

The Pathway to deliver and achieve a net zero building environment

Date: 15 November 2024 (Friday)

Time: 9am – 6pm (registration 8:45am – 9:15am)

Venue: Conference Hall on 4/F, HKPC Building, 78 Tat Chee Avenue, Kowloon Tong, Kowloon.

Language: English supplemented with Cantonese

3rd Announcement

* *This seminar is recommended for a full CPD day & upon request only* *

Buildings are the foundation of our communities, but their emissions are also driving the climate crisis. The building sector contributes nearly 40% of all global greenhouse gas emissions. To continue to thrive, society needs net zero buildings. A net zero building is simply a building that has no net carbon emissions during its construction and operation. Emissions are reduced and what's leftover is balanced by renewable energy or carbon offsets. Innovative façade design is the key to achieve a net zero building such as incorporating BIPV panels in the façade design and consider adopting modular construction methods in lieu of traditional one.

Now is the time to implement net zero carbon for buildings, both new and existing. Achieving net zero carbon will require us to transform how we design, build and operate buildings of all types and scales. The **INNO FAÇADE 2024** will theme on “The Pathway to deliver and achieve a net zero building environment”, a full-day CPD seminar which will focus on Which? What? When? and How?

Which stakeholders in the construction industry should take part in?

What should we concern of?

When should we start the mitigation work?

How to deliver the practice by technological developments?

Special thanks to



Session 1 (0930 – 1020)



Grace Kwok

Chairman and Executive Director
Allied Environmental Consultants Ltd.

Topic

Façade to support Net Zero Transition

Session 4 (1400-1450)



Nina Yiu

Director
Ove Arup & Partners Hong Kong Ltd.

Topic

Inside the Façade of Two Taikoo Place

Session 2 (1040 – 1130)



Ir Dr. Dominic Yu

MSc., PhD., MHKIE, FHKISC, MHKICA
Principal
Alpha Consulting Limited

Topic *Adopting Innovative Technologies
in Building Facades*

Session 5 (1450-1540)



Keith Tsang

Deputy General Manager
South Star Glass Limited

Topic

Building Vacuum Glass Glazing Retrofit

Session 3 (1130-1220)



Clement Yeung

Senior Project Manager
Nan Fung Development Ltd.

Topic *Embracing The Future Of A
Smart and Resilient Neighbourhood*

Session 6 (1600-1650)



Pascaline Hayoun

CEO Saint-Gobain Hong Kong & Macau

Topic *The World's First Low Carbon
Emission Glass*

Panel Discussion (1650-1720)

Moderator: Ir. Michael Leung || Panellists: Simon Chan, Ir. Dr Dominic Yu, Nina Yiu, Pascaline Hayoun

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Fees & Registration

HKFA or HKGBC member

HK\$600 each

Group of 5+

HK\$600 each

Others

HK\$800 each

Registration & Enquiry: (Tel) +852 2704 7597 (Email) hkfa@hkfacade.org

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(To be replied on or before 8 November 2024)

	Name	Company	Tel.	Email	CPD Cert. (✓ / ✗)
1.					
2.					
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Time	Programme
08:45 – 09:15 am	Registration
09:20 – 09:30 am	Opening Remark by Mr. Simon Chan, President of Hong Kong Façade Association
09:30 – 10:20 am	Façade to support Net Zero Transition Grace Kwok Chairman & Executive Director of Allied Environment Consultants Limited
10:20 – 10:40 am	Networking Break
10:40 – 11:30 am	Adopting Innovative Technologies in Building Facades Ir. Dr Dominic Yu Principal of Alpha Consulting Limited
11:30 – 12:20 pm	Embracing The Future Of A Smart and Resilient Neighbourhood Clement Yeung Senior Project Manager of Nan Fung Development Ltd.
12:20 – 14:00 pm	Lunch
14:00 – 14:50 pm	Inside the Façade of Two Taikoo Place Nina Yiu Director of Ove Arup & Partners Hong Kong Limited
14:50 – 15:40 pm	Building Vacuum Glass Glazing Retrofit Keith Tsang Deputy General Manager of South Star Glass Limited
15:40 – 16:00 pm	Networking Break
16:00 – 16:50 pm	The World's First Low Carbon Emission Glass Pascaline Hayoun CEO Saint-Gobain Hong Kong & Macau
16:50 – 17:20 pm	Panel Discussion
17:30 pm	End of the seminar

Special thanks to



SESSION 1 (0930-1020)

Façade to support Net Zero Transition

Ms. Grace Kwok

Chairman and Executive Director

Allied Sustainability and Environmental Consultants Group Limited



Abstract

From the latest Science-based Target Guidance for the building sector to HKGBC Zero Carbon Ready Certification Scheme, decarbonization pathways for the built environment would be discussed from the perspective of building envelop design. Moreover, to review how facade systems contribute to the net zero transition of both new and existing buildings.



SESSION 2 (1040-1130)

Adopting Innovative Technologies in Building Facades

Ir. Dr. Dominic Yu

MSc, PhD, MHKIE, FHKISC, MHKICA

Principal of Alpha Consulting Limited



Abstract

The adoption of innovative technologies in building façades is crucial for shaping the future of architectural design and urban development. This presentation explores various innovative solutions and new materials that enhance the functionality and aesthetic appeal of façades while prioritizing sustainability and structural safety. By integrating research insights and advancements in technology, we can create building systems that respond effectively to environmental challenges and occupant needs. It also emphasizes the importance of collaboration among stakeholders to foster the development of façades that are not only visually striking but also contribute to energy efficiency and resilience. Ultimately, embracing these innovations paves the way for buildings that serve as dynamic elements within our urban development, promoting a sustainable and harmonious relationship between architecture and the environment.



SESSION 3 (1130-1220)

Embracing The Future of A Smart And Resilient Neighborhood

Mr. Clement Yeung

Senior Project Manager

Nan Fung Development Ltd.



Abstract

This presentation will highlight how a commercial development can enhance the sustainability and resilience of its surrounding neighborhood through innovation, sustainable adaptive design, and ongoing engagement with tenants and the community. It will also showcase the design process of our building façade and illustrate how our design approach positively impacts both the community and tenants. This strategy encourages individuals and the community to come together in spaces where they can express themselves and connect with others and nature. Our aim is to inspire stakeholders to adopt a forward-thinking mindset, promoting initiatives that ensure our neighborhood is not only intelligent but also resilient in a rapidly changing environment.



SESSION 4 (1400-1450)

Inside the Façade of Two Taikoo Place

Ms. Nina Yiu
Director
Ove Arup & Partners



Abstract

Two Taikoo Place, the latest phase of Swire's redevelopment of three former industrial buildings within Taikoo Place. It is also Swire's commitment to the future with triple Grade A-rated property built to meet the highest sustainability standards. What are the façade systems used in this award winning project, and what its façade elegantly special. As consultant of the project, Arup will present the human-centric design process of the façade, and how the details are attended.



SESSION 5 (1450-1540)

Building Vacuum Glass Glazing Retrofit

- A Perfect Solution to for Existing Buildings to achieve near zero Carbon

Mr. Keith Tsang
Deputy General Manager
South Star Glass Limited



Abstract

As 2020, Hong Kong total office building floor area is 12,426,800 sqm. It is estimated that 70% of these buildings are with monolithic glazing. It is the equivalent of over 200 blocks of Shiu On Centre. These monolithic glazing have very minimum energy saving performance. For many years, there are no good glazing enhancement solutions to help these buildings to improve energy efficiency.

Building Vacuum Glass (BVG) Glazing Retrofit improves the thermal, acoustic, safety and security performance of existing windows. It is a sustainable retrofitting as there is no need to remove existing windows, meaning that there is no waste going to landfill. BVG effectively reflects solar radiation to outdoor and block heat convection from existing outer glass to indoor.

BVG glazing retrofit can reduce existing glass solar heat gain by as much as 70% and save cooling energy by ~30% for typical single glass window (tinted or solar reflective) in commercial buildings.



SESSION 6 (1600-1650)

The World's First Low Carbon Emission Glass

Pascaline Hayoun
CEO Saint-Gobain Hong Kong & Macau



Abstract

The building sector contributes to nearly 21% of global greenhouse gas emissions. In 2022 it contributed to 34% of global energy demand and 37% of energy and process-related CO₂ emissions. Improving the sustainability of the construction industry represents a significant challenge and opportunity to mitigate the impact of climate change.

Launched by Saint-Gobain Glass in 2022, ORAÉ® is the world's first low-carbon glass.¹ With an embodied carbon reduced by 42% compared to our standard clear glass, and a recycled content of 64%, ORAÉ® has found its market. It is now being used in residential and commercial projects all across Europe and has been processed by more than 60 glass processors. In 2024, production and offering has expanded to India, with a first major architectural project delivered in Hyderabad, and availability for exports to Asia.

Combined with Saint-Gobain Glass best-in-class coatings, ORAÉ® provides exceptional performance in both embodied and operational carbon levels:

- Outstanding third party verified environmental performance, with Environmental Product Declaration (EPDs) available for production in Europe and India.
- Excellent performances from the COOL-LITE®, PLANITHERM® and ECLAZ® coating families, which significantly reduce carbon emissions generated by energy consumption in buildings, thanks to their high performance in terms of daylight intake, solar control and thermal insulation.

As the construction industry continues to seek innovative solutions to reduce its environmental impact, ORAÉ® stands out as a pioneering product that sets new standards for sustainability.