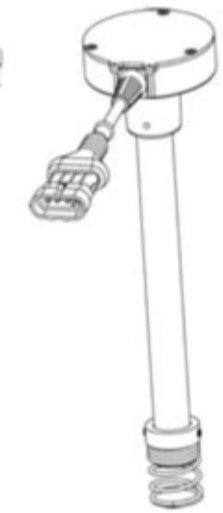
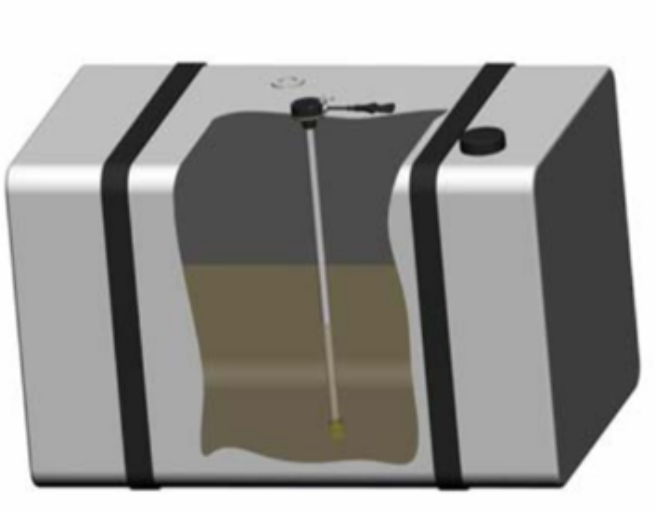
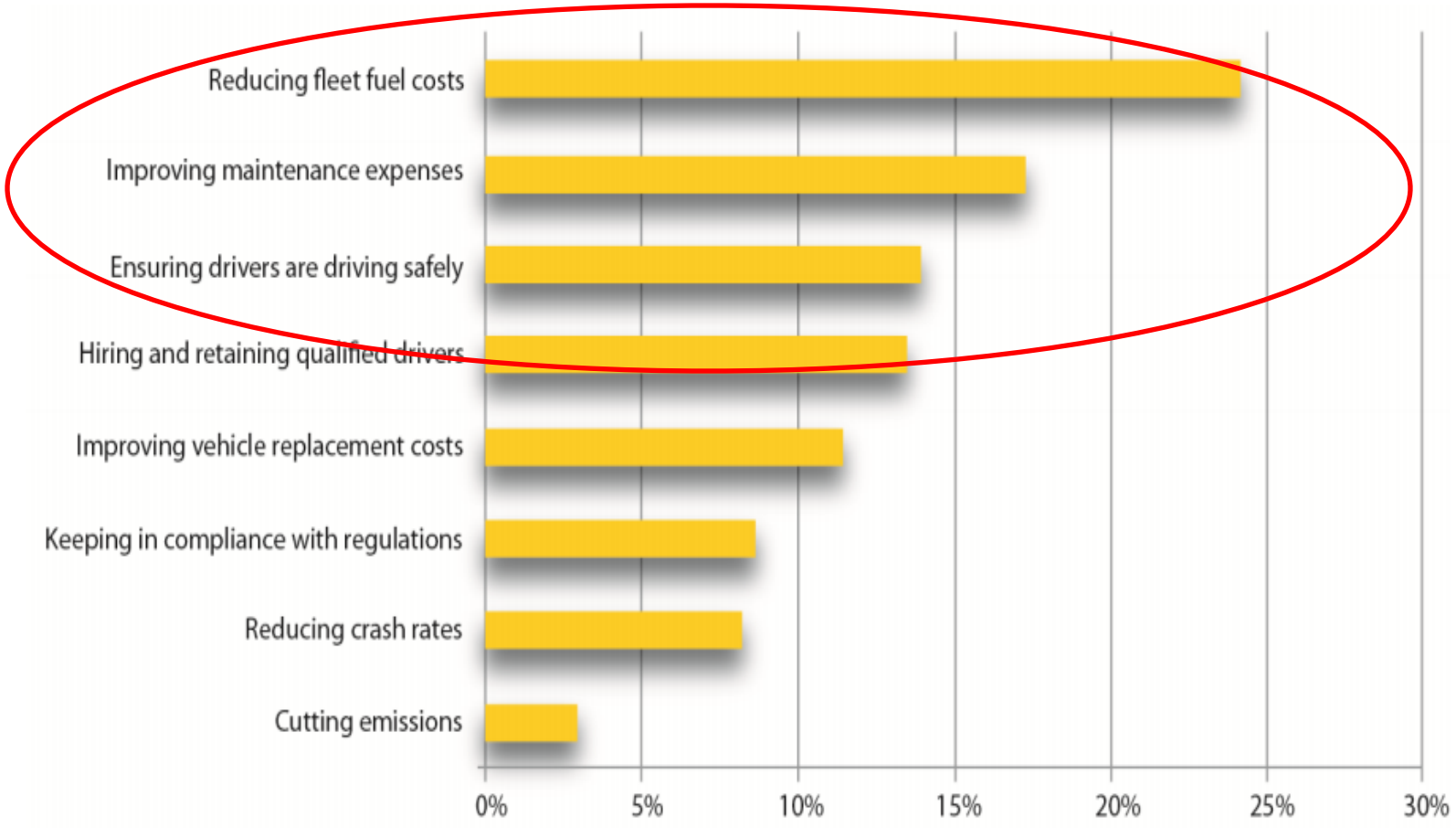
Yatis Fuel Solutions





Most important challenges for fleet owners



www.automotive-fleet.com

Benefits of some of our solutions

- Savings of up-to 15-18% in fuel costs
- Reduce maintenance costs by having a pulse on the engine health of your vehicle (OBD based)
- Reduce accidents and small instances by 50%
- Know instantaneously if your vehicle has been in an accident
- Have state of the art panic alert system
- Monitor temperature, fuel pilferage, tire pressure sensors etc.
- Get accurate mileage and fuel consumption statistics etc. (OBD or Fuel sensor based)

'Positive ROI within 4 months of operations'

Our Scope

yatis

Always know where the asset is and immobilize it if needed

Asset tracking through RFID technologies

Reduce vehicle maintenance costs

Increase fuel economy

Increase asset utilization through tracking

Allow for advanced JIT inventory management through accurate ETA predictions

Reduce the number of accidents in the field

Improve quality of drivers

Solutions

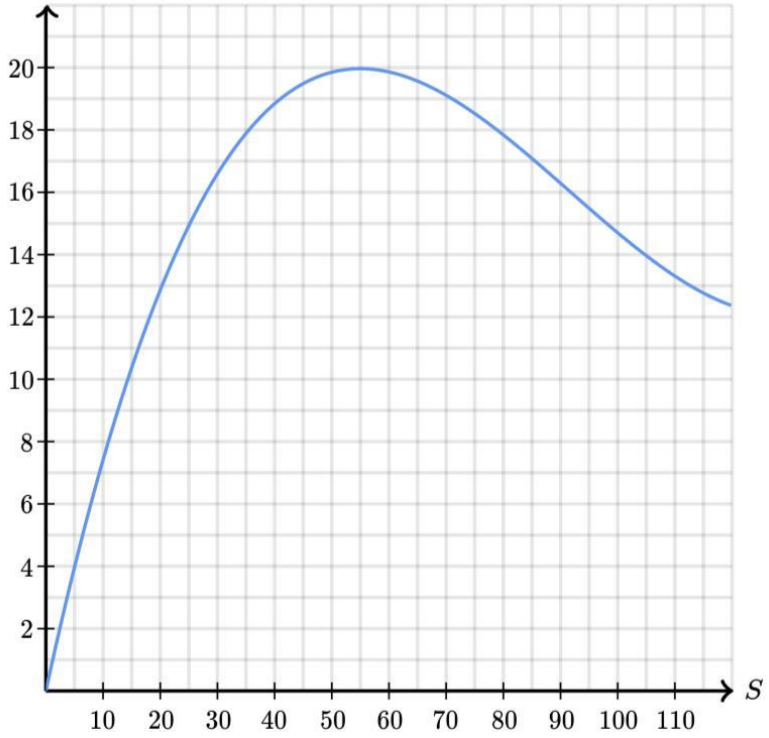
- Increase efficiency: Better driving can save ~15% of your costs

- Reduce Theft of fuel by having an idea of exact amount filled or stolen. Accurate to 0.5-1%

Use an OBD or advanced sensor to detect fuel usage. Accurate daily usage information available

Fuel efficiency graph

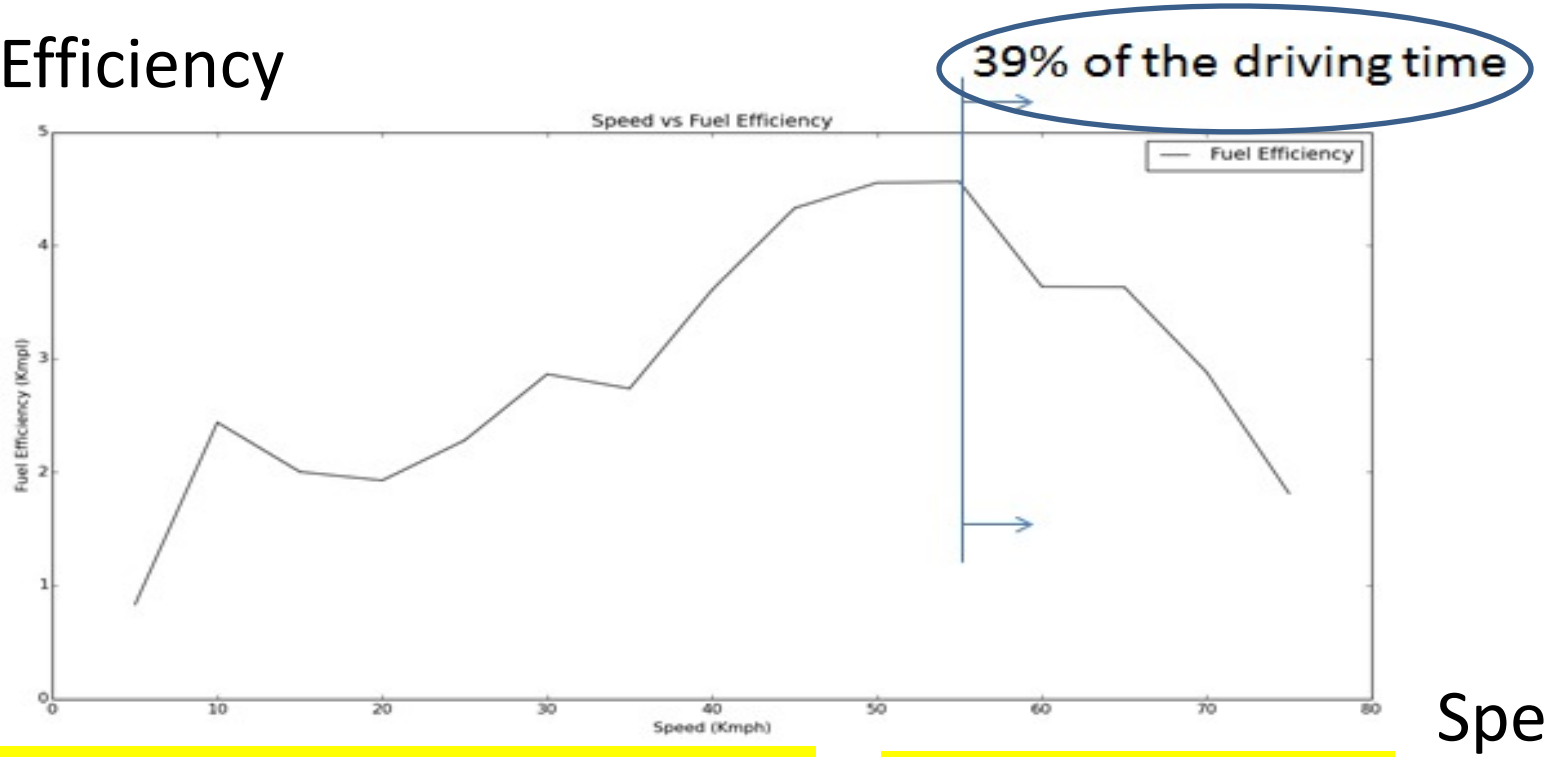
Consumption (Km/L)



Speed

Fuel Efficiency Graph

Efficiency



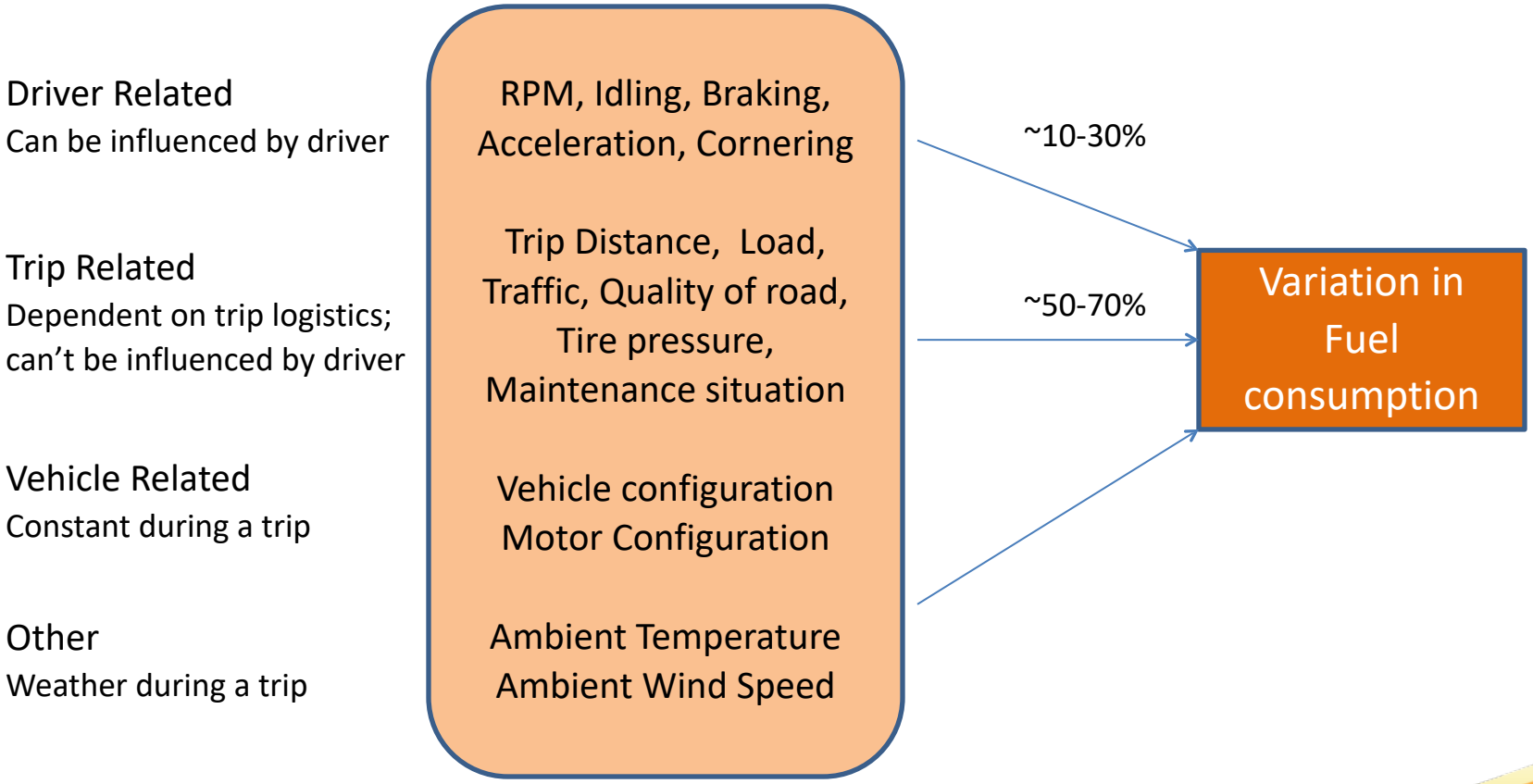
Speed

39% of the driving time is in areas where fuel efficiency is poor.

How to address problem:

- Coach drivers
- Use In-vehicle feedback devices

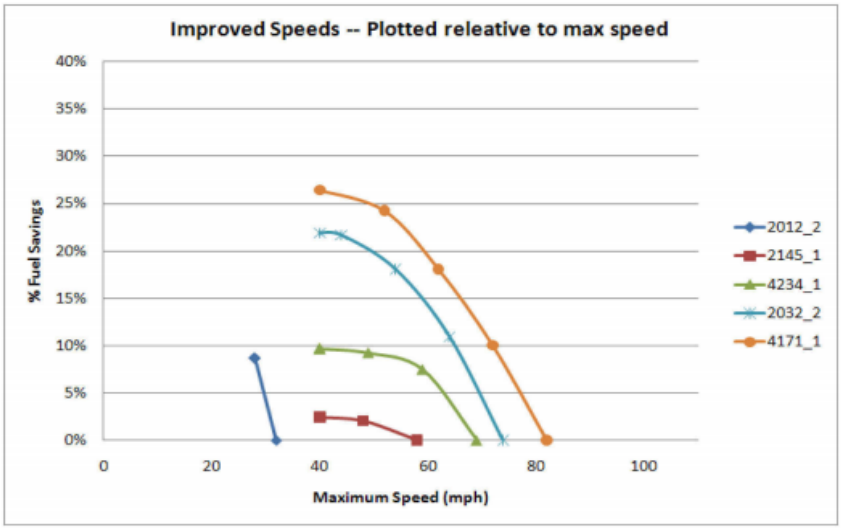
Influencing fuel consumption is a multi variable problem

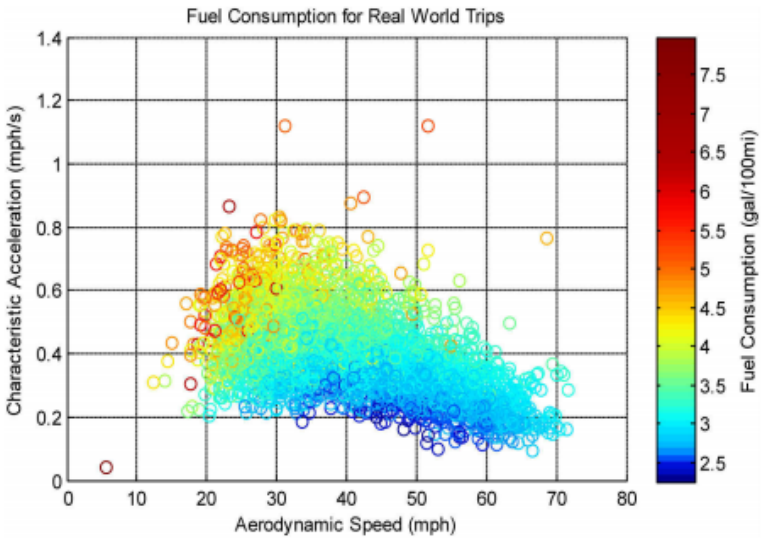


http://www.its-ukreview.org/modelling-the-relation-between-driving-and-fuel-consumption/

https://www.cgi.com/sites/default/files/white-papers/driving_behavior_and_fuel_consumption.pdf

Speed & acceleration fuel consequences





- Reducing speed from 110Kmph to 55Kmph gives you 28% savings
- Reducing speed from 90Kmph to 55Kmph give you 23% savings
- Added savings from reducing acceleration and braking events

http://www.nrel.gov/docs/fy12osti/53864.pdf

Actions

- Reduce Speed
- Reduce Idling
- Reduce Harsh Driving Events
- Reduce theft

Improvement in fuel consumption by coaching drivers and incentivizing drivers

yatis

You can save upto 3L/100Km

	Estimated Effect of coaching (L/100KM)		
Country	Min	Mean	Max
Sweden	3.32	6.82	14.58
Denmark	2.11	4.87	9.59
Italy	2.18	3.58	7.26
UK	2.16	3.44	4.86
France	1.46	2.84	7.08
Netherlands	1.63	2.81	4.13
Poland	1.31	2.4	4.19

https://www.cgi.com/sites/default/files/white-papers/driving_behavior_and_fuel_consumption.pdf

Fuel Improvement Dashboard

Speeding	Idling	Harsh Driving Events	Average &Refuel and Theft Value

Date	Vehicle ID	KMs	Current Fuel (L)	Fuel filled (L)	Fuel Theft (L)	Average (Km/L)	Speeding minutes	Idling Minutes	Harsh Driving Events	Driving Score	Ranking
30-06-2021	KA01MG9510	210	213	0	0	3.56	73	19	5	2.79	

Speeding: Number of total minutes of speeding in day
Idling: Number of total minutes of idling in a day
Harsh Driving: Number of RA/RD and HC events

Action
Reduce Speeding
Reduce Idling
Reduce Harsh Driving Events

Driver improvement system

5 categories:

- Acceleration
- Braking
- Lane Handling
- Cornering
- Speeding

Real Time Monitoring & Feedback of Driver Behavior

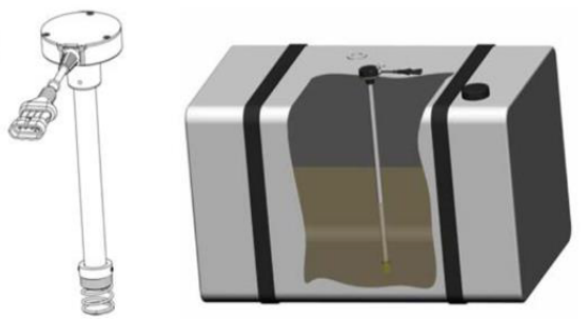
Post Drive Analysis of Driver(s)

Advice/Feedback/Train

Reward or take further action in case of non-compliance

Methods

- Use an accurate capacitive fuel sensor
- Accuracy upto 0.5% of tank
- Sensitivity high
- Temperature compensated
- Pro's:
  - Most accurate way of measuring consumption/theft/ refuelling
  - Suited for large vehicles
- Cons: Installation is hard including calibration



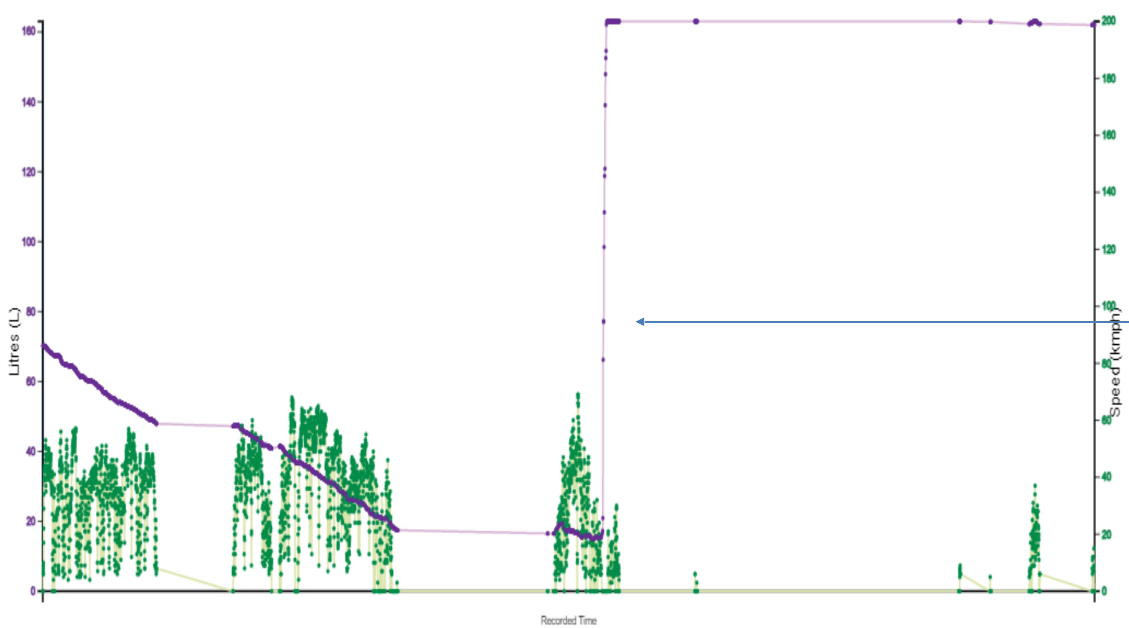
Reduce Theft

- Get alerts when fuel is filled (by litre) and when thefts happen

(Alert for fuel filled) Date and time of alert Exact volume amount

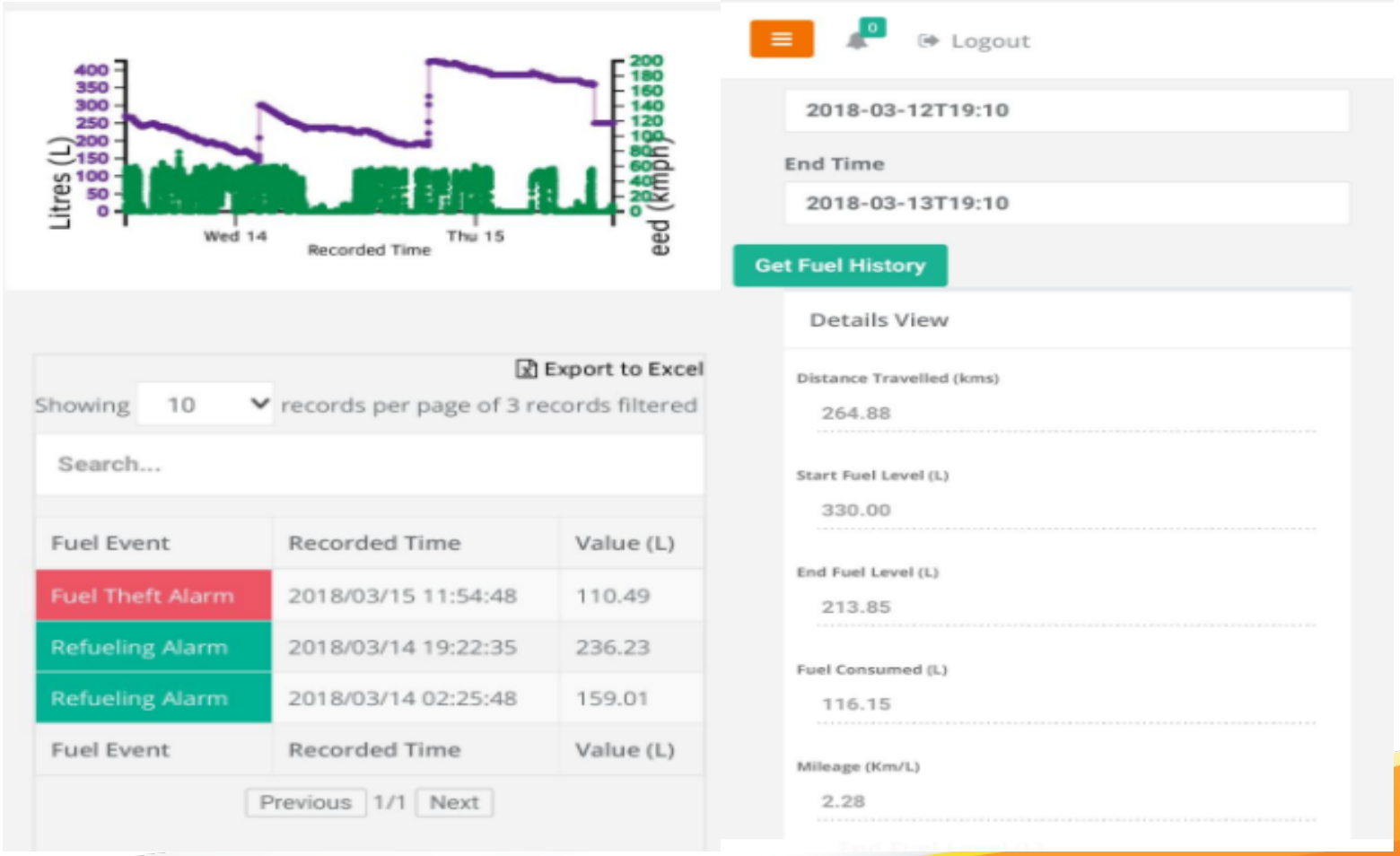
Fuel Event	Recorded Time	Value (L)
Refueling Alarm	2021/06/21 13:07:34	147.7
Fuel Event	Recorded Time	Value (L)

Previous 1/1 Next



Refuelling event

Some Screen Shots



Method 2

- Use OBD
- Pro's
  - Easy to install
  - Gives data from the ECU
  - You get fuel and other engine codes
- Cons:
  - Accuracy is 2-3% plus for consumption
  - You do not get fuel level data in some vehicles i.e. accurate refuel and theft events cannot be detected