

# **Methane to Markets Partnership - Landfill England & Wales**

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# The UK is a mature market

- Landfill gas use encouraged by favourable price for electrical power
- Most good gas already collected and exploited

but;

- UK manufactures very little utilisation equipment
- has many international consultancy with gas & waste management expertise



# Landfill gas Utilisation

- Landfills operated by private companies
- Gas utilisation initially by landfill operators but increasing separation of functions - new Divisions, sales to specialist contractors





# Regulatory Framework

- Regulated by Environment Agency
- Operators report compliance against emission standards annually

Maximise global benefit  
Minimise local impact





# Collaboration of Industry & Regulator

Demonstrating acceptable emissions

- Design of flares monitoring
- Evaluating novel flare design
- Validation of air dispersion modelling
- Demonstration of actual emissions from engines (form of NO<sub>x</sub>, variation with time)





# Issues - technical

## Using present resource with net benefit

- Avoiding landfill fires
- Minimising local impact of NO<sub>x</sub>
- Low cost monitoring

## Anticipating quality of future gas supply

- Recovery of energy from low quality gas
- Combustion of low CV gas
- Controlling gas production curve

# UK Wider involvement

## UK Consultants and Project Managers

- Design, finance, build and manage landfill gas schemes
- R&D to improve control, prediction, future gas quality and efficiency



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