



CONCEPT NOTE

INTERNATIONAL FORUM ON **PARTNERING IN SUSTAINABLE INFRASTRUCTURE**

Hyatt Regency Kathmandu
23 November 2023

KNOWLEDGE PARTNER

IIDS

Institute for Integrated
Development Studies • 1979





ORGANIZER AND THE EVENT

Federation of Contractor's Association of Nepal (FCAN) is the umbrella organization of contractors operating throughout the country. It is represented by seventy-seven district associations and five province federations with a membership base of over twenty-two thousand four hundred organizations. FCAN is the current Chair of the international Federation of Asian and Western Pacific Contractor's Association (IFAWPCA) represented by eighteen member countries in the region.

The upcoming 46th IFAWPCA Convention with the overall theme 'Partnering in Sustainable Infrastructure' will be

held in Nepal from 21-24 November 2023. It is expected to attract over 1000 international and national delegates, including government officials, policy makers, academics, and industry experts.

As a precursor to this event FCAN and IFAWPCA organized a forum entitled 'Financing Sustainable Infrastructure' on 23 March 2023 in Kathmandu. Similarly, IFAWPCA organized an international forum entitled 'Sustainable Building Era' on 15 June 2023 in Ulaanbaatar, Mongolia. The third in the series will be organized on 10 November 2023 in the Philippines with the theme "Implementing Resilient and Sustainable Infrastructure".





BACKGROUND



In an era defined by environmental challenges and the imperative for global sustainability, the role of infrastructure takes center stage as a pivotal driver for positive change. Sustainable infrastructure stands as a linchpin of progress, offering opportunities to create a lasting impact on societies, economies, and the environment. To meet the demands of an ever-growing population, estimated to reach 9.7 billion by 2050, and to address the challenges of rapid urbanization and climate change, the need for sustainable infrastructure has become both urgent and paramount. It is estimated that USD 9.2 trillion in infrastructure spending will be needed globally each year until 2050. The Asia-Pacific region alone will need USD 1.7 trillion annually for infrastructure until 2030 to support economic growth, reduce poverty, and mitigate the risks of climate change. ^{[1][2]}

The built environment contributes to approximately 40% of global carbon emissions. This substantial carbon footprint is attributed to both buildings and infrastructure. Notably, a significant portion of these

emissions occurs prior to the utilization of the asset. This pre-utilization phase encompasses the production of building materials, accounting for roughly 15-20% in the case of buildings and a more substantial 50-60% for infrastructure. The remaining emissions occur during the asset's operational phase, including energy consumption, maintenance, and eventual end-of-life scenarios, such as demolition and waste management. ^[3]

The call for sustainable infrastructure is underpinned by a series of pivotal factors. Globally, the adoption of a circular economy approach has the potential to generate economic benefits of up to USD 4.5 trillion by 2030, with projections indicating this figure could surge to USD 25 trillion by 2050. To put this in perspective, the global economy stood at USD 80 trillion in 2017. Embracing the circular economy not only creates new avenues for business growth but also serves to curtail material expenses, mitigates price fluctuations, diminishes reliance on imports, and bolsters resource security. ^[4]



Studies have indicated that a substantial reduction in environmental effects can be achieved by transitioning to recycled materials during the construction phase and adopting recycling instead of landfill disposal. Notably, the utilization of recycled construction materials, including recycled cement, metal, concrete, and glass, as well as the shift toward recycling for disposal, can collectively result in an impressive reduction of up to 65% in overall environmental impact.^[5]

According to data from the World Watch Institute, buildings account for 40% of the world's annual energy consumption. Considerable reductions in energy use can be achieved throughout all phases of a building's life cycle with an energy efficient design. In order to achieve the goal of achieving net zero emissions by 2050, there is a pressing need to increase global annual investments in clean energy. Specifically, these investments must surpass \$4 trillion by the year 2030, which represents a more than threefold increase compared to current levels.^{[6][7]}

Carbon emissions are generated not just during the operational phase but also throughout the entire life cycle of built assets, encompassing manufacturing, transportation, construction, and

end-of-life stages for both buildings and infrastructure. These emissions, often referred to as embodied carbon, have historically received limited attention but nonetheless constitute approximately 11% of the total global carbon emissions.^[8]

A study commissioned by the Asian Development Bank on its developing member countries revealed that between 2006 and 2015 alone, direct physical losses as a consequence of extreme weather events and geophysical hazards averaged \$46 billion per annum. The failure of insufficiently resilient infrastructure also contributed to over 337,000 disaster-related fatalities over the same period.^[2]

The "Partnering in Sustainable Infrastructure" forum recognizes the interconnectedness of these challenges and opportunities within the context of sustainable infrastructure development. It will serve as a platform for stakeholders to delve into these critical issues, exchange insights, and collaborate to drive innovation, all with the ultimate goal of building a sustainable and resilient infrastructure. Together, we can pave the way for a brighter and more sustainable tomorrow.





OBJECTIVES

Facilitate Knowledge Exchange: The forum aims to provide a platform for sharing knowledge, experiences, and best practices related to sustainable infrastructure development. By fostering dialogue and collaboration, participants can learn from each other and leverage their collective expertise.

Promote Collaboration

Collaboration is key to tackling the complex challenges associated with sustainable infrastructure. The forum

will encourage partnerships between governments, private sector entities, non-governmental organizations, and academia to pool resources and expertise.

Drive Innovation

Through focused discussions and presentations, the forum will explore innovative approaches in financing, technology, and design that can enhance the sustainability and resilience of infrastructure projects.

PROGRAM

The panel discussion will explore collaborative approaches to address the challenges of sustainable infrastructure development. The forum will serve as a platform for knowledge exchange, collaboration, and the formulation of actionable strategies to advance sustainable infrastructure in the Asia-Pacific region and globally.

By coming together and harnessing the expertise of our panelists, we aim to drive the necessary changes toward a more sustainable, resilient, and environmentally responsible infrastructure landscape for a better future.

INTERNATIONAL FORUM

PARTNERING IN SUSTAINABLE INFRASTRUCTURE



FORUM

DATE 23 November 2023

TIME 8 am onwards

VENUE HYATT REGENCY KATHMANDU

08:00-08:45	Registration & Breakfast
08:45-08:55	National Anthem
08:55-09:00	Welcome Remarks (By: Mr. Rabi Singh, President, IFAWPCA & FCAN)
09:00-09:10	Brief Message from Partner Organization (By Mr. Levy V. Espiritu, Executive Director of IFAWPCA)
09:10-09:25	Reflection on Past Forums (By: Er. Birendra Raj Pandey, Secretary General, IFAWPCA)
09:25-09:55	Keynote Address (By: Tan Seng Chuan, Chairman And Managing Director, Tembusu Asia Consulting Pvt. Ltd)
09:55-10:05	Special Address
10:05-10:15	Tea Break
10:15-11:30	<p>Panel Discussion</p> <p>Panelist: 'Er. Keshab Kumar Sharma,' Secretary Ministry of Physical Infrastructure and Transport (MOPIT, Government of Nepal)</p> <p>Panelist: 'Mr. Shreekrishna Nepal,' Joint Secretary International Economic Cooperation Coordination Division, Ministry of Finance</p> <p>Panelist: 'Mr. Haider Raza,' Country Procurement Team Leader, Sr. Procurement Specialist, Worldbank</p> <p>Panelist: 'Mr. Taisuke Miyao,' Senior Procurement Specialist, Asian Development Bank</p> <p>Panelist: 'Mr. Oliver Wee,' Director, Tim Sekata Sdn Bhd President, Master Builders Association Malaysia (MBAM)</p> <p>Moderator: 'Mr. Anil Chitrakar,' Social Entrepreneur & President, Siddharth Inc.</p>
11:30-11:50	Open Forum/Q&A
11:50-12:00	Presentation of Token
	Lunch



AUDIENCE

The forum is targeted at professionals and practitioners from the public and private sectors, including government

officials, project developers, investors, and financial institutions.



FINAL WORDS

The forum on “Partnering in Sustainable Infrastructure” aims to catalyze meaningful partnerships, foster innovation, and inspire actionable solutions that contribute to a more resilient and sustainable future. Together, let us seek innovative solutions, forge partnerships, and break barriers hindering the path towards sustainable infrastructure development. By leveraging our collective expertise and determination, we can foster a paradigm shift

in infrastructure financing and construction practices, leading us towards a greener, more equitable, and prosperous future for all.

Let us embark on this journey of knowledge exchange and collaboration, committed to leaving a legacy of sustainable infrastructure for generations to come. Welcome to the International Forum on “Partnering in Sustainable Infrastructure”.





Er. TAN Seng-Chuan

President-Elect of World Federation of Engineering Organization Emeritus
President of The Institution of Engineers, Singapore
Managing Director of TEMBUSU Asia Consulting Pte. Ltd.

BIOGRAPHY

Er. TAN Seng-Chuan holds a Bachelor of Engineering (Civil) and Master of Science (Building Science) from the National University of Singapore. He is a Professional Engineer (Civil) and Chartered Engineer (Environment & Water) registered in Singapore, GHG Accounting Lead Verifier, GRI Certified Sustainability Professional and a Senior Practicing Management Consultant (Sustainability) Certified by SBACC.

His professional experiences cover Sustainability, Environmental, Engineering and Program management in the sectors of Sustainability, Climate Change, Environmental, Water and Wastewater, Energy & Power, Built Environment & Infrastructure, Chemical and Petrochemical, Oil & Gas and other infrastructure projects in Asia Pacific region.

Er. Tan holds various positions in the early part of his career and rose to the rank of Assistant General Manager in Jurong Engineering Ltd. In 2010, he was appointed as Director of CH2MHill responsible for the operation and development of the water and environmental services business in the Asia Pacific Region. In 2015 he

joined Ramboll Environ (Asia Pacific) as Regional Managing Director leading the development and implementation of company strategies across 12 offices in the Asia Pacific. Presently, he served as Managing Director of TEMBUSU Asia Consulting Pte Ltd, a leading sustainability consultancy company in Asia and a Singapore Accreditation Council (SAC) Certified Validation & Verification Bodies focus on the development and implementation of United Nation Sustainable Development Goals.

Er. TAN is the Emeritus President of the Institution of Engineers, Singapore (IES) where he served as President from 2006 to 2008; he also served as President of the Federation of Engineering Institutions of Asia and the Pacific (FEIAP) from 2007 till 2011, Chairman of the Asia Pacific Economic Cooperation (APEC) Engineers Coordinating Committee and member of the International Engineering Alliance (IEA) Governing Board from 2015 to 2019. Presently he serves as President-Elect of the World Federation of Engineering Organisation (WFEO) and Chairman of Chartered Engineering Board, Singapore.



Er. Keshab Kumar Sharma

Secretary Ministry of Physical Infrastructure and Transport(MoPIT)

Keynote Speaker: Er. Keshab Kumar Sharma, Secretary, Ministry of Physical Infrastructure and Transport

Mr. Sharma has served more than 30 years in transportation sector under Government of Nepal. He is currently serving as Secretary in the Ministry of Physical Infrastructure and Transport (MoPIT). He has served as Secretary in Ministry of Energy, Water Resources, and Irrigation (MoEWRI), Joint Secretary in the MoPIT, Director

General and Deputy Director General of Department of Roads and Project Director of the Project Directorate (ADB) under the Department of Roads in the past. Participated in number of international and national forums, Mr. Sharma is one of the experts in transportation project planning, management and implementation in Nepal.





Mr. Shreekrishna NEPAL

Joint Secretary International
Economic Cooperation Coordination
Division, Ministry of Finance

Mr. Shreekrishna Nepal has been a member of the Board of Directors since February 2023. He is a Joint Secretary in the Ministry of Finance, Government of Nepal and heads the International Economic Cooperation Coordination Division. He oversees development cooperation, policy implementation, foreign aid mobilization and formulation of foreign aid strategies, in addition to his work in budget formulation. He leads aid and financing agreement negotiations on behalf of the Government of Nepal and represents it in various multilateral development bank and global fora. He also served as World Bank Advisor to the Office of the Executive Director for the South East Asia Group. He has a long history of public service, having served as Joint Secretary in the Office of the Prime Minister and Council of

Ministers; Secretary of the Ministry of Social Development in the Bagmati provincial government; Deputy Director General in the Department of Customs, overseeing customs policy, reforms and modernization; Joint Secretary in the Ministry of Health and Population, heading the Financial Management and Human Resource Division; and Executive Director of the Health Insurance Board. He has extensive experience in public finance management, including planning, budgeting, accounting, reporting, procurement, internal control and audit, and was involved in several public financial management reform initiatives of the Government of Nepal. He has a bachelor's degree in business administration and a master's degree in economics from Tribhuvan University, Nepal.





Mr. Haider Raza

Country Procurement Team Leader,
Sr. Procurement Specialist,
Worldbank

Haider Raza is a Chartered Civil Engineer with a master's degree in traffic engineering. Haider is currently leading the World Bank Procurement Team in Nepal. In his professional career spanning over 37 years, he has been managing development projects starting from conception to completion whilst working in the capacity as an employer, contractor, engineer/consultant both within public and private sectors. Mr. Raza have chronologically worked in Pakistan, Bangladesh, Afghanistan, Nepal, Sri Lanka, and the Maldives. The array of countries that he has worked in

have provided him with the unique opportunity of experiencing diversified multi-cultural environments and have successfully delivered numerous operations within and outside the World Bank portfolios.

Mr. Raza is an experienced civil engineer having delivered infrastructure projects worth billions of dollars covering buildings, highways, motorways, hydro-electric projects, tunnels, bridges etc.. However, his passion is still with the road safety and traffic engineering.





BIO OF TAISUKE MIYAO

Mr. Taisuke Miyao is Senior Procurement Specialist in Asian Development Bank (ADB). He joined ADB, Manila, in 2010 as Procurement Specialist and in 2014 he moved to Sri Lanka Resident Mission as a Senior Contract Management Specialist and then shifted to Senior Portfolio Management Specialist. In 2018, he was transferred to Nepal Resident Mission. Currently he covers ADB procurement and contract management in Nepal, Bhutan, Sri Lanka and Maldives.

TAISUKE MIYAO

Senior Procurement Specialist in Asian Development Bank (ADB).

Before joining ADB, he worked at various positions in Japan International Cooperation Agency, Japan Bank for International Cooperation, etc.

He graduated with a degree in Bachelor of Law, Kyoto University in 1988 and obtained Master of Law (LLM) in University of Pennsylvania in 1992. He was admitted to New York State Bar Association (USA) in 1995. He obtained another Master in International Construction Law, Business Engineering from the Institution of Construction Management, University of Stuttgart, 2019.





OLIVER H.C. WEE

Director, Tim Sekata Sdn Bhd
President, Master Builders
Association Malaysia (MBAM)

Oliver H.C. Wee, the President of Master Builders Association Malaysia (MBAM) has over 40 years of experiences in the construction industry and has been actively served with the Association voluntary since 1994. He is also the Business Development Director at Tim Sekata Sdn Bhd.

Since 2022, Wee has been appointed as the Board Member of Construction Industry Development Board Malaysia and the Board of Director of Construction Labour Exchange Centre Berhad (CLAB). He was recently appointed in March 2023 as a member of a Panel of Experts under the Local Government Development Ministry to advise on programmes and policies under the purview of the ministry. He was a Technical Committee Member for the CIDB Construction Law Report from 2018-2020 and currently as

the Advisory Member for the CIDB Construction Law Report 2021-2022. He was recently conferred CIDB Fellowship Award 2023 in view of his contribution to the construction industry development in Malaysia.

In the international frontage, Wee is currently the International Federation of Asian & Western Pacific Contractors' Association (IFAWPCA) Ambassador to International Federation of Consulting Engineers (FIDIC) as well as the Chairman, International Federation of Asian & Western Pacific Contractors' Association (IFAWPCA) Conditions of Contracts Committee. He was the Chairman, ASEAN Constructors' Federation (ACF) in 2023. In addition to the mentioned portfolios, he was also the Executive President for China ASEAN Construction Industry under the Belt & Road initiative from 2015 to 2016 and newly appointed as the Committee Member of RCEP Industrial Cooperation Committee under Council ASEAN Business Council (CABC).





ANIL CHITRAKAR

Social Entrepreneur &
President Siddharth Inc.

Anil Chitrakar currently focuses his work on conserving Nepal's globally unique natural, cultural and built heritage and the promotion of renewable energy and related technologies across Nepal.

Born in a traditional painting family of Chitrakars, Anil schooled in Nepal, trained as an engineer and energy planner at the University of Rajasthan (India) and the University of Pennsylvania (USA). He started his career in the 1980s as an energy engineer for the Academy of Science and Technology when he traveled

to remote areas of Nepal to transfer renewable energy technologies.

His work with conservation education campaigns across Nepal which aims to mobilize the youth and school children to be the link between the supply and demand sides has been recognized globally. He has worked as a member of the team that implemented the National Conservation Strategy for Nepal, the Great Himalayan Trail, Greater Lumbini Development plan, and more.





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