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CELEBRATING 65 YEARS OF SETA

LIMITLESS OPPORTUNITIES FOR UNLIMITED GROWTH

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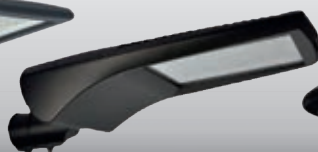
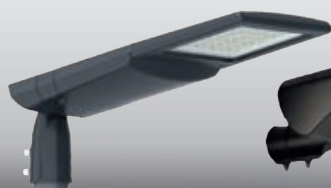


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- 10** • President,
Singapore Electrical Contractors &
Licensed Electrical Workers Association
President,
Specialists Trade Alliance of Singapore

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MESSAGE

Mr Louis Lim

President

Singapore Electrical Trades Association



It is heartening to know the journey of SETA, when first formed in 1958 to promote friendship and cooperation of members of same trade. Activities were focussed on ironing out differences of opinion on electrical installation and towards safe usage of electrical appliances and tools. Today, after 65 years, these activities remain well-forged and valid.

For over half a century, SETA has transformed in tandem with national development and demographic changes. Nothing has been spared when it concerns impacts to trade and practices for the electrical industry be it new policy or regulations, global trend on environmental protection, sustainability, decarbonisation, circular economy, etc. SETA helps to disseminate the good intents and collaborate on necessary works to ensure resilience and practical solutions – all these with the aim to achieve the objectives or challenges with coherence and close mutual understanding with agencies and alliances to meet local regulatory changes or global challenges.

The last five years, more than half the time was to meet changing challenges of covid-19 pandemic. The market and members have had to manage uncertainties of payment for unexpected costs during Covid-19 and unexpected supply chain logistics price increases during restart in business.

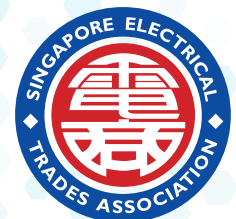
With increased connectivity and interoperability for smart applications in industries and households;

alliances collaboration with other trades' association have becomes vital for SETA, in not just active for its' own members but also to interface and work well as a strategical trade alliance partner.

My executive council members and I will continue to look at new areas of interest for our members, how we can enhance our synergies with alliances and continue our collaborative working and involvement to support government agencies.

With inevitable aging of population, new generation of office bearers have also increased their ratio and contributions of activities for the benefits of our members. I would like to urge for more balanced gender composition in the coming years; hence female staff of member companies please come forward to help drive SETA forward into the next decade – we need collective effort of our members to continue and strengthen our sustainable presence.

I would like to thank all SETA members for the continued support and trust, my ex-co colleagues for the untiring effort in activities and representations, trade alliance members for unity and coherent strength and various government agencies, such as BCA, EMA, ESG, SCDF whom we have worked closely and blessed to have your support. Overseas Affiliations and Individuals whom I may have missed out – Thank you.





MESSAGE

Ms Choy Sauw Kook

Director-General (Quality & Excellence)
Enterprise Singapore

On behalf of Enterprise Singapore, I extend my heartiest congratulations to the Singapore Electrical Trades Association (SETA) on its 65th Anniversary. This is a significant milestone for the association.

I would like to take this opportunity to express my appreciation to SETA for its many years of contribution to the Singapore Standardisation Programme. SETA has been a key partner in Enterprise Singapore's National Standardisation Programme, contributing to the development of many key standards in the Electrical and Electronic Standards Committee and its Technical Committees and Working Groups.

Besides contributing their expertise and experience in the development and promotion of standards, members of SETA have also helmed leadership positions in the Technical Committees and Working Groups. These efforts have helped to ensure the quality, performance, safety and interoperability of electrical and electronics products and services.

I wish SETA every success for the years ahead and I look forward to SETA's continual participation in the Singapore Standardisation Programme.

献词

高泉庆会长
新加坡中华总商会



悉闻新加坡电器商公会欢庆成立65周年，我代表新加坡中华总商会致以诚挚的祝贺！

电器商公会成立于 1958 年。65 年来一直秉持服务会员的精神，硕果累累。60年代，随着我国进入工业化，电气化逐渐普及，电气行业快速发展。贵会在1968年进行了重组，扩大了会员的范围，除了原来的电工和电器批发商和零售商，也包括电气产品批发商和制造商。与此同时，进行全面提升电器技工的服务和安全水平，促进行业专业化。今天数字化时代，贵会积极探讨与其他商团合作开发电子付款系统，协助推动行业进行改革；贵会也扮演行业和政府之间的桥梁，推动政策条规的改良和有效施行。在新加坡发展的历程中，贵会不仅对自身行业的稳健发展起到重要的作用，也对其他行业做出了贡献，促进行业间和跨领域的合作。

贵会加入总商会成为商团会员已有五十五载，可说是关系密切、情谊深厚的伙伴，对总商会举办的活动给予长期支持，对总商会进行的与政府对话会也积极参与，彼此携手共进，为会员排忧解难，让双方会员受惠良多。

当今时代，经济瞬息万变，新型商业模式以前所未有的速度不断涌现，贵会展示了与时俱进的精神，积极适应变化，度过经济升级转型的关键期，迎向一个新的里程碑，为会员商家的未来发展提供了保障，充分发挥行业商协会的不朽价值。

谨此， 本会衷心祝贺新加坡电器商公会，
会务兴隆，再创辉煌！



新加坡中華總商會
Singapore Chinese Chamber of Commerce & Industry



MESSAGE

Mr John Tan Chye Tong

President

Specialists Trade Alliance of Singapore (STAS)

President

Singapore Electrical Contractors & Licensed
Electrical Workers Association (SECA)

Dear members and esteemed colleagues,
On behalf of the Specialists Trade Alliance of Singapore (STAS) and the Singapore Electrical Contractors & Licensed Electrical Workers Association (SECA), I would like to extend my warmest congratulations to the Singapore Electrical Trades Association (SETA) on the momentous occasion of its 65th anniversary commemorative book.

STAS, as the leading alliance of specialists trades in Singapore, takes great pride in acknowledging the indispensable role that SETA has played in shaping the electrical trades industry. Over the years, our partnership with SETA has been instrumental in fostering collaboration, knowledge sharing, and industry-wide advancements. Together, we have championed excellence, innovation, and professionalism, elevating the standards of our trades and contributing to the overall development of Singapore's technical landscape especially in the electrical field. We commend SETA on its remarkable achievements and unwavering commitment to the electrical trades, which have undoubtedly paved the way for progress and success.

Through joint initiatives and industry engagements, we have strengthened the expertise and capabilities of electrical specialists, ensuring the highest standards of quality and safety in our projects. SETA's unwavering support and guidance have been instrumental, and we are truly appreciative of the fruitful partnership we share.

The 65th anniversary commemorative book is a testament to SETA's rich history, milestones, and the remarkable individuals who have contributed to its success. It serves as an invaluable resource, capturing the spirit of progress, innovation, and collaboration that defines SETA and its impact on the electrical trades industry. This book not only pays tribute to the achievements of SETA but also inspires future generations to carry the torch forward, shaping a brighter future for our profession.

As we celebrate SETA's accomplishments, we express our deepest gratitude to the members of SETA, past and present, for their unwavering dedication, expertise, and commitment to excellence. Your collective efforts have positioned SETA as a beacon of knowledge, professionalism, and industry leadership.

Congratulations once again to the Singapore Electrical Trades Association (SETA) on its 65th anniversary commemorative book. May this remarkable milestone be a source of inspiration for all, and may SETA continue to lead the way in driving progress and innovation in the electrical trades industry.



SPECIALISTS TRADE
ALLIANCE OF SINGAPORE



SINGAPORE ELECTRICAL CONTRACTORS &
LICENSED ELECTRICAL WORKERS ASSOCIATION

The background is a dark blue gradient with a complex network of white, glowing lines and dots. The lines are mostly vertical and horizontal, creating a grid-like structure that resembles a circuit board or a data network. Some lines are thicker and more prominent, while others are thinner and more subtle. The dots are small, glowing spheres in various shades of blue and white, scattered throughout the composition. The overall effect is a sense of digital connectivity and modern technology.

EDITORIAL

**LIMITLESS OPPORTUNITIES FOR
UNLIMITED GROWTH**



After battling COVID-19 for nearly three years, Singapore's appeal as a secure, well-managed and resilient country significantly rose a few notches higher.

Covid-19 has enhanced Singapore's international reputation as a reliable and trusted hub for business as the nation absorbed the blows inflicted by the highly volatile world economy and bounced back robustly.

In his 2023 New Year message, Prime Minister Lee Hsien Loong said that "even the darkest of clouds have silver linings, but only for those bold enough to seize opportunities".

"We have weathered the pandemic safely and emerged stronger. Our COVID-19 response has enhanced our international standing. There is great interest in Singapore – many businesses and individuals want to set up shop here and in the region. We must seize the moment."

This is not the first time the Republic had to respond to such challenging times.

In 1968, shortly after independence, the British announced that they were withdrawing their military bases out of Singapore. There were other challenging times, from oil crisis to financial crisis.

"We survived each of these critical moments. We turned every challenge into new opportunities. We have no water in Singapore? We develop NEWater. We have no natural resources? We become a hub for energy and other critical supplies. We don't have enough land? We reclaim land from the sea, and we make the most of our limited space with innovative urban solutions," Deputy Prime Minister Lawrence Wong said at the May Day Rally 2023.

One strategy Singapore is embarking on is to continue investing in her connectivity





infrastructure, such as the Changi T5 and the Tuas Port projects, to enhance the nation's capacity and reinforce her status as a business and logistics hub.

"Because of these moves, in fact more MNCs are choosing to anchor their regional and even their global supply chain operations here," DPM Wong elaborated.

Another important strategy is to deepen the capabilities for innovation, especially in the areas of competitive strengths. That is why the Government is continuing to invest heavily in R&D and innovation. In addition, there is the added avenue to develop current workforce for specialized coverage in digitalization, AI, IoT-embedded device, etc through tripartite initiatives to ensure lifelong learning.

SETA, a Story of Resilience

Singapore Electrical Trades Association (SETA) embodies this resilience deeply since the day of her early beginnings. The story of the Association's commitment to the industry people and to Singapore deserved to be told and revisited.

With some 600 registered electrical contractors engaged in government and other public and private construction projects in the 1950s. Without a standardised criteria on wiring, installation, usage of electrical appliances and more, controversies and friction abound.

A group of electrical contractors saw an urgent need to organise themselves and offered a viable solution. They put themselves up to lead the way and formed an organisation that promoted collaboration, relationship building and a voice for fellow electrical contractors so that together they could work more efficiently, safely and harmoniously. Unbeknown to them, the Chinese name of the Association (電商) was an act of self-fulfilling prophesy.

The eight founders of the Singapore Electrical Contractors Association were Tan Choon Suan, Kowk Siak Hong, Choo Kok Jee, Choo Kay Tock, Koong Chuong, Tan Chee Keow, Wong Man Seng and Woo Ah Cheng. The year was 1958.

It did not take long for the Association members to pull their resources together and bought her own premises at 365D Serangoon Road in 1960.

Eight years later, the Association enlarged her tent and opened her doors to represent electrical product wholesalers and manufacturers. With the revised constitution birthed a new English name, Singapore Electrical Trades Association (SETA).

With good foresight, the leadership led the Association to sell the old home and invest in a three-storey premises in 1970.

More than a place of social gatherings, SETA members served each other by sharing technical know-hows, expertise and skills. SETA members also contributed to the various technical committees of government institutions and agencies such as PUB, SISIR, VITB and more; bridging the gap between the Association and the the Authorities.

"We need a change," SETA President Louis Lim remarked. To move with the times, a new website was created to enhance communication with local and international industry people.

"To be interesting is not impossible," he said. Again, the Association got itself in sync with the needs of the present and also, of the future.

We invite you to read the plans and dreams of Singapore with the lens of SETA and your business for your generation and generations to come. Look for areas of growth and advancements; discover niches where you can fill; and face the changes that you can make to upgrade and upskill.

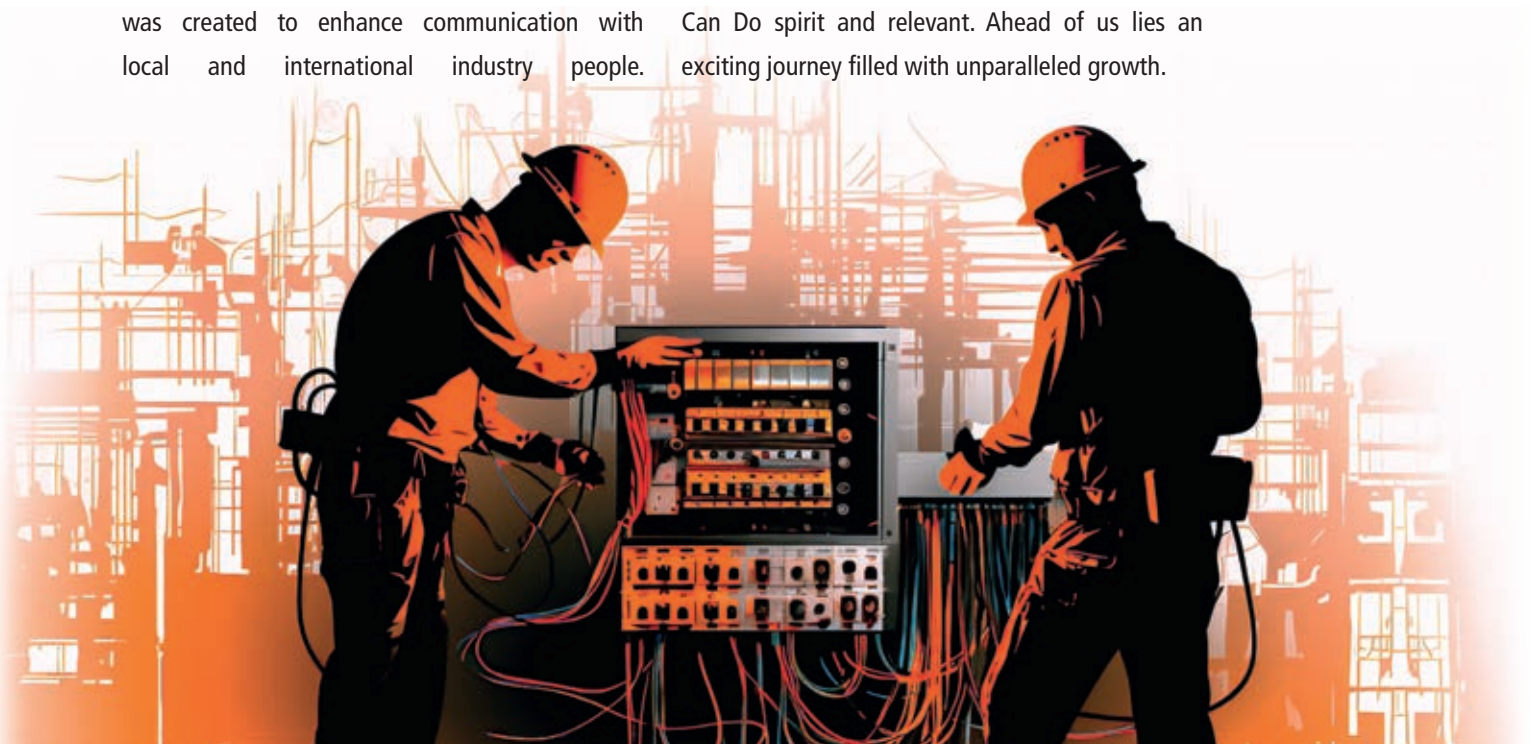
We each play a part to make our Singapore, SETA and your company smart and prosperous.

As SETA turns 65, let's stay rooted in our Can Do spirit and relevant. Ahead of us lies an exciting journey filled with unparalleled growth.



WE NEED A
CHANGE. TO BE
INTERESTING
IS NOT
IMPOSSIBLE.

LOUIS LIM
PRESIDENT
SINGAPORE ELECTRICAL
TRADES ASSOCIATION



TRANSFORMING SINGAPORE THROUGH TECHNOLOGY



Singapore has come a long way since 1963 when the first mainframe computer was installed in the Central Provident Fund Board (CPF Board) to automate the manual ledger accounting system that kept track of 1.6 million CPF members' accounts.

The Smart Nation, a nation "where we can create possibilities for ourselves beyond what we imagined possible", was an initiative launched by PM Lee on 24 November 2014. Since then, the Republic has ramped up its investments and efforts to harness technology to transform health, transport, urban living, government services and businesses with Digital Government, Digital Economy and Digital Society as the three overarching pillars of the Smart Nation.

The efforts to build a smart nation did not go unnoticed.

Singapore was recognised as the leading smart city in Asia and the seventh-smartest in the world. Published by the Swiss business school Institute for Management Development (IMD), the 2023 Smart City index ranks 141 cities by how they use technology to address the challenges they face to achieve a higher quality of life.

In the International Monetary Fund article, "Singapore's Economy Rebounded on Decisive Policy Action, But Challenges Lie Ahead", the writers highlighted that as the pandemic eased,

the focus of Singapore's policymakers has appropriately shifted to accelerating transformation towards a digital, more inclusive, and greener economy.

Smart HDB Town with Smart Lighting

To develop smart towns for an improved and more sustainable standard of living, Housing Development Board (HDB) pointed out that computer simulation and data analytics are used to plan and design optimal, cost-effective urban design technologies in HDB towns; and more.

Residents can tap on smart home apps for anything from switching on their air-conditioners to turning off the lights.



to lighting in common areas will allow HDB to collect data on human movement patterns. Urban planners will then be able to optimise energy usage by optimising lighting level in areas with little or no human traffic during specific times of the day.

Building intelligent homes is more than a concept. In 2020, Northshore Residences I & II became the first HDB flats equipped with smart distribution boards and smart sockets in every room to easily support smart home solutions. The smart distribution board replaces the conventional distribution board in HDB flats, enabling residents to monitor electricity usage across their household appliances.

Harnessing Solar Energy

The Energy Market Authority (EMA) highlighted that as Singapore rebuilds its economy post-COVID-19, electricity demand is expected to grow over the medium to long term. This is due to growth in electricity-intensive sectors such as data centres and transport (through electrification of vehicles).

It is reported that over the next decade, from 2022 to 2032, the annual system demand and system peak demand are projected to grow at a CAGR5 of between 2.8-3.2%. The energy crisis imposed by the war in Ukraine and the high energy prices accelerated the urgency to shift to renewable energy.

Solar energy is Singapore's most promising renewable energy source. Besides rooftops, solar deployments can be found on reservoirs, offshore water spaces, temporary vacant land, and even sheltered walkways. Singapore is one of the most solar-dense cities in the world today, reports EMA.

The aim is to have at least 2 GWp of solar installed by 2030, meeting the annual electricity needs of about 350,000 households. Presently, Singapore's solar capacity is more than the halfway mark to meet the 2025 target of 1.5 gigawatt-peak (GWp).

To ensure grid resilience, energy storage systems, which work as large batteries to store energy and release it when needed, are installed. With the deployment of the 285 MWh Sembcorp Energy Storage System (ESS) on



Jurong Island, which officially opened in 2023, the energy storage target of 200 megawatt-hour (MWh) of energy storage systems were achieved ahead of time.

Singapore's innovative solutions to harness solar energy is important as the nation scales up other energy switches including low-carbon electricity imports and low-carbon technologies to achieve our net-zero goal by 2050.

EMA credits Singapore's increasing solar deployment as a collective effort across the public sector, the private sector and individual households.

Singapore's mobility landscape is also undergoing a transformation with the aim to "phase-out fossil fuel-powered vehicles by 2040,

improvement of last mile commuting for residents and innovative technologies such as autonomous vehicles and smart charging infrastructure". To meet the ambitious target of phasing out internal combustion engine vehicles, the Land Transport Authority is working with various agencies to make sure there are more charging points for electric vehicles.

Buildings Go Green

Building and Construction Authority (BCA) too brought together major stakeholders, comprising both public and private building owners, FM service and solution providers, trade associations and chambers (TACs), and unions, to advance the Facilities Management (FM) sector transformation through Smart FM.

With more than half of Singapore's buildings turning 30 years or older by 2025, there is a greater need to improve building management, energy and manpower efficiency and raise productivity.

In line with the Singapore Green Plan 2030, BCA launched SLEB Smart Hub, Singapore's first digital knowledge centre for green buildings in the region. It is an open database that collates and analyses green building technologies such as air-conditioning, lighting, facade and renewable energy.

With buildings accounting for over 20% of Singapore's emissions, BCA is on the right track





THE NATIONAL AI STRATEGY IS A KEY STEP IN OUR SMART NATION JOURNEY

PRIME MINISTER
LEE HSIEN LOONG

to green our buildings as a key strategy for achieving sustainability.

BCA and the Singapore Green Building Council, along with industry stakeholders, unveiled in the latest edition of the Singapore Green Building Masterplan highlighting the key targets of “80-80-80 in 2030”:

- 1) Stepping up the pace to green 80% of our buildings by 2030
- 2) 80% of new developments by GFA to be Super Low Energy (SLE) buildings from 2030
- 3) Achieving 80% improvement in energy efficiency for best-in-class green buildings by 2030.

AI and IoT—the next frontier of technological opportunities

When we talk about advancing our Smart Nation, we will undoubtedly steer towards Artificial Intelligence (AI) which is the next big shift since the internet and mobile.

“The National AI Strategy is a key step in our Smart Nation journey. It spells out our plans to deepen our use of AI technologies to transform our economy, going beyond just adopting technology, to fundamentally rethinking business models and making deep changes to reap productivity gains and create new areas of growth,” PM Lee wrote in the foreword of the National Artificial Intelligence Strategy report.

By 2030, the target for Singapore is to be a leader in developing and deploying scalable, impactful AI solutions, in “key sectors of high value and relevance to its citizens and businesses”. The 9 sectors that are : Transport & Logistics, Manufacturing, Finance, Safety & Security, Cybersecurity, Smart Cities & Estates, Healthcare, Education and Government.

At the IoT Asia+ Virtual Conference in 2022, Minister of State Alvin Tan pointed out that the potential economic value of the IoT industry is significant. The IoT market size in Singapore alone is expected to grow from US\$643 million in 2019 to US\$1.1 billion 2022, driven by the increased adoption of facial recognition, remote working, and the deployment of 5G.

The Government’s push for a unified IoT network to meet the diverse needs of sensors, robotics, and IoT systems (such as connected appliances and smart home security systems) is a key initiative under the Smart Nation Sensor Platform. IoT is being used by various industries, sectors and for increased efficiency and maintenance.

Implications for Electrical Trades

Industry experts explained that more and more industry sectors are adopting IoT for electrical maintenance. And some of the most common uses of IoT in electrical maintenance are testing, monitoring and fixing and replacement

of electrical equipment. The possibilities of using IoT for electrical maintenance are endless. This is one good case in point.

Mr Louis Lim, President, Singapore Electrical Trades Association, highlighted that “with increased connectivity and interoperability for smart applications in industries and households; alliances collaboration with other trades’ association have becomes vital for SETA, in not just active for its’ own members but also to interface and work well as a strategical trade alliance partner”.

Collaboration is the way to go. To facilitate the smart nation transformation, “we cannot simply apply the latest technologies on top of our existing processes and organisations. It will require a fundamental rethink of our long-held assumptions and how we operate. It requires a whole nation effort, involving every government agency, every business, and our people,” pointed

out Mr Tan Chee Hau, Director of Planning and Prioritisation at Singapore’s Smart Nation and Digital Government Office.

Singapore is poised to stay ahead of the curve and to take advantage of the Industry 4.0. And SETA is set on progressing with the Republic’s economic transformation.

For the past 65 years, “SETA has transformed in tandem with national development and demographic changes”, Mr Louis Lim said. “Nothing has been spared when it concerns impacts to trade and practices for the electrical industry be it new policy or regulations, global trend on environmental protection, sustainability, decarbonisation, circular economy, etc.”

To build a smart, green and liveable city and stay competitive to the world requires all hands on deck. The opportunities for growth are unlimited indeed.



SETA CONVERSATIONS AND STORIES

A series of insightful conversations was held with a few leaders and members of SETA to hear their stories of resilience, hopes and dreams.

Incumbent SETA Hon. Treasurer Er. Lim Say Leong is no stranger to the Association having served as Honorary Secretary for more than a decade before recently passing the baton to the younger Mr Lim Chee Seng.

We also had a dialogue with Mr CM Wong of Ngee Cheng Electric which is one of the oldest SETA member companies. Mr Wong, SETA Assistant Honorary Secretary, is the second generation leader succeeding his father, Mr Wong Tai Fatt, a former SETA Welfare Officer.

It is better late than never for one of the youngest member of SETA, Lectrix Engineering Pte Ltd. Though company was set up in 2002, it became a member of SETA in February 2023 to “meet more like-minded people in the industry”, said Director Mr Goh Joo Koon.

The conversations would not be complete if we did not have a woman’s voice. Here, we feature Agnes Kwek of Eye Lighting Asia Pacific Pte Ltd, a 100% wholly owned entity of Iwasaki Electric Co, Ltd of Japan.

ER. LIM SAY LEONG

The journey began with him delivering talks on technical issues and assisting in the organising of events before taking a more active role in the Executive Council.

Q: How did COVID 19 pandemic affect SETA and its members?

A: Our members were greatly affected and as such so was SETA. We were aware of the many challenges and roadblocks. The first of which was businesses suffered. Margins were cut. Losses became pronounced and worries of members escalated. How could we help?

First on the agenda, SETA ceased the collection of annual fee for a year. This was the least that the Association could do to help in whatever small way we could.

Face-to-face meetings were not allowed so we had to keep up with the new digital world and we learned to go on zoom calls together. That was critical for SETA to keep a channel of communication open to all members. So no member felt alone or forgotten.



Then there was the issue of having our Annual General Meeting. It was a meeting that was legally required. How could we carry out the AGM with complete transparency when it came to voting. It was very challenging indeed! In the end, it became a multi-camera coverage event. We tried as much as possible to remain accessible to members when the world seemed to retreat away from social contact. I believe members appreciated that. Some of the members also turned to SETA for a crash course on how to use zoom to communicate.

Q: How does SETA provide assistance for its members?

A: In order to keep up with society's progress and industry demands, SETA is mindful of our 4 cornerstone objectives. Primary of course is the need to ensure members are kept abreast of changes and developments in the electrical trades arena.

Should there be a revision of electrical codes or standards, we work on reaching out to our diverse membership to inform and acknowledge said revisions. Some of our members are Singapore-based manufacturers. Others import external brands and market these products locally. Some members provide the service end of trade as in installation work as contractors or system integrators. Some are multi-national corporations while others exist as

sole-proprietorships. But we all have one vote no matter the size of the company.

We engage therefore in constant dialogues with relevant government agencies and authorities to ensure our members' interests are represented.

The importance of maintaining standards of professionalism in our industry is never far off in our goals. So SETA endeavours to help members upgrade through courses, lectures and constant technical discussions in electrical engineering work. This in turn contributes to helping to maintain strong credibility of members' reputation and regard all round.

Q: Did any good come out of the pandemic?

A: We simply grew closer especially to members with heavy manufacturing set-ups. Circuit breaker was in place in Singapore and movement restrictions were exercised in most other neighbouring countries.

Opportunities were created for SETA to step up to see how we could extend whatever assistance to help members with access to their factories in Malaysia and elsewhere. Countless days of discussions, data collection and procedural sharing all cemented the relationship that comes from being part of a bigger body family!

SETA was also approached to extend assistance to several government agencies with national emergencies. One that comes to mind was the national urgency in dealing with depletion of consumables in the supermarkets. Members were engaged to determine appropriate areas of assistance we could render. In identifying the members who could readily support with solutions, SETA did our part to create a wafer container with switchboard capabilities in order for JTC to manage Jurong Port space options.

SETA continues on this trajectory of public service support even in post pandemic world. This experience clearly endorses our objective of preserving the interests of our members in their readiness to be of service to those in and out of the trade industry.

Q: What do you want to say to members and non-members out there?

A: Typically when times are good, people naturally are lulled into a state of complacency. SETA seeks to remind our existing members to stay on and continue to give their whole support to the Association; remain a member; take part in the activities organised to foster the bonds that are so easily broken when the effort and care to preserve are not practised.

Q: How do you engage young members?

A: This is an ongoing battle for SETA. But we are optimistic about the turnaround. A lot of

organisations and businesses are being passed on to the new leadership and younger ones at that.

How does SETA establish that constant appeal traces its roots back to 1958 when 8 co-founders had the foresight and enthusiasm to come together and put their heart and soul and energies into a body that could promote friendship and co-operation amongst its members.

Precisely in sharing that crisis always points us towards one finite direction. The bottom line is to build a community and share the same goals. and stand and be counted. Share your views and research ideas and have them heard. Organise mutual interest activities. Contribute innovation possibilities. Each out rather than stay seated.

This post-covid world knows no boundaries. SETA needs the young to bring it to the next level. Come forward and build resilience together.

Q: What is your hopes and dreams for SETA?

A: A couple of items always sit squarely as i think about SETA and our means of moving forward.

We need to maintain the strength in togetherness; be mindful that only when we work together for a common goal as one unified body, can the results favour the efforts.



**WE NEED
TO ENGAGE,
ENGAGE,
ENGAGE!**

ER. LIM SAY LEONG
HONORARY TREASURER

We continue to seek relevance by encouraging a younger generation of member leaders. The goals remain the same. The objectives are constant. But the people, the membership must reflect this change. That is SETA's secret to moving forward.

We encourage gender diversification. That is another very positive direction towards togetherness. It can only lead to a more dynamic culture for our next generation of leaders.

The new world of today and tomorrow places importance on all aspects of our industry. We need to engage, engage, engage!

MR LIM CHEE SENG

After our interview with Er. Lim Say Leong where he bemoaned the lack of younger leaders and his delight to have a younger Lim take over his position in the Council, our interest was pique to hear from Mr Lim Chee Seng, the newly minted Honorary Secretary of SETA.

Q: How did you get into the electrical industry?

A: I graduated with a major in accountancy and

worked in the big 4 audit (or accountancy) firms for a total of 12 years. After relocating to Singapore, I succeeded my father in the running of the family business, Fengsheng Electric Co Pte Ltd.

Q: When did your company become a member of SETA? Why did you join? What did you benefit from being a member?

A: The company has been a member of SETA since 1989. We joined SETA primarily because of our desire to connect and learn from others working in the same industry. Over the years, SETA has helped us to achieve just that through meetings and conferences with local and global stakeholders alike.

One such instance would be the online conference call with NEMA and the US embassy, where we shared more about the advanced manufacturing trends in Singapore. This allows us to stay up to date with the latest news in the industry, ensuring that we change with the times.

Q: When did you step up to serve in the SETA Council and why?

A: I was voted into the exco on 2018. I joined because I believed that this position would allow me to contribute more to SETA through the handling of association's matters and the sharing of good practices. I have learnt much from my fellow experienced exco members, but there is always more to learn.



Q: What does it take to attract younger leaders to serve? What is in it for them?

A: The importance of SETA has become increasingly apparent over the past few years, especially once the pandemic hit. During the pandemic, SETA not only informed members of the latest developments, but also acted as a channel whereby one could communicate with the various government ministries. For example, we had a meeting with Mr K Shanmugam and Mr Desmond Lee about the resumption of work at construction sites amidst covid.

Of course, serving in SETA would take up a portion of their time. However, I sincerely believe that the valuable insights and opportunities one would gain in this role would far outweigh the time invested.

Q: What should a company in the electrical industry do to stay resilient?

A: First and foremost, a company should always attempt to predict and foresee the way the industry would change in the future. They must then be quick to adapt to those changes.

Cultivating a vast network of business contacts would help as they would be able to share the latest developments in the industry with one another.

Q: What lessons can we draw from the pandemic?

A: As the saying goes, no man is an island. To stay competitive in today's day and age, we would need

to learn to work together by helping each other. One such way to do so would be by joining SETA, where different members can give each other advice through the sharing of their own experiences.

Q: What is your wish for SETA on her 65th Anniversary?

A: My wish would be for SETA to continue playing its important role in the industry. May it further contribute to economic growth in Singapore by helping more SMEs.

**NGEE CHENG ELECTRIC,
SETA PIONEER MEMBER**

A second-generation leader of a company set up by his father, Mr Wong Tai Fatt in 1948, Mr CM Wong now sits on SETA'S Executive Council as Assistant Honorary Secretary.

His association with SETA runs long and deep, as his company registered as a member in January 1959, exactly 1 month after the incorporation of SETA.

Mr Wong contemplates his personal journey with the Association and shares his hopes for the times ahead.



Q: What are your memories of those early SETA days?

A: I believe way back when my father was at the helm of Ngee Cheng Electric Co Pte Ltd, there were issues such as the lack of clear interpretations of then Public Utilities Board (PUB) regulatory requirements and procedures with regards to Electrical Supply Applications, connections, testing and turn-on supply. There was also the shortage and therefore hefty increased in basic PVC cable, copper pipes etc. My father must have felt so strongly that we just had to be part of a collective body to build the electrical trade community to voice such concerns.

Members in the 1970s were extremely vocal and consulted authorities on those nagging issues. SETA founders helped initiate discussion on installation requirements and further pushed for formulating trade standardisation. Some of the notable outcomes are the PUB Handbook on Application for Electricity Supply Year 1976 and the Singapore Standards. So, in my father's mind SETA played a crucial role in moving the industry forward and enhancing the progress of its members.

Q: Apart from the handbook, what is another stand out achievement of STAS/ SETA?

A: What comes to mind is the Association's role in the passing of the Security of Payment Act 2004. Before the Act, it was a constant burden for both contractors and traders completing their areas of

work, and then finding themselves not receiving due payment for work carried out.

There used to be a system whereby the main contractor would pay the contractors and traders only if he gets payment from the government or from the developer. It resulted in many scenarios where sub contractors ended up with long delay or even no payment in extreme cases, which obviously resulted in much stress for members.

In the beginning, there were both traders and contractors all in the same boxing ring. Then the split came and Singapore Electrical Contractors and Licensed Electrical Workers Association (SECA) was set up. Ngee Cheng remained a active member of SETA out of loyalty but also joined SECA to ensure our representation on all fronts.

SECA and SETA are in truth, rather small associations. We realised that our joint voices were simply not loud enough. Under the umbrella of Specialist Trade Association of Singapore (STAS), an amalgamation of at least 11 associations, we had a louder voice. By aligning ourselves to a bigger association, we were then able to identify more members with different expertise profile and to help to take up the necessary issue with related government bodies. So the problem of payment or rather delayed or non payment was addressed and resulted in the passing of the Security of Payment Act.

This successful resolution was certainly a huge achievement for SETA. Each member involved in the negotiating teams worked really hard to build a solid case to bring to BCA. A lawyer, who was committed to helping SETA members out of his personal concern, dived into countless research hours. The amazing fact was that the research and fact finding efforts were all done pro bono. Ultimately, we used the Australian dispute background as the basis for our case.

Many members, especially the younger ones, are perhaps not even familiar with this key role afforded by SETA. They have assumed that the resolution of payment issue with the passing of the Act was solely the result of the Government's intervention. We saw many of our members were relieved of the stress and fatigue of running a credible business and not having to worry about unreliable payment terms.

Q: How did your company contribute to SETA?

A: My father was roped in as a welfare officer. As the designation suggests, the association plays as much importance on members welfare in addition to the ongoing task of constant negotiations for electrical standardisation and guidelines. So top on the list was a lot of time spent on bringing members together.

Apparently there was a survey done which showed that trade associations function more like leisure clubs. Perhaps there's some truth to that. But from the early days to present, there is no doubt that effort is needed to bring people together. Bonding and togetherness do not come naturally. So we organised different events around festivals, sports and more for different member groups with different interests. We have committed much of our time to promoting the welfare of members on board on a broad basis.

Q: Do you have any wish for the organisation?

A: On behalf of SETA, here is my call to younger members, please step up and step forward. Many of the Exco members are well into our 70s and 80s. I would like to rally our younger members to rope in more members like themselves and come forward to take the helm.

There is no denying that succession is a current issue. Always has been for other organisations as well. But we remain positive. Over the last three years, we are delighted to welcome new blood. Each generation will face different challenges. Some of the issues we face now include Man-Year-Entitlement, transportation of workers in lorries, dormitory amendments post Covid pandemic and stringent safety practices and enforcement. There is work to be done.



LET'S KEEP OUR COMPETITIVE EDGE. LET'S MAINTAIN OUR COMPETENCY AND STRIVE TO BETTER OUR TRACK RECORDS. LET'S MEET THE CHALLENGES OF THE NEW WORLD FEARLESSLY.

MR WONG CHEN MING
ASST. HONORARY SECRETARY

If the association founders had not taken the initiative to come together for the benefit of a more regulated industry, it would have been hard pressed to have moved on to successfully creating a handbook of approved systems and procedures and specs needed for a credible and reputable industry practice. Where would we be had the Security of Payment Act not been pursued by SETA and STAS.

Our younger members must remind themselves of these facts. It is very much like our nation Singapore's founding fathers toiled to get many of the teething problems resolved.

Younger leaders are needed to dive off from this solid foundation and break the way to meet the challenges of the present and demanding future. So my wish list for SETA is to see the emergence of a much more involved and proactive younger Executive Council. I remain hopeful.

Q: Finally, any insights as to the future of Singapore?

A: Someone asked me 40 years ago, how many buildings can I build? Singapore is so small, there's not enough land. Well, 40 years later, Singapore is still building and still growing at a rate in progress that defies the odds.

This is hardly a sunset industry. The theme, Limitless Opportunities, Unlimited Growth, could not be more

appropriate. As long as we have political stability; as long as we have the drive, commitment and willingness to work hard, and focus on renewal and change exists; the future will remain bright. Investors will continue to find Singapore attractive.

The electrical trade is rather bread and butter; not like electronics which are comparatively more fast changing. Let's keep our competitive edge. Let's maintain our competency and strive to better our track records. Let's meet the challenges of the New World fearlessly.

LECTRIX ENGINEERING NEW MEMBER OF EARLY 2023

Lectrix Engineering Pte Ltd is one of the youngest members of SETA having joined the Association as a member in February 2023.

Mr Goh Joo Koon, who is currently a Director and 50% shareholder of the company, established Lectrix Engineering (LE) in 2002. His passion for the electrical engineering field and with opportunities made available to him, Mr Goh decided to give the business a good shot and set up LE. There was no turning back after that.

His wife, who was in full time employment in another company, was roped in to manage all the

administrative matters. A few years later, Mrs Goh joined LE full time and is currently a Director with 50% shareholder of the company.

LE is an electrical engineering company that focuses on 2 key areas:

- the maintenance of High-Tension, Low-Tension components as well as all the outgoings from the main substation;
- the projects that involves the installation of High-Tension, Low-Tension components.



Lectrix Engineering celebrated its 20th anniversary on 27 May 2022.

Since 2002, LE has been working closely with SMM Pte Ltd, a member of Surbana Jurong Group, and undertake projects mostly related to the MINDEF as well as DSTA.

Over the years, LE managed to build up a team of competent specialists that propels LE to venture into other government-related sector. LE counts itself very humbled to be given opportunities to maintain the electrical aspect of NUS Dover and Bukit Timah campus as well as NEA Tuas South incineration plant.

"LE signed up to be a member of SETA because we would like to meet more like-minded people in this industry and create opportunities of growth together," said Mr Goh.

"This industry is becoming very competitive. With the rise in cost of operation as well as the constant change of the dynamics of this industry, we ought to stay innovative in the way we operate with efficiency in mind.



Seen here are Mr and Mrs Goh cutting the cake and cheered on by the LE Team.

"May SETA continue to be a place which provides companies in this industry opportunities as well as keeping everyone together and moving forward together."

MS AGNES KWEK **EYE LIGHTING ASIA PACIFIC** **PTE LTD**

In a male dominated industry, Agnes Kwek found success, passion and opportunities for growth. Here, she shares not only her career path but also ideas on how to attract more women and younger members into the SETA fold.

Q: Tell us more about your career development.

A: Eye Lighting has been in this industry since 1988; from the HID era to this current LED and IOT era. We specialise in Industrial and Commercial Lighting; providing total solution for lighting with design and proposal.

My journey with Eye Lighting started with me working in the Indoor Sales and Design to Sales Engineer within a year; before taking on the role of a Sales & Marketing Manager.

With more effort and recognition, I was promoted to General Manager, a position I hold till now in

Singapore; and Associate Director in our office in Malaysia. I have been in this company for 30 years.

My main forte is Sales with design capability. In 2023, I step up to cover the Asean market, mainly Malaysia, Thailand, Vietnam as well as the Philippines.

I was previously from the oil and gas industry and later through a good linked up from my Aunt, who was a lighting sales manager from another company, I ended up in the electrical industry and never look back.

Q: When did your company become a member of SETA? What did you/company benefit from being a member?

A: Eye Lighting is a 34 year old member of SETA member, having joined the Association in 1989.

SETA is a good platform for all electrical trades to be together. Be it a supplier or contractor, we share information on market trends, technological advancements and more.

I have attended talks related to electrical trades. SETA also organised many events like Inter company Bowling, Chinese New Year Gathering with Lou Hei and Karaoke, Dumpling Festival, etc.

Q: What can SETA do to attract participation from women and younger members?

A: SETA should try to involve more women and younger members through increased outreach and engagement strategies that are well thought out. Involving a broader range of members can help refresh the association's vitality and ensure its continued relevance, especially in an ever-evolving industry landscape.

SETA can be more intentional in inviting more to serve in different capacity. One way is to invite members to nominate committed personnel to join, one male and one female. From the list of nominated names, they can invite selected people to serve in committees, Exco, etc. A good way to spot potential people is through events where many members bring their staff to attend.

There are not many young members in the committee. New and young members can help to make SETA more vibrant and not be seen like an old man's association.

Generation gap needs to be narrowed to achieve this. To attract more members to serve, SETA can create social media presence and tap on Facebook, Instagram to increase its visibility.

Q: Why lessons can we draw from the COVID pandemic?

A: "The survival of the fittest " is the phrase I used to talk about the Pandemic. Good management and mindset put us through this tough time which saw many businesses going bust. We are not the only one who went through the challenging and tough season. It is a global issue and no one is spared. Everyone must always have contingency plan on hand to handle any hiccups we have in life.

Q: What is your wish for SETA on her 65th Anniversary?

A: I would like to take this golden opportunity to wish SETA Happy Anniversary and many more 65 years to come!

I hope that more members will come forward to serve and volunteer in SETA.



THE SURVIVAL OF THE FITTEST

MS AGNES KWEK
EYE LIGHTING ASIA PACIFIC
PTE LTD



DILEMMA OF JOINING TRADE ASSOCIATION

by Er. Lim Say Leong
SETA Honorary Treasurer

Background

The importance of joining trade association must not be undermined or hesitated. Being member of trade association is vital for business growth. SETA was formed in 1958, at the time when electrical installation works were administered by Municipal Council and there was lacking to have complete criteria or regulations for people of the industry to follow on wiring and the safe use of electrical appliances. Resulting in differences of opinion on electrical installation work and requirements which often have frequent controversies.

Then a group of people who voluntarily came together to solve common problems, meet common needs and accomplish common goals. Then, there was no hesitation or question asked on "Why join SETA?". Even though the first objective is to promote friendship and co-operation among members of the industry. The second objective is to hold dialogue with the authorities after having obtained a consensus among the members, with the aim of eliminating friction and promoting co-operation, so that members could carry out their installation work more efficiently.

Why join?

Over time when the trade is smooth; complacency may happen and some could have taken the smoothness in business for granted. Today, when asked to join SETA? The answer is no longer straightforward. Even though one understands that SETA was formed as a group of people who voluntarily come together to solve common problems, meet common needs and accomplish common goals. There is a Chinese proverb "平时不烧香,临时抱佛脚" Let's hope this would never be the case at SETA.

On 22 November 2017, during the opening of the Trade Association Hub, our PM Lee Hsien Loong at the Official Opening says, and I quote: "Trade Associations and Chambers, or TACs, are aggregators and multipliers in our business eco-system". Unquote.

There are always new concerns and cares with national development and demographic changes; and global trend that will affect trade such as due to environmental protection, sustainability, decarbonisation, circular economy, etc.



One example of unpredictability is the Robinson Fire in November 1972. In the report of the commission of inquiry into the fire, one of the recommendations was to update the 1947 Municipal Wiring Rules and Conditions of Supply. SETA contributed one of her pioneer member Mr Seah Boon Chuan to the Technical Committee responsible for SS CP 5:1977 (1st Edition). SS CP 5 has been revised few times and the current version is SS 638.

SETA remains relevance today

The SETA executive committee constantly reviewed the objectives and confirmed that they remain to be valid and vital. These are true and new action plans, some already in place are ensuring to build aggregators and multipliers; as in the case of SETA being part of founding members for Specialists Trade Alliance of Singapore (STAS).

Just as products no longer can stand alone to operate in isolation, connectivity and interoperability would be the new norm through IoT for many remote monitoring or controlling functions.

Other changing challenges are the market and members have had to manage uncertainties of payment for unexpected costs increase and supply chain disruption when business as usual resumes.

State of readiness and alertness

Activities for members would continue to stay aligned to the objectives that are vital for bonding and networking and to keep up with the state of readiness for SETA.

Business continuity is ensured with having new generation of office bearers in Executive Council. We will look at having more balanced gender composition.

Steering and driving SETA forward into the next decade - we need collective effort of our members' support to continue and strengthen our sustainable presence. Last and certainly not least, perhaps we could together look forward to address:

1. What can I do for the association?
2. How can we enhance our harness and resiliency especially when supporting activities be it social events, technical involvement, business cycle and directions, national and international policies.





INDUSTRY ARTICLES BY PARTNERS AND MEMBERS

E2I SUPPORTING ENTERPRISE & BUSINESS TRANSFORMATION THROUGH COMPANY TRAINING COMMITTEE (CTC) GRANT

by Cheryl Choo

e2i - Employment And Employability Institute Pte. Ltd.

Incorporated in 2007, e2i is a tripartite initiative of the National Trades Union Congress (NTUC), supported by the Singapore National Employers Federation (SNEF) and the Singapore Labour Foundation (SLF), in strong partnership with Workforce Singapore (WSG) and Skills Future Singapore (SSG).

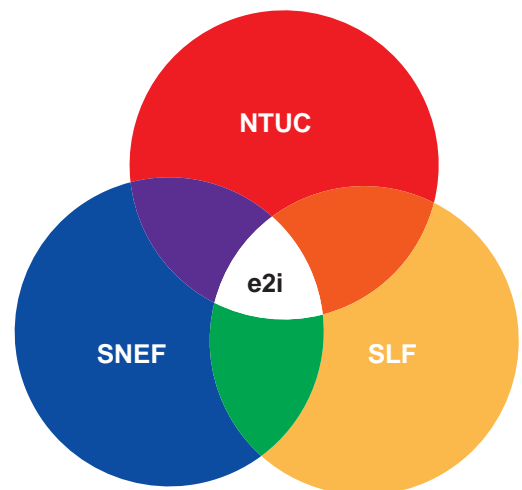
Mission:

To create better jobs for better lives

Vision:

To be the leading organisation to create better solutions for better employment and employability.

One of the key deliverables of e2i is to assist organisations in enterprise and business transformation through the NTUC Company Training Committee (CTC) grant.



What is Company Training Committee Grant?

The CTC grant which is managed by e2i serves to strengthen worker and business outcomes to bring about:

1. Enterprise transformation: Enhanced business capabilities, innovation and/or productivity.
2. Workforce transformation: better career prospects and better wages for local workers

What can be Supported Under the Grant?

Components can be supported if they are related to the transformation project, achieving business and worker outcomes which include:

1. Equipment & Software
2. Consultancy
3. Training

CTC Grant Example 1: Robotic Painting System

Purpose of project: Adopt a Robotic Painting System to carry out painting on large platform workpieces, in line with company's plans to adopt smart manufacturing technologies.

Funded Cost: Up to 70% of qualifying cost

Outcomes

Enterprise: Improve productivity, reduce dependency on manual painters, improving health & safety of workers.

Workers: 20 locals uplift their job values and receive higher salaries.

- Upskilled in advanced manufacturing technologies and retrained to take on higher value work in the company's journey towards smart manufacturing.
- Increment within project funded period.

CTC Grant Example 2: Operations Digitalization

Purpose of project: Review existing business processes and develop departments' SOP and adopt a digital platform to facilitate workflow across different departments.

Funded Cost: up to 70% of qualifying cost

Outcomes

Enterprise: Holistic business review and digitalisation to increase efficiencies for the business.

Workers: 14 locals uplift their job values and receive higher salaries.

- Improve employees' satisfaction from clarity in processes and properly defined work scope.
- Increment within project funded period.



SMART LIGHTING AND IoT

by Christopher Lee
Esave Apac Pte Ltd

As an industry pioneer and business owner in the smart lighting sector, I have firsthand experience of the transformative impact of the Internet of Things (IoT) on our field. Smart lighting, also known as intelligent connected lighting, serves as the backbone of IoT implementations by providing the necessary wireless network infrastructure. This integration of IoT-enabled devices into wireless lighting systems has revolutionized our ability to control, automate, and improve the efficiency of lighting solutions, resulting in sustainable and intelligent outcomes. The wireless network formed by smart lighting serves as the foundation for all smart infrastructures, including smart cities, smart buildings, smart carparks, smart factories, and more.

The advent of Industry 4.0 has brought a wave of technological advancements across various sectors, and smart lighting stands at the forefront

of this revolution. By harnessing real-time data on energy consumption, occupancy levels, light levels, and other variables, smart lighting systems can be optimized to minimize waste, enhance efficiency, and promote sustainability. These benefits not only serve our clients but also contribute to the larger goal of creating a more sustainable future for all.

The ubiquity of lighting infrastructure makes it the ideal medium for extending IoT implementations. Motion and daylight sensors are commonly used IoT devices in smart lighting systems. In our experience, we have installed air quality sensors, weather stations, traffic monitoring sensors, power meters, water meters, and flood sensors in smart cities. Smart buildings feature carbon dioxide sensors, temperature sensors, curtain controls, and smart carparks are equipped with carbon monoxide sensors. Smart lighting also enables the integration of all these IoT devices with third-party platforms



such as Building Management Systems and Fire Alarm Panels.

Safety is another crucial aspect effectively addressed by smart lighting. In public spaces such as streets and parks, many municipalities and developers have started to dim the lights or activate alternate circuits to reduce electrical consumption, inadvertently sacrificing safety. However, smart sensors integrated within smart lighting can detect motion and adjust lighting levels accordingly, thereby improving visibility and reducing the risk of accidents. This approach ensures that public lighting

does not need to be switched on at 100% throughout the night, saving energy without compromising safety. In warehouse or factory environments, smart lighting can identify the presence of workers and adjust lighting levels accordingly, ultimately reducing accidents and improving overall workplace safety.

By programming our smart lighting systems to automatically illuminate during emergency situations, we can effectively alert occupants and facilitate safe evacuation. These safety features are particularly vital in high-traffic areas and

locations where people gather, such as shopping centers, schools, and hospitals. Heat maps derived from motion sensors serve as essential inputs for understanding residents' movements, aiding in the construction of new sheltered linkways and providing real-time security checks for unauthorized gatherings at staircases during nighttime.

Smart lighting has evolved significantly, transcending its traditional role as a mere source of illumination to become an intelligent infrastructure capable of adapting to various environments and user requirements. Another noteworthy aspect is its contribution to reducing light pollution and preserving dark skies. Smart lighting enables automated switching of light sources from standard 4000K to much lower CCT or even amber colour during late nights, reducing the disruptive blue light that affects wildlife and ecosystems' natural patterns.

One of the key advantages of smart connected lighting is its ability to enhance sustainability. By utilizing sensors and intelligent algorithms, smart lighting systems can automatically optimize lighting levels based on occupancy, natural light availability, and other factors. This means that energy is utilized precisely when and where it is needed, significantly reducing waste and contributing to lower energy bills.

In conclusion, smart lighting, or intelligent connected lighting, serves as the foundation for IoT implementations and plays a critical role in ensuring sustainability, safety, and efficiency. The integration of smart lighting with other advanced technologies can create a comprehensive system that addresses the needs of various spaces. As we move towards a more connected future, it is imperative to embrace smart lighting and leverage its benefits.



HARNESSING THE POWER OF ELECTRICAL ENGINEERING IN THE FOURTH INDUSTRIAL REVOLUTION AND INDUSTRY 4.0

by Colin Koh

Senior Manager, LKH Precicon Pte Ltd

(A subsidiary of Tai Sin Electric Limited)

The electrical engineering industry is witnessing a revolution as the world moves towards an "Industry 4.0" era of automation and intelligence. Smart Nations, Smart Cities, Smart Infrastructure, Smart Factories, Smart Grids, and Smart Buildings are becoming increasingly popular. Electrical engineers, contractors, and service providers play a major role in this transformation, as they are responsible for the electrical systems that power these smart buildings and infrastructures. Meaning contractors, products and service providers play an ever-important role in making these projects successful by providing electrical power systems that are high in "Availability, Reliability, and Quality" for all aspects of smart infrastructure and smart buildings. Let's examine how the electrical engineering sector is important in this new era

of technology-driven infrastructure development that must operate year-round basis.

Electrical Power Availability

The availability of electrical power is essential for any industry to function efficiently. Electrical engineering providers ensure an adequate supply of electricity by designing and implementing electrical systems that meet the needs of different sectors, such as hospitals, factories, warehouses and offices. They also ensure these systems are safe to operate by conducting regular safety inspections and testing for potential hazards or risks.

Electrical Reliability

Reliable delivery of electricity is a key factor for successful operations in any organisation or industry. Electrical engineers must ensure that the

electrical system can maintain its performance over time without experiencing downtime due to unexpected events or failures. They also need to be able to respond quickly when unforeseen issues arise to keep operations running while minimising disruption or damage caused by faulty equipment or wiring problems.

Electrical Quality

The quality of electricity delivered by an electrical system significantly impacts its efficiency; poor-quality electricity can lead to decreased productivity, increased energy costs and higher maintenance costs due to damaged equipment or components. Therefore, electrical engineering providers need to be aware of potential sources of poor-quality power (such as voltage fluctuations) and take steps to address them through design modifications or the installation of appropriate protective devices.

The fourth industrial revolution, or "Industry 4.0", has brought an exciting new world of opportunities and challenges for electrical engineering professionals. With its increasing reliance on technology, the roles of electrical consultants, contractors, engineers, and product & service providers have become more important than ever. So let's look at how the electrical engineering ecosystem impacts this new construction era and how they can harness their skills to help shape this new era of industry.

Let's look at two examples, "Smart Building": Smart buildings are equipped with advanced technologies such as sensors, automation systems, and artificial intelligence. All of these require reliable electrical systems for proper functioning. That's where electrical engineering comes in: the science behind creating effective power solutions for smart building projects. Electrical contractors ensure that all electrical system components - including wiring, lighting fixtures, circuit breakers, etc. - are properly installed and functioning. Moreover, they must also ensure that such systems meet local building codes while providing maximum energy efficiency.

Another example is "Smart infrastructure", which requires a reliable network to power its many interconnected systems. Service providers must be able to work with clients on designing secure networks that can accommodate their needs while still being cost-effective. Ensuring that bandwidth capacity is sufficient for all connected devices and that data shall protect from external





threats (such as hackers). Service providers must also maintain existing networks to ensure they are running smoothly and efficiently; this includes troubleshooting any hardware or software issues that may arise over time. Electrical power system design, installation, and commission are critical to ensure successful project completion.

Opportunities & Challenges for Electrical Engineers & Technicians

There are numerous opportunities within the Industry 4.0 framework for electrical engineers and technicians. As the demand for digital transformation increases among businesses worldwide, so do the jobs available to those with specialised technical knowledge in the latest electrical and automation technology. However, this shift towards digitisation and automation also presents a challenge: traditional manual labour positions may become obsolete due to increased reliance on automated processes. Thus engineers must stay ahead of emerging technologies if they wish to remain relevant

in their field while also developing soft skills such as communication which will prove invaluable when dealing with complex projects or stakeholders from other disciplines.

The Role of Electrical Contractors

Electrical contractors are responsible for installing and maintaining all electrical equipment necessary for a business to operate safely and effectively within Industry 4.0. This includes everything from wiring a building's electrical system, such as HVAC, lifts and fire protection, lighting, and power systems, to setting up routers for Wi-Fi networks or automating processes with sensors and other data collection devices. As more companies move towards digital solutions, contractors must keep up with technological advances to ensure that systems run smoothly without compromising safety standards or efficiency levels.

The Role of Electrical Professionals

In this era of rapid technological advancement, electrical engineers play a vital role in helping businesses stay competitive by developing innovative solutions that take advantage of new technologies. Electrical engineers, electricians and technicians use their knowledge to design customised solutions tailored specifically for each company's needs to ensure maximum efficiency while keeping costs down simultaneously.

The Role of Product Manufacturers & Service Providers

Product manufacturers & service providers are key players in creating an effective ecosystem within Industry 4.0. They provide different elements that allow businesses to function smoothly with access to high-quality products and systems and offer comprehensive support services that ensure minimum system downtime.

Service providers have an even more important role in the Industry 4.0 era; they are responsible for designing, maintaining, and repairing any electrical equipment used in smart buildings or infrastructure projects. Therefore, service providers need to be knowledgeable about current state-of-the-art technology and future trends so that they can create solutions that will remain viable for years to come. As such, service providers must stay abreast of new developments in areas like AI (Artificial Intelligence),



IoT (Internet of Things), and 5G connectivity technologies to provide reliable services to their clients now and into the future.

The Role of The Trade Association

Trade association such as SETA has been very conscious about the development of the industry by participating in various standards developments with the government and statutory boards. In addition, SETA's ongoing upgrade of its members since its inception in 1957 through education and training will not stop and is even more critical in this era of Industry 4.0. SETA will continue to support and helps its members to leverage Industry 4.0 and help transit in the coming years by monitoring the trends and providing resources and support to ensure the members can provide professional products and services to their customers and stakeholders.

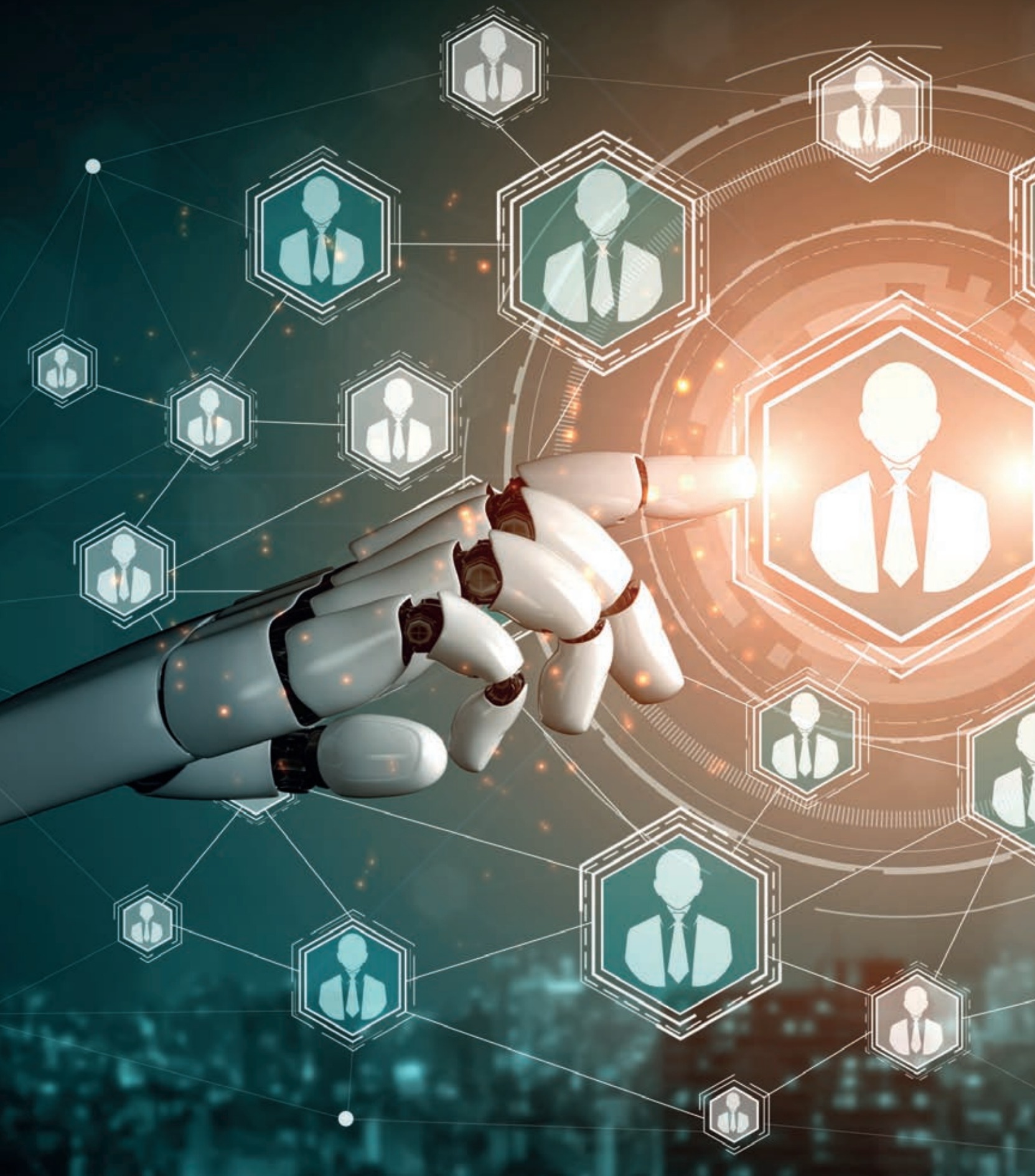
Conclusion:

In today's fast-paced digital environment, it's more important than ever for businesses to ensure they have access to reliable electrical engineering professionals who understand the complexities associated with Industry 4.0 ecosystems.

As we move into the Industry 4.0 era, the electrical engineering ecosystem participants will play an increasingly important role in creating smarter cities and infrastructure projects. With their expertise in hardware design and software engineering, electrical engineers will be integral in driving innovation forward by creating cutting-edge technologies for use in smart buildings and smart infrastructure projects.

Installation work done by contractors, innovative designs created by engineers, and right through to products & services providers – all parties play an integral part in creating an optimal working environment and staying connected with modern technologies. By leveraging these resources appropriately, the industry will be in a competitive position while still enjoying reassurance that projects can be completed on time and within budget.

Trade associations play an important role in ensuring their members are aware, educated and trained in this new business environment, providing value add and ensuring sustainable growth in the coming decades.



RENOWNED US BRAND LUTRON PROUDLY PRESENTS RA2 SELECT

*by Derrick Lam
Lutron GL Ltd*

Elevate your Home Experience Perfect Every Precious Moment at your Fingertips

Lutron Electronics, a global leader based in Pennsylvania USA with six decades of legacy in the intelligent lighting control and automated shades industry, has launched a smart home solution named RA2 Select. Lutron brings intelligent and controllable "light" into life, and achieve the perfect "lighting" by balancing natural light and artificial light, which curates an exceptional experience in daily life. In fact, one can find Lutron's footprints worldwide at various landmarks such as The White House, British Museum, Marina Bay Sands, Shanghai Tower, Taipei 101; retail stores like Louis Vuitton, Cartier and Apple Stores; to luxury residential developments such as One Hyde Park in London and Palm Island in Dubai. As a household name in the United States. Lutron creates the perfect ambience with "Light just right" for where users work, live, learn and play anytime, anywhere.

RA2 Select : Elevate your Home Experience by One Click as Every Moment Matters

With an intense lifestyle and fast working pace, a comfortable and cosy home is definitely important for Singaporeans. Presenting Lutron's epochal product – RA2 Select, the intelligent lighting control and automated shading solution, allowing users to easily control living environment and home ambience in their fingertips through the wireless remote control or LUTRON App, hence to elevate the home living experience comprehensively.

Imagine to wake up with the warm glow of morning sun as automated shades slowly rise at the scheduled time; with just a simple click on the controller, there comes the perfect atmosphere for gatherings with families and friends; watch your favourite movie with a preset scene in just one touch on the App; or even conveniently close the shades and



turn off the lights as it is about to say goodnight. With fully adjustable lighting, automated shades and music control, personalized settings allow users to create a unique home ambience and their own perfect moment.

The Entry-level Intelligent Lighting Control and Automated Shading Solution for Singaporeans

Being one of the most accessible solutions from Lutron, RA2 Select allows users to tailor their exclusive intelligent lighting control system at home according to different budgets, room sizes and home styles. RA2 Select is perfect for individual households, being not only a value for money solution, but also free of the usual installation troubles. Without major changes such as hole-drilling or re-wiring, RA2 Select only takes a few steps and simple tools for installation. Enjoy an effortless upgrade of your living environment at home.

One Application with Five Components Control Every Corner of Your Home Easily

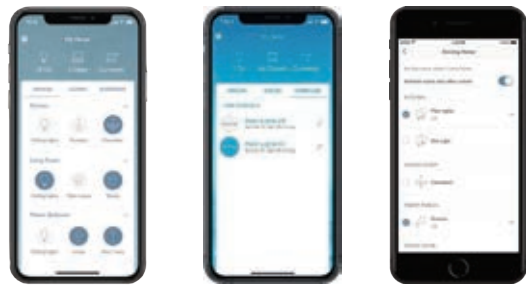
As an intelligent system which can balance all indoor and outdoor lightings, RA2 Select is composed of five major components, including the main repeater, dimmers, Pico remote controls, motion sensors and automated shades. Other than basic equipment like the main repeater and dimmers, users can also customize their Pico remote controls according to individual preferences, or purchase additional motion sensors or automated shades.



RA2 Select Major Components

LUTRON App

Users can easily control such intelligent system through the LUTRON App and adjust the lighting and shading anytime, anywhere to enjoy a simpler life. Other than the remote control function, users can preset different scenes with default lighting and shading mode to create an exclusive ambience. LUTRON App also offers 3 advanced functions like scheduling, geofencing and smart away: program the lighting and shading scenes per schedule; turn the lights on once you arrive home, and notify you if lights are on when you leave; randomly turn the light on and off in the evening for added security while user is away.



RA2 Select can adjust the lighting and shading through the LUTRON App and preset different scenes, offering 3 advanced functions like scheduling, geofencing and smart away.

RA2 Select also works with intelligent home systems, TV and audio from other best-in-class brands, such as Amazon Alexa, Apple®HomeKit™, The Google Assistant™, Honeywell Wi-Fi Thermostats, IFTTT and Sonos, bringing more convenience to daily life.



Pico remote control from RA2 Select can be paired with a pedestal or mounted on the wall, tailored with different icons, colors and textures.



Motion sensors from RA2 Select utilize the patented XCT sensing technology and Clear Connect™ RF technology, A convenient and energy efficient option for any household.



Lutron's automated shades are reliable and durable, offering an absolute silence when functioning. It also offers a variety of styles and materials for selection.



Taipei 101, Marina Bay Sands, The Statue of Liberty and The White House

TACKLING MANUFACTURING'S LABOUR CRUNCH WOES: INNOVATIONS IN AUTOMATION AND COLLABORATION

by Schneider Electric Singapore

The global landscape is currently marked by geopolitical uncertainties and shifts in alliances, contributing to trade disruptions, export constraints, and alterations in trading partners. Such geopolitical tensions can create ripple effects that impact supply chain stability, resulting in trade disruptions, export restrictions, and changes in trading partners, which in turn affect the overall supply chain stability.

The ongoing COVID-19 pandemic has introduced significant disruptions to supply chains on a global scale. Factory closures, labour shortages, transportation restrictions, and shifts in demand for specific goods have been some

of the primary consequences. Even with the gradual rollout of vaccines and improved management of the virus in various countries, the long-term impacts of the pandemic on supply chains and consumer behaviour continue to shape the global economic landscape.

Simultaneously, geopolitical conflicts like the war in Ukraine have further exacerbated the challenges for supply chains. These conflicts disrupt trade routes, lead to transportation delays, and introduce uncertainty into markets. Political and economic sanctions resulting from these conflicts can hinder the smooth movement of goods and materials across borders.

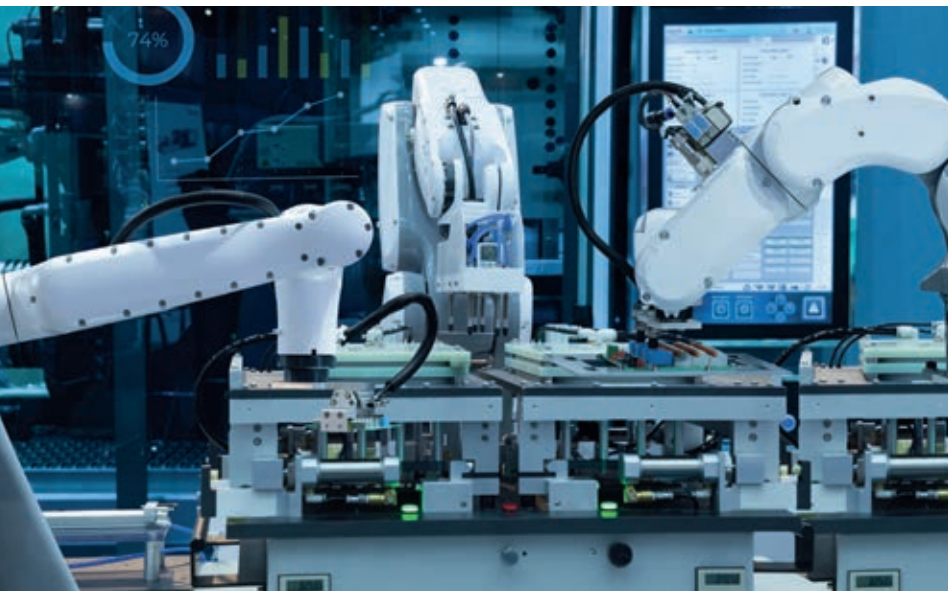
Adding to the complexity, the specter of climate change looms over supply chains. Extreme weather events, ranging from hurricanes and floods to wildfires, have the potential to damage infrastructure and disrupt transportation networks. In addition, environmental regulations and a growing emphasis on sustainability are increasingly influencing supply chain decisions, prompting organizations to re-evaluate their practices to reduce their carbon footprint and ensure environmental responsibility.

It's evident that multiple factors are converging to create a perfect storm for supply chains, and the manufacturing sector is feeling the pressure keenly. Traditional manufacturing processes have relied heavily on human labour to operate

machinery and handle products. However, recent shifts in the way we live and work, including a surge in e-commerce sales, an uptick in remote working arrangements, a phenomenon known as the 'Great Resignation', and an aging workforce, have collectively made it challenging for the manufacturing industry to meet growing demands with a sufficient labour force.

If no effective interventions are undertaken, it is predicted that over 85 million job roles will remain unfilled by 2030, leading to a staggering unrealized global revenue of around US\$8.452 trillion. Notably, countries like Singapore and Hong Kong are projected to account for US\$5.1 billion and US\$2.1 billion of this unrealized revenue, respectively.





Moreover, the mounting labour costs and heightened customer expectations have intensified the demands placed on the manufacturing workforce. The nature of work in this sector varies significantly, with tasks ranging from handling small envelopes to packing sizable boxes, often under tight delivery deadlines. Until recently, motion control and robotic technologies were not sufficiently advanced to handle this range of tasks with the required precision and adaptability.

However, there is a silver lining in the form of fresh breakthroughs in artificial intelligence (AI) and robotics. These advancements have paved the way for automated material handling solutions that are suitable for large-scale supply chains. As a result, manufacturing companies are increasingly

turning to 'cobots' or collaborative robots to address some of their most pressing workflow challenges. These cobots can help reduce the number of repetitive, manual tasks that were previously performed by human workers, thereby increasing efficiency, and freeing up human labour for more strategic and valuable roles.

Collaborative robots represent a new era in automation that deviates from the ominous predictions of hyper-intelligent machines replacing human workers. Instead, cobots are designed to work alongside humans, amplifying their capabilities rather than rendering them obsolete. These robots are typically compact, easy to program, and equipped with advanced safety features, making them suitable for collaborative work environments. They excel in consistent and precise production processes, such as pick and place operations, and are capable of handling both repetitive tasks and hazardous environments that might pose risks to human workers.

A key development that has enabled the rise of cobots is the convergence of robotics with the Industrial Internet of Things (IIoT). IIoT involves interconnecting sensors, instruments, and devices across critical systems, including manufacturing, energy management, healthcare,

and aerospace. By integrating cobots with IIoT technologies, manufacturers can achieve higher efficiency, accuracy, and safety on the production floor. This not only enhances productivity but also helps mitigate the negative impact of labour shortages, which currently result in as much as 20% loss in productive capacity for factories.

Cobots also bring about significant people management benefits. By taking over repetitive and physically demanding tasks, cobots allow human workers to focus on more value-added activities and different types of work that are personally fulfilling and strategically valuable. This can lead to improved job satisfaction, contributing to a more engaged and motivated workforce.

Statista's research indicates that the global market for industrial robots is projected to experience a compound annual growth rate (CAGR) of 26% by 2025, underlining the increasing adoption and importance of automation solutions like cobots in industrial settings.

In a recent report by Gartner on supply chain leaders, it was highlighted that successful organizations are leveraging technology to prioritize human involvement in their digital transformations. This makes the role of cobots

even more urgent and relevant in addressing labour shortages and navigating the ongoing supply chain challenges. Fortunately, the necessary technologies are becoming more accessible and integrated into various industries.

For example, FORTNA (formerly known as MHS Global), a global provider of material handling automation and systems integration, has introduced an innovative robotic solution known as the PacDrive 3 Delta robots. These robots can operate alongside humans, enabling them to efficiently pick and place up to 2000 parts per hour in brownfield scenarios and up to 2500 parts per hour in greenfield scenarios. The success of these cobots is rooted in their intelligent decision-making capabilities, which go beyond simple preset actions. These robots incorporate computer vision software and algorithms to analyse and measure the handling requirements of each individual item, utilizing vacuum-based suction cups, grippers, and arms to pick up and organize items for further processing downstream.



The benefits of cobot installations extend across various organizational priorities. For instance, a manufacturer specializing in slate tile roofing recently deployed robotics to assist in stacking tiles. This move not only addressed labour shortages and increased production capacity but also contributed to the well-being of human workers by reducing the risk of injuries resulting from repetitive physical movements.

However, the potential of cobots is not limited to their individual capabilities. When integrated into a broader network of smart technologies, they become catalysts for unlocking data and insights that can drive significant transformations in productivity, agility, profitability, and employee experiences across industries. Open, cyber-secure, and scalable IIoT platforms can gather and analyse data from various sites and departments, presenting real-time information on performance metrics through intuitive dashboards. This data-driven approach empowers workers and management to make informed decisions that lead to process and profit enhancements.

The future of industrial automation holds the promise of driving improvements at every level. With the assurance that cobots are designed to complement and enhance human work rather than replace it, these technologies can be

seamlessly integrated into existing infrastructures and workforces. Early adopters of digitization are already reaping the rewards. A prime example is Singapore, where the government's commitment to investing in cutting-edge digital technologies, including robotics, artificial intelligence, machine learning, IoT, big data analytics, and cloud computing, is driving the realization of its Smart Nation ambitions. Singapore's ranking as the world's second most automated country is a testament to its progress, propelled by the vision of increasing manufacturing value-add by 50% by 2030.

In conclusion, the convergence of human expertise, collaborative robots, and smart facility software presents a potent formula for overcoming today's labour and supply chain disruptions while also building resilience against future challenges. The rise of robots, far from being a dystopian narrative, represents a positive force that augments human capabilities, fuels innovation, and propels industries toward a more efficient and sustainable future. As technology continues to evolve and industries embrace automation, the vision of harmonious collaboration between humans and robots becomes an integral part of our reality, shaping a future where productivity, creativity, and progress coexist harmoniously.

The background is a dark blue gradient with a complex network of white, glowing lines and dots. The lines are of varying thickness and form a web-like structure, with some lines ending in small, bright white circles. The dots are scattered throughout the image, some appearing as small, faint blue specks and others as larger, more prominent white circles. The overall effect is a sense of digital connectivity and data flow.

THE ASSOCIATION

SETA OFFICE BEARERS

Measured by any standard, Singapore's social and economic transformation is impressive. Within one generation, it has moved from being a third world economy into a first world economy. Electricity has played a pivotal role in shaping Singapore's development, and SETA, as a key stakeholder, has contributed to this success.

Even as the government rolled out the physical infrastructure to ensure the nation has ample supply of electricity to fuel its development, SETA has worked with other stakeholders to establish the requisite standards for the electrical trades.



Front Row (Left to Right):

Back Row (Left to Right):

Er. Lim Say Leong (Honorary Treasurer),

Scott Cham (Social Officer), Wong Yick

Steven Goh (Committee Member), Vince

新加坡电器商公会

SINGAPORE ELECTRICAL TRADES ASSOCIATION

2022-2023



Paul Chia (Vice President), Louis Lim (President), Andrew Koh (Vice President), Lim Chee Seng (Honorary Secretary), Chee Jimi (Committee Member), Richard Tan (Welfare Officer), C.M. Wong (Asst. Honorary Secretary), Bryan Kum (Auditor), Kent Low (Social Officer), Lim Weili (Welfare Officer), Teng Li Mei (Secretariat), Tan Kok Chin (Auditor),

SETA EXECUTIVE COUNCIL 2022/2023

Much of the credit must go to the successive generations of committed SETA leaders who have invested their time, energy and resources to address issues impacting the electrical trades and advance Singapore's development. As we celebrate SETA's 65th birthday, we would like the honour the many who have served the association so faithfully over the years.



PRESIDENT

Mr Louis Lim

Lim Kim Hai Electric Co.
(S) Pte Ltd



VICE PRESIDENT

Mr Paul Chia

Yew Lee Electric Co.
Pte Ltd



VICE PRESIDENT

Mr Andrew Koh

Eye Lighting Asia Pacific
Pte Ltd



WELFARE OFFICER

Mr Lim Weili

Capital Distributors (S) Pte Ltd



SOCIAL OFFICER

Mr Vincent Low

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HONORARY SECRETARY

Mr Lim Chee Seng

Fengsheng Electric Co
Pte Ltd



ASST. HONORARY SECRETARY

Mr C. M. Wong

Ngee Cheng Electric Co.
Pte Ltd



HONORARY TREASURER

Er. Lim Say Leong

Sunlight Electrical Pte Ltd



WELFARE OFFICER

Mr Richard Tan

Singapore Cables Manufacturers
Pte Ltd



COMMITTEE MEMBER

Mr Wong Yick Chee Jimi

Maxspid Enterprise
Pte Ltd



COMMITTEE MEMBER

Mr Steven Goh

ABB Pte Ltd



AUDITOR

Mr Tan Kok Chin

SEC (S) Pte Ltd



AUDITOR

Mr Bryan Kum

Kum Eng Huat Electric Co
Pte Ltd

SETA REPRESENTATIVES IN VARIOUS COMMITTEES

Organisation	Subjects	Representatives
Enterprise Singapore	TC on Safety of Household and Similar Electrical Appliances and Electronic Equipment	Mr. Lim Weili Capital Distributors (S) Pte Ltd Tel: (65) 6288 9190 Fax: (65) 6288 5869
Enterprise Singapore	S'pore National Committee (SNC) for the International Electro-Technical Committee (IEC)	Mr. Alan Ng Eye Lighting Asia Pacific Pte Ltd Tel: (65) 6742 3611 Fax: (65) 6742 3611
Enterprise Singapore	TC on Electrical Accessories and Electric Cables	Mr. Ridzwan Mustapa Singapore Cables Manufacturers Pte Ltd (Prysmian Group) Tel: (65) 6265 0707 Mr. Alex Ong Tai Sin Electric Ltd Tel: (65) 6672 9292 Fax: (65) 674 23611
Enterprise Singapore	TC for Switchgear and Controlgear	Er. Lim Say Leong Sunlight Electrical Pte Ltd Tel: (65) 6741 9055 HP: (65) 9633 0559

Organisation	Subjects	Representatives
Enterprise Singapore	Electrical and Electronic Standards Committee	Mr. Alan Ng Eye Lighting Asia Pacific Pte Ltd Tel: (65) 6742 3611 Fax: (65) 6742 3611
Enterprise Singapore	TC on Electrical & Electronic Products	Er. Lim Say Leong (Chairman) Sunlight Electrical Pte Ltd Tel: (65) 67419055 HP: (65) 96330559 Mr. Eric Lim LKH Projects Distribution Pte Ltd Tel: (65) 68977078 HP: (65) 96345864
Enterprise Singapore	TC on Building Facilities and Services	Mr. Steven Goh Kee Yong ABB Pte Ltd Tel: (65) 67765711 HP: (65) 91193378
Enterprise Singapore	TC on Power System and Utilisation	Er. Lim Say Leong Sunlight Electrical Pte Ltd Tel: (65) 67419055 HP: (65) 96330559

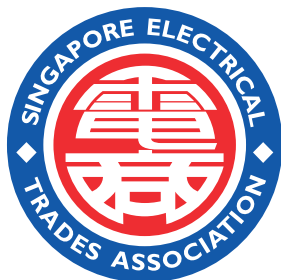
Organisation	Subjects	Representatives
Enterprise Singapore	TC on Lamps and Related Equipment	Mr. James Wong Maxspid Enterprise Pte Ltd Tel: (65) 67481838 Fax: (65) 67491838
Enterprise Singapore	TC for Emergency Alarm and Communication Systems	Mr. Low Kim Seong Aska Engineering & Trading Pte Ltd Tel: (65) 67412752 Fax: (65) 67452752
Enterprise Singapore	TC for Electric Vehicle (EV)	Er. Lim Say Leong Sunlight Electrical Pte Ltd Tel: (65) 6741 9055 HP: (65) 9633 0559
Enterprise Singapore	Technical Committee For Maintenance Of Electrical Equipment of Electrical Installations	Er. Lim Say Leong Sunlight Electrical Pte Ltd Tel: (65) 6741 9055 HP: (65) 9633 0559
Enterprise Singapore	WG To Review <ul style="list-style-type: none"> SS97 on residual current operated circuit-breaker without integral overcurrent protection for household and similar uses (RCCBs) <ul style="list-style-type: none"> - General rules SS480 on residual current operated circuit-breaker with integral overcurrent protection for household and similar uses (RCBOs) <ul style="list-style-type: none"> - General rules 	Mr. Steven Goh Kee Yong ABB Pte Ltd Tel: (65) 67765711 HP: (65) 91193378

Organisation	Subjects	Representatives
Enterprise Singapore	National Technical Committee For Solar Photovoltaic Energy Systems	Mr. Albert Lim SolarGy Pte Ltd Tel: (65) 6570 9001 Fax: (65) 6570 9002
Enterprise Singapore	Working Group on IEC City Service Continuity	Mr. Christopher Sia Engie RCS Pte Ltd Tel: (65) 6316 1180 Fax: (65) 6316 1136
Enterprise Singapore	Task Force Group on IEC standard on Power Track System (to consider IEC 61534).	Mr. Scott Cham Strongly Lighting Pte Ltd Tel: (65) 6292 2302
SCCCI	Representative	Mr. Paul Chia Yew Lee Electric Co Pte Ltd Tel: (65) 6295 8800 Fax: (65) 6297 1101
STAS	Representative	Mr. Louis Lim Lim Kim Hai Electric Co (S) Pte Ltd Tel: (65) 6490 5000 Mr. Wong Chen Ming Ngee Cheng Electric Co Pte Ltd Tel: (65) 6459 9996 Fax: (65) 6457 4707

COUNCIL MEETINGS







Past & Present Presidents of SETA

(The Untiring Efforts/Legacy continues)

1981 – 1983	Bobby Lim Chye Huat
1984 – 1985	Foo Chee Jeow
1986 – 1987	Foo Chee Jeow
1988 – 1989	Foo Chee Jeow
1990 – 1991	Bobby Lim Chye Huat
1992 – 1993	Foo Chee Jeow
1994 – 1995	Bobby Lim Chye Huat
1996 – 1997	Foo Kong Deen
1998 – 1999	Foo Kong Deen
2000 – 2001	Foo Kong Deen
2002 – 2003	Louis Lim Chai Lai
2004 – 2005	Louis Lim Chai Lai
2006 – 2007	Louis Lim Chai Lai
2008 – 2009	Louis Lim Chai Lai
2010 – 2011	Louis Lim Chai Lai
2012 – 2013	Louis Lim Chai Lai
2014 – 2015	Louis Lim Chai Lai
2016 – 2017	Louis Lim Chai Lai
2018 – 2019	Louis Lim Chai Lai
2020 – 2021	Louis Lim Chai Lai
2022 – Present	Louis Lim Chai Lai



Late Foo Chee Jeow



Bobby Lim Chye Huat



Late Foo Kong Deen



Louis Lim Chai Lai

The background is a dark blue gradient with a complex pattern of glowing white and light blue lines and dots. The lines are vertical and horizontal, creating a circuit-like or data-path aesthetic. Some lines end in small, bright blue dots, while others are open. The overall effect is futuristic and technological.

SETA EVENTS 2019-2023

2019 EVENTS

SETA 60TH ANNIVERSARY GALA DINNER

18.01.2019



SETA CNY LUNCH

15.02.2019



SETA DUMPLING FESTIVAL

07.06.2019



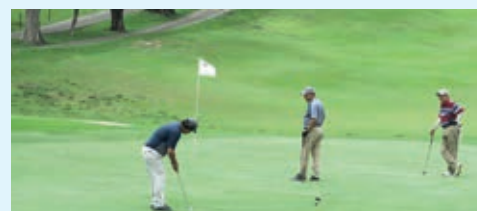
SETA BOWLING TOURNAMENT

30.06.2019



SETA ANNIVERSARY PRESIDENT'S CHALLENGE TROPHY GOLF TOURNAMENT 2019

18.10.2019



SS638 TALK

21.11.2019



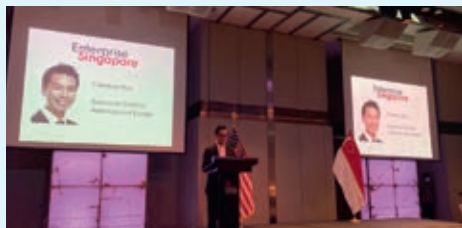
2022 EVENTS

31ST SETA BOWLING TOURNAMENT 2022 CUM MEMBERS GET-TOGETHER DAY

26.06.2022



SETA MEET UP WITH NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) VIA US EMBASSY

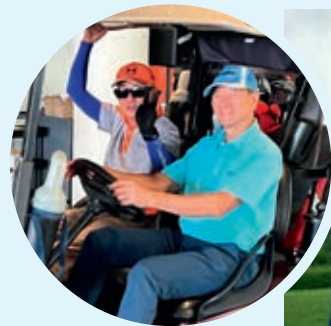


2023 EVENTS

LUNAR NEW YEAR LUNCH GET-TOGETHER



SETA ANNIVERSARY PRESIDENT'S CHALLENGE TROPHY GOLF TOURNAMENT 2023



The background is a dark blue gradient with a complex pattern of white and light blue lines. These lines are mostly vertical, with some horizontal segments, creating a stepped or circuit-like appearance. At the ends of many of these lines are small, glowing white dots. There are also some smaller, fainter blue dots scattered throughout the background. The overall effect is one of a digital or technological environment.

SETA MILESTONES

SETA MILESTONES ...



1958

- The Singapore Electrical Contractors Association was registered by eight founding members.

1960

- The association moved into its own premises at 365D Serangoon Road bought with S\$20,000 donated by its members.

1968

- It was a momentous year for the association. For its 10th anniversary celebration, a gala dinner was held and a fund-raiser organised. At the film premiere of the James Bond's movie, Casino Royale, organised in collaboration with the Lions Club Singapore Central, S\$20,700 was raised for the National Defence Fund.
- The association's name was changed to the Singapore Electrical Trades Association (SETA) to reflect its expanded membership to include wholesalers and manufacturers.

1970

- With the generous contribution of its members, SETA bought a three-storey building in Truro Road.

Inaugurated by then Minister of State for Education and Member of Parliament for the constituency, Dr Lee Chiaw Meng, the building remained the association's headquarters for 38 years.

1974

- In response to the Government's call to provide training places, SETA introduced evening classes at the neighbouring Pek Kio Community Centre to prepare trainees for the entry level NTC 3 examination in electrical fittings and installation. These classes were disbanded with the expansion in technical programmes at vocational institutes and polytechnics.
- In the aftermath of the fire which destroyed Robinson Department Store, the Electrical Workers and Contractors Licensing Bill was passed to enhance safety standards and upgrade professionalism within the electrical industry.

1975

- As a key stakeholder in the electrical trades, SETA began its long-standing involvement in standards development, working with the national standards body the Singapore Institute of Standards and Industrial Research (SISIR) and its successor the Productivity and Standards Board (PSB) and SPRING Singapore.



SPECIALISTS TRADE
ALLIANCE OF SINGAPORE



1976

- A group of contractors and electricians broke away from SETA to form their own association, the Singapore Electrical Contractors and Licensed Electrical Workers Association.
- The region's first international exhibition of electrical and electronic equipment, ENEX, was organised by Interfama at the National Stadium with the support of SETA. It brought together 130 manufacturers from 14 countries. The biennial event grew year on year until it closed in 1988 after its founder sold all Interfama exhibitions to Reed Exhibitions.

2000

- SETA established affiliation with Philippine Association of Electrical Industries Inc (PAEII).
- After forty two years of the founding of our Association, the Council Members decided that SETA should have a website in line with the government policy, with this SETA Website, we would be able to provide a better services to our members as well as the public.

2003

- SETA became a member of the Six+6 Trades Alliance to campaign for a change in the suppliers-contractors contract, the cause of many of its members' payment woes. The Alliance was renamed the Specialists Trades Alliance of Singapore (STAS) in August 2005.

2004

- Following intense lobbying by STAS, the Security of Payment Bill was passed by Parliament which secured a better payment deal for suppliers and sub-contractors and provided cheap and quick resolutions to construction disputes.

2007

- The Second-hand Good Dealers Act was introduced to address the growing problem of theft at worksites following the spike in commodity prices. The Act has made it more difficult for stolen goods to be sold.

2009

- The association moved into its new premises at Lipo Building which it bought with proceeds from the sale of its headquarters at Truro Road. A second office space is on tenancy lease.

SETA MILESTONES ...



2010

- Following a meeting with the Korea Electrical Manufacturers Association (KOEMA) on 11th June, a Memorandum of Understanding between SETA and KOEMA was signed to strengthen mutual understanding and increase trade relation and economic cooperation.

2011

- The new cable colour code was made mandatory by the Energy Market Authority on 1 March bringing Singapore's wiring practice in line with the European Union and Hong Kong. SETA contributed to its implementation by engaging members in the manufacturing, installation work and trading in many ways, including drafting the amendment to the SS CP 5, holding awareness seminars and conducting workshops.

2013

- 2013 saw the pressing need for sustainable and professional facility management. SETA has an important role to play in promoting energy efficiency such as in the area of lighting using LEDs and pump and fans using energy efficient motors. When the International Facility Management Expo (iFaME) made its first presentation in Singapore in May, SETA played an active part in the inaugural expo.

2016

- A meeting with the Turkish Trade Delegation was held on 31st October at SETA's premises to explore opportunities for collaboration between Turkish and Singapore companies in the electrical trade.

2018

- SETA participated in the BCA Productivity Learning Trip to the United Kingdom to learn at first hand how the British construction industry is adopting the Prefabricated MEP Systems. Prefabricated MEP System is one of the key components in BCA's 2nd Construction Productivity Roadmap, Design for Manufacturing and Assembly.



2019

2020

2022

2023

• Security of Payment Act (Amendment)

This talk was conducted by Mr Eric Ng (a lawyer and adjudicator accredited by the Construction Adjudicator Accreditation Committee of Singapore Mediation Centre), who was well versed in the adjudication regime under the Building and Construction Industry Security of Payment Act (Cap 30B), focused on what SETA members could do to avoid the potential pitfalls of claiming payment.

• SS 638 and SS 650 Code of Practice for Electrical Installations and Temporary Electrical Installations

Our representative to the standards committee, Er. Lim Say Leong explained to members of the new SS 638 and SS 650, Discussion entailed implementation, salient changes and how the revision would impact electrical trades.

• Meeting with BCA and Ministers on resumption of work @ construction site

SETA meet up with BCA and MHA in July 2020 to address members' concerns on escalating costs and to have early resumption of construction work. The key issues addressed were

- (1) significant added costs of delivery to sites,
- (2) delay of payment to contractors, and
- (3) for the early resumption of work at construction site.

• SETA Meeting with NEMA (National Electrical Manufacturers Association) and US Embassy

This meeting was to introduce US advanced manufacturing companies into Singapore seeking to collaborate with local companies in the electrical trade.

• Bridging The Cross-Border Gap (JMBA & STAS & SETA)

Our Assistant Honorary Secretary, Mr CM Wong, attended the day trip at Johor Bahru and passed the relevant contacts of the Johor Master Builders Association's (JMBA) delegates for the benefit of our SETA members who were keen to do business in Malaysia.

• Luncheon Meeting with Mr Nan Cuihui (Chairman of CHINT Group Co. Ltd and Chairman of the China Electrical Equipment Industry Association)

This network session introduced SETA to Mr Nan Cuihui to explore the possibility of SETA to link up with Electrical Trades Association in China and of CHINT Global joining SETA.

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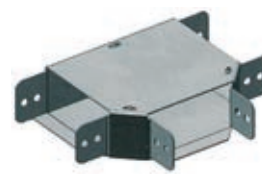
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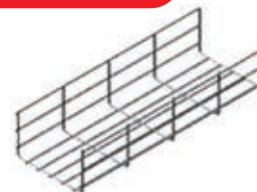
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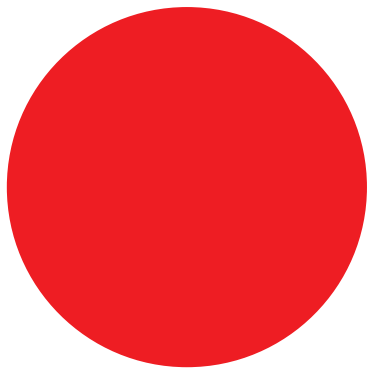


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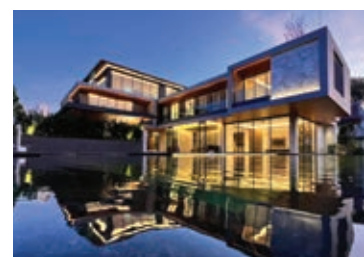
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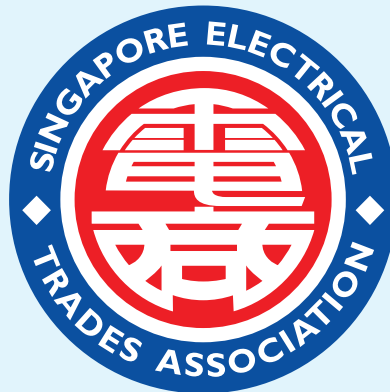
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- All others who have in one-way or another contributed towards making this publication possible.

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