

2020 Annual Report & FINANCIAL STATEMENT



**VOLTA
RIVER
AUTHORITY**

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Our Value Statement



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.

Our Core Values



Accountability



Commitment



Trust

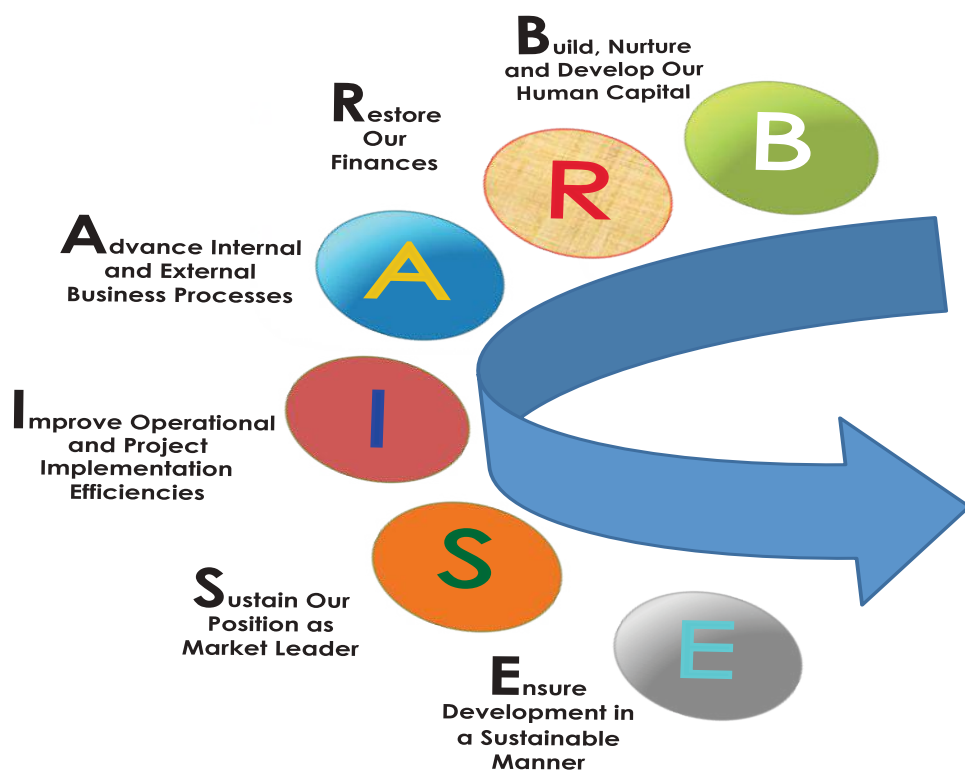


Integrity



Teamwork

Our Strategy



Our Operational Areas



Generation Capacity



KTPS 220MW Thermal Plant



6.5MWp Lawra Solar Power Plant



Akosombo Dam 1020MW Hydro Plant



2.5 MWp Navrongo Solar Power Plant



Kpong Dam 160MW Hydro Plant



330MW Takoradi Thermal Power Station (TAPCo -T1), Aboadze



110MW TTPC1 and 80MW TTPC 2 Thermal Plants

Corporate Achievements



Energy Company of the year, awarded by Ghana Business Awards



Best Company in Clean Water Provision Project, awarded by Sustainability & Social Investment Awards 2020



Company of the year, Public Sector, 2020, awarded by Ghana Business Awards



Best Company in Clean Water Provision Project, awarded by Sustainability & Social Investment Awards 2020



CEO of the year-Power, awarded by Ghana Energy Awards 2020



Best Company in Providing Sanitation Facilities, awarded by Ghana Energy Awards



CEO of the year 2020 Energy/Power Sector, awarded by CEO Summit



Corporate Profile

The Volta River Authority (VRA) 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 has the key function of creating the 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 as the Ghana Grid Company (GRIDCo), while VRA's distribution agency, the Northern Electricity Department (NED), has been transformed into the Northern Electricity Distribution Company (NEDCo), a wholly owned subsidiary of VRA.

Restructuring and Re-alignment

The Authority 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 refocus and re-orient business operations and organisational mindset and transform 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.

Subsequent to our quest to ensure the proper alignments of Departments and Units within the Authority, VRA continued the process of re-alignments. The Corporate Communications Unit originally under the Corporate Strategy Department, has been re-assigned to the office of the Deputy Chief Executive, Services and designated the Corporate Affairs & External Relations Unit (CA&ER). The Unit now comprises: Corporate Communications, Travels & Protocol and the Executive Administration, which includes the International Desk. The Refrigeration and Air-conditioning Unit within the Technical Services Department has also been re-assigned to the Facilities Management Section of the Real Estates and Securities Services Department.

Corporate Profile...

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.

Subsequently, the Authority operates a total installed generation capacity of 2,519MW. The Akosombo and Kpong Hydroelectric Plants have installed capacities of 1,020MW and 160MW respectively. The thermal generating facilities at Aboadze, Tema and Kpone enclaves with installed total capacity of 1,330MW, in addition to the 9MWp Navrongo and Lawra Solar Power Plants complement the hydro generating facilities. It is instructive to state that, the total installed capacity as stated is exclusive of Takoradi Thermal 3's (T3) generation capacity of 132MW but inclusive of AMERI's generation capacity of 250MW.

Capacity Expansion Programme

The Authority has the mandate to provide affordable, reliable, safe, and competitively priced electricity to meet stakeholders' expectation. This we strive to achieve by strategically focusing on measures and programmes that would 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 Government's policy on renewable energy development, VRA is pursuing the development of potential solar and wind energy projects. The successful implementation of the identified projects in the long term would ensure sustainable power generation, reduce our carbon footprints, as well as positively influence the global climate change agenda. The objective is to ensure VRA achieves its strategy of developing in a sustainable manner.

Northern Electricity Distribution Company Ltd.

The Northern Electricity Distribution Company (NEDCo), a wholly owned subsidiary of VRA, is the sole distributor of electricity in the Upper East, Upper West, North East, Savannah, Northern, Brong-Ahafo, Bono East, parts of Oti, Ashanti and

Western North regions. NEDCo, which manages VRA's electricity supply to some border towns in Burkina Faso, Cote d'Ivoire and Togo, has a customer population of 997,203 and a maximum load demand of 334MW. NEDCo was originally developed as an integral part of the larger Northern Electrification and System Reinforcement Project (NESRP).

Customers and Power Interconnectivity

The Northern Electricity Distribution Company (NEDCo), Electricity Company of Ghana (ECG) and Enclave Power Company (EPC) are the major distribution companies VRA sells power to. Power sold to these entities cater mainly for domestic, industrial, and commercial demands. NEDCo distributes power to the Upper East, Upper West, North East, Savannah, Northern, Brong-Ahafo, Bono East, parts of Oti, Ashanti and Western North regions. ECG distributes power in the Southern parts of the country, 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 including Newmont Ghana Gold Ltd., AngloGold Ashanti, Future Global Resources, Aluworks, Diamond Cement and Akosombo Textiles Ltd.

Sub-Regional Cooperation

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

VRA is a partner in the development of the West African Gas Pipeline (WAGP), which guarantees our competitiveness in power delivery in the sub region. Again, VRA is a founding/principal member of the Association of Power Utilities of Africa (APUA), contributing significantly to policies on 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 a member of the West African Power Pool (WAPP).

Corporate Profile...

Relations with Statutory Bodies

VRA has effective 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 and ensuring the provision of the highest quality of electricity to consumers.
- **Ministry of Energy:** Provides supervision and policy direction for the energy sector.

NON-POWER ACTIVITIES

Pursuant to our responsibility of developing the Volta Basin, VRA operates six subsidiary companies: 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.

1.0 Subsidiary Companies

a. Akosombo Hotels Ltd.

The Akosombo Hotels Limited (Volta Hotel), incorporated in 1991, runs a 3-star hotel, 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. Its focus is the optimisation of VRA's non-core real estate assets by converting them into commercially viable investment assets for income and capital growth. In the long term, it strategically aims at creating a diversified portfolio of income generating real estate assets for VRA.

c. Kpong Farms Ltd.

The 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 use in 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 a huge potential for expansion with the private sector.

d. Volta Lake Transport Company Ltd.

The Volta Lake Transport Company Limited (VLTC), incorporated in 1970, 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), etc.

2.0 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 for this intervention is to strengthen engagements with the communities impacted by the Authority's operations but not captured under the Trust Fund.

Again, to enhance the Authority's partnership with the impacted communities, VRA in 2012 introduced the Community Development Programme (CDP), as a measure to empower the affected communities and stimulate economic development. The CDP, which focuses on six (6) thematic areas including Social Infrastructural Projects, Environmental Protection Activities, Industrial Attachment, Educational Scholarship, Healthcare, and Support for Cultural Activities, has the objective of capturing beneficiary expectations and strengthening our partnerships with the communities and the District/ Municipal Assemblies.

In line with the upcoming 60th anniversary celebration, a Seven (7) member Anniversary Planning Committee (APC), chaired by the Deputy Chief Executive, Services, Dr. Mrs. I. Stella Agyenim-Boateng, was inaugurated by the Chief Executive on May 19, 2020. The inauguration preceded the launch of the Anniversary at Kempinski Hotel Gold Coast City Accra in October 2020, under the theme: “**Celebrating 60 years in the Power Business; Our Legacy Our Future**”.

In a bid to ensure effective participation by all stakeholders, some Staff, and representatives of identifiable groups within the Authority were co-opted to serve on the three (3) Sub-Committees, that were formed. The committees include the Events and Programmes Sub-Committee, chaired by Mr. David Adomako-Mensah; the Communications/Publicity/Marketing Sub-Committee; chaired by Mrs. Awurama Ofori-Anin and the Commemorative Materials & Design Sub-Committee, chaired by Mr. Samuel deGraft-Johnson.

60th Anniversary Steering Committee



Dr. Mrs. I. Stella Agyenim-Boateng
Chairperson



Surv. David Adomako-Mensah
Member



Mrs. Awurama Ofori-Ani
Member



Ing. Ebenezer Koramoa
Member



Mrs. Vivian Yebuah
Member



Mr. Samuel deGraft-Johnson
Member



Ms. Joyce Asiedu Ofei
Member/Secretary

Launch of 60th Anniversary

On October 28, 2020, the VRA at 60 Anniversary was officially launched at the Kempinski Hotel Gold Coast City Accra. The event was organised under the strict observance of the COVID-19 protocols. All Stakeholders including past and present Staff, the VRA Board, members of the Diplomatic Corps, Traditional Rulers from the impacted communities and Sister Utility organisations attended the event. Hon. Yaw Osafo-Maafo, Senior Minister, Office of the President, represented the Government of Ghana to deliver the keynote address. A key feature at the event was the outdoor of the Authority's 60th Anniversary logo and cloth.



Launch of 60th Anniversary...





Corporate Governance

Board Chairman & Members As At December 31, 2020



Mr. Kweku Andoh Awotwi
Chairman



Mr. Emmanuel Antwi-Darkwa
Chief Executive



Rev. Dr. Joyce Rosalind Aryee
Member



Nana Kobina Nketsia V
Member



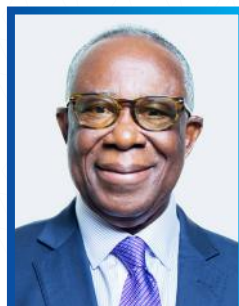
Chief Musa Badimsugru Adam
Member



Janet Anane (Mrs.)
Member



Mr. El-Farouk Umar
Member



Mr. Richard O. Okrah
Member



Claudia Gyeke-Aboagye (Mrs.)
Board Secretary, VRA

Executive and Management Team

Office Of The Chief Executive

<i>Name</i>	<i>Position</i>
Ing. Emmanuel Antwi-Darkwa	Chief Executive
Ing. Frank Akligo	Advisor, Office of the Chief Executive
Mr. Ebenezer Kwadwo Omari-Mireku	Director, Internal Audit
Ing. Alfred D. Sackeyfio	Director, Corporate Strategy

Engineering & Operations Branch

<i>Name</i>	<i>Position</i>
Ing. Emmanuel Dankwa Osafo	Deputy Chief Executive
Ing. Kenneth Mensah Arthur	Director, Hydro Generation
Ing. Edward Ekw Obeng-Kenzo	Director, Thermal Generation SBU
Ing. Ebenezer Apau Koramoa	Director, Engineering Services
Ing. Johnson Kwao Hlordjie	Director, Environment & Sustainable Development
Ing. Samuel Odartey Lamptey	Director, Technical Services
Dr. Isaac Adjei Doku	Director, Commercial Services

Finance Branch

<i>Name</i>	<i>Position</i>
Dr. Ebenezer Tagoe	Deputy Chief Executive
Miriam Darke (Mrs.)	Director, Procurement
Mr. Richard Ahenkora Osei	Director, Investment
Mr. Paul Seniagya	Director, Finance
Mrs. Awurama Ofori-Ani	Director, Office of the DCE, with oversight responsibility for the Management Information System Department
Mr. Frank Kusi	Director, Office of the DCE

Executive and Management Team...

Services Branch

<i>Name</i>	<i>Position</i>
Dr. Irene Stella Agyenim-Boateng (Mrs.)	Deputy Chief Executive
Ellen Bannerman-Quist (Mrs.)	Director, Legal Services
Surv. David Adomako-Mensah	Director, Real Estate and Security
Mr. Eric Mensah-Bonsu	Director, Human Resources/VRA Schools
Mr. Kingsley Gyamfi	Ag. Chief Learning Officer, VRA Academy
Vivian Jennifer Yebuah	Manager, Akosombo Management Committee

Subsidiaries

<i>Name</i>	<i>Position</i>	<i>Registered Company</i>
Dr. Osmani Aludiba Ayuba	Managing Director	Northern Electricity Distribution Company
Dr. Mrs. Rebecca Acquaaah-Arhin	Medical Director	VRA Health Services Ltd.
Mr. William Bobie	Managing Director	Property Holding Company (PROPCo)
Mr. Edwin Adi Aryitey	General Manager	Akosombo Hotels Ltd.
Lilian Arhinful (Mrs.)	Ag. Farm Manager	Kpong Farms Ltd.
Mrs. Rose Appiah Okyere	Ag. Managing Director	Volta Lake Transport Company

Strategic Business Units

<i>Name</i>	<i>Position</i>	<i>Registered Company</i>
Mr. Eric Mensah-Bonsu	Oversight Responsibility	VRA International Schools

Staff On Secondment

<i>Name</i>	<i>Position</i>	<i>Registered Company</i>
Alexandra Totoe (Ms.)	Chief Financial Advisor	State Interest and Governance Authority
Ing. Theophilus Nii Okai	Executive Director	Nuclear Power Ghana Limited
Kwesi Agyeman Prempeh	General Manager, Corporate Affairs	West Africa Gas Pipeline Company

Chairman's Statement



Dear Stakeholders,

On behalf of the Board of Directors, Management and Staff of the Volta River Authority (VRA), I am pleased to present to you the Authority's Financial and Operational report for the year 2020.

This report focuses on the Authority's achievements, expectations, and challenges as we continue to strive to become a "NEW VRA" which is resilient, viable and sustainable with multiple business interests.

Before I proceed, it is instructive to state that this current Board was ushered into office mid- 2021. Thus, this report I present, largely reflects the efforts of the previous Board. I would therefore want to use the opportunity to commend them for their remarkable efforts during their tenure of office.

The fiscal year 2020, in spite of the prevailing COVID-19 pandemic, ended with an excellent financial performance. Indeed, in the year under review, the Volta River Authority recorded an impressive improvement in all its major performance metrics. The major highlight of the year was the ability of Management and Staff to rise up to the occasion with an innovative combination of skills and experience to solve problems by providing tailor-made solutions, inuring to our good operational and financial performance.

Our growth over the past year as a successful business organisation has been guided by our objective of transforming our business, through the adoption of globally accepted standards, which are all focused on how we make a positive impact on our Stakeholders and the Ghanaian economy. Over the period, we navigated the uncertain energy sector landscape through the accelerated implementation of technological work solutions, strategising our work schedules and ultimately defining our role in the society.

The Year 2020 involved unprecedented challenges and opportunities in our business environment. We attribute our growth and achievements to our resilience and agility arising from the swift and decisive actions and decisions taken by Management and the Board in dealing with the COVID-19 pandemic and keeping the focus on our diversification agenda. These invariably led to our meeting of targets as outlined in our corporate strategy at a time of global uncertainty.

Operations Review:

The Authority's hydro generation facilities in Akosombo and Akuse played a pivotal role in Ghana's power generation mix even though there was a decline in generation from hydro. During the period under review, contribution from hydro decreased by 184GWh representing 3% from 6,208GWh in 2019 to 6,024GWh in 2020. Similarly, thermal generation also decreased by 4% (387GWh) from 3,460GWh in 2019 to 3,256GWh in 2020. Our thermal generation included 1,283GWh of energy received from the AMERI Plant as compared to the 2019 generation of 1,483GWh. The contribution of solar, however, remained at 3GWh, similar to its contribution in 2019.

To supplement generation from VRA's generating facilities, a total of 1,193GWh was purchased from the Takoradi International Company Limited (TICO) representing a decline of 26% (423GWh) compared to the 1,616GWh contracted in 2019. There was also a net inadvertent power exchange of 58GWh from Compagnie Ivoirienne d'Electricite (CIE), compared to 127GWh in 2019.

Operational Maintenance

Consistent with best practice and in line with our strict maintenance culture, the Authority ensured that it adhered to its planned maintenance schedules. The objective as always, is to guarantee the availability of our generating plants and ensure optimum operation. It is instructive to state however that, though the Authority could not meet its thermal generation target for the year, VRA ended the year strongly, owing to the commitment of the Staff of the Thermal Generation SBU, who ensured TTPS-T1 operated fully on combined cycle during the fourth (4th) quarter of the year.

During the year under review, Management kept to its decision to power the Authority's thermal facilities exclusively on natural gas. In line with that commitment, the Authority maintained a no Light Crude Oil (LCO) combustion during the period. Consequently, a total of 33,606,084 MMBtu of Natural Gas was utilised during the year. This represents a decline of 11.53% (4,380,364MMBtu) compared to the 37,986,448.40MMBtu utilised in 2019.

Financial Health

Revenue (Group) from the sale of electricity decreased by 2.29 % (GH¢91.74 million) to GH¢3,921,148 million from the 2019 sale of GH¢4,012,892 million. This was mainly due to the combined effects of 8.72 % (938GWh) decrease in the volume of energy sold, from 10,758GWh in 2019 to 9,820GWh in 2020, and a 4.09% decrease in the average tariff of ECG from GH¢0.28129/kWh in 2019 to GH¢0.26978kWh in 2020. The charge for Transmission losses (TSC2) also declined by 37.09% from an average of GH¢0.018335/kWh in 2019 to GH¢0.011534/kWh in 2020. The volume of energy sold to regulated customers in tandem declined by 20.72% (1,390GWh) from 6,709GWh in 2019 to 5,319GWh in 2020. Meanwhile, the volume of electricity sold to deregulated customers, which attract relatively higher tariffs, increased by 11.16 (452GWh) from 4,049GWh in 2019 to 4,501GWh in 2020. This is, largely on account of sales to SONABEL Bolga-Ouagadogou, which increased from 519GWh in 2019 to 930GWh in 2020, an increase of 411GWh (79.19%).

Industrial Relations

The industrial environment was reasonably stable. Management took up a strong leadership position in dealing with the pandemic and effectively collaborated with staff on many fronts to ensure the development of a robust and enabling work environment for all, thus ensuring the attainment of corporative objectives. In line with the above,

Management continued to provide the necessary platform, opportunities, and programmes to advance the skills and knowledge of the Staff. This was achieved largely by relying on the Authority's ICT infrastructure, for all training and development programmes. This intervention ensured business continuity, whilst maintaining a team of well-motivated, committed, disciplined, and dedicated workforce, with the right focus on delivery. I can say that this year we have reached a mutually agreeable wage settlement.

Corporate Social Responsibility

As a responsible corporate social citizen, the Volta River Authority is proud to explore and be associated with roles that improve the living standards and development of our impacted communities. The Authority continued to invest in the life skills of the indigenes in our impacted communities to enhance their income earning potential and improve their livelihood.

The Authority executes its Corporate Social Responsibility policy through the implementation of our Community Development Programme (CDP). The CDP is focused on the Six (6) thematic areas of development and support services including, support for social infrastructural projects, environmental protection, industrial attachments, educational scholarships to the indigenes at the Tertiary levels (but until the Government's Free Senior High School policy, the policy covered those in the second cycle students as well) healthcare, and support for cultural activities.

We maintain mutually beneficial partnerships with the communities through their District and Municipal Assemblies, and other development agencies such as the traditional councils among other key stakeholders.

In the area of education, VRA is going through the modalities to commence the implementation of a framework and strategy that will enable the Authority to introduce a Technical/Vocational Education and Training (TVET) scholarship programme to replace the full educational scholarship provided for second cycle students in our impacted communities. This follows the implementation of the Free Senior High School policy by Government, which gave us a compelling reason to end the award of Scholarship at the Senior High School level to support Government's skills training agenda.

Chairman's Statement...

COVID-19 Efforts

Consistent with our corporate social responsibility, the Authority showed great leadership during the peak of the pandemic by providing support at both the national level and in communities impacted by our operations. At the national level, VRA donated Two million Ghana cedis (GHS2,000,000) to the Government towards the national COVID-19 Taskforce's activities.

At the community level, interventions undertaken to curb the spread of the virus included the fumigation of communities within the operational areas. Beneficiaries of the Authority's communal support included Churches, Mosques, Municipal/District Assemblies, Schools, Akosombo Market, Traditional Councils, etc. Specifically, the entire VRA colony in Aboadze and adjoining communities, the Akosombo market, VRA health facilities, among others were fumigated.

Furthermore, Personal Protective Equipment (PPEs), hand sanitisers, Veronica buckets with stands, hand washing basins, thermometers, and tissues were donated to the beneficiaries to support their fight against the spread of the pandemic. In addition to that, VRA collaborated with Moderpest Ghana, to fumigate its resettlement communities along the Volta Lake in the Eastern Region as part of measures to contain the spread of COVID-19. The beneficiary communities include: Dominase, Onuku, Dedeso, Ampaamu and Kwahu-Aman from in the Fanteakwa and Kwahu West Districts. Facilities such as schools, clinics, police posts, staff bungalows and other public places were also fumigated.

Furtherance to that, the Authority intensified its public education, monitoring and vigilance in these areas. The objective was to create public awareness and sensitisation with the view to curtailing the spread of the virus.

Beneficiaries of the Authority's pandemic support included the Akwamu and Manya Traditional Councils, Lower Manya Municipal Assembly, Upper Manya, Asuogyaman, Yilo Krobo and Shama District Assemblies, the Aboadze, Dwomo, Lower Inchaban and Abuesi Communities. The VRA Akosombo Schools, the Akosombo International School (AIS) and other schools within the communities also benefitted from the Covid support, including the creation of isolation centres to cater for staff, families and students who got infected.

Most importantly, since the Authority's business is about its people, the Authority provided protective clothing for our health officials as well as facemasks and hand sanitisers for the Staff to protect them from the virus. Office spaces were frequently fumigated. Staff were also compelled to observe the social distancing protocols, which resulted in the working from home schedules.

Barriers were mounted at three entry points into Akosombo so that all persons entering the township would have their temperatures taken and the necessary follow-ups done.

Outcome of COVID-19 Efforts

Following the leadership exhibited by the Authority in the management of the pandemic, VRA recorded a relatively low number of positive infection cases (considering the Staff population), even though two (2) fatalities were recorded. This excellent handling of the situation also inured to a conducive work environment, which made Staff feel confident and safe to carry out their duties. Ultimately, this ensured that the Authority's business was not interrupted during the period. The Authority was recognised at the Ghana Energy Awards for its covid-compliance and support systems implemented.

Portfolio Growth

In 2020, two key projects were completed. These include the Kpong Generating Station Retrofit Project at Akuse and the 6.5MWp Lawra Solar Power Project in the Upper West Region. Both projects were commissioned by the President, Nana Addo Dankwa Akufo- Addo.

Work at the 13MW Kaleo Solar Power Project is progressing satisfactorily. Again, key milestones were reached regarding the construction of the Pwalugu MultiPurpose Dam Project after sod cutting on November 29, 2020. The completion of the Project will present many benefits to the northern Ghana and the people of the area, in irrigation and flood control, which is vital in light of the challenges posed by the annual spillage of the Bagre Dam and periods of heavy rainfall but also in the provision of additional power and the strengthening of the national grid.

Additionally, project development activities for the proposed 40MWp Bongo Solar Project, and one of our two (2) 75MWp Wind Power Projects, to be located in the Keta Municipality, are very much on course.

The Authority's unflinching commitment towards the conversion of its simple-cycle plants into combined cycle operations and making them competitive for the market, is one business driver we continued to focus on. VRA has resumed discussions with SSNIT/CENIT ENERGY to convert the two simple-cycle plants in Tema into combine cycle, to improve the efficiency of the Plant and reduce energy cost. The Kpone Thermal Power Station is also earmarked for conversion into a combined cycle plant. In addition to that, VRA is working closely with the Government of Ghana towards the transfer of ownership of the T3 Power Plant to the Authority to enable us retool and operate it preferably in partnership with the private sector. Once operationalised, we expect to see a significant improvement in the cost competitiveness of our thermal portfolio.

It is also encouraging to note that Government has given approval for the relocation of the 250MW AMERI Plant from Aboadze to Kumasi to provide generation in the middle belt of the country. This would improve transmission reliability and loss reduction on the national grid and better utilisation of a state-owned asset. Together with the Ministry of Energy, Finance and the Attorney General, the negotiations of the EPC and Operation & Maintenance Contracts are almost completed. The acquisition of permits from various Regulators are in advance stages to enable the smooth commencement of site activities.

Restructuring of subsidiaries

In 2019, the Authority commenced the restructuring of our subsidiary companies with a target to identify strategic equity partners before the end of 2020. These partners are expected to bring in the much-needed capital injection and management skill to transform our non-power subsidiaries such as the Akosombo Hotels Ltd. (AHL), Kpong Farms Ltd. (KFL) and Volta Lake Transport Company Ltd. (VLTC), into stand-alone, financially viable and self-sustaining entities.

It is gratifying to report that significant progress has been made and we are currently negotiating the terms and conditions for the joint ventureship with the procured partners. We intend to look at all subsidiaries this year and make a decision on the non-core ones.

Challenges

The year 2020 presented its fair share of difficulties in the corporate environment with the lurking scare of the COVID-19 pandemic that adversely affected the Authority's operations. To ensure business continuity, however, it was essential for us to act as quickly as possible to lessen any negative impacts of the pandemic.

Again, for the period under review, some VRA key projects, particularly the Lawra-Kaleo solar projects were impacted by the pandemic with the declaration of force majeure by the contractors. This led to slippage in some key milestones on these projects. Nevertheless, the effective collaboration exhibited amongst our contractors and staff enabled us to complete the projects within the desired schedule and scope.

However, as the pandemic eases, we will gradually ramp up activities to make up for lost time. We are focused on achieving the required competitive advantage in the power market and the markets of our non-power portfolios.

Another significant challenge during the year was the continued upward adjustments of the major currencies in the Forex markets. The 6.95% depreciation of the average GH¢/US\$1 exchange rate from GH¢5.2150/US\$1 in 2019 to GH¢5.57746/US\$1 in 2020, significantly contributed to an increase in our foreign exchange losses and severely influenced our net financial position.

Concluding on the challenges, we wish to reiterate that the absence of a competitively priced electricity tariff regime that integrates financial compensation for the various auxiliary services that the Authority provides for the stability and reliability of the national power system must be carefully taken care of. We are currently working with the Public Utilities Regulatory Commission (PURC) to ensure this.

Chairman's Statement

Way Forward

In line with plans to have a lasting celebration that would leave an impression on the Authority's sixty-year legacy, a seven-member Anniversary Planning Committee was inaugurated on May 19, 2020 by the Chief Executive. Subsequently, a successful 60th anniversary launch was held in October at Kempinski Hotel Gold Coast City Hotel, to herald the anniversary. As we look forward to a successful anniversary, it is my expectation that, the Board, Management, and the Staff will collaborate effectively at all levels to ensure we achieve our goal of ensuring a memorable celebration that would leave a lasting legacy.

Going into the future, I would like to assure our cherished Stakeholders that, VRA will continue to exhibit undying commitment to executing its public sector mandate, generating power for a sustainable economy but with a private sector mindset. We will diversify our portfolio and provide reliable and competitively- priced electricity to support national development.

Key initiatives for 2021 and beyond:

1. Balance sheet and outstanding liabilities.
2. Upgrading all simple cycle thermal plants to combined cycle plants.
3. Developing an economic plan for the lake commercialisation.
4. Advancing the Pwalugu Dam project.
5. Potentially looking at a focus on renewable energy in light of COP26 and a more proactive calculation of our Carbon footprint and renewable plans. Our customers demand this, and we shall rise to the challenge.

Conclusion & Appreciation

I would like to commend the Chief Executive and his Management Team for their sterling leadership, resilience and dedication which ensured that VRA successfully sailed through the challenges of the previous year.

My heartfelt gratitude also goes to the Staff of VRA for their commitment to work and for supporting the Management team to deliver on the mandate of the Authority.

I would like to thank all our stakeholders; the Ministers of Energy and Finance, our highly Supportive regulators, Sister utilities, Financial Institutions, Our venerable customers, Traditional Rulers and the people of their communities, Suppliers, the Media and the General Public for their unflinching support. Let me further extend my appreciation to colleague members of the past and present Board for their leadership, support, and commitment. I have no shred of doubt that with integrity to service, discipline, focus and good corporate governance, this Board will continue to provide the right guidance and good leadership that would inure to the benefit of the Authority and its Stakeholders.

I also want to thank the Government of Ghana for its continued support, which has contributed to the successes we have achieved so far. Lastly, I will want to thank the State Interests and Governance Authority (SIGA), led by its Director General, Mr. Stephen Asamoah-Boateng, for supporting our quest to restructure into a resilient, viable, and financially sustainable entity with multiple business interests.

I would like to assure our Stakeholders that, we would continue to work harder to ensure VRA remains a sustainable organisation as we strive to maintain our leadership in the power industry.

Thank you for the attention.



.....
Mr. Kweku Andoh Awotwi
 Board Chairman]

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.

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, with the exception of the Chief Executive, are non-Executive Members.

2.0 Membership of the Board

Membership of the incumbent Board, which has been in office since October 2017 is eight (8), with the ninth Member yet to be appointed to fill the vacancy. Section 7(3) of Act 46 states that the validity of any proceedings of the Volta River Authority shall not be affected by any vacancy amongst the Members, or by any defect in the appointment of a Member.

The Board Members are drawn from diverse backgrounds. Their diversity, independence and skills represented on the Board ensure objective and balanced decision making.

Mr. Kweku Andoh Awotwi, Chairman

Mr. Kweku Andoh Awotwi recently retired from his position as the Chief Executive of Tullow Ghana Ltd and Executive Vice President of Tullow Oil plc. Prior to these, he served as the Chief Executive of VRA from June 2009 to December 2013. He has been involved in a number of entrepreneurial ventures in energy and mining across Africa serving in various capacities. He was the Chief Executive Officer of Midway Resources International, a company in the Oil and Energy industry, and Founder/Director of Cenpower Generation. He also served as Ag. President, Ghana Chamber of Mines from 2003–2004. Currently, he serves on several Corporate Boards in Ghana and abroad, including the United Nations Global Compact Advisory Board, and has been a Trustee of the World Affairs Council of Northern California, USA. He is also a Principal of Africa Power Systems Management (APSM), a company that provides bespoke management, operational, and technical inputs to optimise the performance of African utility assets.

Mr. Awotwi has an MBA from the Stanford Graduate School of Business, Stanford, California, and a Bachelor of Science in Electrical Engineering, Economics and Political Science from Yale University in New Haven, Connecticut.



Corporate Governance Statement...



Ing. Emmanuel Antwi-Darkwa, Chief Executive

Ing. 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. Ing. 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. Ing. 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, Member

Mr. Richard Okrah, has professional training in Human Resource Management, Public Procurement and has worked in various capacities. 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 & Services.

Mr. Richard Obeng Okrah holds a Master of Public Administration (MPA) from Harvard University and a B.A. Hons. Sociology from the University of Ghana, Legon, in 1995 and 1969 respectively.

Corporate Governance Statement...

Chief Musa Badimsugru Adam, Member

Chief Musa B. Adam is currently 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 an international training in Utility Regulation and Strategy.



Rev. Dr. Joyce R. Aryee, Member

Rev. Dr. Joyce Aryee is the Founder and an Executive Director of Salt & Light Ministries, a Christian organisation, where she serves as a resource person for other faith-based initiatives and organisations. Rev. Dr. Aryee is a Senior Executive with over 40 years' experience in various capacities, and 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 the Ghana Chamber of Mines and as Secretary (Minister) of Information and Education and Local Government. She serves on the Boards of diverse organisations including Central University College, 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.



Corporate Governance Statement...

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.



Mrs. Janet Anane, Member

Mrs. Janet Anane is currently the Managing Director of Gentle Giant Company Limited. She is an astute entrepreneur. Prior to unlocking her entrepreneurial potential, she worked with the Ghana Police Service and Canada Trust Bank.

Mrs. Anane holds a Certificate in Banking from Humber College, Canada.

Corporate Governance Statement...

Mr. El-Farouk Umar, Member

Mr. El-Farouk Umar is currently the Chief Executive of Board Advisory Limited, after serving as the Chief Information Officer of the GCB Bank Ltd. from 2012 to 2019. Mr. Umar has a well-rounded background and professional exposure in: Information Technology Leadership, Business Finance, Customer Relationship Management, and Information Security from the private and public sectors, mostly in the United States of America. He has over twenty-five (25) years of experience as an Information Technology Operations professional and over twelve (12) years as a Business Executive providing global business solutions in the different enterprise areas of Telecommunications, Public Sector Management, Management Information Systems, e-Commerce, Business start-ups, and financial services. He has practical operational experience in the design and build-up of enterprise operational capacity and capability in diverse industries and disciplines with a record of business process improvement and operational cost rationalisation.

Mr. Umar holds an Executive Master of Business Administration from the College of William & Mary, Virginia, a Bachelor of Science in Criminal Justice Administration from John Jay College of Criminal Justice, New York, and a Bachelor of Science in Business Administration from the University of Ghana.



Nana Kobina Nketsia V, Member

Nana Kobina Nketsia V is currently the Omanhene of the Essikado Traditional Area. He is also the Chairman of the Nana Kobina Nketsia V Trust and Dr. Robert Mitchell Memorial Foundation and serves on the Advisory Board of Care Ghana, all of which are non-profit organisations. He is a Member of the Historical Society of Ghana. Nana has chaired both the Ghana Museums and Monuments Board and the Ghana Broadcasting Corporation and served on the Board of the Public Utilities Regulatory Commission (PURC), among others.

Nana Nketsia V holds a PhD in African History from the University of Calabar, Nigeria and a Bachelor of Arts Degree in History from University of Ghana.



Corporate Governance Statement...

3.0 Mandate

The Board is 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.

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 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 the VRA's power generation system, namely the Planning, Development, Operation & Maintenance, and make appropriate recommendations for the consideration of the Board. The Committee has a Membership of three (3) 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 four (4) and is chaired by Mr. Richard Obeng Okrah.

4.3 Audit & Risk Committee

The mandate of the Committee is to advise the Board on matters relating to VRA's risk management and audit functions as they impact on VRA's operations. The Committee has a Membership of four (4) and is chaired by Mr. El-Farouk Umar.

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.

6.0 Board Calendar

At the end of each year, the Board approves the Calendar of the Board and Committee meetings for the ensuing year. In 2020, six (6) Board meetings were held to consider issues of strategic and business performance importance. Twenty-three (23) Committee meetings were also held prior to these 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.

The Board also held a two (2) day Strategy Meeting at the beginning of 2020 to update themselves on progress made with the strategy to restructure the non-core activities of VRA into self-financing and sustainable subsidiary companies and discuss the way forward towards the attainment of the objective.

Corporate Governance Statement...

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.

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 Board continues to strengthen its engagements with other key stakeholders through specific requests for meetings to discuss issues of mutual benefit. In 2020, such engagements were held with the Board Chairman/Management of Ghana Integrated Development Corporation (GIADEC) and the Senior Minister.

8.0 Board Remuneration

Being Non-Executive Members, Members 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 set by Government.

9.0 Governance Improvements

In 2017, the Ministry of Finance, under a World Bank Project, undertook a review of the governance framework of five (5) State Owned Enterprises, of which VRA was included, and outlined Corporate Governance Action Plans for implementation. The Action Plans are intended to address gaps in the corporate governance regimes of the selected SOEs. The implementation of actions specific to VRA, under the guidance of the Board, has seen VRA, over the last year review its governance polices to reflect best practices and provide the foundation for improved performance.

The Board continues to report quarterly to the Ministry of Finance on actions taken in line with outlined Corporate Governance Action Plans. For the year 2020, VRA had a score of 87.04% in its implementation of the actions recommended by World Bank. The inability of VRA to attain a higher rate of implementation was mainly due to the actions below, which are to be implemented by the shareholder, Government.

- a. Review the option of (i) amending the VRA Act to strengthen the corporate governance provisions, and (ii) changing the legal form of VRA into a limited liability company.
- b. Consider listing of VRA assets on the stock exchange.
- c. Establish a credible bulk electricity pricing mechanism.

10.0 Board Evaluation

At the end of 2020, the Board carried out an internal evaluation of its performance for the period January 2019 to December 2020.



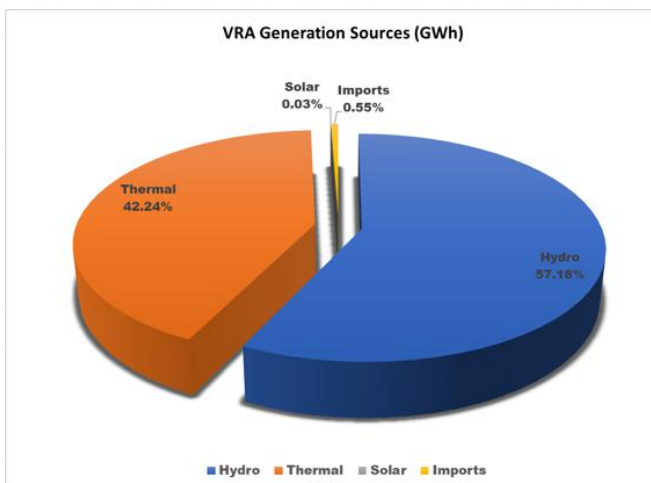
Power Operations

Power Operations



Electricity Demand and Supply

Ghana's power system in 2020 recorded a system peak demand of 3,090MW in December. This represents an increase of 209MW compared to the 2,881MW system peak recorded in 2019.



The total energy consumed in 2020, losses included, was 19,720GWh. This represents an annual growth in energy consumption of 9.3 percent compared to the 2019 figure of 17,890GWh. The total planned VRA supply for the year was 10,922GWh. However, the actual supplied was 10,535GWh. This is 3.5 percent or 387GWh lower than the projected, compared to the 2019 planned supply of 10870GWh and actual supply of 11,441GWh. The supply shortfall during the year under review was as a result of various outages at the TICO and TAPCo Plants.

In 2020, total generation from Akosombo Generating Station (AGS) was 5,161GWh, approximately 516GWh (11.1%) higher than the planned generation of 4,646GWh. The Kpong Generating Station (KGS) on the other hand generated 862 GWh, approximately 43GWh (5.3%) higher than the planned generation of 819 GWh. Overall, VRA Hydro facilities generated 6,024GWh approximately 559GWh (10.2%) higher than the planned generation of 5,465GWh.

The increase in hydro generation was to support the system during the periods of Ghana Gas outage. With thermal generation, the planned supply from the VRA thermal plants was 5,447GWh, whilst actual supply was 4,450GWh. This represents an 18.3%, or 998GWh lower than the expected planned supply. As indicated, actual generation from thermal was 4,450 GWh. This comprises of 427GWh from TT1PC, 90GWh from TT2PC, 368GWh from KTPS, 1,193GWh from TICO and 1,087GWh from the Takoradi Thermal Power Station (TTPS).

In addition, the Navrongo Solar Power Plant (NSPP), the Authority's first utility scale renewable facility, generated 3MWp of energy during the year, compared to the 3,317MWp generated in 2019. NSPP's contribution to the system generation mix was 0.02 percent.

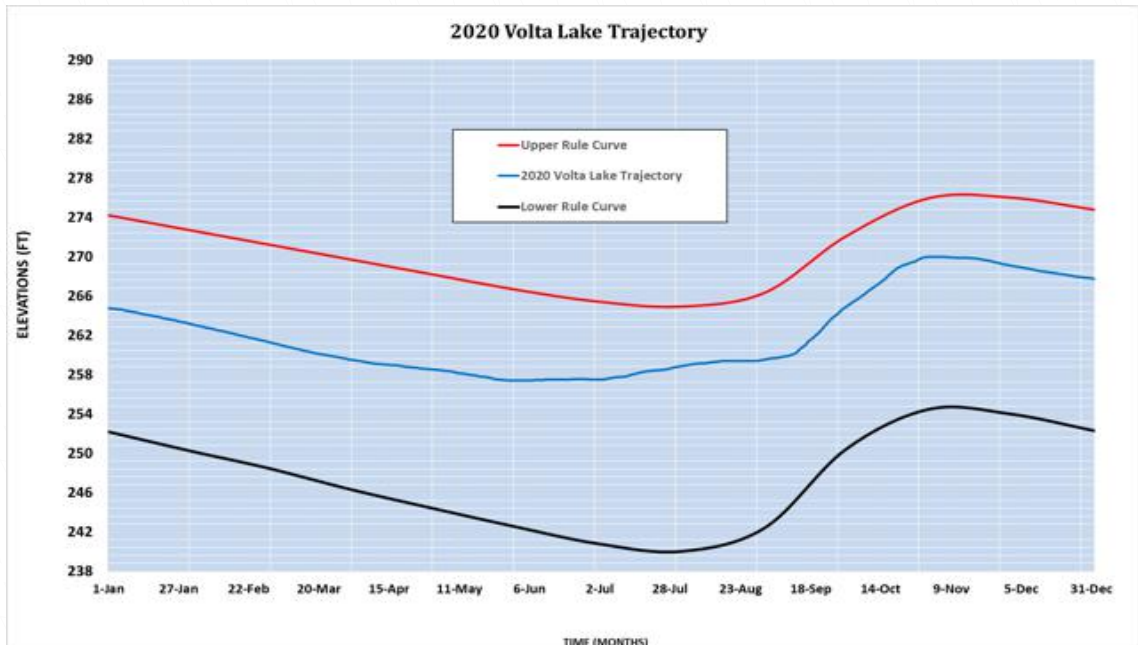
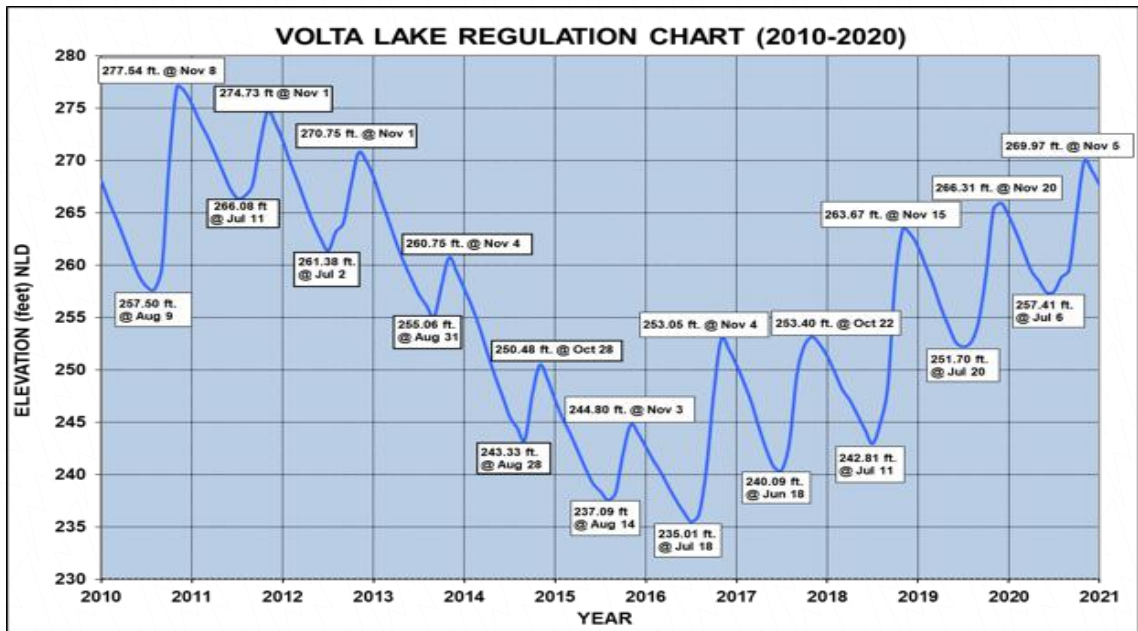
By the close of the year, the thermal/hydro mix for VRA was 42.2/57.2 percent respectively. Whilst the thermal/hydro mix for the entire system was 62.7/37.0 percent respectively. As expected, hydro generation's contribution to the overall system performance is an affirmation of the tremendous significance of hydro power to the entire power system.

Power Operations...

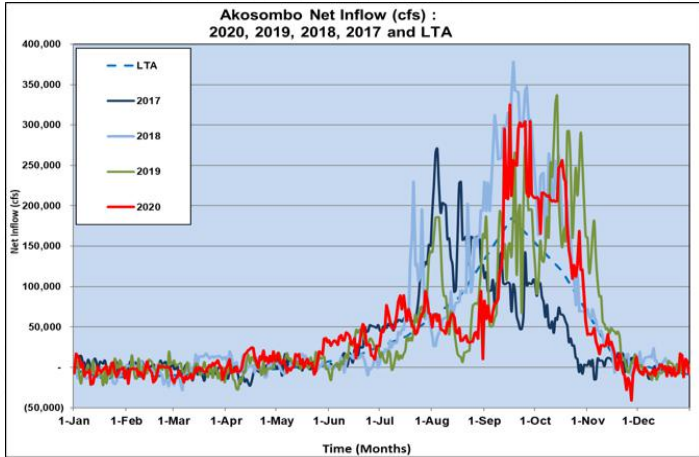
Volta Lake Management Hydrology Report

In 2020, the Authority ensured its hydro generation resources were operated in an efficient and sustainable manner. We began the year with a reservoir level of 80.69m (264.72ft) and 78.46m (257.41ft) at the end of the dry season.

This represents a drop of 2.23m (7.31ft.) from the beginning of the year to the end of the dry season. The lowest Volta Lake elevation was on July 6, 2020, whilst the maximum elevation of 82.29m (269.97ft) was recorded on November 5, 2020, giving a total rise of 3.83m (12.56ft). Consequently, the Volta Lake elevation at the end of the year 2020 was 81.60m (267.73ft).



Power Operations...



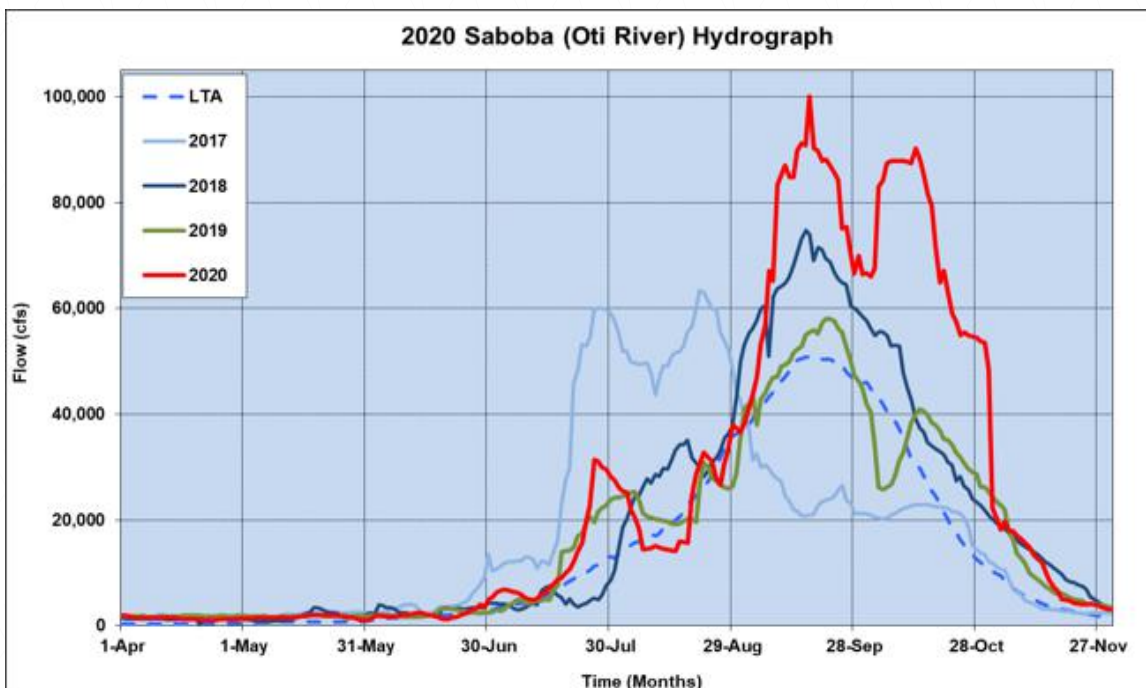
Meteorology

In 2020, rainfall activities within the southern parts of the Volta Basin were below average. This invariably led to below average rainfall activities in Ghana for the period under consideration. In view of this, the annual rainfall for the seven (7) selected rainfall stations of interest to VRA for 2020 was 973mm.

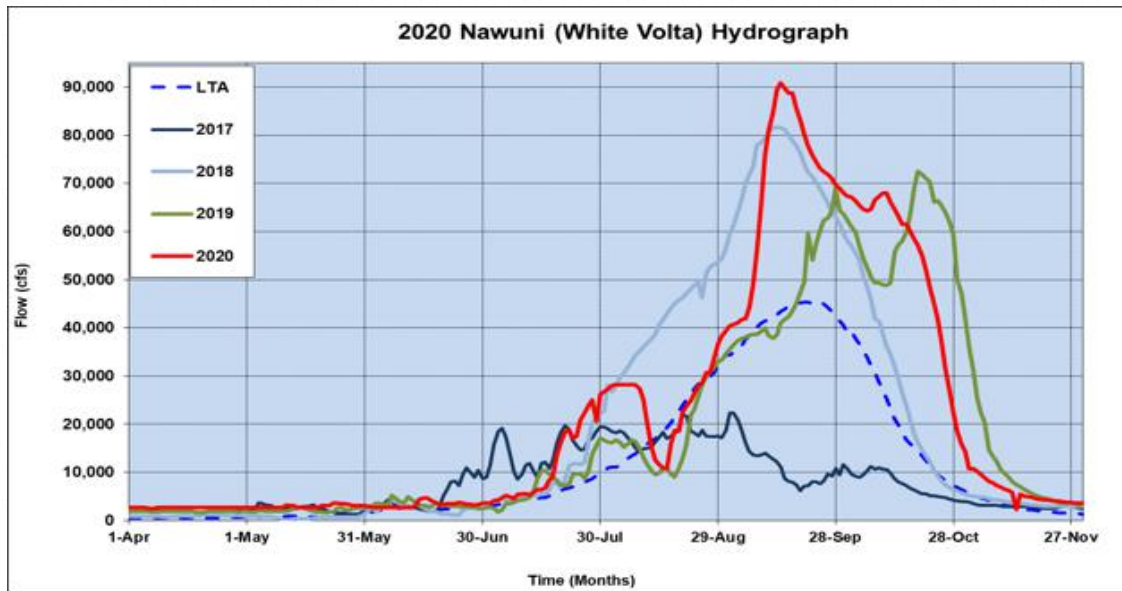
This was lower than the annual rainfall for 2019 by 18 percent, 2018 by 17 percent and 2017 by 13 percent.

Tributary Flows

During the year, stream flow data from designated gauging stations on the three major tributaries of the Volta Lake namely: Nawuni on the White Volta River, Bui on the Black Volta River, and Saboba on the Oti River, were recorded. The inflow recorded on the Oti River at Saboba for 2020 was 11.80MAF. This was higher than the Long-Term Average for the Oti River by about 50 percent. The inflow for Nawuni recorded in 2020 was 10.15 MAF. This was about 80 percent higher than the LTA for the White Volta River at Nawuni. Finally, the flow recorded on the black volta due to energy generation at Bui Hydropower Station from January to December 2020 was 12.48 MAF.



Power Operations...



Thermal Generation

In line with the Authority's strategy to reposition the thermal generation portfolio into a resilient, robust, and efficient subsidiary, in anticipation of the proposed organisational restructuring, VRA vigorously pursued engagements with key stakeholders particularly, Government with respect to the possible repowering of the T3 Plant at Aboadze, as well as converting our simple cycle plants in Kpone and Tema into combined cycle. The goal is to reduce the cost of thermal generation, as well as increase our power export capacities in the sub region.





Operations and Maintenance

In 2020, total thermal generation was 1963.21GWh compared to the target of 1,995.04GWh. This performance was accomplished based on an average operational plant availability and capacity utilisation of 83.12 and 36.07 percent respectively. The shortfall in generation during the year was attributed mainly due to forced and subsequent maintenance outages experienced over the period. It is imperative to note that pursuant to Management's strategic decision to operate the thermal facilities solely on natural gas, there was no Light Crude Oil (LCO) combustion during the period. Consequently, 18,576,199.96 MMBtu of Natural Gas and 24,873.40 barrels of Distillate Fuel Oil (DFO) were used during the period under review.

The Tema Thermal Power Complex (TTPC) generated 516.86GWh of energy at an availability rate of 85.26 percent and capacity utilisation of 46.78 percent. In addition, the Kpone Thermal Power Station (KTPS) generated 372.34GWh of energy at an availability rate and capacity utilisation of 85 percent and 20.94 percent respectively. The Takoradi Thermal Power Station (TTPS) on the other hand generated 1074.01GWh of energy. This was achieved at an availability rate of 81.2 percent and an end-of-year capacity utilisation of 40.87 percent.

Renewable Energy Development

Consistent with Government's objective of promoting the development and utilisation of renewable energy in the country, VRA earnestly pursued its renewable energy programme during the year. The key objective is to ensure development in a sustainable manner through the reduction of its carbon footprint, provide cleaner energy and energy security, as well as ensure the systematic development of the related infrastructure.

It is significant to point out that the performance at TTPS excludes the Takoradi Thermal 1 Gas Turbine No. 2 (32G2), which was out of service for a greater part of 2020. Also, there was no generation from the T3 Plant as all the generating units remained out of service. The Plant, which is currently under preservation is awaiting retooling.

In 2020, the running regime in the Tema area was for TTPC and KTPS to operate intermittently every other month in order to manage the usage of the limited natural gas supplied during the period. The overarching objective for this arrangement is to prevent the shutting down of the Plants for extended periods. For the period under review, a total of 30mmScf/d of gas was secured for the Tema enclave. In line with international best practices and consistent with our world-renowned maintenance culture, we successfully accomplished 98 percent of all planned maintenance activities. Specifically, we achieved 97.0 percent and 98.8 percent of preventive and corrective maintenance accomplishments respectively. It is instructive to state that, though the Authority could not meet its thermal generation target for the year, VRA ended the year strongly owing to the commitment of Staff of the thermal generation SBU who ensured TTPS-T1 operated fully on combined cycle during the fourth (4th) quarter of the year.

Power Operations...

(a) Solar Power Projects

A critical milestone during the year was the commissioning of VRA's second utility scale, 6.54MW Lawra Solar Power Plant in October 2020. The Plant, commissioned by the President of Ghana, forms part of the 17MW Lawra-Kaleo Power Project being executed by Elecnor. By the end of the year, panel installation works and construction of the control building at the Kaleo project site were about 10 and 15 percent complete respectively, while perimeter trenches and the laying of string cables were completed. Aside that, project development activities on the 40MW Bongo Solar Power Project (BSPP) progressed steadily, with the Ministry of Energy evaluating bids for the



procurement of a consultant to review the BSPP feasibility report and ESIA. Additionally, VRA's quest to develop floating solar PV, received a major boost as the Authority successfully completed the review of the terms of reference from KfW for the feasibility study for floating solar PV on Akosombo GS and Kpong GS. Finally, the commitment to live in green spaces by the development of rooftop solar facilities in the operational areas was given a shot in the arm as the Akuse rooftop solar project reached the award stage.

(b) Wind Power Projects

VRA received the Environmental Protection Agency's (EPA) environmental permit for Wind Power Project 1 (WPP1) following the completion of its Environmental Impact Assessment (EIA) study and the detailed Feasibility Studies. An application for the works permit has been submitted to the Anloga District Assembly after receiving the siting clearance license from the Energy Commission.



(c) Pwalugu Multipurpose Dam Project

The Pwalugu Multipurpose Dam Project is an integral part of our developmental plan to improve power supply particularly in the northern parts of the country. To be completed in 50 months, the Pwalugu project comprises a 60MW hydro dam, 50MW hybrid solar facility as well as a 25,000ha irrigation scheme. Upon completion, the project would enhance our renewable energy portfolio and by extension, impact positively on Ghana's climate change efforts. It would also help in accelerating development efforts in the northern regions and reduce the frequency of floods in the surrounding areas.



Nuclear Power Programme

In 2020, VRA collaborated with Nuclear Power Ghana (NPG) to successfully develop a 5-year work plan for the nuclear project infrastructure development activities. The work plan provides a comprehensive and integrated plan on the key activities to be implemented, monitored, and mandatorily completed in the second phase of Ghana's nuclear energy programme. To ensure the success of the work plan, a total of 271 major tasks were identified. The tasks, if executed successfully, would lead to the attainment of 41 unique deliverables. The deliverables will come in the form of reports, strategy papers, policies and procedures. Secondly, a Project Risk Management Framework document on eight (8) risk categories identified for the lifecycle of the project was also developed.

The document has the key objective of guiding the monitoring and evaluation of all associated risks at every stage of the project development. The risk categories identified include strategic project, preparatory planning, construction, operational, risk of human resource, commercial/financial and decommissioning risks.

- ***Community Entry Engagements***

Consistent with international best practice, community entry engagements were undertaken at Aboano and Ahwiam in the Central and Greater Accra Regions respectively. The goal is to elicit the communities' support and involvement through increased sensitisation and awareness.

- ***Communication and Stakeholder Engagements***

Apart from the community entry engagements, NPG held various collaborative media engagements with identified stakeholders. The activities undertaken during the period include the organisation of a communication workshop for selected journalists, paying a courtesy call on the Management of the Ghana News Agency, signing of a joint Memorandum of Understanding (MoU) among the Nuclear Power Ghana, Ghana Nuclear Power Programme Organisation, the Ghana Journalists Association, and the institution of the "Nuclear Star Award", which is to be observed as part of the GJA's annual awards programme. The objective for the intervention is to ensure that, issues relating to Ghana's efforts towards the introduction of nuclear power into the country's energy mix remained in the front burner.

- ***Siting and Environmental Activities***

Three seismic monitoring equipment were procured for installation at three (3) communities where the four candidate sites have been identified. The process has been initiated by the technical team for the equipment to be installed at communities at Ahwiam and Aboano. When completed, the equipment would be integrated into the national system, which is managed by the Geological Survey Authority.

- ***Process Based Integrated Management System (IMS)***

During the year, NPG vigorously pursued the development of a process based integrated management system by developing an IT-based budget tool to be deployed in improving its budgeting processes and enhancing the planning, prioritising, tracking, and reporting of expenditure. VRA is to provide Microsoft Office 365 licenses to Staff of NPG. The two entities are collaborating on the modalities for the migration onto the Microsoft Soft 365 platform.

- ***Programme Comprehensive Report (PCR)***

A memo jointly signed by the Ministry of Energy and Ministry of Environment, Science, Technology, and Innovation was presented to Cabinet for the adoption of the phase 1 PCR and for Government to communicate its intention on the way forward for the nuclear power programme. Cabinet has deferred the approval but has constituted an Inter-Ministerial Committee to analyse the cost structure and financial aspect of the nuclear power project.

- ***Grid Infrastructure Compliance***

In accordance with IAEA's nuclear energy series No. NG-T-3.8 on electric Grid Reliability and interface with nuclear power plants, a report on the status of Ghana's grid infrastructure was compiled for assessment. The objective is to ensure the grid infrastructure is robust to accommodate additional power from the nuclear power plants (NPP).

- ***Public Perception Survey***

In collaboration with the Institute of Statistical, Social and Economic Research (ISSER), a Baseline Nationwide Social and Economic Survey on Household and industries on the Generation of electricity using nuclear technology in Ghana was conducted. ISSER has submitted two draft reports, which are being reviewed by the NPG and the Nuclear Power Institute's (NPI) technical team.

Power Business



Capacity Expansion Activities

VRA focused on its resolve to carry out bold initiatives towards converting our simple cycle power plants into combined cycle by engaging with relevant stakeholders. Accordingly, VRA held discussions with SSNIT/CENIT, a private partner, on the conversion of the TT1PP plant into combined cycle. Again, VRA continued its engagement with Government towards the transfer of ownership of the Takoradi 3 Power Plant. This is to enable VRA take ownership, retool, and operate the Plant in a combined-cycle mode. The Authority's motivation is not only to ensure capacity expansion, but also most importantly, to reposition and strengthen our thermal generation portfolio with the view to making us more competitive in the midst of the emerging competition from the IPPs.

Energy Sales

In 2020, energy sold to customers was 10,446GWh. This was 7.79% lower than the 2019 figure of 11,329GWh. The total power sale in 2020 comprised 5,286GWh to electricity distribution companies, 1,854GWh to export customers, 2,405GWh to bulk customers and 901GWh to GRIDCo as transmission losses and substation use.

Out of the power sold to the distribution companies, 3,468GWh was sold to Electricity Company of Ghana (ECG), 1,576GWh to Northern Electricity Distribution Company (NEDCo) and 242GWh to Enclave Power Company (EPC).

For export customers, the Authority sold 287GWh to Communauté Electrique du Bénin (CEB), 358GWh to Compagnie Energie Electrique du Togo (CEET), 70GWh to Societe Beninoise d'Energie Electrique (SBEE), 990GWh to Société Nationale d'électricité du Burkina (SONABEL) and 149GWh to Compagnie Ivoirienne d'Electricite (CIE).

Power sold to bulk customers consisted of 1,498GWh to mining companies and 185GWh to industrial/commercial customers. The mining companies includes AngloGold Ashanti (AGL), Newmont Ghana Gold Ltd. (NGGL), Newmont Golden Ridge Ltd. (NGRL), Goldfields Ghana Ltd. (GFGL), Golden Star Resources Group, Perseus Mining Ghana Ltd. (PMGL), Adamus Resources Ltd., Owere Mines, Prestea Sankofa Gold Ltd. (PSGL), Adansi Gold Ltd., Earl International Group (Ghana) Gold Ltd., AngloGold Ashanti (Iduapriem), Drillworx and Great Consolidated Diamonds Ghana Ltd. The industrial/commercial customers also included Aluworks Ghana Ltd., Akosombo Textile Ltd., Diamond Cement Ghana Ltd., Savanna Diamond Company Ltd., VALCO, etc. During the period under review, the Authority signed on two (2) new customers, namely, Rider Steel Ltd. and B5 Plus Ltd.

Gas Supply

Given the Authority's resolve to rely solely on gas for the operation of our thermal facilities, we continued to engage and manage natural gas supplies received from existing principal gas suppliers during the year. In 2020, VRA received gas supplies from N-Gas via WAGP, GNGC, and GNPC with volumes of 22,673.33MMscf, 19,893.03MMscf and 11,425.66MMscf respectively. Total gas supplied to VRA and received at the various metering stations stood at 53,992.0210MMscf, with domestic supply accounting for 31,318.69MMscf representing 58% of total gas used for thermal power generation. The non-domestic supply was received from N-Gas, Nigeria and constitutes 42% of the total supply.

Gas Supply Security

WAPCo during the year, undertook pigging of the offshore pipeline as part of efforts to assess and ensure pipeline integrity from the end of January 2020 to the end of February 2020. Meanwhile, "black powder" issues in gas deliveries, observed in April 2020, resulting in the shutdown of some of VRA's Plants in Tema, were successfully resolved, after the issues were brought to the attention of both WAPCo and N-Gas. The situation was brought under control by the frequent replacement of the filter cartridges by WAPCo and the various Plants.

Electricity Tariffs

Tariffs for bulk and export customers were adjusted based on the terms and conditions of the respective Power Sale and Purchase Agreements. The year under review ended with the Public Utilities Regulatory Commission (PURC), approving VRA Bulk Generation Charge (BGC) of GHp 28.2273/kWh, compared to the GHp28.037/KWh and GHp29.9467/KWh approved respectively in 2019. Tariffs for ECG, NEDCo and EPC at year end however were GHp25.1750/kWh, GHp33.7957/kWh, GHp33.7957kWh respectively. This is compared to tariffs of GHp0.275793KWh, GHp0362625 and GHp0.354545/KWh approved for ECG, NEDCo and EPC in 2019.

Sale Contracts

In 2020, VRA continued with efforts at reviewing and executing Power Sale and Purchase Agreements (PSPAs) with its customers. As of December 2020, VRA had concluded and executed twenty-six (26) PSPAs. This includes the signing of two new PSPAs with Rider Steel Ltd. and B5 Plus Ltd.

Business Development

VRA engaged new bulk customers and firmed up an arrangement to supply power to some steel manufacturing companies, B5 Plus Company Ltd., Rider Iron & Steel Co. Ltd., and others such as Temple Energy Services Ltd., who plan to build a data center. B5 Plus Company Ltd., Rider Iron & Steel Co. Ltd and Temple Energy Services Ltd. shall ultimately require some 100MW, 60MW and 60MW of power respectively.

In line with VRA's strategy to optimise the use of our liquid fuel assets and following the expression of interest by GO Energy to use some of the liquid fuel storage facilities at Aboadze, GO Energy was allowed to inspect the facility to have a better appreciation of the available assets. Following that, a Non-Disclosure Agreement was signed with GO Energy to allow for the exchange of information, prior to concluding the commercial arrangement. VRA also received a request from Asanko Gold Mines for the supply of up to 10% of solar power of its current energy demand. A Memorandum of Understanding to cover the renewable energy supply, and subsequent amendment of the existing PSPA was initiated. Finally, to ensure business expansion and sustainability, VRA continued to engage with the Ghana Investment Promotion Council (GIPC) and other relevant stakeholders. The objective is to contact new customers/investors that would require power supply.

Financial Health



Revenue (Group) from the sale of electricity decreased by 2.29 % (GH¢91.74 million) to GH¢3,921,148 million from the 2019 sale of GH¢4,012,892 million. This was mainly due to the combined effects of 8.72 % (938GWh) decrease in the volume of energy sold, from 10,758GWh in 2019 to 9,820GWh in 2020, and a 4.09% decrease in the average tariff of ECG from GH¢0.28129/kWh in 2019 to GH¢0.26978kWh in 2020. The charge for Transmission losses (TSC2) also declined by 37.09% from an average of GH¢0.018335/kWh in 2019 to GH¢0.011534/kWh in 2020. The volume of energy sold to regulated customers in tandem declined by 20.72% (1,390GWh) from 6,709GWh in 2019 to 5,319GWh in 2020. Meanwhile, the volume of electricity

sold to deregulated customers, which attract relatively higher tariffs, increased by 11.16% (452GWh) from 4,049GWh in 2019 to 4,501GWh in 2020. This is, largely on account of sales to SONABEL Bolga-Ouagadougou, which increased from 519GWh in 2019 to 930GWh in 2020, an increase of 411GWh (79.19%).



Management Information System

Despite the disruptions to businesses in 2020 following the severe impact of the COVID-19 pandemic, the Authority ensured business sustainability and continuity by leveraging the huge investments made in the ICT infrastructure. The Authority swiftly responded to the changed work dynamics, which affected work activities by deploying the Virtual Private Network (VPN). VPN enabled Staff to work securely from home, whilst Microsoft Teams provided a virtual collaborative platform for remote meetings, training, and other forms of work among teams from dispersed locations away from the precincts of the office.

• *IT Governance and Management*

Consistent with best practice, all the Authority's software licenses were renewed. A license renewal framework has been developed to facilitate the process to resolve issues with complex license regimes for several software, price changes and PPA rules where a vendor is selected through a competitive process to renew a license for a minimum of two years.

• *Business Process Digitalisation*

To promote VRA's strategic objective of advancing business processes, four (4) key business processes were successfully digitalised. These include:

- a. HR Connect, an application which delivers staff concerns and requests to the HR Department for a timely response.
- b. The Electricity and Water billing modules of the Customer Billing Management System (CBMS) for the Akuse and Akosombo townships. These modules have features that allow the system administrator to apply PURC adjustments and assist users to identify, track and resolve customer issues. When fully implemented, the system will conveniently enable access to the application through mobile devices (computers, tablets, cell phones) that are directly connected to the computer network or by Virtual Private Network (VPN) access as well as send updates on customer transactions via text message indicating payments made and customer balances.

- c. The 'budget verification and cash cover approval' business process was also successfully digitalised using the Electronic Document and Records Management (EDRMS) application, Laserfiche. The system, currently being piloted in six Departments, has the key objective of significantly reducing document-routing time for approval; paper usage in the Authority, in line with the Financial Recovery Plan and the print infrastructure as a whole.
- d. The process to replace the hospital's Information Management System, CAREWEX commenced. The expected outcome is a new system that enables the provision of high standard medical care; recording, maintaining, communicating, and managing patient care, hospital assets and financial transactions.

Finally, the billing system for bulk power customers was completed and will run in parallel with the old system for about six months. This new system has the capacity to enhance the efficiency of the billing process, reduce bill-creation time, track bills and payments as well as ensure the production of accurate and timely reports.

• *Cyber Security*

The cyber security posture of the Authority was enhanced by the subscription to a Security Operations Centre (SOC), as a service through a leading IT infrastructure service provider. This intervention is to deliver visibility of events in the Authority's computing environment and ensure it is more secured. The system includes an Artificial Intelligence (AI) based analyser that alerts an Incident Response Team (IRT) of potential breaches or anomalies on host machines for remediation work to be carried out.

Again, to ensure the security of the Authority's digital assets, efforts were made to create security-conscious users. The Authority made efforts to increase Staff cyber security awareness by organising cyber security sensitisation events for over one thousand five hundred (1,500) employees. In addition, the Authority's hard disk notebooks were encrypted to safeguard data in case of loss or theft. The ultimate objectives for the above are to ensure the security of the Authority's digital assets and strengthen VRA's capacity to mitigate cyber security attacks.

Support Services...

- *Network Improvement Project*

As part of efforts to improve ICT infrastructure, the Authority's Local Area Network and Wide Area Network LAN/WAN infrastructure was enhanced by replacing old connecting devices and providing reliable or new network links within the infrastructure. Under the replacement of connecting devices, core routers and switches within the infrastructure were upgraded to higher capacities with more enhanced security features to improve data switching speed and transport security. With regards to the network links, a more reliable link (a hybrid of terrestrial radio and fibre cable) was positioned between Ada and the Head Office to replace the existing erratic V-SAT link while a dedicated fibre link was provided between the Data Centre at Akosombo and the Data Recovery Site at Tema to improve system/data replication to ensure availability and quicker IT disaster recovery. The developments undertaken so far have ensured improvements in access to corporate applications, network reliability, performance, and enhanced network security.

- *IT Service Delivery*

Being an agile organisation, VRA ensured a seamless transition from working in the office to working from home. VPN access and Microsoft Teams were the two most visible services used to enable network access and remote collaboration. Other tools and services employed included the Microsoft O365 productivity suite, which enabled secure access to work online. The IT Service Desk and the Client Services provided remote support and client-side support despite the limitations imposed by work restrictions.



Industrial Relations

In 2020, the continued positive employer-employee relations within the Authority ensured that, the industrial environment was relatively peaceful and stable resulting in the Authority's ability to ensure business continuity amidst the COVID-19 pandemic.

- *Employee Relations*

Management, during the year, engaged with the Leadership of the various Staff groups/PSWU on issues related to the welfare and development of the Staff. The engagements focused on negotiations, (wage opener), review of 2019/2020 rates and allowances.

Further to that, the Reward Management Team, undertook Staff education of the implementation of the revised Scheme of Service and the revised Reward Management Scheme. Management in the period under consideration also facilitated arrangements for the 2019/2020 SSA delegates congress held at Prampram. These Management and Staff engagements have the key objective of ensuring good corporate governance and sustaining a healthy employee-employer relation.

- *Training and Development.*

Though a challenging year, Management continued to provide the necessary platform, opportunities, and programmes to advance the skills and knowledge of the Staff. This was largely achieved by relying on the Authority's ICT infrastructure, (Microsoft Teams), for all training and development programmes.

This intervention ensured business continuity, whilst maintaining a team of well-motivated, committed, disciplined, and dedicated workforce, with the right customer-centric attitudes.

- *Staff Strength*

The Authority's labour strength at the close of the year was 2,106. Out of the number, 2,085 were permanent whiles 21, were Contract Staff. The Authority's gender profile statistics during the period showed that, out of the Authority's labour strength of 2,106, 1631 were males with 475 being females. This data includes Staff from PROPCo and VLTC.

Legal Services

To prevent potential lapses that could inure to financial liabilities to the Authority following the expiration of contracts, VRA during the period under consideration automated its contract and insurance register. Consequently, six (6) insurance policies were renewed and additional five to cover its assets were procured. The objective for the renewal and procurement of the policies is to ensure that VRA's insurable assets have the required insurance cover that would ensure the risk in the Authority's legal liabilities were transferred to the insurance company for indemnity. The policies renewed include Comprehensive Machinery & Public Liability Policies for Tema Thermal Power Complex Station 2&3 (TTPC-STN2 and TTPC-STN3), Insurance Cover for the Gas Tie-in-Point and the Gas Conditioning Facilities, Takoradi T1 Insurance Cover, Tema Interconnection Facility Insurance Cover, Ada Marine Insurance Cover, KTPS Insurance Cover. The newly procured policies include Insurance for Tema Thermal Power Complex Station 3, Insurance for Buildings in Commercial Use, Goods-in-transit Insurance Cover, Insurance cover for Akosombo Marine Assets/vessels and Insurance cover for VRA selected buildings

Corporate Strategy

Even though the outbreak of the COVID-19 pandemic drastically reduced physical interactions, VRA continued to monitor and evaluate the implementation of its corporate strategy. This was largely achieved by leveraging on the Authority's huge Information and Communication Technologies (ICT) infrastructure. Key milestones achieved during the year include, crafting of the 5-year Business Sustainability Plan (2021-2025), which has the overarching objective of ensuring the protection of the financial gains made, as well as maintaining a sustained financial health and market leadership.

Aside that, we successfully fulfilled all the regulatory requirements by submitting the requisite performance reports to the relevant stakeholders, including the Ministry of Energy, State Interest and Governance Authority (SIGA) and the Public Utilities and Regulatory Commission (PURC).

Again, to ensure VRA had full control of the spectrum of emerging issues that had the potential to derail the achievement of the Authority's strategic objectives, VRA continuously updated the Authority's Corporate Risk Register. The objective was to ensure VRA did not miss out on opportunities, and more importantly, fail to address issues that could impact the Authority's sustainability. Another important milestone was the establishment of the VRA's Right to Information (RTI) office, as required by section 3(b) of the RTI Law (Act 989). Subsequently, we fulfilled the Authority's requirements by submitting VRA's 2020 RTI Manual and Annual Report to the RTI Secretariat as required by law. The implementation of RTI in VRA has the key objective of ensuring transparency in the management of the Authority as a public sector organisation.

Finally, a Communication Strategy for both internal and external stakeholders was developed. The expectation is that the communication strategy would enable the Authority to communicate its sustainability plan to the relevant stakeholders and further enhance the VRA brand and image.

Support Services...

Real Estates & Security Department

In accordance with the Executive Instrument (EI) 42, establishing the Akosombo Township, the Akosombo Management Committee (AMC) on behalf of VRA, continued to manage the Akosombo Township as a Local Authority. The total revenue generated by AMC from its local council activities in 2020, amounted to GH¢220,798.906, compared to the 2019 figure of GH¢313,252.68, representing a percentage decrease of 29.5 percent. The accrued receipts for 2020 is expected to be shared equally between the Authority and the Asuogyaman District Assembly in accordance with the terms of agreement.

In 2020, total income accumulated from rent amounted to GH¢2,803,942.74 as against the amount of Ghc1,369,395.25 recorded in 2019, resulting in a percentage increase of 51 percentage. Included in the total revenue under property services is income from Catering Services, Club House, and accommodation, which amounted to GH¢3,580,904.84. This represents a decrease of about 25 percent over the 2019 total revenue of GH¢4,774,695.36. The overall total revenue generated during the period under review was GH¢6,480,852.60. The year 2020 ended with an overall revenue growth of 0.8% over that of 2019.

Below is the summary of 2020 as against 2019 Actual Revenue line items for the year:

Revenue Lines	2020 Revenue	2019 Revenue	Increase/Decrease
Rentals	2,803,942.74	1,369,395.25	(1,434,547.49)
Catering & Club House	2,048,200.84	3,151,371.86	1,103,171.02)
Accommodation	1,532,704.00	1,623,323.50	(90,619.50)
Miscellaneous	96,005.02	440,797.57	(191,798.55)
Total	6,480,852.60	6,431,894.18	48,958.42

In 2020, there was a significant increase in ground rent income. However, incomes from catering, club house and guest house accommodation(s) decreased owing to the impact of the COVID-19 Pandemic.



Health & Safety

In view of Management's decision to ensure the proper handling of the COVID-19 pandemic, a VRA COVID-19 Task Force was formed with the Chief Executive as Chairman of the Steering Committee. The Task Force's mandate was to, among others, monitor the effectiveness of the measures put in place by Management to prevent the spread of COVID-19 in VRA work areas, ensure the implementation of the directives put in place by the Management, and most importantly, advise Management on the emerging threats and the new measures to be implemented to ensure VRA stayed ahead in the fight against the pandemic.

As a socially responsible organisation, VRA during the year, responded to the

Government's request for support for the COVID-19 Trust Fund, by donating Two Million Ghana cedis (GH¢2,000,000.00). Apart from the national activity, VRA also undertook several activities in the work locations and communities in which we operate.



Workplace Efforts

To complement the national efforts at managing the impacts of the COVID-19 outbreak, the Authority internally sensitised Staff with the deployment of educational materials (posters, banners, and online). The objective was to ensure Staff awareness and compliance with the safety protocols to prevent COVID infections and control the spread should Staff be exposed. Secondly, the Authority provided all Staff at the VRA health facilities with the required Personal Protective Equipment (PPEs), personal hand sanitisers and three (3) re-useable facemasks were also made available to all Staff. All visitors to VRA facilities were mandatorily screened whilst the “working from home” policy as directed by Government

was strictly enforced in compliance with the social distance protocol. The rationale was to prevent the potential spread of the pandemic among the Staff and their dependents. In addition, efforts were made to provide the Staff with isolation, quarantine, and COVID-19 management facilities. It is instructive to note that the “No Mask No Entry” rules were strictly enforced in both the VRA work locations and townships.



Community Support

Aside protecting Staff and their dependents, the Authority also extended the COVID-19 support to stakeholders in the communities within the operational areas. Beneficiaries of the support included Churches/Mosques, Municipal/District Assemblies, Schools, Akosombo Market, Traditional Councils, etc. The interventions rolled out by the Authority to support the communities included fumigation of the entire VRA colony in Aboadze and adjoining communities, the Akosombo market, VRA health facilities etc. Also, Personal Protective Equipment (PPEs), hand sanitisers, Veronica buckets with stands, hand washing basins, thermometers, and tissues were donated to support their fight against the spread of the pandemic. Public education, monitoring and vigilance were in full force.

Support Services...

Furthermore, three (3) screening points were set up at entry points into Akosombo and these points were manned by nurses, in-house security and the police. Passengers in vehicles had their temperatures checked and when there was suspicion, the VRA Hospital took over for COVID testing. Some beneficiaries included the Akwamu and Manya Traditional Councils, Lower Manya Municipal Assembly, Upper Manya, Asuogyaman, Yilo Krobo and Shama District Assemblies, the Aboadze, Dwomo, Lower Inchaban and Abuesi Communities. The VRA Akosombo Schools, the Akosombo International School (AIS) and other schools within the communities also benefitted from the Authority's COVID-19 support.

Outcome of Interventions

Following the Authority's leadership exhibited in the management of the pandemic, VRA's response was always prompt and very often preceded the national directives. As a result, the Authority recorded relatively low number of positive infection cases (considering the Staff population) even though two (2) fatalities were recorded. This created a conducive work environment, which made Staff feel confident and safe to carry out their duties. Ultimately, this ensured that the Authority's business was not interrupted during the period.

Annual Medical Examination

Due to the outbreak of COVID-19 and its attendant restrictions, the Authority's ill-health policy, which provides that all Staff undertake mandatory Annual Medical Examination, was suspended during the period. This was to ensure the strict observance of the COVID-19 protocols; however, measures were put in place to ensure Staff with underlying conditions were adequately cared for.

Safety Activities

In spite of the outbreak of COVID-19, the Authority continued to ensure that Safety, which is a key tenet of our operational excellence strategy, was strictly observed and enforced. To ensure this, we continued the promotion of safety culture activities during the year. The activities included the organisation of safety meetings, workplace safety audits and COVID-19 awareness sessions. These activities were crowned by the celebration of the Authority's Annual Safety Day in November. At the end of the year, Kpone Thermal Power Plant (KTPP) was adjudged the best performing Operational Area, Bolgatanga the best performing NEDCo Area and Real Estate, Akuse was adjudged the best performing Non-Operational Area.





Environmental Sustainability

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

- **Climate Smart Stove (CSS)**

Ninety (90) CSS were constructed for 90 households in four (4) communities in 2020. This brings the total number of stoves provided from 420 in 2019 to 510 in 2020. The CSS is designed to facilitate the Volta Lake Watershed Environment programme with the objective of reducing emissions of Greenhouse Gases (GHGs), mitigating climate change impact, reducing forest degradation through the reduced consumption of firewood as fuel for cooking, improving health conditions of the users of the stoves, as well as saving money for users of the stoves.



- **Environmental Permits Acquisition**

In line with the Environmental Assessment Regulations, LI1652, the Authority acquired environmental permits for all its power projects and other relevant facilities. Valid Environmental permits for the following were acquired:

- » National Gas Pipeline from VRA R&M WAPCo Station
- » Akosombo Oxidation Pond
- » VRA Hospitals Akosombo & Accra
- » VRA Hospital, Accra-Expansion Project

Secondly, we ensured that environmental permits for the operation of our power plants including 330MW Takoradi 1 Thermal Power Station (T1), 49MW Tema Thermal 2 Power Station (TT2PS), 220MW Kpone Thermal Power Station (KTPS), 126MW Tema Thermal 1 Power Station (TT1PS) and 2.5MW Navrongo Solar Power Station (NSPS) remained valid during the year.

Support Services...

- **Bamboo for the Protection of the Volta Lake**

The Authority continued with efforts to protect the shoreline of the Volta Lake to preserve the waterbody for sustained hydropower generation. This follows the collaborative venture between VRA and the Bamboo & Rattan Unit of the Forestry Commission, Council for Scientific Research-Forest Research Institute of Ghana. During the year, out of the planned 10Ha plantation targeted for phase 1 of the programme, 1840 bamboo plantlets were on a 4.6Ha land in Kudikope. A further 1500 bamboo plantlets were procured as additional seedlings to augment the 2020/2021 planting season and also to complete the outstanding 5.4Ha. It is our view that, successfully executing this venture would create the needed buffer zone to avert encroachment of VRA's acquired lands and flood prone areas, protect against erosion and prevent or reduce the rate of evaporation of the Volta Lake, and finally protect the Volta Lake by serving as a means of demarcation of the 85 meters above mean sea level (280 feet contour).

- **Alternative Livelihood interventions**

VRA undertook livelihood empowerment activities for the people in identified areas. These livelihood interventions have the key objectives of serving as a reliable income status for the members of the communities in the project area as well as preventing their negative activities particularly, tree felling, from impacting adversely on the Authority's ability to ensure sustained hydroelectric power generation. For 2020, about 60 persons in Five (5) communities were trained in beekeeping management. It is imperative to note that, the total honey harvested since 2005 is 559.8 litres amounting to cash

equivalence of GH¢24,950.00. The total honey harvested for 2020, however, was 252 litres, translating into a cash equivalence of GH¢11,200.00.



- **Drone Technology Services**

Management's decision to adopt drone technology as part of efforts to help identify and halt illegal undertakings/developmental projects to protect the integrity of the Volta Lake, received a major boost by the commencement of negotiations with the firms that had successfully gone through the evaluation process. The project is expected to generate detailed maps and photographs of land use changes, erosion, human activities, aquatic weeds coverage, vegetation coverage and aquaculture developments, etc. along the volta riverine system, to allow for enhanced environmental planning and conservation activities for sustained hydro power generation.

- **Volta Lake Oil Spill Contingency Plan**

Considering that the bulk handling and transportation of petroleum products (diesel, kerosene, and petrol) on the Volta Lake could pose an environmental risk (accident or human error) to the people and the environment, VRA began the procurement process to engage a consultant to prepare an Oil Spill Contingency Plan for the Volta Lake system. The new contingency plan would replace the outdated VLTC contingency plan rolled out in May 2006 and most importantly, guide other actors in the petroleum industry when ferrying their products across the Volta Lake. A copy of the Technical Evaluation report was submitted to the Executive for approval, prior to the evaluation of applicable financial proposals.



• Reforestation along the Volta Lake

To reduce greenhouse emissions and ensure the continuous flow of water in the Volta Lake Basin for the purposes of ensuring sustainable hydroelectric power generation, VRA continued its reforestation programmes along the Volta Lake. By the end of the year, about 3,132ha of the Volta Gorge area had been covered by dense forest vegetation consisting of both plantation and natural forest. The forest plantation area is 1,630ha, the natural forest covers 1,502ha and the area of land with rocks and grass vegetation is 2,017.24ha. With respect to the buffer zone reforestation programme, a total of 28,800 out of 41,000 forest seedlings produced were supplied to 31 riparian communities for planting and 41 hectares of planted area achieved. As at the close of 2020 about 200ha of forest cover have been re-established under this programme.

This intervention has the objective of guaranteeing the Authority's ability to ensure sustainable power generation for the socio-economic development of the country.

• Environmental Management Plan for the Akosombo & Kpong Hydroelectric Power Plants

As a responsible corporate social entity, VRA since the last decade, has developed and implemented an Environmental Management Plan (EMP) for the continued operation of the Authority's two (2) Hydroelectric power plants. A key activity of EMP is the formation of the Steering Committee, which is mandated to ensure the monitoring and guidance of the overall implementation of EMP. In 2020, the Steering Committee members deliberated on VRA's 2020 annual report on environmental and social activities under EMP. The final report from the meeting formed the basis for the submission of the 2020 annual environmental report submitted to the Environmental Protection Agency in accordance with the environmental permit conditions.

It is instructive to note that, as a result of the directives regarding the COVID-19 restrictions, VRA's Annual Stakeholder Engagements organised to apprise impacted assemblies on highlights of key components of EMP was postponed. The stakeholder engagement, which falls under the Emergency Preparedness Plan (EPP) and a key component of EMP, specifies the roles and responsibilities of stakeholders when emergencies occur or when operational flow releases threaten downstream life, property, or economic activity.

Support Services...

Green House gas Inventory Reporting

The Authority's Greenhouse Gas (GHG) inventory report covering the period 2012-2015, which constituted the initial report, was reviewed by EPA and a verification report submitted in January 2020. The report subsequently has been updated to cover the period 2012-2018. Data on emissions from marine transport has been captured in the report as indicated in the table below.

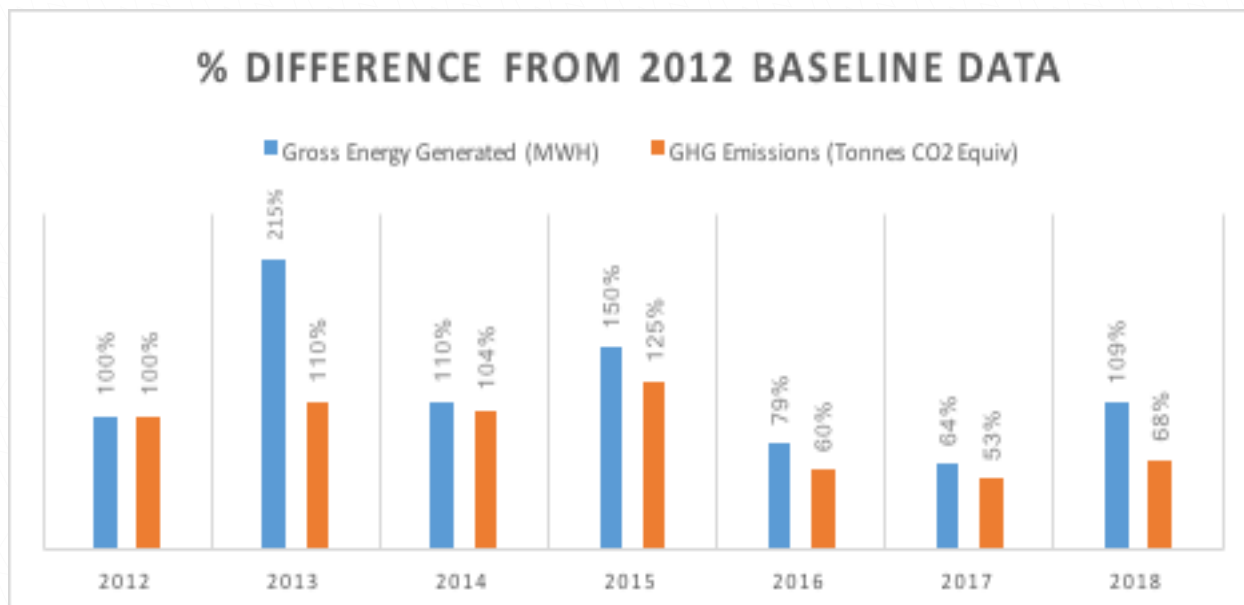
Emissions Source Category	Corporate emissions source	Total emissions Tonnes CO ₂ e	Percentage of total corporate emissions
Stationary Combustion	T1	5,116,494.49	57.26%
	T3	135,112.56	1.51%
	TT1PS	2,508,112.11	28.07%
	TT2PS	500,984.84	5.61%
	MRPS	321,253.36	3.60%
	KTPS	340,564.11	3.81%
Mobile Combustion	Vehicles	12,181.41	0.14%
	Water Transport	448.320	0.01%
Total Emissions from Direct Sources		8,935,151.21	100.00%

The report also provided GHG savings from solar facilities and office paper waste recycling programme.

Source	Annual GHG Emission Savings (Tonnes CO ₂ e)
Navrongo Solar Power Station	8,627.00
Office Paper Recycled	9.00
0.054MW Aglakope	17.00
0.0405MW Atigagorme	6.00
0.054MW Kudorkope	14.00
0.05MW Perdiatorkope	17.00
0.03MW Wayokope	5.00
Total	8,695.00

Annual trends of emissions from stationary combustion, which is the major source of GHG emissions, and the gross energy generated for each year as well as the percentage differences from the 2012 baseline data as shown in the chart below.

The trend shows the percentage difference from the baseline data during the period. In 2013, even though the gross energy generated was 115% over the baseline data, equivalent GHG emissions increased by just 10%. The highest percentage difference in GHG emissions of 25% was experienced in 2015, during which period gross energy generated was 50% over the baseline data. There was considerable decrease in GHG emissions from 2016-2018, with the lowest being in 2017, which achieved 47% less than the baseline data. Indeed, in 2018, the gross energy generated was 9% above the baseline level whilst equivalent GHG emissions was 32% below the baseline data.



Social Sustainability

In 2020, VRA donated relief items to about 100 communities in the Upper East, North East, Savannah, and Northern regions. The items valued over GHc200,000.00 were presented to persons affected by flooding as a result of the spillage from Burkina Faso’s Kompienga and Bagre Dams, following torrential rains in the impacted communities where VRA is constructing the multipurpose Pwalugu Hydroelectric and Irrigation Dam.

• Education

The introduction of Government’s free SHS Policy resulted in stakeholders making a recommendation to the Authority to channel the SHS scholarship component in the budget to support Technical and Vocational Education Training (TVET). In 2020, therefore, a committee was appointed to ensure continuity for the awards of the tertiary scholarships whilst awaiting Management’s approval for the recommendation to transfer the SHS budget to support TVET. The Authority’s scholarship scheme, which till date has supported a total of 329 needy but brilliant students has achieved remarkable success so far. Highlights of the successes include, Theodore Amegashie, a beneficiary from the Anlo State who successfully graduated as a medical doctor from the University of Ghana (School of Medicine and Dentistry); Francis Essilfie from the Shama Traditional Area graduated with distinction from the University of Health and Allied Sciences whilst Miss Nancy Adowa Pokuaa was awarded the best female Nursing Student from University of Cape Coast.



Support Services...



Schistosomiasis Control Programme

In furtherance to our resolve to sustain our efforts at addressing the menace of schistosomiasis in the Volta Basin, VRA through its Schistosomiasis Control Unit continued to collaborate with state institutions including Health Services of the Ministry of Health and the Noguchi Memorial Institute for Industrial Research (NMIIR), University of Ghana. To help us achieve this, we continued the deployment of the much more integrated approach to the management and control of Schistosomiasis. The methods deployed include mass drug administration to reduce disease parasitic load, shoreline weeds clearing to minimise risk of infection, snail vector prospection and population density assessment, to

determine infectivity rates and education and awareness creation to enhance and lead to the change in knowledge, attitudes and practices. Our anticipation is that these interventions will facilitate the lowering of the disease prevalence and ultimately attain full eradication.

- *Provision of Biofil Sanitation*

VRA began the provision of a Biofil toilet facility for two institutions: Adjena SHS and Kade Government Hospital in the Asuogyaman and Kwabebrim Districts respectively. The projects, a ten-double seater biofil facility for Adjena and a second nine (9) double seater facility for Kade was delayed following the outbreak of the COVID-19 pandemic. The biofil sanitation facility is an off-grid alternative to septic tanks, that treats fecal matter on site in a digester separating solids and liquids under aerobic composing conditions. Rolled out in 2015, the programme has had successful outcomes by contributing significantly to curbing the spread of schistosomiasis. Communities that have previously benefitted from the programme include, West Kpong Resettlement Community Methodist School in the Lower Manya Municipality, Dzebato in the South Tongu District, and Supomu Dunkwa Community in the Shama District, amongst others.

- *Provision of Clean Water*

Having identified the lack of potable water as a challenge in the fight against schistosomiasis in the impacted communities along the Volta Lake, VRA continued with its efforts towards providing potable water as part of the interventions to mitigate the spread of schistosomiasis in the communities. To this end, feasibility studies were conducted in selected communities including Agbledomi, Alarkope, Anyako, Atiavi, Aborlove, Apeguso, Akotoe, Akotoe Tsreboanya and Batterkope in the Anloga, Keta, Asuogyaman and Upper Manya Districts. Inspection of existing facilities were also undertaken with the objective of providing them with potable water. The solar powered mechanised borehole project, being executed in collaboration with Project Maji Foundation has so far been provided in six communities.





VRA Health Services Limited (VHSL)

The health needs of the Authority's employees and their dependents, as well as the communities in our operational areas remained a priority to the Authority during the year, as our facilities in Accra, Akosombo, Aboadze and Akuse continued to provide quality medical services to the beneficiaries. VRA's designated panel of doctors also supported with the provision of excellent medical services to Staff of the Northern Electricity Distribution Company (NEDCo) and their dependents. During the year under review, specialised services and general medicine in obstetrics & gynaecology, ophthalmology, general surgery, orthopedics, ear, nose and throat, physiotherapy and dental care were also provided in the Accra and Akosombo facilities. Other cases, were however, referred to selected hospitals; 37 Military Hospital, Korle Bu Teaching Hospital, St. Joseph's Hospital in Koforidua, etc. The total Outpatient attendance at the Authorities facilities was 137,878, which is a 27.4 percent reduction, compared to the 2019 figure of 189,844. Furthermore, admissions for the year were 4,589, which is 15.1 percent lower than the 5,283 recorded in 2019.

During the period, VHSL's paying public population constituted about 66.57 percent of the overall outpatient load and 94.27 percent for the in-patient load in all the medical facilities. Eighty (80) percent of VHSL's clients were on National Health Insurance. Total revenue for the year 2020 dropped from GH¢25,586,853 in 2019 to **GH¢21,459,011** in 2020. The 16.1 percent decrease in revenue is attributed to the COVID-19 pandemic, which compelled VHSL to close down its dental and eye units between March and August 2020.

In 2020, VHSL also continued to operate the GRIDCo Infirmary, by assisting with the procurement of drugs and provision of manpower. The infirmary was manned by Locum Personnel including a Physician Assistant, Dispensing Technician, Laboratory Technician, and a Nursing Officer. Finally, we continued to support the training of medical professionals from medical schools, nursing training schools and other tertiary institutions.

Support Services...



VRA Academy

Following the VRA Academy's quest to improve its capacity in technical training, the newly elevated Centre of Excellence had approval to procure hydraulic and pneumatic workbenches with funding from Association of Power Utilities of Africa (APUA). The availability of the equipment is expected to impact positively on practical training in Hydraulic and Pneumatics, and ultimately improve revenue generation for business sustainability. Again, with budget support from VRA, the Centre of Excellence procured a Programmable Logic Controller (PLC), which is expected to boost the Academy's capacity to deliver training in PLC using its equipment and facilitators.

• *Training Facilitation*

Subsequent to the COVID-19 restrictions that impacted on in-person training, the VRA Academy leveraged the Authority's Information Communication Technology (ICT) infrastructure by deploying the virtual platform (Microsoft Teams) to facilitate training. This was done for both technical and non-technical courses. In spite of the restrictions, VRA Academy continued to hold limited number of in-person training solely for technical courses, which involved practical or hands-on training, complying strictly with the COVID-19 protocols.

• *Strategic Engagements/Collaborations*

In line with our commitment to show leadership in capacity development in the sub region, the VRA Academy held various engagements with strategic partners, such as the West Africa Power Pool, (WAPP), APUA, GIZ and COTVET. The engagement with GIZ aimed at discussing training opportunities in Renewable Energy (RE), while that with the WAPP Secretariat focused on assessing their capacity in RE training. The objective for the engagement with WAPP was to facilitate the agenda of using the VRA

Academy as a hub for Renewable Energy training in the sub region. GIZ also sponsored training on Non-Technical Power Losses which was delivered by VRA Academy in collaboration with NAPTIN, a Training Centre of Excellence in Nigeria to WAPP member countries.

During the period, the Academy also successfully engaged with COTVET to discuss the next phase of the accreditation process, which was the validation of selected programmes to be accredited. A team of experts were put together to review and recommend selected programmes for validation by the Academy.

Again, as a regional Centre of Excellence under the APUA Centres of excellence agenda, the VRA Academy honoured its obligations including participation in strategic meetings. Finally, the Academy also complied with APUA's requirement by submitting the Centre's 2020 training report and 2021 training catalogue for publication within member utilities in Africa.

Non-Power Activities

Subsidiaries

Further to our quest to transform the Authority's subsidiaries into self-sustaining, business-oriented, and profitable enterprises, we vigorously pursued the business of seeking prospective strategic business partners for our subsidiaries. During the year, we focused on the preparation of business proposals and the streamlining of the processes, that would eventually lead to the selection of these partners. The subsidiaries include the Akosombo Hotels Limited (AHL), Kpong Farms Limited (KFL),

Volta Lake Transport Company Limited (VLTC), VRA Health Services Limited (VHSL), VRA Property Holding Company (PROPCo); as well as the VRA International Schools Limited (VISL). It is the expectation that, the selected business partners would inject the requisite capital, and introduce innovative ideas, products, services and the required expertise into the operations of the various entities to make them more competitive, whilst operating with the needed private sector mindset.



Akosombo Hotels Limited (AHL)

Further to the Authority's commitment to selecting a strategic partner for AHL, a mandatory site visit was conducted as part of the restrictive tendering process leading to the engagement of a strategic business partner. Representatives of three firms participated in the site inspection. In the course of the year, VRA, AHL, and Sentinel Global Advisors, who have been appointed as the Mergers and Acquisitions Advisor completed a valuation of AHL's property and submitted a draft report for consideration by the Executive. Furthermore, to facilitate and guide the stakeholder consultations and communications during the due diligence, negotiations, and financial close phase of the selection process, a Stakeholder Engagement Plan (SEP) was developed.

With regards to daily operations, patronage of AHL's business was gravely impacted by the COVID-19 protocols and restrictions. For instance, the capacity for the Dodi Princess cruise boat was reduced from 150 to 70 to ensure the maximum social distancing on board. To sustain client interest, AHL introduced camel riding, water sports, and bird sanctuary for viewing on the Dodi Island as part of the cruise package. Again, food delivery service was introduced at the Hotel to satisfy the needs of clients who wanted to avoid eat-in services. Furthermore, new and exciting accommodation packages interlaced with cruise and watersport experiences were also introduced. These carefully packaged services took into account those customers who wished to honeymoon, celebrate special occasions like birthdays or simply wanted to tour.

As part of AHL strategy to drive its business, business alliances with media houses and tour operators were forged to highlight and promote the fact that 'Volta Hotel' and 'Dodi World' is indeed a unique tourism location.

Non-Power Activities...



Kpong Farms Limited (KFL)

The strategic partner selection process for KFL in 2020, began with the issuance of Request for Proposals (RFPs) to shortlisted bidders. In furtherance to that, a mandatory site visit was also organised and attended by representatives from the shortlisted firms. Subsequently, an eight-member evaluation team was put together to evaluate the RFPs and one bidder was recommended to be selected for the next stage of the process. Executive approval was granted to proceed with the selection of a Mergers and Acquisitions (M&A) Advisor to assist KFL to reach financial close with the prospective bidder. The Public Procurement Authority approved the shortlisted M&A Advisory firms for the restrictive tendering process. The RFP for the M&A Advisory firm was issued in November and closed in December.

Volta Lake Transport Company (VLTC)

Similar to the efforts deployed by KFL and AHL with respect to the selection of strategic partners, a mandatory site visit was conducted for bidders who had expressed interest to become strategic partners with the Volta Lake Transport Company. During the year, a key milestone for VLTC was the completion of VLTC project information memorandum and RFP, which has the objective of facilitating the processes leading to the selection of the prospective strategic business partner. Three Companies out of the eight shortlisted bidders came together to form a consortium and were recommended for selection for the next stage of the process. For the purpose of selecting a Mergers and Acquisition Advisor (M&A), three firms were shortlisted and after going through the due process, PricewaterhouseCoopers (PwC) was finally selected as the M&A for VLTC.



Non-Power Activities...

In terms of operations, following a proposal by the Ministry of Transport to Korean Exim Bank for the development of Volta Lake transport systems, a feasibility study to assess the possibility of constructing a spillway, 10 landing sites (including reception facilities & staff accommodation at 5 cross-ferry stations and the purchase of 5 Drive-on/off vessels for VLTC was commissioned. Secondly, the scheduled commissioning of the engine of the “MV Buipe Queen” was executed by the South African Engineers.

Furthermore, to ensure continuous ferry crossing operations on the Dambai route, “MV Yapei Queen” was redeployed to Dambai, following the docking of “MV Senchi” at Akosombo for repairs. The aforementioned vessels, which are expected to be operational in the first quarter of 2021, would contribute significantly towards improving VLTC’s ferry-crossing operations.



VRA Property Holding Company (PROPCo)

The outbreak of COVID-19 and its concomitant restrictions significantly impacted on PROPCo’s trajectory in 2020. The situation nevertheless provided an opportunity to reflect on project specifics and the potential impact on demand and design.

In addition to the above, PROPCo remained committed to putting in the needed effort to ensuring the successful execution of the following projects:

- **The East Cantonments Village Limited:**

Owing to the outbreak of COVID-19, work on the East Cantonments Village Project was stalled during the year. Despite the setback, PROPCo and Devtraco towards the end of the year, held series of meetings to plan how to kickstart the project in relation to complying with the corporate governance issues associated with the project

- **Energy Exchange Square, Ridge:**

Following the granting of approval for the consolidation of the Accra office into one building to anchor the proposed “Grade A” office development christened “Energy Exchange Square” at Ridge,

VRA, during the period under review, engaged with stakeholders in a bid to identifying suitable funding partners for the project. Consequently, RFPs were evaluated to facilitate the engagement of a project manager for the project. Added to that, a successful bidder was recommended and an invitation to tender for a design and build contractor was floated. PROPCo is awaiting VRA Board’s approval to proceed with the project.

Non-Power Activities...

- **NEDCo Head Office:**

During the year, PROPCo carried out pre-feasibility studies on the NEDCo Head Office Project. Proposals received from three (3) design, build and finance contractors were received and submitted to the NEDCo Board. Prior to that, PROPCo had completed the design and concept for the project and held discussions towards a co-funding agreement between VRA and NEDCo. The project, however, was stalled following the outbreak of COVID-19 as well as challenges with funding.

- **Akuse Guest House Project:**

The Akuse Motel and Guest Houses were released to PROPCo to refurbish purposely for the VRA Academy's training participants and for commercial purposes. This arrangement follows a leasing agreement reached between VRA and PROPCo. The objective of this project is to address the accommodation concerns of the VRA Academy whilst leveraging its infrastructure and ambiance to support the hospitality business.



VRA Health Services Limited (VHSL)

The outbreak of the COVID-19 pandemic and its resultant restrictions posed operational challenges to the Authority's health facilities during the year. With support from VRA, however, through the provision of Personal Protective Equipment (PPEs), VHSL successfully executed its mandate to meet stakeholders' expectation. In line with COVID-19 restrictions and to ensure the strict observance of the social distancing protocol, call centres were instituted for clients to book appointments before walking in to see assigned doctors. At the peak of the pandemic, the Eye and Dental Clinics, were closed down and were re-opened in September 2020. VRA's hospitals became fully operational after a few months of restricted operations. Meanwhile, to ensure VHSL's facilities were adequately equipped for the effective management of COVID-19 cases, VHSL acquired the equipment needed to carry out the COVID-19 tests. These included testing kits and

the COVID-19 testing Safety Cabinet. Added to that, VHSL took delivery of three (3) X-ray machines, which have been deployed to the Accra, Akosombo and Aboadze Hospitals and are expected to be operational in 2021. Again, we worked towards the procurement of diagnostic equipment for the hospitals. In terms of infrastructure, we focused on the Accra Prefab and Aboadze Expansion projects. The Aboadze expansion works when completed would comprise of main wards, ambulance bay, sterilisation centre, laundry facility, eye and dental centres. To further improve health care, VHSL is aiming at deploying technology in administering virtual health for our clients.

The overarching objective for these interventions is to ensure VHSL is well positioned to deliver quality services, which in the long term would improve the revenue streams.

Non-Power Activities...

Strategic Business Units VRA International Schools Limited (VISL)

Prior to its operationalisation, it was recommended by the Restructuring Advisory Committee to engage a consultant to develop a value proposition for VISL. The process, however, was put on hold by the VISL Board during the period under consideration.



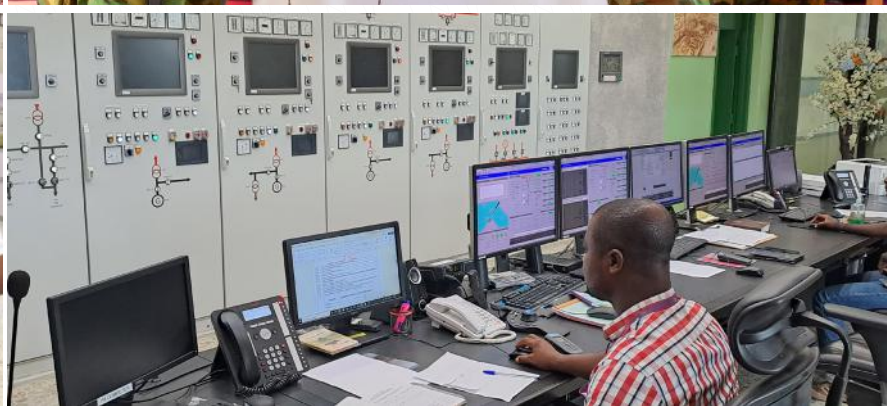
To ensure compliance with COVID-19 protocols and restrictions, VISL adopted virtual learning as a means of facilitating engagements between the teachers and the students, to guarantee business continuity. Teachers initially forwarded learning materials to students via WhatsApp platforms until the online teaching service was rolled out. Again, to control movements to and from the school by the parents, a video room was created to give the students the opportunity to have interactions with their parents. These interventions ensured the school's smooth operations.



Key Activities in 2020



Key Activities in 2020





Financial Audited Accounts

BOARD OF DIRECTORS

Mr. Kofi Tutu Agyare - Chairman (Appointed on 31/08/2021)
Mr. Emmnuel Antwi-Darkwa - Chief Executive
(Resigned on 06/01/2021, re-appointed on (31/08/2021)
Most Rev'd. Dr. Cyril Kobina Ben-Smith (Appointed 31/08/2021)
Mr. Solomon Adjetey Sowah (Appointed on 31/08/2021)
Hon. Kwame Anyimadu-Antwi (Appointed on 31/08/2021)
Rev. Dr. Joyce Rosalind Aryee (Resigned on 06/01/2021, re-appointed on 31/08/2021)
Chief Musa Badimsugru Adam (Resigned on 06/01/2021, re-appointed on 31/08/2021)
Madam Janet Akosua Gyasiwaa (Resigned on 06/01/2021, re-appointed on 31/08/2021)
Mr. Richard Obeng Okrah (Resigned on 06/01/2021, re-appointed on 31/08/2021)
Mr. Kweku Andoh Awotwi (Resigned on 06/01/2021)
Nana Kobina Nketsia V (Resigned on 06/01/2021)
Mr. El-Farouk Umar (Resigned on 06/01/2021)

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
Bank of Africa Ghana Limited
Bank of Ghana
Barclays 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 2020

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

Power Production

The total electricity generated from both hydro and thermal sources decreased by 387 GWh (4%) from 9,667 GWh in 2019 to 9,280 GWh in 2020; this includes generation and transmission substations use of 59GWh (2019: 50GWh). Generation from hydro sources decreased by 184GWh (3%) from 6,208 GWh in 2019 to 6,024GWh in 2020. Thermal generation also decreased by 4% (387GWh) from 3,460GWh in 2019 to 3,256GWh in 2020. The Thermal generation includes 1,283GWh of energy from the Ameri Plant (2019: 1,483GWh). VRA's 2020 generation from solar plants was 3 GWh (2019: 3GWh).

To supplement generation from VRA's own plants, gross power of 1,193GWh (2019: 1,616GWh) was purchased from Takoradi International Company Limited (TICO) of Ghana representing a decline of 26% (423GWh) from the 2019 power purchase from TICO. There was net inadvertent import of 58 GWh from CIE in 2020 (2019: 127 GWh)

Summary of energy generated and purchased in 2018

	Change		2020		2019	
	GWh	%	GWh	%	GWh	%
VRA Hydro:						
Akosombo	(204)	-4%	5,161	49%	5,366	47%
Akuse	20	2%	862	8%	842	7%
	(184)	-3%	6,024	57%	6,208	54%
VRA Thermal:						
TTPS	20	2%	1087	10%	1067	9%
TTIPP	50	13%	427	4%	377	3%
TT2PP	(48)	-35%	90	1%	138	1%
KTPS	(25)	-6%	368	3%	393	3%
AMERI	(200)	-14%	1,283	12%	1,483	13%
	(203)	-6%	3,256	31%	3,460	30%
Total VRA Hydro & Thermal	(387)	-4%	9,280	88%	9,667	85%
VRA Solar:						
NSPS	0	0%	3	0%	3	0%
	(0)	(0)	3	0%	3	0%
Total Energy by VRA	(388)	(0)	9,283	88%	9,671	85%
Purchases & Imports						
TICO	(423)	-26%	1193	11%	1616	14%
CIE	(69)	-54%	58	1%	127	1%
	(492)	-28%	1,252	12%	1,744	15%
Total Energy Generated & Bought	880	-8%	10,535	100%	11,414	100%

Financial Review for the year ended 31 December 2020...

Revenue

Revenue from sale of electricity in 2020 decreased by 2.29% (GH¢91.74 million) to GH¢3,921.15 million from the previous year's sales of GH¢4,012.89 million. This was mainly due to the combined effect of 8.72% (938GWh) decrease in the volume of energy sold from 10,758 GWh in 2019 to 9,820 GWh in 2020 and 4.09% decrease in the average tariff of ECG from GH¢0.28129/kWh in 2019 to GH¢0.26978/kWh in 2020. Transmission Services Charge relating to energy (TSC2) also declined by 37.09% from an average of GH¢0.018335 in 2019 to GH¢0.011534 in 2020. The volume of energy sold to regulated customers however, declined by 20.72% (1,390 GWh) from 6,709 GWh in 2019 to 5,319 GWh in 2020. The volume of electricity sold to deregulated customers which attract relatively higher tariff increased by 11.16% (452 GWh) from 4,049 GWh in 2019 to 4,501 GWh in 2020 largely on account of sales to Sonabel Bolga-Ougadogou which increased from 519 GWh in 2019 to 930 GWh in 2020 representing an increase of 411GWh(79.19%).

Cost of Sales

Cost of sales consisting of fuel usage, power purchase, depreciation, salaries, materials, repairs and maintenance and other operating cost, declined by GH¢120.64 million (3.63%) from GH¢3,326.59 million in 2019 to GH¢3,205.95 million in 2020.

This is attributable to the combined effect of the following;

- » Decrease in energy generation by 7.70% (880GWh) from 11,414 GWh in 2019 to 10,535 GWh in 2020.
- » Gas consumption in line with the decrease in generation also declined by 11.53% (4,380,364 MMBtu) from 37,986,448.40 MMBtu in 2019 to 33,606,084.44 MMBtu in 2020.
- » The contribution of hydro generation to VRA's total energy generated and purchased declined in 2020 by 4.88% from 57.18% in 2019 to 54.39% in 2020.
- » A 6.95% depreciation of the average GH¢/US\$ exchange rate from GH¢5.2150/US\$1 in 2019 to GH¢5.57746/US\$1 in 2020 also contributed to the increase in cost of sales.
- » Power importation (actual and inadvertent) from CIE dropped significantly by 54%% (GWh) from 127 GWh in 2019 to 58 GWh in 2020.
- » Depreciation however increased from GH¢559.39 million in 2019 to GH¢650.75 million in 2020 due to the increase in the indices applied in the revaluation of the fixed operating assets.

Administrative Expenses

Administrative expenses increased by GH¢53.46 million (9.35%) from GH¢571.64 million in 2019 to GH¢625.10 million in 2020. There was a reduction in depreciation from GH¢59.63 million in 2019 to GH¢57.91 million in 2019 due to the completion of the useful lives of most of NEDCo's administrative assets. Staff related cost also increased by 15.91% from GH¢326.28 million in 2019 to GH¢378.20 million in 2020. Repairs and maintenance also declined from GH¢31.57 million in 2019 to GHS26.17 million in 2020. Support to the National COVID-19 response also contributed to the increase in the administrative costs.

Other Operating Income

Other operating income increased by GH¢51.96(30.20%) from GH¢172.05 million in 2019 to GH¢224.01 million in 2020. The increase was due to a significant increase in service charge in respect of NEDCo's distribution function from GH¢13.67 million to GH¢44.71 million. There was an increase of 46.45% (GH¢18.52 million) in service charges in respect of increased volumes of gas supplied to some Independent Power Producers (IPPs) from GH¢39.87 million in 2017 to GH¢58.39 million in 2020. Income from Operating Units and subsidiaries such as Real Estate Department, VRA Health Services Limited, Property Holding Company Limited (PROPCo), Akosombo Hotel Limited, Volta Lake Transport Limited remained almost stable as there was less than 1% (GHS0.47) increase from GH¢70.06 million in 2019 to GH¢70.54 million.

Financial Review for the year ended 31 December 2020...

Operating profit / (Loss)

The operating profit of the Group in 2020 was GHS439.20 million in 2020 million compared to an operating profit of GH¢426.01 million in 2019. The increase in operating profit was mainly due to a decrease in total operating income by GH¢63.94 million (1.43%) from GH¢4,482.86 million in 2019 to GH¢4,418.92 million in 2020 as against a decrease of 1.65% (GHS64.32 million) in total operating cost from GH¢3,898.23 million in 2019 to GH¢3,833.91 million in 2020. Included in total operating income is a GH¢127.95 million support by the Government of Ghana in respect of the shortfall on tariffs to be received for power generated by the AMERI plant. (2019: GH¢139.30 million).

Net Loss

The Group ended the year 2020 with a net loss of GH¢127.00 million (2019: GH¢253.05 million). The loss for the year is after charging depreciation on fixed assets of GH¢708.66 million (2019: GH¢619.02 million), exchange loss of GH¢403.64 million (2019: GH¢385.05million), and financial expenses of GH¢258.18 million (2019: GH¢368.24 million).

2021 OPERATIONAL & FINANCIAL OUTLOOK

The forecast national system demand for 2021 is 20,633GWh, comprising customer demand of 19,753GWh, GRIDCo substation usage of 10GWh and transmission losses of 870GWh.

The Authority plans to generate a total of 11,986GWh whilst Bui Hydro Plant 705GWh and the Independent Power Producers would generate 7,942GWh excluding Bui generation. The Authority's generation breakdown is as follows: 6,500GWh from hydro sources, 1,915GWh from the Takoradi Thermal Plant, 353GWh from the TT1PP, None from the Mines Reserved Plant, 369GWh from the Kpone Thermal Power Plant, 30GWh from the Solar Plant, 622GWh from AMERI and no power imports. The Takoradi International Company (TICO) is forecast to supply 2,085GWh. Thus, VRA is forecast to generate 58.09% of the national electricity load whilst Bui Hydro Generating Plant and the IPPs will supply 41.91% with no additional supply required. The forecast power sale revenue for 2021 is GH¢4,144million assuming a Bulk Generation Tariff of GHp27.58/kWh. The Other income of about GH¢135 million, includes a premium of GH¢8.9 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 GH¢3,085 million.

However, total administrative cost is estimated at GH¢574 million (excluding the Strategic Business Units- SBUs) whilst interest expense is forecast at GHS242 million and loss on exchange fluctuation on foreign debt amount to GH¢180 million.

Financial Review for the year ended 31 December 2020...

Financial Summary (VRA)

	2016	2017	2018	2019	2020
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Income from Sale of Electricity	2,562,276	2,632,802	3,000,712	3,890,946	3,793,161
Other Operating Income	91,351	353,976	132,919	110,837	121,105
Operating and General Expenses including depreciation	3,367,921	2,910,118	3,079,293	3,310,366	3,161,441
Depreciation	249,556	421,369	432,317	424,903	535,675
Operating Profit/(Loss)	(168,866)	771,765	591,311	830,713	880,776
Financial Expenses	840,051	363,726	422,850	363,726	258,184
Financial Income	6,736	9,788	14,101	10,939	3,593
Exchange Fluctuation	(392,680)	(396,380)	(402,663)	(605,046)	(469,686)
Government Assistance/Subvention/ Subsidy	545,428	651,153	536,973	139,296	127,951
Net Profit/(Loss)	(1,319,682)	(430,544)	(220,101)	(127,120)	156,499
Property, Plant and Equipment(Cost/ Valuation)	12,369,942	13,329,637	15,062,532	17,778,816	18,914,285
Property, Plant and Equipment (Net Book Value)	7,569,243	6,948,350	7,502,118	8,469,329	8,648,585
Capital Work in Progress	759,715	834,031	743,927	815,969	827,780
Current Assets	5,018,419	6,110,609	7,495,142	8,864,931	9,201,999
Current Liabilities	7,373,160	6,187,043	6,419,391	7,626,322	7,812,410
Investment by the Rep. of Ghana	495,449	2,924,652	3,960,933	4,305,586	4,305,586
Capital Surplus	4,495,064	4,560,176	4,893,838	5,899,375	5,952,182
Retained Earnings	(1,904,023)	(1,854,085)	(1,526,999)	(1,326,931)	(750,510)
Principal portion of long term loans	937,996	962,447	962,447	824,691	845,598
Ghana Cedi (GH¢) to US\$ Exchange Rate	4.1811	4.4142	4.8200	5.2150	5.7342

Financial Review for the year ended 31 December 2020...

		2016	2017	2018	2019	2020
Return on Average Equity	%	(5.00)	16.49	9.07	10.20	9.54
Return on Average Net Fixed Assets						
-Plant in Operation	%	(2.43)	10.47	8.18	10.40	10.29
Current Assets Ratio	Times	0.68	0.99	1.17	1.16	1.18
Debt Service Ratio	Times	0.02	0.61	0.71	0.90	0.77
Gearing Ratio	%	26.1	27.00	27.11	9.25	8.86
GWh Generated and Purchased less Station Use (X 106)	GWh	9,873	9,503	9,597	11,364	10,476
Total Production Expense including depreciation per MWh	GH¢	341	306	407	291	302
Total cost of production including depreciation and interest but excluding Debt Fluctuation per MWh	GH¢	426	364	385.96	323.00	275
Average Revenue/MWh Generated and Purchased	GH¢	260	273	321.69	352.00	367
Total Installed Capacity	MW	2,684	2,684	2,684	2,520	2651
Ratio of gross hydro generation to firm capability of Akosombo and Kpong	%	88	94.98	95.71	117.13	114
System Peak Demand	MW	1,997	2,077	2,371	2881	2857
Ratio of System Peak Demand to Installed Capacity	%	74	77	88.34	114.33	108

Financial Review for the year ended 31 December 2020...

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

The Directors present their report and the consolidated and separate financial statements of the Authority for the year ended 31 December 2020.

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 consolidated and separate financial statements of Volta River Authority, comprising the consolidated and separate statement of financial position at 31 December 2020, and the consolidated and separate statements of comprehensive income, changes in equity and 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 Authority's Directors are also responsible for such internal control as the Directors determine necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and for maintaining adequate accounting records and an effective system of risk management.

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 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 challenges in the finances of the Authority and its Subsidiaries have started a gradual turn around as shown by the positive current ratio. They have also made an assessment of the Authority's ability to continue as a going concern. Given that the VRA is the State's sole electric generation utility, and Government's recent and on-going initiatives to remedy these financial challenges, the Directors are confident and believe the Authority will be a going concern in the years ahead.

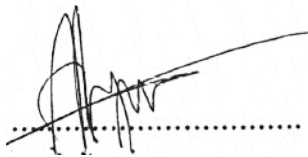
The gradual improvement in the bottom line of the Authority emanated from Management's strategic decision to switch to the use of relatively cheaper natural gas for power generation as opposed to Light crude oil and Distillate crude oil. The Authority's adherence to strict budgetary limits led to a reduction in costs and also accounted for the improvement in the financial performance.

Financial Review for the year ended 31 December 2020...

To further improve the liquidity position and avert the recurrence of a debt build up, the implementation of the Cashflow Waterfall Mechanism, which is being led by the Ministries of Energy and Finance, will ensure that all stakeholders in the power supply chain benefit proportionately from the total revenue collected by the distribution company, Electricity Company of Ghana (ECG)/Power Distribution System, thereby reducing the liquidity risk concerns that have plagued the power sector in recent years.

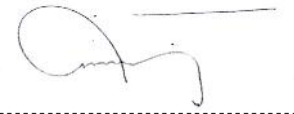
APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements were approved by the Board of Directors on October 14, 2021 and are signed on their behalf by:



Kofi Tutu-Agyare
Board Chairman

OCTOBER 14, 2021



Emmanuel Antwi-Darkwa
Chief Executive

OCTOBER 14, 2021

Introduction

The Authority is committed to the principles and implementation of good corporate governance. The Authority recognizes the valuable contribution that it makes to long-term business prosperity and to ensuring accountability to its stakeholders. The Authority is managed in a way that maximizes long term stakeholders value and takes 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, six 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 a 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 sub-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 process, compliance with laws and regulations and the safeguarding of 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 continuing assessment of the effectiveness of the internal control systems in the business. The systems of internal control are implemented and monitored by appropriately trained personnel and their duties and reporting lines are 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 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, bribery and 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 2020...

INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF THE VOLTA RIVER AUTHORITY

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, 2020, and the Consolidated and separate Statements of 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 23 to 65.

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, 2020, and of its consolidated and separate financial performance and consolidated and separate cash flows for the year then ended in accordance with International Finance Reporting Standards (IFRS) and in the manner required by the Volta River Development Act, 1961 (Act 46), as amended by Act 2005 (692) and the Companies Act 2019, (Act 992).

Basis of Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). 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 2020...

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

Our objectives are to obtain reasonable assurance about whether the Consolidated and separate Financial Statements as a whole are free from material misstatements, 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 it is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISAs,) 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 ISAs, we exercise professional judgement and maintain 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 control.
- 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 uncertain exists, we are required to draw attention in our auditors report to the related disclosures in the Financial Statements or, if such disclosure are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors 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.

Financial Review for the year ended 31 December 2020...

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 safe guard.

From the matters communicated with the Directors, we determine those matters that were of most significance in the audit of the Financial Statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless laws or regulations preclude public disclosures about the matter or when in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on other legal and Regulatory Requirements.

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

- i. 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;
- ii. 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
- iii. 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) are in agreement with the books of account.



ELIZABETH BOTCHEY
ASST. AUDITOR-GENERAL/CAD
for: Ag. AUDITOR-GENERAL

Dated: 14/10/2021

Financial Review for the year ended 31 December 2020...

STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2020

	Note	VRA		GROUP	
		2020	2019	2020	2019
		GHc'000	GHc'000	GHc'000	GHc'000
Assets					
Property, Plant and Equipment	8b	9,476,364	9,285,298	10,453,223	10,320,117
Intangible Assets	8d	-	-	30	59
Investment in Subsidiaries	9	487,985	498,631	-	-
Investment in Equity Securities		-	-	14,104	14,104
Other long term investments	10	57,981	38,921	1,500,898	1,394,052
Trade and other Receivables	12	19,899	15,356	19,899	15,356
Non-current Assets		10,042,229	9,838,206	11,988,154	11,743,688
Inventory	11	440,486	369,732	477,983	389,823
Trade and Other Receivables	12	7,983,021	7,771,998	8,442,593	8,320,930
Current Tax Assets	7b	-	-	533	521
Short term investments	13	65,447	74,081	120,432	137,295
Cash and Cash Equivalents	14	713,044	649,120	841,794	757,240
Current Assets		9,201,999	8,864,931	9,883,335	9,605,809
Total Assets		19,244,229	18,703,137	21,871,488	21,349,497
Equity					
Investment by Republic of Ghana	17	4,305,586	4,305,586	4,305,586	4,305,586
Retained Earnings Account		(750,510)	(1,326,931)	(876,109)	(1,286,644)
Revaluation Surplus	18	5,952,182	5,899,375	7,701,961	7,671,284
Debt Contingency Fund Reserve	21	38,921	38,921	38,921	38,921
Government of Ghana Grant	20	-	-	1,232	1,232
Total Equity		9,546,180	8,916,951	11,171,591	10,730,378
Liabilities					
Employee Benefit Obligations	19	218,344	194,614	259,543	232,109
Trade and other Payables	15	269,740	269,740	269,740	256,743
Capital Grant	15	328	-	43,718	48,712
Deferred Tax	7c	-	-	552	671
Borrowings	16	1,397,228	1,695,510	1,535,135	1,695,510
Non-Current Liabilities		1,885,639	2,159,863	2,108,687	2,233,745

Financial Review for the year ended 31 December 2020...

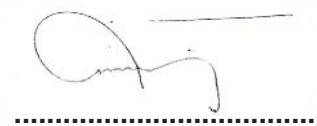
STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2020

	Note	VRA		GROUP	
		2020	2019	2020	2019
		GHc'000	GHc'000	GHc'000	GHc'000
Trade and Other Payables	15	6,794,485	6,587,936	7,339,504	7,024,293
Current Tax	7b	-	-	370,594	321,879
Borrowings	16	1,017,925	1,038,386	881,112	1,039,202
Current Liabilities		7,812,410	7,626,322	8,591,210	8,385,375
Total Liabilities		9,698,049	9,786,186	10,699,897	10,619,119
Total Equity and Liabilities		19,244,229	18,703,137	21,871,488	21,349,497

The Financial Statements were approved by the Board of Directors on October 14, 2021 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 2020...

STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2020

	Note	VRA		GROUP	
		2020	2019	2020	2019
		GH¢'000	GH¢'000	GH¢'000	GH¢'000
Revenue	2a	3,793,161	3,890,946	3,921,148	4,012,892
Cost of Sales	3	(2,725,655)	(2,877,684)	(3,208,803)	(3,326,587)
Gross Profit/(Loss)		1,067,506	1,013,262	712,345	686,305
Other Operating Income	2b	121,105	110,837	224,008	172,045
Government of Ghana Support on AMERI tariff shortfall	2c	127,951	139,296	127,951	139,296
Administrative Expenses	4	(435,786)	(432,682)	(625,103)	(571,638)
		(186,730)	(182,549)	(273,144)	(260,297)
Operating profit/(Loss)		880,776	830,713	439,201	426,008
Financial Income	5a	3,593	10,939	145,816	158,629
Financial Expenses	6	(258,184)	(363,726)	(258,184)	(368,240)
Net Exchange Loss		(469,686)	(605,046)	(403,637)	(385,047)
Profit/(Loss) before taxation		156,499	(127,121)	(76,804)	(168,650)
Taxation	7a	-	-	(50,191)	(84,401)
Profit/(Loss) for the year		156,499	(127,121)	(126,995)	(253,051)
Other Comprehensive Income					
Items that will not be reclassified to profit or loss:					
Revaluation of Property, Plant and Equipment	18	472,729	1,332,725	477,253	1,177,670
Other Comprehensive Income, net of tax		472,729	1,332,725	477,253	1,177,670
Total Comprehensive Income		629,229	1,205,604	350,258	924,619

The notes on pages 23 to 68 form an integral part of the Financial Statements.

Financial Review for the year ended 31 December 2020...

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2020

VRA	Republic of Ghana Contribution	Retained Earnings Surplus	Revaluation Surplus	Debt Contingency Fund Reserve	Total Equity
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
2020					
Balance at 1st January, 2020	4,305,586	(1,326,931)	5,899,375	38,921	8,916,951
Loss for the year	-	156,499	-	-	156,499
Other Comprehensive Income	-	-	472,729	-	472,729
					-
Total Comprehensive Income	-	156,499	472,729	-	629,229
Additional Investments in VRA	-	-	-	-	-
Transfer to Retained Earnings (Note 18)	-	419,922	(419,922)	-	-
Transfer to Debt Contingency Fund Reserve	-	-	-	-	-
Balance at 31st December, 2020	4,305,586	(750,510)	5,952,182	38,921	9,546,180
2019					
Balance as at 1st January 2019	3,960,933	(1,526,999)	4,893,838	38,921	7,366,693
Loss for the year	-	(127,121)	-	-	(127,121)
Other Comprehensive Income	-	-	1,332,725	-	1,332,725
					-
Total Comprehensive Income	-	(127,121)	1,332,725	-	1,205,604
Additional Investments in VRA	344,653	-	-	-	344,653
Transfer to Retained Earnings (Note 18)	-	327,188	(327,188)	-	-
Transfer to Debt Contingency Fund Reserve	-	-	-	-	-
Balance at 31st December, 2019	4,305,586	(1,326,931)	5,899,375	38,921	8,916,951

Financial Review for the year ended 31 December 2020...

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2020

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
Balance at 1st January, 2020	4,305,586	(1,286,644)	7,671,284	38,921	1,232	-	10,730,379
Profit / (Loss) for the year	-	(126,994)	-	-	-	-	(126,994)
Other Comprehensive Income	-	-	477,253	-	-	-	477,253
Total Comprehensive Income	-	(126,994)	477,253	-	-	-	350,259
Additional Investments in VRA	-	-	-	-	-	-	-
*Prior year adjustments	-	90,953	-	-	-	-	90,953
Government of Ghana Grant	-	-	-	-	-	-	-
Transfer to Retained Earnings (Note 18)	-	446,577	(446,577)	-	-	-	-
Balance at 31st December, 2020	4,305,586	(876,109)	7,701,960	38,921	1,232	-	11,171,591
2019							
Balance at 1st January, 2019	3,960,933	(1,429,650)	6,798,395	38,921	1,232	-	9,369,831
*Prior year adjustments	-	91,276	-	-	-	-	91,276
Loss for the year	-	(253,051)	-	-	-	-	(253,051)
Other Comprehensive Income	-	-	1,177,670	-	-	-	1,177,670
Total Comprehensive Income	-	(161,775)	1,177,670	-	-	-	924,619
Additional Investments in VRA	344,653	-	-	-	-	-	344,653
Government of Ghana Grant	-	-	-	-	-	-	-
Transfer to Retained Earnings (Note 18)	-	304,781	(304,781)	-	-	-	-
Transfer	-	-	-	-	-	-	-
Transfer to Debt Contingency Fund Reserve	-	-	-	-	-	-	-
Balance at 31st December, 2019	4,305,586	(1,286,644)	7,671,284	38,921	1,232	-	10,730,379

* relates to correction of transfer of capital reserves to retained earnings in 2019

Financial Review for the year ended 31 December 2020...

STATEMENT OF CASH FLOW FOR THE YEAR ENDED 31 DECEMBER 2020

	Note	VRA		GROUP	
		2020	2019	2020	2019
		GH¢'000	GH¢'000	GH¢'000	GH¢'000
Net Cash from Operating Activities	22	330,859	904,785	389,145	930,558
Cash Flows from Investing Activities					
Interest Received		-	-	8,012	11,923
Purchasing of Property, Plant and Equipment		(6,888)	(64,354)	(16,792)	(101,521)
Proceeds from sales of Property, Plant and Equipment	8c	536	174	542	174
Deferred expenditure		-	-	-	53
Acquisition of short term investment		-	(71,434)	-	(71,434)
Acquisition of long term investments		(10,646)	52,825	(10,646)	52,825
Payments towards Capital Work-In-Progress		(11,811)	(136,580)	(103,176)	(143,298)
Net Cash used in investing activities		(28,809)	(219,369)	(122,060)	(251,278)
Cash flows from Financing Activities					
Net inflows from increase in stated capital		-	344,653	(384)	345,286
Proceeds from loans and borrowings		143,062	986,324	143,062	989,015
Repayment of borrowings		(180,199)	(922,334)	(180,199)	(922,334)
Payment of finance lease obligations		(222,375)	(930,732)	(221,761)	(930,732)
Shareholders advance		-	-	7,632	3,517
Net Cash used in financing activities		(259,512)	(522,089)	(251,650)	(515,248)
Net increase/(decrease) in Cash and cash equivalents		42,537	163,327	15,434	164,032
Cash and cash equivalents at the beginning of the year	14	723,201	619,205	894,535	789,753
Exchange rate fluctuation on cash and cash equivalents		12,754	(59,331)	52,255	(59,250)
Cash and cash equivalents at the end of the year		778,491	723,201	962,224	894,535

The notes on pages 23 to 68 form an integral part of the Financial Statements.

Notes to the Financial Statements for the year ended 31 December, 2020...

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 2020 and the Group's interest in associates. The separate financial statements as at and for the year ended 31st December, 2020 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 16c - leases: whether an arrangement contains a lease.

» Note 16c - lease classification.

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 19 - 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 montly.

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 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 2020 Consolidated Financial Statements include the results of the Authority and its subsidiaries.

Notes to the Financial Statements for the year ended 31 December, 2020...

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 recognized 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 them 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 Limited (VLTC), Akosombo Hotels Limited (AHL), Northern Electricity Distribution Company (NEDCo), Takoradi Power Company Limited (TAPCO), VRA Property Holding Company Limited (PROPCo) and Volta River Authority Health Services Limited (VHSL)

Transactions eliminated on Consolidation

Intra-group balances and transactions, and any unrealized income and expenses (Except foreign currency transaction gains or losses) rising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealized losses are eliminated in the same way as unrealized 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 derecognizes 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 recognized 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 and amended standards IFRS 4 Insurance Contracts

IFRS 4 "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 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.

Notes to the Financial Statements for the year ended 31 December, 2020...

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. Income and expenses are presented on a net basis only when permitted under IFRS, or for gains and losses arising from the Groups of similar transactions

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.

(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 expire, 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 retain control over the transferred asset.

Notes to the Financial Statements for the year ended 31 December, 2020...

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 comprise of Cash and Bank Balances, short term investments, shareholder advance to NEDCo 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 the actual losses are likely to be greater of 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 relate equipment is capitalised as part of that equipment. When parts of an items of property, plant and equipment have different useful lives, they are accounted for a 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.

Notes to the Financial Statements for the year ended 31 December, 2020...

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

A valuation 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.

Depreciated 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;

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	Between 4.0 and 5.0	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

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 amortise over the shorter of the estimate useful life or leased term.

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

Notes to the Financial Statements for the year ended 31 December, 2020...

(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.

(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 realizable 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 realizable 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 includes 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.

Notes to the Financial Statements for the year ended 31 December, 2020...

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 plants are recognised in personnel expenses in profit or loss. When the benefits of a plan are change 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.

Notes to the Financial Statements for the year ended 31 December, 2020...

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.

Subsequent to initial measurement, the liability will be reduced for payments made and increased for interest. It is remeasured to reflect any reassessment or modification, or if there are changes in in-substance fixed payments.

When the lease liability is remeasured, the corresponding adjustment is reflected in the right-of-use asset, or profit and loss if the right-of-use asset is already reduced to zero.

The Group has elected to account for short-term leases and leases of low-value assets using the practical expedients. Instead of recognising a right-of-use asset and lease liability, the payments in relation to these are recognised as an expense in profit or loss on a straight-line basis over the lease term.

On the statement of financial position, right-of-use assets have included in property, plant and equipment (except those meeting the definition of investment property) and lease liabilities have been included in trade and other payables.

The Authority as a lessor

The Group's accounting policy under IFRS 16 has not changed from the comparative period. As a lessor the Group classifies its leases as either operating or finance leases. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of the underlying asset, and classified as an operating lease if it does not.

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.

Notes to the Financial Statements for the year ended 31 December, 2020...

(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 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:

- a. Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- b. Level 2: inputs other than quoted prices included in Level 1 that are observable for the assets or liability, either directly (i.e. prices) or indirectly (i.e. derived from prices).
- c. 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 Volta River Authority. The Board has, in turn, given Volta River Authority's Management a risk mandate. Management allocates this mandate to 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.

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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 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. 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

Operation 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, an 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 Business Development and Sales 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 thing. The Group manages fuel price risk by forecasting and analysing price trends.

Notes to the Financial Statements for the year ended 31 December, 2020...

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 owing 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:

	VRA		GROUP	
	2020	2019	2020	2019
	GHc'000	GHc'000	GHc'000	GHc'000
Trade Receivables	4,500,859	4,844,583	6,467,114	5,944,426
Receivables from related parties	1,504,035	1,101,225	-	-
Other receivables including receivable from Government of Ghana but excluding fuel receivable from Tema Oil Refinery	2,127,544	1,102,747	2,144,147	1,616,801
Staff Debtors	35,707	30,839	41,473	36,890
Cash and cash equivalents (excluding cash-on-hand)	713,044	649,120	841,794	757,240
Long-term investments	57,981	38,921	1,500,898	1,394,052
Short-term investments	65,447	74,081	120,432	137,295
	9,004,617	7,841,516	11,115,858	9,886,704

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

	VRA		GROUP	
	2020	2019	2020	2019
	GHc'000	GHc'000	GHc'000	GHc'000
Wholesale (ECG)	1,949,762	1,234,837	1,949,762	1,234,837
Distribution to end-users	2,551,097	3,609,746	4,517,352	4,709,589
	4,500,859	4,844,583	6,467,114	5,944,426

Notes to the Financial Statements for the year ended 31 December, 2020...

Impairment Losses

The ageing of trade receivables at the reporting date was:

VRA	Impairment allowance		Impairment allowance	
	Gross		Gross	
	31-Dec-20	31-Dec-20	31-Dec-19	31-Dec-19
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Not past due nor impaired	598,609	-	802,387	-
Past due 30-60 days	319,701	-	126,209	-
Past due 60-90 days	115,582	-	231,552	-
Past due 90-120 days	515,039	-	506,561	-
Past due 120 days and above and impaired	2,951,929	286,406	3,177,874	280,751
	4,500,859	286,406	4,844,583	280,751

GROUP	Impairment allowance		Impairment allowance	
	Gross		Gross	
	31-Dec-20	31-Dec-20	31-Dec-19	31-Dec-19
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Not past due nor impaired	1,346,844	-	802,387	-
Past due 30-60 days	356,924	-	126,209	-
Past due 60-90 days	150,700	-	231,552	-
Past due 90-120 days	551,930	-	515,402	-
Past due 120 days and above and impaired	4,060,717	321,451	4,268,876	307,072
	6,467,114	321,451	5,944,426	307,072

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, base on historical payment behaviour and extensive analysis of customer credit risk.

No impairment loss was recognised for financial assets other than trade receivables.

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.

Notes to the Financial Statements for the year ended 31 December, 2020...

December 31, 2020 - 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	6,733,587	6,711,283	22,304	-	-	-
Payable to related parties	33,016	-	33,016	-	-	-
Accrued Expenses	14,992	14,992	-	-	-	-
Sundry creditors, excluding statutory obligations	13,096	9,167	3,929	-	-	-
Borrowings, excluding finance lease	1,947,823	182,705	336,016	307,275	875,827	246,000
Other payables- non-current	269,740	-	-	269,740	-	-
Finance Lease Obligations	467,330	467,330	-	-	-	-
	9,479,584	7,385,477	395,265	577,015	875,827	246,000

December 31, 2019 - 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	6,457,706	6,435,402	22,304	-	-	-
Payable to related parties	33,016	-	33,016	-	-	-
Accrued Expenses	14,865	14,865	-	-	-	-
Sundry creditors, excluding statutory obligations	82,415	57,691	24,725	0	-	-
Finance lease obligations	2,045,898	280,780	336,016	307,275	875,827	246,000
Other payables- non-current	256,743	-	-	256,743	-	-
Finance Lease Obligations	688,128	405,376	-	-	282,752	-
	9,578,771	7,194,114	416,061	564,018	1,158,579	246,000

Notes to the Financial Statements for the year ended 31 December, 2020...

December 31, 2020 - 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	7,310,871	5,752,797	1,558,075	-	-	-
Payable to related parties	-	-	-	-	-	-
Accrued Expenses	13,096	13,096	-	-	-	-
Sundry creditors, excluding statutory obligations	268,750	192,079	76,671	-	-	-
Borrowings, excluding finance lease	1,764,683	288,294	216,292	307,275	866,202	86,620
Other payables- non-current	251,269	-	-	251,269	-	-
Finance Lease Obligations	1,260,058	499,237	168,914	309,155	282,752	-
	10,868,726	6,745,503	2,019,952	867,699	1,148,954	86,620

December 31, 2019 - 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	6,913,628	5,355,553	1,558,075	-	-	-
Payable to related parties	-	-	-	-	-	-
Accrued Expenses	82,415	82,415	-	-	-	-
Sundry creditors, excluding statutory obligations	268,750	192,079	76,671	-	-	-
Borrowings, excluding finance lease	1,764,683	288,294	216,292	307,275	866,202	86,620
Other payables- non-current	251,269	-	-	251,269	-	-
Finance Lease Obligations	1,260,058	499,237	168,914	309,155	282,752	-
	10,540,803	6,417,578	2,019,953	867,699	1,148,954	86,620

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.

(i) 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.

Notes to the Financial Statements for the year ended 31 December, 2020...

Exposure to Currency Risk

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

2020-in thousands	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Account receivable	617,075	-	-	-	-	-	-	-	-	-
Cash and Bank balances	83,142	1,762	-	-	-	-	-	-	-	-
Investments	20,194	(15,904)	-	-	-	(34)	-	(37)	(11)	-
Account payables	(1,050,636)	(51,811)	-	(4,234)	-	-	-	-	-	-
Borrowings	(205,271)	(65,953)	-	(4,234)	-	(34)	-	(37)	(11)	-

2019-in thousands	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Account receivable	747,286	-	-	-	-	-	-	-	-	-
Cash and Bank balances	78,940	2,509	-	-	-	5	-	-	-	-
Investments	20,080	(5,559)	-	(261)	-	(34)	(286)	(93)	(11)	-
Account payables	(1,121,260)	(51,494)	-	(4,234)	-	-	(5,393)	-	-	-
Borrowings	(242,221)	(54,543)	-	(4,495)	-	(29)	(5,679)	(93)	(11)	-

December 2020	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Reporting date spot rate	5.7342	6.3866	8.4773	19.2956	6.4959	7.8045	0.7003	4.4956	0.3926	8.2962
Average rate	5.5775	7.054	8.0089	18.6515	5.9585	7.1731	0.6069	4.2555	0.3425	7.862

December 2019	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Reporting date spot rate	5.5378	6.2031	7.8817	18.7690	5.7131	7.2651	0.5936	4.2405	0.3929	7.6522
Average rate	5.2150	5.8344	7.3987	17.6048	5.2469	6.6504	0.5513	3.9289	0.3613	7.0245

Sensitivity

A 5% strengthening of the GH¢, as indicated below, against the currencies above at 31st December, 2020 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 2019, albeit that the reasonably possible foreign exchange rate variance were different, as indicated below:

Effect in thousands of GH¢	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
2020	(149,336)	(23,262)	-	(3,948)	-	(12)	-	(8)	(0)	-
2019	(134,853)	(15,911)	-	(3,957)	-	(10)	(157)	(18)	(0)	-

Notes to the Financial Statements for the year ended 31 December, 2020...

Effect in thousands of GH¢

	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
2020	(149,336)	(23,262)	-	(3,948)	-	(12)	-	(18)	(0)	-
2019	(134,853)	(15,911)	-	(3,957)	-	(10)	(157)	(18)	(0)	-

A 5% weakening of the Ghana Cedi against the currencies above at 31st December 2020 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	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Fixed Rate Instruments				
Financial Liabilities	467,330	688,129	1,260,058	688,129
Variable rate Instruments				
Financial Assets	65,447	74,081	120,432	1,198,871
Financial Liabilities	1,947,823	2,045,767	1,156,189	2,045,898

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, 2020				
Financial Liabilities	46,733	(46,733)	126,006	(126,006)
31st December, 2019				
Variable rate instruments	194,782	(194,782)	115,619	(115,619)

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

Notes to the Financial Statements for the year ended 31 December, 2020...

GROUP

VRA

Revenue	2020		2019		2020		2019	
	GWh	GH¢'000	GWh	GH¢'000	GWh	GH¢'000	GWh	GH¢'000
2a. Sale of Electricity								
Electricity Company of Ghana	3,468	937,553	5,011	1,425,498	3,468	937,553	5,011	1,425,498
Mines	1,498	907,306	1,319	827,496	1,498	907,306	1,319	827,496
Akosombo Textiles	3	1,200.00	3	1,181	3	1,200	3	1,181
Aluworks	6	2,501.00	6	2,752	6	2,501	6	2,752
Diamond Cement	33	14,214.00	31	13,665	33	14,214	31	13,665
Volta Aluminium Co. Ltd.	722	110,259.00	893	138,008	722	110,259	893	138,008
Others	143	39,943	132	41,897	143	39,943	132	41,897
GRIDCo (Transmission Loss Recoveries)	891	235,097	843	267,962	891	235,097	843	267,962
Substation Use (GRIDCo.)	10	2,870	9	2,297	10	2,870	9	2,297
Northern Electricity Dept.(NED)	1,576	560,994	1,414	452,716	950	688,981	846	574,662
Local Customers	8,350	2,811,937	9,661	3,173,472	7,724	2,939,924	9,093	3,295,418
Communaute Electrique Du Benin	715	339,283	777	326,195	715	339,283	777	326,195
Compagne Ivoirienne d'Electricité	149	86,246	76	22,298	149	86,246	76	22,298.00
Société National D'elect Du Burkina	17	10,830	18	11,049	17	10,830	18	11,049
Sonabel Youga Mines	43	29,397	39	24,536	43	29,397	39	24,536
Sonabel Bolga-Ougadougou	930	430,381	519	243,448	930	430,381	519	243,448
Fee Zone Companies	242	85,087	236	89,948	242	85,087	236	89,948
Foreign Customers	2,096	981,224	1,665	717,474	2,096	981,224	1,665	717,474
Total Sale of Electricity	10,446	3,793,161	11,326	3,890,946	9,820	3,921,148	10,758	4,012,892

Notes to the Financial Statements for the year ended 31 December, 2020...

2b. Other Operating Income

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Real Estates	10,871	15,366	21,729	20,647
Health Services	-	2,915	21,387	19,477
Schools	8,182	13,084	8,182	13,084
Service Charge	58,389	39,066	58,389	39,869
Profit on Sale of Fixed Assets	605	223	605	223
Gas Sales Proceeds	26,612	26,090	26,612	26,090
Decrease in provision	-	-	-	1,142
Other Income	16,446	14,093	67,863	34,660
Ferry Services	-	-	14,912	10,969
Hospitality Services	-	-	4,329	5,884
		-	-	-
Total	121,105	110,837	224,008	172,045

2c. Government of Ghana support on AMERI Shortfall

This relates to expected refund from the Government of Ghana on account of the AMERI tariff shortfall on the Build Own Operate Transfer (BOOT) arrangement between Government of Ghana and AMERI. The Ministry of Energy has confirmed that it would support VRA's application to the Ministry of Finance for the refund.

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
	127,951	139,296	127,951	139,296
	127,951	139,296	127,951	139,296

3. Cost of Sales/ Operating Costs

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Analysis by budget center:				
Generation: Hydro	48,525	44,317	48,525	44,317
Thermal	1,372,747	1,264,782	1,372,747	1,230,329
Distribution(NEDCo)	-	-	307,314	288,002
Purchase of Electricity	805,529	1,178,722	829,464	1,204,546
Depreciation	498,853	389,863	650,752	559,393
Total	2,725,655	2,877,684	3,208,803	3,326,587

Notes to the Financial Statements for the year ended 31 December, 2020...

3. Cost of Sales/ Operating Costs	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Analysis by cost element:				
Salaries and Related Expenses	138,577	115,209	293,037	254,801
Materials and Spares Consumed	-	45,663	17,137	89,559
Repairs and Maintenance	41,919	-	50,348	4,344
Fuel Handling and Usage	1,220,666	1,131,678	1,220,666	1,097,225
Purchase of Electricity	805,529	1,178,722	829,464	1,204,546
Transmission Service Charge	-	-	112,359	65,869
Depreciation	498,853	389,863	650,752	559,393
Other Operating Costs	20,111	16,549	35,040	50,850
Total	2,725,655	2,877,684	3,208,803	3,326,587

4. Administration Expenses	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Analysis by budget center:				
Central Services	299,706	295,819	407,582	374,933
Schools	31,607	29,637	31,607	29,637
Real Estates	67,651	60,543	67,651	60,543
Health Services	-	11,643	60,358	46,896
Depreciation	36,822	35,040	57,905	59,629
Total	435,786	432,682	625,103	571,638
Analysis by cost element:				
Salaries and Related Expenses	273,889	245,579	378,198	326,277
Material and Spare Consumed	-	-	-	3,595
Repairs & Maintenance	20,358	20,859	26,165	31,574
Other Administrative Cost	94,876	122,359	134,484	139,207
Depreciation	36,822	35,040	57,905	59,629
Employees Benefits	9,642	8,646	13,351	10,948
Audit Fees and Expenses	199	199	6,275	408
Increase in Provision for doubtful debts	-	-	8,725	-
Total	435,786	432,682	625,103	571,638
Total Operating & Admin Cost	3,161,441	3,310,366	3,833,906	3,898,225

Notes to the Financial Statements for the year ended 31 December, 2020...

5a. Financial Income	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Interest & Investment Income	3,593	10,939	145,816	158,629
	3,593	10,939	145,816	158,629

6. Financial Expenses	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Interest on Long Term Loans	3,223	3,003	3,223	3,003
Interest on Medium Term Loans	57,545	69,271	57,545	69,271
Interest on Short Term Loans	28,472	16,066	28,472	16,066
Finance Cost on Ameri Finance Lease	100,657	215,429	100,657	215,429
Finance Cost on Defined Benefit Obligations	26,553	25,573	26,553	30,087
Interest on Overdrafts	-	-	-	-
Interest on Delayed Invoices	41,734	34,384	41,734	34,384
Total	258,184	363,726	258,184	368,240

7. Taxation (Group)

The Authority is set up as a state owned corporation and is not subject to corporate income tax. Its subsidiaries are however set up as profit making organizations and are therefore subject to corporate income tax. The tax position in the financial statements represent that of the subsidiaries of the Authority.

7a. Income Tax Expense

Income tax expense recognized in profit or loss includes:

	GROUP	
	2020	2019
	GH¢'000	GH¢'000
Current Tax Expense - Note 7 (b)	50,310	84,547
Deferred Tax Expense - Note 7 c.	(119)	(145)
	50,191	84,401

Notes to the Financial Statements for the year ended 31 December, 2020...

7b. Current Tax

Movement in current tax balance are shown below:

2020	Bal. at Jan 1	Payment	Charge for the year	Adjustments	Bal. at Dec.31
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Before 2017	143,042				143,042
2017	38,070				38,070
2018	56,458				56,458
2019	84,309				84,309
2020	-	(78)	50,310	(1,518)	48,714
	321,879	(78)	50,310	(1,518)	370,594

2019	Bal. at Jan 1	Payment	Charge for the year	Adjustments	Bal. at Dec.31
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Before 2016	99,912				99,912
2016	43,130				43,130
2017	38,070				38,070
2018	56,458				56,458
2019	-	(322)	84,547	84	84,309
	237,570	(322)	84,547	84	321,879

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

	GROUP	
	2020	2019
	GH¢'000	GH¢'000
Current tax payable	370,594	321,879
Current tax receivable	(533)	(521)
Total	370,060	321,358

7c Deferred tax

Movements in deferred taxes are shown below.

	GROUP	
	2020	2019
	GH¢'000	GH¢'000
Balance at 1 January	671	816
Charged to profit or loss	(119)	(145)
Balance at 31st December	552	671

Notes to the Financial Statements for the year ended 31 December, 2020...

8a. Capital Work-in-Progress

GROUP

2020	Generation Assets	Power Distribution Network	Others	Total
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance as at Jan 1, 2020	703,773	65,749	86,706	856,228
Reclassification	4,319	-	(4,319)	-
	708,092	65,749	82,387	856,228
Additions during the year	206,173.95	147,239.59	39,628.75	393,042.29
Write off	-	-	(78)	(78)
Transfers	(223,487)	(16,370)	(15,828)	(255,685)
Balance as at Dec 31, 2020	690,779	196,619	106,110	993,507
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance as at Jan 1, 2019	643,889	14,588	102,467	760,944
Reclassification	-	29,160	(29,160)	-
Additions during the year	108,899	22,001	28,910	159,810
Write off	-	-	-	-
Transfers	(49,015)	-	(15,511)	(64,526)
Balance as at Dec 31, 2019	703,773	65,749	86,706	856,228
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance as at Jan 1, 2020	703,773	32,040	80,156	815,969
Reclassification	4,319	-	(4,319)	-
	708,092	32,040	75,837	815,969
Additions during the year	206,174	19,075	38,324	263,572
Write off	-	-	(78)	(78)
Transfers during the year	(223,487)	-	(11,826)	(235,313)
Transfer to NEDCo	-	(16,370)	-	(16,370)
Balance as at Dec 31, 2020	690,779	34,745	102,256	827,780
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance as at Jan 1, 2019	643,889	299	99,739	743,927
Reclassification	-	29,160	(29,160)	-
Additions during the year	108,899	2,581	25,100	136,580
write of	-	-	-	-
Transfers	(49,015)	-	(15,523)	(64,538)
Transfer to NEDCo	-	-	-	-
Balance as at Dec 31, 2019	703,773	32,040	80,156	815,969

Notes to the Financial Statements for the year ended 31 December, 2020...

8b. Property, Plant and Equipment

GROUP 2020

	Dam Power House and Civil Works		Generating Plant & Machinery		Power Distribution Network		Townships		Building		Floating Craft		Motor Vehicles & Furniture		Equipment & Furniture		Total
	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	GHc'000	
A. Valuation																	
Balance as at Jan 1, 2020	9,221,673	7,170,337	4,180,707	715,300	678,392	543,634	200,130	87,865	22,798,038								
Transfers/Adjustments					(78,899)												(78,899)
Disposal							(1,019)	(6)									(1,025)
Revaluation surplus	459,203	366,504	158,179	34,433	25,254	4,834	9,736	3,834	1,061,977								
Additions (including transfers from CWIP)	132,890	90,735	16,370	11,903	174	4,701	5,395	8,072	270,241								
Bal as at Dec. 31, 2020	9,813,766	7,627,576	4,355,256	761,636	624,921	553,169	214,243	99,765	24,050,332								
B. Depreciation																	
As at Jan. 1, 2020	5,135,299	3,479,949	3,589,439	360,107	89,882	436,788	174,184	68,501	13,334,149								
Disposal/Transfers					(1,577)		(1,019)	(6)	(36,913)								
Charge for the period	118,235	378,861	148,061	29,073	7,301	11,245	10,638	5,243	708,657								
Revaluation surplus	255,645	134,784	163,166	17,238	1,573	4,828	5,229	2,260	584,723								
Bal as at Dec 31, 2020	5,509,179	3,993,594	3,866,355	406,419	97,179	452,861	189,032	75,998	14,590,616								
C. NET BOOK VALUE as at Dec 31, 2020	4,304,587	3,633,982	488,901	355,217	527,743	100,308	25,211	23,767	9,459,715								
Work-in-Progress as at Dec 31, 2020 (Note 8a)									993,507								
									10,453,223								

Notes to the Financial Statements for the year ended 31 December, 2020...

8b. Property, Plant and Equipment

GROUP 2019

A. Valuation

	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
Balance as at Jan 1, 2019	7,815,078	6,052,572	3,550,896	605,906	592,472	531,742	153,427	70,797	19,372,890
Transfers/Adjustments				(12,994)	(3,173)		(5,493)	(962)	(22,622)
Disposal						(3,258)	(2,697)		(5,955)
Revaluation surplus	1,374,158	1,101,187	625,396	104,668	78,659	14,517	27,239	9,988	3,335,812
Additions (including transfers from CWIP)	32,437	16,578	4,415	17,720	10,434	633	27,654	8,042	117,913
Balance as at Dec 31, 2019	9,221,673	7,170,337	4,180,707	715,300	678,392	543,634	200,130	87,865	22,798,038

B. Depreciation

As at Jan. 1, 2019	4,286,725	2,748,319	2,625,624	283,891	73,128	411,988	139,955	55,165	10,624,795
Prior Year Adjustment		(64,501)							(64,501)
Disposal/Transfers						(570)	(2,739)		(3,309)
Charge for the period	95,093	292,365	165,932	27,463	8,393	10,929	14,016	4,831	619,022
Revaluation surplus	753,481	503,766	797,883	48,753	8,361	14,441	22,952	8,505	2,158,142
as at Dec 31, 2019	5,135,299	3,479,949	3,589,439	360,107	89,882	436,788	174,184	68,501	13,334,149

C. NET BOOK VALUE as at Dec 31, 2019

	4,086,374	3,690,388	591,268	355,193	588,510	106,846	25,946	19,364	9,463,889
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Work-in-Progress as at Dec 31, 2019 (Note 8a)

	856,228
	<u>10,320,117</u>

Notes to the Financial Statements for the year ended 31 December, 2020...

8b. Property, Plant and Equipment

VRA 2020

	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
A. Valuation								
Balance as at Jan 1, 2020	9,221,673	7,170,337	698,226	419,795	97,257	117,170	54,358	17,778,816
Transfer & Adjustments						(1,019)		(1,019)
Disposal								
Revaluation surplus	459,203	366,504	34,433	20,866	4,834	5,805	2,642	894,287
Additions (including transfers from CWIP)	132,890	90,735	11,903	25		2,049	4,599	242,201
Balance as at Dec. 31, 2020	9,813,766	7,627,575	744,561	440,686	102,092	124,006	61,598	18,914,285
B. Depreciation								
As At Jan.1, 2020	5,135,299	3,544,450	346,812	31,643	97,134	105,698	48,451	9,309,487
Disposal/Transfers						(1,019)		(1,019)
Charge for the period	118,235	378,861	28,846	4,876	53	3,156	1,648	535,675
Revaluation surplus	255,645	134,784	17,238	1,573	4,828	5,229	2,260	421,557
Balance as at Dec 31, 2020	5,509,179	4,058,095	392,896	38,092	102,015	113,065	52,359	10,265,701
C. Carrying Amount								
Balance as at Dec. 31, 2020	4,304,587	3,569,480	351,665	402,595	77	10,941	9,240	8,648,585
Work-in-Progress as at Dec 31, 2020 (Note 8a)								827,780
								9,476,364

Notes to the Financial Statements for the year ended 31 December, 2020...

8b. Property, Plant and Equipment

VRA 2019

	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						
A. Valuation										
Balance as at Jan 1, 2019	7,815,078	6,052,572	605,906	358,235	82,740	102,673	45,328	15,062,532		
Disposal	-	-	-	-	-	(2,188)	-	(2,188)		
Revaluation surplus	1,374,158	1,101,187	103,289	61,970	14,517	16,722	4,897	2,676,740		
Additions (including transfers from CWIP)	32,437	16,578	2,025	2,763	0	5,456	5,095	64,354		
Balance as at Jan 31, 2019	9,221,673	7,170,337	698,226	419,795	97,257	117,170	54,358	17,778,816		
B. Depreciation										
As At Jan.1, 2019	4,286,725	2,748,319	283,891	23,433	82,307	94,232	41,507	7,560,414		
Disposal/Transfers	-	-	(11,280)	(172)	-	(7,548)	(845)	(19,845)		
Charge for the period	95,093	292,365	27,236	4,607	386	3,980	1,236	424,903		
Revaluation surplus	753,481	503,766	46,965	3,775	14,441	15,034	6,553	1,344,015		
Balance as at Dec 31, 2019	5,135,299	3,544,450	346,812	31,643	97,134	105,698	48,451	9,309,487		
C. Carrying Amount										
Balance as at Dec. 31, 2019	4,086,374	3,625,887	351,414	388,152	123	11,472	5,907	8,469,329		
Work-in-Progress as at Dec 31, 2019 (Note 8a)								815,969		
								9,285,298		

Notes to the Financial Statements for the year ended 31 December, 2020...

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 Gh¢1,316.12 0million (2019: Gh¢1,253.80million)

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	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Cost	1,019	2,188	1,025	2,188
Accumulated Depreciation	(1,019)	(2,188)	(1,025)	(2,188)
Carrying amount	-	-	0	-
Revaluation on disposed assets	-	-	-	-
Net Carrying Amount	-	-	-	-
Proceeds from Disposal	536	174	605	174
Adjustment	69	-	69	-
Profit /(loss) on disposal	605	174	674	174

8d. Intangible Assets

Cost				
Balance as at Jan 1	-	-	159	71
Additions	-	-	-	88
Balance as at Dec. 31	-	-	159	159
Amortization				
Balance as at Jan 1	-	-	100	71
Charge for the year	-	-	29	29
Balance as at Dec 31	-	-	129	100
Carrying Amount	-	-	30	59

9a. Investment in Subsidiaries

TAPCO(100% owned)	169,113	169,113	-	-
VLTC(100% owned)	1,123	1,123	-	-
AHL (100% owned)	5,625	5,625	-	-
PROPCO (100%)	69,945	69,945	-	-
NEDCo (100%)	200,000	200,000	-	-
VHSL (100% owned)	42,179	52,825	-	-
	487,985	498,631	-	-

All the subsidiaries are incorporated in the Republic of Ghana.

9b. Investment in Equity Securities

TICO (10% Owned)	1,123	1,123
WAGPCo (16.38% Owned)	169,113	169,113
	170,236	170,236

Notes to the Financial Statements for the year ended 31 December, 2020...

10. Other Long Term Investments

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Debt Contingency Fund	57,981	38,921	57,981	38,921
Other Long Term Investment		-	1,442,917	1,355,131
	57,981	38,921	1,500,898	1,394,052

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	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Inventory and spare parts	177,848	164,022	215,345	198,463
Write down for obsolescence	-	-	-	(14,350)
	177,848	164,022	215,345	184,113
Fuel for Thermal Plant	262,638	205,710	262,638	205,710
	440,486	369,732	477,983	389,823

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

12. Trade and other Receivables

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade Receivables	4,500,859	4,844,583	6,467,114	5,944,426
Provision for doubtful debts	(286,406)	(280,751)	(321,451)	(307,072)
	4,214,453	4,563,832	6,145,664	5,637,354
Prepayments	121,182	112,256	147,578	168,786
Amounts due from related parties	1,504,035	1,101,225	(16,370)	
Amount due from Government of Ghana in respect of the AMERI transaction - Note 2(c)	-	876,455	-	876,455
Other Receivables	2,127,544	1,102,747	2,144,147	1,616,801
Staff Advances	35,707	30,839	41,473	36,890
	8,002,921	7,787,354	8,462,492	8,336,286
Current	7,983,021	7,771,998	8,442,593	8,320,930
Non-current	19,899	15,356	19,899	15,356
	8,002,921	7,787,354	8,462,492	8,336,286

Notes to the Financial Statements for the year ended 31 December, 2020...

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	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Foreign Currency	489,183	516,124	606,064	551,550
Local Currency	223,642	132,808	235,378	205,502
Cash on Hand	219	188	351	188
Cash and cash equivalents in the statement of financial position	713,044	649,120	841,794	757,240
Short term investments	65,447	74,081	120,432	137,295
Bank overdraft	-	-	-	-
Cash and cash equivalents in the statement of cash flows	778,491	723,201	962,226	894,535

*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	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
<i>Current Portion</i>				
Trade Payables	6,733,587	6,457,706	7,310,871	6,913,628
Amount due to related parties	33,016	33,016	-	-
Sundry Payables	13,096	82,415	12,432	95,800
Capital Grant	-	-	1,209	-
Accruals and Provisions	14,785	14,799	14,992	14,865
	6,794,485	6,587,936	7,339,504	7,024,293
<i>Capital Grant</i>				
<i>Non-Current Portion</i>				
Other Payables	269,740	269,740	269,740	256,743
Deferred Tax	-	-	552	671
Capital Grant (Note 20)	327.72	-	43,718	48,712
	270,068	269,740	314,009	306,126
Total Payables	7,064,552	6,857,676	7,653,513	7,330,419

Notes to the Financial Statements for the year ended 31 December, 2020...

16a Borrowings

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
<i>Current Portion</i>				
Current portion of long and medium term loans	137,907	-	1,069	-
Finance lease obligations due within 1 year	467,330	688,128	467,330	688,814
Bank Overdrafts	-	-	24	130
Loan interest and commitment charges	322,043	262,718	322,043	262,718
Short-term borrowings	90,645	87,540	90,645	87,540
	<u>1,017,925</u>	<u>1,038,386</u>	<u>881,111</u>	<u>1,039,202</u>
<i>Non-Current Portion</i>				
Finance lease obligations due after 1 year	-	-	-	-
Amount due after one year but before five years	551,630	870,819	689,537	870,819
Amount due after five years but before ten years				
Amount due after ten years	845,598	824,691	845,598	824,691
	<u>1,397,228</u>	<u>1,695,510</u>	<u>1,535,135</u>	<u>1,695,510</u>
Total Borrowing	<u>2,415,153</u>	<u>2,733,896</u>	<u>2,416,246</u>	<u>2,734,712</u>

Notes to the Financial Statements for the year ended 31 December, 2020...

16b. Borrowings - Movement in loan balances

The following shows the movement in loan balances during the year

VRA	Bal. as at	Drawings	Repayments	Adjustment	Exchange Variation	Bal. as at
	1-01-2020					31-12-2020
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Long Term Loans						
Kpong Hydro Project						
Kuwait Fund - 339	14,784	-	-	-	415	15,199
Kuwait Fund	64,678	-	-	-	1,815	66,493
Societe General - T3	383,286	1,552	-	-	13,593	398,431
IDA-4356-GEDAP	42,524	-	-	(42,524)	-	-
AFD(Akuse Retrofit)	295,987	13,475	(24,892)	-	40,999	325,569
KTPP-MRP	-	-	-	-	-	-
KFW GOG 12mw Photovoltaic System	23,432	11,958	-	-	4,516	39,906
Subtotal: Long Term Loans	824,691	26,985	(24,892)	(42,524)	61,338	845,598
Medium Term Loans						
Afrexim \$150m	-	-	-	-	-	-
Afrexim \$75m	-	-	-	-	-	-
Afrexim \$185m	870,819	-	(155,307)	-	(25,975)	689,537
Subtotal: Medium Term Loan	870,819	-	(155,307)	-	(25,975)	689,537
Total: Long and Medium Term Loans	1,695,510		(180,199)	(42,524)	35,363	1,535,135
Loans interest and commitment charges	262,718	116,077	(56,752)			322,043

VRA	Bal. as at	Drawings	Repayments	Exchange Variation	Bal. as at
	1-01-2020				31-12-2020
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Short Term Loans					
Ecobank	-	-	-	-	-
Ghana International Bank (GIB\$5.5M)	-	-	-	-	-
Sahara Energy Resources	87,540	-	-	3,105	90,645
Cal Bank	-	-	-	-	-
Subtotal: Short Term Loans	87,540	-	-	3,105	90,645
Finance lease obligations - Note 16c	688,129	100,657	(323,032)	1,577	467,330
Total Borrowings	2,733,897	243,719	(559,983)	40,045	2,415,153

Notes to the Financial Statements for the year ended 31 December, 2020...

16b. Borrowings - Movement in loan balances

The following shows the movement in loan balances during the year

GROUP	Bal. as at	Drawings	Repayments	Adjustment	Exchange Variation	Bal. as at
	1-01-2020					31-12-2020
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Long Term Loans						
Kpong Hydro Project						
Kuwait Fund - 339	14,784	-	-	-	415	15,199
Kuwait Fund	64,678	-	-	-	1,815	66,493
Societe General - T3	383,286	1,552	-	-	13,593	398,431
IDA-4356-GEDAP	42,524	-	-	(42,524)	-	-
AFD(Akuse Retrofit)	295,987	13,475	(24,892)	-	40,999	325,569
KTPP-MRP	-	-	-	-	-	-
KFW GOG 12mw Photovoltaic System	23,432	11,958	-	-	4,516	39,906
Subtotal: Long Term Loans	824,691	26,985	(24,892)	(42,524)	61,338	845,598
Medium Term Loans						
Afrexim \$150m	-	-	-	-	-	-
Afrexim \$75m	-	-	-	-	-	-
Afrexim \$185m	870,819	-	(155,307)	-	(25,975)	689,537
Subtotal: Medium Term Loan	870,819	-	(155,307)	-	(25,975)	689,537
Total: Long and Medium Term Loans	1,695,510	26,985	(180,199)	(42,524)	35,363	1,535,135
Loans interest and commitment charges	262,718	116,077	(56,752)	-	-	322,043

GROUP	Bal. as at	Drawings	Repayments	Exchange Variation	Bal. as at
	1-01-2020				31-12-2020
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Short Term Loans					
Ecobank	-	-	-	-	-
Ghana International Bank (GIB\$5.5M)	-	-	-	-	-
Sahara Energy Resources	87,540	-	-	3,105	90,645
Cal Bank	-	-	-	-	-
Subtotal: Short Term Loans	87,540	-	-	3,105	90,645
Bank Overdrafts	2,281	2,151	(4,408)	-	24
Finance lease obligations - Note 16c	688,815	101,039	(323,030)	1,577	468,401
Total Borrowings	2,736,864	244,101	(559,981)	40,045	2,416,248

Notes to the Financial Statements for the year ended 31 December, 2020...

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	67,960,462	2.08%	2020
KUWAIT FUND (KTHERMAL)	KWD	3,446,000	4%	2029
IDA 4356	SDR	5,232,026	5.30%	2047
AFD(Kpong Retrofit Project)	EUR	23,609,533	1.99	2041

16c. Finance Lease Obligations

Finance lease liabilities are payable as follows:

VRA	Minimum Lease Payments		Interest		Present Value of Minimum Lease Payment	
	2020	2019	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Less than one year	467,555	903,560	225	215,431	467,330	688,129
Between one and five years	467,555	903,560	225	215,431	467,330	688,129

GROUP	Minimum Lease Payments		Interest		Present Value of Minimum Lease Payment	
	2020	2019	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Less than one year	468,626	904,246	225	215,431	468,401	688,815
Between one and five years	-	-	-	-	-	-
	468,626	904,246	225	215,431	468,401	688,815

16c. Finance Lease Obligations

In 2016, the Government of Ghana entered into a Build Own Operate and Transfer (BOOT) arrangement with Africa and Middle East Resources Investment Group (AMERI Energy) LL C for the provision of a 250MW fast track power generation solution. The Government of Ghana assigned its rights under the arrangement to VRA. The BOOT was re-negotiated in August 2018 which resulted in the waiver of the variable and operating charge and the extension of the repayment period for the capacity charge. The Authority also bears the cost of gas supplied to AMERI for the production of power.

The Government of Ghana has the option to purchase the equipment for USD1 at the end of the lease term.

Notes to the Financial Statements for the year ended 31 December, 2020...

17. Investment by the Republic of Ghana

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at beginning of the year	4,305,586	3,960,933	4,305,586	3,960,933
Addition during the year	-	344,653	-	344,653
Balance at close of the year	4,305,586	4,305,586	4,305,586	4,305,586

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

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at beginning of the year	5,899,375	4,893,838	7,671,284	6,798,395
Surplus for the year	472,729	1,332,725	477,253	1,177,670
Transfer				
Transfer to Retained Earnings	(419,922)	(327,188)	(446,577)	(304,781)
Balance at close of the year	5,952,182	5,899,375	7,701,961	7,671,284

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- Services 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.

Notes to the Financial Statements for the year ended 31 December, 2020...

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

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Long-service award	40,655	39,477	58,908	58,099
Severance Benefit	20,635	18,230	28,119	24,897
Post-Retirement medical benefit	157,054	136,907	172,516	149,112
	218,344	194,614	259,543	232,109

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-Services awards

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1 January	39,477	38,136	58,099	55,266
Included in profit or loss:				
Current service cost	3,922	3,654	5,325	5,152
Past service cost	-	-	-	-
Net interest	5,642	5,433	8,197	7,747
	9,564	9,087	13,522	12,898
Included in other comprehensive income:				
Actuarial loss (gain arising from):				
Actuarial loss (gain arising from):				
Demographic/Financial Assumptions	(585)	(64)	(3,122)	(308)
Other sources	(585)	(64)	(3,122)	(308)
Benefits paid	(7,801)	(7,682)	(9,591)	(9,757)
Balance at 31 December	40,655	39,477	58,908	58,099

Notes to the Financial Statements for the year ended 31 December, 2020...

Severance Benefit

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1 January	18,230	17,229	24,897	23,208
Included in profit or loss:				
- Current service cost	1,135	1,005		
- Past services cost			1,571	1,405
- Net interest	2,517	2,370	3,547	3,183
	3,652	3,375	5,118	4,588
Included in other comprehensive income:				
actuarial loss (gain arising from)			-	-
- Demographic/Financial assumptions	1,645	(12)	1,646	143
- Other sources	-	-		
	1,645	(12)	1,646	143
Benefits paid	(2,894)	(2,362)	(3,542)	(3,042)
Balance at 31 December	20,635	18,230	28,119	24,897

Post-retirement medical benefit

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1 January	136,907	132,704	149,112	143,979
Included in profit or loss:				
- Current service cost	4,585	3,987	5,027	4,392
- Past services cost				
- Net interest	18,394	17,770	20,461	19,157
	22,979	21,757	25,488	23,549
Included in other comprehensive income:				
actuarial loss (gain arising from)	-	-	-	-
Demographic/Financial assumptions	2,506	(13,179)	3,491	(4,589)
Other sources				
	2,506	(13,179)	3,491	(4,589)
Benefits paid	(5,339)	(4,376)	(5,575)	(13,827)
Balance at 31 December	157,054	136,907	172,516	149,112

Notes to the Financial Statements for the year ended 31 December, 2020...

<i>Total</i>	<i>VRA</i>		<i>GROUP</i>	
	<i>2020</i>	<i>2019</i>	<i>2020</i>	<i>2019</i>
	<i>GH¢'000</i>	<i>GH¢'000</i>	<i>GH¢'000</i>	<i>GH¢'000</i>
Balance at 1 January	194,614	188,070	232,109	222,454
Included in profit or loss:				
- Current service cost	9,642	8,646	11,922	10,948
- Past services cost	-	-		
- Net interest	26,553	25,573	32,206	30,087
	36,196	34,219	44,128	41,035
Included in other comprehensive income:				
Actuarial loss (gain arising from)				
- Demographic/Financial assumptions	3,567	(13,255)	2,015	(13,992)
- Other sources				
	3,567	(13,255)	2,015	(13,992)
Benefits paid	(16,033)	(14,421)	(18,708)	(17,388)
Balance at 31 December	218,344	194,614	259,543	232,109

c. Defined benefits obligations-actuarial assumptions

The following are the principal assumptions at reporting date

	<i>VRA</i>		<i>GROUP</i>	
	<i>2020</i>	<i>2019</i>	<i>2020</i>	<i>2019</i>
Inflation rate	10.00%	12.00%	10.00%	12.00%
Discount rate	13.00%	15.00%	13.00%	15.00%
Nominal inflation gap	3.00%	3.00%	3.00%	3.00%
Withdrawal Rate	5.00%	5.00%	5.00%	5.00%
Retirement age	60 years	60 years	60 years	60 years

Mortality in 2020 was assumed to follow the mortality rates according to the SA85-90 table. This assumption was the same as what was used in 2019 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.

Notes to the Financial Statements for the year ended 31 December, 2020...

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 loss to operating cash flow

	VRA		GROUP	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Loss after Tax	156,499	(127,489)	(125,520)	(253,051)
Adjustments for:				
Depreciation & amortization	535,675	424,903	708,656	619,022
Exchange (Gain) / Loss	469,686	605,046	403,637	385,047
Profit on disposal of Property, Plant and Equipment	605	(223)	9,321	(223)
Investment Income	(3,593)	(10,939)	(132,426)	(158,435)
Finance expense	258,184	363,726	258,184	363,726
Capital Work-in-progress written off				
Prior year adjustments	-	-	(231)	(48)
Amortization of grant	-	-	(1,209)	(735)
Tax Expense	-	-	48,716	84,401
	1,417,056	1,255,024	1,169,127	1,039,704
Changes in:				
-Inventories	(70,755)	(2,306)	(88,160)	(102)
-Receivables	(1,168,810)	(1,263,324)	(1,308,245)	(1,486,012)
-Payables	186,390	926,909	645,818	1,388,554
-Provisions and defined benefits	23,730	6,544	27,435	6,544
Cash Generated from Operating activities	387,611	922,847	445,975	948,688
Tax paid	-	-	(78)	(89)
Interest paid	(56,752)	(18,062)	(56,752)	(18,042)
Net cash from operating activities	330,859	904,785	389,145	930,558

Notes to the Financial Statements for the year ended 31 December, 2020...

23. Going concern consideration

The Authority recorded a net profit of GH¢156.50 million for the year ended 31 December, 2020 (2019: loss of GH¢127 million) and as at the date, its current assets exceeded its current liabilities by GH¢1,292.13 million (2019: current liabilities exceeded assets by GH¢1,220 million)

24. Capital Commitments

There was no capital commitments for year. (2019: The group had a contract with Zakhem Construction Ghana Limited for the engineering, procurement and construction of a single-cycle power plant at Tema. The estimated value of works expected to complete the project at the end of the year was GH¢24.93 million)

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	
	2020	2019	2020	2019
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Sale of Power				
NEDCo	560,994	452,716	560,994	452,716
Purchase of Power				
TICO	335,538	328,153	335,538	328,153

