



“Intelligent Process to Energy integration through Hybrid Solutions”

Value Add beyond the Obvious

AEC's experience in both the Process and Energy sectors has given us a unique insight into the modern day hybrid energy facility.

With 160MW of Solar projects and 2000 Process projects throughout Africa we fully understand the unique challenges of projects on the African continent.

Constantly striving to be abreast on the latest technology and client specific constraints, AEC is the perfect technical support partner to the Independent Power Producer (IPP).



Feasibilities

Central to AEC's approach is our energy model which incorporates all factors involved in the setup and execution of an energy project. By tailoring our energy model to your project,

AEC is able to efficiently deliver:

- Site and Solar Resource Assessments
- Energy Yield Models
- Project Finance Models
- Project Risk Evaluation and Mitigation Plans
- Facilitate Utility “sell build” and “budget quotes”

Design & Construction Support

Having a specialist and experienced partner is a strategic must for the IPP. By providing a combination of consulting, engineering design, quality, project management and construction services, AEC has the ability to provide support through the full value chain to the IPP on its Energy facilities.

The engineering design team delivers following:

- Qualify and confirm designs
- Ensure Grid Compliancy is attained
- Smart equipment sourcing & procurement
- Site & Quality management
- Energy performance tests

Plant Energy Efficiencies – Solving site problems

Plant inefficiencies consistently accumulate over years, ultimately resulting in plant chaos. With the current shortage of on-site and even country specific specialist technical skills, our clients find themselves with daily energy production problems leading to long term plant inefficiencies. AEC has vast experience in both analysing and fixing these issues.

AEC offers the following:

- Energy yield model expectancy vs site actuality
- On-site investigate and optimization
- Specialist problems we can address:
 - Equipment communication failures
 - Transformer overheating or failures
 - Reactive power integration
 - Inverter curtailment issues
 - Earthing and lightning protection
 - SCADA optimized KPI's
- Short and Long term site optimization contracts
- O&M efficiency audits

