



WFEO - Young Engineers / Future Leaders Committee

Annual Meeting 2020

Minutes

Date and Time: Friday 16th October 2020, 12:00 – 2:00pm CET

Location: Zoom Online

Next Meeting: TBC.

Ref	Agenda Item				
Part A: Introductory and Procedural Matters					
1.	Welcoming and Introduction				
	Committee:	Firas Bou Diab, Chair Milène Guermont Wei Zhang Kwaku Duah Tak Tang Khin Maung Myint Brook Legesse Nicole Brown Ayoub Mataoui Micheal Kamau Milda Pladaite	Federation of Lebanese Engineers (FLE) Ingénieurs et Scientifiques de France (IESF) China Association for Science and Technology (CAST) Ghana Institution of Engineering (GhIE) Hong Kong Institution of Engineers (HKIE) Federation of Myanmar Engineering Societies (MES) Ethiopian Association of Civil Engineers (EACE) Engineers Australia (EA) Union Nationale des Ingénieurs Marocains (UNIM) The Institution of Engineers of Kenya (IEK) Corresponding Member - EU	FBD MG WZ KD TT KM BL NB AM MK MP	
	Guests:	WFEO – President WFEO – Immediate Past President WFEO – President Elect WFEO – Executive Vice-President WFEO – Executive Director CAST FEANI IFME - Australia EA GhIE FLE HKIE Federation of Myanmar Engineering Societies Philippine Technological Council South African Institution of Civil Engineering (SAICE) UAE Society of Engineers	Gong Ke Marlene Kanga José Vieira Mustafa Shehu Jacques de Méreuil Pan Li Dirk Bochar Ben Clark Colin Sheldon Mavis Addy David Mensah Sackey Wael Slika Thomas Lam Rachel Ng Chaw Su Su Aye Khin Manuna Myint Khin Nyein Chan Win Emmanual Cagiumbal Michael Mhlanga Tsebo Koena Khalil Al Hosani		
	Apologies	Donovan Guttieres	Corresponding Member - UNMGCY		
2.	Consideration of meeting agenda - starred items All proposed agenda items were confirmed by Chair at the commencement of the meeting. Additional items: Nil.				
3.	Minutes of Previous Meeting Resolved: Confirmed.				

Part B: Items for Information and Discussion		
4.	COVID-19 Update	
	Speaker/Presentation	Names(s): FBD
	Key Points	<ul style="list-style-type: none"> • Covid-19 information portal is available on the WFEO website • The COVID-19 pandemic has exposed inequalities and vulnerabilities across social, economic, and environmental spheres. • Crucial role that engineers have to play • Engineers are needed now more than ever • WFEO stands beside you and encourages any initiative of solidarity between its members
5.	YEFL Achievements in 2019 -2020	
	Speaker/Presentation	Names(s): FBD
		<ul style="list-style-type: none"> ○ WEC2019 in Melbourne <ul style="list-style-type: none"> ○ Annual Meeting held in Melbourne on November 19 during WEC. ○ Young Engineers Welcome event and Young Engineers Discussion Forum held during the convention ○ WFEO Board and Council approved Lebanon to be the new Host of YE/FL Committee with Firas Bou Diab, as a Chair. ○ World Engineering Day: March 4, 2020 <ul style="list-style-type: none"> ○ Publications launched with UNESCO and WFEO ○ Videos shared by Prof Gong Ke and Dr Marlene Kanga ○ 2020 Young Engineers Competition was held with focus on SDGs <ul style="list-style-type: none"> ▪ Over 400 young engineers from more than 70 countries participated ▪ Winner: Ms Aida Rafata, Imperial College London <ul style="list-style-type: none"> • Focus on SDG12: Reducing textile waste and reducing pollution from textile dying technology: www.wfeo.org/awards ○ WED 2020 Mini Series <ul style="list-style-type: none"> ▪ 17 mini episodes of podcasts, one featuring YEFL Chair: Firas Bou Diab ▪ More than 4,000 views/listens from over 70 countries ▪ wfeo.org/podcast-engineering-leaders ○ YEFL Webinar Series: "Engineering the Future": <ul style="list-style-type: none"> ○ Aim of series: <ul style="list-style-type: none"> ▪ highlight the role of engineering design and systems-based approaches ▪ highlight key challenges for better engineering systems across multiple sectors ▪ discuss different levers which can trigger change ○ Webinar 1: Resilience and Sustainability for Young Engineers <ul style="list-style-type: none"> ▪ Focus on SDG 2,3,4,7,8,9,11,12,13,17 ▪ Speakers: Prof Gong Ke, Matthew Baldwin, Firas Bou Diab (moderator) ▪ Topics: explores various aspects of engineering and indispensable role it has in resilient and sustainable societies ○ Webinar 2: Climate Action <ul style="list-style-type: none"> ▪ Focus on SDG13 ▪ Speakers: Dr Marlene Kanga, Davide Stronati, Bert D'Hooghe, Sara Nyberg, Vane Aminga, Firas Bou Diab, Milda Pladaite (moderator) ○ Involvement in other STCs/PICs <ul style="list-style-type: none"> ○ 2020 UN/WFEO Call for Innovation - Youth Creativity for Sustainable Transport (<i>Involvement with Committee on Engineering for Innovative Technologies</i>) <ul style="list-style-type: none"> • 7 submissions received from 6 countries: Kenya, Lebanon, Malaysia, Zimbabwe, China, Nigeria • Submissions were reviewed by an expert team led by Prof. Jianping Wu (Director of Tsinghua-Cambridge-MIT Centre for Future Transport) as the chair, and Firas Bou Diab (Transport Expert - Chair of YE/FL) as the vice chair. • Given the current concerns regarding coronavirus disease (COVID-19), it has been decided that the Second United Nations Global Sustainable Transport Conference will be postponed. Accordingly, the deadline of this Call for Innovations will be extended, and the submission will remain open. Please stay tuned for future announcements ○ 23rd China Beijing High Tech Expo Webinar: A Sustainable Future: Young Engineers and 4IR (<i>Involvement with Committee on Engineering for Innovative Technologies</i>) <ul style="list-style-type: none"> ▪ Speakers: Prof Gong Ke, Mr Yohad Ramasundara, Ms Carol Cai, Mr. Firas Bou Diab, Dr Peng Jing (moderator) ▪ Webinar highlighted on the below:

		<ul style="list-style-type: none"> → Technological Innovations done by Young Engineers to promote the SDGs → Necessary knowledge and skills for young engineers in the context of 4IR and the SDGs → COVID-19 impact: How are Young Engineers around the world are making a difference?
6.	Regional Updates	
	Speaker/Presentation	Names(s): NB, KD, BL, TT, MG, WZ, KM, F.B.D
	Key Points	<ul style="list-style-type: none"> • Ethiopian Association of Civil Engineers (EACE): Brooke Legesse <ul style="list-style-type: none"> • Established in 1996; originally part of architects and engineer's society • Challenges facing young engineers in Ethiopia: <ul style="list-style-type: none"> • 110million people • 20% reside in urban areas • 63% of the total population is under-age of 24: Reliant on agriculture • Shows challenges we are going to face in creating jobs • Around 225,000 students are yearly enrolled in engineering and technology fields in governmental and non-governmental organisation • Specific challenges: <ul style="list-style-type: none"> • High competition in the labour market • 70% students must study engineering/science • Needing to change from agriculture to industrial • Newly graduated are having trouble adapting to the work environment • Quality of education in high level education institutions • Finding the right mentors for young engineers in the work force is usually difficult • Young engineers are having to bear the burden of past generations mistakes in climate change and burdened with the task of coming up with innovative solutions • And not in a position to influence policy makers • Solution approach for EACE: <ul style="list-style-type: none"> • Focus 1: Job creation: <ul style="list-style-type: none"> • Working with big firms and graduating students to link employment opportunities • Promoting micro and small businesses • Working with policy makers • Focus 2: Capacity Building: <ul style="list-style-type: none"> • Organization various types of training for graduating students • Created regional offices in different universities of the country • Using its platform and its peer reviewed journals to promote young engineers work • Plans for YE/FL in EACE: <ul style="list-style-type: none"> • Strengthen the regional offices in universities • Prepare training through regional offices to graduating engineers • Increase the number of training we organise from 200 engineer to 1000 in the next two years • Increase participation and membership of young engineers in our association • Design and organise a mentorship program in EACE • Establish better strategies for increasing participation • China Association for Science and Technology CAST: Wei Zhang <ul style="list-style-type: none"> • NGO - Largest government organisation for science and technology works in china • 207-member society all over country • All their work focusses on SDG: quality education • Events: <ul style="list-style-type: none"> • Annual student conference, 2700 doctoral students, 300 professors helped present • Established National Youth Science and technology award: 33 years • Donated to content construction of Tibetan first youth science studio last year: divided into robot construction • Young women awards • Primary school and middle schools: science reports, experiences and interactive experiences • Federation of Myanmar Engineering Societies: Khin Maung Myint <ul style="list-style-type: none"> • Chairman of Young Engineer Committee

		<ul style="list-style-type: none"> • 4 types of membership: student, junior, associate and member, 53 members in 2020 due to COVID • Summary of 2020 activities: <ul style="list-style-type: none"> • World Engineering Day • Young engineer of the year • Technical presentations • Annual meeting October 10, 2020 • Future Strategic Discussions by Young Engineers • Young Engineer Forum • International linkages: EWB Global Citizenship Program, ASEANFEO, Kaplan, University College London • Training with FEAIP • Technical Skill Development: technical webinars, collaborative practices • Process and Products Show: technical debate Tournament, technical quiz, technical project show • Internship and technical excursion tour • Social and community activities • Religious and technical sessions • Hong Kong Institution of Engineers (HKIE): Tak Tang <ul style="list-style-type: none"> • Hong Kong Institution of Engineers <ul style="list-style-type: none"> • They are a qualifying body: Serves 21 different disciplines of engineers <ul style="list-style-type: none"> • Structures as a Learned Society • Founded in 1947 as Engineering Society of Hong Kong • Incorporated by law - statutory board • 34,000 members • Young Engineers: <ul style="list-style-type: none"> • Young members under 35: 4500 members • 12 committee members, 150 active volunteers • Working group structure; each person heads a working group <ul style="list-style-type: none"> • Students Promotion Group • Graduates Promotion Group • Seminars Group • Visits Group • Non-technical Programme Group • Community Services Group • Public Relations Group • Sports and Recreation Group • Social Culture and Arts Group • Publicity and Webmaster Group • Human Resources Group • Special Events Group • Focus on international collaborations: 2 program exchanges each year <ul style="list-style-type: none"> • Brought back to analytical framework of SDGs • Aim to be a "Super connector" • Approx. 100 events a year which are organised <ul style="list-style-type: none"> • Seminars, site visits, special events, international young engineers exchange (April 2019), public relations, student's promotion, non-technical programme, community services, sports and recreation • Focus on outreach, give back to society, give back to the environment, whole person development • Ghana Institution of Engineering (GhIE): Kwaku Duah <ul style="list-style-type: none"> • Purpose: identify challenges young engineers face around the world; present paper on these problems and socialise with the wider global community • Activities: <ul style="list-style-type: none"> • 40th conference of UNESCO adopted the resolution to proclaim 4th March of every year as World Engineering Day <ul style="list-style-type: none"> • 4 regions in country celebrated this day: Accra, Kumasi, Ho, Tamale • Established program to reach out to students to encourage them to become engineers <ul style="list-style-type: none"> • Children between 8-15 were assembled to introduce them to engineering and celebrate the contribution of engineers in achieving the SDGs. • Participation of engineering firms in teaching children modern and basic engineering skills • After the session all the students wanted to be engineers
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7.	Feedback on Regional Updates	
	Speaker/Presentation	Names(s): WFEO Board Members
	Key Points	<ul style="list-style-type: none"> Gong Ke: <ul style="list-style-type: none"> Wants to do more to represent YEFL in WFEO and relevant countries WFEO should do more to promote what we are currently doing STCs collaborations are important Continue to increase awareness of SDGs Special mention: Impressed with work done for young engineers in Ghana Marlene Kanga: <ul style="list-style-type: none"> Impressed by range of work being completed by young engineers around the world Inspiring statements around where young engineers are going Young engineers will connect more quickly in the future Looking at bigger issues: Lebanon and Ethiopia; there is so much work as engineers that we can do

		<ul style="list-style-type: none"> ○ Connection with youth group; hoping that we can have a voice at the UN moving forward ○ Every WFEO conference should have a focus on young engineers ○ Encourage everyone and the societies we represent, celebrate World Engineering Day ○ Jose Vieira: <ul style="list-style-type: none"> ○ Congratulations to Firas; organised very interesting events ○ In current format, we see that we can meet with people from all around the world ○ Special demonstration to show WFEO can be a great platform for sustainable development ○ Mustafa Shehu: <ul style="list-style-type: none"> ○ Special mention to Australia and Ethiopia ○ ACTION: 4-year plan is required - Firas to action ○ YEFL doing a lot of activities during this period
8.	YEFL Plans for 2021	
	Speaker/Presentation	Names(s): FBD, MP
	Key Points	<ul style="list-style-type: none"> ○ <u>WED 2021 – YE/FL Activity</u> <ul style="list-style-type: none"> ▪ Under Discussions; to be agreed at next committee meeting ▪ Suggestion from Prof Gong Ke - showcase work of YE from around the world to be done for WED2021 or for (or for HLPF in July 2021) ○ <u>Proposed “Engineering the Future” Webinars</u> <ul style="list-style-type: none"> ▪ Young Engineers Volunteering for the Future ▪ Young Engineers = board members? ▪ Other to be decided. ○ <u>Collaboration with UN Major Group for Children and Youth</u> <ul style="list-style-type: none"> ▪ Youth Science-Policy Interface Platform ▪ Donovan Guettres (corresponding YE/FL committee member) is looking into this. ▪ Aiming to establish memorandum of collaboration/understanding ▪ Co-design side events at various UN fora (e.g., Multi-Stakeholder Forum on Science, Technology & Innovation for SDGs, High Level Political Forum) ▪ Share relevant WFEO (YE/FL) activities, events, and news on UN MGCY social media ○ <u>Collaboration of FIDIC Future Leaders</u> <ul style="list-style-type: none"> ▪ Potential to look at working together on WED, webinars and training ▪ Dr. Marlene Kanga established contact and is assisting to establish collaboration ○ <u>Collaboration with European Young Engineering</u> <ul style="list-style-type: none"> ▪ Draft MOU under preparation with European Young Engineers ▪ Milda Pladaite (Ex-Vice President for Policy at EY) is arranging for this ▪ Objectives: extend WFEO and YE/FL visibility through EYE Network, share knowledge, collaborate on events for prompting SDGs, contribute to Public Policy working groups ○ <u>World Engineering Education Forum and Global Engineering Deans Council</u> <ul style="list-style-type: none"> ▪ Topic: Disruptive Engineering Education - November 2020 ▪ Opportunity for YE/FL committee to get involved ▪ Flagship conference of this group of international education ▪ Student activities are very important ○ <u>HLPF 2021</u> - possibility of a side event as per Chair's suggestion and guidance of WFEO President ○ Potential to establish connection with FEIAP and WFEO ○ <u>Establishment of Working Group on SDG13: Involvement with WFEO Committee on Engineering and the Environment</u> <ul style="list-style-type: none"> → Establish the strategy, defining how young engineers can contribute to SDG 13 and WFEO Declaration on Climate Emergency 2019 ▪ Objectives: collect and record best practices and challenges faced by young engineers, investigate gaps and define the climate action strategy for young engineers, assist WFEO UN with the analysis of the technical economic and environmental feasibility of sustainable development proposals and implement best practices to achieve SDG13 ▪ Firas Bou Diab & Milda Pladaite attended meeting with WFEO Committee on Engineering and the Environment on Oct 15 2020 and discussed potential collaboration on establishing the working Group on SGG13.

		<ul style="list-style-type: none"> ○ <u>International strategic forum workshop - stakeholder collaboration for global integration of youth in industry</u> <ul style="list-style-type: none"> ▪ Open discussion between industry, government, universities and young engineers ▪ Hearing directly from young engineers on workforce development ▪ Facilitate communication among all stakeholders involved in young engineers' development ○ <u>Contribution to WFEO Website and WFEO social Media Accounts</u> <ul style="list-style-type: none"> ▪ Invite Engineers, Young Peers, Colleagues to Like WFEO Facebook Page, Twitter, LinkedIn and YouTube accounts ▪ Action: all pages need to be shared and encourage others to like/follow ▪ Action: WFEO members to share and promote WFEO website and social media input and LinkedIn ○ <u>Confirmation of YEFL Committee Members</u> <ul style="list-style-type: none"> ▪ Improve communication between members ▪ Standard designation process for membership ▪ Invite all WFEO Members to nominate and confirm a member to YEFL to increase membership of the committee ▪ President Call for designation January and July 2020 with a target to designate young and talented engineers to all WFEO Committees
9.	Thanking and closing: FBD thanked everyone for attending and closed the meeting.	

Chair, WFEO - Young Engineers / Future Leaders Committee

Firas Bou Diab



October 19, 2020