

WFEO GA Sept. 2011



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of
South Africa

Engineering Council of South Africa

Engineering Sustainability Through Building Capacity





Theme 1: Why Build Capacity?





"IT IS NOT OUR WEALTH THAT CREATED OUR INFRASTRUCTURE, IT IS OUR INFRASTRUCTURE THAT CREATED OUR WEALTH"

John F Kennedy



Why build Engineering Capacity?

- Engineering work..... is accompanied by risks to health,
 safety, environment, sustainability, consequently ...
- Engineering work must therefore be carried out by competent and accountable registered professionals

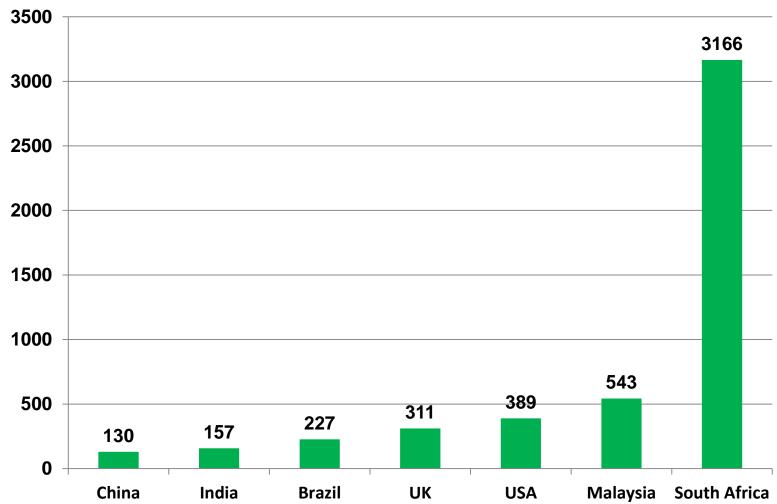
Capacity building is relevant and important for **all nations.**

Capacity building in developing nations – "establishment".

Capacity building in developed nations – "renewal".



Comparison of Citizens per registered Engineer





Examples of Good Engineering in South Africa











Examples of Poor Engineering



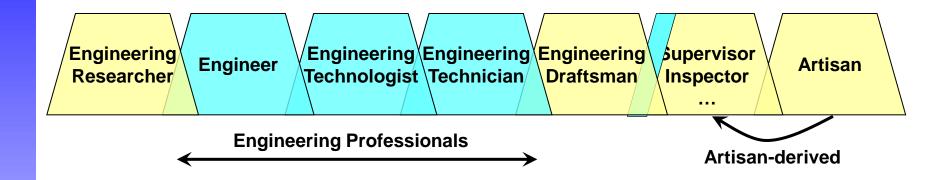








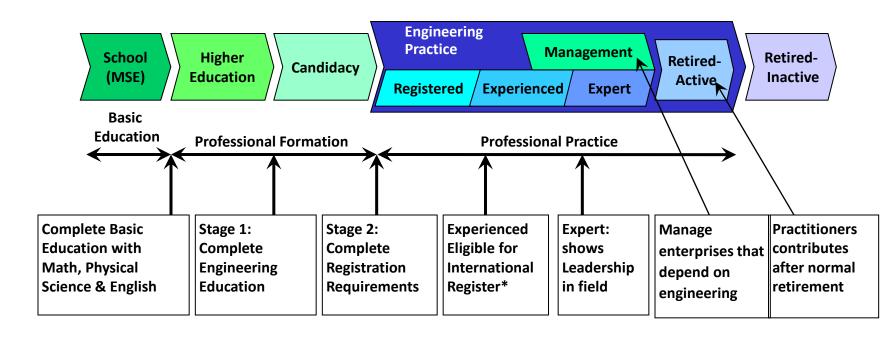
The Extended Engineering Team



- Various Engineering activities require above role players in different measure
- Decision makers need guidance on how to balance the numbers
- Industry needs to understand its role
- Institutions of Learning need to understand the needs of Society



Engineering Practitioner Lifecycle



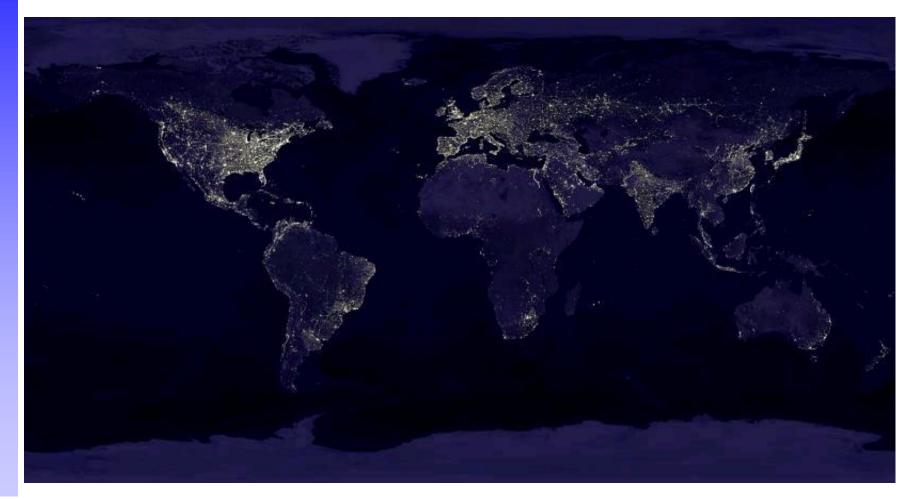
Capacity Building Initiatives Apply Throughout....



Theme 3: Building on The Foundation









Theme 4: What To Do! For the Benefit of Future Generations





What is to be done?

"Growing our Own Timber....starts with good basic education"

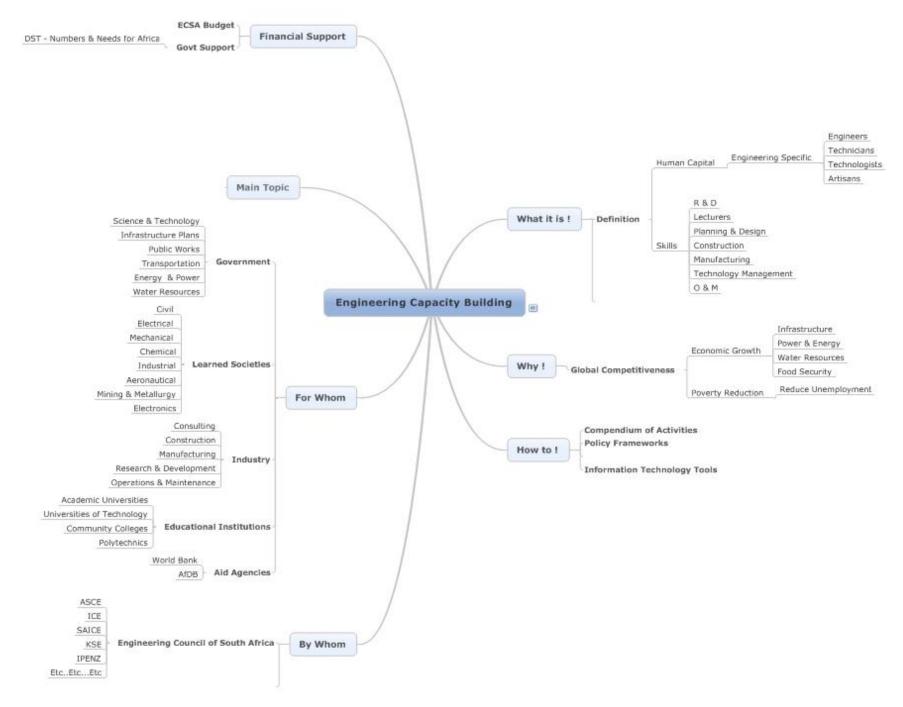
- Sort out schooling system shortcoming. Learn from the best practice.
- Engineering potential develops as early as Primary Education, it is too late to start at Higher Education stages of learning;
- Improve graduation outputs. Increase investment into staff and infrastructure.





Plan of Action







Why Support South Africa?

- We identify strongly with the Capacity Challenges;
- We are passionate about Engineering Capacity Building;
- We have own funding & enjoy financial support of our Govt;
- We have a track record of Capacity Building
 - Major contributor to the work of CECB;
 - Have a reputation for "producing the goods";
 - Assisting African Engineering Institutions in building capacity;
- Enjoy the support of over 30 Engineering Voluntary Associations in South Africa;
- Enjoy the support of the majority of our Colleagues in the room and am grateful for that Vote of Confidence;
- Invite Peru and all other Countries to be part of the Team;
- Pledge full support to Peru, if they are selected;



AYOBA !!!!!



