

Energy crisis forces SA industry to innovate

Companies adopt energy efficiency to combat power shortages

South Africa's energy supply challenge has created opportunities for companies to innovate in their use of energy, and to become a world leader in industrial energy efficiency, experts said in Durban on Tuesday.

SA was already exporting its industrial energy efficiency knowledge and skills to 17 countries, said Ndivhuho Raphulu, director of the National Cleaner Production Centre of SA (NCPC-SA). This follows a successful global pilot programme run in SA by the UN's Industrial Development Organisation (UNIDO).

"The energy shortage gave us real impetus to build skills and capacity with our Industrial Energy Efficiency (IEE) Project," Raphulu told the opening day of the IEE Conference and Manufacturing Indaba KZN.

The IEE project has empowered over 100 companies to save more than R1.1 billion in direct energy costs over five years, and to train 119 energy efficiency experts. "SA has been accelerated by its energy shortages to the forefront of cleaner and more efficient production," Raphulu said.

South Africa was the first to implement the IEE project, which now operates in 17 countries internationally.

Hemant Grover, technical manager at NCPC-SA, said the 1340GWh savings enabled by the IEE project exceeds all energy generated at SA hydroelectric power stations by 30%, and equals 10% of the country's nuclear power generation. The IEE savings would power 118,000 SA mid-income homes for a year.

"Energy efficiency is energy that does not need to be created," said Grover. "We need to start seeing it as a primary energy source, particularly under SA's challenging conditions."

Manufacturing Circle executive director Coenraad Bezuidenhout said industry had been forced to become more self-sufficient in its generation and use of electricity, creating opportunities for cost saving and increased competitiveness.

"Going green is now the competitive thing to do," said Reinet van Zyl, sustainability manager at Arcelor Mittal in Saldanha, which joined the IEE programme at a time when rising power costs and global competition had forced it to the brink of closure.

“We weren’t competitive and didn’t know how to change that, but the IEE programme and NCPC experts empowered us to see opportunities and make changes.”

Van Zyl said the steelmaker has cut its LPG consumption by 49%, saved 20MW in baseline energy demand and already paid back its R15m investment in energy efficiency. “NCPC made the difference by changing not just the way we operate, but also the way we think.”

Imraan Bux runs a textile manufacturer in rural KZN, 100km south of Durban, and faces challenges including cable theft and prolonged load shedding. But the advantage of not having industrial infrastructure, he says, provided a blank canvas on which to develop green industry solutions.

The NCPC-SA helped his small company, Imraan Textile Mills, to cut energy use 30% in one of its processes, and to increase productivity.

The high cost of electricity is not as damaging as the cost of not having power at all, noted Lisa Reynolds of Saint Gobain, a global firm making building materials in SA.

She agrees that the power crisis prompted industry to become more efficient in the use of energy, which means companies are less likely to spend their profits on the cost of wasted power.

“Green manufacturing saves energy and generates profits,” she told the event.

ENDS