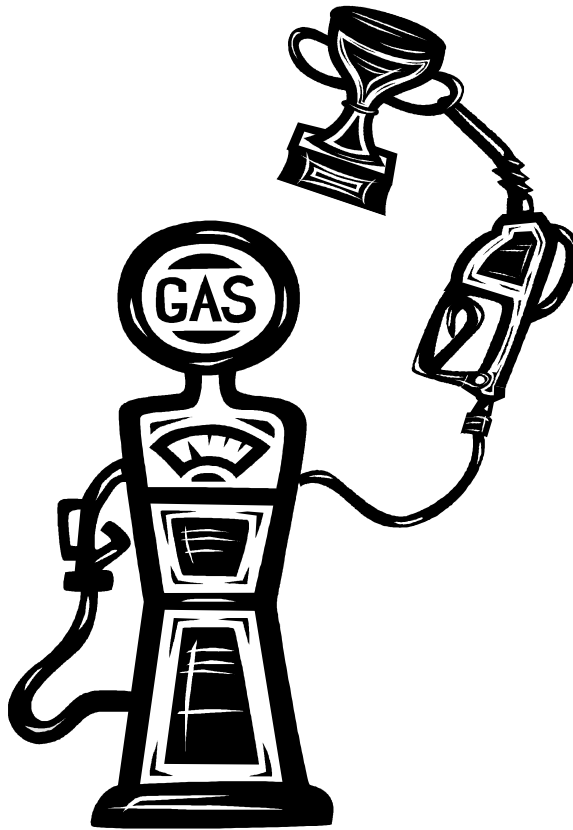


Fuel Champion



Hanson Cement

- Heidelberg Cement Group
- 3 manufacturing sites
- 7 depots
- Lowest Co₂ emissions in industry



2007

- Fuel Savings needed to be made
- Fuel economy
- Fleet composition
- Fuel Trials
- The way forward...

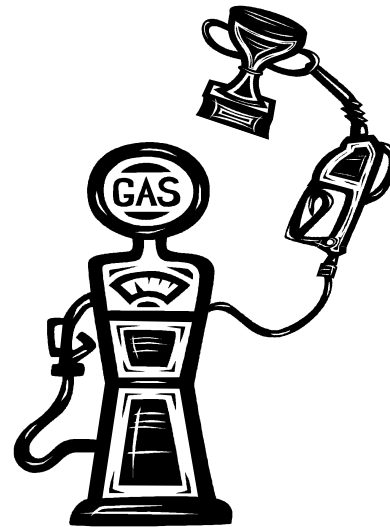
- Huddersfield University
- Dr Michael Coyle
- Fuel Champion By Distance Learning

Course Agenda

- One days training at the University
- Course work conducted over the internet
- Three work based assignments
- Final project put in to operation

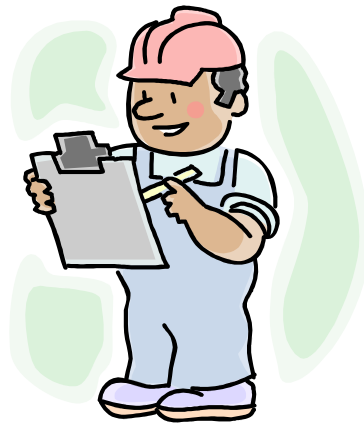
Neil Callaghan

- Qualified Mechanic-Registered Eng Tec
- Experienced on many vehicle types
- PSV & LGV licences
- Office experience
- Operators CPC
- Hanson Cement



Aims

- Increase vehicle MPG
- Reduce fuel usage
- Reduce Co₂ emissions
- Take control of fuel trials

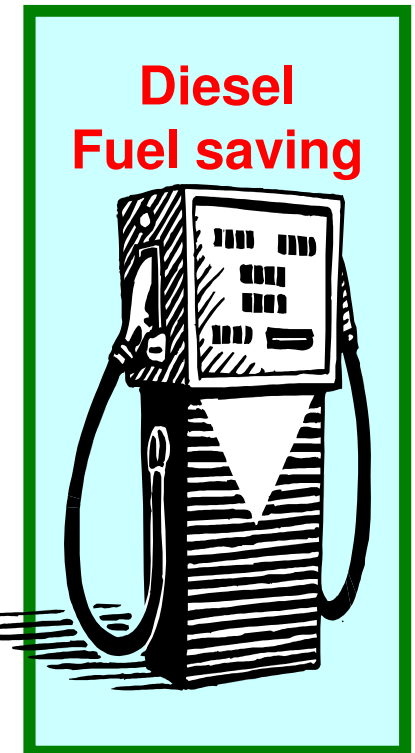


- If you can't measure it,
you can't manage it.

- If you can't manage it,
you can't improve it.

What You Need

- Accurate fuel data
- Team awareness and training
- Realistic but challenging targets



Targets & saving

- Annual MPG was 7.6 in 2007
- Target of 8 MPG
- 0.1 MPG = £450 per year per truck
- Saving 1.206 tonnes Co₂
- 0.4 mpg = £1800 per year per truck
- Saving 4.824 tonnes of Co₂

Telematics

- Manufacturers systems
- Different types of data
- Vehicle and driver scores
- Driver training

Trials

- Control and evaluation of Demo vehicles
- Fuel Efficient Energy Tyres
- Synthetic oils

Lower height Curtain-side trailers

- Exposed trailer bulkhead
- Internal height



Project vehicles



Theory Of The Test

Saving	0.1 mpg per 10 cm	cm difference	mpg			Per Vehicle	*58 vehicles
	0.1	50.5	0.505			£2,204.45	£127,857.85
Saving						6.39%	
	Average miles	Average MPG					
	P/Year	P/Year	gallons	ppl	Per gallon	per year	*58 vehicles
Miles	63128	7.9	7990.89	£1.01	£4.59	£36,689.83	£2,128,010.36
Miles	63128	8.405	7510.77	£1.01	£4.59	£34,485.39	£2,000,152.51

Results after road trials on Mercedes 1704Z

	Vehicle Miles P/Year	MPG	gallons	ppl	Per gallon	per year	x 58 vehicles
High Trailer	63128	7.46	8462	£1.01	£4.59	£38,850.69	£2,253,339.73
Low trailer 480E	63128	7.94	7954	£1.01	£4.59	£36,522.59	£2,118,310.09
Fuel Saving						£2,328.10	£135,029.64
%						6.37%	
Co₂ saving						P/Vehicle	x 58 vehicles
					Gallons	507.05	
					Litres	2305.09	
			2.63 kgs Co ₂ per litre		Co ₂ kgs	6,062 kgs	351.596 kgs
Costs & Savings	Own Trailer Conversion				Roof Lowering	£800.00	x 58 vehicles
	Total Costs					£800.00	£46,400.00
	Fuel Saving per year					£2,328.10	£135,029.64
	Profit in 1st year.					£1,528.10	£88,629.64

The future

- Modifications



Don't get overloaded

