

Energy transition's impact on jobs needs standardised metrics



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In March this year the National Union of Metal Workers went to court to prevent the energy minister from signing the muchdelayed renewable energy purchase agreements, on the basis that there would be huge job losses in the coal power sector as result.



Grové Steyn, managing director of Meridian Economics

And while it's true that around 35,000 coal mining jobs are likely to be lost, this is not wholly a result of renewable energy coming online, but more a case of other factors. "Coal mining drives the employment associated with coal power generation and absorbs low-skilled labour. Job losses in coal mining have been occurring for some time, which appears to be due to the planned decommissioning of Eskom's older coal-fired power stations," says Grové Steyn, managing director of Meridian Economics.

Instead the job losses are being caused by Eskom's own build programme (Medupi and Kusile), which is stranding the older stations, not renewable energy, he says.

Using the right metrics

However, to fully understand the implications of the global power sector's transition away from regulated, monopolistic, centralised and coal-based electricity supply to a more sustainable model, and the allied impact on employment, standardised employment metrics and methodologies should be used across all energy technologies.

"As of June 2017, the Renewable Energy Independent Power Producer Programme (REIPPPP) has created 32,532 direct, full-time equivalent (FTE) person-years of employment. It is anticipated that 109,444 direct FTE person-years of employment will result from REIPPPP rounds 1-4 in both construction and operation over their 20-year power purchase agreement time horizon."

A person-year is defined as the amount of work done by an individual during a working year, on a specific job. The terms are used by companies to estimate the budget for projects or the impact of staff changes on specific tasks. They are also used to estimate the employment benefits of proposed projects.

"Internationally, it is becoming standardised to report employment in person-years. However, this metric is not yet consistently used across South African studies, and in some cases analysis based on person-years of employment is reported simply as 'jobs' at the high level. The use of this term when reporting employment implications of power sector transition can therefore be misleading if not properly explained.

Little agreement

There appears to be little agreement on the ratio between direct, indirect and induced potential job figures. In addition, figures for gross jobs appear significantly inflated against those produced by economy wide (or net) studies.

"The net long-term employment impact of particular power generation scenarios can only be known within the context of any one particular study. Some studies assessed suggest that the loss of coal mining jobs will outweigh the jobs created in renewable energy, nuclear or gas, while others suggest the opposite," says Steyn.

Electricity demand is significant for the economy-wide employment applications of the power sector transition. Given the highly plausible causal link of higher electricity tariffs and the stagnation of demand, this might well suggest that choosing a least cost power supply path will create more jobs than other options, he concludes.

ABOUT NICCI BOTHA

Nicci Botha has been wordsmithing for more than 20 years, covering just about every subject under the sun and then some. She's strung together words on sustainable development, maritime matters, mining, marketing, medical, lifestyle... and that elixir of life - chocolate. Nicci has worked for local and international media houses including Primedia, Caxton, Lloyd's and Reuters. Her new passion is digital media.

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