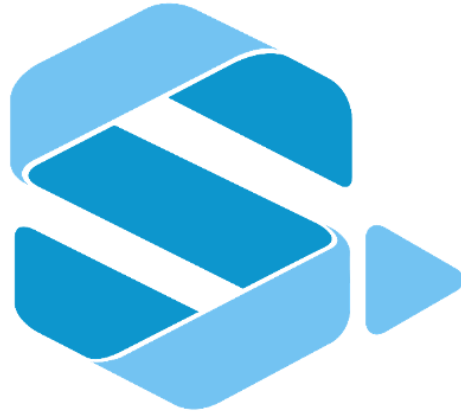




STS ASSOCIATION

CHAIRMAN'S REPORT

2026

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Executive Summary

The 2025 financial year marked a period of deliberate strategic transition and consolidation for the STS Association, as it strengthened its long-term sustainability, governance framework, and operational resilience while continuing to support the global STS ecosystem.

Financially, the Association remained in a strong position despite a reduction in membership income, which resulted from a proactive decision to grant a payment holiday to members. This was offset by solid investment income and supported by disciplined financial management. Operating expenditure increased moderately, reflecting targeted strategic investments in organisational transformation, including the transition from a single service provider model to a distributed framework of independent specialist providers. Additional expenditure supported the development of digital platforms, legal structures, and administrative systems designed to improve control, transparency, and risk management. The Association remains cash-positive and well positioned to sustain its strategic priorities.

A key highlight of the year was the continued evolution of the STSA operating model. The establishment of a more decentralised service provider structure, together with a strengthened head office function and the appointment of a dedicated administrator, will significantly enhanced governance, coordination, and organisational independence. This new model reduces reliance on single points of failure and provides a more robust foundation for managing increasing operational complexity.

A major strategic focus was the transformation of the Key Management Centre (KMC) environment. Following independent risk assessments, the Association made substantial progress in strengthening infrastructure resilience through the commissioning of primary and disaster recovery key management systems in secure, geographically separated data centres. This work forms part of a broader transition toward a distributed key management framework, designed to enhance scalability, security, and business continuity. This programme remains one of the most significant infrastructure initiatives undertaken by the Association.

In parallel, the STSA continued to fulfil its core mandate of standards governance and interoperability assurance. Preparations progressed for updates to relevant IEC standards, incorporating enhanced security and technical improvements. Certification activity remained

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strong throughout the year, reflecting sustained global adoption of the STS standard and reinforcing confidence in its technical integrity.

Member engagement and industry outreach also remained a priority. The Association expanded its communication and engagement efforts through targeted initiatives across key regions, including Africa and Asia. Enhanced digital platforms, training programmes, and communication tools improved accessibility, strengthened stakeholder interaction, and supported more effective implementation of STS solutions.

Risk management and governance oversight were further strengthened during the year. Independent assessments identified key risk areas, particularly within the KMC environment, which are being actively addressed through structured transformation programmes. Dedicated technical and risk-focused task teams have been established to ensure these matters are managed with appropriate governance and technical rigour.

Overall, 2025 represents a foundational year in which the STSA undertook significant structural and strategic investment to secure its long-term future. While these initiatives have increased short-term expenditure, they have materially strengthened the Association's governance, independence, and operational resilience. The progress achieved during the year provides a strong platform for continued stability, innovation, and leadership within the global STS ecosystem.

Financial Position

Burns Acutt Audit Services Incorporated was appointed as the Association's external auditors for the financial year ended 31 December 2025. The Annual Financial Statements were prepared in accordance with International Financial Reporting Standards (IFRS) and the requirements of the Companies Act of South Africa. The audited financial results have been approved and will be presented in detail at the 2026 Annual General Meeting.

Membership income for the year amounted to ZAR 3.14 million, compared to ZAR 11.52 million in the previous financial year. The reduction in membership revenue was anticipated and resulted from a payment holiday granted to existing members during 2025. Despite this reduction, the Association maintained a strong financial position throughout the year.

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Investment income contributed approximately ZAR 3.33 million, reflecting prudent financial management and the continued strength of the Association's reserves. Total operating expenditure for the year amounted to ZAR 8.89 million, compared to ZAR 8.37 million in 2024, representing an increase of approximately ZAR 520,000.

The increase in expenditure was primarily driven by strategic initiatives aimed at strengthening the Association's operational independence, governance, and long-term resilience. During the year, the STSA progressed its transition from an integrated service delivery model, reliant on a single service provider, to a model based on independent specialist service providers operating under the direct management and oversight of the STSA Board. This strategic shift is intended to reduce operational risk, enhance governance oversight, and provide greater control over critical service functions.

Key investments supporting this transition included legal and professional services associated with the establishment of new contracts and service level agreements, development and hosting of the Association's new website, and the implementation of digital platforms designed to automate and modernise several previously manual administrative processes.

Notwithstanding these strategic investments, the Association remains in a strong cash-positive position with adequate financial resources to support its ongoing operations and strategic objectives for the foreseeable future. This reflects sound financial governance, disciplined financial management, and the long-term sustainability of the Association.

Organisational Risk and Governance

As the custodian of the STS specification and its associated key management infrastructure, the STSA has a responsibility to ensure that its governance structures, operational processes, and security controls remain effective and aligned with evolving industry risks and best practices. In support of this objective, the Board commissioned an independent Crisis and Risk Management assessment during 2024 to obtain an objective evaluation of the Association's risk landscape, with particular focus on the resilience, security, and sustainability of its critical operations and services. The assessment was conducted by KPMG, with the final report being delivered in November 2024. The findings and recommendations have subsequently provided valuable input into a number of strategic initiatives aimed at strengthening the Association's governance,

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operational independence, and long-term sustainability. A dedicated Risk Management task team was set up in 2025 by the STSA Board, lead by Mr. Don Taylor, to review and implement risk mitigation recommendations emanating from the report.

A number of risks were identified during the assessment. After evaluating the controls already implemented by the Association and their effectiveness in mitigating these risks, several residual high-risk areas remained and were deemed to require immediate attention.

- Risk of suitability of KMC location
 - Inherent risk = Extreme
 - Residual risk = Extreme
- Key management centre (KMC) logical and physical security deficiencies
 - Inherent risk = Extreme
 - Residual risk = High

Following a comprehensive due diligence process, Teraco data centre facilities were found to fully satisfy the stringent technical, security, resilience, and operational requirements necessary to address both of the aforementioned risks. As a result, the primary Key Management System (KMS) has been installed at the Johannesburg data centre, while the Disaster Recovery (DR) KMS has been deployed at the Durban data centre, with both facilities located within South Africa.

At present, the primary Key Management Centre (KMC) continues to operate from the Eskom facility. However, a joint project between the STSA and Eskom is currently underway to transition operations to the new infrastructure and bring the system into full production service (refer to section entitled *Key Management Services and Infrastructure* in this report).

Key Management Services and Infrastructure

As reported in the 2025 Chairman's Report, the STSA Board embarked on a strategic initiative to relocate the Key Management Centre (KMC) from its long-standing operational environment at Eskom to a purpose-built, top-tier secure data centre environment. This initiative was driven largely by the findings and recommendations arising from an independent risk assessment

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conducted by KPMG, which highlighted the need to strengthen the long-term resilience, governance, and operational continuity of the STS key management ecosystem.

While the current KMC continues to reside at and be operated by Eskom on behalf of the STSA, significant progress has been made towards the future architecture. During the reporting period, the STSA successfully commissioned primary and backup Key Management Systems (KMSs) within two geographically separated Teraco data centres, establishing the foundational infrastructure required for the next phase of the programme.

As the project entered its execution phase, Eskom proposed that the STSA consider the implementation of a Distributed Key Management Centre (DKMC) architecture. This proposal aligned closely with a strategic objective that has remained on the STSA Board's agenda since 2013, namely the creation of a distributed and resilient key management ecosystem capable of supporting the future growth and sustainability of the STS industry.

Following careful consideration, the Board resolved to combine the KMC relocation initiative and the development of a Distributed Key Management Centre ecosystem into a single strategic programme. This decision ensures that the industry moves directly towards a future-state architecture that delivers enhanced resilience, business continuity, governance, and scalability.

To drive this initiative, the STSA and Eskom, as the current operator of the KMC, established a dedicated Distributed Key Management Task Team during the final quarter of 2025. The task team meets weekly and has been actively engaged in addressing the technical, operational, legal, governance, and security considerations necessary to support a distributed environment. Given the critical role of the KMC within the STS ecosystem, the project is inherently complex and requires extensive evaluation of multiple use cases to ensure uninterrupted service delivery and business continuity once deployed.

The project continues to progress according to plan. A detailed project roadmap has been established, and the requirements for the primary, backup, and disaster recovery KMC architecture have been defined. Recognising the unique security requirements of the STS ecosystem, the task team has also been addressing several important architectural considerations. These include the fact that vending keys, once transferred to a KMC, cannot subsequently be migrated to another KMC, and that all operational and security risks

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associated with key management remain the responsibility of the KMC owner. This governance model is necessary as the STSA, by design, does not have access to externally managed KMC information.

Furthermore, the architecture recognises that information residing on a KMC cannot simply be replicated to another KMC following a catastrophic event. To mitigate this risk and strengthen industry resilience, participation in a central escrow-based data repository is being incorporated into the proposed framework. Access to such data will be tightly governed and controlled through the KMC Owner, with STSA access permitted only under clearly defined catastrophic circumstances and subject to strict conditions.

From a governance perspective, a month-to-month addendum to the existing Service Level Agreement remains in place to ensure continuity of Eskom's operation of the current KMC while the project is completed. In parallel, a comprehensive Distributed Key Management Centre Agreement has been drafted and is currently under review by the task team. This agreement will ultimately form the contractual framework between the STSA and any future KMC owner and will define the rights, obligations, governance requirements, operational responsibilities, and compliance obligations associated with participation in the distributed ecosystem.

In support of implementation readiness, stakeholder communication and engagement plans for STSA members and SGC users are currently being developed. In addition, an extensive test programme is being prepared to validate all aspects of interoperability, conformity, security, resilience, and business continuity within a distributed environment. Existing product conformance testing processes are also being reviewed and will be updated to align with the future distributed architecture.

The Board wishes to reaffirm that, irrespective of the future ownership model of KMCs, the STSA will remain the custodian of all STS regulations, governance frameworks, policies, and operational standards. All KMC owners will be required to operate in full compliance with STSA governance requirements and established industry procedures.

The Distributed Key Management System project represents one of the most significant strategic initiatives undertaken by the STSA in recent years. Once completed, it will provide the STS industry with a modern, resilient, and scalable key management ecosystem that supports

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long-term sustainability while maintaining the highest standards of security and governance. The project remains on track, with completion currently targeted for November 2026.

Marketing, Communications and Stakeholder Engagement

The Marketing activities for 2025 reflect a continued and deliberate effort by the STSA to strengthen global awareness of the STS standard and deepen engagement with members and user of STS technology. Through a combination of international events, enhanced digital platforms, targeted media engagement, and the development of structured training and communication programmes, the Association has significantly improved the way it communicates its value proposition and technical capabilities. These initiatives have not only reinforced STS as a leading global open standard for prepayment metering, but have also supported greater understanding, adoption, and collaboration across the evolving smart metering landscape.

2025 Activities to date

A key enhancement during the year was the introduction of a new and improved interactive exhibition stand, designed to significantly improve the quality of engagement at industry events. The stand features two interactive terminals. Terminal 1 supports in-depth discussions on STS implementation and provides tailored access for both members and utilities. For members, this includes membership applications, development tools, a specification selector, on-site technical training, and other member benefits. For utilities, it provides access to Key Management Services, SGC applications, and information on STS membership and certified meter and vending suppliers. Terminal 2 functions as a video gallery showcasing STS marketing material and will be expanded to include implementation guidance videos for utilities and manufacturers.

The Association participated in several key international industry events during the year, using these platforms to showcase developments and engage directly with stakeholders. At ENLIT Africa in Cape Town, the flagship regional event, the focus was on engagement with African utilities, participation in ESI Africa television and booth interviews, and presentations within the Utility Forum Hub. The event also provided valuable opportunities to engage with global members active in the African market.

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At POWERGEN India in New Delhi, engagement focused on collaboration with Indian and Asian manufacturing members involved in India's large-scale smart metering programme, as well as promoting STS as a proven prepayment solution for large-scale deployments. The Association also engaged with DISCOM representatives and policy makers, gaining insight into evolving technical and operational requirements. In addition, meetings with leading industry publications supported the identification of future opportunities to increase STS visibility in the Indian market.

In terms of media and publications, 2025 saw strong visibility in key African industry platforms, including ESI Africa, the Africa Energy Indaba Handbook, Industry Insights (ESI digital magazine), and the African Power & Energy Elites 2025/2026. A more expanded communications strategy is planned for 2026, with increased focus on both African and Indian markets, including additional coverage in ESI Africa and POWERLINE Magazine in India.

A quarterly members-only webinar series was launched during the year to strengthen technical understanding and improve member engagement. These sessions cover core topics such as Key Management Services, specification tools, development resources, and product certification, and have been well attended by members. In addition, an open webinar in collaboration with ESI Africa, titled *STS Interoperability – Prepayment Metering Made Simple*, was delivered for utilities, focusing on implementation guidance and best practice.

The Association also contributed to an ESI Africa podcast, *From Evolution to Revolution, Smart Metering Simplified*, which highlighted key developments including the IEC security review of STS, alignment with DLMS for two-way communication, and the importance of addressing human factors in system security.

Work has commenced on the expansion of utility-focused training material, including new documentation and supporting training videos. Improvements are also being made to website workflows to enhance access to Key Management Services and related functions.

To improve member communication, a dedicated email broadcast system using Mailchimp was introduced. This has enhanced the ability to communicate more effectively with members regarding webinars, specification updates, voting processes, and working group participation.

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2026 Activities – Planned and Ongoing

Following the successful launch of the new STSA website in July 2025, the Association has continued to implement incremental improvements as part of the ongoing Phase 2 development programme. These enhancements include improvements to user interfaces, refinements to overall workflow and information access, and the introduction of a dedicated smart metering page, currently being aligned with outputs from the DLMS User Association liaison task force. In addition, user guides are being progressively updated, and homepage banners have been introduced to highlight key STS activities and announcements in a more dynamic and accessible format.

In terms of events, the year commenced with participation at ENLIT Africa, which continues to serve as a key platform for engagement with the African market. A central theme of the event was the ongoing promotion of STS and the communication of the recently established liaison agreement with the DLMS User Association. This strategic alignment reinforces the continued relevance of STS and highlights the growing importance of interoperable smart prepayment standards within the global energy sector.

The Association had also planned to participate in POWER & WATER Nigeria; however, attendance was cancelled due to travel safety considerations linked to ongoing global conflict conditions. In place of physical participation, the STSA successfully contributed to a remotely delivered Utility Forum session sponsored by the Association, ensuring continued engagement with stakeholders and reinforcing its commitment to supporting utilities globally.

The final major event of the year is scheduled for POWERGEN India in September. Participation at this event will continue to focus on reinforcing the strategic messaging around the DLMS User Association liaison agreement and the combined strength of two leading open standards. The event provides an important opportunity to engage with stakeholders across the rapidly expanding Indian smart metering market.

Following the successful rollout of the members-only webinar series, the Association is now developing a series of utility-focused webinars aimed at providing practical guidance on STS implementation, key management best practices, and broader smart metering roadmap

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updates. This initiative will form part of a longer-term programme and will be made available to utilities globally through multiple communication channels.

In parallel, the Association continues to sponsor a live annual webinar in partnership with ESI Africa. This year's session included participation from the DLMS User Association, reinforcing the importance of the liaison agreement and the work of the joint task force in advancing specification development. The discussion highlighted a clear roadmap for utilities and manufacturers to develop and implement interoperable smart prepayment systems, enabling system upgrades without the need for full infrastructure replacement.

The STSA is also sponsoring a podcast series through POWERLINE Magazine in India, targeting DISCOM stakeholders involved in the national smart metering rollout. The series provides a platform to discuss implementation strategies, operational requirements, and technical challenges, while highlighting the importance of open standards, interoperability, and the role of STS in enabling scalable smart prepayment solutions.

STSA Head Office

Following deliberations and with careful consideration and review by the board, we have decided to transition away from a single-service-provider model for the various services being supplied by our previous provider. This decision reflects a strategic shift aimed at reducing operational risk, allowing for more control, and increasing oversight by engaging specialized providers for each service area (e.g., finance, secretarial, data storage, website management and IT). The segregation came into effect from 31 July 2025.

In line with this the STSA Board went out to the market and issued Request For Proposals (RFPs) to various services providers. The service providers on boarded are shown below.

- Legal (Barkers Attorneys)
- Website Design and Hosting (Bettle Inc)
- Website Hosting and Infrastructure Management (BUI)
- Finances and Secretary (Burns Acutt)
- Internal Database Design (Bardy Solutions)

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The STSA's transition from a Secretariat-led operating model to one supported by independent specialist service providers has been a significant step in strengthening the Association's governance, independence, and long-term sustainability. While this approach has enabled the Association to access specialised expertise in areas such as financial management, legal services, website administration, and hosting, it has also created a greater need for centralised coordination and oversight across multiple service providers, committees, members, and industry stakeholders.

To support this evolving operating model, the Board approved the establishment of a dedicated STSA Head Office and the appointment of an Administrator. Together, these initiatives provide the organisational infrastructure necessary to ensure the effective day-to-day management of the Association and to support its growing portfolio of strategic and operational activities.

The Head Office establishes a permanent and independent base for the Association, providing a central location from which its activities can be coordinated, records maintained, Board and committee functions supported, and engagement with members and stakeholders enhanced. Importantly, it reinforces the STSA's position as an independent industry body by providing a dedicated corporate presence that is not linked to any individual member organisation or service provider.

The appointment of an Administrator complements this structure by providing a central point of coordination and continuity for the Association's operations. To this end, I would like to welcome Ms Anita Von Brandis to the STSA team. The role is responsible for supporting the Board and committees, facilitating communication between stakeholders, maintaining organisational records, and ensuring that projects, actions, and service providers are effectively managed and aligned with the Association's objectives.

In addition to supporting the Association's governance and administrative functions, the Head Office has been established to provide secure accommodation for the STSA's Key Management System (KMS) client and operator activities. Given the critical role that key management plays in maintaining the security, integrity, and trust of the STS ecosystem, a dedicated and controlled operating environment is essential. It must be noted however that this accommodates the KMS client only. As discussed in the Distributed Key Management section, the critical hardware, namely the KMS server will be hosted at Teraco.

Technical and Standards Developments

The STSA is actively tracking and preparing for forthcoming updates to the IEC 62055 suite of standards, in particular IEC 62055-41 and IEC 62055-51. These revisions are expected to introduce important technical changes, including the removal of legacy key references such as EA07, DKGA02, DCTK, and VCTK, as well as the introduction of updated security and key management structures. In addition, the standards will accommodate an expanded 8-digit Supply Group Code (SGC) format. Publication of these updates is anticipated towards the end of 2026.

In preparation for these changes, all affected STSA documentation, specifications, and reference materials will be reviewed and updated accordingly to ensure full alignment with the revised standards. This includes updates to simulator and software tools used within the ecosystem to ensure continued compliance and accurate testing capability under the new framework.

The STSA CTS (Conformance Test Specification) documentation has also been updated to Edition 2.3. These revisions primarily address minor refinements and incorporate feedback received from members and testing activities. The changes are incremental in nature and are intended to improve clarity, consistency, and practical applicability of the test procedures without altering the fundamental certification requirements.

Overall, these updates form part of the STSA's ongoing standards maintenance process, ensuring continued alignment with international IEC requirements while maintaining stability and interoperability across the STS ecosystem.

The STS Association established a formal liaison with the DLMS User Association during the year, representing an important strategic milestone in ensuring the continued relevance of STS within the rapidly evolving smart metering landscape. Through this collaboration, a joint technical taskforce has been formed to map STS functionality to the COSEM objects defined in the recently published ACESM Generic Companion Profile (ACESM-GCP) for smart electricity meters. The objective is to create a standardised framework that enables seamless integration of STS prepayment functionality into modern smart metering systems while maintaining compliance with both STS and DLMS standards.

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This initiative will provide utilities with a practical migration path from existing STS prepayment systems to next-generation smart metering environments without requiring wholesale replacement of installed infrastructure. By preserving backward compatibility with existing meters, vending systems, and key management infrastructure, utilities can modernise their networks while protecting previous investments and minimising implementation risk.

The collaboration combines the strengths of two globally recognised open standards and positions STS to play a central role in future smart prepayment deployments. This work will help ensure long-term interoperability, support innovation in smart metering technologies, and secure the ongoing viability of the STS ecosystem as utilities continue their digital transformation journeys.

STS Certification and Compliance

Certification activity under the STS programme remained strong during 2025, with a total of 129 products successfully achieving certification across the various product categories. This momentum has continued into 2026, with a further 93 products certified during the year to date, demonstrating the ongoing commitment of manufacturers and solution providers to maintaining compliance with STS requirements and ensuring interoperability within the global STS ecosystem. The 2026 certifications comprised 84 electricity meters, 2 water meters, and 7 vending systems. No new certifications have been issued this year for gas meters or security modules.

As illustrated in Figure 1, certification activity has remained robust over the years, reflecting the sustained adoption of STS technology globally and the continued relevance of the certification programme. Figure 2 highlights the distribution of certifications by product type in 2026, with electricity meters accounting for the overwhelming majority of new certifications issued during the period.

The Association continues to place significant emphasis on certification and compliance as fundamental pillars of the STS ecosystem. Through rigorous testing, certification, and ongoing standards maintenance, the STSA ensures that certified products continue to meet the

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technical, security, and interoperability requirements necessary to support utilities and consumers worldwide.

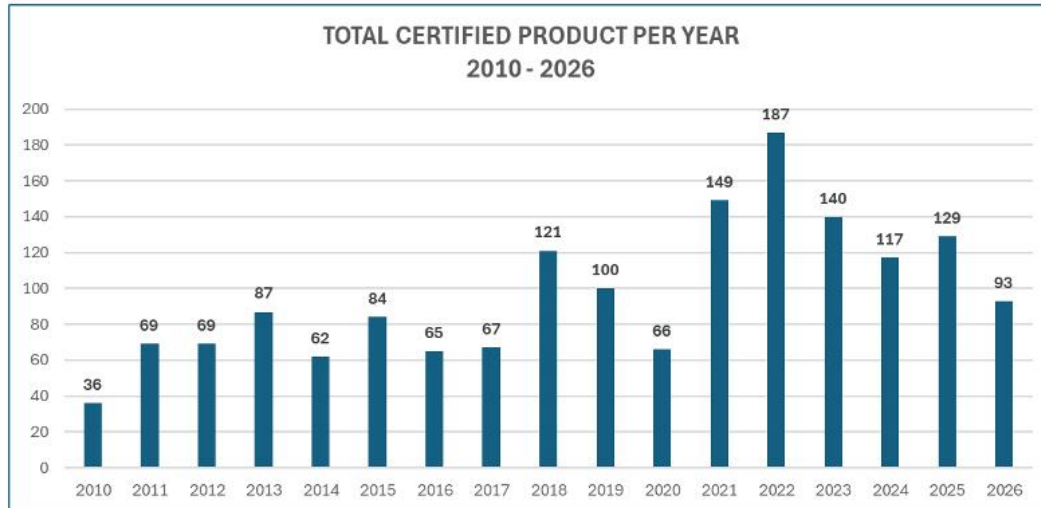


Figure 1: Total meters certified between 2010 and 2026

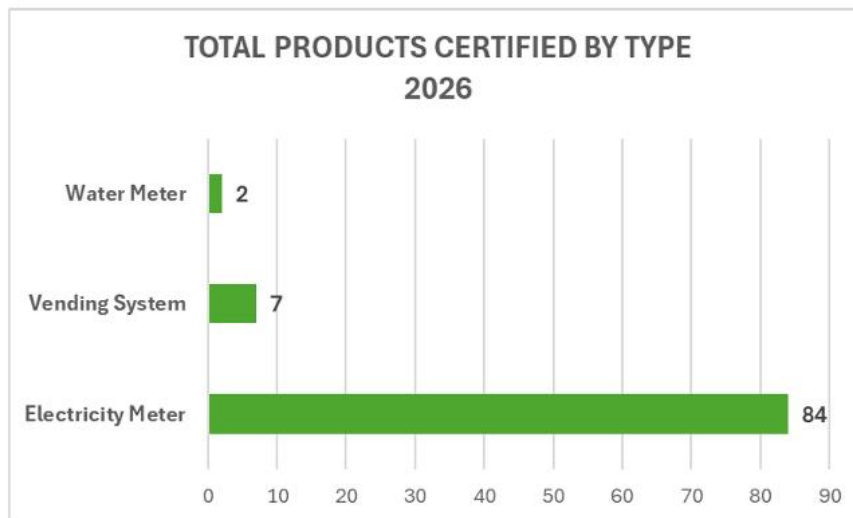
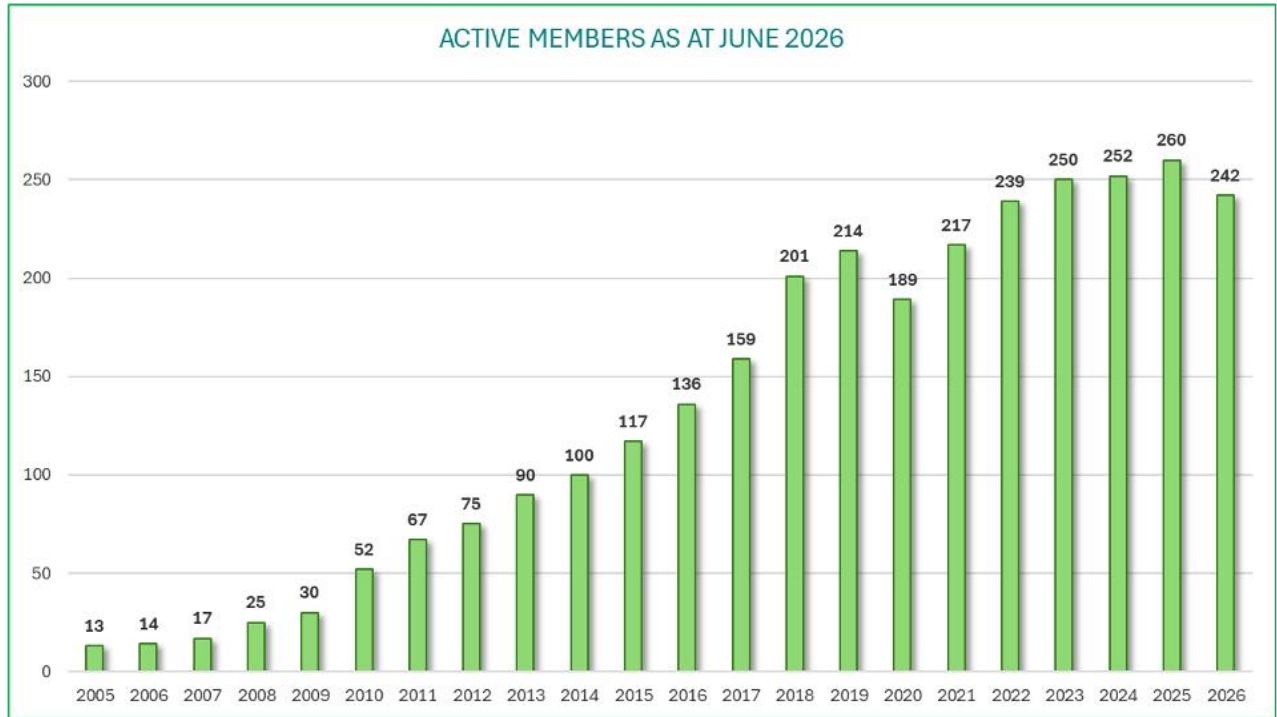


Figure 2: Total products by type certified in 2026

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STSA Membership



Total membership as of June 2026 stands at 242 with 23 new members joining the Association in 2025 and a further 54 in 2026.

Acknowledgments

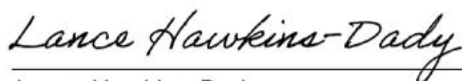
As always, I would like to take this opportunity to express my sincere appreciation to our members, Board, and all stakeholders for their continued support, commitment, and contribution throughout the year. Their collective efforts have been instrumental in advancing the objectives of the STS Association and strengthening the global STS community.

The Board and members of the STS Association extend their sincere appreciation to Mr. Nndwamato Mutshidza for his dedicated service and valuable contribution during his tenure on the Board. His insight, professionalism, and commitment to the objectives of the Association have been greatly appreciated and have contributed positively to the governance and strategic direction of the STSA. On behalf of the Association, I would like to thank Mr. Mutshidza for his service and wish him every success in his future endeavours.

I would also like to extend my gratitude to the dedicated STSA staff whose professionalism, expertise, and commitment underpin the day-to-day operations of the Association and support the successful delivery of its programmes and services.

The STSA Board and staff complement for the 2025 financial year were as follows:

- Mr. Lance Hawkins-Dady (STSA Board - Conlog and chairman)
- Mr. Len Schaller (STSA Board - Itron)
- Mr. Lee Naicker (STSA Board - Landis+Gyr)
- Mr. Nndwamato Mutshidza (STSA Board - Association of Municipal Electricity Utilities)
- Mr. Shawn O'Neil (STSA Board - Security Module Manufacturers)
- Mr. Don Taylor (STSA Board - Independent co-opted Director)
- Ms. Anita Von Brandis (Administrator)
- Mr Riccardo Pucci (Marketing Manager)
- Mr. Franco Pucci (Technical Consultant)



Lance Hawkins-Dady

STSA Chairman

8 June 2026