



Who we are

The Zimbabwe Energy Regulatory Authority (ZERA) is a statutory body established in terms of the Energy Regulatory Authority Act [Chapter 13:23] of 2011. The Act mandates ZERA to regulate the procurement, production, transportation, transmission, distribution, importation and exportation of energy derived from any energy source.

ZERA is also responsible for the issuing of licences for all electricity and petroleum service providers as provided for in the Energy Regulatory Authority Act [Chapter 13:23] of 2011 as read together with the Electricity Act [Chapter 13:19] of 2002, the Petroleum Act [Chapter 13:22] of 2006 and subsequent amendments.

Vision

To be a world class energy regulatory institution by 2020.

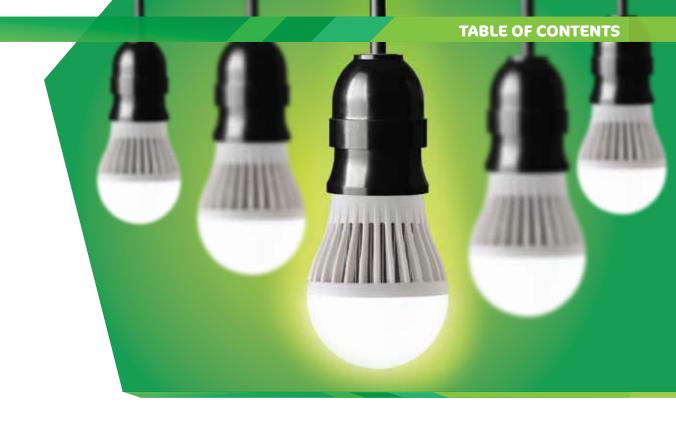
Mission

To ensure that energy supply is reliable, adequate and sustainable, whilst the prices charged are fair, the environment is protected and it is supplied safely through effective regulation

Guiding and Shared Values

- Independence making decisions consistent with the mandate
- **Transparency** openness in communication
- Accountability responsibility for results
- Innovation excellence at goal attainment
- Fairness love and equity
- Integrity the virtue of honesty in delivery
- Team work collaboration

Promoting value and growth



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AFUR African Forum for Utility Regulators
CCZ Consumer Council of Zimbabwe
CEM Certified Energy Manager
CFL Compact Flourescent Light Bulb

COMESA Common Market for Eastern and Southern Africa

CUT Chinhoyi University of Technology
CZI Confederation of Zimbabwe Industries

DSM Demand Side Management

ESKOM Electricity Supply Commission of South Africa

GIS Geographic Information System

GWh Gigawatt hours
HCB Hydro Cahora Bassa

HIT Harare Institute of Technology
ILB Incandescent Light Bulb
IPP Independent Power Producer

ISO International Organisation for Standardization

kVa kilo-volt-ampere
kWh kilowatt hours
LED Light Emitting Diode
LPG Liquefied Petroleum Gas

MOEPD Ministry of Energy and Power Development

MW Megawatt

NamPower National Power Utility Company of Namibia

NEEA National Energy Efficiency Audit
NRE Nyangani Renewable Energy

NUST National University of Science and Technology

PPA / Power Purchase Agreement

PV Photovoltaic

RERA Regional Electricity Regulators Association of Southern Africa

SADC Southern African Development Community

SAZ Standards Association of Zimbabwe

SIRDC Scientific Industrial Research and Development Centre

UZ University of Zimbabwe

ZERA Zimbabwe Energy Regulatory Authority

ZETDC Zimbabwe Electricity Transmission and Distribution Company

ZESCO Zambia Electricity Supply Corporation

ZIMASSET Zimbabwe Agenda for Sustainable Socio- Economic Transformation

ZPC Zimbabwe Power Company



Dr. Ester Mpandi Khosa Board Chairperson

The year 2015 saw the Board, once again, executing its mandate as spelt out in the Energy Regulatory Authority Act [Chapter 13:23], as read together with the Electricity Act [Chapter 13:19], Petroleum Act [Chapter 13:22] and ancillary amendments and policies.

ZERA's operations continued to be funded by licence fees and statutory levies. Receipts from the Electricity Sub-Sector remained subdued as a result of the liquidity challenges which are being experienced in the country. Licensing and regulation of power generation and issuance of licences for importers, wholesalers and retailers of petroleum products was expedited in fulfillment of the ZimAsset blue print objectives. The speedy, but meticulous, turnaround of the licensing process demonstrated the Authority's readiness to accelerate the ease of doing business in Zimbabwe.

The Authority received and processed 10 applications for electricity generation licences using mini hydro, open cycle gas turbine and solar photovoltaic technologies with a combined potential of 635.09MW.

ZERA reduced the licensing fees for all electricity licences through Statutory Instrument 55 of 2015, Electricity (Licensing) (Amendment) Regulations as part of enhancing the ease of doing business in the country and also promoting investment in the electricity supply industry.

As of the end of 2015, the Authority's register had 21 licensed Independent Power Producers (IPPs) and three licensed State-Owned power generation projects. Three power generation licences were cancelled after the project promoters failed to meet their license terms and conditions.

One of the licensed projects, Pungwe B Power Station, was commissioned in 2015. Two IPP projects, Pungwe C and Kupinga Power Station, and Kariba South Power Extension (a State-Owned project), were under construction during the course of the year.

An application for a tariff review of 49% from 9.86c/kWh to 14.69c/kWh was received from Zimbabwe Electricity Transmission and Distribution Company (ZETDC). The due process of stakeholder consultation was done and the final tariff determination will be completed in 2016.

A National Energy Efficiency Audit (NEEA) was completed and a draft National Energy Efficiency Action Plan was submitted to the Ministry of Energy and Power Development (MOEPD). This plan proposes various energy conservation activities and measures across all sectors.

The Authority piloted a project to instal energy efficient lights at its offices, MOEPD offices and at Harare Hospital Children's Ward. The Authority also developed codes and regulations for the safe, reliable, good quality and efficient operations of the electricity supply industry.

The low water levels recorded at Kariba Dam in 2015 resulted in 50% reduction of power generation at the Kariba South Power Station. While ZETDC ensured minimal interruption across the country through additional power imports, the situation reinforced the need for a balanced power generation mix given the vulnerability of some renewable energy sources to climate change.

The petroleum sub-sector witnessed price volatility due to the instability of fuel prices on the international market. The Authority responded by coming up with a formula which ensured a win-win situation for the consumers and investors. A Petroleum Pricing Study was commissioned to review the pricing methodology and also determine the cost of supplying petroleum products in the country.

In terms of licensing compliance, a total of 657 fuel operators were licensed during the year against 557 in 2014. The same trend was recorded in respect of Liquefied Petroleum Gas (LPG) where 53 operators were issued with licenses against 10 in 2014. This improvement was attributed to increased stakeholder engagement and fuel operators' realisation that being licensed increases consumer confidence. The Mobile Fuel Quality Laboratory collected 836 fuel samples from 379 fuel sites countrywide. The average compliance rate was 97.5%.

The Board continues to be guided by the Board Charter and the Code of Ethics which the Authority adopted during the year. The Authority also upheld high standards of corporate governance and continues to work towards compliance with the Corporate Governance Framework for Parastatals, the National Code on Corporate Governance and best practice pronouncements.

As part of improving business processes and efficiencies, the Authority embarked on staff training in preparation for the ISO 9001:2015 (Quality Management System) certification and migration to the Systems Application Products (SAP) system. The rollout of SAP is set for the end of the first quarter of 2016 with ISO certification targeted for end of 2016.

Construction of the Authority's Head Office in Mount Pleasant gained momentum during the year with the competitors submitting architectural designs. Selection of the winning design is set for early 2016 and will set the groundwork for the engagement of a contractor before the end of 2016.

As part of its mandate to advise and raise awareness on energy efficiency, renewable energy and alternative energy technologies, the Authority facilitated 21 workshops and exhibited at various agricultural, business exhibitions and promotional events countrywide. The engagements increased the Authority's visibility and presented an opportunity to explain its role as well as empowering consumers through understanding their rights and responsibilities.

The Authority continues to strengthen its manpower for effective service delivery. By end of 2015, there were 46 members of staff against an approved budget structure of 49. The number of female employees was 39.1% of the total staff complement. A total of 1 099 man days were invested by ZERA in capacity enhancement and development of the Board, management and staff through workshops, seminars, familiarisation tours and conferences. The Authority gained invaluable experience through case studies, innovations from others, practical challenges and solutions within the energy sector through participation in learning and development programmes. The Authority values the wellness of its human capital. Members of staff attended physical fitness sessions and commemorated the World AIDS Day amongst other wellness events.

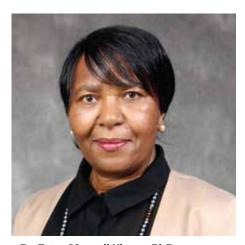
ZERA has implemented programmes which are aimed at increasing access to modern forms of energy and energy efficiency. To this end, the Authority supported Emthunzini Wethemba in Bulawayo, Matthew Rusike Children's Home in Harare and Harare Hospital Children's Ward with energy efficient light emitting diode (LED) bulbs. The bulbs are set to significantly reduce the institutions' energy consumption.

The Authority supported the University of Zimbabwe (UZ) and the National Student Engineering Paperette Competition in partnership with the Zimbabwe Institute of Engineers. ZERA also paid fees for eight students who are studying towards engineering degrees at UZ but are experiencing financial challenges.

Let me end by acknowledging members of staff, management and fellow Board Members of the Authority for their continued dedication to the improvement of the regulatory environment in order to facilitate sustainable energy supply in Zimbabwe.

The support offered by the Ministry of Energy and Power Development, the Office of the President and Cabinet and other key Government institutions and Ministries is highly valued. Universal access to clean, reliable, affordable and sustainable energy remains the Board's aspiration.

Dr. Ester Mpandi Khosa BOARD CHAIRPERSON ZIMBABWE ENERGY REGULATORY AUTHORITY



Dr. Ester Mpandi Khosa, PhD Board ChairpersonPhD (Microbiology); MSc (F&T); MSc (Biotech);
BSc Gen; Grad TC; R Nutr (AHPC, NSA)



Dr. Irene Jeke Vice Board ChairpersonDoctorate in Business Leadership; MBA; ICSA



Eng. Todd Garfield Nkiwane Board MemberMSc Electrical Eng; MZwelE, Pr. Eng



Rtd. Air Marshal Henry Muchena Board Member



Eng. Betty Nhachi Board Member MSc Environmental Management; BSc (Hons) Chemical Engineering; FMeZwelE, Pr. Eng.



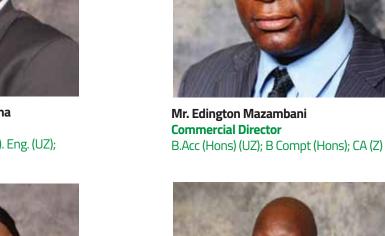
Mr. Ted Muzoroza Board Member LLM (International Trade and Investment Law); LLB (Hons); BSc (Hons) Psychology



Eng. Gloria Magombo Chief Executive OfficerMSc Mech Eng; MBA; BSc; FZwelE, Pr.Eng.



Mr. Misheck Siyakatshana Technical Director MBL (UNISA); BSc (Hons). Eng. (UZ); MSAIMechE

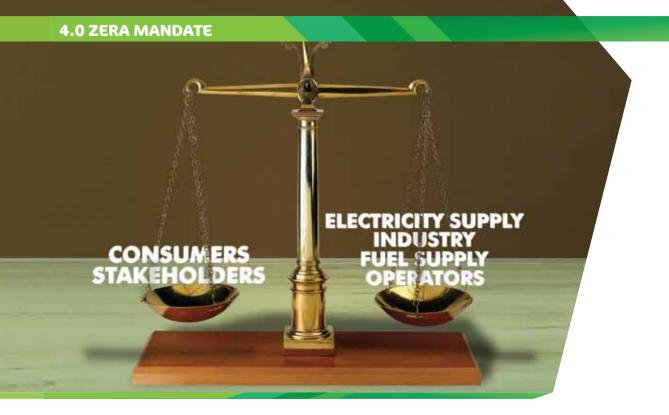




Ms. Jacqueline Mupamhanga Corporate Secretary LLBS (UZ)



Mr. Learnmore Nechitoro Senior Manager Economic Regulation MSc Eco (UZ); BSc Eco



The Zimbabwe Energy Regulatory Authority (ZERA) is mandated to regulate the energy sector in Zimbabwe. It derives its mandate from the Energy Regulatory Authority Act (Chapter 13:23) of 2011 as read together with the Electricity Act (Chapter 13:19) of 2002, the Petroleum Act (Chapter 13:22) of 2006 and other subsequent amendments. The Authority has 18 functions which are summarised in the following six broad categories:

A. Regulatory and Licensing

- To regulate the procurement, production, transportation, transmission, distribution, importation and exportation of energy derived from any source;
- To exercise licensing and regulatory functions in respect of the energy industry;
- To ensure that prices charged by licensees are fair to consumers in the light of the need for prices to be sufficient to allow licensees to finance their activities and obtain reasonable earnings for their efficient operation;
- To establish or approve operating codes for safety, security, reliability, quality standards and any other sector related codes and standards for the energy industry or any sector thereof and
- To maintain and promote effective competition within the energy industry.

B. Research and development

- To promote and encourage the expansion of the energy industry and the advancement of technology relating thereto;
- To promote, identify and encourage the employment and development of sources of renewable energy and
- To undertake such other issues which it considers is necessary or convenient for the better carrying out of or giving effect to the functions of the Authority.

C. To increase access and security of supply

- To promote the procurement, production, transportation, transmission and distribution of energy in accordance with public demand and recognised international standards;
- To ensure the maximisation of access to energy by all consumers that is affordable and environmentally sustainable and
- To promote coordination and integration in the importation, exportation and pooling of energy from any energy source in the SADC and COMESA region.



ZERA values consumers' contributions and feedback

D. Market reform and competition

- To create, promote and preserve an efficient energy industry market for the provision of sufficient energy for domestic and industrial use;
- To maintain and promote effective competition within the energy industry and
- To promote and encourage the expansion of the energy industry and the advancement of technology relating thereto.

E. Energy efficiency and environmental protection

- To advise and educate consumers and licensees regarding the efficient use of energy and
- To assess, promote studies of and advise the Minister and licensees on the environmental impact of energy projects before licensing.

F. Key stakeholder advisory

- To advise the Minister on all matters relating to the energy industry;
- To establish appropriate consumer rights and obligations regarding the provision of energy services;
- To arbitrate and mediate disputes among and between licensees and consumers and
- To represent Zimbabwe internationally in matters relating to the energy industry.

STRATEGIC GOALS

ZERA endeavours to fulfil the following strategic goals:

- a. To ensure increased access to sufficient, reliable and secure energy supply by 2020;
- b. To capacitate ZERA for effective service delivery by 2018;
- c. To achieve 100% compliance with the legal and regulatory frameworks in the energy sector;
- d. To increase energy efficiency and use of renewable energy to the energy mix by 600MW by 2020;
- e. To promote investment in infrastructure through fair pricing, appropriate market structure, planning and sequencing and
- f. To ensure sustained stakeholder engagement and awareness on energy issues.



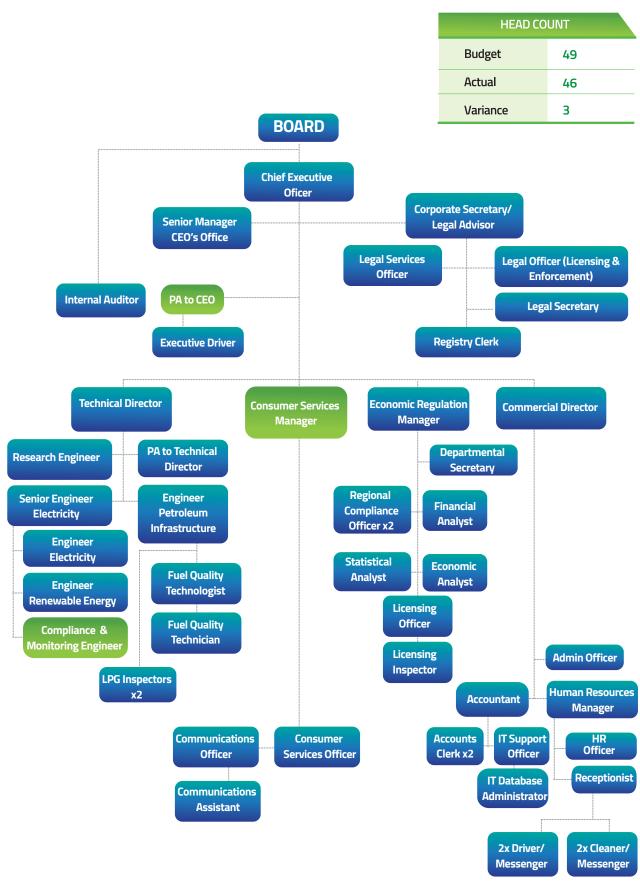


Figure 1: The ZERA Organogram

5.1 CORPORATE GOVERNANCE ADHERENCE STATUS

ZERA is committed to achieving high standards of corporate governance and continues to work towards compliance with the Corporate Governance Framework for Parastatals, the National Code on Corporate Governance and best practices pronouncements. The Board continues to be guided by the Board Charter and the terms of reference for the various Board Committees which stipulate the responsibilities and procedures to be followed by the Board in the execution of its mandate.

The Board also adopted a Code of Ethics which provides guidance on ethical issues and helps foster a culture of honesty and accountability. In line with the Code of Ethics and to ensure effectiveness on the part of the Board, each Director is required to notify the Board of any actual or potential conflicts of interest and to update the Board of any changes on an ongoing basis. To enable this, a Register of Directors' Interests is maintained wherein Board Members disclose any interests with regard to matters to be considered at a meeting of the Board or any other directorships.

The Authority has in place a continuous development programme to ensure that the Board keeps up to date with developments in respect of corporate governance and regulatory matters. As part of continuous development and in line with corporate governance requirements, the Board was trained on Board Evaluation to enable it to evaluate its own performance on an annual basis in 2015.

The Board also conducted tours of the Kariba Power Station, some independent power producer projects and the Zambian Energy Regulatory Board. These tours were beneficial as they provided insight on the infrastructural and operational issues affecting the energy industry both nationally and within the region. Other training programmes included appreciation of the National Code of Corporate Governance and Power Purchase Agreements.

The corporate governance structure as at 31 December 2015 was as follows:-



Dr. Ester Mpandi Khosa



Dr. Irene Jeke Vice Board Chairperson



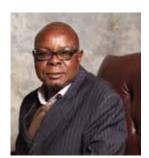
Eng. Betty Nhachi Board Member



Eng. Todd Garfield Nkiwane Board Member



Mr. Ted Muzoroza Board Member



Rtd. Air Marshal Henry Muchena



Eng. Gloria Magombo Chief Executive Officer Ex-Officio Board Member

5.2. BOARD MEETINGS

The Board meets at least six times in each financial year in terms of section 8 (1) of the Energy Regulatory Authority Act. Scheduled Board meetings are held quarterly in accordance with a Board Calendar which is approved at the end of the previous year. Special meetings are also conducted as and when necessary so as to address urgent issues which might arise outside the scheduled Board meetings. Annual General Meetings are held in June every year to approve the financial statements and annual report for the previous year.

5.3. BOARD COMMITTEES

The Board has established five committees to assist in discharging its mandate. Each of the Committees is guided by terms of reference as approved by the Board and subject to review on an annual basis or as necessary.

The five standing Committees of the Board are: Petroleum Committee, Electricity Committee, Finance Committee, Audit and Risk Management Committee and the Human Resources and Governance Committee. The Committees are chaired by non-executive Directors of the Board. Executive Management attends Committee Meetings by invitation. Currently, the Board Committees are constituted as follows:

5.3.1 Board Members' Attendance Register

Table 1; Attendance Register

Finance Committee	Petroleum Committee	Electricity Committee		Audit and Risk Management Committee
 Dr. I. Jeke* Rtd. Air Marshal H. Muchena Eng. T. Nkiwane Dr. E. Khosa 	Eng. B. Nhachi*Dr. I. JekeMr. T. Muzoroza	Eng. T. Nkiwane*Eng. B. NhachiRtd. Air Marshal H. Muchena	 Mr. T. Muzoroza* Eng. T. Nkiwane Dr. I. Jeke Dr. E. Khosa 	 Rtd. Air Mashal H. Muchena* Eng. B. Nhachi Mr. T. Muzoroza

^{*} Committee Chairperson

BOARD MEMBER	BOARD OF DIRECTORS' MEETINGS INCLUDING AGM	SPECIAL BOARD OF DIRECTORS' MEETINGS' INCLUDING THE 2015 AGM	HR & GOVERNANCE COMMITTEE	PETROLEUM COMMITTEE	ELECTRICITY COMMITTEE	FINANCE COMMITTEE	AUDIT & RISK MGT. COMMITTEE	STAKEHOLDER ENGAGEMENT MEETINGS	TOTAL
Dr. E. Khosa	4	2	3			3		2	14
Dr. I. Jeke	4	2	3	3		3		2	17
Rtd. Air Marshal H. Muchena	4	2			3	3	3	2	17
Eng. B. Nhachi	4	2		3	3		3	2	17
Mr. T. Muzoroza	4	2	3	3			3	2	17
Eng. T. Nkiwane	4	2	3		3	3		2	17

5.4 INTERNAL AUDIT

5.4.1. Establishment of the Internal Audit Function

In 2015, a ZERA Internal Audit Charter was formulated and approved by the Board. The Terms of Reference for the Audit and Risk Management Board Committee (ARMC) were amended to incorporate the committee's additional responsibilities pertaining to the internal audit function.

Independence and objectivity of the internal audit function is illustrated by the Internal Auditor's administrative reporting to the Chief Executive Officer and functional reporting to the ARMC through the Committee Chairperson.

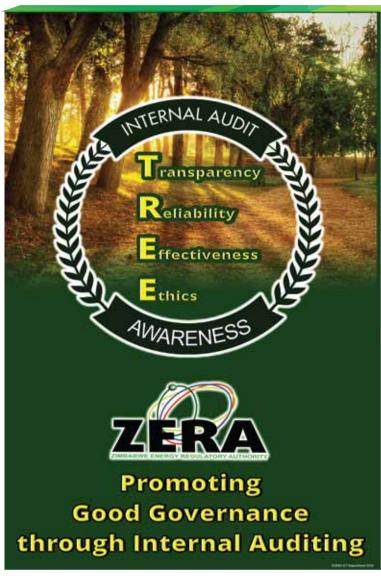
5.4.2. Focus on highest risks

A risk based internal audit plan was developed after an internal audit risk assessment was conducted. Three assurance engagements were targeted for the year with the petroleum licensing and petroleum technical audits being conducted and completed in the period under review. Completion of the electricity licensing audit is targeted for the first quarter of 2016.

The Authority's Management worked tirelessly to implement internal audit recommendations and agreed upon action plans. Implementation as at the 31st of December 2015 based on management assertions was as follows:

Table 2: Audit Recommendation Implementation

Audit Engagement	Matters raised	% Implementation as at 31 December 2015
Petroleum Licensing	28	82%
Petroleum Technical	31	96%



During the year, seven consultancy services were rendered. An auditee satisfaction survey form was designed to obtain feedback from auditees on the value addition role of the internal audit function. The survey had an 89% response rate and work is in progress to address feedback received.



Eng. Gloria Magombo Chief Executive Officer

6.1. BRIEF OVERVIEW

The year 2015 was an eventful one for the Authority. It was characterised by numerous successes, ground breaking inroads and also had its fair share of challenges. Great efforts were invested in meeting the set targets guided by the fundamental principles of energy regulation which are independence, transparency, fairness and accountability. The Authority adopted the Results Based Management system which made it easy and clear to assess its impact, milestones and challenges. Overall, a 75% completion rate was achieved on all key deliverables.

The highlights of the year include development of licensing codes for the sector, stakeholder engagement, promotion of energy efficiency and uptake of renewable and alternative technologies of energy, fuel quality monitoring and enforcement thereby increasing visibility and accessibility of the regulator's services.

Like the previous years, the electricity supply industry remained suppressed with demand outstripping supply. Ten new applications for power generation were received and six

Independent Power Producers (IPPs) were licensed during the year, bringing the number of IPPs that were licensed to 21 projects to date. New investments require codes, standards and regulations that match global trends. In 2015, a target of 20 new regulations had been set and this was duly met. The regulations were submitted to MOEPD for review. Promulgation of these regulations will enhance the electricity supply industry's performance through improved safety, security, reliability and quality of services and products. The Authority made a presentation to Parliament on the key energy regulatory fundamentals and the areas which need support from a policy perspective. The presentations were made at workshops for the law makers that were convened in Nyanga and Bulawayo.

Development of the National Energy Integrated Plan (NEIP) and the Independent Power Producer Framework commenced as scheduled. These documents will boost investor confidence and build on the national thrust of promoting the ease of doing business in the country. The results of the National Energy Efficiency Audit (NEEA) gave impetus to the development of strategic interventions in different sectors. Savings were made through demand side management as the power utility surpassed the 40MW target to achieve 100MW by end of year. The Authority also initiated a project to instal efficient lighting at MOEPD offices, Harare Hospital Children's Ward and its own offices to contribute towards energy savings.

The gains confirm that consumers' efficient use of electricity can significantly contribute to the 300MW virtual power which can be directed to economic pulses/hubs such as mining, industry and the agricultural sector. The challenges of ensuring efficiency by the power utility and IPPs could not be met due to technical challenges owing to dilapidated infrastructure which increased technical losses and poor efficiency results.

Mindful of the potential savings through embracing an energy efficiency culture, the Authority rolled out stakeholder engagement sessions for different sectors resulting in it exceeding the set target of awareness campaigns during the year. The rollout was complemented by 16 radio programmes on different energy issues which aired on three national radio stations during the year.

The Authority capped the energy efficiency drive by facilitating the training of 60 Certified Energy Managers from 26 different companies. This pool of resources is expected to inculcate an energy efficiency culture at organisational level which will result in significant savings.

During the year, the Authority also invested in safe and proper handling of fuel products among licensees after realising a knowledge gap. The target was to train 50 fuel attendants but due to the demand of the services, 251 of them from different fuel operators were trained. The increased uptake of LPG also saw 30 domestic installers being trained against a target of 10 during the year.

In fulfilment of Government policy on blended fuel uptake, the Authority exceeded its target of ensuring that all the service stations comply with the set blending ratio for the period. However, the ethanol supply challenges persisted during the rainy season resulting in 11% instead of the targeted 15% average blend levels being achieved. The fuel sector also witnessed increased compliance to structural standards and licensed sites which maintained acceptable fuel quality standards during the year.

The aim of a zero tolerance to industry related accidents, however, was not achieved in both the petroleum and electricity supply industries. Efforts will be made in 2016 to ensure more robust and stringent measures are put in place to minimise unnecessary loss of life.

The planned National Energy Consumer Satisfaction Survey which incorporates LPG usage analysis as well as the development of the Stakeholder Engagement Framework will be undertaken in 2016. A service provider was identified to undertake the survey in the first quarter of 2016. It is important to note that for the fourth year in a row, the Authority achieved an unqualified audit opinion. This report buttresses a deep and embedded culture of good corporate governance that is adhered to by the Authority. The Internal Audit function is also in place and is in line with the corporate governance requirements.

During the year, a branding exercise of the Authority's offices in Harare was undertaken resulting in its increased visibility and easy access by all stakeholders. Ease of access and visibility was also amplified by the toll free line, a revamped and easy to navigate website as well as the Authority's presence on the social platforms and exhibitions at national, provincial and business forums across the country.

Exhibitions at the Africa Energy Indaba in South Africa continue to serve as the platform of meeting potential investors and to explain key aspects for investment in the energy sector.

In terms of media presence, the Authority maintained a cordial relationship with journalists resulting in 130 articles in which the Authority was directly or indirectly cited being published during the year. About 90% of the media coverage cast a positive light on the energy sector. The level of understanding of energy issues among journalists has improved much to the benefit of the consumers and stakeholders.

The following sections provide details of the state of operations within the energy sector in 2015.

6.2. ELECTRICITY SUB-SECTOR LICENSING

6.2.1. Licences Issued in 2015

During the year, the Authority approved six electricity generation licence applications with a total capacity of 663.62MW. The licensees are as follows:

Table 3: Attendance Register

NAME OF APPLICANT	TECHNOLOGY	CAPACITY (MW)	LOCATION			
i. H.T.Gen	Mini hydro	3.3	Tsanga River, Nyanga Rural District Council, Manicaland Province			
ii. Plum Solar	Solar PV	5	Wartrail Farm, Bulilimamangwe, Matabeleland South Province			
iii. Pungwe C	Mini hydro	3.72	Chiteme River, Honde Valley, Manicaland Province			
iv. Yellow Africa	Solar PV	50	Ntabazinduna/Mbembesi Communal Lands, Umguza Rural District Council, Matabeleland North Province			
v. Immaculate Technologies	Mini hydro	1.6	Nyahode River, Dzingire Village, Chimanimani, Manicaland Province			
vi. Hwange Power Station Stage 7 and 8	Fossil fuel	600	Hwange Power Station			
Total	Total 663.62					

6.2.2 Amended Licences

The Authority reviewed and amended three electricity generation licences in 2015 as follows:

Table 4: Amended Licences

LICENSE		CAPACITY (MW)	TECHNOLOGY	REASON FOR AMENDMENT
i. China Afri	ca Sunlight	600	Coal fired	Correction of error on licensee name and name of power station
	ower Station- an Energy	2000	Coal-fired	Change in conditions of the licence due to changes in milestones
iii. Pungwe	C Power Station	3.72	Mini-hydro plant	Change of capacity from 2.72MW to 3.72MW
Total		2, 603.72		

6.2.3. Electricity Generation Licences Cancelled in 2015

Three power generation licenses were cancelled during the year due to the project promoters' failure to demonstrate any movement towards realisation of the projects. The combined capacity of the licensed projects which were cancelled is 660.75 MW. The related transmission and retail licenses for those projects were also cancelled. The list of cancelled licences is as follows:

Table 5: Generation Licences Cancelled

	Licensee	Capacity (MW)	Technology
a.	Rusitu Power Station	0.75	Hydro Fossil fuel (thermal)
о. С.	Essar Hwange Power Station Essar Redcliff NewZim Power Station	60	Captive power
d. Total	Retail supply license ESSAR	660.75	To approved large customers

6.2.4. New Applications for 2015

During the year, the Authority received and processed 10 electricity generation license applications with a potential capacity of 635,09 MW. The technologies involved are hydro, open cycle gas turbine and solar photovoltaic (PV) technologies with solar PV being the most common.

6.2.5. ZETDC Tariff Application

In December 2015, the Authority received and reviewed a tariff application from the Zimbabwe Electricity Transmission and Distribution Company (ZETDC) for an upward review of 49% from the 9.86c/kWh to 14.69c/kWh. Preparations for the assessment and processing of the application were made. The tariff determination will be made in first quarter of 2016.

6.2.6. Review of Electricity Sector Licence Fees

During the year, Statutory Instrument 55 of 2015, Electricity (Licensing)(Amendment) Regulations were gazetted. This Statutory Instrument streamlines licence fees for generation, transmission and distribution, hence significantly reducing the licence fees in response to the need to promote the ease of doing business in the country. The generation licence fees are based on the capacity of the project.

6.2.6.1. Approval of Power Purchase Agreements

The Authority approved the Power Purchase Agreement (PPA) between ZETDC and Pungwe C for a 2.7 MW mini-hydro power project.

6.2.6.2. Special Pricing Agreements

Two applications for the approval of Special Pricing Agreements between ZETDC and its customers were processed and approved. The applications were for Ferrochrome Industry Association and Sable Chemicals who were facing severe circumstances due to depressed operations.

6.2.7. Progress of Licenced IPPs

The Authority continued to monitor the progress in implementation of licenced power producers during the year under review. Based on project reports, the major challenge is the raising of the requisite financing facilities to progress the projects to bankability. Power Generation Projects Progress is summarised below:

Table 6: Licenced IPPs

Stage Of Development		Licenced companies	Total Capacity (MW) as per license
Stage 1 - Concept/ Pre-feasibility stage (completion of all activities required to define projects for full feasibility)	i. ii. iii. iv. v. vi.	Sengwa Power Station Great Zimbabwe Hydro Manako Power H T Gen Yellow Africa Immaculate Technologies	2 462
Stage 1 (b) Feasibility and technical studies	i. ii. iii.	Geobase Gwanda Solar Gairezi Plum Solar	285
Stage 2- Feasibility/Proof of bankability (Completion of all activities to prove project bankability including EPC contract and PPA approval)	i. ii.	Lusulu Southern Energy	2 600
Stage 3 – Funding (Completion of all activities leading to financial close and fulfilment of conditions precedent)	i. ii.	China Africa Sunlight Energy Gwayi Power Station Hwange Expansion Project	1 200
Stage 4- Construction (Completion of all activities to project commissioning)	i. ii. iii.	Kariba Expansion Project Pungwe C Kupinga Renewable Energy	305
Stage 5 - Operational (Commercial operation)	i. ii. iv. v. vi. vii.	Border Timbers Duru Nyamingura Pungwe A Pungwe B Hippo Valley Estates Triangle Estates Green Fuel	118.10
Total			6 970.1

6.2.7.1. Familiarisation Tour of Power Stations

Visits were made to operational power stations as well as those at different stages of construction. The visits presented an insight into the challenges and opportunities within the power generation sector. The power stations visited include Kariba Power Station, Kariba South Extension and Harare Power Stations. The other operational power stations that the Authority visited are Chisumbanje, Hippo Valley and Triangle Limited Co-generation Power Stations.

Community led projects that were visited are Himalaya and Chipendeke Micro Grid Power Station. The Authority also visited IPP projects which include Pungwe A and Pungwe B mini grid stations as well as the construction site of Pungwe C. The tour also challenged the Authority to support community based initiatives through light handed regulations.

6.2.8. Developing Appropriate Regulatory Environment

As part of fulfilling the mandate of increased access and security of supply, the Authority facilitated the following plan and framework which will promote the procurement, production, transportation, transmission and distribution of energy in accordance with public demand and recognised international standards:

(a) National Integrated Energy Resource Plan

The Authority initiated the development of a National Integrated Energy Resource Plan (NIERP) and an expression of interest was developed during the year. The consultants are expected to submit their report by end first quarter of 2016. The NIERP is a planning mechanism in which costs and benefits of both demand and supply side resources are evaluated to determine the least cost mix of resource options under a given set of technical, economic and environmental constraints.

(b) Reviewed Independent Power Producer Policy Framework

The Authority initiated the development of an Independent Power Producer (IPP) Policy with the MOEPD. An expression of interest was developed and advertised during the year. An IPP policy provides a framework for procurement of power from the private sector including incentives to be offered to such investors.

6.3. ELECTRICITY SUB-SECTOR REGULATIONS, CODES AND STANDARDS

The Authority undertook the following measures to fulfil its mandate of regulation and licensing through establishment or approval of operating codes for safety, security, reliability, quality standards and any other sector related codes and standards for the energy industry.

6.3.1 Regulations, Codes and Standards

The Authority is empowered by Section 4 (1) (a), (b) and (c), Section 57 and 58 of the Electricity Act [Chapter 13:19] to develop codes and regulations for the safety, reliability, quality and efficient operation of the electricity power system.

The following new regulations, codes and standards were developed:

a) Inefficient Lighting Products Ban and Labelling Regulations;

These regulations set the minimum performance standards for lighting products such as lumens, efficiency and service life. The regulations, which effectively ban the incandescent lighting and other inefficient lighting products, were submitted to MOEPD for promulgation.

b) Generation, Transmission and Distribution Performance Codes;

These codes establish key performance indicators/requirements for licenced generators, transmission and distribution licensees and procedures for reporting these parameters as well as corrective action required for compliance. Significant progress was made in the drafting of these codes in consultation with the licensees. The promulgation of the codes is expected in 2016.

c) Solar Photovoltaic Standards;

These standards, based on the International Electrotechnical Commission (IEC), set quality performance requirements for solar PV panels and related equipment such as batteries and charge controllers to protect consumers from substandard products. The standards were completed in 2015, whilst Solar PV regulations which enforce these standards are expected to be completed in 2016.

d) Solar Water Heater Regulations;

These regulations require the mandatory incorporation of solar water heaters in new buildings in Zimbabwe and are to regulate installation and standards for the heaters. Significant progress was made on these regulations based on the experiences of other countries and they are expected to be promulgated in 2016.

6.3.2 Reviewed Regulations, Codes and Standards

a) Electricity (Consumer Appliances & Products) Regulations (1976)

These regulations place an obligation on persons wishing to import or manufacture electrical appliances or products to ensure that the appliances or products adhere to set safety standards. The regulations were reviewed and finalisation of the amendment process is expected in the last quarter of 2016.

Regulations and Codes under the Promulgation Process b)

The Authority continued its engagement with MOEPD to have the following regulations and codes promulgated following submission of the same regulations and codes to the Ministry in 2014:

i. Grid Code:

- iv. Electricity Public Safety Regulations;
- ii. Distribution Code;
- v. Net Metering Regulations; and
- iii. Third Party Access Code;

vi. Power Quality and Service Code.

6.3.3 Compliance Monitoring

6.3.3.1 Infrastructure Surveillance

To ensure that licensees operate in accordance with the Electricity Act and the licence conditions issued to them, the Authority carried out several inspections on ZETDC infrastructure during the period under review. Eleven ZETDC electricity distribution infrastructure audits were done countrywide and two non-compliance orders were issued. Anomalies that were found were brought to the attention of ZETDC for appropriate corrective action and are under varying stages of redress. An 80% compliance rate in closing non-compliances was recorded for infrastructure.

ZERA will continue to monitor the implementation of issued orders to ensure corrective measures are implemented. The Authority further carried out six investigations into electrical accidents but remains hamstrung by the lack of regulations to prosecute cases of illegal connections and negligent conduct on the part of licensees. The Electricity Public Safety Regulations (EPSR) are currently awaiting promulgation.

6.3.4 Electricity Products

The Authority tested fixed wiring electricity cables on the market to ascertain compliance with the relevant standards. Of the eight samples tested, three were found to be substandard. An advert conscientising the public on the hazards of using substandard cables was placed in the press, and a regulatory framework is being developed to impose mandatory quality standards on locally manufactured or imported cables. This will be completed in 2016.

6.3.4.1 Power Quality Audits

Two power quality investigations were carried out at Lafarge Cement and Proton Bakery in Harare and Marondera respectively after customer complaints. The Larfarge complaint was centred on severe supply interruptions and Proton had voltage sensitive equipment which required compensatory equipment. All complaints were resolved, with Larfarge supplies normalising while Proton was advised to instal voltage compensation equipment.





During the year, ZERA toured to community led power generation and IPP projects in the Eastern Highlands



6.3.5. Energy Efficiency

6.3.5.1 National Energy Efficiency Audit

The Authority completed a National Energy Efficiency Audit (NEEA) and submitted a draft National Energy Efficiency Action Plan to MOEPD. This plan proposes energy conservation activities to bring about savings envisaged in the NEEA across all sectors. The plan also identifies different players to undertake strategic roles, such as policy reviews at national and company levels, as well as regulatory intervention.

Key highlights

- 377.67MW identified potential demand saving (27% of average national demand)
- 1,392.96GWh total potential electricity savings for all electricity consumer sectors

6.3.5.2 Certified Energy Management Training

ZERA facilitated and sponsored a Certified Energy Managers course which was attended by 30 engineers from the power utility, MOEPD, energy regulator and intensive power users from the industries of commerce and mining sectors.

The training programme is part of developing capacity for implementation of energy efficiency and conservation measures amongst the industrial, commercial and mining consumers particularly among designated intensive energy users. This is in line with the Draft Energy Management Regulations being developed which stipulate mandatory energy management audits by all intensive energy users and prescribes qualifications for energy auditors.

6.3.5.3 Energy Efficiency Demonstration Projects

6.3.5.3.1 Energy Efficient Lighting

To promote the deployment of energy efficient lighting technology, ZERA sponsored a demonstration project for installation of LED lighting at the Ministry of Energy and Power Development Office complex, Harare Hospital Children's Ward and ZERA Offices. The exercise resulted in a reduction of lighting wattage of 64% (Harare Hospital Children's Ward), 74% (ZERA Offices) and 77% (MOEPD Offices).

6.3.5.3.2 Geyser Timer Switch Pilot Project

ZERA initiated and funded a Geyser Timer Switch installation pilot project in Gweru for 1,000 households implemented by ZETDC. About 2MW is expected to be saved and 83% of the respondents were satisfied with the installation and resultant savings.

6.3.5.3.3 Electric Water Heating Bucket

It has been proven that use of the electric water heating bucket reduces water heating costs by as much as 30%, thus saving an average household electricity bill by about \$10. The Authority is developing a safety standard for this bucket to ensure customer safety, given safety concerns on the product currently on the market.

6.3.5.3.4 Demand Side Management Funding Mechanism

A Demand Side Management (DSM) levy mechanism was developed and approved by the Board. Funding of DSM activities is proposed to come from a 1% levy on electricity sales, which is widely adopted worldwide. This levy is to be integrated into the utility's revenue requirements for 2016 and is not to be considered as a separate levy.

6.3.6. Promotion of Renewable Energy

6.3.6.1. Renewable Energy Feed in Tariff

The Renewable Energy Feed-in Tariff (REFIT), which was developed in 2013 and is pending Government approval, was placed under review in view of the rapid decline in the price of solar PV panels. The new tariffs are expected during first quarter of 2016.

6.3.6.2 Register of Renewable Energy Companies

The Authority developed a register of renewable energy companies who were assessed for technical competence. This is in the interest of ensuring that consumers are provided with quality solar energy products and services. The list has been posted on ZERA's website to advise consumers on the 27 recommended solar companies.

6.3.7. Research and Development Intervention Projects

The Authority continued to monitor the following funded research projects:

Table 7: Renewable energy research projects

No	Title	Institution	Remarks	Progress
i)	Solar Water Heaters for Zimbabwe: DSM, GHG emission abatement, Consumer Economics and Rolling out	University of Zimbabwe	Surveys were completed for 5 provinces and the University is to assess the efficacy and effectiveness of solar water heaters currently available on the local market.	60%
ii)	Development of a Solar PV testing Laboratory at SAZ	Standards Association of Zimbabwe	The laboratory is expected to provide a testing platform for solar products to ensure standards are adhered to. Procurement of the laboratory is in progress.	65%
iii)	Sewage Treatment Plants Bio-Digesting Project	Harare Institute of Technology	The inception report on electricity generation from Harare City Council sewer plants at Chitungwiza, Firle and Crowborough was submitted.	20%
iv)	Designing of a Tobacco Curing System using Solar Energy and a Biomass Back-up Heat Exchanger Unit	Chinhoyi University of Technology	The majority of farmers are using firewood for curing tobacco and this is decimating forests. The project is therefore expected to reduce firewood use and promote more cleaner methods. Conceptual design was completed and the prototype is being constructed.	45%
v)	Developing a Mobile Jatropha Curcas Multipurpose Processing Plant	Harare Institute of Technology	Assembly of the components of the plant, i.e. reaction vessels, trailer, crusher plant and generator is in progress.	60%

6.4. PETROLEUM SUB-SECTOR LICENSING

The Authority continued to license and ensure compliance during the year as part of fulfilling its mandate of promoting market reform and competition through the creation, promotion and preservation of an efficient energy industry market for the provision of sufficient energy for domestic and industrial use.

6.4.1 Licensed Companies

There has been a sharp increase in the number of licensed petroleum sub-sector operators from the year 2012 to 2015 as evidenced below. The increase is attributed to increased compliance and surveillance audits carried out by ZERA.

Table 8: Liquid Fuels Companies

Period	Retail	Procurement	Wholesale	Production (Blending)	Production	Total
2012	229	48	16	5	1	299
2013	411	39	6	11	2	469
2014	496	32	7	18	4	557
2015	594	31	6	16	4	651

During the year 2015, the Ministry of Energy and Power Development issued two directives to the Zimbabwe Energy Regulatory Energy Board in terms of Section 24 of the Energy Regulatory Authority Act [Chapter 13:23]. The directives related to the licensing of Triangle Limited for the purposes of supplying ethanol for mandatory blending in order to address ethanol supply shortages on the market. The board implemented the directives whilst noting the need to adopt long term strategies to address the challenge of ethanol supply shortages.

The LPG sector witnessed an increase as shown below;

Table 9: Liquefied Petroleum Gas

Period	Retail	Wholesale	Total
2014	5	5	10
2015	39	14	53

6.4.2 Licence Distribution by Province 2015

The table below shows that Harare had the highest number of petroleum operators in 2015.

Table 10: Licences by Province

Province	Licensed 2015
Harare	257
Masvingo	44
Midlands	54
Mash Central	29
Mash East	36
Mash West	66
Mash North	16
Mash South	20
Manicaland	63
Bulawayo	66
Total	651

6.4.3. Enforcement of Price Compliance

ZERA undertook continuous monitoring to ensure the regulated prices for fuels are not breached as well as to ensure that retail operators receive the stipulated margins as provided in the Statutory Instrument 100 of 2015. Fuel price compliance was 100% and compliance to licensing was 98%. The 2% non-compliance was due to some sites having closed during the year.

6.4.4. Development of Regulations

In an effort to ensure efficient fuel pricing, Statutory Instrument 80 of 2014 was reviewed with the promulgation of Statutory Instruments 20 and 100 during 2015. Statutory Instrument 20 stipulates the fuel pricing regime and regularity whilst Statutory Instrument 100 stipulates the margins for retail and wholesale.

6.4.5. Fuel Site Mapping

The fuel site identification using a Geographical Information System (GIS) was completed and all licensed fuel sites in Zimbabwe are now identifiable on a map with all the coordinates and full details of the sites. The mapping assists ZERA in compliance monitoring and identification of all fuel facilities in Zimbabwe.

6.4.6. Petroleum Sector Pricing Study

The petroleum sector pricing study which is aimed to advise on an efficient fuel pricing regime could not be completed due to poor quality and inadequate data collected. As a result, no meaningful results could be obtained from the data collected. However, a new phase of data collection was initiated in December 2015 with results expected in April 2016.

During the year, ZERA also considered an application from the licensed ethanol producer for the review of the ethanol price. The matter could not be concluded due to inadequate data from submitted documents in support of the application.

6.4.7. Fuel Quality Compliance Levels

A total of 72 prosecution cases were handled, with 57 relating to retailing petroleum products without a ZERA licence as required in terms of Section 29 of the Petroleum Act, while 15 pertained to retailing fuel that was not properly blended as stipulated in terms of section 4(1) of the Petroleum (Mandatory Blending of Anhydrous Ethanol with Unleaded Petrol) (Amendment) Regulations, Statutory Instrument 147A of 2013 as read with the Petroleum (Mandatory Blending of Anhydrous Ethanol with Unleaded Petrol) Regulations of 2013 and Statutory Instrument 17 of 2013.

Thirty-two cases were finalized at the courts, while 40 are still pending. Of the 32 finalised cases, 31 offenders were convicted and sentenced to fines ranging from US\$50 up to US\$500. Only one operator was acquitted.

6.4.8. Regulatory Instruments

The Authority, in line with its objective of aligning and benchmarking legislation and policies with best practice, reviewed fuel pricing regulations as follows:

- a) Petroleum (Fuel Pricing) Amendment Regulations (SI 20/2015); and
- b. Petroleum (Fuel Pricing) Amendment Regulations No. 2 (SI 100/2015).



Workshops were held across the country to orient fuel operators on petroleum standards and regulations.



6.5. PETROLEUM SUB-SECTOR REGULATIONS AND STANDARDS

6.5.1. Petroleum Infrastructure Standards and Regulations

6.5.1.1. Review of Existing Standards

In order to improve fuel quality monitoring and enforcement of fuel quality regulations, ZERA initiated a review of 10 fuel quality standards by the Petroleum and Petroleum Products Technical Committee of the Standards Association of Zimbabwe (SAZ). All the 10 fuel quality standards including, E5, E10, E15, E20, E85 ethanol blends, diesel, illuminating paraffin, LPG, biodiesel and B5 blend standards were reviewed to align them with modern test methods and parameters as currently specified on refinery quality certificates.

6.5.1.2. Standards and Regulations Development

6.5.1.2.1. Transportation of Liquid and Gas Fuel Standards

ZERA in consultation with the Standards Association of Zimbabwe (SAZ), oil marketing companies, local authorities, environment and transport authorities embarked on the development of standards for the transportation of flammable liquids focusing on technical and operational requirements of transportation vehicles conveying liquid fuels and LPG.

By the end of the year, the draft transportation standards were 70% complete. It is anticipated that the standards will be used as the basis for future regulation of the transportation of fuels in the country.

6.5.1.2.2. Automotive Lubricants Regulations

Investigations conducted by the Authority during the year showed that the prevalence of mislabelled lubricants, inferior lubricants without additives and lubricants with obsolete American Petroleum Institute (API) performance classifications was high on the market. To protect motorists against poor quality and misleading lubricants, the Authority initiated the development of national lubricants regulations based on the API and the Association of European Car Manufacturers licensing and approval schemes.

As a result of cooperation from Total, Fuchs, Castrol Zimbabwe and Engen, significant progress was made in developing the regulations which were 90% complete by the end of the year.

6.5.2. Implementation of LPG Regulations

6.5.2.1. LPG Licence Enforcement

In February and March 2016, the Authority in conjunction with the Environmental Management Agency (EMA), the Zimbabwe Republic Police (ZRP) and Local Authorities carried out a licence enforcement operation which closed all unlicensed wholesale sites and enforced compliance with LPG standards. As a result, there was a 50% increase in the number of licensed LPG wholesalers and a 38 % increase in the number of licensable LPG retail sites.

6.5.2.2. LPG Infrastructure Compliance Monitoring

In order to ensure safety in the LPG industry the Authority carried out inspections of LPG facilities countrywide. Of the 368 retail sites inspected, an increase of compliance from an average of 54% in 2014 to an average of 71% was noted as shown;

Table 11: Compliance Monitoring of LPG retail sites

	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Total	Compliance Level
1	101	32	8	57	198	80-100%
2	32	8	6	40	86	60-79%
3	31	8	20	25	84	0-59%
Total	164	48	34	122	368	Ave 71%

The average compliance for the 13 LPG wholesalers was maintained at 90% from the previous year.

6.5.3. Orderly and Safe Petroleum Industry

In order to ensure order and safety in the liquid fuel sector, the Authority carried out inspections at 300 sites countrywide and an average compliance of 77% to infrastructure standards was recorded as shown below:

Table 12: Countrywide Fuel Retail Sites Inspections

	,					
	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Total	Compliance Level
1	34	54	52	31	171	80-100%
2	28	23	13	13	77	70-79%
3	9	6	7	11	33	60-59%
4	6	7	0	6	19	< 59%
Total	77	90	72	61	300	Ave 77%

The compliance rate increased by 7% from the 2014 performance.

6.5.4. Fuel Quality Monitoring

6.5.4.1. Fuel Quality Inspections

The Mobile Fuel Quality Laboratory was very active during the year and had a deterrent effect against non-compliant operators. During the year, the Authority collected 836 samples from 379 fuel sites countrywide with the results being shown in the table below:

Table 13: Countrywide Fuel Quality Testing

rabie 107 country mac racing	unity recting				
	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Total
Samples	206	229	238	163	836
Sites	56	115	121	87	379
Average Compliance %	98.5	100	99.4	96	98.5

The Authorities fuel quality inspections and monitoring resulted in the following non-conformances and corrective measures were taken.

Table 14: Fuel Quality and Calibration Non-conformance

Non-conformance	Number of cases	Corrective Action	Status by end of 2015
Selling unblended petrol	5	Prosecuted and convicted	Retested and found compliant
Pumps underthrowing	4	Prosecuted and convicted	Retested and found compliant
Selling petrol with more than the recommended 15% ethanol	3	Prosecuted and convicted	Retested and found compliant
Diesel adulteration with paraffin	2	Prosecuted and convicted	Retested and found compliant
Selling petrol with less than the recommended 15% ethanol	1	Prosecuted and convicted	Retested and found compliant

6.5.5. LPG and Petroleum Standards Awareness and Training

Training of both LPG and liquid fuel operators was carried out by ZERA to raise awareness of relevant infrastructure standards and to capacitate the operators to comply with petroleum regulations. The training was conducted as follows:

Table 15: Awareness Training

Area	LPG Fillers	LPG Installers	Fuel Station Operators
Harare	172	30	74
Bulawayo	-	-	73
Gweru	102	-	73
Mutare	-	-	31
Masvingo	55	-	-
Total	329	30	251

The total number of fillers and operators trained increased from 500 in 2014 to 610 in 2015 constituting a 22% increase. As a result of the training and awareness programmes, there were no work related accidents in the sector attributable to lack of knowledge of products or operations. A total of 30 LPG installers drawn from different areas in Zimbabwe were trained.

6.5.5.1. Tools and Equipment

In 2015, the Authority acquired an LPG Vapour Tester machine to test quality of LPG at wholesale and retail sites. The Vapour Tester has been useful in detecting poor quality LPG imports. Compliance with LPG quality standards has been high among importers due to the deterrent effect of the LPG Vapour tester. Quality compliance among licensed LPG importers has been 100% since the machine was procured.

6.5.6. Fuel Additives and Regulatory Framework

During the course of the year, a study was commissioned to investigate the efficacy and desirability of using additives in automotive fuels. The study gave the Authority a framework for evaluating fuel additives based on fitness for use and no harm effects criteria based on representative laboratory test methods and representative fuels.

Using the framework, ZERA has established that the major additives in Zimbabwean fuel, namely the pipeline drag reducing agent for the Beira-Msasa fuel pipeline and the ethanol corrosion inhibitors used at Green Fuel are fit for purpose and do not harm automotive engines and distribution equipment.



Dr. Khosa, (centre) ZERA Board Chairperson interacting with young scientists at the RCZ Science Expo

6.6 FINANCE AND ADMINISTRATION

6.6.1 Income

A total income of \$11 674 675 was recognised in 2015 against a budget of \$11 031 451 of which 63% was related to the electricity statutory levies,15% to electricity and fossils licence fees and 22% to other income. Income for the year ended 31 December 2015 increased by 19% compared with that of 2014 from \$9 834 995 to \$11 674 675.

6.6.2 Operating Expenditure

Total expenditure amounted to \$8 575 598 which covered salaries and wages, allowances for credit losses, administration overheads, depreciation, corporate social responsibility, donations and research and development. The expenditure for the year ended 31 December 2015 increased by 14% from \$7 510 214 to \$8 575 598, compared with that of the year ended 31 December 2014.

6.6.3 Operating Surplus

Operating Surplus for the year ended 31 December 2015 increased by 33% compared to that for the year ended 31 December 2014 from \$2 324 781 to \$3 098 524.

6.6.4 Funding and Receipts

Receipts from the Electricity sub-sector remained subdued as a result of the liquidity challenges being experienced in the country. However, the Authority's operations continued to be funded by licence fees and statutory levies. The subdued receipts resulted in the gross debtors' figure increasing by 20% from \$18 644 827 in 2014 to \$22 520 760 in 2015.

6.6. 5 Capital expenditure

Capital Expenditure declined from \$1 257 798 for the year ended 31 December 2014 to \$559 035 for the year ended 31 December 2015. This was a significant reduction of 56% for the period under review.

6.6.6 ZERA Office

Construction of the Authority's Head Office in Mount Pleasant is still in its infancy stages and the major achievement in the year was the Office structure designs competition.

6.6. 7 BUSINESS PROCESS IMPROVEMENT SYSTEM

6.6. 7.1. Systems Applications and Products

The Authority embraced the Systems Applications and Products (SAP) system as a way of capacitating the institution for effective and efficient delivery service. The overall goal of SAP is to enhance ZERA's financial, purchasing, budgeting, licencing, stakeholder's engagement and human capital management processes. The system will enable real time processing of information. The SAP Project Implementation commenced in November 2015 and by end of the year, a project implementation team was put in place with clear timelines. The project is expected to be rolled out in the first quarter of 2016.

6.6. 7.2. ISO 9001:2015 Standard Implementation

In an effort to enhance organisational responsiveness and effectiveness, the Authority embarked on the process towards ISO 9001:2015 certification. A Gantt chart and an implementation team were constituted during the year. Training and awareness of what is expected of ISO 9001:2015 was conducted for all members of staff. By end of the year, position statements and Quality Management System's manual were developed. The certification is expected by end of 2016.

6.6.7.3. Enterprise Risk Management

The Authority continued to instal and capacitate the Enterprise Risk Management initiatives. During the year all departments developed Standard Operating Procedures using the RACI Matrix, which indicates who is Responsible, Accountable, Consulted and Informed on every activity. The Enterprise Risk Management initiative was also aligned to ISO Certification and SAP enterprise resource planning business processes.



The Board Members and Senior Executives toured the Green Fuel plant in Chimanimani on a familirisation exercise

6.7 HUMAN RESOURCES

6.7.1 Manpower Head Count

The Authority continues to strengthen its manpower for effective institution service delivery. By end of 2015, there were 46 members of staff against an approved budget structure of 49. The distribution of the permanent staff at the end of 2015 was as shown below:

Table 16: Headcount

Danastanant	Dudmet	Actual	Gende	Vacancies	
Department	Budget		Male	Female	Vacancies
CEO's Office	5	4	1	3	1
Consumer Services and Communications	4	3	1	2	1
Legal	5	5	1	4	0
Technical	12	11	10	1	1
Economic Regulation	9	9	6	3	0
Finance and Admin	14	14	9	5	0
Total	49	46	28	18	3

6.7.2. Gender

By year end, the Authority had a total headcount of 46 employees of which 28 were male and 18 were female translating to female employees accounting for 39.1% of total staff complement.

6.7.3. Recruitment

The Authority recruited a total of 10 employees of which five were females during the year.

6.7.4. Wellness Programme

Implementation of the Authority's Wellness programmes continued during the year in line with the approved guidelines. Focus was on physical fitness sessions. ZERA also commemorated the World Aids Day through a presentation on HIV and AIDS, a drama and a testimony from a person living with HIV and AIDS.



6.7.5. Learning and Development

A total of $1\,099$ man days were invested by ZERA in training the Board and employees. Highlights of the above were as outlined below:

Table 17: Capacity Building

Type of Engagement	Number of Engagements	Summary of Engagements
a. Regional Workshop	2	The Authority participated in regional workshops in fulfilment of the Authority's mandate to participate in promotion, coordination, integration and harmonisation of energy related policies and strategies in the SADC and COMESA region as well as representing the country internationally in matters relating to the energy industry. ZERA was appointed Chair of the Regional Electricity Regulators Association of Southern Africa (RERA) for 2016 to 2017. ZERA also attended RERA and COMESA's REARESA AGMs.
b. Regional Familiarisation	2	The objective was to enhance capacity building for Board and staff members in terms of best practice and regional and international trends within the energy sector regulators.
c. Conference	15	The conferences provided opportunities for improving knowledge, investment promotion of Zimbabwe as an ideal investment destination and also to exchange and share experiences on all aspects and forms of energy. Staff participated in discussions on the recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the energy space.
d. Workshops	18	The authority made presentations at such forums and shared latest developments in terms of regulations, the Stakeholder Charter, energy efficiency measures, alternative and renewable energy technologies, consumer rights and responsibilities and safe use of all energy forms. Other members of staff also attended workshops that enhanced their skills and capacity thereby contributing to regulatory excellence
e. Learning and Development	13	The sessions resulted in information sharing and learning opportunities through mentoring and coaching, on the job training for acquiring necessary knowledge, skills and behaviours. The objective was to orient members of staff to be able to meet current and future job requirements and perform at higher levels.

Over and above the short courses and workshops, the Authority sponsored various courses for members of staff who are pursuing approved advanced studies at undergraduate or postgraduate level in line with human capital advancement.

6.7.6. Code of Ethics Manual and Code of Conduct

Following awareness training on workplace ethics, the Authority developed a Code of Ethics manual which was approved by the Board. The drafting and subsequent approval by the Board of the Employment Code of Conduct was also completed and the document was sent for registration with the Department of Labour.

6.7.7. Integrated Results Based Management System Implementation

In line with Government's adopted approach of managing parastatals, the Authority crafted and implemented the Agency Integrated Performance Agreement (AIPA) and the Chief Executive Officer's contract during the year in line with its 5 Year (2013-17) strategic goals.

6.7.8. Major Human Resource Challenges

The Authority faced challenges in attracting qualified and experienced staff in key technical fields of Energy Efficiency, Electricity Compliance and Monitoring as well as Consumer Services Management. To mitigate against the above challenges, benchmarking of remuneration practices within the energy supply industry continues.

6.8. STAKEHOLDER ADVISORY AND ENGAGEMENT SERVICES



ZERA participates at public shows and expos where knowledge and information on safe use of energy and energy efficiency is shared with consumers

ZERA is mandated to advise stakeholders through establishing appropriate consumer rights and obligations, arbitrate and mediate disputes among and between licensees and consumers. It also has a duty to advise and educate consumers and licensees regarding the efficient use of energy. The following summarises how this mandate was executed in 2015.

6.8.1. Confederation of Zimbabwe Industries (CZI) and Chamber of Mines (COM) Quarterly Meetings

The Zimbabwe Energy Regulatory Authority continued with its quarterly meetings with the captains of industry and Chamber of Mines to appraise each other on energy related issues and impact thereof on production. Some of the issues that were discussed include investing in energy efficiency measures, alternative energy sources and security of supply.

6.8.2. Farmers' Indaba On Energy

The Authority facilitated the inaugural Farmers' Indaba on Energy which was attended by over 100 farmers drawn from different farmer groups. The Indaba was also attended by officials from the Ministry of Agriculture and Mechanisation, EMA, MOEPD and the power utility. The major issues discussed include outstanding electricity bills, safety issues, energy efficiency at farm level and how to ensure sustained supply of power to the sector.

6.8.3. Education and Awareness Campaigns

Through its partnership with the Consumer Council of Zimbabwe (CCZ), ZERA engaged about 1200 consumers mainly from high density areas of Harare and Bulawayo on safe use of LPG and other forms of energy as well as energy efficiency and existing options for renewable energy technologies. The plan is to roll out the same engagements across the country in 2016.

6.8.4. Consumer Complaints and Dispute Resolution

As a result of awareness of consumer rights and responsibilities, the Authority received 17 complaints, seven being from the petroleum sub-sector and 10 from the electricity sub-sector. The major issues were of contaminated fuel, alleged unfair load shedding and electricity postpaid estimated billing complaints. Of the 17 cases received, 14 cases were resolved with the remainder being carried over to year 2016.

6.8.5. Stakeholder Service Charter

ZERA developed its first Stakeholder Service Charter which was validated through a stakeholder engagement workshop. The Charter locates consumer satisfaction as central to the Authority's effective service delivery.

6.8.6. National Energy Consumer Satisfaction Survey

A suitable service provider was engaged to undertake a National Energy Sector Satisfaction Survey in 2016. The survey will explore challenges, needs and expectations of suppliers and end users of energy. The results will inform the Authority's stakeholder engagement strategic interventions and programs in future.

6.8.7. Radio Programmes

The Authority sponsored a radio programme, under the banner "Energy Talk", which was aired on Radio Zimbabwe, ZiFM and Star FM stations. The interactive programme raised awareness on safe use of all forms of energy and increased visibility of the Authority among other issues. The programmes will continue in 2016.

6.8.8. Media Engagement

ZERA maintained its cordial relations with journalists during the year. Efforts were made to ensure factual responses to issues and that enquiries raised were done on time. This resulted in the Authority being referenced and quoted directly and indirectly in 130 articles during the year with the majority being positive. The level of understanding of energy issues among journalists has improved much to the benefit of the consumers and stakeholders.

6.8.9. Participation at Business Expos, Shows and Strategic Exhibitions

ZERA participated and exhibited at the Harare, Midlands, Masvingo, Manicaland and Bindura Agricultural Shows, ZITF and various business exhibitions. In 2016, efforts will be made to also exhibit in Matabeleland North and South, Mashonaland West and East among other events.

6.8.10. Corporate Social Responsibility

The Authority improved the lives of children at Emthunzini Wethemba, a Bulawayo-based orphanage, where the installation of solar geysers and retrofitting of all the lighting systems with energy efficient Light Emitting Diode (LED) bulbs were made. Similar interventions were made at Matthew Rusike Children's Home in Epworth. The Harare Hospital Children's Ward was also supported with LED bulbs as well as MOEPD and ZERA offices.

ZERA in partnership with the Zimbabwe Institute of Engineers supported UZ and the National Student Engineering Paperette Competition. ZERA also paid fees for 8 students who are studying towards engineering degrees at UZ, but are experiencing financial challenges.



ZERA supports' students at tertiary institutions who are studying towards their engineering degree as part of developing a human resource base of engineers for the nation.

6.8.11. Records and Information Resource Centre

The Authority continued to ensure a robust records management system, developed within a framework that includes accountability and information security to enable effective business processes, compliance, and preservation of vital records. Development of the Information Resource Centre to standards that ensure that ZERA becomes a focal point for all those with an interest in energy is one of the Authority's medium-term projects which is still underway.

Currently, the literature in the resource centre spans across energy generation, transmission and distribution and also includes electronic books, journals and books on management, economics, legal, financial management and stakeholder engagement among others.

6.9. REGIONAL AND INTERNATIONAL INTEGRATION

ZERA is mandated to promote the coordination and integration of the importation, exportation and pooling of energy from any energy source in the SADC and COMESA region as well as to represent Zimbabwe in international matters related to energy. In that respect, the Authority participated in regional energy forums as part of promoting harmonisation of energy policies and influencing increased trade in the SADC and COMESA regions.

The Authority participated at the World Energy Regulators Triannual Conference. It also served as a resource member of the Regional Electricity Regulators Association of Southern Africa (RERA) and African Forum for Utility Regulators (AFUR) where it actively participated.

ZERA was elected as the Chair for RERA for the period 2016 to 2017. The Authority attended the AGM of Regulators for Eastern and Southern Africa (RAERESA) and Common Market for Eastern and Southern Africa (COMESA) energy forum which was held in Egypt.

The Authority also attended the Africa Refinery Association Annual Conference to appreciate the trends. These regional and international platforms also serve as opportunities to attract investors to the country and region which culminate in improved security of supply.



- The current electricity shortage has led to the adoption of alternative energy sources by electricity consumers which include Solar Home Systems (SHS).
- Safety should be observed always when connecting and using SHS.
- * All alternative electricity supplies should be equipped with a change-over switch.

7.0 ENERGY SECTOR PERFORMANCE

In the interest of the stakeholders, ZERA is mandated to monitor, analyse and present an independent view and assessment of the energy sector performance in accordance with established best practice. In this regard, the following are highlights of the electricity and petroleum sector performance:

7.1. ELECTRICITY SUB-SECTOR PERFOMANCE

The total energy sent out by ZPC in 2015 was 9,215GWh as compared to 9,783GWh in 2014, this represents a 5.8% decrease. The individual contributions from the generating stations are as depicted in Table 17 below.

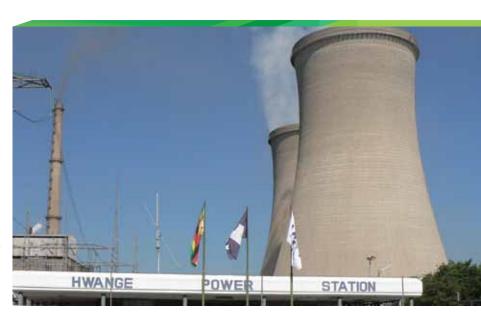
Table 18: Energy Sent Out

Plant	2015 Actual (GWh)	2014 Actual (GWh)	2014/2015 Variance (%)
Hwange	3,721	3,821	-2.62%
Kariba	4,938	5,403	-8.61%
Harare	209	216	-3.17%
Munyati	173	176	-1.55%
Bulawayo	174	167	4.22%
Total Energy - GWh	9,215	9,783	-5.80%

ZPC did not attain the capacity threshold set by ZERA for 2015 at all stations.

- (a) Kariba's contribution to the national grid decreased by 8.6% and this was largely attributed to the reduction in water allocation by the Zambezi River Authority following the drought.
- (b) Hwange faced a number of challenges during 2015, the most prominent being Generator Unit 1 which was taken out of service on 20 July 2015 and remained so at year end pending repairs.
- (c) Harare Power Station also missed its target as it had challenges which included the failure to return to service of transformer TA1 at Harare Power Station. The turbine shaft which was also bent during commissioning is still being manufactured and the unit is expected to be commissioned in April 2016.
- (d) Bulawayo and Munyati failed to meet the ZERA target due to low availability of boiler plant due to frequent problems with jamming chain grates and boiler fouling resulting from poor maintenance practices.

ZERA remains concerned at the poor performance of the thermal stations and intends to carry out a technical audit during 2016 on these thermal stations.



Hwange Thermal Power Station

7.1.1. Performance Indicators

ZPC power stations failed to meet most performance indicators of plant load factor, availability factor and efficiency. Frequent boiler tube fouling and silica deposits have been a major cause of the poor performance.

Table 19: Performance Indicators

PERFORMANCE INDICATOR	2015 Actual	2014 Actual	Variance	ZERA TARGET	VARIANCE (%)
	Plant Load Fa	actor (%)			
Hwange Power Station	53%	53%	0%	80%	-27%
Kariba Power Station	59%	88%	-29%	80%	-21%
Small thermals	45%	32%	13%	65%	-20%
Plant Efficiency %(Thermals)					
Hwange Power Station	27%	28%	-1%	30%	-3%
Harare	23%	22%	1%	20%	3%
Munyati	14%	14%	0%	20%	-6%
Bulawayo	15%	15%	0%	20%	-5%
Kariba Power station	95%	95%	0%	95%	0%
Total Number of Trips					
Hwange Power Station	33	40	-18%	36	-8%
Small thermals	5	1	400%	9	-44%
Kariba Power Station	5	3	67%	3	67%

7.1.2. Independent Power Producers Electricity Production

ZERA monitored electricity production by Independent Power Producers (IPPs) in the year 2015. It was noted that Hippo Valley Estates and Triangle (Pvt) Limited's generation have been decreasing while Nyangani Renewable Energy doubled its power generation capacity. The following table summarises the total annual production over the period 2012 through to 2015:

Table 20: IPP Production

Producer	Technology	2015	Production 2014	on (GWh) 2013	2012
Nyangani Renewable Energy (Pungwe, Nyamingura and Duru)	Mini-hydro	51.4	28.8	14.2	2.6
Hippo Valley Estates	Biomass	34	50	70.2	55.2
Triangle Limited	Biomass	87.5	94.2	95.6	111.4
Border Timbers	Biomass	0	0	0.2	-
Chisumbanje	Biomass	6.5	-	-	<u>-</u>
Total		179.4	173	180.2	169.2

7.1.3 Transmission, Distribution and Supply

Table 21: Transmission Quality of Supply Parameters

Description	YTD 2015	YTD 2014	YTD 2015/2014 Variance (%)
Number of Interruptions	127	123	3.2%
System minutes	270	143	89%
Average duration of interruptions (minutes) - SAIDI	192	78	146%
Unserved Energy (MWh)	7,790	6,099	28%
Voltage excursions	654	524	25%

The system minutes increased due to load shedding, the increased number of faults and general lack of maintenance of the distribution system. A total of 20 Southern African Power Pool (SAPP) induced system disturbances were recorded (eight in 2014) and three of these led to loss of generation at Hwange. A total of six of these disturbances affected other ZESA network equipment whilst the rest had no effect.

The Authority has requested ZETDC for full reports of these disturbances in accordance with the Grid Code Clause 6.20 (Fault Recording and Reporting). ZETDC has been urged to hasten the finalisation of tuning of stabilisers at Hwange Power Station and maintain system stability.

7.1.4. Distribution Quality of Service Parameters

The number of faults reported at 33kV and below during 2015 was 133,008 against 129,630 in 2014, this being almost a 0.3% increase. Most of the faults are a result of the lack of maintenance on the system infrastructure, acts of vandalism and theft of both transformer oil and conductor.

Table 22: Distribution Quality of Service Parameters

Description	YTD 2015	YTD 2014	2015/2014 Variance (%)
Number of faults	133,008	129,630	2.6%
Average arrival time at a fault (minutes)	180	342	-47%
% of faults restored in 3hours	41%	40%	2.5%
Frequency of Load Shedding (days)	3	3	-

7.1.5. Transmission/Distribution Operational Efficiency

7.1.5.1. Losses

System losses increased from 16.3% in 2014 to 17.21% in 2015. The distribution and transmission losses are tabled below:

Table 23: Technical losses

Losses	2015	2014	Variance %
Transmission	3.21%	3.8%	-16%
Distribution*	14%	12.5%	12%
Total	17.21%	16.3%	+5.6%

The total system losses increased by 5.6% rising from 16.3% in 2014 to 17.21% in 2015. These losses are 30% higher than the ZERA approved target of 12% used in tariff determination for calculation of allowable losses. The Authority is developing Transmission and Distribution Performance Codes to set progressive agreed targets for the losses which will be linked to tariff reviews.

7.1.5.2. Quality of Service

New connections decreased by 31% from 22,369 in 2014 to 15,443 in 2015. The reduction in connections is due to shortage of prepayment meters. The Authority is considering regulations requiring land developers to include MV backbone infrastructure as a mandatory requirement for new urban housing developments.

Table 24: New Connections

Description	YTD 2015	YTD 2014	2015/14 variance (%)
New connections	15,443	22,369	-31%
Active customer base	635,645	622,780	2%
Customers paid but not connected	18,048	2,834	53,7%
Time to resolve account query (Days)	3	3	-

7.1.6. Electrical Accidents

Reports of electricity accidents are submitted to the Authority in accordance with section 28 of the Energy Regulatory Act to enable the Authority to maintain records so that trends can be identified and remedial action taken. All electrical fatalities are investigated by the Authority. Sixty-eight (68) electrical accidents were reported against 71 (30 fatal) in 2014, this being a marginal 4.4% decrease against a projected 5% decrease. Of the 68 accidents, 48% (27) were fatal. The main causes of the accidents were infrastructure collapse, unsafe installations and careless handling of electricity.

ZERA is awaiting promulgation of the Electricity Public Safety Regulations, which will provide obligations for network operators to ensure the safety of the public.



Some of the causes of accidents include infrastructure collapse

7.1.7. Distribution Energy Sales

The total energy delivered to the transmission system for 2015 decreased from 9,377GWh in 2014 to 8,813GWh in 2015 representing a 6% decline whilst distribution sales decreased by 9.8% to 7,474GWh in 2015 from 8,280GWh in 2014.

Table 25: Energy and Sales

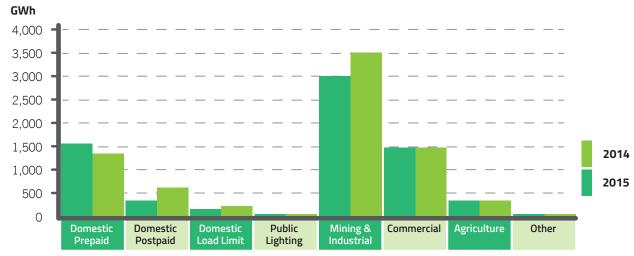
Description	YTD 2015	YTD 2014	Variance	Remarks
Total Energy Delivered Transmission (GWh)*	8,813	9,377	-6%	Less transmission losses, Nampower exports and regional exports,
Distribution Sales (GWh)	7,474	8,280	-9.8%	Less distribution losses

The negative variance for consumption is a result of Demand Side Management (DSM) as consumers are using electricity conservatively and efficiently as many of them are now on the prepaid platform, while companies are also scaling down production.

Table 26: Graph 1 below show the energy sales by sector:

Category	2015(GWh)	% Contribution	2014 (GWh)	2015/2014 Variance
Domestic Prepaid	1,706	22.8%	1,515	13%
Domestic Postpaid	352	4.7%	702	-50%
Domestic Load Limit	179	2.4%	257	-30%
Public Lighting	14	0.2%	38	-63%
Mining and Industrial	3083	41.2%	3605	-14%
Commercial	1663	22.3%	1643	1%
Agriculture	455	6.1%	466	-2%
Other	22	0.3%	25	-12%
Total	7,474	100%	8,251	-9%

Graph 1: Energy Consumption by Sector



The Authority has noted with concern the poor collection of outstanding bills with an increase in uncollected revenue rising from \$971.4million in 2014 to \$1.036 billion in 2015, despite the installation of prepayment meters. ZETDC has been urged to develop more efficient debt collection strategies.

7.1.8. Increased Energy Access

The Rural Electrification Agency (REA) electrified 429 institutions in 2015 adding some 17MVA onto the distribution network, bringing the electricity access rate for institutions to 60%. A total of 14 solar PV mini-grids and 18 biogas digester plants were commissioned throughout the country.

7.2. PETROLEUM SUB-SECTOR PERFORMANCE

7.2.1 Fuel Imports

The table below shows the volumes of petroleum products imported into the country in the year 2015. The monthly trends based on the companies' submissions to Authority show that there was stability in the importation of diesel, petrol, paraffin and Liquefied Petroleum Gas (LPG) during the year. Among other things, variations in LPG supply are caused by lack of availability of resources as well as electricity supply. The higher the electricity supply, the lower the demand for LPG as most households use LPG when there is no electricity. Unavailability of adequate national storage facilities for LPG is still a challenge.

Table 27: Petroleum Products Monthly Imports

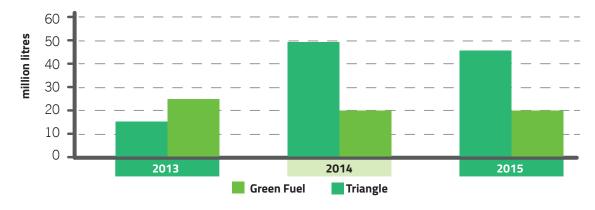
Month			eum Product (U		
Month	Diesel (Itrs)	Petrol (Itrs)	Paraffin (Itrs)	Jet A1 (ltrs)	LPG (kgs)
January	58,041,555	36,955,185	2,550,027	2,828,852	1,084,265
February	52,837,609	34,183,804	4,072,031	2,320,044	1,143,218
March	65,918,983	37,246,403	3,562,945	1,662,542	1,318,734
April	80,464,715	44,305,262	2,650,490	1,963,571	1,422,879
May	60,247,236	40,295,880	3,172,290	1,384,461	1,636,987
June	88,302,520	44,883,657	4,823,686	1,346,648	1,906,204
July	88,806,659	49,400,375	4,128,849	2,612,418	1,139,255
August	74,490,388	37,890,509	5,678,140	3,575,858	1,910,699
September	76,359,097	44,590,323	5,168,899	2,753,284	2,243,618
October	86,011,430	41,709,493	4,979,498	1,798,127	2,557,727
November	67,048,062	39,421,454	5,213,054	2,381,694	1,524,140
December	74,722,299	54,264,849	5,168,123	2,562,575	1,887,433
Grand Total	873,250,553	505,147,194	51,168,032	27,190,074	19,775,159
Monthly average	72,770,879	42,095,600	4,264,003	2,265,840	1,647,930

A comparison with data received from Zimbabwe Statistical Agency (ZIMSTAT) shows that, of the total petrol and diesel imported by the petroleum companies up to a maximum of 4% and 2% respectively is exported to neighbouring countries.

7.2.2. Ethanol Production

The graph below shows the ethanol production figures from 2013 to 2015. The period under review saw the production of ethanol decreasing by 7% and 2% respectively for Green Fuel and Triangle as compared to the previous year. Consistent supply of adequate ethanol for sustainable blending is still a challenge.

Graph 2: Ethanol production for the period 2013 - 2015



The actual ethanol quantities produced are shown in the table below:

Table 28: Actual ethanol quantities produced

Year	Green Fuel (million litres)	Triangle (million litres)
2013	16.5	23.8
2014	49.1	20.2
2015	45.8	19.8

7.2.3. Sales of Petroleum Products by Economic Sector

Table 29 below shows the percentage sales of the petroleum products by economic sectors showing that most of the sales of the products are distributed through retail sites where it is consumed by the motor industry and for domestic activities.

Table 29: Percentage Sales by Economic Sector

Contain	Petroleum Products				
Sector	Diesel	Petrol	LPG		
Retail	48.0%	75.2%	62.0%		
Commercial	25.6%	19.6%	4.0%		
Transport	9.9%	1.5%	0.0%		
Mining	5.6%	0.6%	1.0%		
Agriculture	4.4%	1.3%	1.0%		
Food	1.4%	0.1%	3.0%		
Manufacturing	1.3%	0.3%	1.0%		
Construction	0.2%	0.1%	0.0%		
Other	2.7%	1.4%	28.0%		
Total	100.0%	100%	100%		

7.2.4. Sales of Petroleum Products by Geographic Region

Table 30 below shows the percentage sales of the petroleum products by geographic region. Harare and Bulawayo have a lion's share of all the energy commodities. This is largely a reflection of economic activity in the various areas.

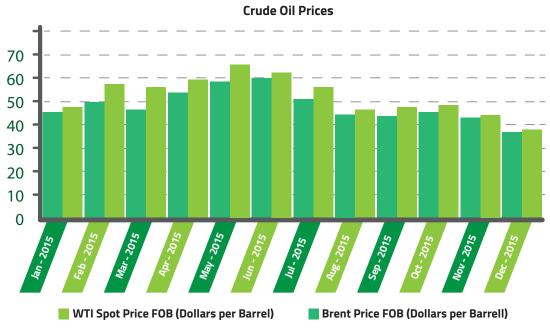
Table 30: Percentage Sales by Geographic Region

Province	Diesel	Petrol	LPG
Bulawayo	11.30%	15.20%	9.30%
Harare	50.50%	52.40%	65.40%
Manicaland	7.20%	5.70%	2.20%
Mash Central	2.00%	1.20%	6.70%
Mash East	3.10%	2.70%	0.20%
Mash West	6.30%	5.50%	0.40%
Masvingo	7.50%	5.30%	14.00%
Mat North	2.70%	1.60%	0.30%
Mat South	3.60%	1.40%	0.10%
Midlands	5.90%	9.00%	1.60%
Total	100%	100%	100%

7.2.5. International Crude and Beira FOB Prices

Crude OII prices rose and peaked in June 2015 when they started declining up to December.

Graph 3: Crude Oil Prices per Barrel



^{*}Source; U.S. Energy Information Administration (EIA)

7.2.6. Market Prices

The trend shown in the graph below is a reflection of the movement in the crude oil prices. Statutory Instrument 20 of 2015, Petroleum (Fuel Pricing) (Amendment) Regulations enabled the alignment of the international prices with local prices by defining the reference period for price review.

Graph 4: Regulated Maximum Prices and Market Prices - Blend



1.45
1.40
1.35
1.30
1.25
1.20
1.15
1.10
1.05
1.00

Average Price

Maximum Prices

Graph 5: Regulated Maximum & Market Prices - Diesel

7.2.7. Regional (SADC) Petroleum Prices

The table below illustrates the average fuel prices (USD per litre) from a sample of countries in the region (as at December 2015). From the current figures, Zimbabwe has relatively higher prices of petrol.

Table 31: Regional Fuel Prices – December 2015

Country	Petrol price (\$/litre)	Diesel price (\$/litre)
Zimbabwe	1.31	1.16
Zambia	0.80	0.71
Malawi	1.16	1.20
South Africa	0.86	0.76
Tanzania	0.88	0.82

7.2.8. Ethanol price

The latest international comparison of ethanol prices is shown in the table below. Zimbabwe has a relatively higher ethanol price.

Table 32: International Ethanol Prices – December 2015

Country	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Thailand	0.52	0.49	0.49	0.51	0.54	0.51	0.5	0.48	0.48	0.50	0.50	0.50
Singapore	0.52	0.50	0.49	0.52	0.54	0.51	0.52	0.48	0.47	0.50	0.50	0.50
Philippines	0.53	0.51	0.51	0.53	0.56	0.53	0.55	0.51	0.50	0.53	0.53	0.53
Brazil Santos	0.58	0.56	0.46	0.47	0.47	0.48	0.48	0.43	0.42	0.48	0.48	0.48
Europe Rotterdam	0.53	0.54	0.62	0.60	0.65	0.61	0.63	0.64	0.64	0.61	0.61	0.61
Triangle (Zim)	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Green Fuel (Zim)	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Green Fuel (millgate)	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88

7.2.9. Accidents



ZERA facilitated training of LPG operators which resulted in reduced accidents in the energy sector during the year

The fuel sector recorded isolated cases of domestic accidents during the year. The cases include:

Table 33: Petroleum sector accidents

	Location	Nature of accident
i.	Highfields	LP Gas Fire
ii.	Mpopoma	Petrol Fire
iii.	Mabuthweni	LP Gas Incident
iv.	Glen Norah A	Paraffin Fire
V.	Nketa	LP Gas Fire
vi.	Gutu	LP Gas Cylinder Explosion
vii.	Msasa	Diesel spill from road tanker

In all the cases, thorough investigations were conducted and corrective advice was proffered. It emerged that the majority of the LPG related accidents were due to inadequate knowledge of safe use of the product. ZERA produced a brochure and poster on safe use of LPG in the home. Visitors to the ZERA stand at all exhibitions were also accorded a pratical demonstration or overview on how to use LPG safely.



- LPG has a unique odour which helps in the early detection of leaks. Leaks can be detected by applying soapy water to all joints on the gas cylinder.
- If leaks are present, the soapy water will produce bubbles indicating the location of leaks.
- If leaks are detected, consumers are urged to disconnect the joint and clean the connecting surfaces before re-connecting and re-checking for leaks by accredited installers.
- Gas cylinders should always be upright and well secured especially during transportation. Consumers are urged never to tamper with a gas cylinder valve.
- If one finds that excessive force is needed to open or close the cylinder valve, or if the valve is damaged, it is advisable to have it repaired at an authorised cylinder test station.
- Gas cylinders need to be inspected and re-tested when necessary but should be re-approved every 10 years.



FINANCIAL STATEMENTS FOR THE YEAR 2015

Country of Incorporation and domicile	Zimbabwe
Nature of business and principal activities	Regulation of the energy sector in Zimbabwe
Board of Directors	Dr. E. Khosa (Chairperson) Dr. I. Jeke (Vice Chairperson) Eng. B. Nhachi Eng. G. T. Nkiwane Mr. T. Muzoroza Rtd. Air Marshall H. Muchena
Executive Directors	Eng. G. Magombo - Chief Executive Officer Mr. E. Mazambani - Commercial Director Eng. M. Siyakatshana - Technical Director
Registered office	14th Floor Century Towers 45 Samora Machel Avenue Harare Zimbabwe
Bankers	ZB Bank Limited 4th & 5th Floors ZB House Cnr Speke Avenue/First Street Harare Stanbic Bank
	Cnr First Street/Samora Machel Harare
Auditors	PKF Chartered Accountants (Zimbabwe) 8th Floor Takura House 67 Kwame Nkurumah Avenue Harare
Secretary	Ms J Mupamhanga

Directors' Responsibilities and Approval

The directors are required in terms of the Energy Regulatory Authority Act (Chapter 13.23) and the Public Finance Management Act (Chapter 22:19) to maintain adequate accounting records and are responsible for the content and integrity of the financial statements and related financial information included in this report. It is their responsibility to ensure that the financial statements fairly present the state of affairs of the Authority as at the end of the financial year and the results of its operations and cash flows for the period then ended, in conformity with International Financial Reporting Standards. The external auditors are engaged to express an independent opinion on the financial statements.

The financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) and are based upon appropriate accounting policies consistently applied and supported by reasonable and prudent judgments and estimates.

The directors acknowledge that they are ultimately responsible for the system of internal financial control established by the Authority and place considerable importance on maintaining a strong control environment. To enable the Authority to meet these responsibilities, the board of directors sets standards for internal control aimed at reducing the risk of error or loss in a cost effective manner. The standards include the proper delegation of responsibilities within a clearly defined framework, effective accounting procedures and adequate segregation of duties to ensure an acceptable level of risk. These controls are monitored throughout the Authority and all employees are required to maintain the highest ethical standards in ensuring the Authority's business is conducted in a manner that in all reasonable circumstances is above reproach. The focus of risk management is on identifying, assessing, managing and monitoring all known forms of risk across the Authority. While operating risk cannot be fully eliminated, ZERA endeavours to minimise it by ensuring that appropriate infrastructure, controls, systems and ethical behaviour are applied and managed within predetermined procedures and constraints.

The directors are of the opinion, based on the information and explanations given by management, that the system of internal controls provides reasonable assurance that the financial records may be relied on for the preparation of the financial statements. However, any system of internal financial control can provide only reasonable, and not absolute, assurance against material misstatements or loss.

The directors have reviewed the Authority's cash flow forecast for the year to 31 December 2016 and, in the light of this review and the current financial position, they are satisfied that the Authority has access to adequate resources to continue in operational existence for the foreseeable future.

The external auditors are responsible for independently reviewing and reporting on the Authority's financial statements. The financial statements have been examined by the Authority's external auditors and their report is presented on page 47.

The financial statements set out on pages 50 to 66, which have been prepared on the going concern basis, were approved by the board of directors on 3 May 2016 and were signed on its behalf by:

Approval of financial statements

Dr. Ester Mpandi Khosa Board of Directors – Chairperson Eng. Gloria Magombo Chief Executive Officer



To the Board Members of Zimbabwe Energy Regulatory Authority

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Zimbabwe Energy Regulatory Authority set out on pages 50 to 66, which comprise the statement of financial position as at December 31, 2015, and the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the Zimbabwe Energy Regulatory Authority financial statements present fairly, in all material respects, the financial position of the Zimbabwe Energy Regulatory Authority as at December 31, 2015, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) and the requirements of the Energy Regulatory Authority Act (Chapter 13:23) and the Public Finance Management Act (Chapter 22:19).

Basis for 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 Financial Statements section of our report. We are independent of the Authority 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 Zimbabwe, 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.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. The key audit matters noted below relate to the financial statements.

Matter	Why the matter was determined to be a key audit matter	How the matter was addressed in the audit
VAT accrual and long outstanding debtors	ZERA is owed \$14,273,964.92 by Zimbabwe Energy Transmission and Distribution Company (ZETDC), Zimbabwe Power Company (ZPC) and Kariba Hydro Power Company (KHPC) which is in excess of 120 days. Related to this debtor balance is outstanding VAT that had been provided for in the books of ZERA. After negotiations that occurred over a number of years, ZIMRA approved for use of the cash basis. The rate at which debtors are collected will influence the overall value of the VAT accrued in the financial statements. ZERA has agreed a payment mechanism with ZETDC that 1% of the electricity levies should be deducted on receipt of funds at the ZETDC bank and transferred to ZERA's bank account before they form part of ZETDC cash flow.	We have reviewed the agreements made by ZERA and ZIMRA and are satisfied that these have been accounted for appropriately in the financial statements. Any VAT that had been raised on ZERA debtors which remains outstanding are included in deferred VAT in the value of \$944,379. As at year end ZERA had collected from ZETDC, ZPC, KHPC and Petroleum debtors amounts on which VAT amounting to \$91,179 is due to ZIMRA. This portion is disclosed under current liabilities in Trade and Other Payables in Statement of Financial Position. Note 9 provides details on the VAT accrual.
Impairment of investment property that was underutilised.	We noted the following indications of impairment on the carrying amount of the investment property: • Out of the eight letting suites, one suite was occupied, while the rest were vacant. • Rental income decreased from \$55,668 in 2014 to \$29,091 in 2015.	Subsequent to year end, ZERA engaged professional valuers who determined a fair value of \$850,000. In 2014 the investment property was valued at \$955,000. An impairment adjustment of \$105,000 has been recorded. ZERA resolved in February 2016 to change the use from commercial to residential with the aim of maximising returns. Note 2 disclose the investment property issue.

Other information

The directors are responsible for the other information. The other information comprises the Management report. The other information does not include the financial statements and our auditor's opinion thereon. Our opinion on the financial statement does not cover the other information and we do not express any form of assurance or conclusion thereon.

In connection with our audit 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 on the other information that we obtained prior to the date of the auditor's report, we conclude that there is a material misstatement of this other information, we are required to report the fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the ZERA's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the ZERA or to cease operations, or has no realistic alternative but to do so. Those charged with governance are responsible for overseeing the ZERA's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with 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 judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit 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 ZERA's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ZERA's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the ZERA 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 audit evidence regarding the financial information of ZERA or business activities of ZERA to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of ZERA's audit. We remain solely responsible for our audit opinion.

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

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, 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 law or regulation precludes public disclosure 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.

The engagement partner on the audit resulting in this independent auditor's report is Lewis Hussein.

PKF Chartered Accountants (Zimbabwe) Registered Public Auditors (Zimbabwe) Harare

Per: Lewis Hussein Engagement Partner Registered Public Auditor (Zimbabwe) PAAB Practicing number of Engagement Partner: 0347

STATEMENT OF FINANCIAL POSITION

			Figures in US Dollar
Assets	Note(s)	2015	2014
Non-current assets			
Investment property	2	850,000	955,000
Property and equipment	3	1,831,821	1,696,875
Intangible assets	4	7,668	7,819
		2,689,489	2,659,694
Current assets			
Inventory	5	16,576	2,612
Trade and receivables	6	9,271,501	7,570,971
Cash and cash equivalents	7	2,763,379	3,765,697
cach and cach equivalente	•	12,051,456	11,339,280
Total assets		14,740,945	13,998,974
Equity and Liabilities Equity			
Reserves		794,854	794,850
Retained Income		11,134,527	8,834,574
Total equity		11,929,381	9,629,424
Liabilities			
Long-term liability Deferred VAT liability	9	944,379	-
Current liabilities Trade and other payables Total liabilities Total aguity and liabilities	8	1,867,185 2,811,564 14,740,945	4,369,550 4,369,550 13,998,974
Total equity and liabilities		14,740,945	15,990,974

The financial statements and the notes on pages 60 to 66 were approved by the board of directors on 3 May 2016 and were signed on its behalf by:

Dr. Ester Mpandi Khosa Eng. Gloria Magombo
Board of Directors – Chairperson Chief Executive Officer

STATEMENT OF COMPREHENSIVE INCOME		Figures in US Dollar	
	Note(s)	2015	2014
Revenue Other income Operating expenses	9 10 11	9,127,966 2,546,709 (8,575,598)	9,390,393 444,602 (7,510,214)
Operating surplus		3,099,077	2,324,781
Surplus for the year		3,099,077	2,324,781
Total comprehensive income		3,099,077	2,324,781
Total comprehensive income attributable to: Zimbabwe Energy Regulatory Authority Rural Electrification Agency	12	3,099,077 -	505,000 1,819,781
		3,099,077	2,324,781

STATEMENT OF CHANGES IN EQUITY

Figures in US Dollar

	Electricity Fund	Other NDR	Total Reserves	Retained Income	Total Equity
Balance at 1 January 2014	535,538	794,850	1,330,388	6,509,793	7,840,181
Changes in equity			-		-
Total comprehensive income for the year	-		-	2,324,781	2,324,781
Transfer to electricity fund	1,819,781		1,819,781	(1,819,781)	-
Rural Electrification Agency	(535,538)		(535,538)		(535,538)
Total changes	1,819,781	794,850	2,614,631	7,014,793	9,629,424
Balance at 1 January 2015	1,819,781	794,850	2,614,631	7,014,793	9,629,424
Changes in equity			-		-
Amounts to electricity fund not yet paid	(1,591,038)	-	(1,591,038)	1,591,038	-
Prior Year Adjustments			-		-
Transfer to NDR		4	4	(4)	
Total comprehensive income for the year			-	3,099,077	3,099,077
Transfer to Rural Electrification Agency	(228,743)		(228,743)		(228,743)
Refund of Electricity Licenses			-	(570,377)	(570,377)
Total Changes	(1,819,781)	4	(1,819,777)	4,119,734	2,299,957
Balance at 31 December 2015	-	794,854	794,854	11,134,527	11,929,381

Amounts to electricity fund not yet paid relates to prior year surplus determined on cash accounting basis in 2014 as per permission from the Ministry of Energy and Power Development.

STATEMENT OF CASH FLOWS	Note(s)	Figures in US Do	
		2015	2014
Cash flows from operating activities			
Cash generated from operations	15	138,546	1,077,575
Net cash from operating activities		138,546	1,077,575
Cash flows from investing activities			
Purchase of property and equipment	3	(555,004)	(1,256,491)
Purchase of other intangible assets	4	(4,032)	(1,307)
Proceeds from sale of asset		43,650	1,240
Interest received	10	173,642	315,334
Net cash from investing activities		(341,744)	(941,224)
Cash flows from financing activities			
Refund of Electricity Licence Fees		(570,377)	-
Transfer to Rural Electrification Fund		(228,743)	(535,538)
Net cash flows from financing activities		(799,120)	(535,538)
Total cash movement for the year		(1,002,318)	(399,187)
Cash at the beginning of the year		3,765,697	4,164,884
Total cash at end of the year	7	2,763,379	3,765,697

Accounting Policies

1. Reporting Entity Nature Of Business

ZERA is a parastatal established by an Act of Parliament- Energy Regulatory Authority Act (Chapter 13:23). ZERA mandate is to regulate the energy industry.

Basis of Preparation

1.1 Statement of Compliance

The entity's financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) and the International Financial Reporting Interpretations Committee (IFRIC) interpretations.

1.2 Reporting Period

The entity has prepared the financial statements for the period beginning 1 January 2015 and ending on 31 December 2015.

1.3 Basis Of Measurement

The financial statements are based on statutory records that are maintained under historical cost except certain financial instruments and investments are measured at fair value.

1.4 Functional And Presentation Currency

These financial statements are presented in United States dollar (USD) which is the entity's functional currency. All the financial information presented has been rounded to the nearest dollar.

1.5 Critical Accounting Judgments Assumptions And Estimates

In preparing the financial statements, management is required to make estimates and assumptions that affect the amounts presented in the financial statements and related disclosures. Use of available information and the application of judgment is inherent in the formation of estimates. Actual results in the future may differ from these estimates which may be material to the financial statements. Estimates and underlying assumptions are reviewed on an on-going basis. Revision to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected. Significant judgments include the following:

Impairments

ZERA estimates the allowance for uncollectable accounts based on management's assessment of collection indicators to determine the rate applied.

The impairment for trade receivables and other receivables is calculated on a debtor type basis, adjusted for national and industry specific economic conditions and other indicators present at the reporting date that correlate with defaults on the portfolio.

ZERA employs professional valuers to estimate the fair value of investment property. Based on these estimates adjustments are made to the carrying value of the related assets.

Useful Lives and Residual Values of Property, Plant and Equipment

ZERA assesses useful lives and residual values of property, plant and equipment each year taking into account past experience and technology changes. The depreciation rates are set out in note 1.8. The residual values for the year were assessed and have been noted as adequate. The value for this year has been assessed as \$Nil (2014 \$ Nil).

1.6 Standards Issued And Effective on or After 1 January 2016

IFRS 15 Revenue from Customers' Contracts

New standard that requires entities to recognise revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This core principle is achieved through a five step methodology that is required to be applied to all contracts with customers.

The new standard will also result in enhanced disclosures about revenue, provide guidance for transactions that were not previously addressed comprehensively and improve guidance for multiple-element arrangements. The new standard supersedes:

- a) IAS 11 Construction Contracts;
- b) IAS 18 Revenue;
- c) IFRIC 13 Customer Loyalty Programmes;
- d) IFRIC 15 Agreements for the Construction of Real Estate;
- e) IFRIC 18 Transfers of Assets from Customers and
- f) SIC-31 Revenue-Barter Transactions Involving Advertising Services.

IAS 16 Properties, Plant and Equipment

Amendment to both IAS 16 and IAS 38 establishing the principle for the basis of depreciation and amortisation as being the expected pattern of consumption of the future economic benefits of an asset.

Clarifying that revenue is generally presumed to be an inappropriate basis for measuring the consumption of economic benefits in such assets.

IAS 38 Intangible Assets

Amendments to IAS 16 and IAS 38 to clarify the basis for the calculation of depreciation and amortisation, as being the expected pattern of consumption of the future economic benefits of an asset.

Amendment to both IAS 16 and IAS 38 establishing the principle for the basis of depreciation and amortisation as being the expected pattern of consumption of the future economic benefits of an asset.

Clarifying that revenue is generally presumed to be an inappropriate basis for measuring the consumption of economic benefits in such assets.

1.7 Standards Issued and Effective on or after 1 January 2018

IAS 1 Presentation of Financial Statements

Disclosure Initiative: Amendments designed to encourage entities to apply professional judgement in determining what information to disclose in their financial statements. For example, the amendments make clear that materiality applies to the whole of financial statements and that the inclusion of immaterial information can inhibit the usefulness of financial disclosures. Furthermore, the amendments clarify that entities should use professional judgement in determining where and in what order information is presented in the financial disclosures.

1.8 Revenue Recognition

Revenue is recognised on accrual basis and the revenue categories of the entities are as follows;

Electricity Annual Levies

Levies are charged at 1% of electricity sales to electricity generating, transmission and distributing companies in terms of Statutory Instrument no. 6 of 2008.

Electricity Licence Application Fees

Licence application fees are charged to all companies and individuals who submit applications to obtain any form of trading licence in terms of Statutory Instrument no. 55 of 2015.

Licence Fees

Electricity Licence fees are charged to new companies who are into the generation, transmission and distributing companies in terms of Statutory Instrument no. 55 of 2015.

LPG licence fees are charged in terms of Statutory Instrument no. 57 of 2014.

Licence fees for the Petroleum sector vary depending on the category of business as follows;

- (a) Blending
- (b) Procurement
- (c) Production
- (d) Retail
- (e) Wholesalers

Interest Received

Revenue is recognized as the interest accrued

1.9 Property, Plant and Equipment

Property, plant and equipment are shown at cost less accumulated depreciation and impairment. Depreciation is provided for on a straight line basis over the assets' expected economic lives on the following rates:

Item	Depreciation rates
Office partitions	4%
Furniture and fixtures	20%
Motor vehicles	20%
Office equipment	20%
IT equipment	33.33%
Other property, plant and equipment	33.33%
Library Books	20%

Disposals are recorded when an asset is removed from ownership of ZERA. The proceeds are net off the carrying amount at that date and related gains or losses included in the surplus for the year.

Impairment of Assets Assessment

The carrying amounts of ZERA assets are reviewed at each financial reporting date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated. An impairment loss is recognised in the statement of comprehensive income whenever the carrying amount of an asset exceeds its recoverable amount.

Investment property

Investment property is initially recognised at cost and subsequently measured at fair value at every Statement of Financial Position date.

1.10 Intangible assets

Intangible assets are shown at cost less accumulated amortisation and impairment. Amortisation is provided for on a straight line basis over the assets expected economic lives on the following rates:

Item	Amortisation rates
ZERA Logo	20%
Computer software	33.33%
ZERA Website	20%
Branding	20%

1.11 Cash and Cash Equivalents

Cash and cash equivalents comprise cash balances and call deposits with maturities of three months or less from acquisition date.

1.12 Provisions

Provisions are recognised when ZERA has a present legal or constructive obligation as a result of past events, if it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate of the amount can be made.

1.13 Employee Benefits

Employee benefits are the consideration given by ZERA in exchange for services rendered by employees. In summary the benefits are:

Short-Term Benefits

Benefits earned by employees under normal employment terms including salaries, bonuses and leave pay. These are expensed as earned and accordingly provisions are made for unpaid bonuses and leave pay.

Post- Employment Benefits

Contributions to Fidelity Life Assurance are expensed as and when incurred. All employees contribute to the National Social Security Authority pension scheme and the amounts are included in the determination of surplus for the year.

1.14 Corporate Tax

ZERA is exempt from paying corporate tax in accordance with the Income Tax Act (Chapter 23:06).

1.15 Inventory

Inventory is valued at the lower of cost and net realisable value. Cost is calculated using the weighted average price method. Inventory to date consists of petrol and diesel fuel coupons.

1.16 Foreign Currency Transactions

Transactions in foreign currency are translated into United States dollars at rates of exchange prevailing at date of transaction. At each statement of financial position date, monetary assets and liabilities that are dominated in

foreign currencies are translated at the rates prevailing on the statement of financial position date. Gains and losses arising on exchange are included in the statement of comprehensive income for the period.

1.17 Financial Instruments

Classification

ZERA classifies financial assets and financial liabilities into the following categories:

- Financial assets at fair value through profit or loss designated.
- Loans and receivables.
- Financial liabilities measured at amortised cost.

Classification depends on the purpose for which the financial instruments were obtained or incurred and takes place at initial recognition. Classification is re-assessed on an annual basis, except for financial assets designated as at fair value through profit or loss, which shall not be classified out of the fair value through profit or loss category.

Initial Recognition and Measurement

Financial instruments are recognised initially when ZERA becomes a party to the contractual provisions of the instruments. ZERA classifies financial instruments, or their component parts, on initial recognition as a financial asset, a financial liability or an equity instrument in accordance with the substance of the contractual arrangement. Financial instruments are measured initially at fair value, except for equity investments for which a fair value is not determinable, which are measured at cost and are classified as available-for-sale financial assets.

For financial instruments which are not at fair value through profit or loss, transaction costs are included in the initial measurement of the instrument. Transaction costs on financial instruments at fair value through profit or loss are recognised in profit or loss.

Subsequent Measurement

Financial instruments at fair value through profit or loss are subsequently measured at fair value, with gains and losses arising from changes in fair value being included in profit or loss for the period. Net gains or losses on the financial instruments at fair value through profit or loss includes interest. Loans and receivables are subsequently measured at amortised cost, using the effective interest method, less accumulated impairment losses.

Impairment of Financial Assets

At each reporting date ZERA assesses all financial assets, other than those at fair value through profit or loss, to determine whether there is objective evidence that a financial asset or group of financial assets has been impaired. For amounts due to ZERA, significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy and default of payments are all considered indicators of impairment. In the case of equity securities classified as available for sale, a significant or prolonged decline in the fair value of the security below its cost is considered an indicator of impairment. If any such evidence exists for available-for-sale financial assets, the cumulative loss measured as the difference between the acquisition cost and current fair value, less any impairment loss on that financial asset previously recognised in profit or loss-is removed from equity as a reclassification adjustment to other comprehensive income and recognised in profit or loss. Impairment losses are reversed when an increase in the financial asset's recoverable amount can be related objectively to an event occurring after the impairment was recognised, subject to the restriction that the carrying amount of the financial asset at the date that the impairment is reversed shall not exceed what the carrying amount would have been had the impairment not been recognised.

Reversals of impairment losses are recognised in profit or loss except for equity investments classified as available-for-sale. Impairment losses are also not subsequently reversed for available-for-sale equity investments which are held at cost because fair value was not determinable. Where financial assets are impaired through use

of an allowance account, the amount of the loss is recognised in profit or loss within operating expenses. When such assets are written off, the write off is made against the relevant allowance account. Subsequent recoveries of amounts previously written off are credited against operating expenses.

Loans to Directors, Managers and Employees

These financial assets are classified as loans and receivables.

Trade and Other Receivables

Trade receivables are measured at initial recognition at fair value, and are subsequently measured at amortised cost using the effective interest rate method. Appropriate allowances for estimated irrecoverable amounts are recognised in profit or loss when there is objective evidence that the asset is impaired. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments are considered indicators that the trade receivable is impaired. The allowance recognised is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the effective interest rate computed at initial recognition.

The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in profit or loss within operating expenses. When a trade receivable is uncollectable, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited against operating expenses in profit or loss.

Trade and other receivables are classified as loans and receivables.

Trade and Other Payables

Trade payables are initially measured at fair value, and are subsequently measured at amortised cost, using the effective interest rate method.

Cash and Cash Equivalents

Cash and cash equivalents comprise cash on hand and demand deposits and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These are initially and subsequently recorded at fair value.

1.18 Value Added Tax (VAT)

VAT is accounted for on accrual basis but remittance to Zimbabwe Revenue Authority (ZIMRA) is on cash basis this was after ZIMRA approved for the use of the cash basis as agreed with ZIMRA. The difference which arises between accrual and cash basis is classified under long term liability as Deferred VAT liability in the Statement of Financial Position.

However, there is no obligation to settle with ZIMRA, the liability will clear when the cash amount received from electricity entities exceeds the invoiced value. ZERA had collected amounts from which VAT is due to ZIMRA and is included in the Trade and other payables figure in the Statement of Financial Position.

1.19 Leases

Operating lease payments are recognised as an expense on a straight-line basis over the lease term, except if another systematic basis is more representative of the time pattern in which economic benefits will flow to ZERA.

Contingent rentals arising under operating leases are recognised in the period in which they are incurred. Lease incentives and similar arrangements of incentives are taken into account when calculating the straight-line expense.

Notes to the Financial Statements

2. INVESTMENT PROPERTY

Figures in US Dollar

		2015		20	14
Valuatio	Fair value on adjustment	Carrying value	Valuation Valuation	Fair value adjustment	Carrying value
955,00	00 (105,000)	850,000	975,000	(20,000)	955,000

Investment property

Reconciliation of investment property - 2015

Investment property

Reconciliation of investment property - 2014

Investment property

Opening balance	Fair value adjustment	Total
955,000	(105,000)	850,000
Opening balance	Fair value adjustment	Total
975,000	(20,000)	955,000

The Board having noted that rental returns from Athanasia Court had decreased from \$55 668 in 2014 to \$29 091 in 2015 resolved in February 2016 to change the use from commercial to residential with the aim of maximising return. Three professional valuers were employed to determine the fair value of the property. The basis of the valuation was based on market value.

3. PROPERTY, PLANT AND EQUIPMENT

	2015				2014		
	Cost	Accumulated	Carrying	Cost	Accumulated	Carrying	
		depreciation	value		depreciation	value	
Office partitions	85,838	(11,687)	74,152	85,838	(8,199)	77,639	
Furniture and fixtures	154,902	(54,121)	100,781	102,433	(26,786)	75,647	
Motor vehicles	1,355,249	(539,638)	815,611	1,068,817	(337,884)	730,933	
Office equipment	6,485	(2,705)	3,780	6,366	(1,592)	4,774	
IT equipment	46,847	(20,765)	26,082	45,155	(27,772)	17,383	
Other property, plant							
and equipment	390,363	(173,550)	216,813	342,546	(66,980)	275,566	
Land	511,225	-	511,225	511,225	-	-	
Library books	4,490	(960)	3,530	3,890	(182)	511,225	
W.I.P – Building	79,847	-	79,847	-	-	3,708	
Total	2,635,246	(803,426)	1,831,821	2,166,270	(469,395)	1,696,875	

Reconcialtion of property, plant and equipment - 2015

Figures in US Dollar

	Opening balance	Additions	De-recognition	Depreciation	Total
Office partitions	77,639	-	-	(3,487)	74,152
Furniture and fixtures	75,647	52,469	-	(27,334)	100,781
Motor vehicles	730,933	329,387	(22,620)	(222,090)	815,611
Office equipment	4,774	528	-	(1,522)	3,780
IT equipment	17,383	24,505	-	(15,805)	26,082
Other property, plant and					
equipment	275,566	67,668	(333)	(126,089)	216,813
Land	511,225	-	-	-	511,225
Library books	3,708	600	-	(778)	3,530
W.I.P – Building		79,847			79,847
	1,696,875	555,004	(22,953)	(397,105)	1,831,821

Reconciliation property, plant and equipment - 2014

	Opening balance	Additions	De-recognition	Depreciation	Total
Office partitions	67.579	13,245	_	(3.184)	77,639
Furniture and fixtures	52,948	38,841	-	(16,142)	75,646
Motor vehicles	546,264	359,188	-	(174,519)	730,933
Office equipment	2,700	3,055	(92)	(889)	4,774
IT equipment	23,450	15,365	(68)	(21,365)	17,383
Other property, plant and					
equipment	31,136	311,682	(1,626)	(65,627)	275,566
Land	-	511,225	-	-	511,225
Library books	-	3,890	-	(182)	3,708
	724,077	1,256,491	(1,786)	(281,908)	1,696,875

4. INTANGIBLE ASSETS

4. INTANGIBLE ASSLTS		Accumulated	Carrying		Ammortised	Carrying
	Cost	Amortisation	Value	Cost	amortisation	Value
ZERA Logo	3,652	(2,677)	975	3,652	(1,948)	1,705
Computer software	6,128	(2,781)	3,347	9,297	(7,300)	1,998
ZERA website	2,348	(1,055)	1,293	2,348	(587)	1,761
ZERA reception						
Zera reception branding	1,533	(683)	850	1,533	(375)	1,157
Motor vehicle branding	1,594	(390)	1,204	1,307	(109)	1,198
Total	15,255	(7,586)	7,668	18,137	(10,318)	7,819

Reconciliation of intangible assets - 2015

ZERA Logo
Computer software
ZERA website
Zera reception
branding
Motor vehicle branding
Total

Opening	A -1 -1 141	A	Total
Balance	Additions	Amortisation	Total
1,705	-	(730)	975
1,998	3,745	(2,396)	3,347
1,761	-	(470)	1,293
1,157	-	(307)	850
1,198	287	(281)	1,204
7,819	4,032	(4,184)	7,668

Reconciliation of intangible assets - 2014

Figures in US Dollar

2014

	Opening			
	Balance	Additions	Amortisation	Total
ZERA Logo	2,435	-	(730)	1,705
Computer software	5,094	-	(3,096)	1,998
ZERA website	2,231	-	(470)	1,761
Zera reception				
branding	1,464	-	(307)	1,157
Motor vehicle branding	-	1,307	(109)	1,198
Total	11,224	1,307	(4,712)	7,819
5. INVENTORY			2015	2014
Fuel Coupons			16,576	2,612
6. TRADE AND OTHER RECEIVABLES				
Trade receivables			9,012,540	7,437,699
Prepayments			249,405	122,049
Other receivables			9,556	11,224
			9,271,501	7,570,972
			-,	.,
Trade receivables reconciliation				
Gross trade receivables			22,520,760	18,644,827
Bad debts written off			-	(75,474)
Allowance for credit losses			(13,508,220)	(11,131,654)
			,,	, , , , , , , ,
			9,012,540	7,437,699
Ageing for trade receivables			659,294	518,804
Current			224,725	514,614
30 days			553,021	915,673
60 – 90 days			7,757,501	5,488,608
Over 120 days			9,012,540	7,437,699

Trade and other receivables impaired

As of 31 December 2015, trade receivables and other receivables amounted to \$22,520,760 and in 2014 was \$18,644,827 and these were reviewed for impairment. No amount was written off in 2015 and \$75,474 was written off in 2014. The amount of the Allowance for credit losses was (\$13,508,220) as of 31 December 2015 and in 2014 was (\$11,131,654).

Reconciliation of provision for impairment of trade and other receivables

Opening balance	(11,131,654)	(8,418,409)
Increase/decrease in provision for credit losses	(2,376,566)	(2,713,245)
	(13,508,220)	(11,131,654)

7. CASH AND CASH EQUIVALENT	Figu	ıres in US Dollar
Cash and cash equivalents consist of:	2015	2014
	885	1,000
Cash on hand	683,790	604,081
Bank balances Short term deposits	2,078,704	3,160,616
Short term deposits		
The short term deposits are deposits made for investment purposes to FBC, CABS and ZB Bank. There are subject to an interest of between 1% and 6.5% per annum. The funds are invested for a period of a month (30days) and these are subject to notice period.	2,763,379	3,765,697
8. TRADE AND OTHER PAYABLES		
Trade payables	698,679	829,247
Provision for tariff reversal	-	2,289,831
Other payables	1,168,506	1,250,474
	1,867,185	4,369,552
		_
9. DEFERRED VAT LIABILITY		
Outstanding VAT based on accruals concept	1,035,558	_
Outstanding cash VAT due and payable to ZIMRA	(91,179)	-
Deferred VAT Liability	944,379	
10. REVENUE		
Electricity annual levies	7,368,787	8,086,430
Electricity licences application fees	20,100	1,200
Electricity licenses fees	703,511	262,172
Liquid Petroleum Gas license fees	14,800	4,100
Petroleum license fees	1,020,768	1,036,491
	9,127,966	9,390,393
11. OTHER INCOME		
Electricity tariff provision reversal	2,289,831	_
Insurance claims proceeds	2,507	-
Interest received	174,934	315,334
Miscellaneous	759	-
Obsolete furniture sales	-	480
Discounts received	- 21 021	38,157
Profit on disposal Regional Electricity Regulators Association (RERA) annual conference donations	21,031	34,000
Rental income	29,091	55,668
Tender income	2,270	964
Training registration fees	11,337	-
Unlicensed petroleum operators fees	13,910	-
ZB commission	1,039	444.602
	2,546,709	444,603

12. OPERATING EXPENSE

Figures in US Dollar

12. OPERATING EXPENSE	1 180	ures III US Dollar
The following items are included within operating expenses:	2015	2014
Allowance for credit losses	2,376,566	2,713,505
Audit fees	11,760	10,421
Bad debts	,,	75,474
Bank charges	18,377	15,317
Board fees	98,552	79,926
Computer expenses	27,322	420
Consulting and professional fees	285,249	320,054
Consumables	35,843	19,449
Entertainment	2,844	1,181
Impairment and loss on de-recognition of assets	105,000	21,406
Insurance	61,188	46,629
Depreciation and Amortisation	401,287	286,620
Donations and CSR	452,559	316,289
Employee Costs	2,931,271	2,583,177
Lease rentals on operating lease	206,349	176,270
Loss on disposal of assets	333	
Motor vehicle expenses	142,093	89,540
Postage	1,131	781
Printing and stationery	55,003	80,519
Promotions, advertising and publicity	308,844	198,390
Repairs and maintenance and office administration	110,967	65,237
Research and development	234,576	20,055
Subscriptions	108,074	77,169
Telephone and fax	70,031	69,101
Travel external	152,340	174,595
Travel local	167,577	68,749
Workshops and seminars	210,462	-
workshops and seminars	8,575,598	7,510,214
13. INCOME ATTRIBUTABLE TO ELECTRICITY FUND		
Electricity Fund		
Opening balance	1 910 791	535,538
	1,819,781	555,556
Share of surplus		1,819,781
Transfer from General Fund	(1,819,781)	(535,538)
Less transferred to Rural Electrification Agency	(1,019,701)	1,819,781
According to the Energy Regulatory Act, ZERA is required to remit surplus recorded in the electricity account to the Rural Electrification Agency. As at 31 December 2015 a receipts and expenditure audit was done and the electricity account recognised a deficit of (\$652,171.79)		
14. RELATED PARTY DISCLOSURES		
Short-term employment benefits		
To executive management	522 903	518 423
Total board members	98 522 621,455	518,423
	021,400	310,423

The amount disclosed above is the amount recognised as an expense during the reporting period related to board members fees (2015 \$98 552, 2014 nil) and key management personnel (2015 \$522 903, 2014 \$518 423). For key management personnel the figure includes medical aid, pension, security and motoring benefits.

15. CASH GENERATED FROM OPERATIONS	Figures in US Dollar	
	2015	2014
Surplus for the year	3,098,524	2,324,781
Adjustments		
Depreciation and amortisation	401,289	286,620
Impairment and de-recognition loss	105,333	21,406
Interest received	(173,642)	(315,334)
Profit on Disposal	(21,031)	(864)
Changes in working capital:		
Inventories	(13,964)	5,151
Trade and other payables Trade and other receivables	(1,557,662)	256,018
	(1,700,304)	(1,500,203)
Net cash inflow from operations	138,543	1,077,575
16. COMMITMENTS – AUTHORISED CAPITAL EXPENDITURE		
16.1 Authorised by directors and contracted		
Development of ISO 9001:2008	24,380	-
Fuel Additive Technology	46,570	-
Framework	38,899	-
LED Retrofitting of Lights	85,700	-
Motor Vehicles	99,963	-
Petroleum Sector Pricing Study	96,779	-
Purchase of fuel sulphur tester	197,150	-
SAP Enterprise Resource		
Planning	546,441	-
16.2 Authorised by directors and not yet contracted		
Motor vehicles	127,300	317,000

17. Risk Management

Financial Risk Management

ZERA's activities expose it to a variety of financial risks: market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk.

Interest Rate Risk

ZERA has significant interest bearing assets, these assets relate to investments that are at market rates. ZERA has adopted the fixed interest rates model on all its money market investments, hence interest receivable is not affected by fluctuations of interest rates and as a result the sensitivity analysis was not performed.

Credit Risk

Credit risk consists mainly of cash deposits, cash equivalents and trade debtors. ZERA only deposits cash with major banks of high quality credit standing and limits exposure to any one counter party. ZERA's bankers received the following ratings as at 31 December 2015:

- 1. CABS
- 2. FBC Bank
- 3. ZB Bank

Trade receivables comprise a widespread customer base. Management evaluated credit risk relating to customers on an on-going basis. If customers are independently rated, these ratings are used. Otherwise, if there is no independent rating, risk control assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with limits set by the board. The utilisation of credit limits is regularly monitored.

Financial assets exposed to credit risk at year-end were as follows:

Financial instrument

Amounts at bank Trade and other debtors

2015	
0.700.404	0.764.607
2,762,494 9,271,501	3,764,697 7,570,971

Liquidity risk

ZERA maintains sufficient cash and marketable securities. Management review cash flow forecasts on a regular basis to determine whether ZERA has sufficient cash reserves to meet future working capital requirements and to fund initiatives to fulfill mandate. ZERA has good relations with financial institutions to access additional means of easing liquidity risk if considered necessary. The average creditor payment period is 9 days in 2014 and 14days in 2015.

Contractual maturity analysis for financial liabilities

2015	Due in 3 months	Due in 4 to 6 months	Due in 7 to 12 months	Due in more than 1 Year	Totals
	C27 010	200 001	174750	700 500	1 007 105
Trade and other payables	637,219	266,691	174,753	788,522	1,867,185
Long term liability				944,379	944 379
Totals	637,219	266,691	174,753	1,732,901	2,811,564
2014					
Trade and other payables	492,440	246,377	84,932	3,545,803	4,369,552
Totals	492,440	246,377	84,932	3,545,803	4 369 552

18. Going Concern Assumption

Management has assessed the ability of ZERA to continue operating as a going concern and believe that the preparation of these financial statements on a going concern is still appropriate.

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