



# RICS Hong Kong NEC4 X29: Supporting sustainability through procurement practices webinar

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# NEC4 X29: Supporting sustainability through procurement practices



# Introduction



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- 40 years' experience in setting up and managing contracts, 28 of those using NEC
- Based in Hong Kong
- NEC Users' Group Secretary since 2006
- Published NEC3 and NEC4 Compared, NEC2 and NEC3 Compared; joint author NEC4 Avoiding and Resolving Disputes, NEC4 Practical Solutions, NEC3 Practical Solutions
- Accredited Mediator and Dispute Resolution Adviser
- Honorary Advisor to the Hong Kong Adjudication Centre
- Senior Certified Adjudicator at the International Dispute Resolution & Risk Management Institute

# Agenda

- Introduction and learning objectives
- What is the NEC X29 clause?
- Sustainability in construction
- Environmental, Social and Governance (ESG) and the NEC4 secondary Option climate change clause (X29)
- NEC4 Facilities Management Contract (FMC) and ESG
- Projects in Hong Kong that have focused on sustainability
- Q&A
  - Credit to AI for some of the sustainability/ESG content in this presentation

## What is the NEC X29 clause?

- Intended to reduce the impact of the creation, operation, maintenance and demolition of the *works* on climate change
- Enables a *Client* to state their Climate Change Requirements in the Scope and provides a new climate change plan for a *Contractor* to set out their strategy for achieving the requirements
- If a *Client* wishes to, they can incentivise performance through a Performance Table – a target can be set and an adjustment to payment is made if the *Contractor* exceeds, meets or does not meet each target
- There is a need to carefully manage compensation events, acceleration etc that might affect the Performance Table

## What is the NEC X29 clause?

- If a *Client* does not wish to set Climate Change Requirements, the clause provides for a *Contractor* to submit proposals to change the *Client's* Scope to achieve the reduction in impact of the creation, operation, maintenance and demolition of the *works* on climate change
- The proposals may include changes to the Prices and Performance Table, a revised programme, resulting risks to the *Client*
- Again, care is needed to think through the effect of the proposals

# Sustainability in construction

- Green building design
- Efficient water management
- Waste reduction and recycling
- Energy efficiency
- Sustainable material selection
- Sustainable site development

# Sustainability in construction

- Indoor environmental quality
- Life cycle assessment
- Green roof and vertical gardens
- Adaptive reuse and renovation
- These are just a few examples of sustainable practices in construction
- The industry continues to evolve, and new innovations and technologies are being developed to further enhance sustainability in the built environment
- What are the needs and interests of your *Client*
- What is your *Client's* mission statement, what is their purpose?



# Environmental, Social and Governance (ESG) and the NEC4 Secondary Option Climate Change Clause (X29)

- What does ESG stand for?
  - Environmental
  - Social
  - Governance
- What is the purpose of ESG?
  - It is a framework used to evaluate the sustainability and ethical impact of an investment or business

## Environmental, Social and Governance (ESG) and the NEC4 Secondary Option Climate Change Clause (X29)

- An explanation of environmental:
  - This refers to the consideration of environmental factors and how a company's activities impact the natural world
  - It includes issues such as climate change, resource depletion, pollution, waste management, energy efficiency, and the conservation of biodiversity.
  - ESG factors related to the environment assess a company's commitment to sustainable practices and its efforts to minimise its ecological footprint

# Environmental, Social and Governance (ESG) and the NEC4 Secondary Option Climate Change Clause (X29)

- An explanation of social:
  - The social component of ESG focuses on the social impact of a company's operations on various stakeholders
  - It encompasses factors such as labor practices, human rights, employee well-being and diversity, community engagement, customer satisfaction, product safety, and data security
  - Assessing the social aspects of ESG involves evaluating how a company manages its relationships with employees, customers, suppliers, local communities, and other relevant social groups

# Environmental, Social and Governance (ESG) and the NEC4 Secondary Option Climate Change Clause (X29)

- An explanation of governance:
  - This refers to the system of rules, practices, and processes by which a company is directed and controlled
  - It assesses the company's internal policies, leadership structure, board composition, executive compensation, transparency, and ethical standards
  - Strong governance practices promote accountability, integrity, and responsible decision-making within an organisation

# Environmental, Social and Governance (ESG) and the NEC4 Secondary Option Climate Change Clause (X29)

- Why should we care about ESG?
  - ESG factors are used by investors, financial institutions, and other stakeholders to evaluate the sustainability and long-term performance of companies
  - Integrating ESG considerations into investment decisions helps identify businesses that are managing environmental and social risks effectively, demonstrating good governance practices, and aligning with sustainable development goals
  - It reflects growing recognition that financial performance and sustainability are interconnected, and that companies that prioritise ESG factors are more likely to create long-term value while mitigating potential risks
  - My opinion – this is just as effective for public sector as it is for the private sector

## Environmental, Social and Governance (ESG) and the NEC4 Secondary Option Climate Change Clause (X29)

- So how do we thread this into X29?
  - That is where you come in
  - Be sensible, you cannot do everything in one go
  - Understand the direction of your *Client*, map those as targets on X29 – it's called climate change but how will things like better governance impact on climate change?
  - I'm sure we can think if a link if we look hard enough!

## NEC4 Facilities Management Contract (FMC) and ESG

- Facilities management (FM) refers to the management and operation of buildings, properties, and infrastructure to ensure their effective and efficient functioning
- It involves overseeing various aspects of a facility's lifecycle, including planning, design, construction, maintenance, and operation
- The primary goal of facilities management is to create and maintain a safe, productive, and sustainable environment that supports the activities and objectives of an organisation
- Terminology might be slightly different (i.e., *Service Provider*, *Service Manager*) but X29 is the same in principle
- Sustainability according to *Client* needs and interests should have been considered in the design and build state of the asset, but things change

# Projects in Hong Kong that have focused on sustainability

- Wu Shan Road site formation, Tuen Mun, Hong Kong
- Blue-green drainage infrastructure in Hung Shui Kiu/Ha Tsuen New Development Area, Hong Kong
- Land reclamation at Tung Chung, Hong Kong





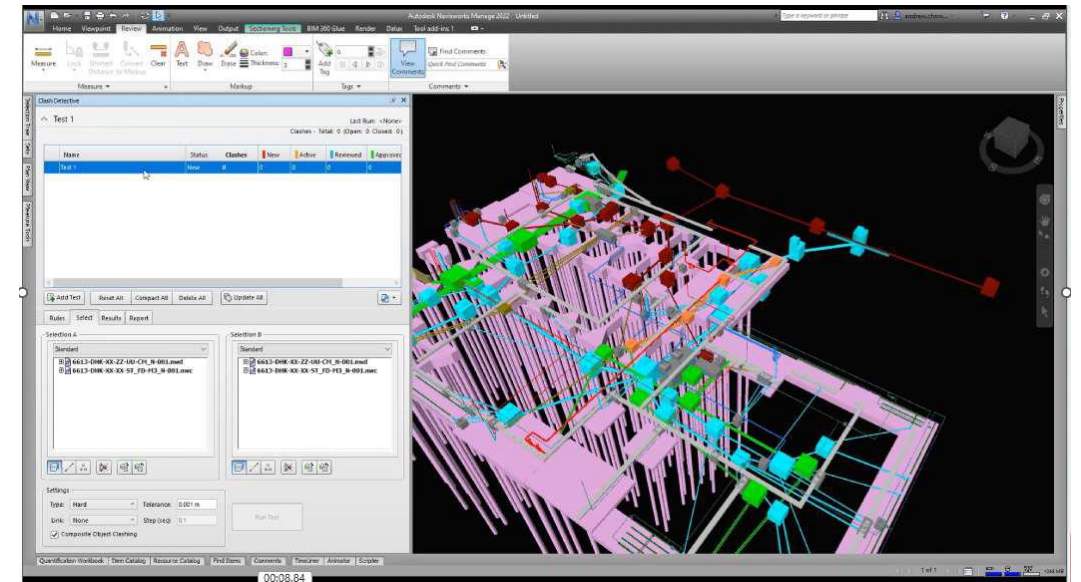
# Projects in Hong Kong that have focused on sustainability

- Anderson Road Greywater Treatment Plant
- A centralised and innovative solution of recycling the grey water generated from the development area provides a sustainable source of water for flushing, irrigation, and other non-potable uses, thus minimising the negative impact on the environment by saving significant amount of energy in pumping seawater to the ARQ development area for toilet flushing
- The *Contractor* initiated an innovative design amendment because it could reduce the plant size, noise and vibration emission, long term operation cost and carbon footprint even with the higher initial cost



# Projects in Hong Kong that have focused on sustainability

- Fire Station-cum-ambulance Depot, Departmental Quarters, TKO
- The *Employer* and the *Contractor* are using this project to demonstrate the benefits of using BIM, Digital Management Platform, MiC and DfMA, so as to promote and expand the use of innovative technologies to ultimately achieve the sustainability and climate resilience
- The *Contractor* initiated an innovative design amendment because it could reduce the plant size, noise and vibration emission, long term operation cost and carbon footprint even with the higher initial cost



# Projects in Hong Kong that have focused on sustainability

- Site Formation and Infrastructure Works at Tung Chung Valley, Phase 1
- The design concept of TCW development is to build a sustainable and harmonious habitat integrating natural ecology and human enjoyable space.
- Due to the increase in paved surfaces from the TCW development, an increase peak runoff and common pollutants such as sediment, oil and petrol, metal in the surface runoff is anticipated. Use of SuDS is therefore proposed to reduce flow rates and improve stormwater runoff quality before discharging into Tung Chung Stream.
- This project includes woodland planting of about 11 hectares as a carbon reduction initiative.





Questions?

## Contact us



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