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Better Quality of

ACTIVITY REPORT 2024

The Asian Civil Engineering Coordination
Council Future Leaders Committee

20 August 2023 – 31 January 2024

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1. Background

ACECC Future Leaders group is a group of young civil engineers below 35 years of age from across Asia Pacific, with representatives from 17 member economies (Australia, Bangladesh, India, Indonesia, Japan, Korea, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Srilanka, Taiwan, USA, Vietnam, Russia, New Zealand). The objective of the Future Leaders Group is to develop leadership skills in young civil engineers in member economies by

- Creating a Sustainable Future Leaders Forum (FLF).
- Promoting a diverse and inclusive culture for young civil engineers.
- Creating avenues for the professional development and strong international technical collaboration among young civil engineers in ACECC member economies.

From the Future Leaders Group, an executive committee of Future Leaders Committee is elected as per the Terms of Reference. ACECC FLC has always ensured equal participation of Male and Female young engineers and has therefore got the equal proportion of representatives.

1.1 FLC Committee

The First ACECC FLC committee got elected in April 2021 and had its tenure until December 2022. The First committee had Female Chair and Male Secretary while the second FLC has Male Chair and Female Secretary and it will be continued alternately. The tenure of First ACECC Future Leaders Committee has ended and a Second ACECC Future Leaders Committee has been elected from January 2023 which will be valid until December 2024. The 2nd ACECC FLC has also introduced the role of Immediate Past Chair (Advisory role) and the provisions of the Working Groups (WGs) for the smooth functioning of the committee. The endorsed structure for the ACECC FLC Committee 2023/24 is shown as follows:



2nd ACECC FLC for the term 2023-2024



**Ms. Prasanti
Widyasih Sarli**
Immediate Past Chair
ACECC FLC



**Mr. Suraj
Gautam**
Chair
ACECC FLC



**Ms. Faiza
Saeed**
Deputy Chair
ACECC FLC



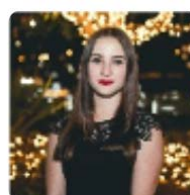
**Mr. Gyu-Beom
Shin**
Deputy Chair
ACECC FLC



**Ms. Maria Kay S.
Eco**
Secretary
ACECC FLC



**Mr. Kyaw Minn
Htun**
Member
ACECC FLC



**Ms. Madison
Elliott**
Member
ACECC FLC

Name	Country/Institution	Post
Ms. Prasanti Widyasih Sarli (Asih)	Indonesia / HAKI	IMMEDIATE PAST CHAIR
Mr. Suraj Gautam	Nepal / NEA	CHAIR (MALE)
Ms. Faiza Saeed	Pakistan / IEP	DEPUTY CHAIR (FEMALE)
Mr. Gyu Beom Shin	Korea / KSCE	DEPUTY CHAIR (MALE)
Ms. Maria Kay S. Eco	Philippines / PICE	SECRETARY
Mr. Kyaw Minn Htun	Myanmar / FED.MES	MEMBER(MALE)
Ms. Madison Elliott	Australia / EA	MEMBER(FEMALE)

1.2 Future Leaders Group (FLG) Members

FLG is constituted of thirty-four (34) Members representing seventeen (17)-member economies as shown below

No.	Country	Society/Institution	Name
1.	Australia	EA	Engr. Madison Elliott
2.	Bangladesh	IEB	Ms. Anonna Ahmed Linda
3.	India	ICE	Er. Ishita Arora
4.	Indonesia	HAKI	Dr. Prasanti W Sarli
5.	Japan	JSCE	Er. Sayaka Sugiyama
6.	Korea	KSCE	Dr. Ji-Su Kim
7.	Mongolia	MACE	Ms. Baigalimaa Turmunkh
8.	Myanmar	FED.MES	Engr. Chaw Su Su Aye
9.	Nepal	NEA	Engr. Purnima Acharya
10.	New Zealand	ENZ	Engr. Michelle Meaclem
11.	Pakistan	IEP	Engr. Faiza Saeed
12.	Philippines	PICE	Engr. Maria Kay S. Eco
13.	Russia	RSCE	<i>Vacant*</i>
14.	Srilanka	IESL	Engr. Dilini Gamage

15.	Taiwan	CICHE	<i>Vacant*</i>
16.	USA	ASCE	Ms. Shishi Chen
17.	Vietnam	VFCEA	Ms. Nguyen Thi Hong Hanh
18.	Australia	EA	Mr. Andrei Petrovsky
19.	Bangladesh	IEB	Mr. Mahmud-Ul Haque
20.	India	ICE	Er. Manish Kumar
21.	Indonesia	HAKI	<i>Vacant*</i>
22.	Japan	JSCE	<i>Vacant*</i>
23.	Korea	KSCE	Dr. Sang Yeob Kim
24.	Mongolia	MACE	Mr. Ganbaatar Enkhsaikhan
25.	Myanmar	FED.MES	Engr. Kyaw Minn Htun
26.	Nepal	NEA	Engr. Suraj Gautam
27.	New Zealand	ENZ	Engr. Kishan Seger
28.	Pakistan	IEP	Engr. Shoaib Ahmed
29.	Philippines	PICE	Engr. Warren Keith J. Nietes
30.	Russia	RSCE	<i>Vacant*</i>
31.	Srilanka	IESL	Engr. Janaka Priyantha
32.	Taiwan	CICHE	<i>Vacant*</i>
33.	USA	ASCE	Dr. Vijay V Nair
34.	Vietnam	VFCEA	Dr. Tran Duy Quan

Vacant/New Future Leaders are being followed-up to ensure they are filled and operational. **The ACECC Member Economies are requested to support FLC achieve this by the end of March 2024.**

1.3 Financial Background

The ACECC FLC has been contributing in-kind for the number of activities such as designing of Newsletter, website, zoom meeting and so on. The current domain (aceccfutureleaders.org) and server for the hosting of ACECC Future Leaders website is hosted by ACECC FLC Chair. The cost for designing and setting up of layout of the Newsletter has also been possible through the in-kind support of the Working Group-2 Newsletter and ACECC FLC Chair.

The Future Leaders Group is a group of young civil engineers under 35 years of age. It is challenging for the young future leaders to manage the financial resources by themselves to attend the programs in person. We sincerely appreciate the support provided by the ACECC to enable two Future leaders to participate in this 45th ECM. The financial support framework submitted during the 45th ECM for supporting Future Leaders in the major events of ACECC (such as the PCM, ECM and CECAR) has also been unanimously supported by the ACECC member economies and the travel grant has been approved up to \$2000.

2. Expected Outcomes

The ACECC Future Leaders Group and FLC has been envisioned to network, develop and participate in professional development activities such as:

- Seminar Presentations associated with every ECM
- Technical Webinars hosted by joint ACECC member economies
- Presentations at all CECAR
- Other planned FL networking activities

The 2nd ACECC FLC for the term 2023-2024 has identified following Priority Areas for Continuing Professional Development (CPD) that includes,

- Implementation of SDG / Sustainability
- Frontiers Technology and Innovations in Civil Engineering
- Climate change, Disasters & their impacts to Civil infrastructure
- Understanding Risk, Risk Communication

ACECC FLC Strategic Plan



1 Creating a Sustainable Future Leaders Forum (FLF)

- **Two Years** tenure of ACECC Future Leaders Committee (ACECC FLC)
- **Four Working Groups** (WG1, WG2, WG3, WG4) for the effective functioning
 - a. Working Group 1: Activity Management
 - b. Working Group 2: Newsletter
 - c. Working Group 3: Research & Documentation
 - d. Working Group 4: Website, Communication & Social Media Handling
- **Webinar Groups**
- Establishment of **ACECC Future Leaders Chapter** in 16 Countries (each country chapter will establish & maintain their own database– ACECC FLC will link up) [Proposed]

2. Promoting a diverse and inclusive culture for young civil engineers.

- Inclusive Leadership [Male – Chair and Female – Secretary, vice versa after each term] 2 Deputy Chair [Male & Female] and 2 Members [Male & Female]
- Two Future Leaders [1 Male and 1 Female] from each countries

3. Creating avenues for the professional development and strong international technical collaboration among young civil engineers in ACECC member economies.

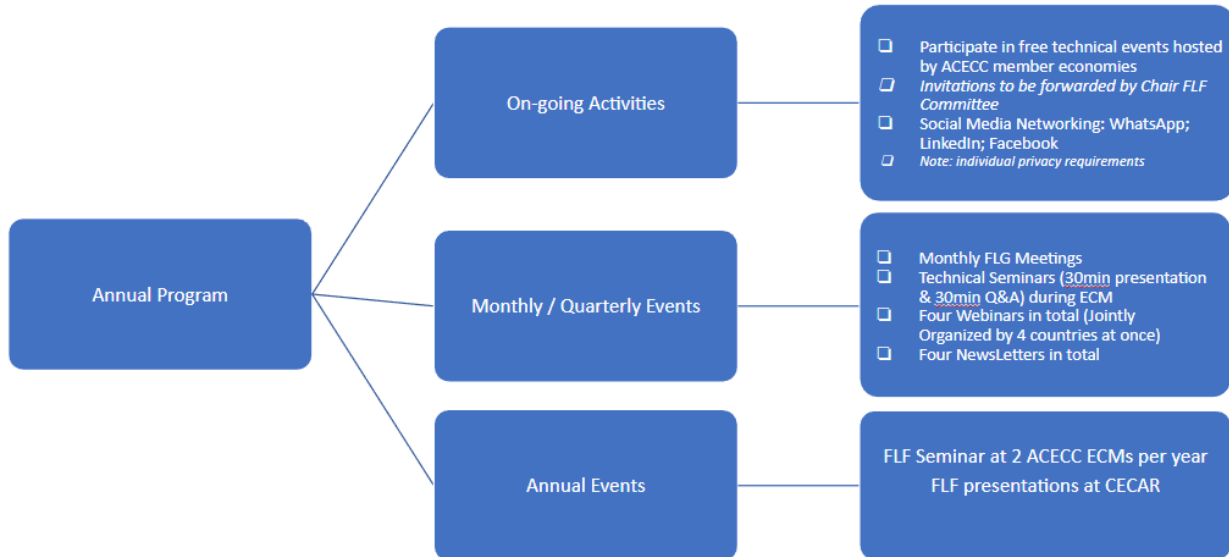
- Conducting **Four Webinars** in a year
- Conducting ACECC FLG Seminars on each ECM (2 Seminars)
- Preparing **Four Newsletter** in a year
- Create an **Repository of Open Sources for scientific database** with the person in charge (PIC) in every country chapters

Priority Areas for Continuing Professional Development (CPD):

- Implementation of SDG / Sustainability
- Frontiers Technology and Innovations in Civil Engineering
- Climate change, Disasters & their impacts to Civil infrastructure
- Understanding Risk, Risk Communication

3. Completed Activities

There are several activities expected of the FLG and FLC as outlined below. Some of the completed activities are outlined as:



3.1 Welcoming New Future Leaders

The ACECC FLC has updated the Future Leaders as per the recommendations from the Member economies. Future Leaders are expected to dedicate at least 6-8 hours of online participation to the FLG. Similarly, Future Leaders are also expected to **interact with the Member Economies** every quarter and share their updates including newsletters. ACECC FLC has approved the following New Future Leaders:

- Engr. Andrei Petrovsky, EA
- Er. Ishita Arora, ICE
- Er. Manish Kumar, ICE
- Er. Sayaka SUGIYAMA, JSCE
- Dr. Sang Yeob KIM, KSCE
- Ms. Michelle Meaclem, ENZ
- Engr. Kishan Seger, ENZ
- Ms. Shishi Chen, ASCE
- Dr. Vijay V Nair, ASCE
- Dr. Tran Duy Quan, VDCEA
- Er. Muhandiramge Don Janaka Priyantha Wickramasooriya, IESL
- Er. Dilini Gamage, IESL

ACECC FLC has also communicated with the member economies to complete the participation of Future Leaders if there is any vacant position.

3.2 Updating of Working Groups

With the new Future Leaders joining the team, the google form was circulated to update the preferences of the working group. There are four working groups working closely with ACECC FLC.

- Working Group 1: Activity Management
- Working Group 2: Newsletter
- Working Group 3: Research & Documentation
- Working Group 4: Website, Communication & Social Media Handling

Two of the Working Groups are also being mentored by the ACECC FLF Chair Engr. Shalendra Ram and Deputy Chair Engr. Maqbool Mohammed. ACECC FLC Chair has been facilitating each Working Group.

Working Group 1: Activity Management	Working Group 2: Newsletter	Working Group 3 Research & Documentation	Working Group 4 Website, Communication & Social Media Handling
<i>Coordination by:</i> Faiza Saeed, Deputy Chair Female	<i>Coordination by:</i> Maria Kay S. Eco, Secretary	<i>Coordination by:</i> Suraj Gautam, Chair	<i>Coordination by:</i> Madison Elliott, FLC Female Member
Warren Keith J. Nietes	Dr. Prasanti Widyasih Sarli	Dr. Ji-Su Kim	Michelle Meaclem
Shoaib Ahmed	Andrei Petovsky	Purnima Acharya	Thi Hong Hanh Nguyen
Chaw Su Su Aye	Vijay V Nair	Dr. Sang Yeob Kim	
Shishi Chen	Mahmud Ul-Haque	Muhandiramge Don Janaka Priyantha Wickramasooriya	
Dilini Gamage		Kyaw Min Htun	

3.3 Future Leaders Seminar

The Future Leaders Seminar is a bi-annual event that is held during the ECM. A technical seminar on **“Frontiers Technologies and Innovations in Civil Engineering”** was hosted on 20th September 2023 at GIS Taipei Tech Convention Centre, Taiwan. Ms. Mei-Hui Situ (CICHE), Assistant Civil Engineer working in the Southern Region Water Resources Agency shared her experiences on **“Reservoir Sustainability: The Desilting Tunnel Project in Taiwan”**. Mr. Suraj Gautam, Executive Director at the Institute of Himalayan Risk reduction presented interesting case studies on **“Application of (UAV) for Disaster Risk Management: Case Studies from Nepal”**. Ms. Mariya Kay S. Eco is a Filipino civil engineer working an Associate ASEAN Engineer presented insights from her Masters dissertation on **“Assessment of Climate Change impacts on the water resources of the Laoag River Basin in Ilocos Norte, Philippines using the SWAT Model”**. Similarly, Prof. Ji-Su Kim, an assistant professor in the Department of Civil engineering at University of Seoul showcased some interesting examples and **“Overview of 3D concrete printing technology in construction and building industry”**.



3.4 Future Leaders Third and Fourth Newsletter

ACECC FLC publishes Future Leaders Newsletter four times a year. The published Newsletter can be accessed through the <https://aceccfutureleaders.org/download>. ACECC FLC is planning to publish its first volume of Newsletter of 2024 by the end of March 2024.




3.5 Conducting International Webinar

The Future Leaders Committee conducted a live webinar on September 30, 2023, with the theme "Community Engagement for Resilient Infrastructure" hosted by Working Group No. 1 comprising of Australia, Japan, Myanmar and Nepal.

Two esteemed speakers from Australia and Nepal had shared their knowledge and expertise on community engagement. Leisa Prowse, a Director at Leisa Prowse Consulting from Australia, talked about the topic "Resilient infrastructure and community engagement – an Australian practitioner's perspective of best practice" and Mr. Anup Poudel, a Structural Engineer from Nepal shared about his recent experience of working with community after the Gorkha Earthquake 2015.

Prowse emphasized that significance of community engagement for resilient infrastructure. She also focused on the meaning of



engagement and how components like stakeholder, communication, proactiveness and participation matters. On the other hand, Mr. Anup highlighted the components of resilient infrastructure and importances of community engagement as a vital part prior to implementation of projects leading to resilient infrastructure. Mr. Poudel focused on the aspects of Continuity, recovery, adaptability, sustainability and community-centred approaches for the resilient infrastructure. To those who missed to attend the webinar may watched the livestreamed event through our Youtube Channel https://youtu.be/fDA-Ccmgrl0?si=5IwPBhK_KIWzw3QS

3.6 Participation in the International Seminar



International Seminar on "Forewarned is Forearmed: Construction Disputes Avoidance and Resolution", was held on Saturday, December 23, 2023 at NED University. The seminar was attended

by over 200 participants including, construction industry and law professionals, and students. The seminar was organized by NED University, in collaboration with Institution of Engineers Pakistan (IEP) Karachi Centre, Chartered Institute of Arbitrators (CIARB) Pakistan Branch, Asian Civil Engineering Coordination Council (ACECC) Future Leaders Forum. The participants of the seminar were welcomed by Prof. Dr. Asad Ur Rehman Khan, Dean CPL, NED University. This followed up by address of Mian Sheraz Javaid, Chair CIARB Pakistan Branch.

3.7 Representation of FL during 46th ECM

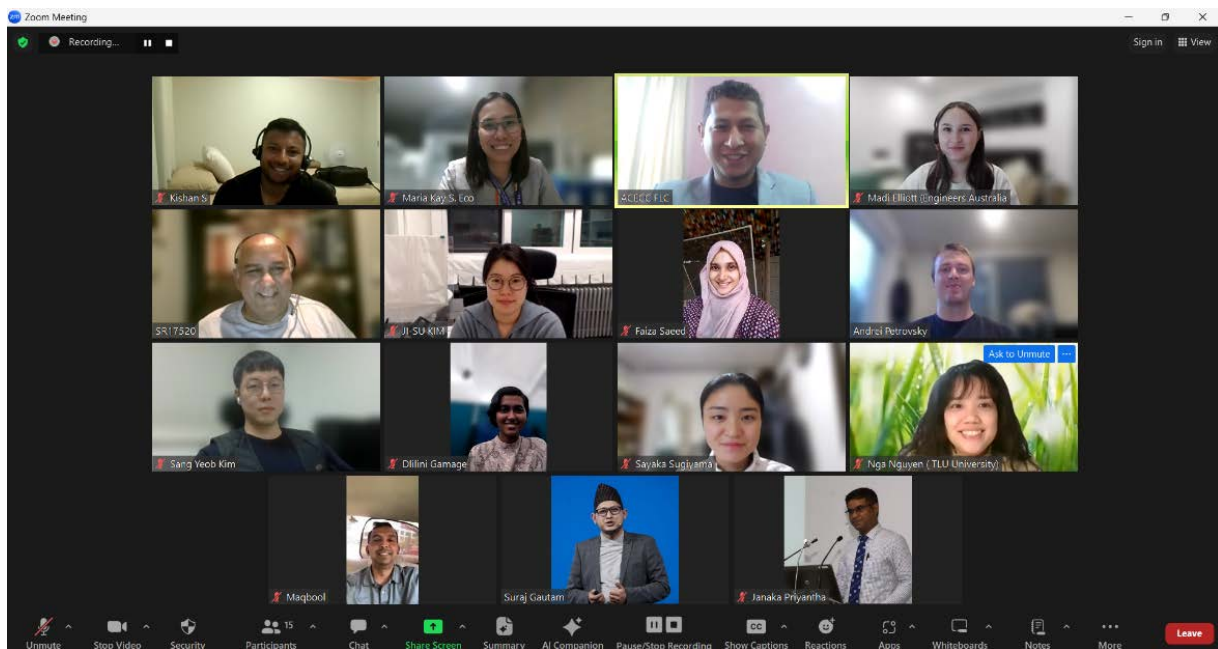
- The Chair of the ACECC FLC reached out to the ACECC FLC Immediate Past Chair, Deputy Chair, Secretary, and Elected Members to inquire about their availability to present and discuss the Activity Report in the ECM. After considering everyone's schedules, it was determined that the FLC Chair would participate and present in the ECM.
- For organizing the FLF Seminar in 46th ECM, ACECC FLC submitted the expression of interest by sharing the program agendas with four speakers to the ACECC.
- ACECC approved the FLC request to organize the FLF technical seminar under the theme “Engineering Frontiers: Global Perspectives on Infrastructure, Innovation and Leadership”. The Seminar will be conducted for a period of 1.5 hours.
- To make the entire process accountable and transparent, ACECC FLG Meeting of December 2023 agreed to develop an EoI form and circulated an EoI form for all the Future Leaders to express their interest to present at the FLF Seminars in Manila, Philippines. The deadline for EoI form was set to 10th of January 2024.
- Through the google form, the responders were requested to share their interest and availability to attend the FLF Seminar in 46th ECM. Taking into account the member economies in close proximity to the Philippines, two speakers were finalized as the Future Leader presenters: one from Sri Lanka and the other from Japan. The Future Leader representing JSCE is receiving financial support from JSCE for the travel. The ACECC FLC Secretary, representing the host country, will contribute as a moderator for the Seminar.
- The overall decision was then circulated for any disagreements and comments in the January FLG meeting. Since, there were no disagreements, it was then approved by the Future Leaders Group Meeting of January 22, 2024.

3.8 Sharing of Planning Matrix for the Year 2024

FLC encouraged Future Leaders to suggest activities that can be added to the activity matrix through the link: <https://www.canva.com/design/DAF4oyCVE4g/CRpv6cx1sPyOIhziraj4rA/edit>. FLC also discussed the quarterly release of the Newsletter, comprising four (4) issues each year. FLC also urged everyone to contribute to upcoming releases.

3.9 Coordination Meetings

The FLC has been arranging a monthly meeting within the FLC and FLG to organize events and also to discuss about upcoming events. The agenda and minutes of each meeting are circulated through the emails and a google calendar invite is sent to the Future Leaders.



3.10 Summary of Participation by the Future Leaders in the second term

FLF Technical Seminar		
Particulars	Presenters in the ECM	Topic
44 th ECM FLF Seminar: Innovations in Civil Engineering towards Sustainability	Prof. Dr. Ji-Su Kim (KSCE)	"Introduction of virtual laboratory for developing building and construction materials"
	Dr. Gyu-Beom Shin (KSCE)	"Load transfer behaviour of a Load Distributive Compression Anchor"
	Engr. Chaw Su Su Aye (FED.MES)	"Overview about Water 4.0"
45 th ECM FLF Seminar: Frontiers Technologies and Innovations in Civil Engineering	Engr. Mei-Hui Situ (CICHE)	"Reservoir Sustainability: The Desilting Tunnel Project in Taiwan"
	Engr. Suraj Gautam (NEA)	"Application of (UAV) for Disaster Risk Management: Case Studies from Nepal"
	Engr. Mariya Kay S. Eco (PICE)	"Assessment of Climate Change impacts on the water resources of the Laoag River Basin in Ilocos Norte, Philippines using the SWAT Model"
	Dr. Ji-Su Kim (KSCE)	Overview of 3D concrete printing technology in construction and building industry
46 th ECM Engineering Frontiers: Global Perspectives on Infrastructure, Innovation and Leadership	Engr. Maria Sophia Ort (PICE)	"Combined Ground Penetrating Radar and Electrical Geo-Resistivity Survey in Underground Utility Condition Assessment and Anthropocene Upper Surface Characterization at Sta. Mesa, Manila"
	Engr. Sayaka Sugiyama (JSCE)	"The function of engineering offices in the developing world"

	Engr. Kevin Manalo, Philippines (PICE)	“NEW WATER: From waste water to potable water”
	Engr. Dilini Hansika Pahala Gamage (IESL)	“Prospects and Challenges of Future Leaders”

Newsletter Article		
Particulars	Future Leaders	Articles
1 st Volume	Mr. Shailendra Ram, ACECC FLF Chair (EA)	Best Wishes Message
	Dr. Asih/Prasanti Widyasih Sarli (HAKI)	“A Strong Start: Paving the way for the Future”
	Engr. Faiza Saeed (IEP)	“INTERNATIONAL WOMEN’S DAY CELEBRATION at Institution of Engineers Pakistan (IEP-KC)”, “Women’s Day Special”
	Engr. Mariya Kay S. Eco (PICE)	“National Women’s Month Celeb in the Philippines”, “PICE, DPWH and REAP Collaboration on GAD Forum”, “Women’s Day Special”
	Engr. Purnima Acharya (NEA)	“My Journey to PhD”
	Engr. Madison Elliott (EA)	“Brisbane set to host the 2032 Olympics and Paralympics”, “Current Major Engineering Projects in Australia”
2 nd Volume	Mr. Shailendra Ram, ACECC FLF Chair (EA)	Best Wishes Message
	Maqbool A. Mohammed, P.E., ACECC FLF Deputy Chair (ASCE)	Best Wishes Message
	Zhiyan Sun, PhD Candidate, RMIT University (EA)	“Digital Twin Development for Intelligent Monitoring and Maintenance of Civil Infrastructure”
	Yi Yang, Transport Australia Society (EA)	“Bridgewater Bridge”
3 rd Volume	Mr. Shailendra Ram, ACECC FLF Chair (EA)	Message from ACECC FLF Chair
	Engr. Suraj Gautam (NEA)	“NEA Celebrates 61st Engineer’s Day in Nepal”, “FLC Chair shares his ECM Experience”
	Engr. Mariya Kay S. Eco (PICE)	“Maria’s journey in taking up MSE SWRE”
	Dr. Ji-Su Kim (KSCE)	“Dr. Ji-Su Kim at the FLF Technical Seminar”
4 th Volume	Mr. Shailendra Ram, ACECC FLF Chair (EA)	Message from ACECC FLF Chair
	Engr. Dilini Hansika Pahala Gamage, (IESL)	“Navigating The Future: Prospects And Challenges For Civil Engineering Leaders”
	Engr. Suraj Gautam (NEA)	“Training Sessions for Early Career Researchers”, “FLC Chair in the U-INSPIRE ALLIANCE”

4. Ongoing/Upcoming Activities

4.1 Future Leaders Participation in the ACECC working group for website upgrade

The FLC Chair has been involving actively in the Working group for the website upgradation of ACECC. For this, the FLC chair has been joining regular meetings, providing inputs to the website skeleton and contents.

4.2 Participation in the ACECC FLG Seminar in 46th ECM

Two of the Future Leaders from the FLG are participating in this ECM. There is a technical session of Future Leaders Forum in the ECM where the Future Leaders will be presenting their experiences.

Future Leaders Forum Seminar: Engineering Frontiers: Global Perspectives on Infrastructure, Innovation and Leadership Venue: Manilla, Phillipines Date: 29 Feb, 2024 Moderator: Engr. Maria Kay S. Eco, ACECC FLC Secretary		
16:15 - 16:30 (15 min)	Pre-meeting sign-in	
16:30 - 16:35 (5 min)	Welcome from ACECC FLF Chair	Engr. Shalendra Ram, ACECC FLF Chair, <i>Australia/EA</i> Suraj Gautam (FLC Chair), <i>Nepal/NEA</i>
16:35 - 16:40 (5 min)	Introduction about ACECC FLC, Outline Agenda & Introduce FL Presenters	Engr. Maria Kay S. Eco, PICE
16:40 - 16:55 (15 min)	<i>Presenter I: Combined Ground Penetrating Radar and Electrical Geo-Resistivity Survey in Underground Utility Condition Assessment and Anthropocene Upper Surface Characterization at Sta. Mesa, Manila</i>	Engr. Maria Sophia Ort, <i>Philippines / PICE</i> <i>Project Manager, Maynilad Water Services Inc</i>

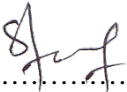
16:55 - 17:10 (15 min)	<i>Presenter II: The function of engineering offices in the developing world</i>	Engr. Sayaka Sugiyama, Japan / JSCE School of Civil Engineering, The University of Tokyo
17:10 - 17:25 (15 min)	<i>Presenter III: NEW WATER: From waste water to potable water</i>	Engr. Kevin Manalo, Philippines / PICE Water Supply Operation Officer
17:25 - 17:40 (15 min)	<i>Presenter IV: Prospects and Challenges of Future Leaders</i>	Engr. Dilini Hansika Pahala Gamage, Sri Lanka / IESL
17:40 - 17:55 (15 min)	Question & Answer session	Engr. Shalendra Ram, ACECC FLF Chair, Australia/EA
17:55 - 18:00 (5 min)	Closing	Engr. Maqbool Mohammed, FLF Deputy Chair, USA / ASCE

4.3 Call for Articles for the 5th Edition of Newsletter

The Working Group 2: Newsletter will be publishing the fifth volume of the Newsletter by the end of March 2024.

5. Recommendations

- Proposal for the Revision of ACECC Future Leaders Governance Document 2024 (Annex 1).
- Proposal for Adding Hyperlink Options for ACECC Future Leaders Website (<https://aceccfutureleaders.org>) into the ACECC Website (<https://www.acecc-world.org/>)
- Proposal for the Technical & Financial Support on Publishing ACECC Future Leaders Publication “**Innovations in Civil Engineering from the Future Leaders of ACECC**” (Annex 2).



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Er. Suraj Gautam
ACECC FLC Chair / NEA



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GOVERNANCE DOCUMENT 2024

The Asian Civil Engineering Coordination Council Future Leaders Committee

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1. About Future Leaders

1.1 Future Leaders

A group of Young Civil Engineers below 35 years of age from the Asian Civil Engineering Coordinating Council (ACECC) member economies. The objective of the Future Leaders Group is to develop leadership skills in young civil engineers in member economies by

- a. Creating a Sustainable Future Leaders Forum (FLF).
- b. Promoting a diverse and inclusive culture for young civil engineers.
- c. Creating avenues for the professional development and strong international technical collaboration among young civil engineers in ACECC member economies.

1.2 Future Leaders Strategic Plan

The ACECC Future Leaders Group (FLG) and Future Leaders Committee (FLC) has been envisioned to network, develop and participate in professional development activities such as:

- a. Seminar Presentations associated with every ECM
- b. Technical Webinars hosted by joint ACECC member economies
- c. Presentations at CECAR
- d. Other planned FL networking activities

The Second ACECC FLC (2023-2024) has identified following Priority Areas for Continuing Professional Development (CPD) that includes,

- a. Implementation of SDG / Sustainability
- b. Frontiers Technology and Innovations in Civil Engineering
- c. Climate change, Disasters & their impacts to Civil infrastructure
- d. Understanding Risk, Risk Communication

ACECC FLC Strategic Plan



1. Creating a Sustainable Future Leaders Forum (FLF)

- **Two Years** tenure of ACECC Future Leaders Committee (ACECC FLC)
- **Four Working Groups** (WG1, WG2, WG3, WG4) for the effective functioning
 - a. Working Group 1: Activity Management
 - b. Working Group 2: Newsletter
 - c. Working Group 3: Research & Documentation
 - d. Working Group 4: Website, Communication & Social Media Handling
- **Webinar Groups**
- Establishment of **ACECC Future Leaders Chapter** in 16 Countries (each country chapter will establish & maintain their own database– ACECC FLC will link up) [Proposed]

2. Promoting a diverse and inclusive culture for young civil engineers.

- Inclusive Leadership [Male – Chair and Female – Secretary, vice versa after each term] 2 Deputy Chair [Male & Female] and 2 Members [Male & Female]
- Two Future Leaders [1 Male and 1 Female] from each countries

Priority Areas for Continuing Professional Development (CPD):

- Implementation of SDG / Sustainability
- Frontiers Technology and Innovations in Civil Engineering
- Climate change, Disasters & their impacts to Civil infrastructure
- Understanding Risk, Risk Communication

3. Creating avenues for the professional development and strong international technical collaboration among young civil engineers in ACECC member economies.

- Conducting **Four Webinars** in a year
- Conducting ACECC FLG Seminars on each ECM (2 Seminars)
- Preparing **Four Newsletter** in a year
- Create an **Repository of Open Sources for scientific database** with the person in charge (PIC) in every country chapters

1.3 Future Leaders Committee (FLC) Elections & Tenure

- Future Leaders (Civil Engineers of ACECC Member economies) should be under the age of 35 (thirty-five). Future Leaders are expected to dedicate at least 6 to 8 hours of participation in the Future Leaders Group activities in a month.
- There are two (2) Future Leader members [1 Male, 1 Female] from each member economies of ACECC.
- Future Leaders should update or report their quarterly activities to the Member Economy and ensure their active participation in the Future Leaders Group activities such as contribution to the Newsletter articles, participation in the International Webinars, Technical seminars and so on.
- Future Leaders Committee (FLC) positions will have a two-years tenure, starting from January to December.
- The Chair of Previous Term will serve as Immediate Past Chair (an Advisory Position) to the new term for bridging the information and institutional memory.
- The (first) initial term of the FLC was led by a Female Chair and a Male Secretary. Subsequently, the leadership positions will alternate each term. Every term the leadership position will be swapped. i.e. The 2nd Future Leaders Committee will have following positions:
 - Immediate Past Chair (Advisory Role)
 - Chair [Male]
 - Two Deputy Chairs – one male & one female
 - Secretary [Female]
 - Two Committee members - one male & one female
- Nominations to be called for service in early Dec of the second year of the term.
- Chair of ACECC FLF Sub-Committee will send out email for nominations in Nov/Dec.
- Nominations returned to ACECC Secretariat by 1st week of Dec. Should there be more than 1 nomination, then voting will occur. FLC positions should be finalised and shared to all FLG members by mid to late December.
- In case the elected Chair or Deputy Chair or Secretary or Members is unable to serve in the FLC (considering the age barrier of 35 years / FL becomes unavailable / Member Economy wishes to replace the existing Future Leaders), then the Chair of the FLF can circulate nominations for the vacant position and fulfil it. If there are more than one nomination, then voting will be carried out.
- The ACECC FLC Chair will inform the ACECC PCM & ECM about the outcomes during the subsequent meeting following the FLC election.

1.4 Future Leaders Forum Organization Chart



1.5 FLF Member Program & Activities

FLF Member Program & Activities



1.6 FLC Positions & Responsibilities

FLC Positions - Responsibilities and Expectations



Chair - Accountable for all activities of FLF; Connect with ACECC FLF Chair (monthly) & provide quarterly reports; run fortnightly / monthly FLFC meetings to review annual program and; assign activities to rest of committee; review agenda and minutes of FLC meetings

Deputy Chair – Assist Chair with delegated tasks; stand in for Chair when Chair is absent at any meetings; review agenda & minutes; review FLF membership; focus on conduct & progress monthly activities; Deputy Chair 1 to focus on Monthly activities and Deputy Chair 2 to focus on Annual Events

Secretary – Draft Agenda & Minutes of all planned & special meetings of FLC; share and circulate all information received by Chair; liaise with Chair & Deputy Chairs. Monitor and maintain social media (WhatsApp, LinkedIn and Facebook for FLF members)

Committee Members (Two) – undertake assigned tasks and assist Deputy Chairs 1 & 2. Focus on assisting with monthly and annual events. Assist with ideas from other FLF members on FLF activities.

2. Financial Support Framework for FLC

Financial Support Framework for ACECC Future Leaders Committee Members

One of the ACECC's goal is to develop leadership skills in young civil engineers. To attain this ACECC has been supporting FLF Sub-Committee since its inception by promoting a diverse & inclusive culture for young engineers and by creating avenues for professional development & collaboration between young engineers from various member economies. However, FLC members have been lagging leadership & management development skills by not attending ACECC ECMs in person. This is mainly due to limited financial capital among young engineers, many of them being students or early in career with little or no support from employer or member societies. During the 44th ECM in Jeju, South Korea, a request was made to Executive Committee to financially support FLC members to attend future ECMs. A \$1,000 provision was made for the financial support to attend 45th ECM. The Financial Support Framework was submitted on the 45th ECM and the ECM unanimously decided on the following clauses.

Considering limited capital resources and transparency in awarding the travel support, the following framework rules are adopted:

- 1) The maximum travel support will not exceed \$2,000 for any ECM/CECAR.
- 2) The travel support will be provided to at least one FLC member and may provide support to two members when the costs in certain member location are significantly low.
- 3) Any costs exceeding the limit above shall be either borne by the society of the attending FLC member or by the member.
- 4) Travel support will include Airfare and Accommodation. The same shall be reimbursed by submitting an expense report/receipt.
- 5) Criteria to select member for financial support in order of preference:
 - a) FLC Chair
 - b) FLC Deputy Chair
 - c) FLC Member presenting at ECM/FLF Seminar
 - d) FLC Immediate Chair
 - e) No single FLC member shall be supported at two consecutive ECMs
 - f) FLC shall make effort to select male and female members on alternate basis
- 6) All travel & accommodation shall confirm to ACECC Guidelines.
- 7) Travel shall be approved by ACECC Chair and Secretary General.
- 8) Cost of Visa/Passport shall be the responsibility of the participant.
- 9) There shall be no expense advances.
- 10) The currency for all reimbursement shall be USD.

This framework was adopted on September 19, 2023 at 45th ECM.

3. ToR for Working Groups

The 2nd ACECC FLC has introduced the provisions of the Working Groups (WGs) for the smooth functioning of the committee. There are four working groups namely:

1. WG 1: Activity Management
2. WG 2: Newsletter
3. WG 3: Research & Documentation
4. WG 4: Website, Communication & Social Media Handling

The Terms of Reference (ToR) has been prepared for each working groups. The Future Leaders will be assigned to respective working groups on the basis of their Expression of Interest (EoI). The EoI Form will be circulated through the email and will consider the following attributes:

EoI Form for ACECC Future Leader Registration

- a. Full Name
- b. Highest Level of Education [PhD, Masters, Bachelors]
- c. Gender
- d. Country
- e. Name of Member Economies (eg: Nepal Engineers Association for Nepal, Engineers Australia for Australia, etc)
- f. Email Address
- g. WhatsApp/Contact Number (with Country Code)
- h. Current Affiliation/Working Organization
- i. Interest to join Working Group: [1st Priority]
- j. Interest to join Working Group: [2nd Priority]
- k. Interest to join Working Group: [3rd Priority]
- l. Are you willing to contribute as a resource person in the ACECC Technical Webinar ?
- m. Short Bio [150-200 Words]
- n. Social Media Handle (LinkedIn, Twitter, Facebook, etc)
- o. Photo for ACECC Future Leaders Profile
- p. I agree to share my information in ACECC Future Leaders Forum Profile Document and Website.

ACECC Future Leaders Forum

Terms of Reference

Working Group on Activity Management [WG 1]

Background

ACECC Future Leaders Forum is a group of Young Civil Engineers below 35 years of age from the ACECC member economies. The objective of the Future Leaders Group is to develop leadership skills in young civil engineers in member economies by

- Creating a Sustainable Future Leaders Forum (FLF).
- Promoting a diverse and inclusive culture for young civil engineers.
- Creating avenues for the professional development and strong international technical collaboration among young civil engineers in ACECC member economies.

The Working Group on Activity Management has the potential to contribute to the activities like Webinar and future programs by

- Sharing Best Practices
- Organizing Thematic Webinars on [Flood Resilience, Earthquake Resilient Structures, High Rise Buildings, Tunnel Excavation, Metro Rails, Mobility Management]
- Setting up Calendar Events,
- Organizing Webinar on a Bi-monthly Basis
- Division of Member Economies into 4 groups
- Organize jointly workshops and symposiums for training and capacity development in the region;
- Lead and organize hackathons, ideation workshops (e.g. meetings with potential partners and donors, coordinate the development of the project proposal documents for funding opportunities etc).

Expected Outputs

Expected output of this Working Group includes planning of the activities like webinar, preparing reports and fact sheets of the activities organized.

Reporting and Schedule

The Working Group will report their activities to the Monthly Meeting of the ACECC FLC.

Language:

All reports and communication will be in English.

ACECC Future Leaders Forum

Terms of Reference

Working Group on Newsletter [WG 2]

Background

ACECC Future Leaders Forum is a group of Young Civil Engineers below 35 years of age from the ACECC member economies. The objective of the Future Leaders Group is to develop leadership skills in young civil engineers in member economies by

- Creating a Sustainable Future Leaders Forum (FLF).
- Promoting a diverse and inclusive culture for young civil engineers.
- Creating avenues for the professional development and strong international technical collaboration among young civil engineers in ACECC member economies.

The Working Group on Newsletter has the potential to contribute to the development of content for ACECC FLF and Newsletter by

- Sharing Best Practices
- Topic Based Newsletter [Practices/ Activities on Eg: Flooding/EQ, Metro]
- Preparing Quarterly/Bi-Annually Newsletter
- Encourage data generation and timely sharing of vital information between Member Economies
- Assist with development of an online tools for information sharing and best practices between Member Economies

Expected Outputs

Expected output of this Working Group includes preparing newsletters.

Reporting and Schedule

The Working Group will report their activities to the Monthly Meeting of the ACECC FLC.

Language:

All reports and communication will be in English.

ACECC Future Leaders Forum

Terms of Reference

Working Group on Research & Documentation [WG 3]

Background

ACECC Future Leaders Forum is a group of Young Civil Engineers below 35 years of age from the ACECC member economies. The objective of the Future Leaders Group is to develop leadership skills in young civil engineers in member economies by

- Creating a Sustainable Future Leaders Forum (FLF).
- Promoting a diverse and inclusive culture for young civil engineers.
- Creating avenues for the professional development and strong international technical collaboration among young civil engineers in ACECC member economies.

The Working Group on Research & Documentation has the potential to contribute to the development of content, research document by

- Store and embed knowledge assets (links, podcasts, videos, documents, simulations, wikis...) in standard business processes and provide access to those who need to know.
- Coordinate with other working groups to provide them the information about the existing available knowledge resources and encourage them to develop new and innovative resources.
- Archive, maintain, backup and disseminate documents, videos, infographics, webinars, blogs and other knowledge resources.
- Coordination of the development of synthesis papers which may be a review of some specific scientific topic or state of practice or perspectives on a relevant matter where the interdisciplinary and geographical distribution of the Member Economies may contribute.

Expected Outputs

Expected output of this Working Group includes generation of knowledge products, research documents, reports and fact sheets.

Reporting and Schedule

The Working Group will report their activities to the Monthly Meeting of the ACECC FLC.

Language:

All reports and communication will be in English.

ACECC Future Leaders Forum

Terms of Reference

Working Group on Website, Communication & Social Media Handling [WG 4]

Background

ACECC Future Leaders Forum is a group of Young Civil Engineers below 35 years of age from the ACECC member economies. The objective of the Future Leaders Group is to develop leadership skills in young civil engineers in member economies by

- Creating a Sustainable Future Leaders Forum (FLF).
- Promoting a diverse and inclusive culture for young civil engineers.
- Creating avenues for the professional development and strong international technical collaboration among young civil engineers in ACECC member economies.

The Working Group on Website, Communication & Social Media Handling has the potential to contribute to the activities like W

- Developing/Ensuring Content for an interactive website of ACECC FLC as an online office and digital profile.
- Establish ACECC FLC existence on social media accounts on twitter, Facebook, Instagram, etc.
- Manage social media handles
- Fetch updates of activities from Member Economies and promote it to various online portals.
- Provide solutions for online meeting and activities.
- Establish a graphic wing to support ACECC FLC and publish media for ACECC FLC

Expected Outputs

Expected output of this Working Group includes the development of a functional and up-to-date website showcasing ACECC FLC activities roadmap, progress, basic information, photographic updates..

Reporting and Schedule

The Working Group will report their activities to the Monthly Meeting of the ACECC FLC.

Language:

All reports and communication will be in English.

Annex -2: Call for Book Chapter

The **Working Group 3: Research & Documentation** of ACECC FLG is planning to prepare its very first volume of the Book Chapter entitled “**Innovations in Civil Engineering from the Future Leaders of ACECC**”. As ACECC prepares to celebrate its 25th Anniversary this year on Sep 2024, ACECC FLC is planning to circulate this notice among the Future Leaders. ACECC Future Leaders is therefore looking for the **technical support** from the ACECC Member Economies and Technical Committees for their support in reviewing the book chapters. As a part of the **Editorial team**, the insights and expertise will be invaluable for us in ensuring the quality and accuracy of the content we are preparing to publish. Your thorough review and constructive feedback will greatly contribute to the enhancement of the chapters, ultimately enriching the value of the book for our intended audience. We’d also request ACECC for the **financial support** on publishing **at least 50 hard copies** of the Book Chapter. The concept note for the book chapter is given below:

Call for book chapters

We are delighted to announce our forthcoming book on “Innovations in Civil Engineering from the Future Leaders of ACECC”. Our aim is to showcase a number of case studies from the future leaders of the Asian Civil Engineering Coordinating Council (ACECC) in order to highlight how Young Civil Engineers Under 35 years of age are leading transformative initiatives in Science, Technology, Engineering, Arts and Mathematics which aligns with the priorities and target set forth by the ACECC. This book will also visualize the challenges faced at both local and national levels, and the approaches that have been adopted to mitigate such challenges.

Innovations in Civil Engineering from the Future Leaders of ACECC

ACECC Future Leaders Forum is a group of Young Engineers below 35 years of age from across Asia Pacific, with representatives from 17 member economies (Australia, Bangladesh, India, Indonesia, Japan, Korea, Mongolia, Myanmar, Nepal, Pakistan, Philippine, Sri Lanka, Taiwan, USA, Vietnam, Russia, New Zealand). The objective of the Future Leaders Group is to develop leadership skills in young civil engineers in member economies by i) Creating a Sustainable Future Leaders Forum (FLF); ii) Promoting a diverse and inclusive culture for young civil engineers; iii) Creating avenues for the professional development and strong international technical collaboration among young civil engineers in ACECC member economies.

The field of civil engineering is undergoing rapid transformations, and the contributions of young professionals in shaping the future of infrastructure development are both significant and diverse. Despite a noticeable rise in the inclusion of Youth and Young Professionals in global, regional, national, and local platforms and networks, there is a lack of comprehensive documentation regarding the impactful work undertaken by these agents of change. The present need is to shift the mindset from viewing Young Civil Engineers (YCE) as supporting roles to recognizing their capacity as leaders. This shift would highlight the YCEs' role as capacity multipliers, enabling them to share, contextualize knowledge on Civil Engineering, integrate scientific knowledge, leverage technology and innovation, and advocate for transformative change. This proposed book chapter aims to compile insights from young civil engineers across 17 countries, shedding light on their experiences, challenges, innovations, and aspirations in the field.

The proposed book chapter will not only celebrate the achievements of young civil engineers but also serve as a valuable resource for educators, practitioners, and policymakers aiming to understand and support the next generation of professionals in the field. This book delves into the transformative initiatives undertaken by YCEs in 17 countries of the ACECC, showcasing their significant contributions. Through an in-depth exploration of various transformative projects, challenges faced, and an analysis of how regional and national policies support YECs, the book aims to develop a framework for engaging YECs in innovation and development. Furthermore, it will provide recommendations to enhance the contributions of YCEs in the realms of rapidly growing contexts, automations and so on. By amplifying the voices of young civil engineers, this chapter contributes to the ongoing dialogue on the future of civil engineering in a rapidly changing world.

Scope:

The book chapter will cover a broad spectrum of topics within civil engineering, including but not limited to:

- a. **Innovations and Technologies:** Highlighting innovative approaches, technologies, and methodologies employed by young civil engineers in diverse projects.
- b. **Challenges Faced:** Discussing the common challenges faced by young professionals in the field, such as project management, sustainability, regulatory compliance, and integrating new technologies.
- c. **Global Perspectives:** Offering insights into how cultural, economic, and regional factors influence civil engineering practices in different countries.
- d. **Educational and Professional Development:** Exploring the role of education and professional development opportunities in shaping the careers of young civil engineers.

The book will :

- Showcase a voice of Young Future leaders
- Open up a new research and practice field to encourage and motivate young Civil Engineers
- Compile the best practices and potential challenges
- Have compiled case studies from 17 countries

Important Dates

- Chapter submission: 1 May 2024
- Review: 15 July 2024
- Revised Chapter Submission: 15 August 2024
- Publication Date: 1 September 2024