CIGRE Strategic Plan 2023 Edition

# **Entering CIGRE's second century**

The foremost global community for end to end power system expertise



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# CIGRE 2023 Strategic Plan & Horizon 2030: Entering our second century with renewed vision

# **INTRODUCTION**

CIGRE is a member based, not-for-profit professional association, established under French law in 1921. Now entering its second century, the organization has developed into the foremost global community for sharing end to end (E2E) power systems expertise for the betterment of society.

CIGRE now has nearly 20,000 members in over 90 countries, comprising researchers, academics, engineers, technicians, suppliers, regulators and other decision makers. This membership is organized and represented via a strong confederation of over 61 National Committees, further supported by numerous regional bodies.

CIGRE provides a global forum for the development and open exchange of electricity industry knowledge, information and expertise which is both technically relevant and practically applicable for the future of electric power systems.

This creates a unique opportunity at the individual, organization, national and international levels for the development of technical competencies and the provision of authoritative, unbiased technical advice.

# **Our Purpose for the 2023 Revision**

The ongoing global energy transition will involve many disruptive, challenging and exciting changes. CIGRE sees the power industry on an expansive track, in terms of its scope and range of activities. The current industry mindset of "4.0", with a focus on rapid technology changes, increasing interconnectivity, smarter automation and system-to-system interaction, is migrating to "5.0". That means a shift to greater sustainability, resilience and socioeconomic improvements. In the process, it will reveal areas of knowledge that are no longer exclusive to any segment.

The electricity sector is considered as fundamental to modern humanity as the basic needs of health, food and clean water. It has made significant cuts in carbon emissions, and it is envisioned that other sectors, including transportation, buildings, housing and industry, will migrate rapidly to the electricity sector. This will bring with it profound challenges and changes.

CIGRE has evolved, and will continue to evolve to respond to these challenges and assist with the necessary organizational and structural requirements.

With its inherent neutrality, CIGRE is ideally positioned to meet these challenges. CIGRE aims to become a true 'live laboratory.' At the same time, the organization will continue to provide essential opportunities for knowledge sharing and networking through in-person events such as Paris Session, Symposia and Colloquia. Alongside this continuing commitment to face-to-face events, there are plans to further expand online activities. CIGRE embraces both formats, supporting innovators in developing suitable products for a sustainable future for our planet.

CIGRE proposes this 2023 revision for its Strategic Plan with a horizon of 2030, to ensure our leadership for power system expertise for our stakeholders, and for society's needs for electricity.

# **Our Commitment and stakeholders**

Our commitment is to provide quality support for the technical foundation of CIGRE by growing our volunteer participation. This will be guided by our principles of non-profit, impartiality and the betterment of society. CIGRE aims to engage its stakeholders to ensure we deliver tangible benefits: for stakeholders and wider society, within the shifting landscape for electricity and power systems.

As the energy transition accelerates, the number of people involved in new and nontraditional technical areas will increase. Attracting individuals and companies or agencies to become members of CIGRE will help to ensure a broader global discussion across all these diverse areas. A greater volume and diversity of membership will also ensure we can provide value to a broader set of stakeholders, beyond those involved with electricity today.

Our policies ensure adherence to our approved Statutes and Rules of Procedure, applying best contemporary governance and business practices in compliance with Anti-Trust Guidelines.

We are committed to periodically updating our Strategic Plan, to ensure it remains relevant in our second century to CIGRE's Purpose, Vision, Mission, and Value Proposition. Our rich global community for unbiased power system expertise is our foundation and heritage, addressing emerging issues with solutions for all our stakeholders through the active participation of members and stakeholders.

Our stakeholders include thousands of people worldwide who directly or indirectly serve the electricity industry, including those who will engage with the industry in the future. This Strategic Plan is a roadmap for our stakeholders, comprising CIGRE staff and

members, including our volunteer participants, executives, policy makers, regulators, and professionals from industry (e.g., utilities, TSOs, DSOs and manufacturers), universities, and the broader electricity industry community, both today and in the future.

# **Our Strategic Context For 2030**

The CIGRE brand is "for power system expertise". As we evolve within a rapidly transforming landscape, CIGRE will look towards the boundless opportunities that are emerging at the grid edge and beyond.

The foundation of the CIGRE brand is a global, impartial and collaborative community that supports sustainable electricity: not only for those that have electricity today, but also for those not fortunate enough at present to enjoy the comfort that electricity provides.

Electricity is vital for the development and well-being of all people of the world. As the Earth's population continues to increase, so too does pressure on the planet's key resources, especially food, clean water and energy. Global development and peace will in part be dependent on equitable access to these key resources.

Electricity, as one of the most efficient forms of energy, will almost certainly increase its share of the global energy portfolio. At the same time, traditional carbon-based energy resources are under increasing scrutiny due to environmental considerations. While traditional large-scale generation, transmission and distribution of electricity will continue, it will be increasingly complemented by dispersed renewable and embedded energy sources. Electricity will be the dominant environmental solution for transportation, industry, buildings and housing, and in the future all aspects of society.

The broader energy and electricity industry environment in which CIGRE operates is undergoing a major transition. The grid is no longer monolithic. A plethora of new and innovative participants have amplified system operations from purely centralized macro technologies to also incorporate decentralized micro technologies with digital platforms to enable every resource and every touch point. CIGRE has advanced these horizons and it is our objective to continue an innovative approach to member collaboration, creating electricity benchmarks and guidelines, and sharing experiences for the betterment of society. To this end, CIGRE will actively develop its membership by attracting and retaining new market entrants into the electricity and power systems sector, both as collective and individual members.

E2E will not be static in definition and will evolve in the energy transition. The "beyond" aspects involve elements such as electricity consumer to prosumer supply and demand

interactions beyond the meter, referred to as digitization E2E, and boundless electricity innovations for the grid and at the grid edge.

While E2E pushes boundaries, CIGRE intends to maintain its core Mission, tied to the grid and interacting at the grid edge from supply to demand. The core of CIGRE's Mission remains power systems issues related to the development, operation and management of electric power systems and markets, as well as the design, construction, maintenance, reuse and ultimate disposal of equipment and plant. Nevertheless, CIGRE should be permanently looking at new edge aspects, capturing trends to be included in its range of activities.

With a global membership, CIGRE is structurally a confederation that extends across many countries and National Committees (NC). Our diversity, and the collaboration that takes place between NCs, provides the ability to push horizons for the electricity sector. It also ensures that best practices emerge as a benchmark for all.

CIGRE has been and will remain an apolitical, not-for-profit, global community that fosters knowledge sharing and human connections among power systems professionals. The outcome of our collaboration is the creation and distribution of unbiased, neutral and authoritative technical reference resources that contribute to the betterment of the industry, critical standards, and the expertise of the people within it.

CIGRE's goals will continue to be:

- Facilitating and developing the exchange of engineering and power system knowledge and information on power systems, particularly through addressing the energy transition aspects.
- Adding value to knowledge and information exchanges by synthesizing state-of-theart and global best practices.
- Contributing to the promotion of social sustainable development.
- Developing guidelines and information to aid the emergence of new technologies and techniques to assist power system practitioners in their application, particularly through the energy transition consideration.
- Fostering growth and development opportunities for the future workforce needed for the energy transition.
- Growing membership and member services to fulfill our Purpose, Vision, Mission and Values, to add new entrants for the energy transition, and to sustain our business model for the future.

# **Our Purpose**

Enable sustainable electricity for all through the development of power system expertise globally.

# **Our Mission**

Contribute to the betterment of power systems and electricity by enhancing the community of power system expertise.

# **Our Vision**

The leading, most authoritative and innovative, global community for the sharing and development of electric power system expertise.

# **Our Values**

- **Impartiality** Providing completely unbiased technical information and solutions to electric power systems issues and problems.
- Accessibility Disseminating knowledge without barriers to the global community.
- Transparency Open processes, guidelines, and finances.
- **Making a Difference** Partnering through our National Committees to disseminate technical information for the betterment of society.
- Advancement Growing and encouraging our members, including the next generation and women, through global participation to achieve their individual and collective goals in advancing electric power systems.
- **Cooperation** Collaborating with other international organizations of related interests.
- Integrity Always honest and professional in our endeavours.
- Adaptability Able to address and influence emerging issues affecting the electric power sector in a timely manner.
- **Diversity, Equity and Inclusion** Advancing diversity in the technical profession, cultivating and promoting an environment for an equitable and inclusive culture that welcomes, engages, and rewards all who contribute.

# OUR PATH FORWARD

CIGRE's members and stakeholders, our global participants, will continue to pursue the obligations as per our Statutes and Rules of Procedure, and will continue to grow our technical foundation with quality and impartiality. The pillars below set out the aspirational goals of the 2030 Strategic Plan:

#### 1. Strategic Themes

• CIGRE's four Strategic Themes will be followed with strategic and tactical actions towards our goals.

#### 2. Outcomes & Metrics

• CIGRE's top goals will be measurable and attainable.

#### 3. Technical Knowledge Advancement

- CIGRE at its core is the development and dissemination of unbiased technical knowledge for power system expertise, for electricity end-to-end (E2E), and to broaden to all facets of the energy transition.
- The CIGRE Technical Council is the center of this advancement as are the National Committees with their local initiatives in conferences and in assisting the Technical Council.

#### 4. Membership Growth Plan

- Membership growth and active participation will sustain CIGRE's technical foundation and remain technically competitive with the growing number of people in the energy, power, and associated fields in the energy transition, and with greater diversity across the globe.
- Membership growth will sustain finances and remain competitive with affordable fees.
- Membership value will be grown accordingly, with resources to support the Central Office (CO) and at National Committee (NC) level, and with greater resources and higher attendances for events such as the biennial Paris Sessions, regional and national conferences.

#### 5. Financial Management

• Financial reserves of CIGRE will be at secure levels for contingencies and to enable continual investment in support of CIGRE membership. CIGRE will remain a non-profit, as per French Law.

#### 6. Structure & Governance

- CIGRE's structure will be aligned with our strategic growth.
- CIGRE's Central Office (CO) structure and systems will grow efficiently in support of membership.
- CIGRE Regional Councils (RCs) and National Committees (NCs) will continue in support of CIGRE's Mission.
- CIGRE's Technical Council (TC) will evolve to meet the challenges and opportunities of the energy transition ahead, gathering innovative solutions as a main vehicle for knowledge dissemination.
- CIGRE's Statutes and Rules of Procedure will evolve as needed for continued effective governance, for continued support, and for effective attraction and retention of members within the membership structure.

From this Strategic Plan, the CIGRE Steering Committee and Technical Council with the Central Office should develop action plans with the budget to be approved biennially by the Administrative Council with monitoring annually.

# **Strategic Themes**

- 1. Influence and Contribute Providing key information to executives and engineers for influence and awareness.
  - Leverage our technical strength to provide executives, regulators, policy makers and technology innovators with valuable information for innovation and policy direction, and standards development.
  - Develop a marketing platform for ease of access to CIGRE to support promotion of leading-edge innovative concepts to government agencies, policy makers, regulators and our broader membership.
  - Raise awareness of CIGRE and its activities, and target industry executives via ELECTRA, NC events and contacts, and trade associations. Adapt content and distribution to the changing nature of energy markets and systems within the energy transition.

- Improve the CIGRE brand and visibility by further consolidating and achieving external citation and indexing in Scopus, the leading database of peer-reviewed literature.
- Access and actively encourage the presence of regulators and policy makers within the organization.
- Develop geographic diversity such as in Africa: promote symposia and conferences to attract members and foster the development of regional African councils. CIGRE is working with the World Bank, African Standards authorities, and other learned organizations to achieve this goal.

# 2. Vibrant and Inclusive – Excellent Central Office services and enabling National Committee growth and participation.

- Central Office (CO) resources to be efficiently enhanced and adapted to address new requirements.
- Member-friendly IT systems/website to increase member services across all platforms (e.g., desktop, tablets and smartphones). Central for membership, services and communications, is a vibrant and up to date eCIGRE.
- Complete roll out of new Membership Management Systems between CO and NCs.
- Promote greater participation and contribution from Administrative Council members (NC Chairs) to support CIGRE.
- Review role of CIGRE Regional Councils (RCs) and assess need for further RCs (e.g., Africa).
- Provide support for smaller NCs to develop and grow and offer more local services.

# 3. The Electricity Future – Understand and influence the development of new technology and practices.

- Foster understanding and development of new technologies, new standards, and new uses of existing technologies, to support current and future power system requirements to develop and operate, such as interconnections, cyber security, disaster management, self-healing networks, capacity markets and storage, and grid edge solutions.
- Include sustainability and governance aspects of modern power systems in current activities.

- Engage with customers, the broader community and industry, to raise levels of awareness of changes needed across the energy value chain.
- Smart Grids & Grid Edge: understand, gather and influence further development of the knowledge and experience gained around the world.
- E2E coverage: adapt our organization leveraging our core strengths to address the challenges raised by the energy transition and dispersed generation sources with interactive consumers and prosumers.
- Industry: expand in sectors related to all aspects of electric power systems to address their greater involvement in the energy transition.
- Electrification of rural areas: provide global best practices and guidelines enabling provision of sustainable electricity to areas currently without access.
- 4. People and Skills of the Future Increase participation and skills for our growing membership and improve the diversity of our membership to enhance our relevance in addressing the electric power systems of the future across the globe.
  - Recently qualified professionals and students: increase their participation in the organization by launching, at NC level, systematic action targeting engineering schools and universities.
  - Diversity: increase the participation of next generation network (NGN) and women in energy (WiE) in the organization, by creating dedicated forums at CIGRE and NC levels.
  - Diversity: ensure that our actions are inclusive for our global community, with equal voices and without bias. CIGRE will aspire to best practices for diversity, equity and inclusion.
  - Required specialists: NCs to attract at NC board level the participation of specialists capable of contributing to technologies in all aspects of power delivery systems.
  - Continuing professional development: CIGRE should also assist with continuing educational requirements for technical professionals through certification of attendance at conferences, tutorials and CIGRE Academy Webinars.

- NCs at board level to attract members with business acumen and passion for CIGRE that will ensure value is delivered for member fees and that activities are commercially efficient.
- Technical Council: leverage our well-established technical foundation to evolve to the electricity future, including the development of new research areas beyond our traditional scope.

# **Outcomes & Metrics**

Through the actions noted within it, CIGRE's 2023 Strategic Plan will yield the following outcomes and metrics by 2030 or before:

- CIGRE will advance as a power system expertise organization, always looking to those important intersections of energy related activities. For example, we will advance on innovation and leading-edge topics in the energy transition.
- Membership will grow to between 30,000 and 35,000 members (equivalent) by 2030 (7-10% growth per annum). Active membership, those participating in Study Committees, Working Groups, and other groups (e.g., governing bodies, task forces), should be monitored and grow proportionately with membership growth.
- Active membership will expand. For example, Study Committees in 2024 will consider: expanding the number of Regular Members for each Study Committee from 24 to 34; reducing the six additional Distribution Members to four; adding two NGN representatives and two WiE representatives; and reducing the number of Observers to ten.
- Demonstrate on our CIGRE website and in promotional material the energy transition changes that will be made through our Technical Council, with a graphical illustration of the 16 Study Committees' areas of activities, highlighting the new power system trends. Also, we will adapt the names of Study Committees to better reflect energy transition interests.
- Membership will grow in diversity. The average age of members, currently in the mid-40s, will fall to the low 40s. The proportion of women with STEM (Science, Technology, Engineering, and Mathematics) backgrounds, currently at 11+%, will be 20%, and growing. We will also attract more women with other skillsets, such as economists, lawyers, regulators and environmentalists. NGN and WiE will be encouraged to be better represented and more active in technical activities.

- Improve our communication with academics to promote the new era of the Electric Power Industry (EPI) in universities and become a major player in the technical training of the new generation (students).
- Grow membership worldwide, showing a greater proportionate growth in underserved and underrepresented areas such as Africa and Asia.
- Establish a cooperation agreement with the International Energy Agency before 2024.
- Sustain the biennial Paris Session, growing to 5000 delegates with over 1000 papers (Scopus indexed). Also grow regional and national conferences with an increase in the number of events in underserved areas, and with higher attendances. Enhance the networking platforms at future Paris Sessions.
- Develop greater diversity in energy sectors and new entrants in support of the energy transition. The metric is to identify those new players as collective members or as exhibitors at Paris Sessions and other conferences.
- Develop and monitor the new products and technologies that are created by new players in the energy transition, such as renewables, electrification, and new use cases. CIGRE will advance as a repository of critical information for the entire electricity sector.
- Develop cash reserves needed for contingencies (e.g., loss of a Session due to circumstances beyond our control). An assessment is needed to redevelop the target for inflation and other factors, but the floor should be at least 6 million euros by 2030 (current targets are between 2 and 3 million euros – see Business Plan section).
- Grow visibility of CIGRE beyond members so that broader stakeholders are aware of the value we offer.
- Develop a CIGRE scorecard with quarterly updates for governing bodies. The four quadrants will be memberships, cash reserves, strategic measures and technical publications (or similar).

The plan requires a specific, resourced and adaptive membership growth program, with external expertise and significant internal resources to support the understanding, attraction and retention of new members (collective and individual) from outside of traditional energy segments. There should also be clear performance measures to monitor the success of this program.

# **Technical Knowledge Advancement**

CIGRE at its core is the development and dissemination of unbiased technical knowledge for power system expertise, broadening to all facets of the energy transition. The CIGRE Technical Council (TC) is the center of this advancement as are the National Committees (NCs) in their local initiatives in conferences and in assisting the Technical Council. Areas to advance include:

- Broaden the Technical Council, as per the action plan, to meet the future of the energy transition, therefore providing greater visibility to the following topics, in addition to current activities:
  - o Hydrogen
  - o Storage
  - Wind and Solar PV Sources
  - o Grids and Flexibility
  - o Consumer, Prosumers and Electrical Vehicles
  - o Sustainability and Climate Change
  - o Sector Integration
  - o Digitalization
- Develop and sustain CIGRE digital platforms for:
  - Searchability via any search engine for all CIGRE material based on key words as a minimum. (Note eCIGRE will be refurbished in 2023.) This includes technical material, publications, papers in CIGRE Science and Engineering (CSE) journal, conferences and Symposia, as well as CIGRE Academy webinars and other e-products.
  - Greater technical collaboration by members with the CIGRE Knowledge Management System (KMS).
  - Greater use of interactive video meetings to assist member participation.
  - Improved ability to use translation tools for greater ease of readership worldwide.
- Expand CIGRE Academy webinars by remote workshops on emerging topics and podcasts, including executive panels, policy makers, regulators and technical experts. Record and publish tutorial and other information sessions worldwide, adding another revenue source with sponsorships. Develop means by which members can attain continuing education or professional development credits.

- Develop greater sourcing of articles, papers and thematic material for our signature bimonthly publication ELECTRA, our CIGRE Science and Engineering (CSE) journal, and our newsletters. Make CSE a recognized and even more prestigious technical/scientific journal.
- Develop alternatives (e.g., ad hoc, or narrow scope) to traditional Working Groups to shorten publication timelines – preliminary and final - to about one year. This does not replace current Working Group efforts, but the current model of WGs can be reviewed to streamline and assist timelines of less than three years to publication completion.
- Develop better citation indexing ability (e.g., Scopus) for member Session, Symposia and Colloquia papers beyond just CIGRE Science and Engineering (CSE) Journal and expand CSE without detriment to quality.
- Develop a contingency plan if the Paris venue is not available, and local expansion options if needed to augment the Palais des Congrés.

# **Membership Growth Plan**

Membership growth is to sustain CIGRE's active technical resources and finances while addressing the evolving changes that are impacting power systems. Active participation and quality membership is vital for our technical foundation, and significant growth is needed to address the broader and more diverse challenges we are facing across the world.

Membership fees need to be affordable compared to similar organizations, particularly as we grow to meet the needs of the energy transition. It is our goal for growth in membership to achieve economies of scale that lessen the pressure to increase fees.

Specifically:

- We recognize that a specific, focused and resourced portfolio of actions will be required to be conceived, implemented and regularly updated to create and deploy value propositions that attract, engage and retain a much wider range of new market sector entrants who are supporting specifically the energy transition. This will include a wide range of corporate and international organizations.
- A parallel set of actions will be required to grow individual membership coming from those organizations (i.e., new market sector entrants). This will require complementary expert and promotional support, able to access those new target market segments, together with a significant enabling of National Committees to attract new entrants. We recognize that NCs are our usual entry points so we

must provide collateral media and promotions centrally to support them. In addition, our unique approach to Collective Memberships provides great entry points to new participants in the energy transition.

- Distribution is being transformed with distributed resources, EV charging networks and greater digitization and transparency. In addition to new market entrants, it is important to grow this distribution segment, including DSOs.
- At the same time, actions will be required to maintain and develop our existing and traditional membership base in the face of growing competition from other learned associations (e.g., IEEE, CIRED) that are also looking to develop into the energy transition space. Market surveillance will be needed for benchmarks and best practices. The competition is not predatory, and decisions are mainly maid on the ground of budget and time at company and individual levels. Our goal is to be a one-stop shop for power system expertise, including all power, energy and associated elements growing in the energy transition.
- We will need to study membership categories via a comprehensive and data driven approach. Specifically, we need to:
  - Study attrition to address issues (remains less than added growth but worthy of study).
  - Bridge the gap from student membership to young professional and then to individual membership.
  - Develop retention initiatives such as offering cigre.org email addresses.
  - Develop retention initiatives in member retirement.
  - Study collective membership categories, eCIGRE account allowances, limits for multi-national firms, identification of individuals within collective memberships to assure delivery of CIGRE publications, and adherence to the intent of the collective membership.
- The goal is to keep membership rates and registration rates in line with or below inflation (if possible, half the rate of inflation, and at or lower than the rates charged by similar organizations).
- We will improve membership and registration processes and requirements to reduce transactional overheads.

# **Financial Management**

CIGRE is non-profit but requires substantial holdings to endure contingencies such as pandemics and events that may cancel a Paris Session. The goals for financial management are:

- Maintain policies and procedures that ensure excellent audits annually, and implement all the improvements required by the auditor.
- An assessment is needed to redevelop the target for inflation and other factors. It is envisioned that in 2030, the threshold should be in 5-7 million euros (to be studied) with adjustments for inflation (see Business Plan section).
- Maintain member and registration rates affordable and no greater than inflation (if possible, half the rate on average).
- Increase revenues by growing membership, registrations, exhibitions, e-products, sponsorships and advertisements.
- Keep overheads low in proportion to sustained revenues and use economies of scale to achieve affordable fees.
- Consider a biennial budget approach to ensure that even year surpluses sustain odd year losses. Financials can be shown annually, and audited financials are annual.
- Develop a new approach to NC subsidies. Some nations have lower income levels per capita on average than others, which challenges "affordability" of fees. One solution could be to capture "charitable" contributions over fees such as the IEEE does. An account can be established to specifically help fund NCs needing assistance. Certainly, this complicates collections at NCs going to the CO, but a solution is worthy of study. An alternative or complementary solution could be to budget and structure NC subsidies to assist affordability. In recent years, the subsidy was 50,000 euros annually, but we have increased this in 2023 to 70,000 euros, and may budget higher going forward.
- The financial management of NCs remains their responsibility and is not included in our Business Plan. NCs typically attract revenues beyond the fees sent to the Central Office for their own sustenance and sustainability.
- One area of risk is geo-political conflicts. While CIGRE retains its apolitical status and peaceful means, conflicts may intercede financially and curtail member

participation. This is another reason for retention of cash reserves. Of course, this is minor compared to the impact on humanity engaged in those conflicts.

# **Structure & Governance**

CIGRE is a member based not-for-profit professional association, established under French Law in 1921. It is governed according to CIGRE's Statutes and Rules of Procedure which may be amended by General Assembly (membership) ballot. Our policies ensure adherence to our approved Statutes and Rules of Procedure applying best contemporary governance and business practices in compliance with Anti-Trust Guidelines.

CIGRE in 2023 is nearing 20,000 equivalent members, comprised of researchers, academics, engineers, technicians, suppliers, regulators and other decision makers, in over 90 countries. Our membership is a solid confederation of over 61 National Committees (NCs) with at least 40 members each, with many in the hundreds. We also have regional entities of NCs. Our membership pays fees at individual levels (Individual, Young Professional, Student), and at collective levels (Large Employers, Small Employers, Universities/Agencies).

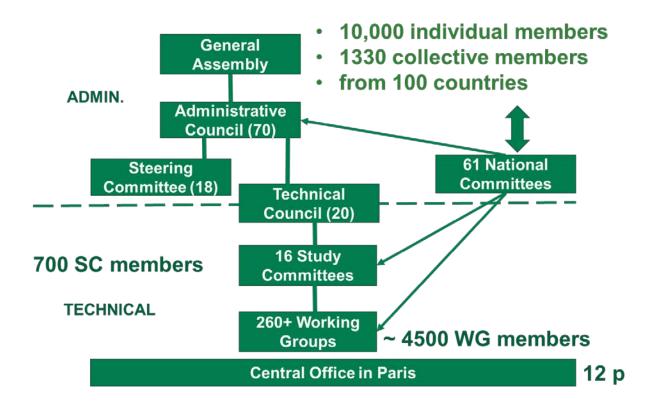
CIGRE is an organization consisting of thousands of volunteers as well as a small permanent organization based in Paris. There are more staff in National Committee organizations, depending on the size.

CIGRE today is organized as follows:

- The CIGRE General Assembly is CIGRE's congress comprised of all members for decisions as per CIGRE governance practices.
- The CIGRE Technical Council comprises the Chairpersons of CIGRE's 16 Study Committees, the Technical Council (TC) Chair, and select Administrative Council representatives. The TC Secretary assists the TC Chair. The Study Committees and their Working Groups are the technical foundation of CIGRE, operating independently as volunteers but under the unified goals of CIGRE represented by the Technical Council (TC).
- The CIGRE Administrative Council comprises the Chairs of the National Committees (or their approved proxies) and others such as past presidents, that reviews and approves the organization's plans on an ongoing basis.

- The CIGRE Steering Committee acts as the Executive and Strategic arm of the Administrative Council and makes strategic recommendations for approval by the Administrative Council. This structure will broaden as membership increases worldwide.
- CIGRE National Committees operate in their respective countries and have representation on the Administrative Council. The National Committees promote the CIGRE values and activities in their own countries.
- CIGRE Regional Councils assist aggregations of NCs for greater economies of scale and ease of collaboration, such as:
  - Asia Oceania Regional Council (AORC) includes the National Committees of Australia, China, Arab Countries of the Gulf (GCC), India, Indonesia, Iran, Japan, Jordan, Korea, Malaysia, New Zealand, and Thailand.
  - Ibero-American Regional Council (RIAC) includes the National Committees of Argentina, Brazil, Chile, Colombia, Mexico, Paraguay, Peru, Portugal and Spain, and members from Bolivia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Uruguay, and Venezuela.
  - The Nordic Regional Council of CIGRE (NRCC) includes the National Committees of Denmark, Estonia, Finland, Iceland, Norway and Sweden, and members from Latvia and Lithuania.
  - The South East European Regional Council (SEERC) includes the National Committees of Austria, Bosnia and Herzegovina, Croatia, Czech and Slovak Republics, Georgia, Greece, Hungary, Israel, Italy, Kosovo, Montenegro, North Macedonia, Romania, Serbia, Slovenia, Türkiye and Ukraine.
- CIGRE's Central Office, which is headed by the Secretary General, deals with the day-to-day operation of the organization within the approved guidelines of the organization. CIGRE's Central Office, located in Paris, comprises a small staff managed by the Secretary General.
- Specific groups are formed to support and develop young members (NGN Next Generation Network) and Women in Energy (WiE), to enhance the age and gender balance in our Association.

- Editorial Boards support CIGRE publications such as ELECTRA and CSE. These are voluntary boards that assist sourcing articles and papers for members and to attract new members. Primary CIGRE publications come from the Technical Council with Technical Brochures and Green Books.
- Three CIGRE Officers are elected by the Administrative Council, namely the President, Technical Council Chair (Vice President, Technical) and Treasurer (Vice President, Finance). We do not envision an increase for the elected officers and rely on the scaling of skill sets needed at the Central Office (CO).

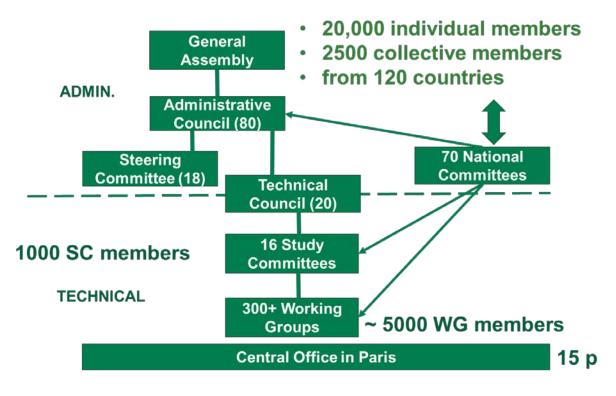


# 2023 ORGANIZATIONAL STRUCTURE

The organizational structure provides greater diversity as NCs do have some latitude within the governing documents to organize in ways that best suit their respective countries. This challenge efficiencies but can be viewed as a better practice to accommodate membership and attract new members.

To scale the organization to grow membership by 2030 and embrace the evolution of the electricity future, the following is required:

- The Central Office (CO) shall remain based in Paris, France due to our heritage and our tie to French Law. As required, contractors may be located anywhere in the world.
- Central Office will need to expand resources (e.g., employees, contractors, contract services) appropriate to service membership without burdening cost structures. Office expansion, modification or remote employees may need to be accommodated, but we do not anticipate great expense by 2030. Where possible, efficiencies should be pursued to achieve cost savings to offset or reduce resource increases. This can include process improvements, automation and data management. Expertise will be needed, including, for example, IT, marketing, membership services, accounting services and sales (e.g., sponsors and advertisements).
- Technical Council plans the need to expand volunteers in support of the Chair, Secretary and Study Committee Chairs to provide for the evolution and innovation of the electricity sector of the future, and for the growing level of participation with greater membership.
- Publications and communications are key. For consistency, we should continue to retain an editor to assist with English translations, and a copy editor to assist formatting consistency.
- CIGRE should develop ambassadors to showcase its strengths at conferences and other venues. This role can grow to be funded at the CO level with a clear role and reporting responsibility. Ambassadors are volunteers used to leverage the Secretary General and CIGRE officers. They can be Steering Committee members, Administrative Council members, or Technical Council members.
- NC mergers and regionalization should be encouraged if needed by the NCs to increase collaboration and reduce overheads.
- Membership and registration gateways and data need to mature to provide ease of centralized processing, ease of NC entry and independence, and the most efficient financial transactions avoiding higher transactional fees.
- Providing security for copyrights and access to members within membership structures that limits free access to non-members unless freely provided is important to maintain.



# **2030 ORGANIZATIONAL STRUCTURE**

The governance documents will need to be reviewed in a comprehensive manner rather than in parts. It is important that changes to these documents are evolutionary, not revolutionary. Areas that should be reviewed as we scale CIGRE include:

- Review membership hierarchy and structures to attract and retain members and new entrants. The structure should retain simplicity and auditability. See Membership Growth Plan section for specifics.
- Review governance matters at least every five years, and in the near term in emergency situations (e.g., pandemic lessons learned). Reduce rule impediments to scaling CIGRE.
- Monitor non-membership fee revenue activities such as advertising to ensure they are not biased.

# STRATEGIC PLAN DETAILS

# Our Strategic Task Force & Strategic Advisory Group on Energy Transition

The Strategic Task Force was commissioned by the CIGRE Steering Committee at the direction of CIGRE President, Michel Augonnet.

The CIGRE Technical Council (TC) has, on a parallel track, convened a Strategic Advisory Group on Energy Transition (SAG-ET) which incorporated external advisors' opinions. Both efforts culminate in this comprehensive Strategic Plan for CIGRE.

In addition to direct advice from Michel Augonnet, substantial advice was received from past CIGRE presidents, Rob Stephen (now CIGRE Science and Engineering Editor in Chief), Andre Merlin and Klaus Froehlich.

Our thanks go to all the volunteers who contributed to this effort, and the extended community of thousands of CIGRE volunteers "for power system expertise."

#### STRATEGIC TASK FORCE

Michael Heyeck (United States) Convener, VP Finance & Treasurer

Philippe Adam, Secretary General Phil Coughlan (Australia), NGN Chair Ciprian Gheorghe Diaconu (Romania) Jianbin Fan (China) Rudolf Meier (Switzerland) Adam Middleton (United Kingdom) Phil Southwell (Australia) Mark Waldron (United Kingdom)

#### STRATEGIC ADVISORY GROUP on ENERGY TRANSITION

Marcio Szechtman (Brazil) Convener, VP Technical & Technical Council Chair

The 16 Study Committee (SC) Chairs: Kevin Mayor (A1), Pascal Mueller (A2), Nenad Uzelac (A3), Geir Clasen (B1), Pierre Van Dyke (B2), Koji Kawakita (B3),

Joanne Hu (B4), Rannveig Loken (B5), Antonio Iliceto (C1); Jayme Darriba (B2), Maria Mercedes Vazquez (C3); Marta Val Escudero (C4); Alex Cruickshank (C5), Kurt Dedekind (C6), Simon Sutton (D1), Victor Tan (D2) Note: Marco Marelli (B1), Herbert Lugschitz (B2), Zia Emin (C4), Christine Schwaegerl (C6), Ralf Pietsch (D1) and Olga Sinenko (D2), and previous Chairs, contributed up to the end of their term, as well as Ja-Yoon Koo and Claus Leth Bak as Ad Co members.

Secretary General (Philippe Adam) and the TC Secretary (Alain Xémard).

External Advisors:

- Chief Technology Officers (CTOs) and others from equipment/services providers:
  - o Hitachi Energy, Dr. Gerhard Salge
  - o SIEMENS Energy, Mr. Ulf Katschinski
  - o GE Power Conversion, Dr. Philippe Piron
  - o Schneider Electric, Mr. Christophe Preve
- International Consulting member, Mr. Mark McGranahgan EPRI
- International Equipment Laboratory member, Ing. Domenico Villani CESI
- One CIGRE Member from an Oil & Gas Company (Shell), Vinay Sewdien
- CIGRE NGN representative, Andreas Lukaschik
- CIGRE WiE representative, Britta Buchholz

Also, previous SC Chairs: Marco Marelli (B1), Herbert Lugschitz (B2), Zia Emin (C4), Christine Schwaegerl (C6), Ralf Pietsch (D1) and Olga Sinenko (D2) contributed up to the end of their term. And, Ja-Yoon Koo and Claus Leth Bak as AdCo members in the TC.

# **Technical Council Strategic Plan**

The Technical Council (TC) Strategic Plan, integral to CIGRE's 2023-2030 revised Strategic Plan, was triggered in early 2022. Main aspects of the plan were debated and summarized as follows:

- Capture all relevant aspects of the Energy Transition (including Digitalization, Environmental, Social, and Governance ESG, Distributed Generation).
- Recognized as a truly E2E forum for information exchange on power systems.

 Expand CIGRE activities according to the expansion of the electricity business – CIGRE's growth.

To add value to this TC Plan, a Strategic Industrial Advisor Team of invited experts has been established in 2022 under the coordination of the TC, named "SAG-ET - Strategic Advisory Group on Energy Transition." This Group composition was described earlier. Those invited members worked in close cooperation with the 16 Study Committee Chairs.

During 2022, the SAG-ET met at first with the SC Chairs, who presented their views on the above topics. Then the Industrial Advisors presented their views and made suggestions, addressing mainly the following topics:

- Current and future scopes of each SC.
- Overlaps among SC, are they manageable, and are they clear to all our members?
- Are there better ways to group our SCs?
- Is CIGRE missing any relevant topics, are there gaps in our set of domains and scopes?
- How should we develop suitable links with parent organizations?
- Should CIGRE envisage being an energy organization or keep its tradition of leadership on power systems? How should CIGRE better capture relevant issues related to sector and market coupling, and business transformation in the Electric Power Industry (EPI)?
- Should CIGRE be better positioned to provide regulators, elected officials, and governmental bodies with unbiased documents on key issues related to energy, such as policies, security of supply, sustainable directions for development?
- Are there better ways to attract non-traditional professionals to CIGRE new players?
- Are there better ways to recruit new members for our WGs?
- How should CIGRE address issues such as scarcity of materials, manufacturing limits, decommissioning of massive amounts of batteries and solar panels, under the scope of sustainability factors or circular economy?
- How can CIGRE increase knowledge dissemination/communication?

• What is the ideal number and composition of regular members for the SCs?

In summary the above issues resulted in the following:

- The current TC organization and potential future changes are noted below for context; the SC nomenclature is also noted below for ease in understanding the organization.
- At CIGRE.org, the TC structure should be made clearer (e.g., re-grouping and reformatting) to provide context for CIGRE's Strategic Plan.
- A more in-depth re-grouping might impact the current organization of the TC in the existing 16 Study Committees; a new reform of the SCs might take a long time to implement and could destabilize the technical work related to the traditional technical subjects if not carefully considered.
- In 2002, the reform proposed two transversal (or intersection/overlap of) SCs D1 (materials and emerging test techniques) and D2 (information systems and telecommunications); what we see now is that almost all SCs show a level of intersection/overlap.
- The gap analysis showed that nothing critical is missing, explicitly demonstrating that CIGRE is addressing issues from supply through to consumption. Nevertheless, the electrical world is much more interactive with many interfaces and intersections among sectors, such as transmission and distribution, electricity and gas, multi-energy systems and so on. These are challenging factors for any scientific and technologically based international organization.
- CIGRE is a world class electrical/power systems organization, continually reinforcing its skills and leadership in that field. Although the electricity sectors and markets worldwide are expanding strongly due to the increase in renewables, continued electrification, and other energy transition factors, the potential expansion of CIGRE to a broader energy organization should evolve with great care so as not to drift from its core.
- Concerns related to materials and supply chain scarcity, full life cycle and decommissioning of installed capacity and components, and reduced number of qualified professionals should be part of CIGRE's scope.
- It is agreed that non-traditional players such as regulators, policy makers, and political and social stakeholders should be attracted to CIGRE's unbiased work. The "language" of CIGRE's communication vehicles (articles, magazines, newsletters) should attract the attention of these non-traditional players, not only

in SC C5 (electricity markets and regulation) and SC C3 (power system environmental performance), but with the entire TC Group. It is critical in this endeavor that CIGRE remains unbiased – influencing standards, practices and policy without lobbying.

- Non-traditional stakeholders will be attracted to CIGRE's unbiased information on the energy transition and more. They may not have a technical background in electrical engineering but will have huge impact on the success of CIGRE's growth. Therefore, CIGRE should have communication experts on board who will support the technical experts from the beginning of a Technical Brochure and publishing within ELECTRA and other CIGRE publications and communications. Translating the results in understandable ways for all stakeholders will be critical. In this field, CIGRE NGN and WiE groups could play a relevant role.
- CIGRE is doing a good job in highlighting in each call for experts that women and young members are welcome to become involved in new Working Groups. A step further could be to have CIGRE NGN and WiE representatives of the SCs involved in the call for experts, in addition to Regular Members and National Committees. CIGRE NGN has nominated one person for each SC to support this role and CIGRE needs to expand that.
- Since 2017, CIGRE has dedicated a great amount of effort to create periodic communications based on modern digital platforms. In this respect CIGRE will take advantage of these communication channels to disseminate technical knowledge to a broader audience, in line with the strategic theme 4 (i.e., increase participation and skills for our growing membership and improve the diversity of our membership to enhance our relevance in addressing the electric power systems of the future across the globe). Nevertheless, our Industrial Advisors have emphasized that more should be done towards producing fast, agile and timely communications.
- A strategic approach with the International Energy Agency (IEA) should be a priority for CIGRE due to its relevance in the energy sector. IEA's complementary role would be helpful to CIGRE given its strong role in the energy transition and hydrogen, as well as involvement with regulators and governmental bodies.
- The organization of the Paris Session should expand joint technical activities throughout the week and not concentrate them in the first two days of the Session. The Paris Session offers enormous potential for expanded common technical activities and expanded business and networking that are valued greatly by delegates. Suggestions include implementing summary sessions at the end of each day (e.g., "afternoon tea summary sessions") which exhibition

visitors can also attend. The summary sessions can include a summary by SC Chairs or special reporters, or a panel discussion with key players. In 2024, (for example) we should tentatively assign two SC/GDM (group discussion meetings) to compose on Tuesday and Wednesday those afternoon sessions with involvement of four SCs.

In addition to the short-term measures already described, a number of longer-term actions (3 to 5 years) have been identified:

- Analyze and align the Study Committees in relation to E2E and energy transition objectives.
- Analyze and adapt the Paris Sessions to improve common technical and business networking, and consequently, Symposia as well.
- Analyze and adapt more agile and timely CIGRE communications and publications.

# 2023 ORGANIZATION OF CIGRE TECHNICAL ACTIVITIES

Currently, CIGRE works within 16 domains of work, each with its own expert global Study Committee and program of work.

#### Group A – Equipment

- A1 Rotating electrical machines
- A2 Power transformers and reactors
- A3 Transmission and distribution equipment

#### **Group B – Technologies**

- **B1** Insulated cables
- B2 Overhead lines
- **B3** Substations and electrical installations
- **B4** DC systems and power electronics
- **B5** Protection and automation

#### Group C – Systems

- C1 Power system development and economics
- C2 Power system operation and control
- **C3** Power system environmental performance
- C4 Power system technical performance
- C5 Electricity markets and regulation
- C6 Active distribution systems and distributed energy resources

#### Group D – New Materials and IT

- D1 Materials and emerging test techniques
- D2 Information systems and telecommunication

# FUTURE ORGANIZATION OF CIGRE TECHNICAL ACTIVITIES BEGINNING IN 2024

The general organization will remain the same, with minor changes in some Study Committee names and scopes, to better reflect the recent evolutions. Three changes have been identified:

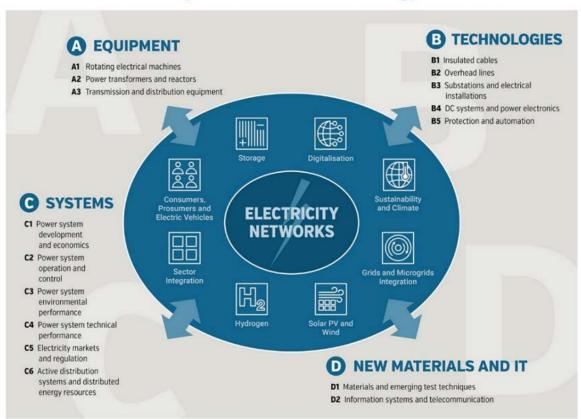
- A broader view on Power Generation, with a new name for Study Committee A1 of Power Generation and Electromechanical Energy Conversion.
- Sustainability and social aspects will be added in the naming of Study Committee C3 (Power System Sustainability and Environmental Performance).
- Cybersecurity will be added to the name of Study Committee D2 (Information Systems, Telecommunications and Cybersecurity).

The other Study Committees have been invited to suggest changes in their names if necessary.

To facilitate the understanding of the organization to new entrants, it is suggested to introduce an over layer of description using easily understandable and strategic terms.

Study Committees have been asked to describe the different links between this second layer and their activities in the new topics.

The Technical Committee is preparing a graphical presentation to illustrate the links between the second layer and the existing organization, as shown below with a simple example. This graphic is as example of the layering concept.



#### **CIGRE's Study Committees and the energy transition**

The Technical Council (TC) Strategic Plan, integral to CIGRE's 2023 Strategic Plan, can be accessed in the same file location as the present document. It comprises a comprehensive analysis of the TC evolution since the CIGRE Reform in 2002, a deep diagnosis of overlaps, gaps, intersection and transversal aspects, SWOT analysis, short- and medium-term enhancements as well as a future vision from the 16 Study Committees and their involvement with the Energy Transition.

# **Business Plan**

The CIGRE Business Plan is presented here through 2030. The financials do not include monies held at NCs for their sustenance, and only include the view from the Central Office. It is very important to CIGRE that NCs are financially sustained and independent to maintain our successful and historical confederation approach.

Based on historical trends from 2014, you will note assumptions for revenues and expenses. The critical element to note is revenues for fees grow at 7%, which is the threshold for membership growth. If membership "count" grows at 7%, the assumption then becomes holding membership fees flat. If membership count stagnates, we would need to grow the fee structure. Realistically, given the price sensitivity of fees, we should aim to hold any increases to below inflation (although less than like organizations today). This is an important point in the business plan. It is also worth noting that changes in the fee structure (e.g., discounts or extensions of free membership) will also affect income.

You will also note that the Paris Session (registrations and the exhibition) remains a significant part of our revenues. In 2022, that portion is nearly 78% of revenues. Even if you consider the biennial budget adding revenues for 2022 and 2023, The Paris Session in 2022 is just over 60% of the total. The Paris Session is our cash cow, and its success is worthy of continued focus without dilution of alternative options.

Therefore, our business model continues to rely on the Paris Session. To mitigate risks, however, we must endure the loss of the Session with cash reserves. Cash reserves in 2030 are above 6 million euros, but if you follow the trends, it appears the 6 million euros threshold may not be robust. A study will be needed to develop a new target while adhering to our nonprofit status with French Law.

For cash reserves, the 2–3 million euro threshold was established in 2014. Until recently, inflation has been low. For 2022 euros, inflation yields a multiplier of 1.25 to 1.30 from 2014. In 2030, using today's inflation rates, a 4 to 6 or 5 to 7 million euro range may be appropriate. However, given the continued reliance on the Paris Session revenues, we may need to be above 6 million euros as a floor given that 2022 Paris Session revenues exceed 6 million euros.

Growth in sponsorships, advertising and e-product revenues remains an opportunity to help mitigate reliance on the Paris Session, but is not sufficient to offset that reliance completely. The refurbishment of eCIGRE in 2023 should help sponsorships and advertisements, but again not sufficient to offset the Paris Session reliance. As our membership survey shows, price sensitivity creates pressure to maintain fee increases below inflation, if not flat. That avenue for increasing revenues must be viewed

cautiously so as not to increase attrition. The conclusion is to continue focusing on the Paris Session, grow our membership, and increase cash reserves to endure its loss for one Session year.

Histor	rical data											
	Revenues (k€)	Historical data							Observed average annual rate 2014-2022			
	Year	2014	2015	2016	2017	2018	2019	2020	2021	2022		
	Membership fees	1120	1153	1207	1289	1256	1360	1367	1436	1619	5,1%	
	Registration fees	3061	33	3143	30	3791	23	227	490	4400	7,2%	
	Exhibition revenues	1422	0	1753	0	2199	0	45	192	1857	9,1%	
	Sponsorships/Advertising	162	48	83	26	80	24	16	50	75	9,9%	
	E-product sales	74	40	50	36	56	50	24	259	80	9,2%	
	Financials & other	150	140	95	72	109	124	67	71	60	0,0%	
	TOTAL	5988	1414	6331	1454	7492	1581	1746	2498	8101	4,2%	
	Expenses (k€)			Historical data								
	Year	2014	2015	2016	2017	2018	2019	202.0	2021	2022	1	
	CO staff	1202	1055	1494	1214	1499	1406	1577	1585	1513	3,6%	
	Office rents & services	92	91	87	89	75	81	85	84	95	1,5%	
	Membership services	647	664	704	648	792	496	581	644	761	2,7%	
	Professional support	41	54	52	190	286	276	260	251	300	22,1%	
	Statutory services	103	91	163	104	209	125	24	32	194	9,8%	
			4.5	2286	11	2981	22	76	925	3134	12,8%	
	Session, symposia & webinar costs Other	1993 199	13 209	199	172	2301	192	210	242	3434	4,9%	

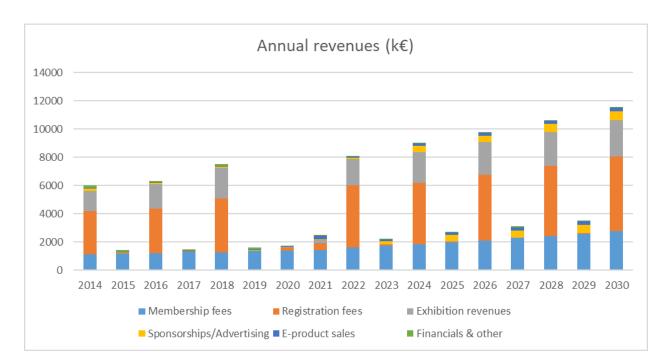
CIGRE business plan 2023 - 2030 draft 1

# 2014-2022 HISTORICAL FINANCIAL INFORMATION

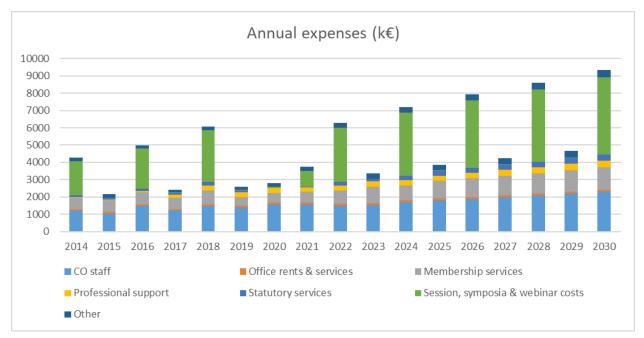
Observed average annual rate 2014-2022	Assumed average annual rate after 2023	Revenues (k€)
		Year
5,1%	7%	Membership fees
7,2%	7%	Registration fees
9,1%	5%	Exhibition revenues
9,9%	7%	Sponsorships/Advertising
9,2%	7%	E-product sales
0,0%	0%	Financials & other
4,2%		TOTAL

Observed average annual rate 2014-2022	Assumed average annual rate after 2023	Expenses (k€)
		Year
3,6%	5%	CO staff
1,5%	3%	Office rents & services
2,7%	5%	Membership services
22,1%	4%	Professional support
9,8%	5%	Statutory services
12,8%	7%	Session, symposia & webinar costs
4,9%	5%	Other
5,3%		TOTAL

#### 2023-2030 FINANCIAL TREND ASSUMPTIONS

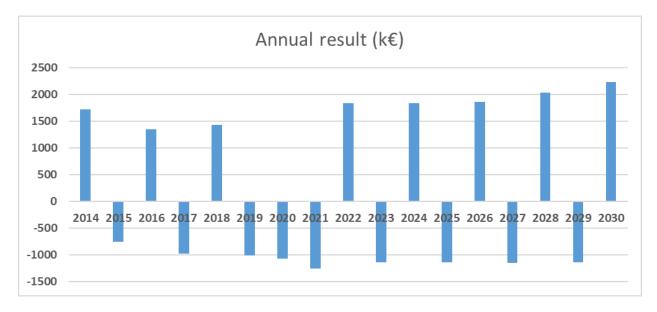




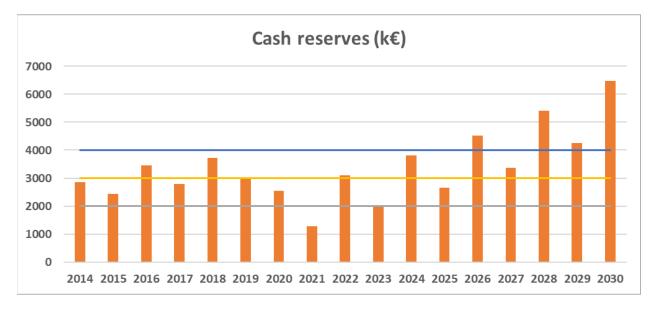


# 2014-2030 FINANCIAL REVENUES AND EXPENSES





2014-2030 ANNUAL FINANCIAL NET INCOME RESULTS



# 2014-2030 FINANCIAL CASH RESERVES

# **Final notice**

Our governance body, the Administrative Council of CIGRE, has approved this document as the framework for entering CIGRE's second century. This is the 2023 edition of a document that will be updated periodically as we move towards a 2030 horizon.

No part of this document provides authority for action by staff or members of CIGRE, or by any other individual or group. Any action purporting to be authorized by this document will not be considered binding on CIGRE. The strategies set out in this document are approved for planning purposes and are reviewed periodically in accordance with the governance processes of CIGRE.

For more information, contact the CIGRE Secretary General (info@cigre.org), 21 Rue D'Artois, Paris 75008 France.

# APPENDIX

# **Membership Surveys**

CIGRE conducted a comprehensive 2022 individual membership survey and a 2022 Paris attendee survey in advance of this edition of the Strategic Plan. The following summary of these surveys was used to assist with the Plan.

# 2022 Membership Survey

Overall, the results of the survey were member positive, with CIGRE in most cases generating good to excellent levels on differentiation, perceived value, and member satisfaction. 93% of respondents indicated that they would renew their membership.

- The digital platform CIGRE offers (eCIGRE.org) is highly valued.
- The knowledge aspects of CIGRE are highly valued. The ability to collaborate with experts, the opportunity to be involved in SCs and WGs, and global perspectives are all ranked just behind eCIGRE.org and ELECTRA/CSE as the most important value offered by CIGRE.
- Networking and professional development were ranked well, and high enough for CIGRE to have confidence its offering and focus on the points mentioned above differentiates it from other organizations that also offer these attributes.
- We are not reliant on the Paris Session for perceived membership value. We note that the survey was close to the pandemic experience, and we did not lose membership. That said, the event is regarded positively, with non-attendance largely due to cost of travel or registration and inability to get time off work (post-pandemic).

However, a minority risk of membership attrition was identified. This is summarised as follows:

- 7.3% of respondents view membership as optional.
- 16.8% of respondents perceive that other organizations may offer similar experiences and products.
- Around 24% of respondents ranked price as either their #1 or #2 influencing factor when considering membership renewal.

Should CIGRE increase pricing significantly or change the nature of membership value, this risk may be realised.

# Analysis

While overall responses were broad-ranging and insightful, this report focuses on three key areas - how unique is CIGRE perceived to be, what attributes of CIGRE do individual members (IMs) value the most, and how satisfied and likely to renew are members?

For background, there were 1052 responses to the survey (a consolidation of all language versions), and this represents over 10% of individual memberships – a strong survey response rate. Although some groups (e.g., CIGRE's very active NCs in the developed world), responded at a higher rate than others, there was still sufficient diversity to inform meaningful analysis. For example, responses from women equated to 10%, which aligns with the current gender profile of the overall membership.

#### 1. Level of Discretion

It is important to understand member perceptions about how unique CIGRE is. Respondents were asked to state how important membership is in their professional life, whether they felt CIGRE had any notable competitors and who paid for their membership.

Key findings from these two lines of enquiry are summarised in 1.1 and 1.2 below.

## 1.1 Level of Discretion: "Importance of your membership to you" Question

Overall, respondents saw their membership as important:

- 77.8% rated belonging to CIGRE as important or very important.
- 14.8% rated membership somewhat important.
- The 'membership is optional' response was the lowest rating for importance with 7.3% selecting this option.

While this is a good result, those who consider membership to be optional was sufficiently high to require a closer look because this group represents some 'loss' risk should CIGRE increase pricing further or change aspects of membership value.

Key notes on the 'membership is optional' group:

• 'Membership is optional' was highest among people who have been members for less than 2 years, at 14%. It dropped to 8% for 2-5 years and 5% for 5 years+.

- This underlines the need to increase new member participation and to encourage them to embrace the world of CIGRE with more active roles in Working Groups, etc.
- Also, communications to promote different aspects of membership, such as our eCIGRE ever increasing supply of Technical Brochures will likely drive this number down.
- Only 4% of developing world National Committee respondents selected 'membership is optional.' This may reflect a high perceived value among that group in belonging to a global organization that encompasses more developed economies and the advantages of sourcing knowledge from it.

#### **1.2 Perceived Competitors**

This question was put to the membership: "When you think about CIGRE do you believe other organizations have alternative offerings?" They were asked to score their responses on a spectrum.

Variance across years of membership in CIGRE was minor. However, as shown above, variance between 'developing' and 'developed' was more pronounced.

- CIGRE has done well to be perceived as quite differentiated. However, this should not be taken for granted, with only a few members rating CIGRE as unique and quite a large number perceiving that other organizations offered similar products.
- Around 17% of members perceive there are other organizations offering similar things, so CIGRE must be mindful of this when making changes to pricing or membership rights as this group would likely view membership as more discretionary when under financial or discretionary pressure.

#### 1.3 Who Paid?

As part of establishing an understanding of discretionary behaviour, members were also asked to indicate whether they paid for their membership themselves, or their employer did.

- In the highly developed economies 41% paid themselves and their employer 57%.
- In the rest of the world NCs (so the developing world) 78% paid themselves and their employer 19%.
- This data shows a high level of personal interest within the developing world and reinforces the growth opportunities CIGRE can pursue in targeted geographies such as Asia and Africa.

### 2. The Most Valued Attributes of CIGRE

A key objective of the survey was to assess the value members place on the various attributes of membership. Members were asked to rank the value of these from excellent to no value.

- CIGRE's digital platform is a crucial driver of perceived value.
- eCIGRE is our most important asset for members across all profiles. This supports the planned redevelopment in 2023 and the push to make Collective Members pay a fair amount for their multi-account access.
- Both digital magazines are consistently ranked highly, which supports ongoing content marketing of ELECTRA and adding promotion of CSE content. Both support the CIGRE brand and complement the download-based experience of the eCIGRE.org engagement.
- The knowledge development program is crucial to CIGRE perceived value delivery. The opportunities to participate in working groups or SCs and the publications produced and made available via digital platforms are all highly valued.
- A further connection with the above point is the 'collaborating with experts' attribute is also consistently highly ranked.
- CIGRE's value with individual members (IMs) is clearly understood globally. Local activities, while still valued, ranked consistently below global attributes.
- This perceived global value encourages the high levels of website traffic on the central websites and the number of membership applications occurring in that space vs the NC sites. This further supports automation of membership sign up, and therefore the gateway.
- Networking and professional development are important aspects of CIGRE's perceived value but are not ranked most important, indicating that members belong for other more important reasons. This is encouraging as many other professional associations also offer networking and professional development. It is those other highest ranked attributes that differentiate CIGRE.
- The Paris Session is valued but, given the limitations that face-to-face events can impose on a globally dispersed community, it is encouraging to see that CIGRE is not dependent on it for creating perceived value. This helps to explain how CIGRE membership attrition was avoided during the worst pandemic years. See more on the Session in the next section.

- Energy transition and CIGRE's value in this space is ranked higher by younger members. We will need to strengthen the role of this attribute across groups in driving member perceived value of CIGRE to ensure the brand remains contemporary. This activity has already begun.
- The rankings help inform our tactical marketing activities aimed at growing membership. Our current 'why join CIGRE' message framework is supported by this data. We will use this data to help inform the 'message hierarchy' of promotional activities that focus on specific segments (e.g., WiE).

## 3. Feedback on the Session (Survey before 2022 Session)

Members were asked if they had attended a Paris Session before and, if not, what were the main factors that prevented them from doing so.

- Overall, the responses were positive, with only 6.5% seeing limited value in the event.
- At 32%, the main reason stated for lack of attendance was cost of travel.
- Around 15% stated that they could not get time off from their employer. A similar number stated that the cost of the event was (too) high.
- 23% had not attended because there had not been an in-person event since they joined.

## 4. Levels of Satisfaction and Membership Renewal

In the final section of the survey, we measured satisfaction with membership through a series of indirect and direct questions.

- When asked if they would recommend CIGRE to colleagues and other industry professionals an overwhelming 89% indicated they would, with less than 1% indicating they would not. The remainder indicated that they would in certain situations.
- 91% of respondents rated their experience of CIGRE either good or excellent. Less than 1% rated it poor, with the balance rating it acceptable.
- 93% of respondents indicated they were likely to renew membership.
- Members were asked to rank key attributes of membership again when they considered renewal. This also included price to allow us to assess the risks. Responses indicated that the same attributes are valued in renewal as generally (see section 2) with eCIGRE.org coming through as number 1 again.

• <u>Around 24% of members' ranked membership cost either number 1 or 2.</u> This is a significant number and indicates that some price sensitivity exists. This should be viewed in the context of a highly satisfied group who value their membership, but in the current inflationary environment we need to be aware of risks when you couple this with the small but not insignificant number of people (7.3%) who stated membership was optional.

The longer people are members the greater they perceive value, the more likely they are to renew and recommend CIGRE, and the higher they rate their satisfaction. We need to bring forward this perception of value earlier in the life of memberships through communications, welcome packs, etc. NCs are key in facilitating this.

While price is not the number one decision driver for membership renewal across all respondents, implied price sensitivity could cause substantial attrition should CIGRE increase prices above accepted norms or lessen membership rights.

We should not take membership renewal for granted. While the numbers are high the risk of attrition is nevertheless present and something we normally experience anyway. A key strategy in 2023 will be to reduce attrition and increase membership retention. This will require direct action to enhance our communications with members about the value of various aspects of their membership throughout the year.

# 2022 Paris Attendee Survey

The 2022 Paris Session survey had five questions relating to this Strategic Plan. The rank order of all answers (all included as rank was close) follow:

- Q1 > According to you, why does CIGRE exist?
  - To support sharing and developing power system technical expertise across all aspects from the points of generation to the end customers.
  - To foster innovation in relation to power systems.
  - To enable networking amongst its members.
  - To support the improvement of existing power systems to enhance sustainability.
  - To support working groups to examine particular aspects and perspectives of the power system.
  - To examine global power system practices across different power systems in individual countries.

- To provide a vehicle to support the development of a diverse, next generation of talent for the power industry.
- To help developing countries improve and grow sustainable power systems.

#### • Q2 > What is primary purpose and strength of CIGRE's today?

- To provide an open international platform for knowledge sharing among utilities, manufacturers, institutes, and academia etc.
- To promote cleaner and more accessible electricity for all mankind by building better future power systems.
- To serve as a think tank for the global energy industry.
- To promote power system knowledge accumulation and inheritance.
- To accelerate innovation and promote their applications in the power industry.
- To create more value and benefits for communities in different countries.
- To become the cradle to cultivate young professionals for energy sectors.

#### • Q3 > What do you expect from CIGRE?

- Technical excellence in power systems.
- Future perspectives on tomorrow's technical challenges (future oriented opinion), inclusive of boundary technologies and industries.
- Up to date views on the technical issues of the day.
- Open, totally compliant, and collaborative working of global industry experts.
- International viewpoint.
- Technical relevance to its membership.
- Non-commercial opinion and focus.
- Non-political and impartial.
- Nurturing of next generation industry talent.
- Fully inclusive of diverse views.

## • Q4 > If you had to improve one thing in CIGRE, what would it be?

- New structure of Study Committees with visibility for new topics such as: storage, Renewable Energy Systems, Hydrogen, e-mobility.
- Providing more tutorials showing examples, best practice for young professionals and academia.
- CIGRE position papers to be introduced to policy makers at global and national levels.
- Improve the CIGRE administration with a single database covering CIGRE enrollment, membership fees etc.
- Differentiated individual membership fees according to their buying power.

- Accept, as a mandatory rule, young professionals in WGs supported by a tutor from the same National Committee.
- Provide more support to developing countries (with or without NCs), including participation by CIGRE experts (tutorials).
- CIGRE to be more actively inclusive of diverse members (e.g., geographic, African presence, women).
- CIGRE to offer Professional Accreditation (e.g., Chartered Engineer CEng, Professional Engineer - PEng).
- Global/regional companies to be accepted as different collective members for different countries where they are doing relevant business.
- Q5 > Which future goals CIGRE should pursue in coming years to increase relevance?
  - Increase CIGRE's contribution to the energy transition.
  - Improve accessibility and ease-of-use of the CIGRE database (eCIGRE).
  - Make the organization more agile and suitable to continue working in a fastchanging environment.
  - Extend CIGRE's field of expertise to additional technical domains.
  - Increase communication and cross-works between CIGRE Study Committees.
  - Reinforce its online presence through web, apps and social media.
  - Partner with other relevant organizations for co-contributions (co-working group, co-events, etc.).
  - Increase the presence of women and NGN in working groups and standard CIGRE activities.
  - Increase transparency (ask often for members' input), communicate more on CIGRE's works in progress, organization changes, financial situation.

The detailed results of this survey, based on 759 responses received, are provided below:

	Delegates' sur	vey
Q1/ According to you, why does CIGRE exist ? (SQ #1)	Score (8-6-2)	Rank
To support sharing and developing power system technical expertise across all aspects from the points of generation to the end customers	7,14	1
To support the improvement of existing power systems to enhance sustainability	5,64	2
To foster innovation in relation to power systems	5,45	4
To support working groups to examine particular aspects and perspectives of the power system	5,50	3
To examine global power system practice across different power systems in individual countries	5,29	6
To help developing countries improve and grow sustainable power systems	5,36	5
To enable networking amongst its members	4,74	7
To provide a vehicle to support the development of a diverse, next generation of talent for the power industry	4,68	8

	Delegates' sur	vey
Q8/ What is the primary purpose and strength of CIGRE today? (SQ #2)	Score (8-6-2)	Rank
To promote cleaner and more accessible electricity for all mankind by building better future power systems	5,81	2
To serve as a think tank for global energy industry	5,65	3
To provide an open international platform for knowledge sharing among utilities, manufacturers, institutes, and academia etc.	6,78	1
To accelerate innovation and promote their applications in power industry	5,22	6
To create more value and benefits for communities in different countries	5,46	4
To promote power system knowledge accumulation and inheritance	5,23	5
To become the cradle to cultivate young professionals for energy sectors	4,53	7

	Delegates' survey	
Q14/ What do you expect from CIGRE? (SQ #3)	Score (8-6-2)	Rank
Technical excellence in power systems	6,65	1
Technical relevance to its membership	6,08	2
Up to date views on the technical issues of the day	5,88	3
Future perspectives on tomorrow's technical challenges (future oriented opinion), inclusive of boundary technologies and industries	5,79	4
International viewpoint	5,45	6
Fully inclusive of diverse views	5,71	5
Open, totally compliant and collaborative working of global industry experts	5,44	7
Nurturing of next generation industry talent	5,22	10
Non-commercial opinion and focus	5,25	9
Non-political and impartial	5,34	8

Q19/ If you had to improve one thing in CIGRE, what would it be? (SQ #4)	Score (8-6-2)	Rank
New structure of Study Committees with visibility for "new topics" such as : storage, Renewable Energy Systems, Hydrogen, e-mobility.	6,29	1
Providing more tutorials showing examples, best practice for young profesionals and academia	6,13	2
Differentiated individual membership fees according to their power of buying	5,79	4
CIGRE position papers to be introduced to policy makers at global and national levels	5,84	3
Global/regional companies to be accepted as different collective members for different countries where they are doing relevant business	5,41	5
Accept, as a mandatory rule, young professionals in WGs supported by a tutor from same National Committee	5,21	7
Improve the CIGRE administration with single data base covering CIGRE enrolment, membership fees etc	5,38	6
Provide more support to developing countries (with or without NCs), including CIGRE experts (tutorials) participation.	5,17	9
CIGRE offer Professional Accreditation (E.g. Chartered Engineer / CEng; Professional Engineer / PEng) /	5,04	10
CIGRE to be more actively inclusive of diverse members (E.g. geographic / African presence; population / growing the womens membership)	5,20	8

	Delegates' sur	vey
Q25/ Which future goals CIGRE should pursue in coming years to increase relevance? (SQ #5)	Score (8-6-2)	Rank
Increase CIGRE's contribution to the energy transition	6,89	1
Extend CIGRE's field of expertise to additional technical domains	5,75	3
Reinforce its online presence through web, apps and social media	5,47	5
Make the organization more agile and suitable to continue working in a fast- changing environment	5,76	2
Improve accessibility and ease-of-use of the CIGRE database (e-cigre)	5,67	4
Increase woman and NGN presence in working groups and standard CIGRE activities	5,17	7
Increase transparency* and ask often for members' inputs - *communicate more on CIGRE's works in progress, organization changes, financial situation	5,35	6
Partner with other relevant organizations for co-contributions (co working group, co events ?)	5,10	9
Increase communication and cross-works between CIGRE study committees	5,15	8

## **October 2022 Membership Survey**

The October 2022 members' survey had the same five questions relating to this Strategic Plan. Unlike the previous survey, the proposed multiple choice answers were presented randomly. The results of this survey, based on 99 responses received, are provided below:

	October surve	ey
Q1/ According to you, why does CIGRE exist ? (SQ #1)	Score (8-6-2)	Rank
To support sharing and developing power system technical expertise across all aspects from the points of generation to the end customers	4,60	1
To support the improvement of existing power systems to enhance sustainability	2,58	3
To foster innovation in relation to power systems	3,10	2
To support working groups to examine particular aspects and perspectives of the power system	2,50	4
To examine global power system practice across different power systems in individual countries	2,03	5
To help developing countries improve and grow sustainable power systems	1,37	8
To enable networking amongst its members	1,89	6
To provide a vehicle to support the development of a diverse, next generation of talent for the power industry	1,39	7

Other answers:

- To publish and discuss the opinions of specialists and experts on key problems.
- To provide essential material for standardization in a reasonable time.
- To promote the importance of the power system and those who engage in it across the global community.
- To support standardization bodies with scientific research.
- Inspire women and young engineers for active participation in CIGRE.
- To optimize the value of technical expertise in the power industry.
- To optimize the efficient delivery of energy for communities.

	October surve	у
Q8/ What is the primary purpose and strength of CIGRE today? (SQ #2)	Score (8-6-2)	Rank
To promote cleaner and more accessible electricity for all mankind by building better future power systems	2,79	4
To serve as a think tank for global energy industry	2,43	5
To provide an open international platform for knowledge sharing among utilities, manufacturers, institutes, and academia etc.	4,94	1
To accelerate innovation and promote their applications in power industry	3,89	3
To create more value and benefits for communities in different countries	1,20	7
To promote power system knowledge accumulation and inheritance	4,10	2
To become the cradle to cultivate young professionals for energy sectors	1,48	6

Other answers:

• To attract participation from middle age group companies' academics replacing old generation.

	October surve	у
Q14/ What do you expect from CIGRE? (SQ #3)	Score (8-6-2)	Rank
Technical excellence in power systems	4,14	1
Technical relevance to its membership	1,60	8
Up to date views on the technical issues of the day	2,32	4
Future perspectives on tomorrow's technical challenges (future oriented opinion), inclusive of boundary technologies and industries	3,00	3
International viewpoint	1,96	5
Fully inclusive of diverse views	0,26	10
Open, totally compliant and collaborative working of global industry experts	3,11	2
Nurturing of next generation industry talent	1,81	7
Non-commercial opinion and focus	1,57	9
Non-political and impartial	1,86	6

Other answers:

- Empower women and inspire for active participation.
- Promotion of equity of opportunity for women and other disadvantaged groups in relation to the power industry.

	October surve	у
Q19/ If you had to improve one thing in CIGRE, what would it be? (SQ #4)	Score (8-6-2)	Rank
New structure of Study Committees with visibility for "new topics" such as : storage, Renewable Energy Systems, Hydrogen, e-mobility.	3,24	3
Providing more tutorials showing examples, best practice for young profesionals and academia	3,89	1
Differentiated individual membership fees according to their power of buying	1,40	9
CIGRE position papers to be introduced to policy makers at global and national levels	3,31	2
Global/regional companies to be accepted as different collective members for different countries where they are doing relevant business	1,11	10
Accept, as a mandatory rule, young professionals in WGs supported by a tutor from same National Committee	2,31	4
Improve the CIGRE administration with single data base covering CIGRE enrolment, membership fees etc	2,18	7
Provide more support to developing countries (with or without NCs), including CIGRE experts (tutorials) participation.	2,19	6
CIGRE offer Professional Accreditation (E.g. Chartered Engineer / CEng; Professional Engineer / PEng) /	2,00	8
CIGRE to be more actively inclusive of diverse members (E.g. geographic / African presence; population / growing the womens membership)	2,29	5

Other answers:

- Make sure that eCIGRE becomes indexed by the large search engines, so that all the valuable publications can have an increased out-reach (not only keeping knowledge internal for the CIGRE community which is the case today).
- Technical papers should be visible on Google scholar so that they can be reached by the maximum number of researchers.
- Open and transparent election for working groups.
- Accept Women members as a mandatory rule in WG, supported by a tutor from the same NC.
- Eliminate non active members from SCs and WGs. Free supply of technical brochures to young professionals.

	October surve	у
Q25/ Which future goals CIGRE should pursue in coming years to increase relevance? (SQ #5)	Score (8-6-2)	Rank
Increase CIGRE's contribution to the energy transition	3,12	4
Extend CIGRE's field of expertise to additional technical domains	1,84	9
Reinforce its online presence through web, apps and social media	3,20	3
Make the organization more agile and suitable to continue working in a fast- changing environment	3,95	1
Improve accessibility and ease-of-use of the CIGRE database (e-cigre)	3,76	2
Increase woman and NGN presence in working groups and standard CIGRE activities	2,00	8
Increase transparency* and ask often for members' inputs - *communicate more on CIGRE's works in progress, organization changes, financial situation	2,19	7
Partner with other relevant organizations for co-contributions (co working group, co events ?)	2,30	5
Increase communication and cross-works between CIGRE study committees	2,21	6

Other answers:

• Joint working groups with IEEE/IEC/EU/BIS/JIS standards.

The comparison between the two surveys (Paris attendee and October 2022 Membership) shows a rather good alignment of the results for the first three questions.

However, to question 4 (What to improve?), delegates have selected "New structure of Study Committees with visibility for "new topics" such as: storage, Renewable Energy Systems, Hydrogen, e-mobility, although members have preferred "Providing more tutorials showing examples, best practice for young professionals and academia".

Same for question 5 (Future goals), delegates have selected *"Increase CIGRE's contribution to the energy transition,"* although members have selected *"Make the organization more agile and suitable to continue working in a fast-changing environment."* 

## Glossary

BIS – Bureau of Indian Standards

- CEng Chartered Engineer
- CESI Centro Eletrotécnico Sperimentale Italiano

CIRED – International Conference on Electricity Distribution.

CIGRE – Our organization, founded in 1921. CIGRE is an acronym for power system expertise. The French abbreviation lives in historical documents, but our brand remains one word with no accent noted, CIGRE.

CIGRE Administrative Council – A governing body that represents all National Committees and members.

CIGRE Central Office (CO) – The CO is centralized to handle member services based in Paris France.

CIGRE General Assembly – The full CIGRE membership that votes on specific strategic items proposed by the CIGRE Administrative Council.

CIGRE Green Books – A CIGRE book that substantially captures a technical subject.

CIGRE KMS – Knowledge Management System

CIGRE Membership (Equivalent) – Today, members include a stratum of Individual Members, students, young professionals, full members. Also, a stratum of Collective Members includes employers of over 500 employees, under 500 employees, and universities. The Collective Membership level is ideal for new entrants. The "equivalency" relates somewhat to fees, i.e., young professionals pay half and therefore 0.5 equivalent membership, and collectives include multiple equivalents due to organizational groupings. Student memberships are free, and at times included as 1.0 members due to their potential, but formally not included.

CIGRE National Committee(s) (NCs) – NCs are organized by nations independently, but part of CIGRE. Regional Councils (RCs) are informal groupings of NCs, typically in a geographic region.

CIGRE NGN – Next Generation Network, formally organized internationally and at NC levels. They represent professionals below age 35, bridging student members (free), young professionals (transitional for two years half-price), and full individual members.

CIGRE Science and Engineering (CSE) journal – A digital publication of the best papers (Scopus indexed, meaning easily searchable and citable).

CIGRE Steering Committee – A strategic body limited in membership that reports to the CIGRE Administrative Council.

CIGRE Technical Council (TC) – The TC is the technical foundation of CIGRE organized by Study Committees (SCs) with Working Groups (WGs) reporting to the SCs.

CIGRE WiE – Women in Energy, formally organized internationally and at NC levels. They represent women in CIGRE, growing diversity in our membership.

DSO – Distribution System Operator

eCIGRE – CIGRE's search engine for all publications free to members.

ELECTRA – CIGRE's bimonthly signature digital magazine in coordination with CIGRE newsletters, Leadership Circle (for CEOs and decision makers), Future Connections (sourced from the Technical Council), and Power Talk (sourced for Life of the Association articles in ELECTRA).

- ESG Environmental, Social, and Governance
- **EPI Electric Power Industry**
- EPRI Electric Power Research Institute
- EU European Union
- EV Electric Vehicle

E2E – End-to-End is the subtext of the CIGRE brand meaning CIGRE is a "one-stopshop" for the broadest extent of power system expertise. We are no longer limited to the grid but include all facets in the industry affecting the grid, at micro or macro levels, with or without interconnection. End to end power system expertise" refers to a comprehensive understanding and knowledge of all aspects involved in the design, implementation, operation, maintenance, reuse, and ultimate disposal of a power system. It encompasses a deep understanding of various components, such as generation, transmission, distribution, and utilization of electrical power, as well as the associated technologies, regulations, and best practices. Experts with end to end power expertise are capable of providing holistic solutions and guidance to optimize the efficiency, reliability, and safety of power systems.

**GDM - Group Discussion Meetings** 

- IEA International Energy Agency
- IEC International Electrotechnical Commission
- IEEE Institute of Electrical and Electronics Engineers
- JIS Japanese Industrial Standards
- PE or Peng Professional Engineer
- PV Photo-Voltaic (Solar Panel)
- Scopus Indexed literature, papers, and publications, searchable and citable.
- SWOT Strengths, Weaknesses, Opportunities, Threats (analyses)
- TSO Transmission System Operator