

# 新加坡能源转型与 新加坡国际能源周2025

**Singapore Energy Transition and  
Singapore International Energy Week  
(SIEW) 2025**





# AGENDA

1. Overview of Role of EMA
2. Singapore Energy Transition
3. SIEW

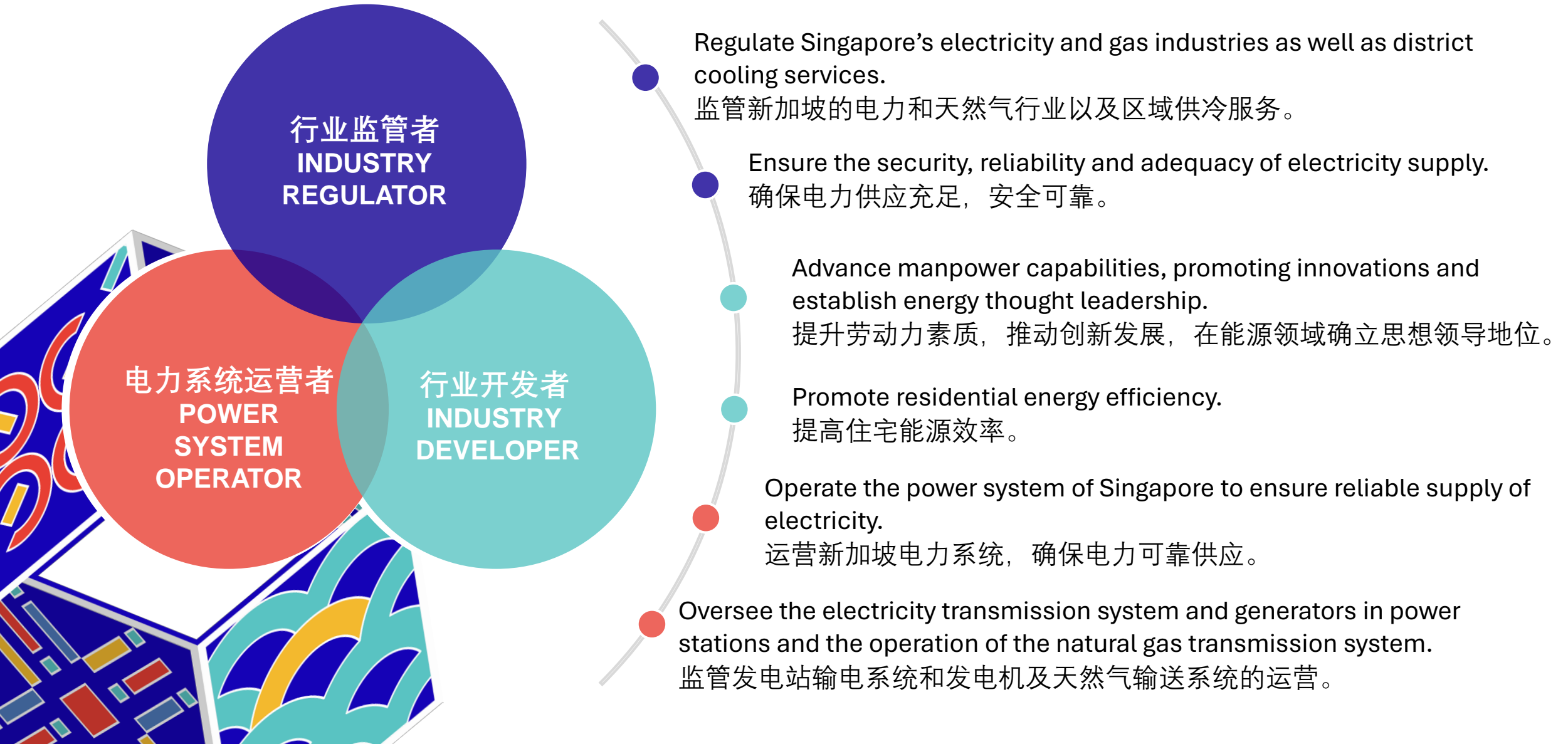
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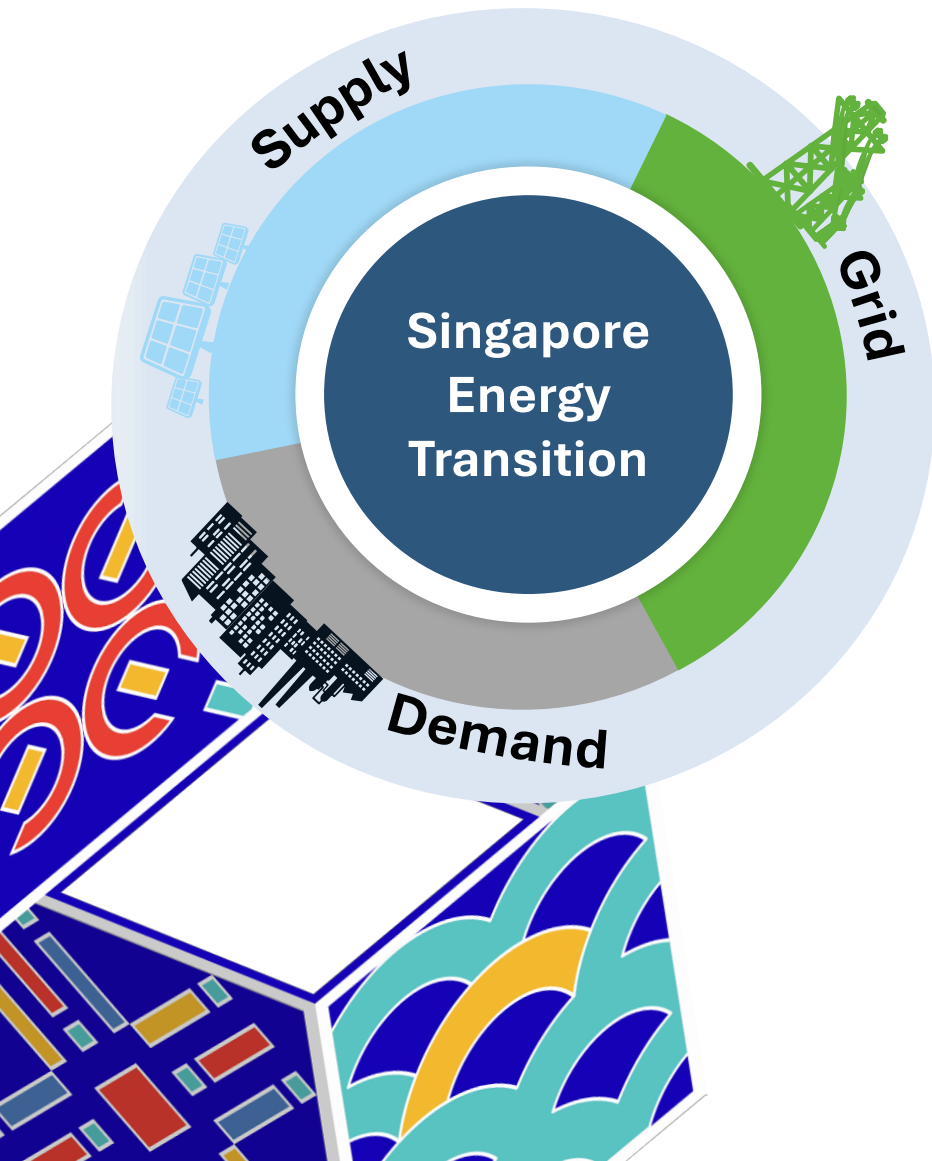
IN CELEBRATION OF



# ROLE OF ENERGY MARKET AUTHORITY 新加坡能源管理局职责



# SINGAPORE ENERGY TRANSITION 新加坡能源转型

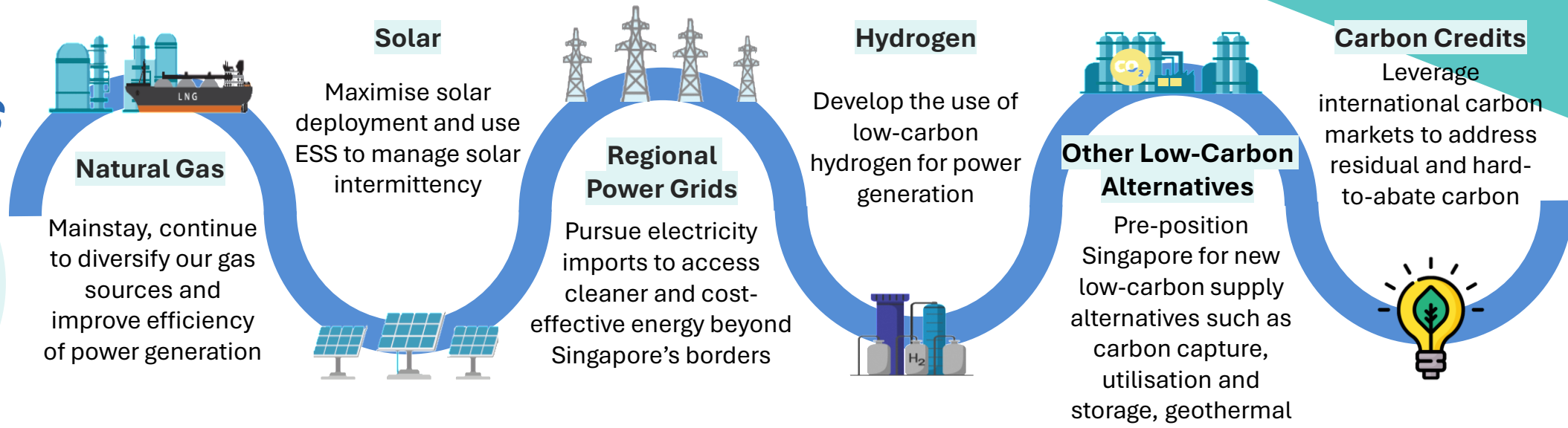


The Singapore Energy Transition is a multi-pronged strategy that outlines the key paths for Singapore's transition towards a more sustainable future.

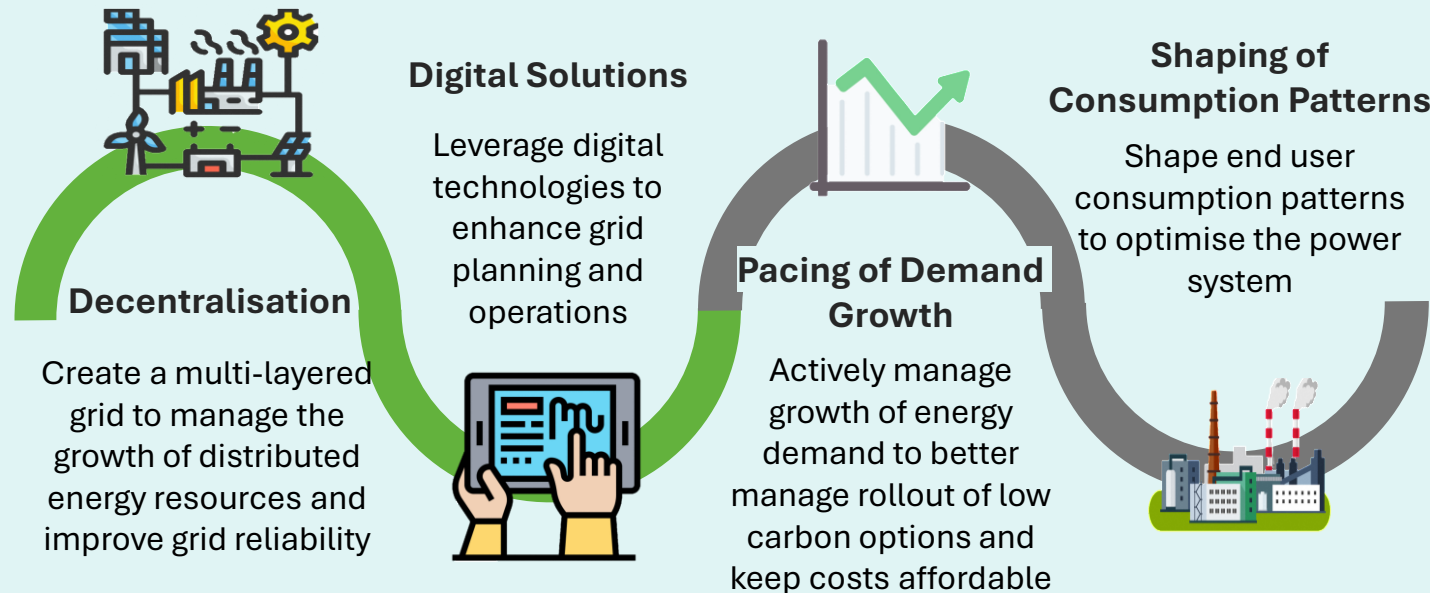
It aims to reduce the power sector's emissions, through supply, grid, and demand measures while ensuring that Singapore's power system remains secure, reliable, and sustainable.

新加坡能源转型规划，旨在推动新加坡迈向更加可持续的能源未来。该计划通过优化能源供应、提升电网效率及调整能源需求来减少电力行业的碳排放，同时确保国家电力系统的安全性、可靠性和可持续性。

# SUPPLY STRATEGIES



# GRID STRATEGIES



# DEMAND STRATEGIES





# 1<sup>ST</sup> SWITCH: DIVERSIFY NATURAL GAS SOURCES FOR EFFICIENT POWER GENERATION 实现天然气来源多元化，提高发电效率



~95% of Singapore's electricity is generated using imported natural gas today.

新加坡约95% 的电力是通过进口天然气发电的。

Singapore will develop a second LNG terminal to meet energy needs and enhance energy security.

As the cleanest burning fossil fuel, natural gas will remain a key energy source before other low-carbon energy sources become viable. 天然气作为最清洁的化石燃料，在其他低碳能源尚未普及前，仍将是重要的能源来源。

New natural gas power plants must be hydrogen ready.

新的天然气发电厂必须具备氢能适用性。

## 2<sup>ND</sup> SWITCH: MAXIMISE SOLAR DEPLOYMENT AND GRID RESILIENCE WITH ESS SUPPORT 借助储能系统，最大程度增加太阳能部署和电网弹性

- Solar is our most promising renewable energy source, creatively deployed in our in land-scarce city.  
太阳能是新加坡最具前景的可再生能源，以创新方式部署于土地资源紧张的城市。
- Singapore has achieved our 2025 target of deploying 1.5GWp of solar and on track to meet our target of at least 2GWp by 2030.
- However, intermittency from rain and cloud cover in our tropical climate challenges solar energy. Daytime harvesting limits availability.
- Energy Storage Systems (ESS) address this by managing electricity supply-demand mismatches, ensuring grid reliability, and regulating second-to-second power fluctuations.  
储能系统可通过管理电力供需错配、确保电网可靠性及监管每秒电力波动，妥善解决该问题。

By 2025

**1.5 GWp of solar**, which can power around 260,000 households

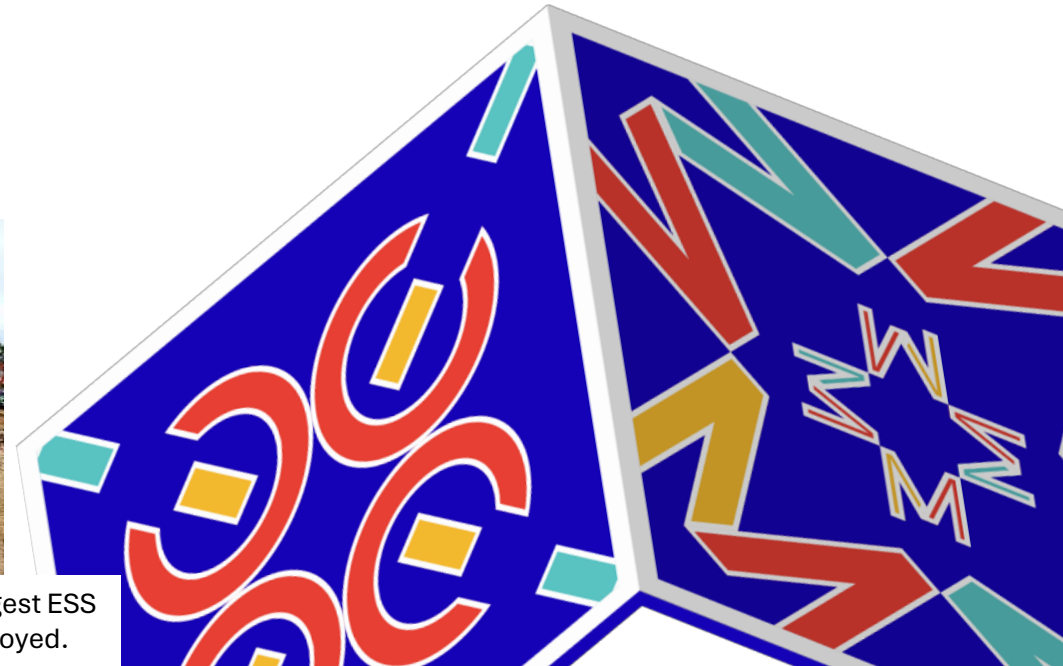


By 2030

**At least 2 GWp of solar**, which can power around 350,000 households



The 285MWh Sembcorp ESS is Southeast Asia's largest ESS and is the fastest in the world of its size to be deployed.



# 3<sup>RD</sup> SWITCH: IMPORT REGIONAL ELECTRICITY FOR CLEAN ENERGY

## 引进区域电力，发展清洁能源



- EMA targets to import around 6GW of low-carbon electricity by 2035, which is around one-third of our energy supply then. 能源市场管理局计划2035 年进口约6吉瓦的低碳电力，届时将占全国能源供应的约三分之一。
- While Singapore has limited renewable energy resources, we are able to access low-carbon electricity that is abundant in the region by connecting to regional power grids.
- EMA has launched Request for Proposals for large-scale electricity imports.
- To date, EMA has issued Conditional Approvals to ten projects to import low-carbon electricity from Australia, Cambodia, Indonesia and Vietnam.  
截至目前，能源市场管理局已向十个项目发出有条件批准，以从澳大利亚、柬埔寨、印度尼西亚和越南进口低碳电力。



# 4TH SWITCH: POSITION SINGAPORE FOR LOW-CARBON SUPPLY ALTERNATIVES 探索新加坡低碳供能的替代能源

As an alternative energy-disadvantaged country, we are investing early in early low-carbon technologies for future commercial viability.

## Carbon Capture, Utilisation and Storage (CCUS) 碳捕集、利用与封存 (CCUS)

- Singapore is exploring carbon capture and storage to decarbonise the economy starting with a CCS project to capture and aggregate CO<sub>2</sub> emissions. 新加坡正在探索碳捕集与封存技术，以推动经济低碳化，首个 CCS 项目将用于捕集和汇集二氧化碳排放。



## Low-Carbon Hydrogen 低碳氢能

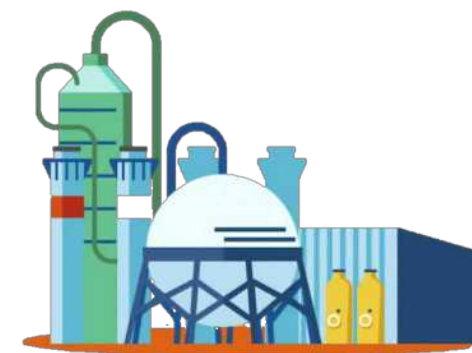
- We will develop local H<sub>2</sub> capabilities and infrastructure for future commercial viability integration. 我们将努力发展当地氢能和相关基础设施，确保其未来顺利整合至商业化应用中。

## Geothermal 地热能

- We will assess our deep geothermal resource potential for power generation at depths of up to 10km. 我们将探测至多 10 公里深度的地热能，评估可用于发电的深层地热资源。

## Nuclear 核能

- We will monitor advanced nuclear technologies' progress to keep energy options open and assess their implications. 我们将密切关注核能技术的前沿发展，始终对能源选项持开放态度，评估其可能带来的影响。





# ABOUT





SINGAPORE INTERNATIONAL ENERGY WEEK

## 新加坡国际能源周

The Singapore International Energy Week (SIEW) is an official trademarked event by the Energy Market Authority of Singapore (EMA). It is an annual platform for energy professionals, policymakers and commentators to discuss and share best practices and solutions within the global energy space.

新加坡国际能源周 (SIEW) 是由新加坡能源市场管理局 (EMA) 官方举办的大型活动。作为一年一度的行业盛会，该活动为能源专业人士、政策制定者以及评论员提供了广阔平台，共同探讨和分享全球能源领域的最佳实践和解决方案。

The 18th edition of SIEW will be held from 27 – 31 October 2025 in Singapore.

第 18 届 SIEW 将于 2025 年 10 月 27 日至 31 日在新加坡举行。



# SIEW AT A GLANCE

Monday 27 Oct	Tuesday 28 Oct	Wednesday 29 Oct	Thursday 30 Oct	Friday 31 Oct	
SIEW Summit	Singapore-IEA Forum	SIEW Energy Insights	SIEW Thinktank Roundtables	SIEW Thinktank Roundtables	
		SIEW TechTable			
	Singapore-IRENA High Level Forum	Asia Gas Markets Conference			
		Asian Downstream Summit/ Asian Refining Technology Conference/ Ammonia & Carbon Capture Asia			
	Asia Clean Energy Summit + Asia Carbon Summit				
	NEW Conference on Electric Power Supply Industry (CEPSI)				
SIEW Summit Gala Reception	SIEWConnects	SIEWConnects	SIEWConnects	Youth@SIEW	
SG60@SIEW Energy Showcase					

Programme is subject to change.





**Envisioning Energy Tomorrow,  
Building Systems Today**

**展望能源未来，  
建设今日体系**



# EVENT HIGHLIGHTS



## **SG60@SIEW Energy Showcase & Gala Reception**

- Highlighting energy innovations and Singapore's energy transition plan towards 2065

## **SIEW Academy**

- A network of distinguished global energy thought leaders who will shape the discourse and chart new pathways for our energy future

## **Conversations on Future-Ready Technologies**

- Deep dives into Nuclear Energy, CCUS, Artificial Intelligence applications, Biomethane and other emerging technologies

# SIEW SUMMIT THEMES 峰会主题



**ENVISIONING ASIA'S  
ENERGY FUTURE**

展望亚洲能源未来



**THE NEXT ENERGY  
BREAKTHROUGH: SCALING  
FUTURE ENERGY  
TECHNOLOGIES**

扩展未来能源技术



**THE FUTURE OF ENERGY:  
NATURAL GAS' STRATEGIC  
ROLE IN GRID STABILITY**

天然气在电网稳定中的战略  
作用



**FINANCING OUR  
ENERGY FUTURE**

未来能源的投资展望



# DISCUSSION AREAS 讨论课题

- 1. Strengthening regional interconnectivity 加强区域互联互通**
  - advancing power grids and energy systems integration across borders
- 2. Fostering collaboration in energy research 推动能源研究领域的合作**
  - sharing knowledge and collaborating on energy solutions
- 3. Development and deployment 开发与部署**
  - implementing new energy technologies and infrastructure
- 4. The role of natural gas as a transition fuel 天然气在能源转型中的关键作用**
  - leveraging natural gas to bridge the shift to a sustainable energy future
- 5. Building a people-centric system 以人为本，推动系统发展**
  - ensuring energy solutions address community's needs and aspirations
- 6. Resilient energy system 灵活且稳定的能源系统**
  - creating robust and adaptable energy infrastructure





# PAST SPEAKERS AT SIEW 历届论坛演讲嘉宾



**Lawrence Wong**  
Prime Minister and Minister  
for Finance  
Republic of Singapore



**H.E. Zhang Jianhua**  
Administrator, National  
Energy Administration,  
People's Republic of China



**H.E. Ban Ki-moon**  
Secretary-General of the  
United Nations



**H.E. Dr Kao Kim Hourn**  
Secretary General  
ASEAN



**Dr Fatih Birol**  
Executive Director  
International Energy Agency  
(IEA)



**Francesco La Camera**  
Director-General  
International Renewable  
Energy Agency (IRENA)



**H.E. Armida Salsiah  
Alisjahbana**  
Under-Secretary General  
UNESCAP



**Xin Baoan**  
Chairman, Global Energy,  
Interconnection  
Development and  
Cooperation Organisation



**Pang Xiaogang**  
President, State Grid  
Corporation of China



**Li Rui,**  
Chief Executive Officer,  
Guangzhou Power Supply  
Bureau

# PARTNER EVENTS 共同主办的专业会议



The 12th edition of Asia Clean Energy Summit will take place on 28-30 October 2025 at Marina Bay Sands Expo. As Asia's leading event focused on clean energy technology, policy and finance, the Asia Clean Energy Summit provides a common platform for regional thought leaders in both the public and private sectors to collaborate on critical issues and opportunities in harnessing clean energy for the future. The 2<sup>nd</sup> Asia Carbon Summit's programme will discuss how Asia is positioning itself at the forefront of global climate action while creating substantial economic opportunities for stakeholders across the region.



Asia Gas Markets Conference

The Asia Gas Markets Conference, a premier two-day industry gathering, brings together energy leaders to explore Asia's evolving gas markets, focusing on regional trends, strategic partnerships, and sustainable energy transition. The programme covers critical topics from geopolitical impacts and market dynamics to future energy innovations, including hydrogen integration and carbon capture.



Asian Downstream Summit/ Asian Refining Technology Conference/ Ammonia & Carbon Capture Asia is Asia's most influential downstream refinery and petrochemical event. This year's edition will be held from 29-30 October at Marina Bay Sands Singapore.



The 25th Conference of Electric Power Supply Industry (CEPSI), a flagship event of the Association of the Electricity Supply Industry of East Asia and Western Pacific (AESIEAP). Hosted by SP Group in conjunction with SIEW 2025, the event will bring together regional participants to build on strategic conversations and collaborative efforts toward the energy transition.

# SPONSORSHIP OPPORTUNITIES 赞助与合作机会

THOUGHT LEADERSHIP

战略思维引领

BRAND RECOGNITION

品牌塑造

MARKETING AND MEDIA  
PROFILING

传播媒体

NETWORKING AND  
BUSINESS DEVELOPMENT

商务拓展与市场增长



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**Hayden Lee**

Email: [hayden\\_lee@ema.gov.sg](mailto:hayden_lee@ema.gov.sg) | Phone: +65 6376 7479

# DON'T MISS OUT 切勿错过

REGISTER FOR SIEW

登记参加



FIND OUT MORE ABOUT  
SIEW 2025

了解相关信息



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成为赞助合作伙伴

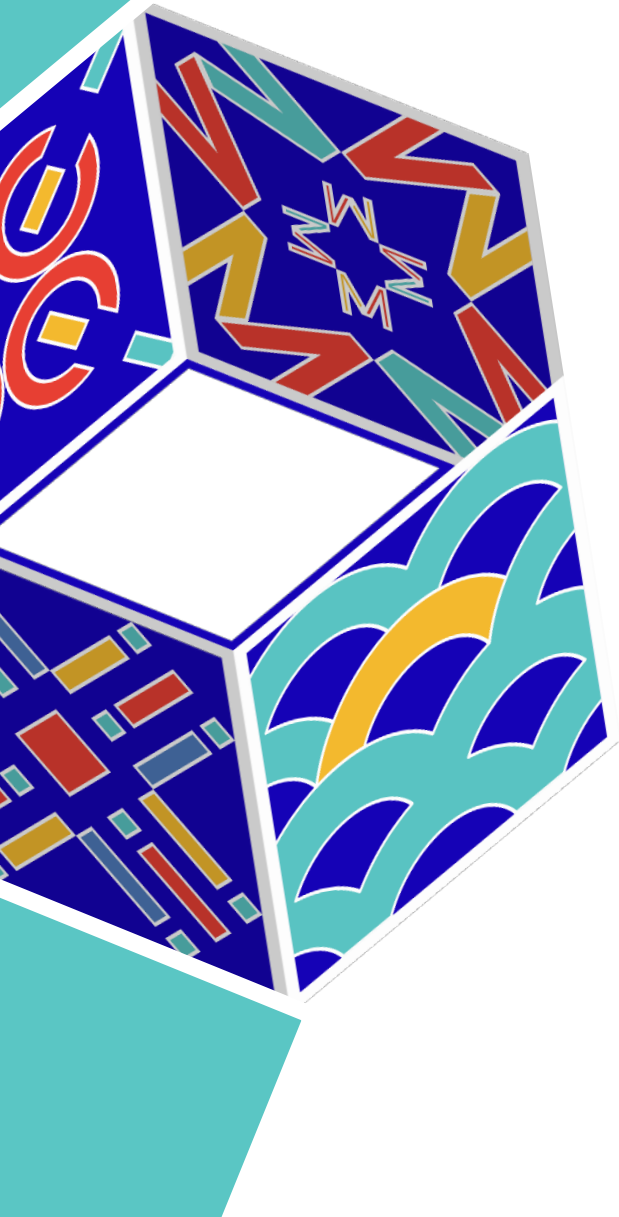


Registration opens in July. Scan the QR code  
above to register your interest.  
报名将于七月开放。请扫描上方二维码登记您的  
兴趣。





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新加坡国际能源周(SIEW)

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# siew 2025

SINGAPORE INTERNATIONAL ENERGY WEEK  
27 - 31 OCTOBER 2025 | MARINA BAY SANDS

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IN CELEBRATION OF



# BUILD CONNECTIONS



**SIEWConnects:** Your gateway to global energy leaders and industry insights

Register your interest for our upcoming sessions:

- Washington DC, United States (June)

