

# Did you know...?

## Facts on Road Transport and Oil

# Did you know...?

The International Road Transport Union (IRU) is the international organisation which upholds the interest of the road transport industry worldwide. Via its network of national Member Associations, it represents road transport operators. The IRU, whose objectives are to work towards facilitation of road transport and the promotion of sustainable development, has a truly global vision, but also acts effectively at a national and local level through its international network of 180 national Members in more than 70 countries, using its slogan: “Working together for a better future”.

# Did you know...?

In an increasingly competitive and globalised economy, road transport has become a vital production tool and thus the engine of economic development. While providing this irreplaceable service it must be recognised that commercial road transport is, on a short as well as on a long term basis, 100% dependent on oil and has no other economically viable alternatives to fossil fuels. To ensure that our children's children can benefit from black gold, a sustainable energy policy must be put in place based on facts and figures which reflect economic and road transport realities.

## Preface

# Did you know...?



**That road  
transport is 100%  
dependent on oil?**

A comparison of energy characteristics of various fuels shows that to obtain the same operating efficiency of a truck using diesel fuel, all existing alternative fuels require much heavier and larger tanks than diesel tanks. In other words, by running on alternative fuels, a truck would have to carry additional fuel weight instead of transporting goods. Running on diesel fuel with the current fuel tank a truck can drive 2000 km. Running on batteries, carrying the same weight it could only do 25 km.


# Did you know...?

Weight & volume of a fuel for the same amount of energy	Weight coefficient	Volume coefficient
<b>Petrol / gasoline</b>	<b>1</b>	<b>1</b>
<b>Diesel Fuel</b>	<b>1</b>	<b>1</b>
<b>Ethanol (C<sub>2</sub>H<sub>5</sub>OH)</b>	<b>1.62</b>	<b>1.53</b>
<b>Methanol (CH<sub>3</sub>OH)</b>	<b>2.2</b>	<b>2.1</b>
<b>Butane (C<sub>4</sub>H<sub>10</sub>)</b>	<b>8</b>	<b>1.4</b>
<b>Propane (C<sub>3</sub>H<sub>8</sub>)</b>	<b>8</b>	<b>1.9</b>
<b>Hydrogen (H<sub>2</sub>) - Gas at 200 BAR</b>	<b>25</b>	<b>22</b>
<b>Lead Battery</b>	<b>70</b>	<b>12</b>

■ Current fuel, 100% used in trucks ■ alternative fuel

Road transport has no economically viable alternative to diesel fuel.

# Did you know...?

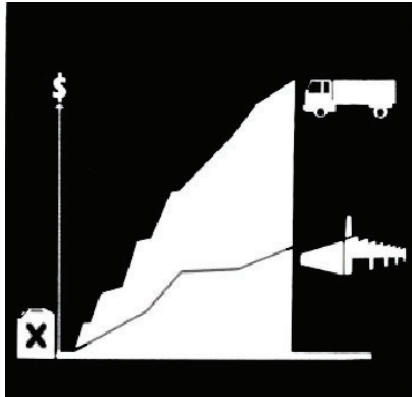


**That oil is wasted  
due to wrong  
taxation?**

Oil is a finite resource. Yet it still is wasted on stationary applications such as heating, electricity or paper production, where economically viable alternatives to oil exist. The reason for this waste is that governments keep taxes low on oil used as an energy source where viable alternatives exist but maintain high taxes on fossil fuel where there is no alternative such as truck transport.

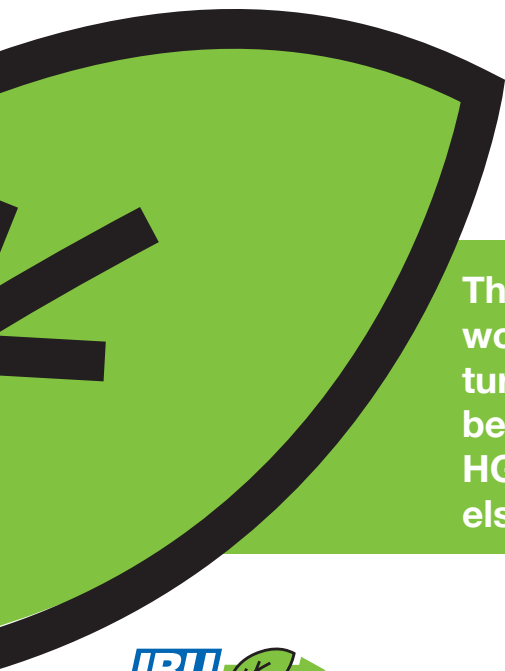
# Did you know...?

Different increase in fuel price  
for mobil and stationary use.



Road transport has no  
viable alternative to oil  
but pays the most taxes.

# Did you know...?



**That 25% of the world's agricultural land would be needed to fuel HGV's with Biofuels?**

To fuel JUST the commercial vehicle fleet of TODAY, 25% of the world's agricultural land would have to be converted into heavily subsidised Biofuel crops. Only a few countries will be able to produce an adequate amount of Biofuel and therefore new fuel dependencies will be created.




# Did you know...?



**Biofuels are not an ecological and viable fuel source alternative.**

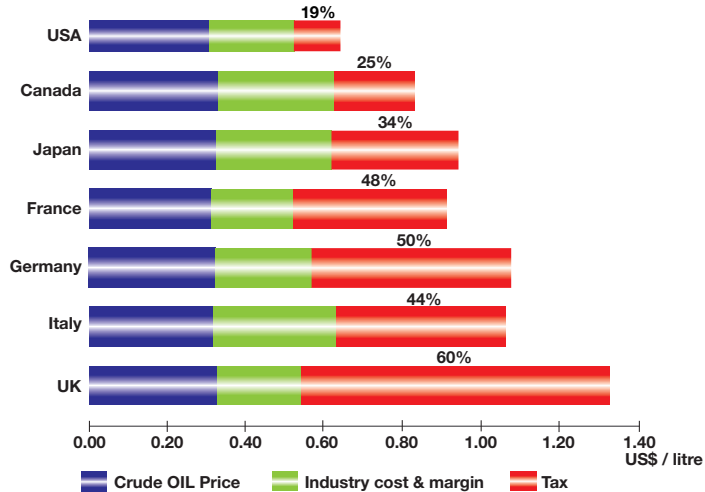
# Did you know...?



**That up to 60%  
of the fuel price  
are government  
taxes?**

Fuel taxation consists of excise duties and VAT. This taxation constitutes up to 60% of the diesel fuel price in the G7 countries. For the UK alone £25 bn of fuel taxes are collected each year. These tax-revenues are allocated mostly to general budgetary purposes and cross subsidisation of less efficient transport modes instead of being invested back into road infrastructure. In some countries, in fact, the price of diesel fuel at the pump is 3 to 4 times higher than the price set by OPEC.


# Did you know...?



Source: OPEC

Fuel taxes are a huge source of revenue for government budgets.

# Did you know...?

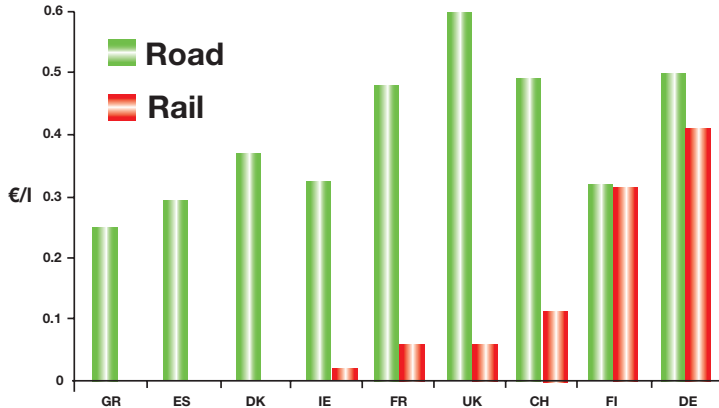


**That different transport modes pay different fuel duties?**

Road transport carries an unequal burden of fuel duties in comparison to other modes of transport. Railways pay next to nothing and the airline industry pays NO fuel duty at all on international flights.

# Did you know...?


## Fuel Duties on Diesel (€/l)



Source: EEA

Unequal fiscal treatment  
leads to unfair competition.

# Did you know...?



**That speculation  
amplifies the fuel  
price?**

Supply and demand, refinery capacity, political tension and unexpected events (e.g. hurricanes) affect oil and fuel prices. However, brokers' speculations amplify those factors with a dreadful consequence:

- speculation on higher prices increases oil storage,
- which in turn increases the shortage of supplies,
- which in turn increases speculation and so on...


In the end all this increases governmental tax revenues via higher fuel prices.

# Did you know...?



**Speculation leads to higher fuel prices and therefore penalises the truck industry and the economy.**

# Did you know...?

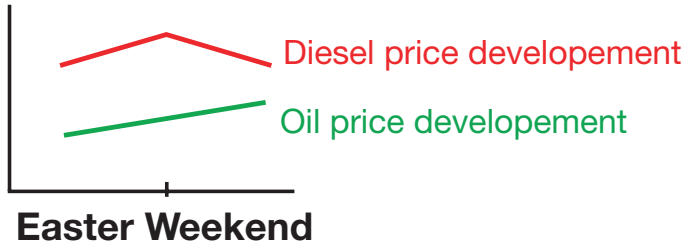


**That the fuel price  
is not linked to the  
actual oil price?**

According to figures by the Energy Information Administration (EIA) and various national ministries, fuel prices increase before every Easter break and decrease right after. This is independent of the fact that the oil prices fluctuate differently.




# Did you know...?



Fuel prices seems to be applied in a coordinated manner.

# Did you know...?



**That the real fuel price is much lower than the one at the filling station?**


Multinational oil companies link the fuel price with the current, high oil price at the stock markets. However, this oil spot price on the free market covers less than 10% of the oil purchase on the oil market and it does not correspond with the long-term contracts for cheap oil with the oil producing countries. Still, the multinational oil companies apply that high oil spot price systematically at their filling stations.

# Did you know...?



Customers pay an  
unreasonably high fuel price.

# Did you know...?



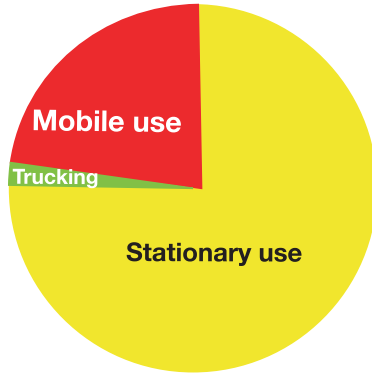
**That only a small percentage of oil is used for trucking?**

The oil consumption of heavy goods vehicles represents a small percentage of the total oil consumption. In modern industrialised economies:

- 70% of oil is used for stationary use,
- 30% of oil is used for mobile use,
- of this 30% just 3% is used for trucking.

# Did you know...?


**Oil consumption in  
modern, industrialised economies**



*Source: UNFCCC*

**The best way to save oil is by  
cutting down on its stationary  
use through appropriate tax  
policies.**

# Did you know...?

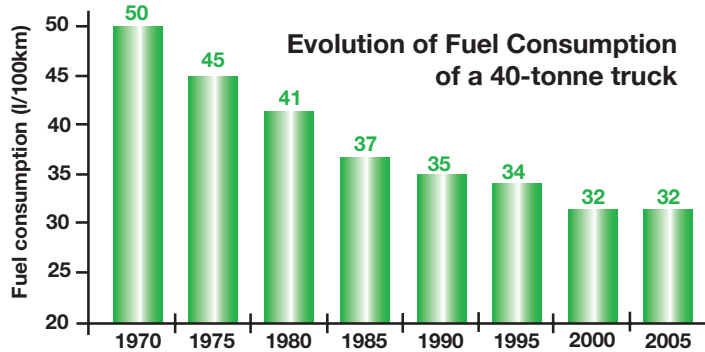


**That since 1970  
the fuel efficiency  
of a truck has in-  
creased by 36 %.**

The road transport industry has taken up its responsibility in sustainable development and invested heavily in vehicles representing the latest technology. As a result, fuel consumption has been considerably reduced from 50l/100km in 1970 to 32l/100km today.

According to the International Energy Agency (IEA) figures, diesel engine improvements will raise the overall fuel economy by another 20%-30% by the year 2020, reducing the overall fuel consumption to almost 20l/100km.


# Did you know...?



Source: VDA

**Innovative technology  
reduces fuel consumption  
effectively.**

# Did you know...?

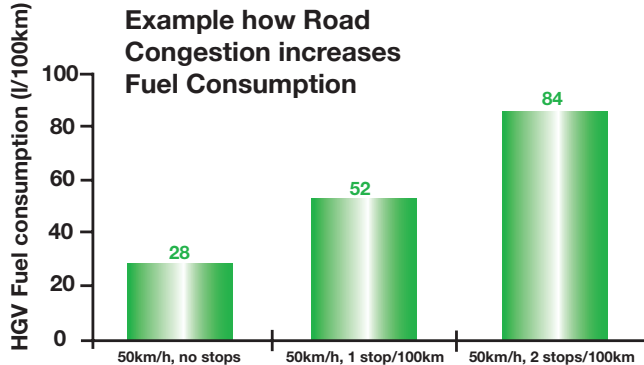


**That 50% of the fuel consumption is wasted due to road congestion?**

Every single stop increases the fuel consumption of a heavy goods vehicle. Already two stops increase the fuel consumption by almost three times or by more than 50 litres. In addition billions of litres of fuel are wasted every year due to congestion amounting to 50% of the overall fuel consumption.




# Did you know...?



Source: VDA

Infrastructure improvements to achieve free flowing traffic are a prerequisite to use fuel effectively.

# Did you know...?



**That high fuel  
prices make your  
goods more  
expensive?**

Increasing fuel costs affect all transport operators and their customers. If fuel costs amount to a realistic 26% of the total cost of operating a vehicle and fuel prices increase by 15%, overall costs will increase by 3.92%. Considering that profit margins of transport operations are very low it becomes clear that any fuel cost increase will be passed on to the final consumer.

# Did you know...?

## Influence of fuel cost in operating costs:

Fuel price increase	Fuel cost's share of the total operating costs of a vehicle					
	20%	22%	24%	26%	28%	30%
<b>1%</b>	0.20%	0.22%	0.24%	0.26%	0.28%	0.30%
<b>5%</b>	1.00%	1.12%	1.19%	1.31%	1.42%	1.50%
<b>10%</b>	2.00%	2.23%	2.38%	2.62%	2.85%	3.00%
<b>15%</b>	3.00%	3.35%	3.58%	3.92%	4.27%	4.50%

Source: IRU

**Any penalty on road transport is an even greater penalty on economy, leading companies to relocate and to cut jobs.**

# Did you know...?



**That to provide a cup of coffee at a café, it takes 29 companies from 18 countries?**

Globalisation - due to the enormous differences between liberalised national economies with regards to knowledge, the availability of raw materials and social costs - leads to an increase in trade and transport as well as in customer's demand for a bigger choice of high quality products at a low price. Only road transport can offer that service. Any penalty on road transport is an even greater penalty on the economy and will lead to company delocalisation.

# Did you know...?



Road transport has become a production tool that keeps companies competitive and permits the quality of life you enjoy today.

# Did you know...?

This brochure is brought to you by the:

**International Road  
Transport Union, IRU**

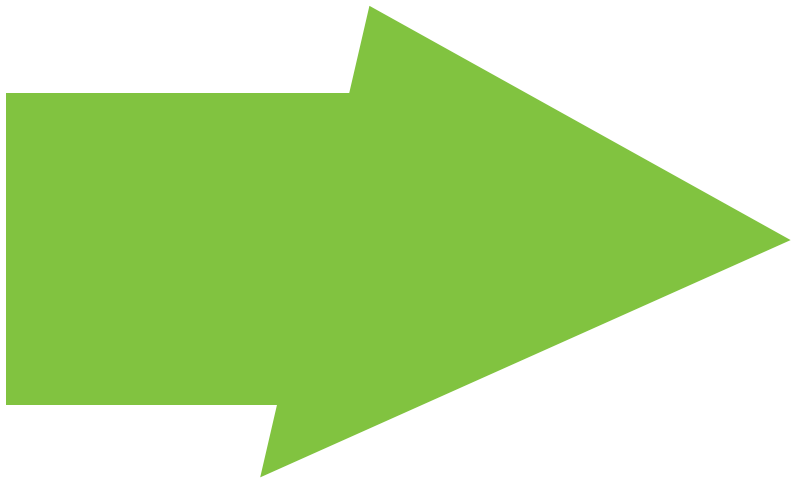


# Did you know...?

*Working together  
for a better future*



*s i n c e      1 9 4 8*



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