



World Federation of Engineering Organizations
Fédération Mondiale des Organisations d'Ingénieurs



ENGINEERING COUNCIL OF ZIMBABWE

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WFEO STANDING COMMITTEE ON ENGINEERING CAPACITY BUILDING (WCEO-CECB)

ABRIDGED STRATEGIC PLAN (2020-2023)

PRESENTED TO THE WFEO BOARD ON 25 JANUARY 2020 BY ECZ

REVIEWED AND RE-SUBMITTED ON 5 JUNE 2020

1 INTRODUCTION

This proposed Strategic Plan is a response to the WFEO Melbourne 2019 General Assembly and has considered wider consultations of the stakeholders of the WFEO Committee on Engineering Capacity Building (CECB). The Committee on Engineering Capacity Building's vision is "to make WFEO (through CECB) the world leader in promoting , supporting and providing guidance on engineering capacity building and sustainable development to sustain and enhance human, institutional and infrastructure capacity to achieve the SDGs". We will focus on SDG 16 with objective of the development of strong institutions, which is needed for building capacity in engineering. SDG 17 will play a supporting role for this STC. This STC also support other STCs to responds to other SDGs. The host national member is the ECZ and the proposed chair is Eng. Martin Manuhwa.

It is a global strategy meant for both the developed and developing countries. Among strategic key activities with tangible outcomes are to develop a new edition of the hand book of engineering capacity building with emphasis on sustainable development, conferences/forums/workshops on engineering capacity building in different regions A global survey of engineering capacity needed for sustainable development. ECZ will assume its responsibilities by funding the chair and hosting the Committee with a financial commitment of averaging above € 90,000.00 per annum and will operate in accordance with the WFEO Rules of Procedures. This strategic plan addresses transitional issues as well as long-term strategic transformation of the committee.

1.1 THE CONTEXT AND BACKGROUND

The ECZ's understanding of the ***impact of capacity building and development*** is that the ***outcomes of the committee's work*** will empower national members of WFEO to strengthen their economies, governments, institutions and individuals through education, training, mentoring, orientation and the mobilization of resources for ***sustainable development***. It aims at developing secure, stable, appropriate, affordable and sustainable structures, systems and organizations, with a particular emphasis on improving the quality of life. Engineering Capacity Building is the greatest enabler to the achievement of the ***Sustainable Development Goals (SDGs)***.

1.2 THE SIX PILLARS FOR ENGINEERING CAPACITY NEEDED FOR THE SDGS

To us **capacity building** is ***"a dedication to the strengthening of economies, governments, institutions and individuals through education, training, mentoring, and the infusion of resources. Capacity building aims at developing secure, stable, and sustainable structures, systems and organizations, with a particular emphasis on using motivation and inspiration for people to improve their lives."*** The ECZ believes that Sustainable Engineering is a prerequisite for

Sustainable Development. The CECB Capacity model is based on the six pillars below. We will craft strategies to achieve the SDGs in a systematic way using the model in figure 1 below.

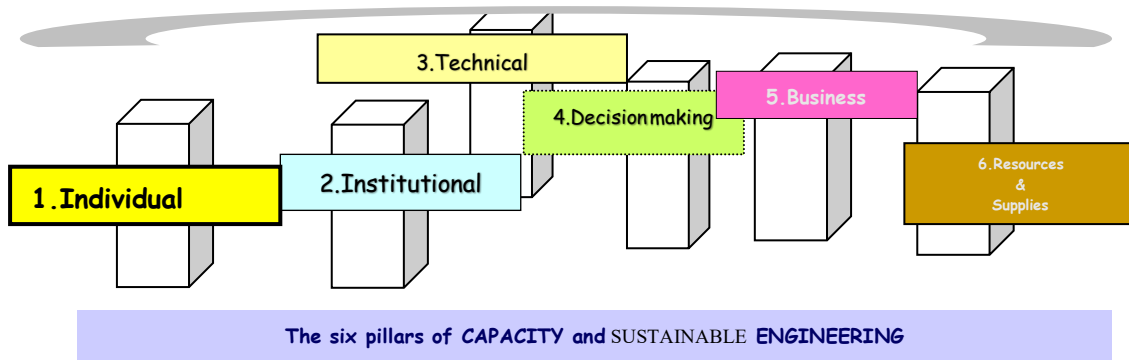


FIGURE1:The Six Pillars Supporting Engineering Capacity.

2 VISION, MOTTO, STRATEGIC THRUSTS, VALUE SYSTEM AND MISSION STATEMENT

The WFEO-CECB Strategic Pillars are shown on the diagram below. CECB aims to be the voice of engineering Capacity Building in WFEO, by being the premier WFEO STC that offers sustainable quality engineering capacity building.

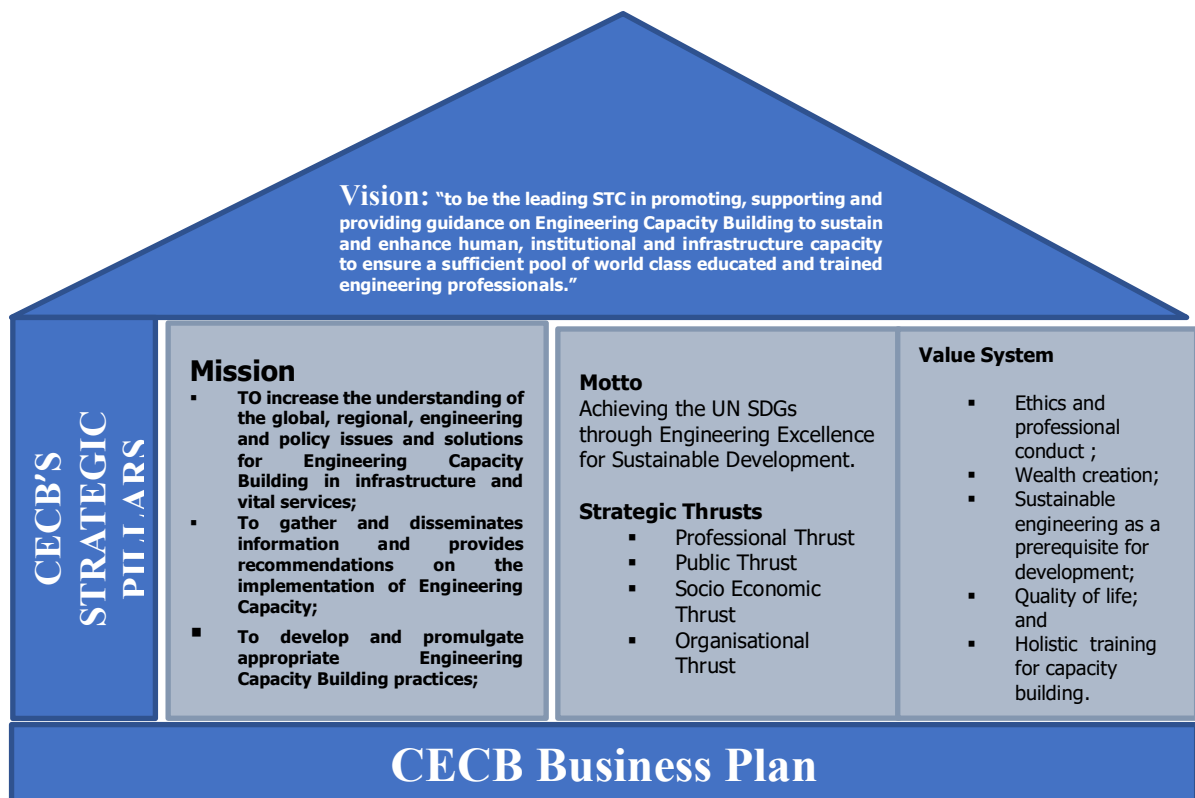


Figure 2:THE VISION, MISSION, MOTTO AND VALUE SYSTEM MATRIX.

2.1 COMMITTEE STRATEGIC OBJECTIVES

The WFEO-CECB Strategic Objectives are to:

- be recognized as the respected and reliable source of advice and guidance on engineering capacity building.
- be at the forefront of international engineering capacity building efforts to improve the visibility/presence, and stature of WFEO, and attain support of National and International engineering Organizations.
- continuously improve the work and quality of the CECB STC outputs and outcomes for greater impact *and benefit to WFEO membership*.

2.2 COMMITTEE FOCUS & DELIVERABLES

In partnership with its national members and other WFEO standing committees, the WCEO-CECB will execute a thematic, results-oriented program for 2020-2023 that:

- A new edition of the hand book of engineering capacity building with emphasis on sustainable development, this will be published and used for training material and may eventually become an input to UN System Reporting on Engineering Capacity Building.
- Conferences/forums/workshops on engineering capacity building with regional regards in Africa (together with AEW), Asia (cooperate with FEIAP or CAST or IEI), America (2021 World Engineering Forum or similar event) and Europe (as part of WEC2023).
- Survey of engineering capacity needed for sustainable development, the report of the survey may be an input to next UNESCO Engineering Report or other engineering capacity report.
- Develops and promulgates appropriate Engineering Capacity Building practices in the least developed, developing and developed countries in engineering and related industries;

3 CECB SDG FOCUS, STRATEGIC ACTIVITIES AND DELIVERABLES

3.1 CECB SDG FOCUS



Goal 16 is our focus goal and it is mainly concerned with building strong institutions and will inform most of our activities. Capacity Building is broad-based so it will have

many goals to focus on depending on the project and collaboration on the capacity needed by the other STCs or the partner or WFEO national or international member. For us to continuously improve the work and quality of the STCs outputs and outcomes we will focus on building the capacity of WFEO National and International Members and other STCs to attain the SDGs. SDG 17 will play a supporting role for this STC. Other STC Goals will be supported especially those to with capacity building in engineering standards, infrastructure and education.



3.2 STRATEGIC ACTIVITIES AND TANGIBLE OUTCOMES

3.2.1 STRATEGIC ACTIVITIES

The strategic activities are to develop and promulgate appropriate Engineering Capacity Building practices in the least developed, developing and developed countries in engineering and related industries and engaging with the appropriate United Nations agencies, international non-government organizations and national members of World Federation of Engineering Organizations to provide Engineering Capacity Building advice and strategies.

The STC Activities as based on the themes in this Strategic Plan are as follows:

- Encouraging and supporting Engineering Capacity Building theme leaders to organize international conferences, webinars, workshops and seminars related to their work within the strategic plan.
- Drafting practice guidelines and policies related to Engineering Capacity Building for the consideration and approval of the WFEO Executive Council and WFEO members.
- ***Capacity building in sustainable development goals (SDGs) for other STCs and WFEO National Members.***
- Capacity building in lifelong engineering education, and improving quality, needs and numbers and continuous professional development.
- Develop a new edition of the capacity building manual and a Compendium in order to meet the engineering capacity to deliver the SDGs.
- **Capacity building for engineering project planning, design, implementation and management, in light of the fourth industrial revolution and sustainable development.**
- ***Developing of a hub linking and an online Resources Centre for WFEO facilitate to continuous professional development. (e.g. online courses like MOOCS about Anti-corruption from GIACC, Sustainability from MOOCS Engineers Canada, and about Disaster Risk management from Peru, Japan and China).***

3.2.2 THE COMMITTEE STRUCTURE

The Committee has put in place the following Structure with Regional Sub-Committees so as to effectively spread its activities across the globe to reflect WFEO's Vision of Engineering Capacity Building in Infrastructure Development.

The committee structure will be as follows:

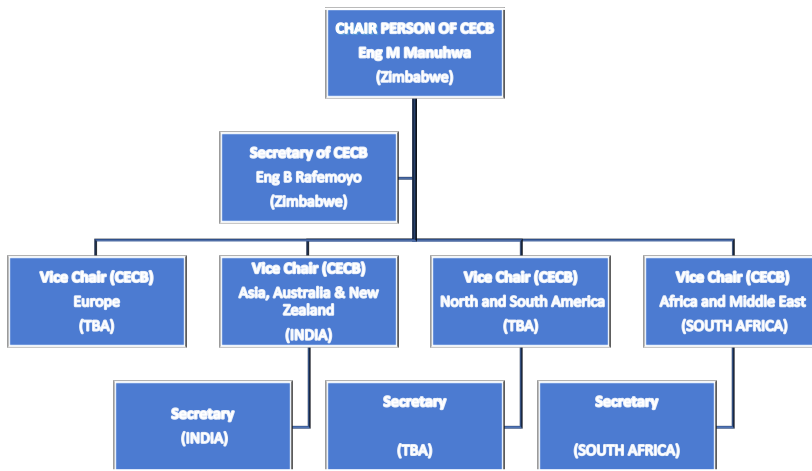


FIGURE 3: CECB ORGANOGRAM

3.2.3 THE COMMITTEE REGIONS AND TARGETS FOR MONITORING & EVALUATION:

The regions are (i) Europe, (ii) North and South America (iii) Asia, Australia and New Zealand (iv) Africa and Middle East.

Each of the Four regions will have a Vice President of the Committee.

Our overall framework of strategic monitoring and evaluation will be based on the criteria given below.



FIGURE 4: KEY MILESTONES 2020-2023

TABLE 1: PROPOSED PROGRAMME OF ACTIVITIES AND THE OUTCOMES FOR 2020-2023

Theme	Proposed Activity	2020 outcomes	2021 outcomes	2022 outcomes	2023 outcomes
1	Implementing the WFEO 2030 Plan to create Partnerships, Co-operations, Global Alliances and Networking to achieve the (SDGs).	(i) Create 1 Alliance with development partners.	(ii) Implement agreement to achieve agreed outcomes.	(iii) Achieve two WFEO Capacity building MoUs.	(iv) Host a Capacity building meeting.
2	Engineering Capacity Building in Developing and Developed Countries.	(i) Produce regional reports on Engineering Capacity. (ii) Develop a new edition of the capacity building manual and a Compendium in order to meet the engineering capacity to deliver the SDGs.	(iii) Hold 1 Conference on Engineering Capacity Building (iv) Hold an event on Capacity building for engineering project planning, design, implementation and management, in light of industrial revolution and sustainable development.	(v) Present 3 papers at Conference (vi) Hold a Capacity building Webinar for infrastructure maintenance and planning for being resilient to disaster and inclusive (vii) Hold a Capacity building event for mitigating and adapting to climate change in engineering practices.	(viii) Publish an Engineering capacity report & Contribute to future UNESCO Engineering Reports.
3	Engineering Capacity Building Conferences.	(i) Hold the Africa Engineering Week conference. (ii) Hold a Capacity Building Workshop in WFEO Events (Exco, GA or WEC)	(iii) Hold the Africa Engineering Week conference. (iv) Hold a Capacity Building Workshop in WFEO Events (Exco, GA or WEC)	(v) Hold the Africa Engineering Week conference. (vi) Hold a Capacity Building Workshop in WFEO Events (Exco, GA or WEC)	(vii) Hold the Africa Engineering Week conference. (viii) Hold a Capacity Building Workshop in WFEO Events.
4	Engineering Capacity Building Awareness, Training and Development of Systems.	(i) Hold one Course (ii) Hold one Webinar. (iii) Hold a Workshop on Capacity building in lifelong engineering education, and improving quality, numbers and continuous professional development.	(iv) Hold 1 Training course on CPDs. (v) Developing of a hub linking and an online Resources Centre for WFEO facilitate to continuous professional development (e.g. online courses like MOOCS about Anti-corruption from GIACC, Sustainability from MOOCS Engineers Canada, and about Disaster Risk management from Peru, Japan and China).	(vi) Hold one training seminar	(vii) Hold 2 train the trainer courses

3.3 EXPERIENCE OF THE HOST AND THE PROPOSED CHAIR

The host country Zimbabwe has vast experience and expertise in running STCs as evidenced by their successful hosting of the Anti-corruption Committee (CAC) which has now gained international recognition. The proposed chair Eng. Martin Manuhwa (CV already sent to the WFEO Board) was also a national member of WFEO Exco, sits in 3 Committees and is the current FAEO President. This plan includes the task to secure the commitment of CECB members to support the Engineering Council of Zimbabwe as the host and chair of the committee subject to the recommendation by the Executive Board and approval of the WFEO Executive Council and General Assembly in compliance with the November 2019 Melbourne Resolution by WFEO membership which required the Capacity Building Committee to be a standalone committee to compliment the Education Committee.

4 MANDATE OF CECB

The WFEO–CECB shall support the WFEO and engineering profession worldwide by:

- Encouraging and supporting CECB theme leaders to organize international webinars, workshops and seminars related to their work within the strategic plan.
- Developing and promoting Engineering Capacity Building policies, strategies and practices for sustainable development.
- Drafting practice guidelines and policies related to Engineering Capacity Building for the consideration and approval of the WFEO Executive Council and WFEO members.
- Participating as the WFEO representative in the UN System and representing WFEO at meetings of relating to corruption and professional practices.
- Representing the CECB as one of the WFEO delegates on issues to do with Engineering Capacity Building.
- Communicating to WFEO and the international community on the work of the CECB.

5 OPERATIONS

5.1 OPERATING Principles

The WCEO-CECB shall engage in a facilitating role among its members and the WFEO community. Where necessary, this role may include leadership and coordination among members and other committees of the WFEO. The WCEO-CECB will conduct its business in a transparent, inclusive and consultative manner among its members as well as the other committees and structures within the WFEO by:

- Inspiring and empowering our theme leaders and project participants, treating each other fairly and respectfully and fostering teamwork and collaboration

- Encouraging collaboration among committee members as well as other standing committees of the WFEO as appropriate and focusing on concrete and measurable **deliverables/outcomes** and tracking progress as well as reporting to, and liaising with, the WFEO Executive Board and Council.

5.2 MEETINGS

The CECB will hold one face-to-face meeting each year, normally between September and December. There will be four online meetings.

5.3 NEWSLETTER

The CECB shall produce a newsletter twice yearly. The newsletter focuses on one of the themes in the strategic plan and the theme leader is asked to assist in the coordination of articles for the publication.

5.4 WFEO WEBSITE

The Secretariat will have responsibility for the transmission of files to be placed on the CECB portion of WFEO's website.

5.5 SUCCESSION PLANNING

The ECZ will identify a suitable successor and mentor them to take over as hosts.

6 ECZ FINANCIAL (BUDGETS) COMMITMENT AND RESPONSIBILITIES

6.1 COMPLIANCE TO WFEO RULES OF PROCEDURE & HOST RESPONSIBILITIES

This committee shall assume its responsibilities like funding the activities of the CECB secretariat, implementing this strategic plan and it will operate in accordance with **WFEO Rules of Procedure (RoP) Clauses 3.2, 3.3 and 3.4 and Annex C Clauses 2.1 to 2.4** as approved by the Executive Council in London on 24 October 2018.

6.2 BUDGET

The ECZ has committed to support the hosting and chair expenses as depicted in the budget. The Chair and Secretariat will manage and approve expenses for this budget once received. The Budget for the CECB is shown in table 2 below. The CECB will disclose the overall funding and staff support from host country in the budget. The ECZ will cover the following budget. Specific project budgets will be done on a need basis.

TABLE 2: WFEO COMMITTEE ON ENGINEERING CAPACITY BUILDING (CECB) BUDGET 2020 TO 2023

CECB BUDGET FINANCIAL YEAR	2020 (FY1)	2021 (FY2)	2022 (FY3)	2023 (FY4)	
1. CECB SECRETARIATE SERVICES					Notes
1.1 Salary for support staff for Committee two post)	€ 16,800.00	€ 17,640.00	€ 18,480.00	€ 19,320.00	See Note 1
1.2 Equivalent time allowances for meetings and travel	€ 9,600.00	€ 10,080.00	€ 10,560.00	€ 11,040.00	See Note 1
1.3 Consumables (Stationery, Cartridges etc)	€ 600.00	€ 630.00	€ 661.50	€ 694.58	See Note 1
Sub Total 1	€ 27,000.00	€ 28,350.00	€ 29,701.50	€ 31,054.58	
2. CAPITAL EXPENDITURE : OFFICE FURNITURE AND EQUIPMENT					
2.1 Computers and Office Equipment use and hire at Seminars	€ 2,000.00	€ 2,100.00	€ 2,205.00	€ 2,315.25	See Note 1
2.2 Furniture for CECB Office	€ 1,200.00	€ 1,260.00	€ 1,323.00	€ 1,389.15	See Note 1
Sub Total 2:	€ 3,200.00	€ 3,360.00	€ 3,528.00	€ 3,704.40	
3. CONFERENCES, WEBINARS, WORKSHOPS AND TRAINING SEMINARS					
3.1 Conference Bookings and Office Rentals and Utilities	€ 6,000.00	€ 6,000.00	€ 6,000.00	€ 6,000.00	See Note 1
3.2 CECB Workshops	€ 5,000.00	€ 5,250.00	€ 5,512.50	€ 5,788.13	See Note 1
3.3 CECB Training and Capacity Building	€ 5,000.00	€ 5,250.00	€ 5,512.50	€ 5,788.13	See Note 1
3.4 CECB Training Seminars	€ 5,000.00	€ 5,250.00	€ 5,512.50	€ 5,788.13	See Note 1
3.5 CECB Annual Conferences	€ 5,000.00	€ 5,250.00	€ 5,512.50	€ 5,788.13	See Note 1
3.6 Travelling and subsistence of Committee Chair and Secretariat	€ 28,640.00	€ 28,412.00	€ 28,192.40	€ 27,981.62	Note 1 & 2
3.7 Other CECB Costs Travelling and subsistence (Presenters & Guests)	€ 36,360.00	€ 37,338.00	€ 38,345.10	€ 39,382.76	
Sub Total 3	€ 91,000.00	€ 92,750.00	€ 94,587.50	€ 96,516.90	
Grand Total	€ 121,200.00	€ 124,460.00	€ 127,817.00	€ 131,275.85	Note 1 & 2

NOTE 1: Costs and travel and subsistence of chair and his team will be covered by the ECZ which is € 84,840.00 for 2020, € 87,122.00 for 2021, € 89,471.90 for 2022 and €91,893.10 for 2023.

NOTE 2: . Provision of 30% of the total budget will be made for the costs for emerging and other strategic projects which will be met by fund raising. The set targets for the fundraising are which is €36,360.00 for 2020, € 37,338.00 for 2021, €38,345.10 for 2022 and €39,382.76 for 2023. This is only necessary if members have proposed extra projects for **CECB**.