Workshop Buy Down Incentives for Natural Gas and Propane Vehicles Incentive Analysis

Energy Commission

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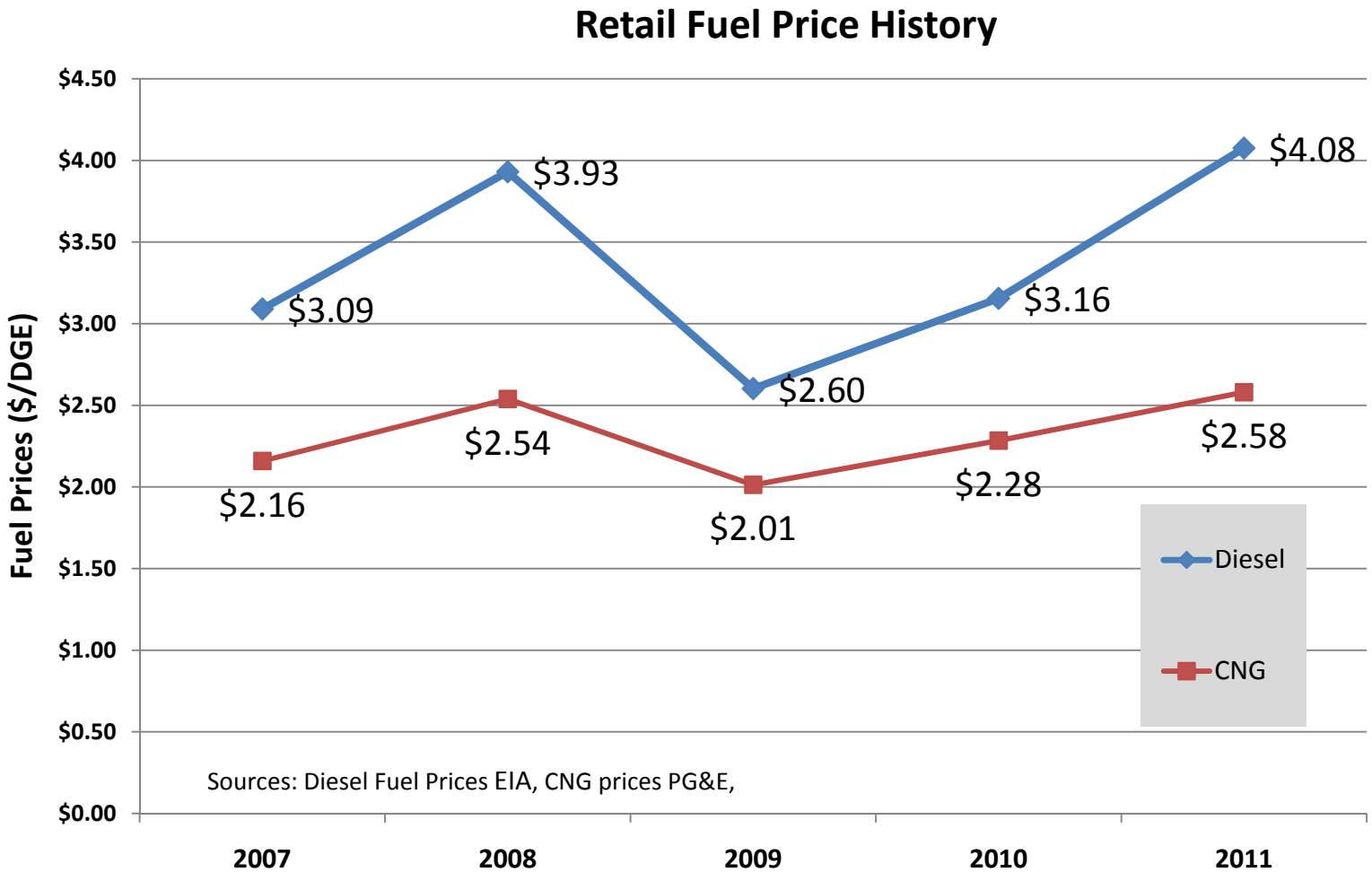
Incentive level Analysis

- Class 8 Truck
  - 13,000 gal/year
- Drayage Truck
  - 9,000 gal/year
- Refuse Truck
  - 8,600 gal/year

- $50K Incremental Alternative Fueled Vehicle Cost
- Natural Gas $1.25 / diesel equivalent gallon lower cost
  - (2007-2011) Retail $ differentials.

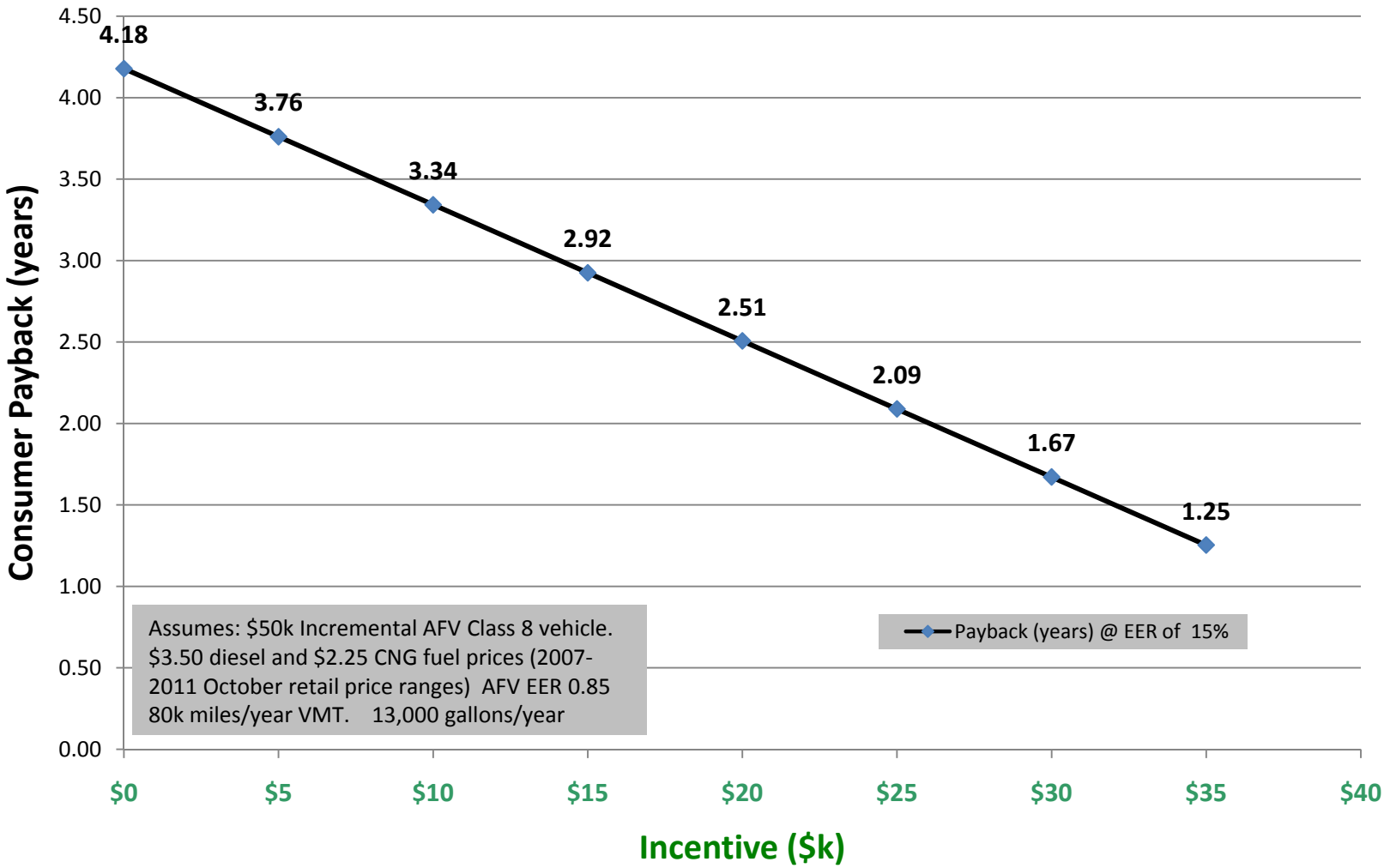
Assume Natural Gas $1.25 less per Diesel Gallon Equivalent



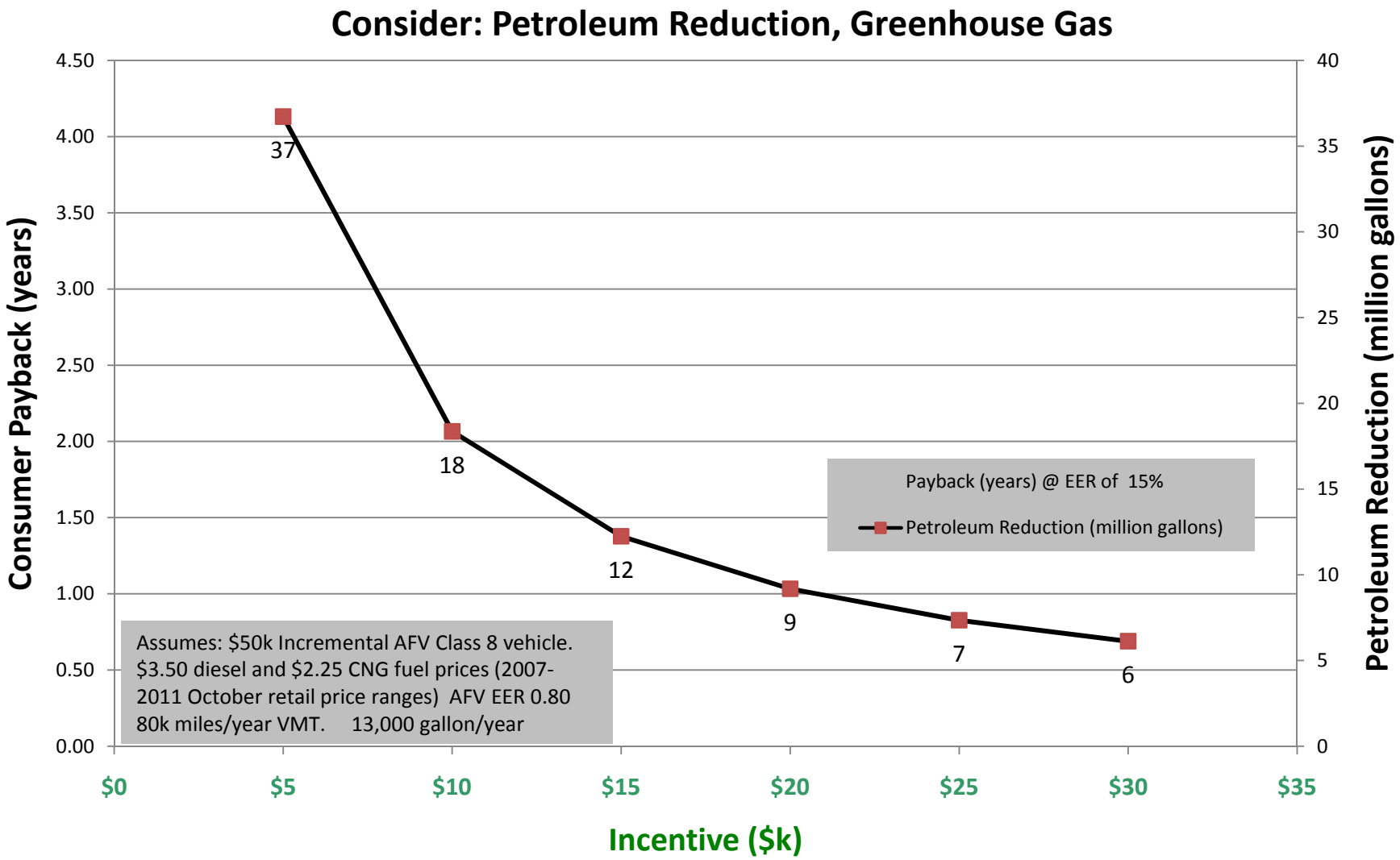
Annual (Diesel $-NG$)

2007-$0.93
2008-$1.39
2009-$0.59
2010-$0.87
2011-$1.5

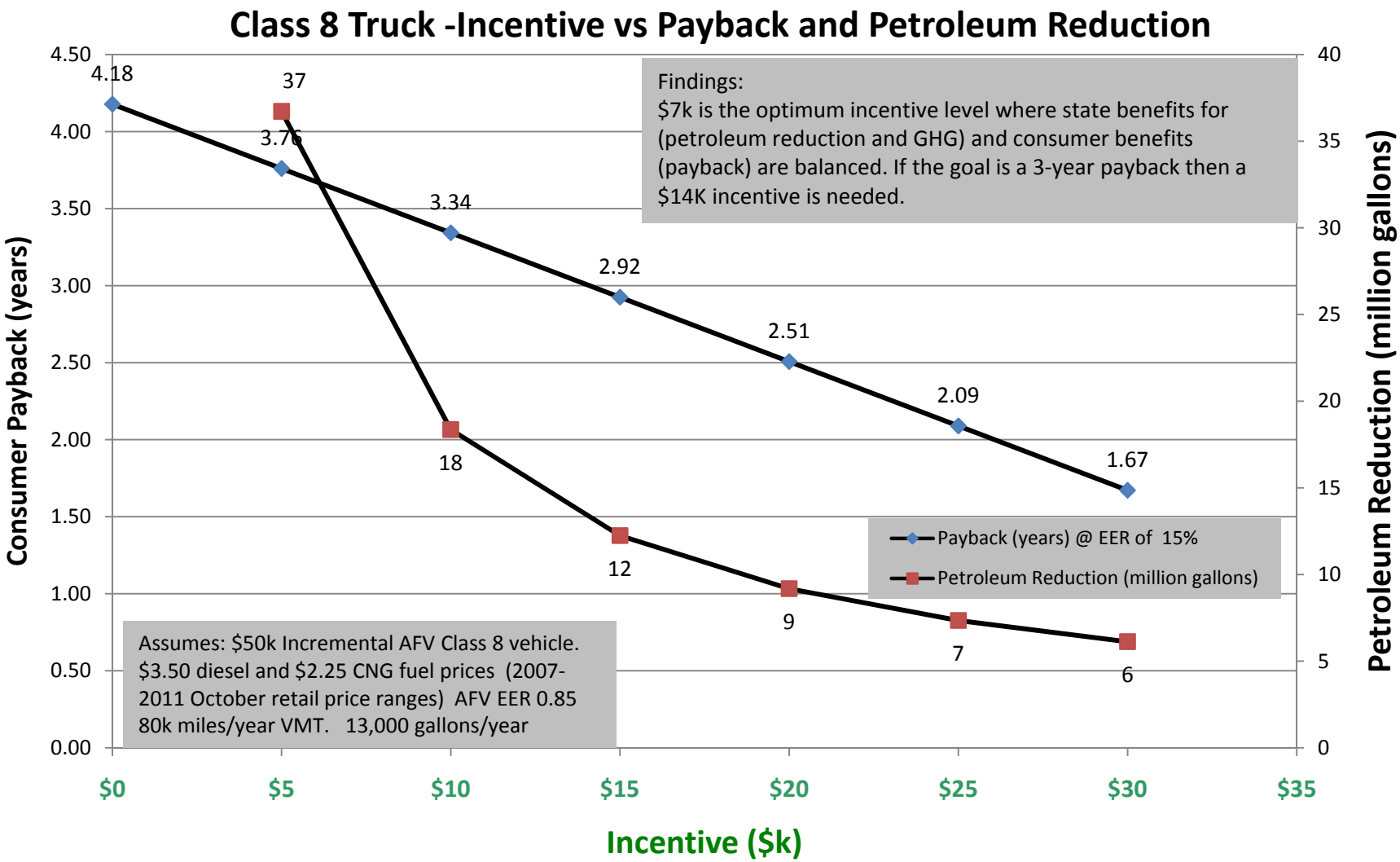
Truck Owner Benefits Class 8 Truck Payback vs Buy Down



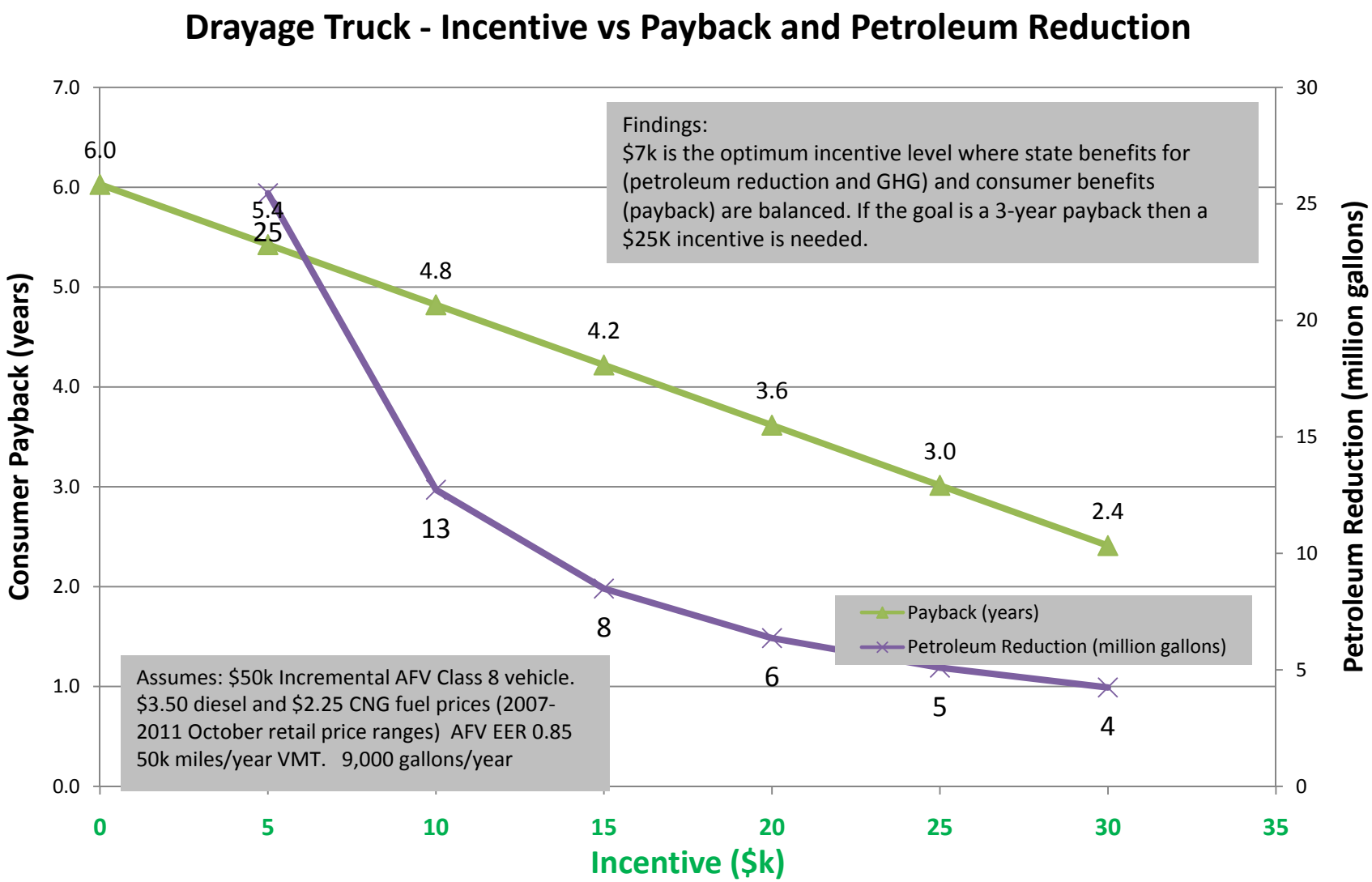
Society Benefits Class 8 Truck



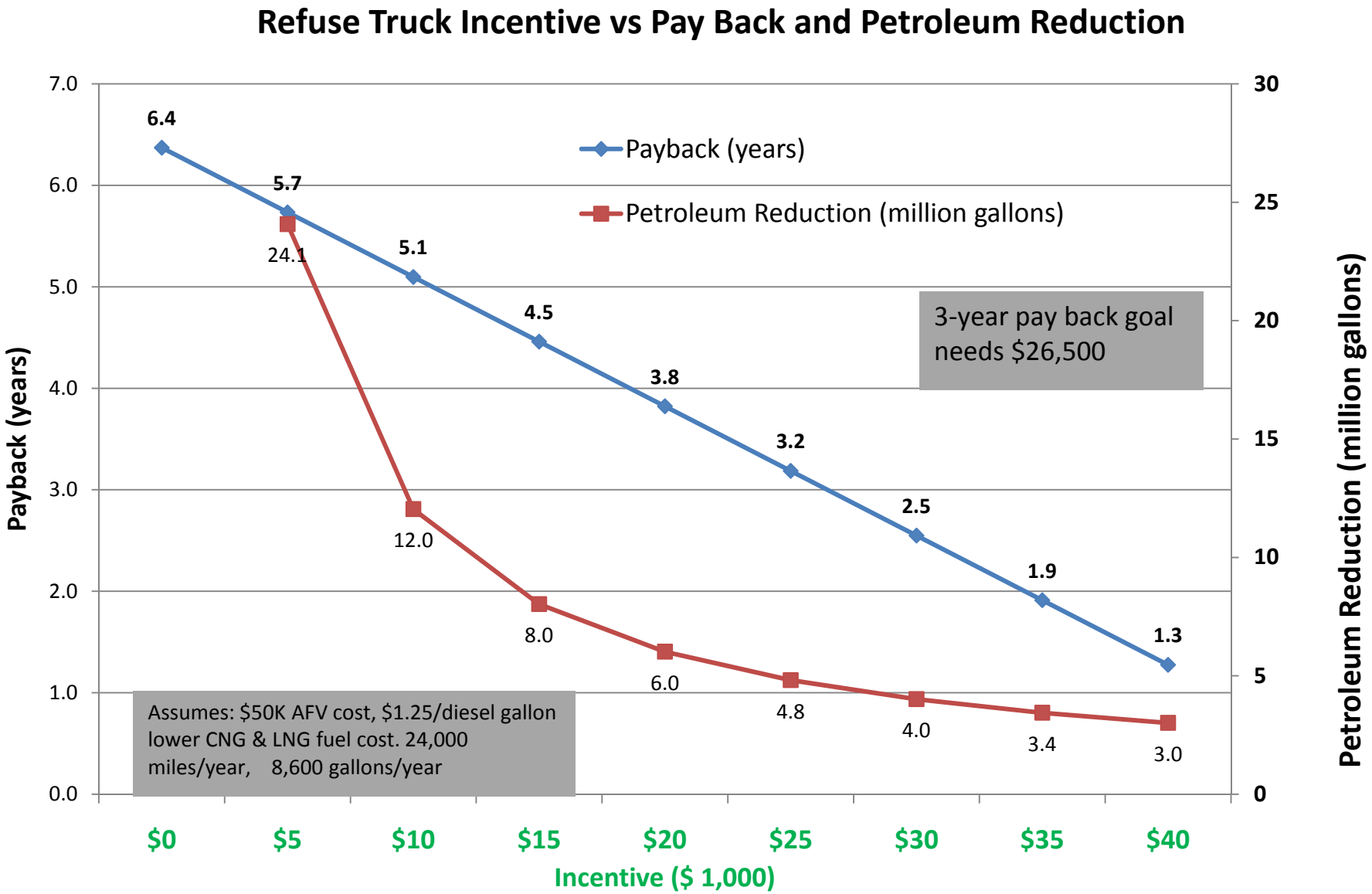
Society and Truck Owner Benefits



Drayage Truck Example

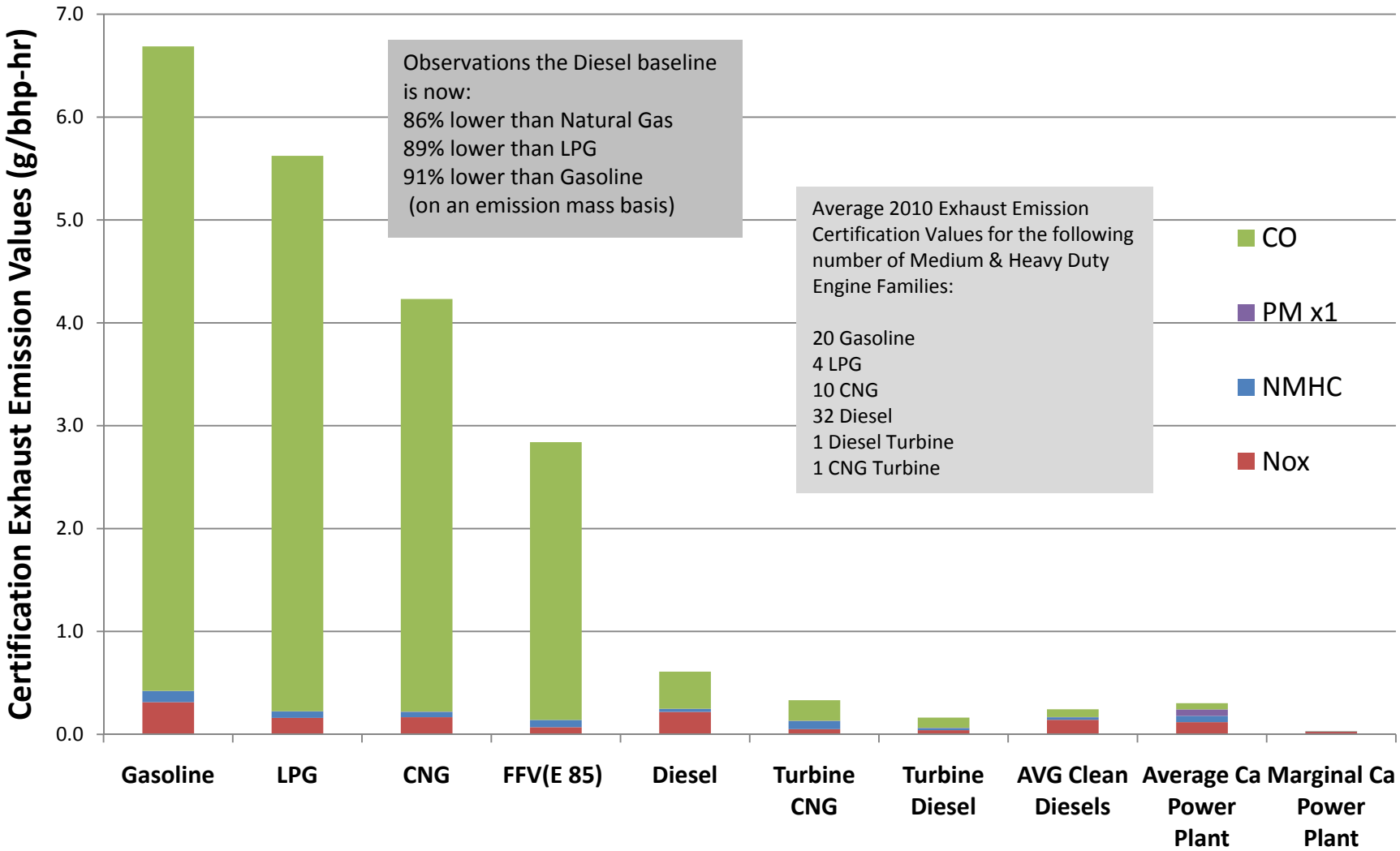


Refuse Truck Example



Background Notes

Average 2010 Certification Exhaust Emission Values and Ca Power Plant Emissions



Source: http://www.arb.ca.gov/msprog/onroad/cert/cert.php

Private CNG Station Cost are similar to Utilities & Other Retail Stations

CNG Station Cost Est.

$ 1,000,000	CNG Station
55	Fleet Size (Vehicles)
15	investment life (years)
4.25%	Interest
($87,789)	Annualized PMTs
8,600	Annual Gallons/vehicle/year
473000	Fleet annual gallons/year

($0.19)	Annualized Capital ($/DEG)
-0.20	Maintenance Cost/DEG
-0.20	Electricity cost per DEG
($0.59)	**Compression cost per DEG**

0.74	**Compression cost per therm SCG 1/2006**