ROYAL ACADEMY OF ENGINEERING

PUTTING ENGINEERING AT THE HEART OF SOCIETY
What we do

• Choosing the best engineers to join the Fellowship
• **Leading** the profession
• Nurturing engineering **education** and **skills**
• Inspiring **young people**
• **Recognising** great engineering
• Shaping national **policy**
• Encouraging **entrepreneurs** and **innovators**
UK’s national academy with a global outlook

(In a changing funding landscape)
Global Fellowship

- **1500** of the UK’s and the world’s best engineers
- 50% from industry, 50% from academia
- Ambassadors for Engineering. Our Fellows act as Mentors, Speakers, Discussants, Reviewers, Overseers, Partners and Connectors for the Academy’s work and its awardees
There is a **demonstrable, positive, link** between engineering and economic development across the world.

One-percentage point increase in the Engineering Index score is associated with a 0.85% increase in GDP per capita.
Breaking siloed approaches to tackling and managing complex, interdependent and cascading societal challenges
Recognising Great Engineering

Engineering a Better World

Achieving the United Nations Sustainable Development Goals

Queen Elizabeth Prize for Engineering

Global grand challenges summit
Encouraging entrepreneurs and innovators

- Supported 555 Entrepreneurs with training, mentoring and networking
- Across 23 Countries
- Scalable businesses addressing development challenges
- Above £20 million investment generated with high value jobs created

The Royal Academy of Engineering announces the Africa Prize for Engineering Innovation is open for applications.

The prize aims to stimulate, celebrate and reward innovation and entrepreneurship in sub-Saharan Africa.

Applications are invited from engineers affiliated with a university or research institution in sub-Saharan Africa who have developed innovations that can provide scalable solutions to local challenges. Engineers from all engineering disciplines are invited to enter.

Shortlisted applicants will receive a six-month package of tailored support to help them achieve commercial success from their innovation.

The overall winner of the GBP 25,000 prize will be announced at a high-profile event in May 2016. Applications close at midnight on 29 June 2015.

Find out more at: www.raeng.org.uk/AfricaPrize or africaprizeraeng.org.uk
Encouraging entrepreneurs and innovators

Barbarita Lita (Chile)
Founder - S! E
Mobile Emergency Information System

Arthur Zang (Cameroon)
Founder - Cardiopad
Remote Cardio Diagnostic Kit
Nurturing engineering education and skills

"WE DON'T HAVE ENOUGH MANPOWER IN ENGINEERING. THAT’S THE BASIC PROBLEM."

...ENGINEERS WERE GRADUATING WITHOUT THE NECESSARY SKILLS AND EXPERIENCE TO BE EMPLOYABLE.
Nurturing engineering education and skills

The Academy supports \textit{XX} Universities directly and \textit{XX} Universities indirectly in \textit{XX} countries to connect with Industry and UK partners to improve the quality of their teaching, research and innovation output.

Projects include:

- Promoting \textit{cross-sector research collaborations on pressing challenges} such as water purification, flood warning systems and environmental contamination

- Harnessing UK research expertise to \textit{develop new products and solutions} for low cost medical devices, advanced manufacturing and marine energy in partner countries

- Engaging industry and UK \textit{best practice in the design and delivery of research agenda and teaching curricula} in fields of emerging technology and high-impact engineering fields in partner countries
Inspiring young people

- young engineers see a role for engineers to be involved in development policy

- only two in five of the young engineers surveyed agree that their government takes engineers’ views into account in their country

- young engineers are enthusiastic about the potential for engineering to help reach the UN’s Sustainable Development Goals (SDGs), in particular ensuring access to energy and building resilient infrastructure, and fostering innovation.”
Early Lessons

• Work in partnerships to enhance impact

• Work hard to communicate impact to wider audience and relevant stakeholders
Questions?

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