



ENGINEERING NEWS

ENERGY TRANSITION

Compiled by SABRINA JARDIM

Project management skills vital for local energy transition

SABRINA JARDIM | CREAMER MEDIA REPORTER

PIONEERING THE ENERGY TRANSITION
 Mdu Mlaba and George Asamani expect South Africa's energy transition to pave the way for other African countries

Project management skills are imperative to ensure that South Africa's clean energy transition is successful, says organisation National Society of Black Engineers (NSBE) president Mdu Mlaba and nonprofit organisation Project Management Institute (PMI) business development lead George Asamani.

Mlaba explains that the energy transition will bring about new energy initiatives, such as green hydrogen projects, which will, consequently, create opportunities for project managers in the renewable-energy, oil, gas and clean hydrogen space.

Asamani adds that the transition will afford new opportunities for traditional and non-traditional project managers.

"Non-traditional project managers, or change makers, implement change in a project management-orientated way. We call this PMOE, which refers to project management-oriented employment. The transition will allow for substantial opportunities for them in terms of leading the change," says Asamani.

He explains that change makers and project managers are expected to focus on business-orientated aspects of the transition, which includes planning and budgeting for various energy projects. They also need to show interest in green energy and exhibit soft skills, which includes leadership and communication skills, to drive innovation in the sector.

Mlaba adds that engineering skills are also relevant for the design of projects, while

construction, operation and maintenance management skills are necessary for when facilities are set in place. He says State-owned power utility Eskom will decommission old coal-fired power stations over the next 12 years, as stated in the Gas Master Plan 2022, which will require skills to decommission boilers and replace them with natural gas installations.

Asamani says employment will be created during the scaling down of coal, which requires planning, management and execution, while affording opportunities for change makers to drive the change and lead project management teams. Change makers and project managers can also foster new skills, innovation and creativity in the transition.

Additionally, the increase in energy capacity generation creates opportunities for entrepreneurs to play an important role in driving South Africa's economy, says Asamani.

Government's Role

Mlaba says government should have "one voice" to create a policy and regulatory framework that will encourage public-private partnerships, and to promote investor confidence.

He further explains that certain contractual commitments made by independent power producers (IPPs) were not honoured, whereby some IPPs broke agreements after receiving their tenders.

Hence, Mlaba suggests government implement strict protocol measures and penalties for IPP "delinquents" to ensure that contractual commitments are honoured and energy transition projects can move forward.

"This time around, we need to make sure that companies commit to localisation and skills transfer. They need to be held accountable to honour their commitments and contractual agreements. So, government also needs to work with academia and the private sector to incentivise initiatives that promote the reskilling of the South African workforce for the clean energy transition."

Mlaba expects government to work with the NSBE to ensure an inclusive energy transition that benefits all South Africans.

He further cautions against the purging of qualified professionals who have critical skills when local administration changes, which would hamper South Africa's progress in the transition.

Expectations and Support

The PMI has experts in various fields, including the clean energy sector, to help guide

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companies through their development strategies.

The institute also offers training partners that provide skills training for companies wanting to upskill their workforce, adds Asamani.

Further, NSBE members, who are qualified and experienced engineers, can assist in the upskilling of young engineers to ensure they are ready to tackle the energy transition.

PMI and NSBE work with universities nationally to ensure that students are qualified on a practical level when entering the work environment.

PMI provides skills, training, certification programmes and events for university

students to ensure their competency in energy transition projects.

Some NSBE members are academics at universities – such as Professor **Thokozeni Majozi**, who is the head of the Faculty of Engineering and Built Environment at University of the Witwatersrand – which helps to ensure student readiness for transition projects.

Asamani and Mlaba expect the outcome of the transition to create positive socioeconomic impacts for South Africa in terms of increasing employment opportunities and creating social awareness of the importance of renewable energy for global sustainability.

“We expect energy transition initiatives to be the catalyst to finally deal with the

country’s long-standing challenges of extreme poverty, inequality, and unemployment,” adds Mlaba.

They also agree that a successful transition will enable South Africa to “blaze a trail” for the rest of Africa to embark on renewable-energy initiatives that will, consequently, support global sustainability.

“With South Africa being a leading nation in Africa, it is a beacon for the rest of the continent. The country’s transition will have a knock-on-effect, whereby the rest of the continent will follow suit,” highlights Asamani.

Mlaba concludes that the transition will demonstrate the country’s commitment to shift from coal-fired energy to renewable energy. 

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