

The Association of Polish Electrical Engineers – contribution to strategy 2026 - 2034

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Abstract—SEP is a higher-benefit organization that has been working diligently for over a century to benefit its professional community. It shares the ups and downs and undergoes changes along with its professional community, but also with the entire society it continuously serves. A growing number of scientific, technical, economic, and even political and social organizations are actively using AI analyses and functional support. AI's capabilities encompass a wide range of activities, including planning, contextual situation assessment, problem-solving, strategic game management, and more. In this article, we argue that, in the current situation, without significant AI involvement or support, a well-formulated new statute and the associated modern Strategy of the Association of Polish Electrical Engineers may be inadequate for today's rapidly changing professional and broader social contexts. The AI environment allows for flexible, context-sensitive support in the construction of complex legal and formal documents, such as the organization's operational strategy, with multiple accepted arguments and functional variables related to the organization's activities. It is worth taking advantage of this opportunity and testing it, for example, during discussions on the SEP's Operational and Development Strategy for the next two terms. Here, we test what AI suggests in this regard and what discussion can be opened.

Keywords—SEP; AI; Association of Polish Electrical Engineers; strategy of development

I. INTRODUCTION

THE upcoming new term of office of the Association of Polish Electrical Engineers (SEP) from 2026 to 2030 is linked to periodic elections across all structures and the holding of the General Assembly of Delegates. The prospect of changes in the Association's governing bodies, the Main Board, Branches, Committees, etc., is an appropriate moment to engage in broader discussions about the foundations of our operations. One such foundation, obliging the Association to plan its activities and development plans, is the Statute and its associated Strategy. It was decided to hold the discussion on the new SEP Development Strategy, which is being prepared and covers the next two terms, i.e., the years 2026-2034. The Strategy document, scheduled for adoption after the discussion, formally and responsibly commits the Association to implementing the adopted courses of action. Furthermore, the adopted Strategy document commits to periodic, rigorous monitoring of its implementation progress. Therefore, if we manage to prepare a very good, demanding, yet realistic Strategy, it will become a guide for a certain period of time, as well as an important, inviolable imperative for implementation.

What is the goal of the long-term strategy, over a time horizon of several decades, divided into shorter term periods? To paraphrase a phrase currently circulating in the political world, we could briefly say: "Make SEP Great Again." This major task can and must be divided into shorter stages, but implemented with unwavering consistency. We must properly incorporate the specific, achievable tasks of the upcoming stage into the Strategy currently being discussed, remembering, however, that they constitute part of the Association's broader development perspective. So far, we have some challenges implementing this Strategy. The very interesting document, the SEP Strategy for the decade 2020-2030, has not been practically implemented, despite valuable discussions within the Association. We will use it in the current discussion. Looking at it from the perspective of several years, we see noble intentions, youthful planning energy, but also insufficient resources to implement some tasks. The document currently under discussion, the new Strategy with a changed time horizon, is completely different, carefully developed, but is it really optimal and possible to approve and implement in this form?

In this discussion of the SEP Strategy, we examine this document not directly, but indirectly through the context of its time and the conditions of its creation, as well as the current state of the Association. What has changed so dramatically that it is worth considering the Strategy from a different perspective? The Association strongly links its fate for the next decade to the great energy transformation that awaits us, and is actually already underway in Poland and all European countries and societies. This is a very good choice. However, if the Association has the ambitions of the MSEPGA, it may be worthwhile to consider social changes more broadly. The energy transformation is an important and fundamental infrastructural transformation enabling other, much larger processes. The big three technologies developing before our eyes: general and generative artificial intelligence, quantum information technologies, and space technologies are fundamental civilizational transformations.

The major association, IEEE, which is friendly to SEP, has already embraced these areas, establishing relevant sections, task forces, industrial standards committees, social initiative groups, establishing thematic journals, organizing thematic conferences, and launching professional development programs. The Association's engagement with the energy transition is essential and will further help us formulate a Strategy, but can and should such a well-formulated approach be achieved without the emerging era of artificial intelligence?



The energy transition will not be achieved without the participation of AI. Such a classic approach could prove costly and impact the Association's future. Perhaps a deeper understanding is needed within the Association that AI is a factor transforming civilization and will be an overlay on the energy transition and other major transformations in infrastructure, IT, transportation, utilities, and so on. So what can we do? Let's allow artificial intelligence to see our Association through its own lenses. Let's ask it to generate a picture of the future for us, and more specifically, our Strategy. With this picture in mind, let us contrast some of our problems and tasks to be solved in the shorter tactical and longer strategic time horizons.

II. SEP STRATEGY IN THE CONTEXT OF THE AI ENVIRONMENT

In the Association, we face the challenge of developing, discussing, and approving a bold, realistic, and implementable strategy. The Statute and Strategy of the Association of Polish Electrical Engineers [1], [2] are invariably created within a context defined by the organization's history, its current coordinates, and its future priorities. These coordinates encompass all operational variables. These operational variables include, among others, the Association's scope of activity and the dynamics of its changes, indicators of operational conservatism, effectiveness and efficiency, distinguishing tactics from strategy, similarities and connections with sister organizations, the flood of information and artificial intelligence, etc. Currently, we in the Association neither fully understand nor utilize artificial intelligence. We absolutely must learn this thoroughly, as artificial intelligence will be a component of energy systems and all other civilizational infrastructures. It will be a significant force transforming society as a whole. Our Association should seriously consider what to do about this. Perhaps we should use these very interesting AI tips regarding the strategy of operation and development of our Association, from the AI point of view and to what extent.

Here we present a selected, abbreviated example of action of such an LLM environment [3] regarding SEP strategy. Many professional associations actively use AI support [4]. The SEP Strategy Committee could potentially be advised to stress-test the developed strategy proposal in the selected AI environment with various types of generative queries, first general and then more specific. Such generative queries could include: improving the strategy to make it more useful and attractive to members, adding a stronger scientific-political layer, whether the developed strategy should be so detailed, distilling issues of truly significant strategic importance, separating tactical and ad hoc details, changing the strategy's time horizon, changing the depth of operational analysis, separating substantive and logistical layers of social impact, improving fundraising efficiency, and many others.

One of the contexts of the strategy preparation process is the editorial team's natural tendency to cram everything possible into it. The result is a very long document, mixing the weight of problems, important and completely minor matters, mixing time horizons of decades, terms of office, and individual years. Few people notice this, saying that we finally have a complete, comprehensive document, a list of all our wishes, pain points,

and dreams—the entire menu of our beautiful and rich tradition, intentions, and actions. We have a document that is a cocktail of possibilities and impossibilities, verifiability and unverifiability, validity and invalidity, triviality and seriousness. It's worth considering our Association's strategy this way. A very similar strategy generated by AI, after appropriately setting generative parameters, enables subtle filtering of dreams and more precise expert analysis. Manual filtering is unnecessary, as automatic filtering is provided. As experts, we can conveniently examine such a strategy from multiple perspectives.

The Association of Polish Electrical Engineers is a vibrant, dynamic organization, constantly evolving. Its strategy is a document aimed at continuous transformation and the continued maintenance and improvement of SEP's role as a valued, recognized, and effective national scientific and technical association, engaged in extensive international cooperation, serving society and its members, and focused on innovation, technology, sustainable development, and collaboration with industry. Let's examine how AI perceives this role, let it evaluate us and offer suggestions. Let's look at ourselves through AI's lenses, approaching this image with engineering reflection.

Our tested AI strategy positions the Association of Polish Electrical Engineers (SEP) positively and proactively within the overall context of the development of a knowledge society. The SEP is an organization that invests in talent, innovation, and research, supporting its members. SEP continually builds its recognition through effective operations and the creation of a modern, digital, intelligent environment, including a knowledge base that practically supports its members and its professional community. SEP sets technological trends and provides solutions for industry. SEP contributes to the development of human resources and the domestic industry, and is open to international cooperation. As a modern professional association, SEP serves as a model for the digitization of the energy sector and the implementation of an embedded artificial intelligence environment.

The Association of Polish Electrical Engineers is a useful organization, supporting its members and providing continuous professional development for engineers with a flexible educational profile that meets the needs of the economy and industry. SEP systematically collaborates with leading universities in the field of personnel education. SEP creates a friendly ecosystem that strengthens relationships between members of the professional community. SEP fosters a culture of continuous improvement in all segments of the professional community. SEP continually introduces programs to actively identify, develop, and retain talent among young professionals. SEP continually builds active and multidisciplinary relationships with national partners in research, scientific and technical activities, education, continuing education for engineers, organizational, and logistical matters. SEP creates maps and networks of such relationships as a foundation for actively ensuring value generation for all parties involved. With appropriately set AI generative parameters, SEP's strategy is surprisingly comparable to that of the largest technical universities in Poland [5], [6], [7].

The Association of Polish Electrical Engineers (SEP) continually intensifies its cooperation with central and local government institutions, business support institutions, non-governmental organizations, local communities, and strategic partners in priority areas. SEP is an organization dedicated to sustainable development and social responsibility. It creates or initiates, for itself and its professional community, energy-efficient, ecological, and user-friendly technical solutions, ready for global civilizational challenges. SEP uses every possible means to build a professional community based on values, strengthening the authority of the engineer based on eternal classical and ethical values such as truth, wisdom, goodness, beauty, but also freedom, equality, and justice. It is worth citing the IEEE Code of Ethics [8], supplemented recently by AI CoE, as an example and for comparison. IEEE has launched an AI Ethics Certification Program and is issuing IEEE Certified AI ED certificates.

The Association of Polish Electrical Engineers is managed in a modern manner through process digitization, efficient financial management, asset management, and a commitment to the quality of continuing education and innovations initiated and developed. SEP implements and updates EPR systems such as SAP, comprehensive business process management, including electronic document flow, relationship management with collaborating organizations (CRM), and the integration of finance, logistics, operations, collaboration, and HR into a single central database with embedded artificial intelligence, enabling optimization, monitoring, and decision-making based on current, real-time data. SEP serves as a model for the digitization of statutory activities for our professional community. Within this unified, intelligent system, SEP offers members and the professional community valuable benefits, assistance, products, and services.

Some of the processes and activities of the Association of Polish Electrical Engineers (SEP) mentioned above are measured by specific indicators. The Association periodically monitors the implementation of the SEP Development Strategy based on developed objective indicators, adapts activities to changing circumstances, and openly discusses implemented changes. Indicators monitoring strategic goals include the provision of services to the professional community, the introduction of effective membership development mechanisms, the growth of members' professional competence, the development of an active community and professional environment, increasing the Association's recognition, initiatives in the areas of innovation, science, and technology, obtaining grants, training and development of staff, relationships and the development of cooperation opportunities, resources, including in the area of process digitization and the digital geo-information database of assets, and the introduction of pro-quality mechanisms. SEP periodically publishes open analyses and synthetic results of the strategy's implementation.

AI defines SEP as an influential and important organization in the field of electrical engineering and information technology, particularly in Poland. Nothing lasts forever. AI defines the pillars of the Association's potential longevity. History and Reputation – SEP has actively entered its second century of operation. It has a long tradition of promoting

technical standards and innovation. Standards and Norms – The Association develops technical standards that are important for safety and efficiency in the electrical engineering industry. Education and Research – SEP supports scientific research and technology development by organizing conferences, seminars, and publications. International Cooperation – SEP operates internationally, collaborating with other industry organizations and institutions. Policy Influence – The Association influences policies related to technology and engineering, making it an important voice in public debates on technological innovation. AI compares SEP with similar foreign organizations and their status, such as IEEE, UFE, and VDE. SEP can evolve into an organization with similar broad local, national, and international influence through a consistently implemented long-term strategy.

AI can evoke sentiment, but it is focused, with the right analysis conditions, on the effectiveness of service and social activities. AI ruthlessly points out many anachronisms in our current operations. It highlights the evolution of the meaning of many terms, such as electrical engineering, electronics, and telecommunications, from the scientific and technical sphere towards a purely technical one. It challenges the Association's name in terms of its optimal scope of operation and points to the historical significance of the SEP abbreviation. It proposes an evolution of this name. It emphasizes the role of the Association's digitization and the creation of a comprehensive eSEP or SEP-connect environment. It combines this virtual environment with opportunities to expand the services offered and address them more effectively to the digital generation. It emphasizes the role of the Association's economic layer. The proposed economic center of the Association would include the combined Chamber of Experts, the Entrepreneur-Engineer Club, and the Center for Professional Development of Engineers.

It challenges the organization of the General Assembly of SEP Delegates as a purely electoral assembly, rather than as the Association's most important scientific, technical, and economic congress, with possible accompanying elections. Organizing a valuable scientific and technical congress as a general meeting of delegates, with in-person attendance preferred, and publishing quality materials publicly available in the Association's bibliographic resources is another matter. This is a creative endeavor, valuable for our community. AI suggestions in specific areas of the Association's activities can be contextually expanded and contain a wealth of valuable analytical material. We are attaching an example of an AI-generated summary of the main points of the SEP Strategy to the discussion. Below, we discuss what is realistic in the AI picture and what could be implemented.

III. OPEN PUBLIC DISCUSSION ON THE SEP STRATEGY

The SEP statute presents the Association as a non-governmental, creative organization with a scientific and technical focus, working for the benefit of society and its members. The term "electricity in the broad sense" is explicitly included in the statute. The SEP's scope of activity includes: electrical engineering, energy engineering, power engineering, electronics, radio engineering, optoelectronics, bionics,

information technology, computer science, telecommunications, automation, robotics, and other related fields. SEP also operates outside the borders of the Republic of Poland. We recall this statutorily defined scope of electrical engineering in the broad sense to contrast it with the Association's actual scope of activity and the current landscape of the field. Perhaps it is worth further examining our chances for significantly greater coverage of our scientific, technical, economic, and social activities. Everything is becoming digital, including electrical engineering and the large-scale power industry. Electrical engineering in the broad sense is expanding even further, and this expansion should be addressed proactively within the Association. SEP formally oversees two multi-disciplines defined by law: Automation, Electronics, Electrical Engineering, and Space Technologies (AEEiTK), and Technical Information Technology and Telecommunications (ITiT). AI's perspective on SEP's above-mentioned social roles and areas of activity prompts a return to open discussion about the foundations of the Association's activities.

The SEP strategy is developed periodically for a decade and periodically reviewed. The previous draft strategy for 2020-2030 generated numerous comments within the Association regarding a diagnosis of the current state, based on the identification of strengths and weaknesses, opportunities, and threats to the Association's operation in a changing environment. Some comments suggested that the SEP Strategy should be based on a current snapshot of the Association. Furthermore, the strategy was criticized for excessive centralization, noting that the Association's strength lies in its members and cooperative cooperation at the branch and branch level. In other words, the strategy is not just about grand words and a crystal-clear vision, but also about the actual possibility of its implementation. On the one hand, local realism suggests that the strategy should emphasize not only the dreams of the Board and regional branches, noble, periodic, spectacular, and therefore costly initiatives in their surroundings, but above all, it should support the natural evolution of the Association's fundamental structure, adapting to external requirements and the changing needs of its members. On the other hand, the Association's activities on a broader social scale are equally important, and giving them up is impossible.

Thanks to the development of electrical, electronic, and information technologies, digitization, and artificial intelligence, are the prospects for our Association's activities enormous? Never before have there been such opportunities for growth. We ask simple questions about these possibilities. Do we thoroughly understand what's happening around us, even just in our professional environment, but perhaps even more broadly? Do we know how to reach this new technological environment and society with our ideas, services, and activities? Or is it perhaps easier and safer to maintain the status quo, as has recently happened in some other SNT affiliated associations. In an election year, a year of discussion about the association's strategy, will we be merely conservative? Conservatism cannot be hidden; it is evident in the selection of the right people, in studies containing tailored phrases, in the formulation of tasks that will eventually need to be implemented or appropriately suggested to the central authorities.

The current state of expertise and appraisal within the Association requires appropriate action to reconstruct, activate, supplement competencies, and adapt to market requirements [9], [10], [11]. This is a task for the entire Association, not just the Chamber of Appraisers. A thorough analysis of this topic, along with guidelines, goals, and methods for achieving them, should be included in the Strategy. The Chamber of Experts and Appraisers is an important component of the Association, providing a vital interactive area of cooperation with the economy. Supported by the Association's activities, the Chamber of Experts/Appraisers is responsible for its specialized area of continuous development and maintenance of an efficient interface between science, innovation, implementation, technology development, industry, and business. This challenging area of evolving competencies and the need to supplement them belongs to the Association's important financial sector. This area is particularly in need of digitalization for national coordination.

SEP is primarily concerned with electrical engineering and power engineering. Of the 50 regional high-current Branches, there is only one, potentially nationwide, low-current Branch of OEIT SEP: Electronics, Information Technology, and Telecommunications. The EIT Branch strives to serve its professional community [12], [13], [14], [15]. This Branch has a traditional name within the Association, compatible with the high-current branches. The structure of the Regional Branches and the potentially nationwide nature of the EIT Branch are incompatible. The development potential of this Branch is very large. Such development would be very valuable for the parent Association, complementing and naturally expanding the areas of activity of the EIT. Factors favoring the development of this Branch would be the support and interest in its activities of the EIT economic sector. Currently, the Branch is undergoing restructuring efforts. AI analyses pay particular attention to this aspect of the Association's operational structure.

SEP is an important element of the entire system in its professional and social sectors, encompassing components such as education, training, professional development, science, technology, innovation, industry, and society. All of these components should be reflected in the Strategy.

IV. SEP STRATEGY FOR 2026-2035

Future Vector: Knowledge, Innovation, Transformation. This document summarizes a strategic proposal based on publicly available data, trend analysis, and forecasts for the energy sector and technological development in Poland and Europe [3].

1. Introduction: Strategic Context

Poland and Europe are at a turning point in economic transformation, with the energy sector at its heart. The decade 2026-2035 will be a period of unprecedented change, driven by three fundamental forces: decarbonization within the European Green Deal, the digital revolution, and the need to ensure energy security and sovereignty. In this dynamic environment, the Association of Polish Electrical Engineers (SEP), as an organization with over a century of tradition and undisputed authority, must not only adapt to change but actively shape it. This strategy sets an ambitious yet realistic direction for SEP's development for the next ten years. Its goal is to strengthen the

Association's position as a key partner in the modernization of Poland, a competence center for engineers, and a dynamic platform connecting generations, science, and business. This strategy is a response to the challenges of the future and a guidepost that will allow SEP to successfully enter the second century of its activity, strengthening the role of Polish technical thought in the country and internationally.

2. Analysis of the Strategic Environment

An effective strategy must be based on a thorough understanding of both external factors and the organization's internal potential. The following analysis provides the foundation for the strategic pillars defined below.

2.1. Megatrends and Key External Conditions

Energy Transition: EU climate policy (including the "Fit for 55" package) and national strategies (the update of Poland's Energy Policy to 2040) are forcing a fundamental transformation of the energy mix. This means massive investments in renewable energy sources (RES), the development of nuclear power, hydrogen technologies, and the modernization and expansion of transmission and distribution networks towards Smart Grids.

Digital Revolution and Industry 4.0: The digitization of energy systems, the use of artificial intelligence (AI) for grid management and fault prediction, the Internet of Things (IoT) in building and industrial automation, and the growing importance of cybersecurity for critical infrastructure are trends that are redefining the competencies required of electrical engineers.

Demographic Changes and the Labor Market: Poland, like other developed countries, is grappling with a generational gap in engineering professions. The aging of experienced technical staff coincides with the need to rapidly develop new specialists in fields that did not exist a decade ago. At the same time, the role of flexible forms of education and lifelong learning is growing.

A New Model of Energy Consumption: The development of prosumerism, electromobility, energy storage, and demand-side energy management systems (Demand Side Response) is transforming the unidirectional flow of energy into a complex, decentralized system. This requires new standards, regulations, and technical solutions.

Geopolitical and Economic Environment: The need to become independent from fossil fuel imports from unstable sources increases pressure to diversify and develop local energy sources. At the same time, high inflation, financing costs, and supply chain instability pose challenges to the planning and implementation of large-scale investment projects.

2.2. Internal Potential and Challenges for SEP

Strengths:

Tradition and Reputation: Over 100 years of history, a well-established brand, and widespread recognition as a reliable source of technical knowledge.

Nationwide Network: Extensive field structure (branches, circles, committees, sections) ensuring access to engineering communities across the country.

Expert Authority: Leadership role in standardization, certification (licenses, qualifications), expertise, and technical publications.

Human Resources: Access to a wide range of outstanding specialists, scientists, and practitioners in various fields of electrical engineering.

Challenges and Areas for Development, Weaknesses:

Member Demographics: Risk of an aging membership base and difficulties in effectively attracting and engaging young engineers and students.

Communications Modernization: The need to fully utilize modern, digital communication and marketing channels to reach new audiences and build a dynamic image.

Structure Flexibility: The need to adapt traditional forms of operation to the rapid pace of technological change and the expectations of the younger generation (through agile projects, online platforms).

Competition in the Training Market: A growing number of commercial entities offering specialized training and certifications in niche, modern fields.

3. Mission, Vision, and Strategic Values

3.1. Mission

Integrating and supporting the Polish electrical engineering community, shaping a safe and innovative future for the energy sector through disseminating knowledge, promoting the highest technical and ethical standards, and actively participating in public debate.

3.2. Vision 2035

The Association of Polish Electrical Engineers is a key opinion leader and leading competence center in Central Europe, actively contributing to Poland's sustainable and digital energy transformation. SEP is perceived as a dynamic, open, and modern organization for all generations of engineers, representing the first choice for professional development, certification, and access to reliable technical knowledge.

3.3. Values

Professionalism: Striving for the highest quality and reliability in all activities, based on knowledge and experience.

Innovation: Openness to new ideas, technologies, and methods; promoting technical progress.

Collaboration: Building strong relationships within the community and with partners from science, industry, and government.

Responsibility: Ensuring public safety, sustainable development, and the social impact of technological transformation.

Ethics: Promoting the highest standards of professional engineering ethics.

4. Strategic Pillars for 2026-2035

The implementation of the mission and vision will be based on five interconnected strategic pillars that guide the Association's activities towards key development areas.

Pillar I: Leader of the Energy Transformation

Strategic Goal: Establish SEP as the main, independent advisor and substantive partner for central and local government administration and industry in Poland's energy transformation process.

Key Activities:

1. SEP Strategic Analysis Center: Creation of a permanent team of experts to prepare periodic reports, analyses, and recommendations on key projects (nuclear energy, offshore

wind farms, smart grids, hydrogen technologies).

2. Active Participation in Legislation: Systematic review of draft laws and regulations; proactively proposing legislative solutions that support security and innovation in the energy sector.

3. "Polish Energy 2040+" Dialogue Platform: Organizing periodic, high-profile conferences and debates with the participation of policymakers, industry leaders, scientists, and the public to build consensus around strategic development directions.

4. Promoting Standards for New Technologies: Developing and implementing technical standards for renewable energy sources, energy storage, electric vehicle charging stations, and hydrogen installations, ensuring their quality, safety, and interoperability.

Pillar II: SEP Future Competence Academy

Strategic Goal: Creating the most comprehensive and modern professional development system for electricians in Poland, responding to the challenges of digitalization and decarbonization.

Key Activities:

1. Digital Educational Platform: Launching an integrated e-learning platform offering online courses, webinars, video materials, and virtual laboratories in key areas (e.g. IT cybersecurity, photovoltaic farm design, AI diagnostics, BMS/EMS systems).

2. New Competence Certification System: Developing and promoting new, market-recognized SEP certifications in high-demand areas, such as "Certified Engineer for Cybersecurity of Energy Systems" and "Renewable Energy Integration Specialist."

3. "Engineer 4.0" Program: Collaborating with technical universities to modernize study programs, organize internships, workshops, and student competitions (e.g., "SEP Smart Grid Challenge").

4. Intergenerational Knowledge Transfer: Creation of a mentoring program in which experienced SEP experts support the development of younger engineers, and a "reverse mentoring" program where young specialists train seniors in new digital technologies.

Pillar III: Digital and Innovative Association

Strategic Goal: Complete digital transformation of SEP's internal processes and strengthening the organization's image as a promoter of technological innovation.

Key Activities:

1. SEP Integrated Management System (SEP-Connect): Implementation of a modern CRM/ERP platform for managing the membership database, dues, training, certification, and communications, ensuring personalized member services.

2. Modernization of Communication Channels: Investments in professional social media, technical podcasts ("Engineer's Voice"), video newsletters, and a modern, interactive SEP website.

3. SEP Innovation Incubator: Launching a program supporting startups and research and development projects of SEP members, offering mentoring, access to laboratories, and assistance in obtaining financing.

4. Digitization of Knowledge Resources: Full digitization of SEP technical journal archives and creation of a modern,

searchable digital library accessible to all members.

Pillar IV: Strengthening Community and International Influence

Strategic Goal: Increasing member engagement, rejuvenating structures, and strengthening SEP's presence and influence in Europe.

Key Activities:

1. "Young in SEP" Program: Creating a dedicated offering for students and young graduates (reduced dues, special events, competitions, internship programs with SEP partners) and ensuring their representation in the Association's bodies.

2. Strengthening Local Structures: Supporting branches and circles in organizing local initiatives, training sessions, and integration meetings by providing tools, materials, and partial funding from headquarters.

3. Activity in European Organizations: Increasing the involvement of SEP representatives in the work of organizations such as EUREL and CENELEC; initiating joint projects and positions on key issues for Poland.

4. "SEP Ambassador" Program: Promoting outstanding Polish engineers internationally by nominating them for awards, technical committees, and as speakers at major global conferences.

Pillar V: Guarantor of Safety and Reliability

Strategic Goal: Maintaining and strengthening the role of the Polish Electrical and Electronics Association (SEP) as a guardian of the highest safety standards in electrical engineering, with particular emphasis on emerging threats.

Key Activities:

1. Development of the Authorization and Qualification System: Continuously updating the scope and examination requirements for qualification authorizations to reflect technological progress (e.g., in the field of DC installations, energy storage, cybersecurity).

2. National Center for Electrical Safety: Initiative to establish (independently or as part of a consortium) a center for monitoring threats, investigating the causes of serious failures and accidents, and publishing preventive guidelines.

3. Public Education Campaigns: Conducting nationwide information campaigns on the safe use of electricity, the risks associated with unprofessional installations (e.g., photovoltaic), and the benefits of modern technologies.

4. Cooperation with Regulatory Authorities: Strengthening cooperation with the Energy Regulatory Office, the Office of Technical Inspection, and the National Labor Inspectorate to harmonize standards and effectively enforce safety regulations.

5. Implementation, Monitoring, and Evaluation of the Strategy

The success of the strategy depends not only on its accuracy, but above all on the effectiveness of its implementation. This process will be based on a clear division of responsibilities, measurable indicators, and regular progress assessment.

5.1. Implementation Schedule

The strategy will be implemented in three phases:

Phase I (2026-2028): Foundation and Investments. Focus on building key tools (e-learning platform, SEP-Connect system), launching pilot projects (Analysis Center, Innovation Incubator), and intensifying communication activities.

Phase II (2029-2032): Expansion and Scaling. Full implementation and development of all initiatives, expansion of certification and training offerings, strengthening of international position, and achievement of key growth indicators (e.g., membership numbers).

Phase III (2033-2035): Optimization and Leadership. Improving implemented solutions, maximizing environmental impact, and preparing the ground for the next strategic cycle. Focus on establishing a leadership position.

5.2. Key Performance Indicators (KPIs)

Progress in implementing the strategy will be measured using specific indicators, monitored annually by the SEP Management Board.

5.3. Strategy Management

The SEP Executive Board will be responsible for overseeing the implementation of the strategy. Pillar Leaders – Board members or designated experts – will be appointed to coordinate activities within each pillar. Progress will be reported annually to the General Assembly of Delegates. A comprehensive review of the strategy will be conducted every three years (in 2028 and 2031) to allow for potential adjustments and adaptation to the changing environment. Pillar indicators are gathered in Table I.

TABLE I
PILLAR INDICATORS

Strategic Pillar	Sample Indicator (SI)	Goal for 2035
I. Energy Transition Leader	Number of published strategic reports and legislative positions	Minimum 10 per year
II. Future Competence Academy	Number of individuals who have obtained new SEP competency certificates	20 000 persons
II. Future Competence Academy	Percentage of training delivered digitally or hybrid	> 60%
III. Digital and Innovative Association – eSEP	Number of active eSEP platform users	> 80% of members
IV. Community Strengthening	Increase in number of members under 35	+50% compared to 2026
V. Safety Guarantor	Media reach of the social education campaign	Reaching 1 million citizens per year

V. SEP AS A VECTOR OF THE FUTURE

The presented strategy for 2026-2035 is an ambitious plan intended to transform the Association of Polish Electrical Engineers into an organization that meets the challenges of the 21st century. By focusing on knowledge, innovation, and active participation in the energy transition, SEP has the opportunity

not only to maintain but also significantly strengthen its position. Implementing this strategy will require the commitment of the entire Association community – from the Board of Directors, through office staff, to every member in branches and circles across Poland. By working together, we can ensure that SEP becomes a true vector of the future for the Polish energy sector and technical thought.

Association of Polish Electrical Engineers (SEP) - Towards the Future with Energy and Knowledge. SEP as a Vector of the Future

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