

# Green Fleet Management: A four stage plan

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# Introduction

- Fleet management policy
- Reducing mileage
- Increasing efficiency
- Cleaner fuels and technologies

# Step 1: Fleet Management Policy

- Important for generating management buy-in
- Helps to demonstrate policy impact
- Ensures policy remains current – annual review
- Links to green travel plan.

## What is the current situation?

- How many vehicles do we own/lease?
  - Make/model/age/purpose/dept.
- Mileage
  - As a whole/by dept./by individual
- Annual fuel bill
  - As a whole/by dept./by individual
- Grey fleet miles by dept.
- Current travel policy (if any)

## What are we aiming to achieve?

- Carbon reduction?
- Cost reduction?
- Better management?
- Increased efficiency



## Fleet Management Policy

Objectives: Linked to aims

Actions: What are we planning to do?

Monitoring: When and how are we planning to measure performance?

# Step 2: Reducing mileage

- **Mileage monitoring**
  - Average MPG (for owned/lease vehicles)
  - MPG per driver (where appropriate)
- **Grey fleet miles**
  - Purpose of trip
  - Alternative options?
    - Does the trip need to be made?
    - Can it be made by a more sustainable mode?
    - Can it be shared?
    - When is the most efficient time to make it?

# Case study: Loughborough University Kinch Hopper Bus



- Very large university campus (437 acres)
- Free shuttle bus for staff on campus
- Every 10 mins during term time, every 15 mins in holidays
- Staff encouraged to use it for within-campus travel

Source: Loughborough University, 2011

# Step 3: Increasing efficiency

- Driver Training
  - Identify suitable staff through fuel monitoring or driving record
  - Provide training on “eco-driving”, including avoiding harsh acceleration and braking
- Vehicle maintenance
  - Encourage regular vehicle checks
  - Have a vehicle maintenance schedule to optimise vehicle performance

# Step 4: Cleaner fuels and technologies

## ▪ Electric vehicles

- Full EV, hybrid, plug-in hybrid
- 10%-50% more expensive than conventional vehicles
- Full EV zero emissions at point of use
- Hybrids reduce POU emissions by 20-25% compared to petrol
- Charging for full Evs
- Potential to use on-site sustainable electricity source



Source: Renault.co.uk, 2011



# Step 4: Cleaner fuels and technologies

- **Gas vehicles**

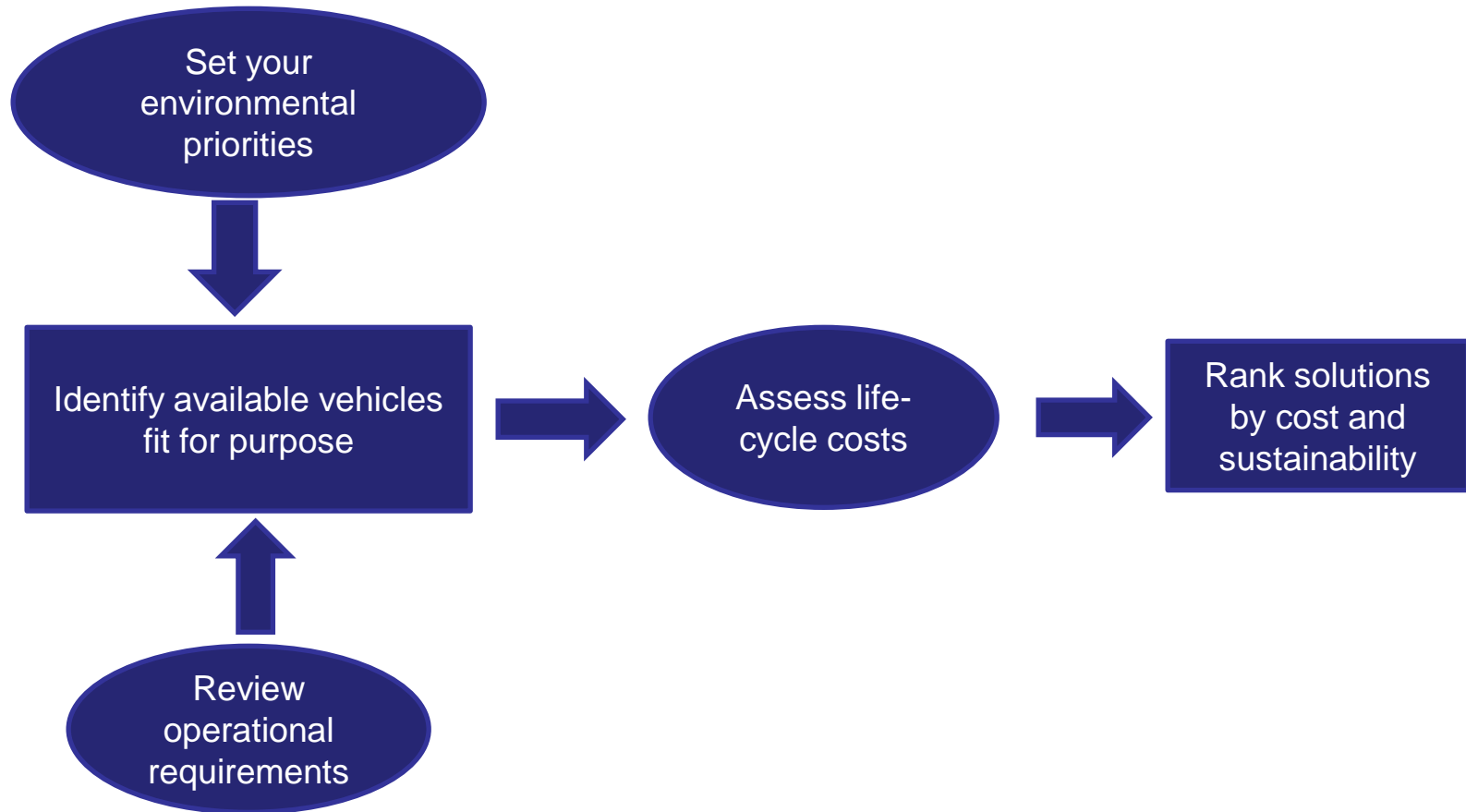
- LPG (“Autogas”) and NG
- Many vehicles bi-fuel
- Vehicles are converted
- Likely to require on-site fuel source – fuel costs ~25% lower
- Cheaper, cleaner and quieter to run

# Step 4: Cleaner fuels and technologies

## ▪ Biofuels

- Renewable made from natural materials
- Mainly biodiesel, from waste cooking oil and bioethanol from fermented crops
- Likely to need on site supply
- Often blended with diesel
- Blend over 5% may affect vehicle warranty or require engine modification
- Reduce CO<sub>2</sub> emissions by 50-90%

# Step 4: Cleaner fuels and technologies



Source: TfL, 2011

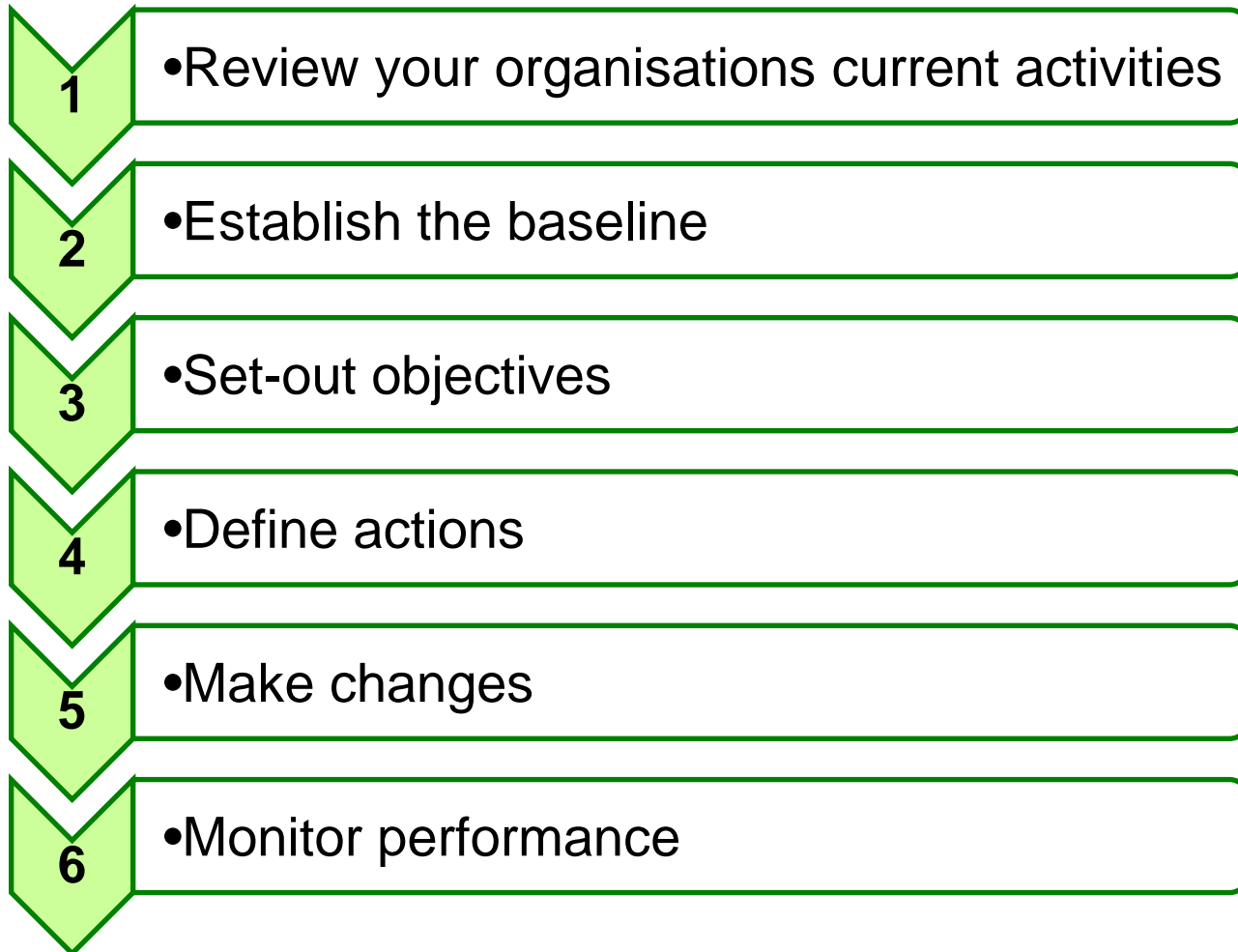
# Case study: University of Greenwich Electric Vehicles

- The university of Greenwich has invested in five electric vans that will be used to help the environment and cut costs. They have taken this decision because electric vehicles are particularly suitable for short stop-go trips.



*Source: University of Greenwich, 2009*

# Summary



# Any questions?

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