



MINISTRY OF DEFENCE

# UK MOD Climate Change Strategy

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# Overview

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  - **Sustainable Development in the MOD**
- **MOD Climate Change Strategy**
  - **Mitigation**
    - **Emissions from the Estate**
    - **Emissions from Motive Fuel Use**
    - **Emissions from Business Administrative Travel**
  - **Adaptation**
    - **Adapting Policy Planning (incl Climate Security)**
    - **Adapting Equipment**
    - **Adapting the Defence Estate**
  - **Delivering the Strategy**
- **Question & Answer**

# UK Government leadership

- **Climate Change Bill being passed through House of Commons**
- **Targets set for all UK Government Departments**
- **Cap and Trade systems such as EU Emissions Trading Scheme and Carbon Reduction Commitment**

## Carbon emissions from offices

- **Reverse the current upward trend in carbon emissions by April 2007.**
- **Reduce carbon emissions by 12.5% by 2010-11, relative to 1999/2000 levels.**
- **Reduce carbon emissions by 30% by 2020, relative to 1999/2000 levels.**

## Carbon emissions from road vehicles

- **Reduce carbon emissions from road vehicles used for Government administrative operations by 15% by 2010/11, relative to 2005/2006 levels.**

## Carbon Neutral

- **Central Government's office estate to be carbon neutral by 2012.**

## Energy Efficiency & Renewables

- **Departments to increase their energy efficiency per m<sup>2</sup> by 15% by 2010, relative to 1999/2000 levels.**
- **Departments to increase their energy efficiency per m<sup>2</sup> by 30% by 2020, relative to 1999/2000 levels.**
- **Existing Sustainable Operational Commitments (to continue until completion)**
- **Departments to source at least 10% of electricity from renewables (2010)**
- **Departments to source at least 15% of electricity from Combined Heat and Power (2010)**

# Sustainable Development in the MOD

## ■ MOD Sustainable Development Aim

*To be successful in achieving the Defence Vision because we have embedded sustainable development principles into all areas of defence business.*

- *Defending the United Kingdom and its interests*
- *Strengthening international peace and stability*
- *A force for good in the world*

UK Defence Vision

# Sustainable Development in the MOD

## ■ MOD Sustainable Development Aim

*To be successful in achieving the Defence Vision because we have embedded sustainable development principles into all areas of defence business.*

## ■ MOD Sustainable Development Strategy

- Sustainable Consumption and Production
- Climate Change and Energy
- Natural Resource Protection and Enhancing the Environment
- Creating Sustainable Communities and a Fairer World

# MOD Climate Change Strategy

## ■ Purpose & Scope

### ● Purpose

- Single Source of Strategic Direction for MOD Response to Climate Change
- Set Defence Climate Change Vision

*Effective delivery of Defence capability that is robust to climate change and does not substantially contribute to its causes.*

# MOD Climate Change Strategy

## ■ Purpose & Scope

### ● Purpose

- Single Source of Strategic Direction for MOD Response to Climate Change
- Set Defence Climate Change Vision
- Set Targets for Mitigation and Adaptation
- Identify Owners within the Department for meeting the targets

### ● Scope – Does not include

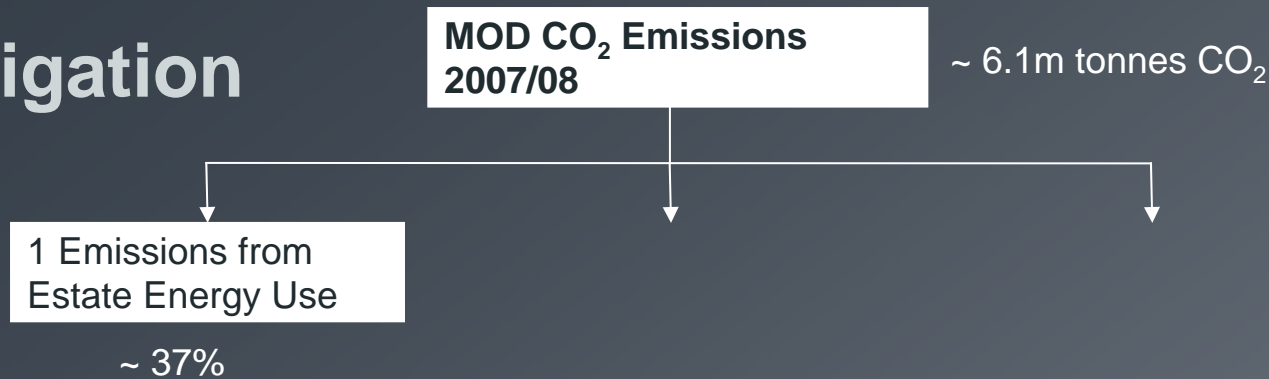
- F-Gasses
- ODS's
- CO<sub>2</sub> Emissions from Waste

**These are all addressed by separate strategies or policy guidance**

# Mitigation

*Ensure that the effect of emissions from the GHGs that result from defence activities are continually reduced, such that defence will eventually not be a significant contributor to the causes of Climate Change*

# Mitigation



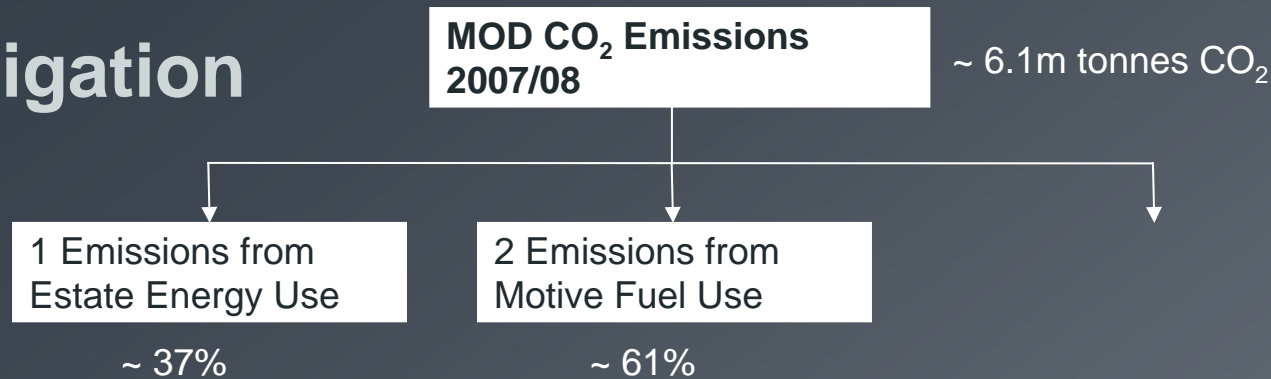
## ■ Key Targets

- 12.5% reduction in Estate CO<sub>2</sub> Emissions by 2010/11\*
- 80% reduction in Estate CO<sub>2</sub> Emissions by 2050\*
- 10% of Electricity to be sourced from renewable sources by 2010

## ■ Achievements to date

- 10.27% Reduction in Estate Emissions

# Mitigation



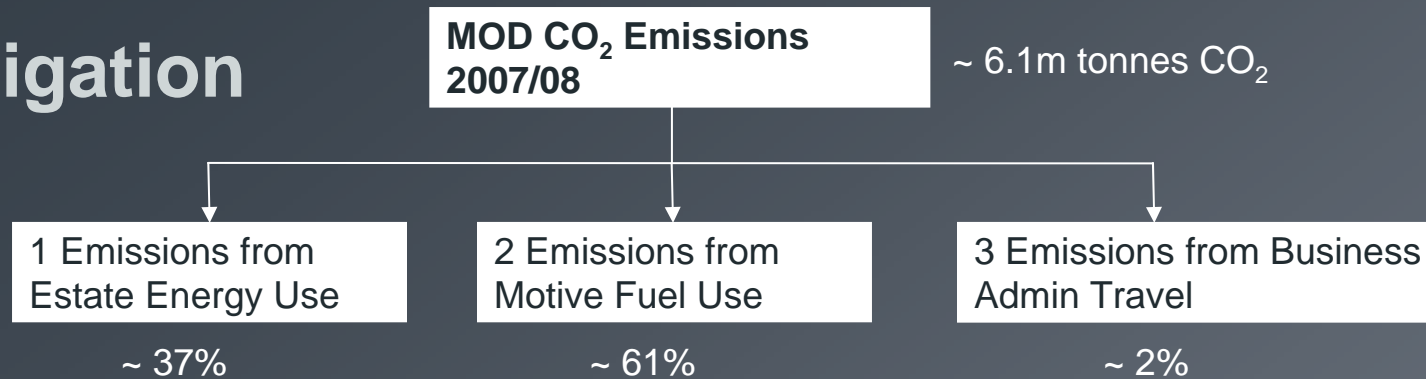
## ■ Key Targets

- Complete “Fully Burdened Cost of Energy” Study by 2009
- Identify & Implement “quick wins” across Services by 2010
- Identify long term emissions reduction targets with the three services by 2011

## ■ Achievements to date

- “Fuel Efficiency Gap Analysis” conducted at RAF Brize Norton to identify potential “quick wins” for RAF
- Working Group set up to bring together key stakeholders to collaborate on fuel efficient future acquisitions

# Mitigation



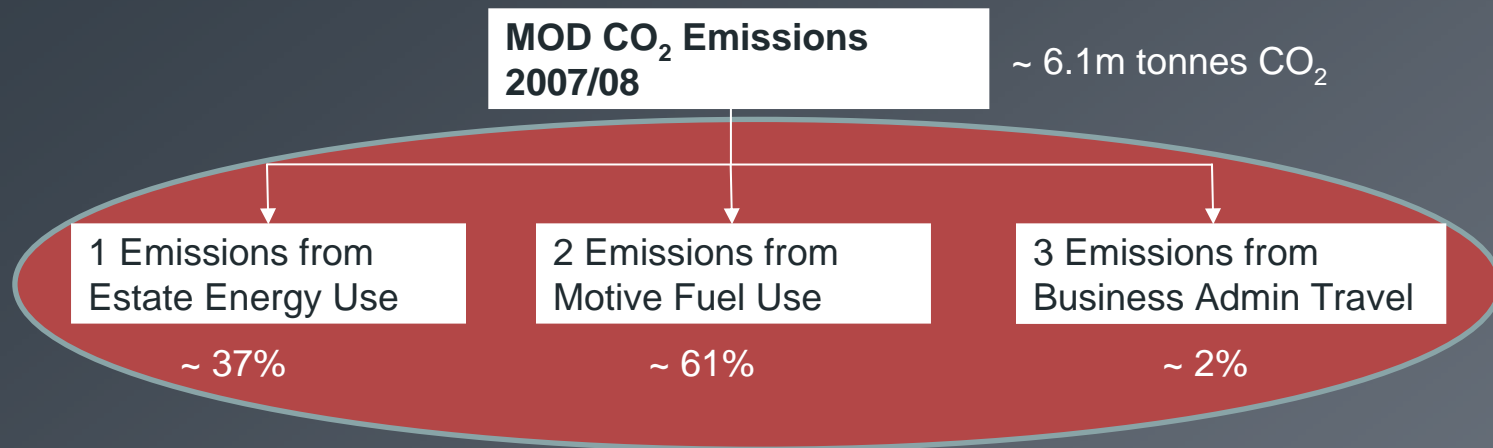
## ■ Key Targets

- Produce MOD Sustainable Travel Strategy by March 2009
- Achieve an average emission level of 130g/km across MOD hire car fleet by 2010
- Reduction in Emissions from business admin road travel by 15% by 2011

## ■ Achievements to date

- 5.4% Reduction in Emissions from Road Transport

# Mitigation – Enablers

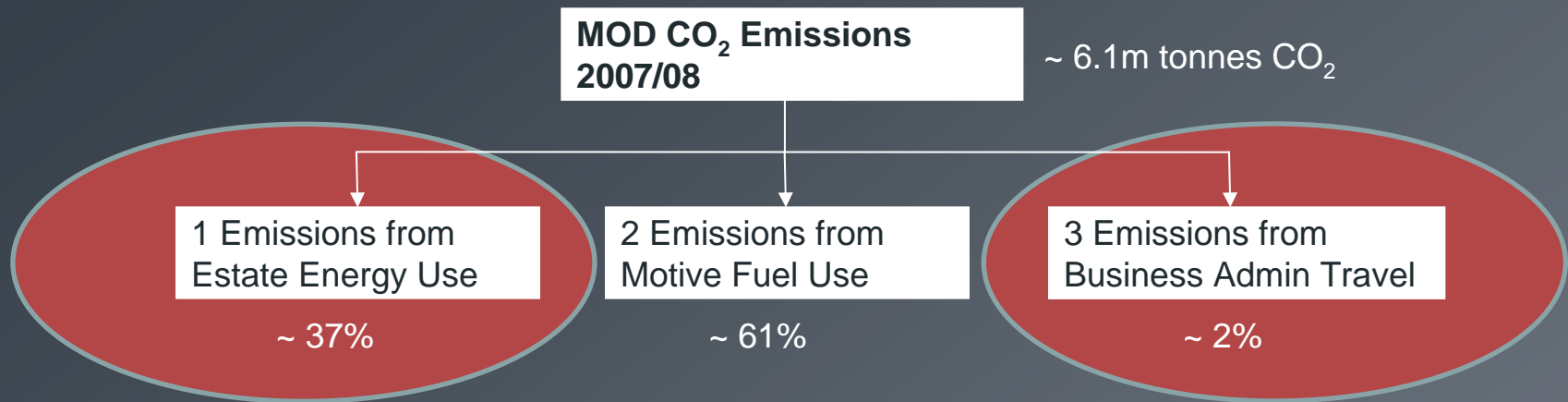


## Enablers

Acquisition

- Take Whole-Life Cost Approach to Emissions reduction
- Sustainable Development Charter signed with key suppliers

# Mitigation – Enablers

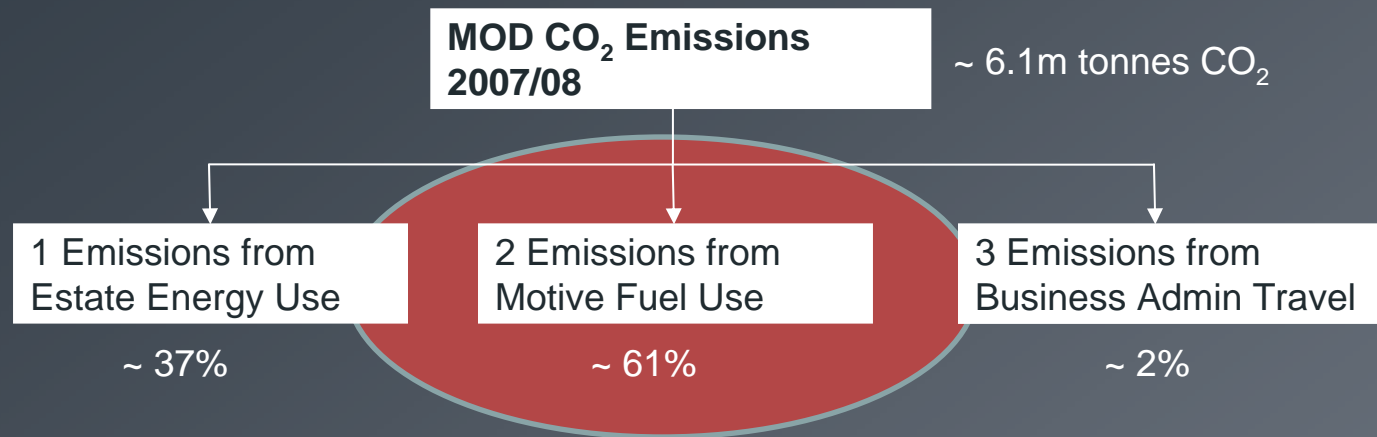


## Enablers

Acquisition  
Green ICT

- Develop Green ICT Roadmap by Mar 2009
- Analyse Government “quick win” suggestions and implement where appropriate

# Mitigation – Enablers

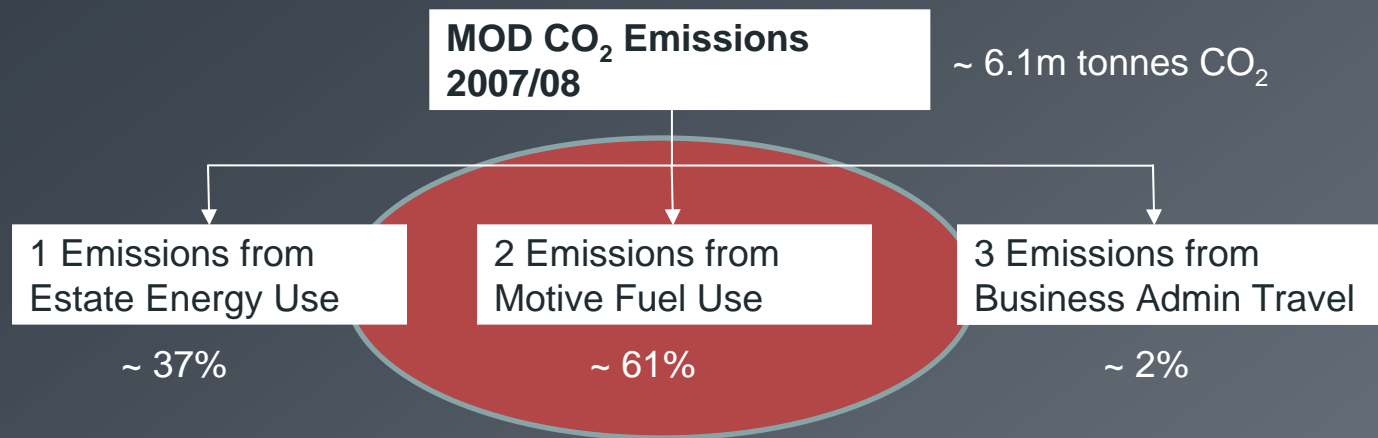


## Enablers

Acquisition  
Green ICT  
Synthetic Aviation Fuels

- Owner of DEF-STAN 91-91 (international spec for jet fuel).
- Permits use of 100% non-crude oil derived fuel

# Mitigation – Enablers



## Enablers

Acquisition  
Green ICT  
Synthetic Aviation Fuels  
Research

- **Work towards Capability Visions**
  - Reduced Dependency on Fossil Fuels
  - Self Sustaining Forces in Theatre
- **Contribute to Defence Climate Research Programme with Other Government Departments**



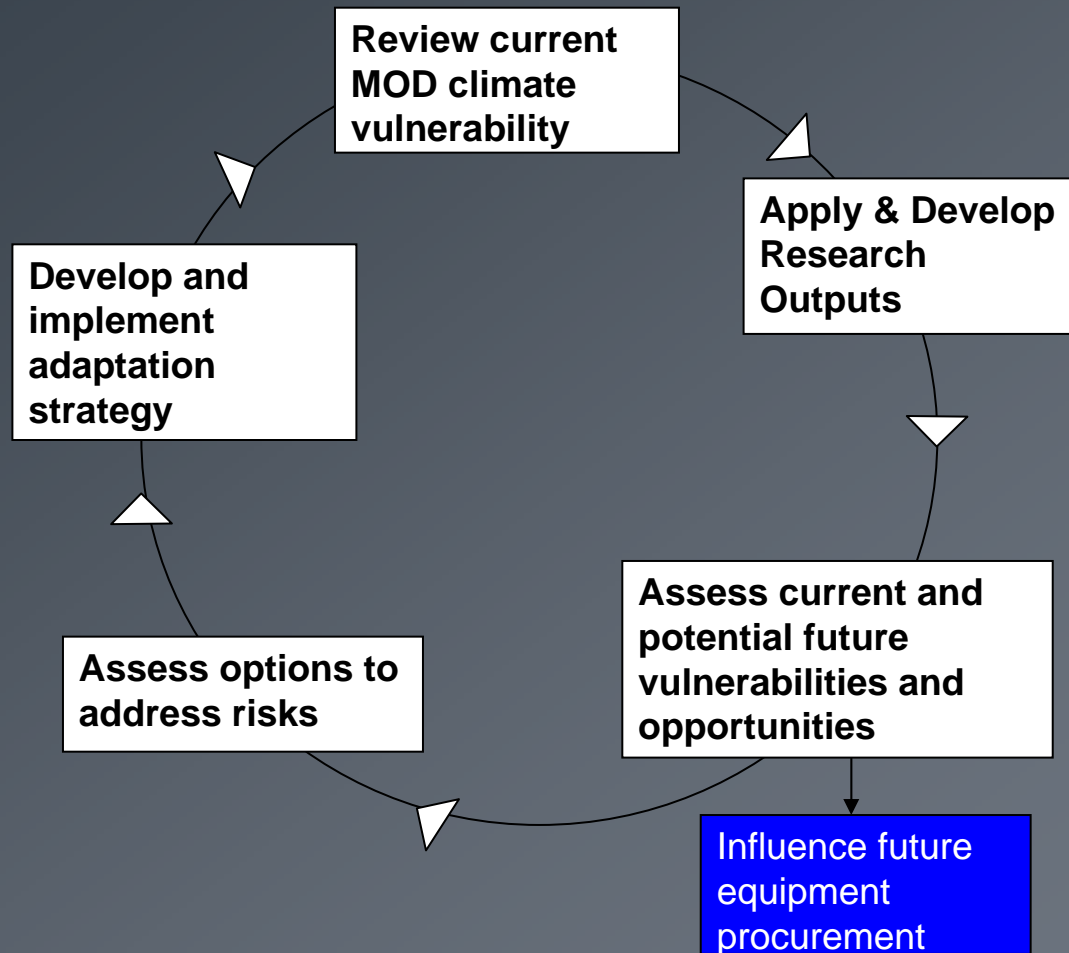
# Adaptation

*Agree and implement an effective process to enable defence activities to continually adapt to a changing climate, such that defence capability is not compromised and any potential benefits from the future climate are realised.*

*'Climate change is potentially the greatest challenge to global stability and security, and therefore to national security'*

2008 UK National Security Strategy

# MOD Adaptation Process



# Policy Planning

## Aims:

- To factor Climate Change into our long-term planning
- To work with Met Office, Foreign Office & Department for International Development and OGDs to contribute to Government efforts to articulate risks of Climate Security

## Current Work:

- Developing region-specific climate scenarios with Met Office

# Adapting Equipment

- **Not as simple as buying equipment that can operate in temperatures that are 2° hotter than at present**
- **Must procure equipment that has the adaptive capacity to be capable of performing across all potential future operating environments.**
- **Therefore this must be informed by Policy Planning work, factoring climate change into plans for force development, equipment capability and personnel.**

# Adapting the Defence Estate



Walham Power Station, July 07

Image: Evening Standard ([www.thisislondon.co.uk](http://www.thisislondon.co.uk))

# Adapting the Defence Estate

- **Already experiencing some environmental effects**
- **Developing “Climate Change Risk Assessment Methodology” for MOD Estate;**
- **Working closely with cross-Government board on Domestic Adaptation**

# Leadership – Delivering the Strategy

- **Embedding Climate Change**
  - Part of Embedding Sustainable Development
- **Improving Data**
  - Accurate data essential to measure progress
- **Clarity of Ownership**
  - Each section of the strategy has clearly defined owners for the targets and actions within it
- **Challenges to Delivery**

# Summary

- **UK Specific Context**
- **MOD Strategic View**
- **Mitigation**
  - Emissions from the Estate
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  - Emissions from Business Administrative Travel
- **Adaptation**
  - Adapting Policy Planning (incl Climate Security)
  - Adapting Equipment
  - Adapting the Defence Estate
- **Delivering the Strategy**

# Questions and Answers

