

Engineers Without Borders International

Ahead Together

Unlocking the global potential of the engineers without borders

Raymond Lopinski
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ENGINEERS
WITHOUT
BORDERS
INTERNATIONAL

ReShaping Engineering

EWB-UK Challenge with AzuKo

Every design decision you make has an impact - it is never neutral. How can you lead with empathy, and deliver genuinely sustainable solutions?

Reshaping Engineering offers a unique opportunity to collaborate and explore how we, collectively, can do just that.

Jo Ashbridge, Founder & CEO, AzuKo

This Challenge is an incredible opportunity for participants to deepen their understanding of globally responsible engineering and their ability to solve real-world problems with a collaborative approach to design. By opening applications to those with and without technical training, we want to highlight the importance of working across sectors to foster a broader understanding of the impacts of engineering to make a safer future for everyone.

John Kraus, CEO

ReShaping Engineering

Principles of globally responsible engineering



Globally responsible engineering is thinking beyond the specification. It's considering all the external effects that we have on the world as we do our job.

Engineers are so fundamental in ensuring that people live healthy lives. We're really going to have to get our heads in gear, stop pursuing vanity projects, and start focusing on how we deliver what is being asked of us – from society but also from the planet.

Brittany Harris, Co-founder of Q-Flow

ReShaping Engineering Submissions

- Combatting Waste
- River Community App
- Skill Sharing Network
- ReShaping Education
- Carbo (Carbon Footprint)
- How we approach our careers
- Entrepreneurship Education
- Propeller Framework
- Construction Waste
- Ethical Engineering
- Workshop Toolkits
- Design Thinking
- U-values Online Tool
- Corporate Rating System
- EcoRadar
- E-Collab

View all the submissions at:

<https://crowdsolve.net/challenge/re2023/p/>

ReShaping Engineering Winners

Welcome to Reshaping Engineering 2023. This month-long multidisciplinary challenge will provide participants with the space to rethink the role of engineering and how to build the best possible world for people today and future generations in the face of climate and ecological emergencies and continued social injustice.

200 Participants and 23 Submissions

View all the submissions at: <https://crowdsolve.net/challenge/re2023/p/>

Team RE23-P01:
EcoRadar



Top Professional team



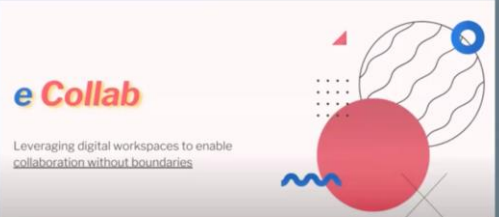
Team RE23-S06:
The Ethical Engineer Programme




Top Student team And Overall WINNER



Team RE23-P09:
E-Collab



Special mention



Geo-locating tool using sustainability data (BREEAM, LEED...) to easily identify sustainable buildings on google maps

Improving the prevalence and efficacy of ethics education for STEM students

Leveraging digital workspaces to enable collaboration without boundaries

BreakOut

- How could your workplace/company be more driven for achieving higher sustainability results.
- What is the biggest roadblock in approaching each project from a sustainability framework.

Engineers Without Borders International

We are a movement of engineers and changemakers from all over the world, willing to divert and volunteer our skills and expertise to the most pressing issues of our time. We are driven by the understanding that engineering can enable positive change, but we recognise engineering has also played a significant role in creating the global challenges humanity faces today. We are committed to delivering engineering that is better for everyone and our planet.

Ahead Together

- Humanity is facing significant challenges, some of which - the climate and biodiversity crises - pose an existential threat to our future on the planet.
- Engineers Without Borders International believes that the global Engineers Without Borders movement has the potential to be the vehicle for making this happen.
- **Together, we have the reach.**
 - **30+ countries across every major global region, and operates in 89+ countries worldwide. We mobilise at least 14,000+ engineers worldwide**
- **We have the passion and motivation for the issues.**
 - **passionate, motivated people to lead the efforts to tackle them.**
- **We have the knowhow that is needed.**
 - **we champion new engineering approaches that are relevant for the new paradigm that is needed. inclusive of the diverse communities and stakeholders impacted by engineering, respectful of the environment and planetary boundaries within which we all live, and mindful of the future implications of our work.**
- **We have the track record to draw upon.**
 - **We' ve been delivering positive change for the last four decades; improving lives today and reimagining the future**
- **We already have levers of change in place.**
 - **We all share values on working in partnership and supporting emerging leaders. Vast network toleverages to accelerate change through coordinated effort**

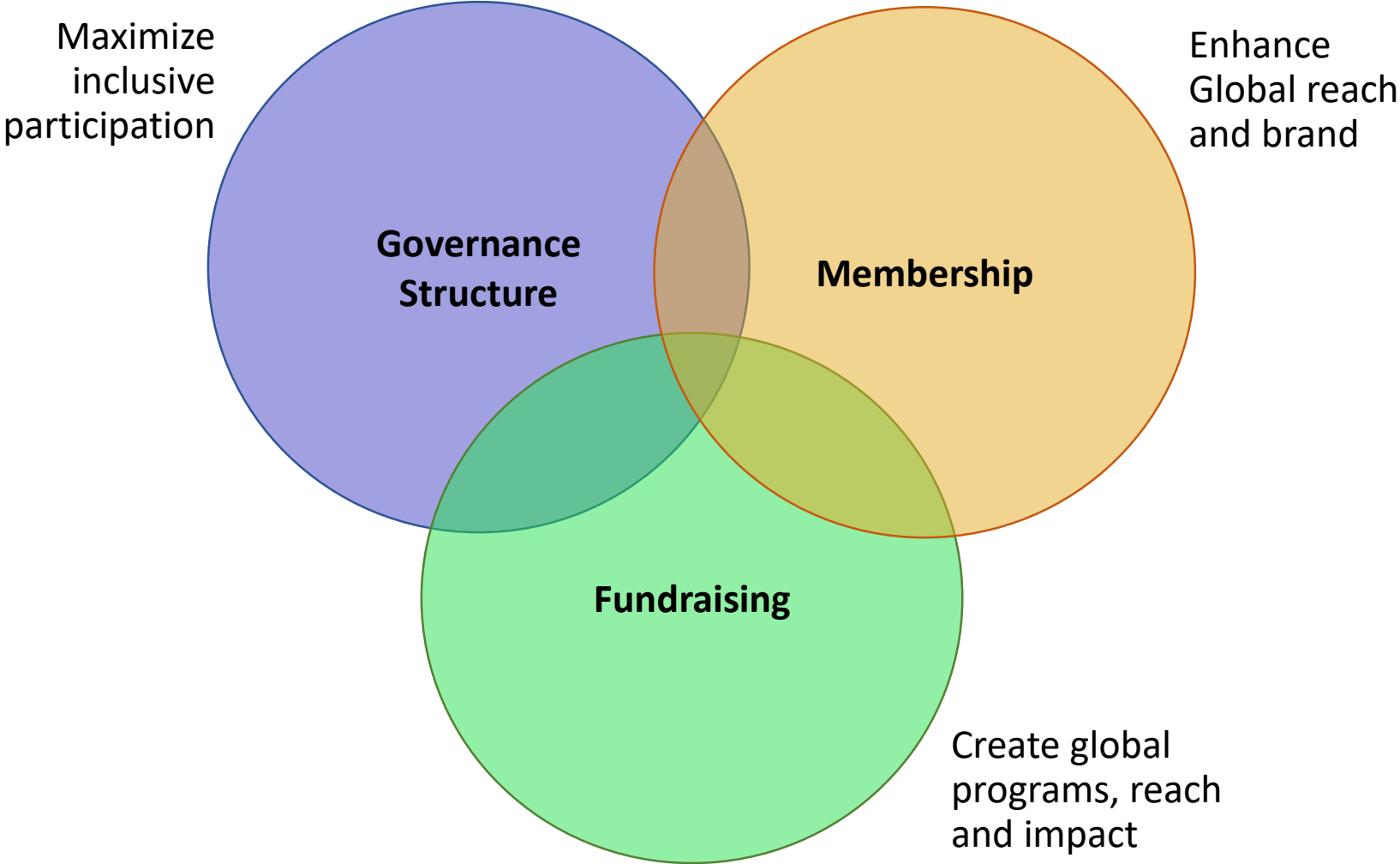
Current Chapter Activities

Programming ³ ->	Changing lives today									Reimagining tomorrow					
	Delivering critical infrastructure to communities in need									People in crisis	Future fit engineering community				Future fit engineering solutions
Number of EWBs delivering programmes in this focus area	Water access	Energy access	Sanitation	Buildings and community infrastructure	Food access	Roads and bridges	Waste management	Other	Preparedness and response	Engineering education	Youth STEM outreach	Reshaping engineering	Supporting governments	Entrepreneurs and innovators	Research and development
African EWBs ⁴ (n=7)	6	7	6	4	2	0	0	3	2	6	3	2	0	2	0
Americas EWBs ⁵ (n=7)	6	5	6	3	2	3	0	1	2	5	1	1	0	2	0
Asia + Pacific EWBs ⁶ (n=9)	7	4	4	1	3	2	0	3	2	4	3	1	2	1	1
European EWBs ⁷ (n=9)	3	4	2	2	1	0	2	2	1	3	3	2	0	1	3
Middle East EWBs ⁸ (n=2)	1	1	1	1	0	0	1	0	2	1	0	0	0	0	0
Total EWBs (n=34)	23	21	19	11	8	5	3	9	9	19	10	6	2	6	4

New Focus

- **Our impact in the world** -
 - Delivering impact at globally meaningful scales to deliver a future where all people's needs are met within the limits of the planet
- **Our collective voice**
 - Changes the ecosystem we work within; accelerating the achievement of our future vision e.g. meaningfully contributing to global discourse on achieving the SDGs and beyond
- **Our global brand** - through collective ownership structure
 - Builds our credible respected reputation, unlocks the platform for our collective voice to influence systemic change and mobilises support so that we can deliver greater and
- **Our work together** – through collective culture and capacity building
 - Delivers results on the ground, improving people's lives today and reimagining tomorrow
- **Our core identity** - through collective ownership structure
 - Our shared values, standards and approaches

Initial Focus



BreakOut

- What can EWB-HK do to have more impact in HK?
- What can EWB-I do to have a greater global impact?