

# EC positioning itself as an energy manufacturing hub

A growing number of manufacturing opportunities are being created and sustained in the Eastern Cape by the installation of power generation facilities ranging from wind farms to renewable energy and nuclear power, according to Sandisiwe Ncemane, Coega Development Corporation (CDC) business development project manager - energy projects.



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She continues to say that within the borders of the Eastern Cape, the CDC has identified eight wind farms, five existing and planned hydro-power facilities, two open gas cycle turbines, two proposed biofuel plants, and one proposed nuclear plant at Thuyaspunt, some 80kms from the Coega Industrial Development Zone (IDZ).

“The Coega IDZ has the space and the infrastructure to support nuclear, conventional and renewable energy projects,” she says.

## Key value offerings

Furthermore, the localisation of manufacturing and maintenance is being supported by the CDC through six value offerings. The key value offerings identified by the CDC include nuclear component and advanced manufacturing, engaging with the industry, supplier development, human capital solution, labour management and infrastructure programme implementation. One of the most important of the “value offerings” is ensuring that the Eastern Cape is represented in the relevant energy committees.

“The CDC is a member of the Nuclear Industry Association of South Africa, and plays a leading and proactive role in nuclear together with private and public sector institutions.

Furthermore, the CDC has identified energy manufacturing sites with close proximity to the Port of Ngqura and a nuclear logistics network. Existing facilities will help the Coega IDZ attract manufacturers by providing economies of scale. “For example, the DCD wind tower facility in the Coega IDZ has an 80-ton crane which could be used to move other energy and advanced manufacturing–related components.”

“In addition, the CDC has identified sites for the potential establishment of nuclear fuel cycle production facilities, which could include recycling of spent nuclear fuel,” she adds.

New entrants into the supply of components and services for the nuclear, renewable and conventional power plants are being supported by the CDC, which is already supporting new entrants into the manufacturing sector in particular those which are black and women-owned enterprises.

## **Skills development and technology transfer**

“The CDC has a proven track record in assisting with the commercialisation of newly developed home-grown patents and technology, ensuring technology transfer,” she says.

Skills are being identified and developed through organisation’s “advanced systems for registering work-seekers and competency-based recruitment functionality”. Some 85% of the people trained through programmes facilitated by the CDC often find sustainable employment.

The CDC also helps companies with the recruitment and management of staff based on a zone labour agreement which ensures fair and equal treatment of workers throughout the Coega IDZ.

CDC project managers and engineers work closely with the port, rail and road agencies to ensure that there is logistics infrastructure to support the growth of power-based manufacturing and services in the IDZ.

## **Job creation**

“The magnitude of the Thyspunt project is underpinned by the socio economic spinoffs which, when translated to numbers give a clearer picture of what to expect on the ground. A typical nuclear plant, the size of that proposed for Thyspunt, will use 523,560 cubic metres of concrete, 66,000 tons of steel, 70kms of piping, 480kms of electric wiring and 130,000 electrical components.” adds Ncemané.

“Potentially, 23,000 formal sector jobs will be created during the construction phase, which normally takes between five and seven years.

“These numbers are based on the normalised averages from analyses of the economic and employment impact of the construction of 23 nuclear plants in the USA and are calculated per megawatt of installed capacity.

“Without any doubt the Eastern Cape – and the Nelson Mandela Bay Metro in particular – is on the brink of a power-driven industrial boom,” says Ncemané.