



CEEC

THE FUTURE

Media Release

For Release: Monday May 25, 2015. Melbourne Australia AEDT

Best Practice: an emerging reality

Industry leaders agreed to two complementary strategies to drive forward **best practice** in mineral processing at the 2014 CEEC Workshop. Endorsing the work of the Global Mining Standards Group (GMSG), the Workshop delegates embraced the initiative led by the GMSG Industrial Comminution Efficiency team in generating global guidelines for standardised measurement of operating loads. Using standardised measurement processes will facilitate the generation of comparable data, essential to process optimisation.

Additionally, the work of Dr Grant Ballantyne (The Julius Kruttschnitt Mineral Research Centre JKMRRC) surveying the comminution energy requirements of gold and copper producing mines has provided reliable benchmarking data. This data can be used to compare comminution energy consumption across different mine sites. The comminution energy per unit metal product is presented in a graphical form similar to a cost curve.

This simple technique allows individual mines to assess their current operational energy consumption against their peers.

Anonymity of the comprehensive, mine-specific data is guaranteed and site to site variability is visualised by constructing an 'energy curve'. The energy curve displays the potential energy savings and cost benefits of moving down the cost curve into more cost-efficient operating regimes. This approach also allows flexibility in the way comminution energy intensity is displayed (e.g. energy per rock milled or metal produced) thus providing a direct comparison between sites.

The easily recognisable curve format can be used to visualise the variability in energy intensity across the industry. The applications of energy curves are many and varied.

- It can be used to map the position of the mine as production progresses with year-on-year analysis.
- Circuit design proposals can be compared to current operational strategies to assess their benefits.
- Operational efficiency improvements can be mapped to the curve to visually assess the



magnitude of energy efficiency gains per unit achievable through various strategies.

- The efficiency with which the various comminution devices achieve size reduction can be mapped to identify opportunities for improvement and the magnitude of achievable gains.

The full report from the CEEC 2014 Workshop may be [downloaded](#) from CEEC’s web site.

CEEC: Processing Best Practice

1. Compare current processing efficiency against industry distribution by participating in energy curve program on CEEC web site.
2. Adopt the guidelines of the Industrial Comminution Group within the Global Mining Standards Group: metrics and methodologies for benchmarking of industrial comminution efficiency within the hard rock mining sector.

CEEC Portal

CEEC’s mission is to raise awareness of the benefits of alternative mineral processing

strategies and installed outcomes relating to energy-efficient comminution. CEEC aims to accelerate knowledge and technology transfer with the objective of reducing processing costs and improving shareholder returns as a result of enhanced comminution practices. Funded wholly by the mining industry, CEEC will host the energy curve program on its web site and provide complementary access to this unique program for operators. An industry – funded organisation, CEEC encourages the industry to take up this service. The CEEC Board foresee the positive impact this program will have on driving best practice in comminution, achieving improved outcomes for shareholders, mining companies and communities.

Watch for an announcement of the launch of the Energy Curve portal on CEEC’s web site. For more details, please contact admin@ceecthefuture.org.

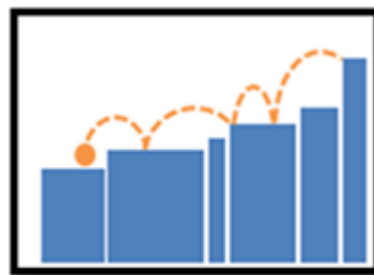


Fig 1. Energy curve logo



About CEEC: CEEC is a not-for-profit global company whose mission is to accelerate knowledge transfer in the field of energy-efficient comminution (crushing and grinding). CEEC aims to raise awareness of beneficial alternative comminution strategies with the objective of improving earnings, achieving lower processing costs and gaining energy efficiencies in the mining sector.

CEEC is the acronym for the Coalition for Eco Efficient Comminution. CEEC was established by a visionary group of mining industry leaders, who recognised the need to provide a platform for effective communication of the latest technical findings on efficient comminution practices. Extensive research and improved engineering design has established that a range of improved blasting, crushing and grinding techniques may lower project costs, and carbon footprint. These include relatively straight forward strategies such as removing waste material before size reduction, a better combination of grinding technologies and targeting larger grind sizes where mineralogy allows.

CEEC is funded wholly by industry sponsorship from Anglo American, Barrick Gold, Beacon Events, Indophil Resources NL, Gekko Systems, Ausenco, XT, Outotec, Orica, Derrick Corporation, Metso, AMIRA International, MMG, Weir Minerals, New Gold, Multotec and Russell Mineral Equipment.

LinkedIn	CEECthefuture.org
Twitter	@ceecthefuture
Web site:	www.ceecthefuture.org
Press:	+614 222 57 425
	admin@ceecthefuture.org

Attachments:

1. CEEC Logo



2. Infographic