

Aluminium Smelters as Virtual Power Plants

- Al Smelters can become (VPPs) when retro-fitted with 'EnPot' energy modulation technology.
- Energy use can be varied by up to +or- 30%
- Providing 10GW of DSR flexibility to the power system for indefinite periods (IEA 2019)
- Lowering overall operational cost of power system by 3% (IEA)
- AGOG and ACOT means **ROI to the power system = < 1 year (IEA)**
- Smelters profit from energy arbitrage reduce energy consumption (*production*) when electricity spot price is high and increasing energy consumption (*production*) when prices are low.
- **ROI to smelter 1-3 years**