Service Transformation in Practice
29th October 2010

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Construction & Asset Management

Waste & Environment

Climate Change

Agenda

- **What's a RIEP?**
- **Service Transformation in waste and refuse collection?**
    - **Route Optimisation to deliver efficiencies**
    - **Maximising resources to meet service needs**
    - **Collaborative approaches between authorities**
    - **The future**

Background to the RIEP

"A partnership of 12 local authorities and 4 Fire and Rescue Services"

Share learning, facilitate joint working and provide peer support to solve problems that are shared by councils:

- Improvement of local public services is best led by councils in partnership with other public service providers

- Improvement will be more effective by devolving central resources to the front line and local decision making by councils and partners

- Simplifying support for LA/FRSs and reducing duplication

RIEPs link improvement activity in each region.

The NE IEP – Links to the region's LAs

- **Overseen by IESG**
  - LAs, FRSs are voting Members,
  - GONE, TUs, Audit Commission, SHA, IDeA are advisory members
- **Programme Board for each programme**
  - Programme Sponsors are Chief Executives or Directors
  - Performance Reports to IESG meetings every other month
- **5 Programme Managers**
- **120+ projects**

NE IEP Programmes

Service Specific

- Construction and Asset Management
- Adult Social Care
- Children's Services
- Waste and Environment
- Collaborative Procurement

Cross Cutting

- Partnerships
- 21st Century Services
- Regional Leadership
- Community Engagement and Empowerment
- Organisational Development and Workforce Planning

Late additions

- Climate Change
- ILG
- Capital projects

What did we set out to do?

Programme Summary

"Deliver significant cashable efficiencies & minimise environmental impact of WM"

- Reduce waste generated & sent to landfill
- Increase recycling and re-use
- Improve carbon management

Evidence base

Waste management is one of the highest spending areas

Increasing environmental pressure and increasingly challenging targets for the future

What we are doing to achieve this

1. "Learning Opportunities"
2. Benchmarking
3. Co-ordinating Waste Management Strategies
4. Improving sub-regional and regional communications
5. Create links between construction and waste
6. Cultural change through education
7. Review current approaches – eg Recycling
8. Efficiency, Value For Money and Innovation Projects
   a. AD study
   b. Gullies and Sweepings
   c. Route Optimisation
   d. Fleet performance

Learning opportunities

Requests	Activity
Effective management of commercial waste services	Seminar
Performance management for recycling services	Benchmarking Project
Software solutions for effective waste operations	Phase 2 of Route Optimisation
Achieving zero waste in the construction industry	Construction & Asset Management prog.
Working with SMEs and third sector to deliver services – PQQ and procurement opportunities	Sustainable procurement training
Alternate weekly collections	Seminar
Social marketing – how to apply it successfully	Seminar
Management of "bring sites"	Seminar

Benchmarking

- **Understanding who does what & where**
- **Database of contacts and contracts**
- **Can it be used to drive improvement activity?**
- **Where should it live after the RIEP?**

Communications Strategy

- **Assist the reduction of the volume of small household electrical appliances directed to landfill**

- **Assist the reduction of the volume of household food waste directed to landfill**

- **Increase public awareness of how waste prevention differs from recycling**

- **Sustain and increase householder participation in home composting**

Enviro-schools

Web based system – "log-on" and "password"

- **To raise knowledge and awareness of the "Sustainable Schools" agenda in schools**
- **An educational resource for schools covering 3 key stage ages (5-7, 7-11 and 11+)**
- **Additional module for Energy Reduction – targeted at pupils, teachers and school staff**

Recyclates Study

- Map out current tonnages, collection frequencies for dry recyclates
  - **Confirm disposal/recycling options and costs/income**
  - **Confirm end market disposal/recycling arrangements**

- Assess current regional, national and global markets and short, medium and long term trends
  - **Availability of "closed loop"**
  - **Effect on existing MRFs**

- Identify likely effect of waste reduction strategies on volumes

- What opportunities are there to:
  - **Reduce risk/maximise opportunity**
  - **Match demand with supply chains**
  - **Obtain matched funding or inward investment**

Study into Road Sweeping and Gulley emptying

- **What technologies are available – what's real and what is mythology?**

- **How much does it currently cost?**

- **Are there opportunities to recover value?**

- **Are we doing the right thing currently?**

- **Is a regional or sub-regional or individual LA based approach the right one?**

- **How do we keep the EA happy?**
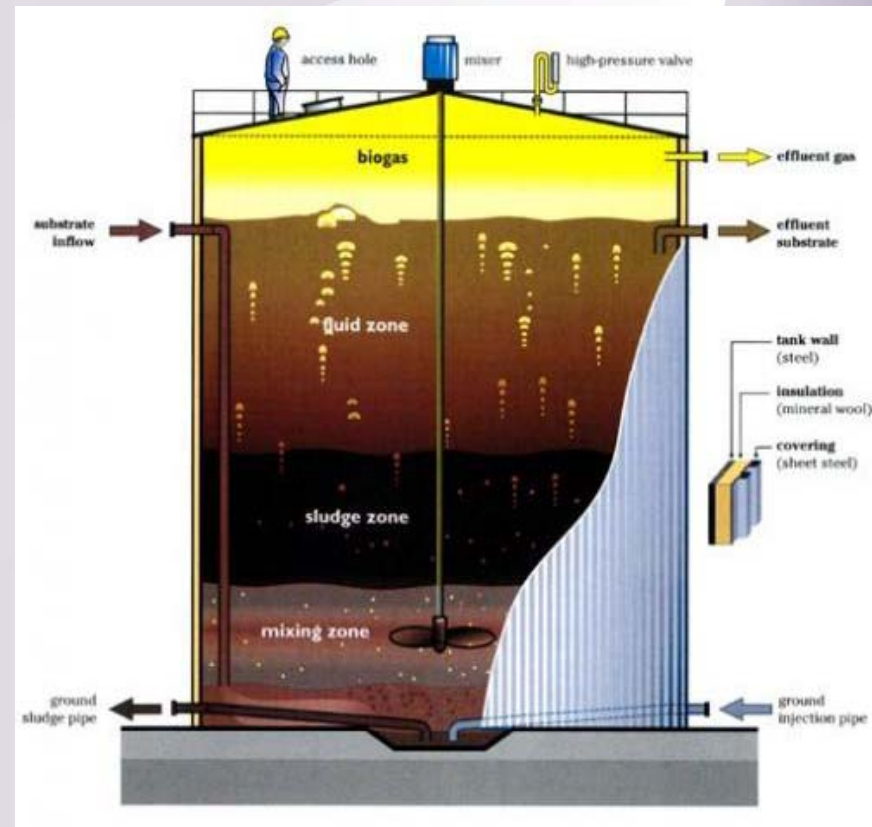
- **How can we drive down costs?**

AD Project

got watt?

Turning waste into watts:
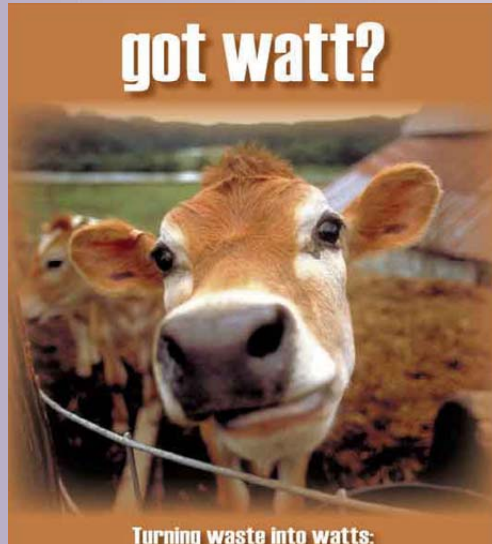
Unpicking the mythology

What are the CSFs?
What is the Feedstock?
How big?
How small?
What energy generation?
Where?

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and efficiency
partnership

Transport/Fleet

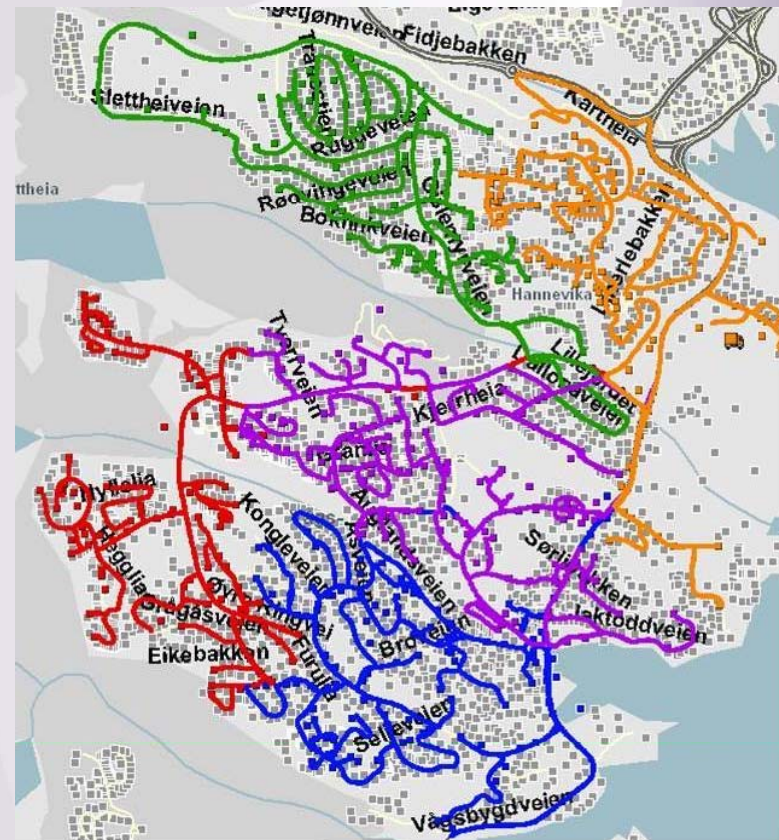- Route optimisation
- Vehicle KPIs
- Vehicle brokerage

Route Optimisation

- ICT tool to balance workloads
- £, time or tonnes of Carbon
- "Scenario planning" to challenge:
  - location of depots and other facilities
  - Fleet requirements
- "One click" route planning

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Route Optimisation

- **Portal**
  - Remote access
  - Updates loaded once
  - Bypass ICT "conflicts"

- **Collaboratively procured**
  - 12 licenses for the region

- **Sustainability**
  - Skills embedded into LAs so done "in-house" as often as required

Route Optimisation
Potential other uses

- Application to other services:
  - Gritting, street sweeping, meals on wheels
  - Inspections
  - Education transport
  - Social care transport
  - Taxis
- Scenario planning across boundaries
  - Licenses don't stop at Council boundaries

Fleet KPIs
"Sweating assets"

- ***If Eddie Stobart paid £120k for a vehicle would he use it for 4 (7 hour) days a week?***

- Piloted at Easington
- Proof of concept at DCC, Gateshead and DDFRS
- Roll out regionally from May 2010

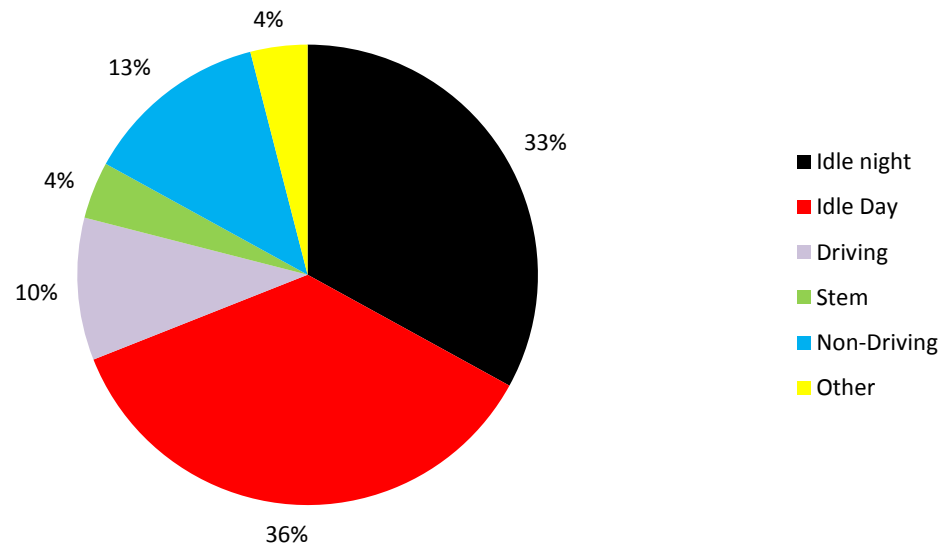# Fleet KPIs

- *Vehicle availability* (to carry out a required task at a given time)

- *Operational effectiveness* (proportion of time carrying out value-added tasks)

- *Fleet profile suitability* (capacity used for tasking versus fully loaded capacity)

- *Cost per activity undertaken* (for comparison between vehicles with same tasking)

- *Staff availability* (to use vehicles when tasks were required)

The process

- Overview of fleet numbers & costs

- Select a sample of vehicles

- Train & issue the sheets

- Data entry & analysis

- Review of the results

Your average day in the life of a vehicle

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A "typical" vehicle?

- Idle night — 33%
- Idle Day — 36%
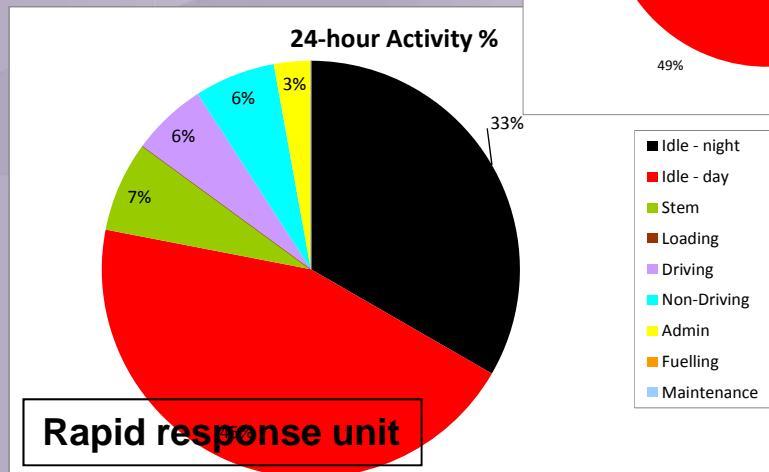- Driving — 10%
- Stem — 4%
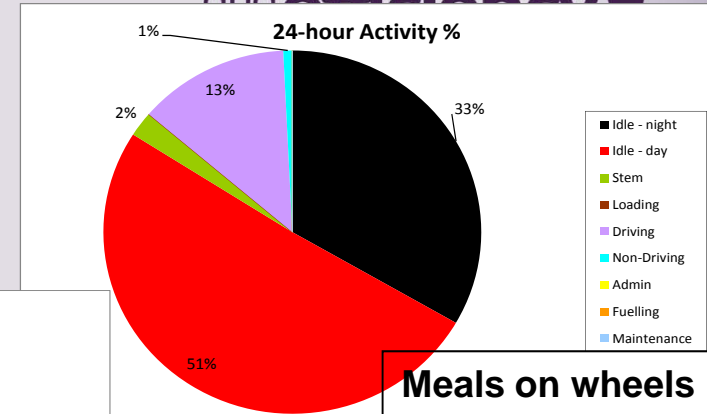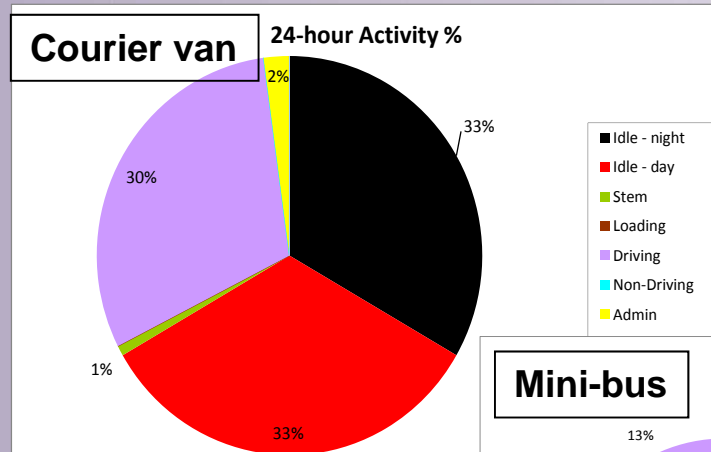- Non-Driving — 13%
- Other — 4%

Within each <u>weekday</u> a "typical" vehicle in the NE:

- Spends 16.5 hours **idle**
- Spends 3.4 hours **moving**
- Spends 4.1 hours **parked**

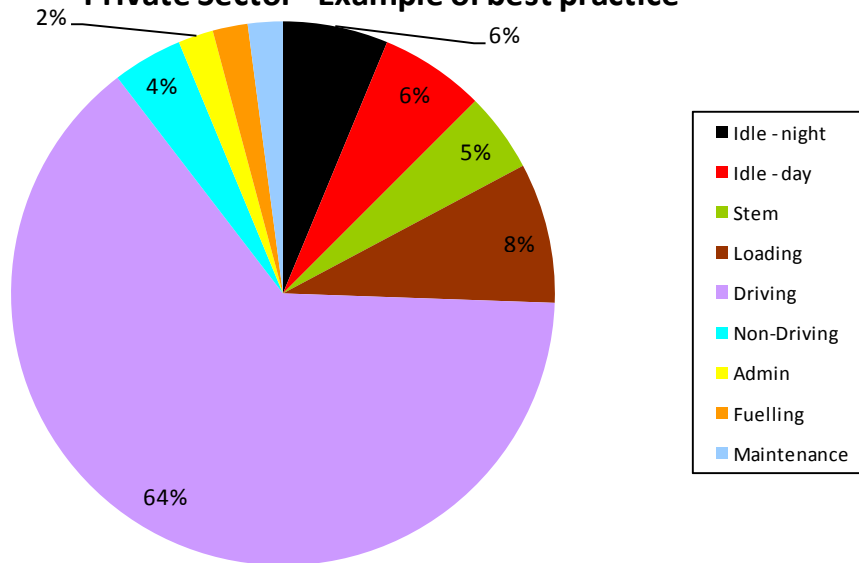- On average it moves 48 miles (~ 14mph)

- It is extremely rare for more than half of the load capacity to be used
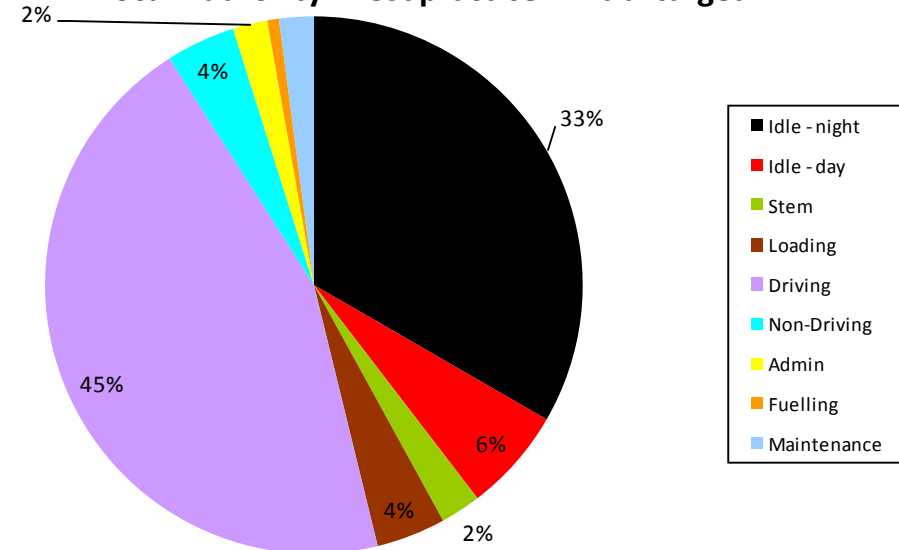
www.weir-tscs.com

Examples – a day in the life of......
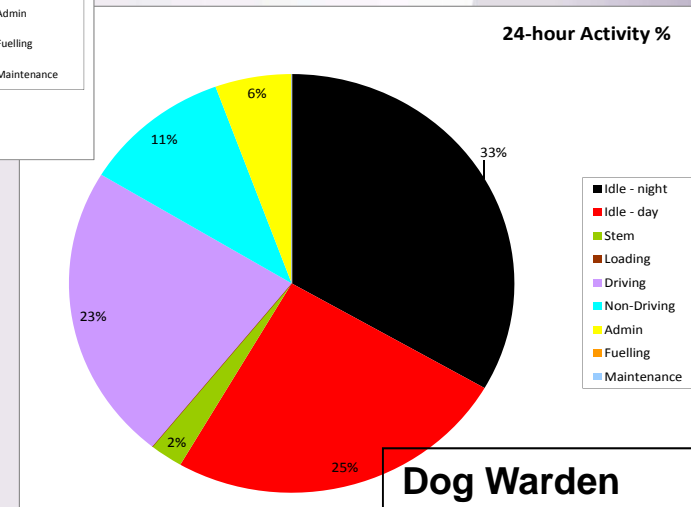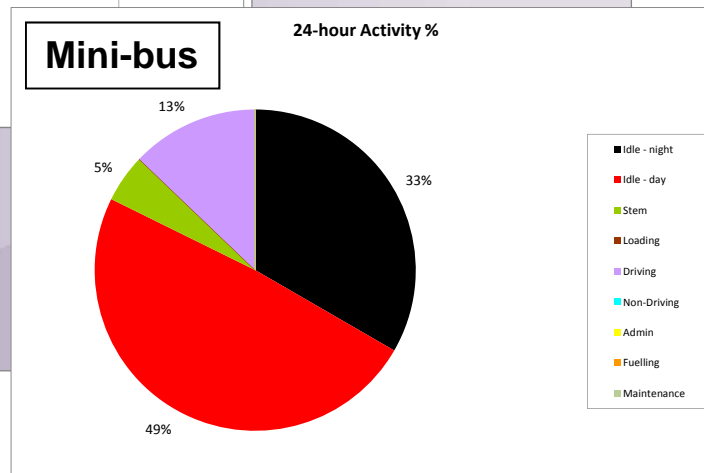
24 hour activity summary – best practice illustrations

Private Sector - Example of best practice

- Idle - night — 6%
- Idle - day — 6%
- Stem — 5%
- Loading — 8%
- Driving — 64%
- Non-Driving — 4%
- Admin — 2%
- Fuelling
- Maintenance

Local Authority - Best practice - initial target

- Idle - night — 33%
- Idle - day — 6%
- Stem — 2%
- Loading — 4%
- Driving — 45%
- Non-Driving — 4%
- Admin — 2%
- Fuelling
- Maintenance

Fleet KPIs
Potential uses

- **Identify spare capacity to:**
  - **Share vehicles between services**
    - eg – Playground inspections, meals on wheels, courier services, security
    - Community transport, school transport, ASC transport
  - **Application to plant**
    - Strimmers, grass cutters, street sweepers
  - **Share vehicles, plant, equipment between Councils?**
  - **Hire it when you need or rent it out when you don't?**

Vehicle Brokerage

Most efficient "cross cutting" use of fleet

- Education vehicles – core use is for students to access courses at a wide range of times

- Additional uses:
  - Access to health facilities
  - Participation in healthy and cultural activities
  - Access to employment
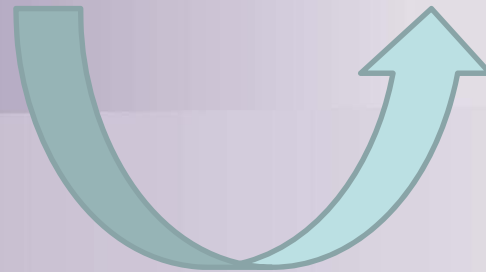 - Increase training participation

Some figures

- **Route Optimisation**
  - £150k pa proven (Middlesbrough and Newcastle)
  - Typical reduction of 1 round per 12 (£100k+ each)
  - Max impact is if operated across boundaries

- **Fleet KPIs**
  - Daytime idle 48%, Stem mileage 38%, Loaded space 26%
  - Procurement / purchase avoidance & "right sizing" the fleet
  - "Regional fleet" of £70M to £80M – potential for £6M to £8M
    - 5% "low hanging/harvest" operational activity
    - 10% more radical process change
    - 5% strategic co-operation and cross-regional activity

- **Vehicle Brokerage**
  - Proven results in Hartlepool – £200k+ pa

"Son of Route Optimisation"

- **On-Screen "Management system"**
  - Ensure optimised routes are followed
  - Provide flexibility to react to severe weather/breakdowns
- **In-cab device**
  - "Sat Nav" guidance, reduce need for "local knowledge"
  - Flag up assisted "pullouts" or H&S issues
  - Increase flexibility to switch drivers/crews
- **Communication between vehicle and CRM system**
  - "Exceptions" – overloaded bins, bins not out
  - Participation rates in recycling rounds

English "waste landscape"

Country-wide

- 239 WCAs, responsible for the collection of municipal waste;

- 21 WDAs responsible for treating and disposing municipal waste

- 137 UAs responsible for the collection and treatment and disposal of municipal waste

- Commercial waste collected by Private contractors eg ONYX, SITA and BIFFA and some LAs

The South East of England

- 67 collection authorities, 13 Unitary authorities and 55 Districts & Boroughs

The North East of England

- 12 Unitary Councils

How could this apply to NI?

Area	North East	England	Northern Ireland
"Landscape"	12 Unitary Councils delivering all services	239 Waste Collection Authorities, 21 Waste Disposal Authorities and 137 Unitaries	26 "small" Councils delivering waste collection, street cleansing, environmental health, parks and leisure. Planning, Housing, Highways delivered centrally
Collaboration opportunities	Tees Valley partnership, ST&W, Northumberland & Durham "new" unitaries. All moving towards same disposal contractor.	District & County partnerships in two tier areas. Collaborative Procurement frameworks for goods, services etc	Salvage from the "Clusters"? Local collaborations? Joint Procurements or Frameworks?

Collaboration

- **How to find opportunities?**
  - Understand the landscape
- **How to collaborate**
  - "Physical" joint working
  - "Virtual" joint working
- **What helps?**
  - Common problems
  - Common processes and practices
  - Good understanding of what is currently going on and what is required for the future

The future?
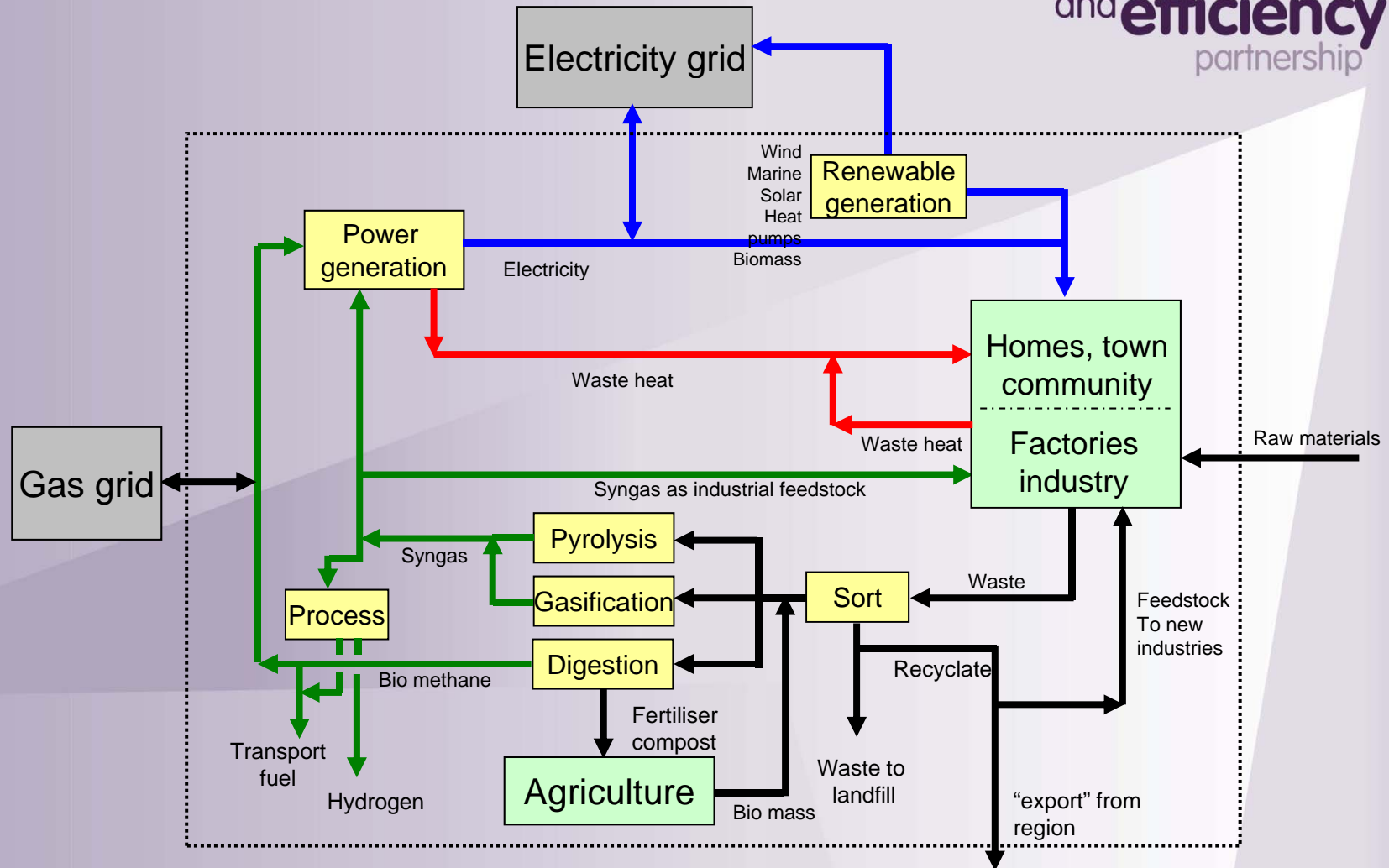
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