

2023 Annual Report



POWER INSTITUTE FOR EAST AND SOUTHERN AFRICA

THE POWER INSTITUTE FOR EAST AND SOUTHERN AFRICA (PIESA)

IS A REGIONAL POWER UTILITY ASSOCIATION ESTABLISHED IN 1998

TO IMPROVE ELECTRIFICATION IN EAST AND SOUTHERN AFRICA

THROUGH SHARING INFORMATION, RESEARCH, TECHNOLOGY, SKILLS,

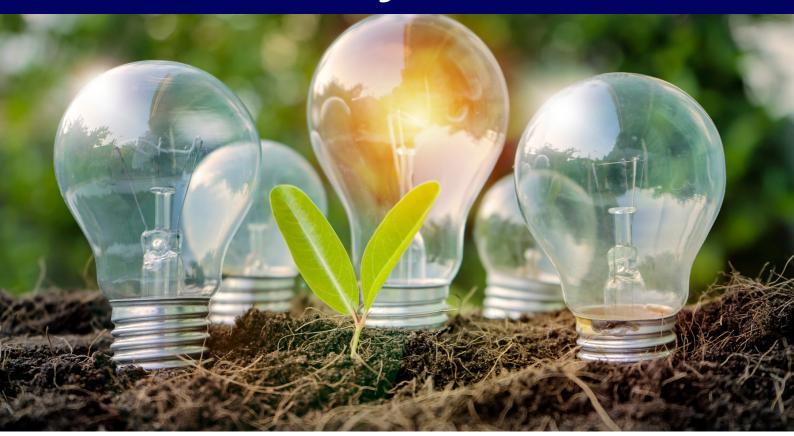
AND EXPERIENCES FOR THE BENEFIT OF CUSTOMERS AND SUPPLIERS IN

THE ELECTRICITY DISTRIBUTION INDUSTRY.

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VISION AND OBJECTIVES



PIESA aims to achieve economies of scale with local manufacturers within the region and to be the catalyst for sustainable regional technological cooperation in expanding the Electricity Distribution Industry and stimulating electrification for regional growth and development.

The Association's main objectives include

- broadening membership,
- developing strategic alliances and partnerships,
- facilitating dialogue,
- being flexible to the evolving industry, promoting applied research,
- fostering a culture of skills development and technology transfer,
- maintaining an integrated information system,
- promoting energy efficiency,
- encouraging localisation, and
- minimizing the impact on the environment.



Mr Mohlomi Seitlheko, PIESA Board Chairman, Lesotho Electricity Company



Mr Vally Padayachee, PIESA Executive Officer



Mr Simbiso Chimbimba, UMEME



Ms Sophia Mgonja, Tanzania Electric Supply Company Limited



Mr Patrick Mwila, ZESCO



Mr Harol Hayes, Landis + Gyr



Dr Andreas Beutel, Eskom Holdings



MS Jayshree Pershad, AMEU

POWER INSTITUTE FOR EAST AND SOUTHERN AFRICA

MEMBERSHIP

Membership of PIESA is open to the electricity industry. The number of members from time to time shall not be limited but shall at no time be less than five (5). Membership may not be assigned or transferred to any other person, company, or concern. Membership is obtained by paying the prescribed contributions as stipulated in Article 14.2 following the acceptance by the PIESA Board of the application for membership.

MEMBER BENEFITS:

- Network with similar organizations for joint research and international insights (e.g., IERE, EPRI, SAPURA).
- Exchange information, technology, skills, and experiences from pilot projects and tech implementations.
- Actively influence regional standard specifications through Advisory Committee participation.
- Engage in shaping electricity distribution standards
- Access local solutions to recurring regional problems

PIESA MEMBERSHIP CATEGORIES:

1. Full Members:

- o Organizations involved in electricity generation, transmission, distribution, or trade.
- Representation of entities falling under the above categories.
- Active participation in training, exchange programs, and development projects.
- Collaboration with like-minded organizations (e.g., SADCSTAN, UPDEA) for harmonized standards.
- Involvement in regional workshops, conferences, and networking with key decision-makers in the electricity industry.
- Facilitation of market growth and economies of scale for regional manufacturers and suppliers.

2. Affiliate Members:

- Organizations or individuals with allied interests to PIESA.
- Includes manufacturers, service providers, researchers, consultants, and financiers in the electricity distribution industry.

UTILITY MEMBERS 2023

- AMEU ASSOCIATION OF MUNICIPAL ELECTRICITY UTILITIES OF SOUTHERN AFRICA
- ESCOM LTD ELECTRICITY SUPPLY CORPORATION OF MALAWI LIMITED
- ESKOM HOLDINGS SOC LTD SOUTH AFRICAN ELECTRICITY SUPPLY

 COMPANY
- KPLC KENYA POWER AND LIGHTING COMPANY LTD
- LEC LESOTHO ELECTRICITY COMPANY (PTY)LTD
- SNEL SOCIÉTÉ NATIONALE D'ÉLECTRICITÉ
- TANESCO TANZANIA ELECTRIC SUPPLY COMPAMY LIMITED
- UMEME LTD UMEME LIMITED
- ZESA ZIMBABWE ELECTRICITY SUPPLY AUTHORITY
- ZESCO LIMITED



AFFILIATE MEMBERS 2023

LANDIS + GYR

LUCY ELECTRIC SOUTH AFRICA

SCHNEIDER ELECTRIC

POWER INSTITUTE FOR EAST AND SOUTHERN AFRICA

CHAIRMAN'S REPORT

New climate change imperatives, multiple geopolitical tensions, and the security of electricity supply crisis in South Africa, meant that the past year proved to be eventful for PIESA.

Global energy trends point towards a shift to distributed energy systems and increased utilization of hydropower and renewables, particularly solar and wind. The combined impact of global and local influences in South and East Africa is reshaping the energy market, making it more competitive and dynamic, with a rising number of players and innovative business models. In response to a changing regional industry landscape PIESA must function as an agile organization. Utilities will also need to adapt and evolve to remain competitive and responsive to changing customer needs.

With this in mind, the PIESA leadership reviewed the organization's strategic intent, contemplating whether a complete overhaul or realignment of certain aspects was required. After careful consideration, the leadership reaffirmed PIESA's vision to be the catalyst for sustainable regional technological cooperation, expanding the Electricity Distribution Industry and stimulating electrification for regional growth and development.

PIESA needs to remain pertinent to its members and enhance their negotiation of the regional industry landscape. PIESA remains steadfast in supporting the migration to a prudent, fit-for-purpose, cost-effective **Balanced Just Energy Transition (BJET)**. We aim to learn from other countries while ensuring our **BJET** aligns with the needs and aspirations of our member countries.

Collaboration with other energy-related organizations in the region, namely AMEU, SAIEE, SARPA, STS, SAIPPA, etc. needs to be maintained and expanded.

While PIESA members have witnessed some economic improvement due to increased energy consumption, the recovery is sluggish, with funds being redirected from electrification and maintenance activities to other priorities. I urge all members to actively participate in various PIESA Workgroups, relevant webinars, workshops, and other related forums to derive maximum value.

I extend my gratitude to my fellow Board members and the Secretariat for their unwavering support and commitment on this journey towards improved **electrification in Southern and East Africa.**Mr Mohlomi Seiffhefo

EXECUTIVE OFFICER'S REPORT

It has been a dynamic year for the leadership team at the Power Institute for East and Southern Africa.

Although the impact of the COVID-19 pandemic diminished compared to previous years, it remains a persistent factor.



The leadership undertook a thorough review of the organization's strategic direction, reflecting on its journey since its establishment in 1998. Deliberations focused on whether a complete overhaul or a realignment of certain aspects was necessary.

Originally established in response to discussions on the pivotal role of electricity access in poverty alleviation, PIESA initially concentrated on technology cooperation among electricity utilities in the region. Over time, it transformed into a reputable forum facilitating collaboration on technical issues, knowledge sharing, and capacity-building initiatives. The membership expanded to include national rural electrification agencies as affiliate members.

After careful consideration, PIESA reaffirmed its vision to be the catalyst for sustainable regional technological cooperation. The organization aims to expand the electricity distribution industry, stimulate electrification for regional growth, and development. Key objectives include achieving economies of scale with local manufacturers, increasing membership, and fostering cooperative agreements.

Facilitated through advisory workgroups, PIESA's focus areas include technological investments, capacity building, plant performance improvement, resource optimization, sustainability, cost optimization, and alignment with regional priorities. The organization operates with a lean structure, with advisory workgroups reporting to the PIESA executive officer.

Five advisory workgroups—Infrastructure Asset Management, Revenue Protection, Electrification, Sustainability, and Standardization—have been established to address key aspects of PIESA's mission. The majority of PIESA's work is conducted through these advisory workgroups, where members, technology partners, and affiliates collaboratively discuss and agree on regional strategies and actions.

In the context of South and East Africa, emphasis remains on distributed energy systems, renewable technologies, and addressing power deficits using abundant sunlight, wind, hydro, and gas resources. PIESA recognizes the challenges faced by Eskom in South Africa and encourages member countries to learn from these experiences to avoid similar situations.

Acknowledging the varying pace of change across the region, challenges such as insufficient transmission infrastructure and unsupportive regulatory frameworks persist. PIESA continues to champion a just energy transition (JET) and appreciates the collaborative efforts of its members and partners in the region.

The **PIESA** leadership expresses gratitude to the board, membership, and secretariat for their ongoing support in fostering a better, more sustainable, reliable, and resilient energy system that is equitable and just.



POWER INSTITUTE FOR EAST AND SOUTHERN AFRICA

MEMBER ACTIVITIES

- Joint WorkGroup Meeting
- Annual General Meeting
- Visit to Steenbras Pump Storage Scheme
- PIESA/Eskom Meeting
- Visit to the ESKOM KOMATI and KUSILE Power stations
- DMRE-AMEU-METRO Virtual Electrification Meeting
- Joint Workgroup Meeting
- Executive Board Meeting
- PIESA/SAAMA MoU
- WorkGroup Chairs Meeting
- WorkGroup Program of Work and Action Plan
- WorkGroup Chairs Meeting
- Asset Management WorkGroup [PIESA/ESKOM Alignment]
- Virtual Joint WorkGroup Meeting
- PIESA/ESKOM Meeting
- Sustainability WorkGroup Meeting
- Standardisation WorkGroup Meeting
- Asset Management WorkGroup Meeting
- PIESA/SAAMA Collaboration
- Electrification WorkGroup Meeting



ADVISORY WORKGROUPS

PIESA's Advisory Workgroups have made substantial progress in their respective domains, aligning with the organization's overarching objectives. This report consolidates the achievements, ongoing activities, and future aspirations of the five key advisory workgroups.

A unified objective to enhance the institute's impact involves fostering increased integration, collaboration, knowledge sharing, and high-level awareness among workgroups.

All workgroup members are strongly encouraged to attend meetings and other related interventions actively, ensuring effective and meaningful knowledge transfer aligned with workgroup-specific value-add propositions.

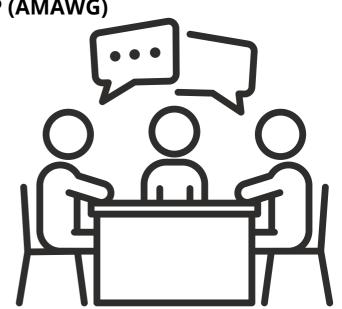
Advisory Groups also finalised the following documents/artefacts

- Terms of Reference
- Project Charter
- Value Proposition
- Proposed Strategic Projects identified.

The following Advisory Workgroups have been established:

1. ASSETS MANAGEMENT WORKGROUP (AMAWG)

- 2. REVENUE PROTECTION (RPAWG)
- 3. ELECTRIFICATION (EAWG)
- 4. SUSTAINABILIITY (SUAWG)
- **5. STANDARDIZATION (STAWG)**



ADVISORY WORKGROUPS

1. ASSET MANAGEMENT ADVISORY WORKGROUP (AMAWG)

The AMAWG has demonstrated a productive year. Additional documents, including an action items spreadsheet, Asset Management Policy and a Strategic Asset Management Plan template, have been compiled. Regular bi-monthly meetings facilitate ongoing engagement.

Initiatives extend beyond internal collaboration, with discussions held with external bodies such as the South African Asset Management Association (SAAMA). A Memorandum of Agreement (MoA) is awaiting final approval by the PIESA Board, indicating a commitment to closer collaboration. Future objectives include creating an Asset Management awareness program, identifying training needs, and standardizing the Asset Management Landscape to meet business objectives.

2. REVENUE PROTECTION ADVISORY WORKGROUP (RPAWG)

Established to address an upsurge in revenue losses within utilities in the region, the RPWG focuses on identifying the reasons for these losses, implementing preventive measures, recovering lost revenue, and mitigating future non-technical losses, through analysing data and combatting infrastructure crimes by collaboration with law enforcement. Key objectives include focusing on programs that protect existing revenue, upskilling human resources, and creating awareness of initiatives in the region, investigating innovative trends, and standardizing revenue protection initiatives in the region.

3. ELECTRIFICATION ADVISORY WORKGROUP (EAWG)

Mandated to assist PIESA in ensuring a secure and sustainable provision of electrical energy, the Electrification Advisory WG is working towards establishing closer liaison with IERE to align to international trends and advancements, as well as to increase its footprint.

Objectives include enhancing access to electrical energy, developing electrification policies, regulations, and masterplans, exploring grid and non-grid technologies and prioritizing training and development initiatives. Exploring grid and non-grid technologies, as well as the effective and efficient use of "block chain" to enhance the rollout of electrification projects.

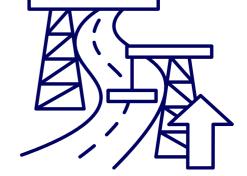
4. SUSTAINABILITY ADVISORY WORKGROUP (SUAWG)

The Sustainability Advisory WG aims to secure and sustain the provision of electrical energy for socioeconomic development through the effective and efficient rollout of environmental and safety management programs.

Objectives involve focusing on relevant programs, policies, promoting skills-development initiatives to ensure the availability of skilled, qualified, experienced, and competent personnel to successfully execute electrification related projects, creating awareness through sharing information and technologies, while keeping abreast of international developments and trends which could influence or benefit the region.

The workgroup is also responsible for identifying energy sustainability and safety

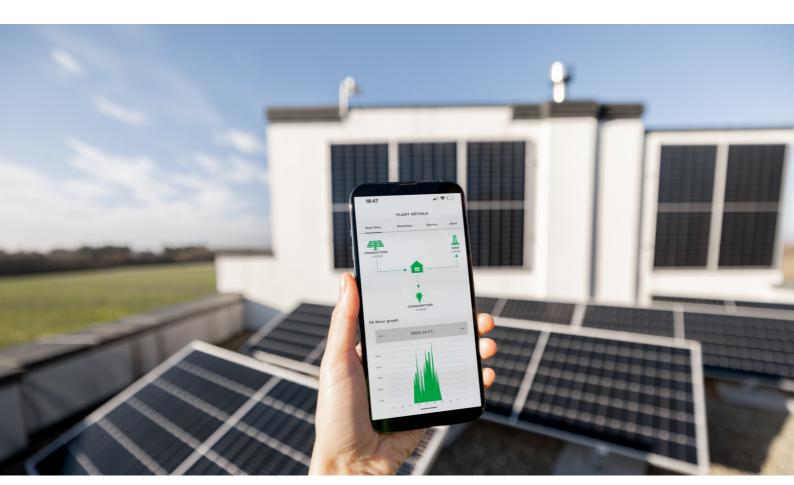
issues of common interest to PIESA members, researching, and communicating around these.



5. STANDARDISATION ADVISORY WORKGROUP (STAWG)

With a mandate to ensure a secure and sustainable provision of electrical energy, the Standardisation Advisory WG focuses on standardizing policies, regulations, procedures, and equipment. Key documents are pending approval. This group works towards developing a 3-year strategic plan to be submitted to the PIESA Board. Objectives include harmonizing with existing standards, collaborating with African standards bodies, and providing a centralized location for accessing information seamlessly.

In summary, the PIESA Advisory Workgroups achieved significant milestones during 2023, collectively contributing to the organization's mission of promoting sustainable and secure electrical energy provision.



FINANCIAL REPORT

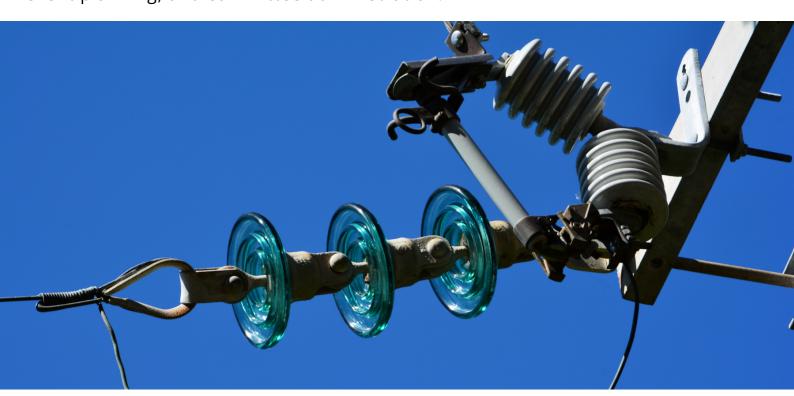
FOR THE YEAR ENDING FEBRUARY 2023

The Association operates as a common law entity, duly registered as a non-profit organisation within the Republic of South Africa. We benefit from an exemption from standard corporate taxation, although we are liable for the value-added tax (vat) as per South African regulations.

Our operations are primarily financed through annual membership dues, supplemented by occasional income from conferences and sponsorships. All accounts are maintained in South African Rand, and our financial year runs from March to February of the subsequent year.

Harris Dowden and Fontaine, located in Sandton, South Africa, serve as our appointed auditors. Absa bank handles our general banking needs, including the processing of foreign exchange transactions.

Additionally, Vdw&co, also based in Sandton, provides comprehensive management services to our association. These services include strategic and operational management, financial accounting, treasury services, communication, event planning, and committee administration.



COMPREHENSIVE INCOME FOR THE YEAR ENDED 28 FEBRUARY	2023	2022
Membership Dues	1 560 899	240 632
Other Revenue	138 234	13 010
Total Income	1 699 133	253 642
Auditors Remuneration	18 500	18 970
Annual Report	5 174	5 170
Bank Charges	4 070	4 019
Printing and Stationery	3 376	3 683
Secretariat Retainer	600 565	1 056 000
Subscriptions	-	22 627
Meeting Costs	101 776	-
Communication Costs	10 624	12 250
Total Expenditure	744 085	1 122 723
Net Profit for the year	955 048	-869 081
Retained income brought forward	197 464	1 066 545
Retained income at the end of the year	1 152 512	197 464
STATEMENT OF FINANCIAL POSITION AS AT 28 FEBRUARY	2023	2022
Trade and other receivables	233 948	357 112
Cash and cash equivalents	977 520	26 147
Total Assets	1 211 468	383 259
Retained income	1 152 512	197 464
Trade and other payables	58 956	185 795
Total Liabilities and Reserves	1 211 468	383 259



Why Infrastructure Asset Management?

Human achievements have brought us unprecedented comfort and convenience. Living in today's advanced era, we enjoy a lifestyle shaped by highly automated industries. We depend on continuous water, - electricity, and efficient transportation for our well-being.

Preserving the integrity of our physical assets is crucial. Asset failures not only threaten the economy but also jeopardize our survival and comforts. Understanding and managing the processes leading to asset failure are urgent priorities. Adopting effective asset management practices brings immediate benefits.

The overarching goal of asset management is to ensure sustainability of services.

Asset Management is a systematic approach to investing, acquiring, maintaining, and operating physical assets cost-effectively. It brings advantages in forecasting, accountability, sustainable performance, service delivery, risk reduction, and fiscal management. The goal is to ensure the sustainability of services.

While adopting these practices may seem challenging, especially for smaller utilities, many concepts are already part of daily operations and organizational culture.

The true value of good asset management practices emerges when they are firmly integrated at all levels of an organization, ensuring sustainability and a solid foundation for our economy and quality of life.





