



MINISTRY OF DEFENCE



DEFENCE ESTATES
Delivering Estate Solutions to Defence Needs

TACKLING ENERGY MANAGEMENT ON THE DEFENCE ESTATE

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Content

- Why the need to tackle energy management and our aspirations.
- What we are doing...
 - Data and Information
 - Physical Infrastructure
 - Incentives
 - Renewables
 - Management Structures

Why the need to tackle energy management...

- Over 30% increase in MOD estate energy bill since 2000.
- Carbon emissions need to reduce by over 630,000 tonnes by 2020.
- Must exploit on site opportunities for renewable energy.
- We have incomplete data and management information.
- Some 40% of our infrastructure assets were built before 1960.
- Allow for future development of the estate.

Context

- Over 4000 sites in UK plus Germany, Cyprus, Gibraltar, Falklands plus 50,000 married quarters in the UK.
- 240,000 hectares in UK, over 45,000 structures and buildings, 797 listed buildings and over 82,000 hectares of SSSI's.
- 220 top consuming sites: 76% of total estate consumption.

But...

- Large open spaces available - often in remote areas.
- Developed multi use sites - often close to large centres of population
- Continuing demand for energy - for the long term.

Aspirations

- Data collected visible and acted upon.
- Energy asset investment aligned with maintenance programmes.
- Procurement expertise within a single centre of excellence.
- Major developments include through life energy requirements.
- Renewable provision on a strategic rather than opportunity basis.
- Incentive mechanisms to drive behaviour and improve performance.
- More efficient and holistic approach to energy management.

What we are doing...

Data and Information

- Common standards and processes.
- Rolling out SMART meters.
- Web based data collection system.
- Single point reporting & policy.

Physical Infrastructure

- Spend to Save energy audits.
- Capital investment project.
- DREAM.
- Case study - RAF Kinloss.

What we are doing...

Incentives

- SW Energy Management Initiative.
- Site level reduce and reward.
- MOD wide energy award scheme.

Renewables

- Biomass.
- Wind generation.
- Case study - HMNB Clyde.
- Case study - Catterick master planning.

What we are doing...

Management Structures

- Carbon Trust Standard.
- Central Programme Office.
- Pan bureau services - next steps.
- Private sector involvement - next steps.

Conclusions

- Getting our house in order.
- Targets ever more challenging.
- Opportunities
 - On site renewables & securing external funding / grants.
 - Better incentives: contractors / users / funders.
 - Greater private sector role in energy management.
 - Greater private sector investment in physical infrastructure.



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QUESTIONS

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