

SAVING ENERGY IN AFGHANISTAN

EFFICIENT FUEL USE WITH THE FULLY BURDENED COST OF ENERGY MODEL

When the MoD needed options for reducing its energy use and dependency on fossil fuels in Afghanistan, they turned to **CORDA**.

The MoD had already accepted that different technologies, such as alternative energy sources or efficient power distribution, could reduce their fossil fuel use. However, the MoD had no way of quantifying, and comparing, the likely savings or sustainability.



CORDA brought together MoD and independent energy and domain experts with their own in-house consultants to identify technologies which could support operations and improve effectiveness. The team used BAE Systems' powerful 'Fully Burdened Cost of Energy' modelling to measure the full impact of new technologies.

The implications of energy saving options were considered across the entire energy supply chain. As a result, cost savings came from reducing fossil fuel use, and from reducing the equipment, infrastructure and personnel involved in providing energy. This all adds up to the total reduction in the fully burdened cost of energy.

The results showed the MoD team the full financial benefits of these new technologies, the impact on their carbon footprint and the security of their energy supply in Afghanistan.

CORDA

Delivering Successful Futures

Benefits:

- > Provided a unique measure of sustainability for a complex situation
- > Identified potential reductions of over 30% for CO₂ emissions in current operations
- > Supported compelling business cases by quantifying the fully burdened cost savings
- > Cost savings from new energy technologies can outstrip savings on energy purchase alone many times over
- > The fully burdened cost of providing power for the MoD in Afghanistan could be more than halved through new energy generation technologies