in the value of the investment are attributable to interest earned and foreign exchange gains/losses.

22. Reconciliation of operating profit/loss to operating cash flow

	VRA		GROUP	
	2023	2022	2023	2022
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Profit (Loss) after Tax	80,394	110,893	(389,122)	(283,231)
Adjustments for:				
Depreciation & amortisation	1,327,260	780,270	1,969,053	1,218,267
Exchange (Gain) / Loss	591,431	315,206	591,431	71,223
Profit on disposal of Property, Plant and Equipment	(308)	(546)	(308)	(546)
Investment Income	(15,318)	(9,125)	(142,514)	(162,017)
Finance expense	184,752	116,466	184,752	116,466
Capital Work-in-progress written off	-	-	-	-
Prior year adjustments	-	-	-	-
Amortisation of grant	-	-	(185,998)	(1,209)
Tax Expense	-	-	31,799	98,383
	2,168,211	1,313,164	2,059,092	1,057,336
Changes in:				
- Inventories	30,784	9,227	7,688	(8,400)
- Receivables	611,543	577,433	1,006,920	696,751
- Payables	(2,206,896)	(1,289,737)	(1,913,560)	(814,125)
- Provisions and defined benefits	90,102	27,161	114,157	32,644
Cash Generated from Operating activities	693,744	637,248	1,274,296	964,206
Tax paid	-	-	(177)	(146)
Interest paid	-	-	-	-
Net cash from operating activities	693,744	637,248	1,274,118	964,059

Financial Review for the year ended 31 December 2023 (Continued)

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2023

23. Going concern consideration

The Authority recorded a net profit of GHS80.39 million for the year ended 31 December, 2023 (2022: GHS110.89 million) and as at the date, the current assets exceeded current liabilities by GHS4,527.41 million (2022: GHS3,092.08 million).

24. Capital Commitments

There was capital commitments of GHS580.71 million for the year. (2022: GHS33.44 million). The Group had contracts with Messrs Synohydro, Gold Key Properties, Dredge Masters and Gadol Construction.

25. Contingent liabilities

As at the reporting date, the Authority had other legal cases pending judgment. The Directors believe that the outcome of these cases will be favorable to the Authority.

26. Related parties

Related party transactions

	VRA		GROUP	
	2023	2022	2023	2022
	GHC'000	GHC'000	GHC'000	GHC'000
Sale of Power				
NEDCo	1,188,718	716,132	1,188,718	716,132
Purchase of Power				
TICO	335,538	335,538	335,538	335,538

