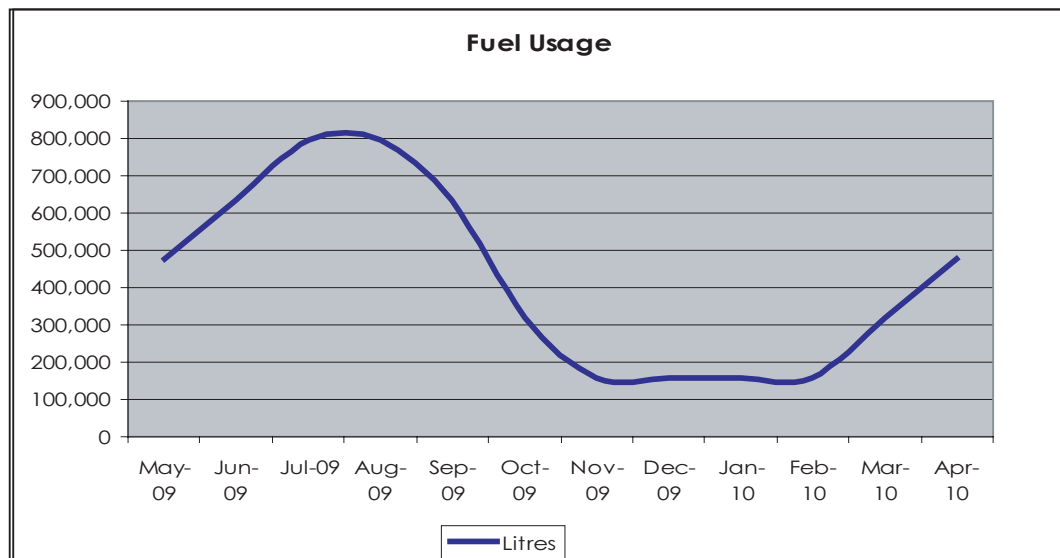


## Example of a diesel fuel hedge using recent historical prices

Firm A expects to consume 5,000,000 litres of diesel fuel over the next 12 months. Fuel represents a large expense for the firm, and volatile prices make it difficult to forecast what their overall energy costs will be. Rather than accept the risk that prices may rise, they decide to lock-in the price they will pay for fuel by purchasing Heating Oil futures contracts that trade on the New York Mercantile Exchange. Heating oil is highly correlated with diesel fuel (see attached case study for more details).

Typically their usage spikes during the summer months and declines into winter. As a result they will purchase more futures for delivery in the summer months than for delivery in the winter months.



Contract Month	Contracts	Gallons	Litres	*Price gallons \$USD	*Price litres \$USD	
May-09	3	126,000	476,910	1.3458	0.3556	
Jun-09	4	168,000	635,880	1.3684	0.3615	
Jul-09	5	210,000	794,850	1.3994	0.3697	
Aug-09	5	210,000	794,850	1.4294	0.3776	
Sep-09	4	168,000	635,880	1.4604	0.3858	
Oct-09	2	84,000	317,940	1.4899	0.3936	
Nov-09	1	42,000	158,970	1.5189	0.4013	
Dec-09	1	42,000	158,970	1.5489	0.4092	
Jan-10	1	42,000	158,970	1.5779	0.4169	
Feb-10	1	42,000	158,970	1.5984	0.4223	
Mar-10	2	84,000	317,940	1.6084	0.4249	
Apr-10	3	126,000	476,910	1.6094	0.4252	
		32	1,344,000	5,087,040	<i>*Prices as of April 1st, 2009</i>	

Between April 1st, when the hedge was entered, and May 27th the price of Heating Oil has gone up by about 20 cents per gallon. The table below shows the unrealized gains on the hedge.

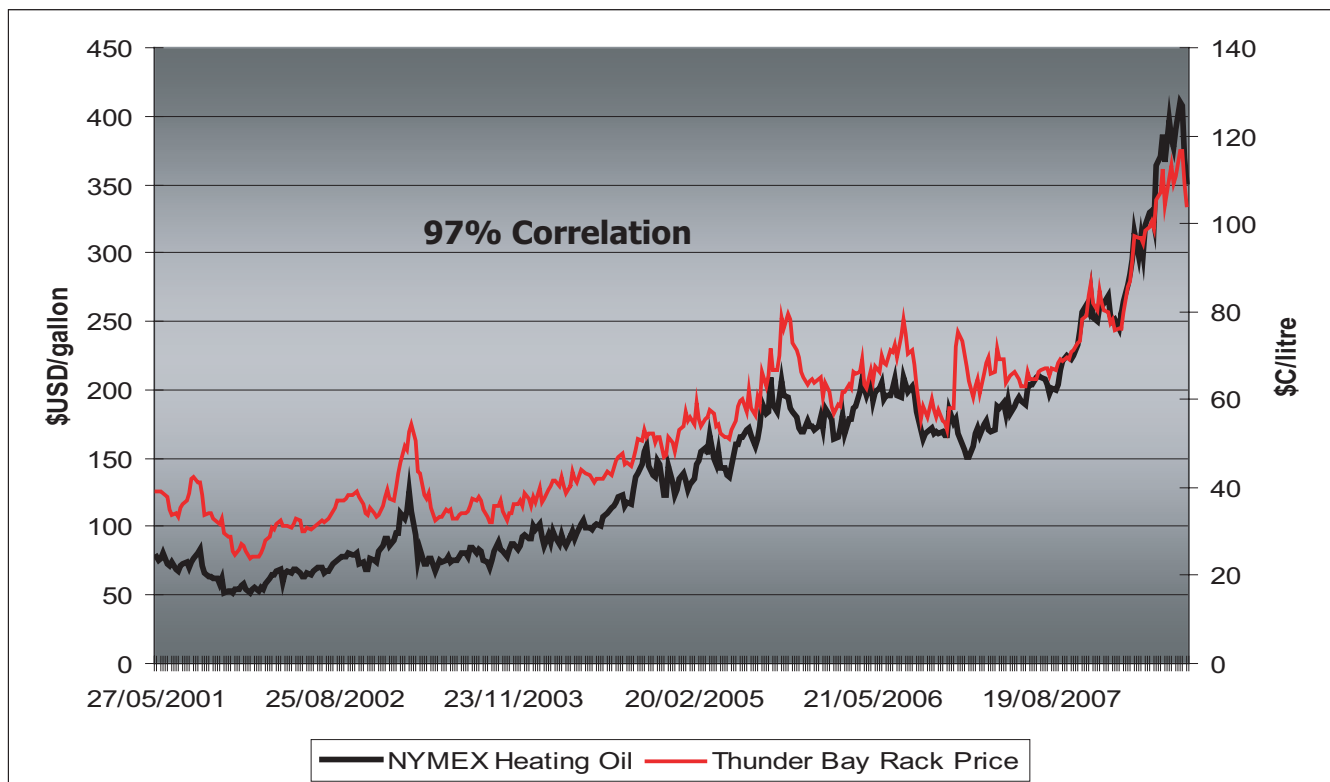
Contract Month	Contracts	Gallons	Litres	Entry Price gallons \$USD	*Current Price gallons \$USD	*Current Price litres \$USD	Unrealized Profit or Loss
<b>**May-09</b>	3	126,000	476,910	1.3458	1.3147	0.3473	<b>-\$3,918.60</b>
Jun-09	4	168,000	635,880	1.3684	1.5617	0.4126	\$32,474.40
Jul-09	5	210,000	794,850	1.3994	1.5883	0.4196	\$39,669.00
Aug-09	5	210,000	794,850	1.4294	1.6265	0.4297	\$41,391.00
Sep-09	4	168,000	635,880	1.4604	1.6680	0.4407	\$34,876.80
Oct-09	2	84,000	317,940	1.4899	1.7070	0.4510	\$18,236.40
Nov-09	1	42,000	158,970	1.5189	1.7395	0.4596	\$9,265.20
Dec-09	1	42,000	158,970	1.5489	1.7715	0.4680	\$9,349.20
Jan-10	1	42,000	158,970	1.5779	1.8035	0.4765	\$9,475.20
Feb-10	1	42,000	158,970	1.5984	1.8270	0.4827	\$9,601.20
Mar-10	2	84,000	317,940	1.6084	1.8405	0.4863	\$19,496.40
Apr-10	3	126,000	476,910	1.6094	1.8445	0.4873	\$29,622.60
<b>Total:</b>	<b>32</b>	<b>1,344,000</b>	<b>5,087,040</b>				<b>\$249,538.80</b>
					<i>*Prices as of May 27th, 2009</i>		
					<i>**Contract expiry</i>		

During this same period, the price of diesel fuel has gone up by a similar amount. The extra fuel expense incurred during this period will be offset by the profit realized on the futures transaction.

### Case Study #5 - Transport Inc.

Transport Inc. is a trucking company that operates in Northern Ontario and Western Canada. The widely fluctuating price of diesel fuel has made it increasingly difficult to manage costs, especially on fixed price contracts where they cannot levy fuel surcharges. In order to accurately forecast upcoming fuel expenses, they have decided to hedge next year's purchases in the futures market. The goal of the hedge is to minimize exposure to changing prices and provide stability to cash flows related to fuel expenses.

There is no futures market for the diesel fuel used by their fleet of trucks, however the price of the heating oil futures traded at the New York Mercantile Exchange is highly correlated with the price of diesel fuel.



<b>Heating Oil</b>	New York Mercantile Exchange (NYMEX)
<b>Trade Unit</b>	42,000 gallons
<b>Point Description</b>	\$0.01 per gallon = US \$420 per contract
<b>Contract Listing</b>	Each month out 4 years
<b>Trading Hours</b>	9:00am - 2:30pm (pit hours), 6:00pm - 5:15pm (electronic hours)
<b>Minimum Fluctuation</b>	0.01 cents per gallon = \$4.20 per contract
<b>Margin per contract</b>	US \$13,500

Transport Inc anticipates using 158,000 litres of diesel fuel each during each month of 2009, which equates to roughly one heating oil futures contract per month. In order to manage the hedge, they will liquidate one contract every month at the same time they procure their monthly diesel requirement.

Quarter	Litres	Gallons	Contracts	Contract Month	Price
Jan-09	158,000	41,744	1	Feb-09	3.6128
Feb-09	158,000	41,744	1	Mar-09	3.6028
Mar-09	158,000	41,744	1	Apr-09	3.5638
Apr-09	158,000	41,744	1	May-09	3.5283
May-09	158,000	41,744	1	Jun-09	3.5038
Jun-09	158,000	41,744	1	Jul-09	3.5003
Jul-09	158,000	41,744	1	Aug-09	3.5078
Aug-09	158,000	41,744	1	Sep-09	3.5218
Sep-09	158,000	41,744	1	Oct-09	3.5378
Oct-09	158,000	41,744	1	Nov-09	3.5533
Nov-09	158,000	41,744	1	Dec-09	3.5683
Dec-09	158,000	41,744	1	Jan-10	3.5803
<b>Total</b>	<b>1,896,000</b>	<b>500,925</b>	<b>12</b>		

Once the contracts have been purchased, Transport Inc. will receive a statement showing their positions.

TRADE	LONG	SHORT	CONTRACT DESCRIPTION	PRICE	DEBIT/CREDIT
SCOTIA MCLEOD					
ACCOUNT NUMBER: 5 82C 98999					
TRANSPORT INC			FOSTER KOWAL FUTURES GROUP		
87 HILL ST. N			(416) 945-4180		
THUNDER BAY ON P7A 5V6					
***** OPEN POSITIONS *****					
28/07/2008	1		JAN 09 HEATING OIL	3.6128	
28/07/2008	1		FEB 09 HEATING OIL	3.6028	
28/07/2008	1		MAR 09 HEATING OIL	3.5638	
28/07/2008	1		APR 09 HEATING OIL	3.5283	
28/07/2008	1		MAY 09 HEATING OIL	3.5038	
28/07/2008	1		JUN 09 HEATING OIL	3.5003	
28/07/2008	1		JUL 09 HEATING OIL	3.5078	
28/07/2008	1		AUG 09 HEATING OIL	3.5378	
28/07/2008	1		SEP 09 HEATING OIL	3.5218	
28/07/2008	1		OCT 09 HEATING OIL	3.5378	
28/07/2008	1		NOV 09 HEATING OIL	3.5533	
28/07/2008	1		DEC 09 HEATING OIL	3.5683	
28/07/2008	1		JAN 10 HEATING OIL	3.5803	
			COMMISSION		162.00 DR
			FEES		14.65 DR
			** US DOLLARS **		
BEGINNING BALANCE				200,000.00	
COMMISSION				162.00	
FEES				14.65	
INITIAL MARGIN REQUIREMENT				166,056.00	
TOTAL EQUITY				199,823.35	
ACCOUNT VALUE AT MARKET				199,823.35	

This case study should not be construed as an investment recommendation to you to engage in any transaction involving the purchase and sale of a futures contract and/or commodity option. The risk of loss in trading futures contracts or commodity options can be substantial. Investors should carefully consider the risks of investing in light of their investment objectives, risk tolerance and financial circumstances. This report may not be reproduced in whole or in part, or referred to in any manner whatsoever, nor may the information, opinions, and conclusion contained in it be referred to without the express written consent of ScotiaMcLeod.

## Exiting The Hedge

If the price of diesel has gone up since the hedge was established, Transport Inc. will pay more for the fuel on the road, but will realize an offsetting profit on their futures transaction. On the other hand, if the price of diesel goes down they will pay less for their fuel on the road, and realize a loss on the futures transaction roughly equal to their savings. A successful hedge will not produce excess returns, but will protect the hedger against losses resulting from unanticipated price increases.

### Examples:

#### April 12, 2009

The price of diesel has risen to \$1.50/litre, up from \$1.04 when the hedge was established. The 158,000 litres cost Transport Inc \$237,000, \$72,680 more than had been anticipated. Meanwhile the price of May heating oil also increased from 3.5038/gallon to 5.2038/gallon, for a net profit of \$71,400. Overall, Transport Inc. paid only \$1,280 more than anticipated.

28/07/2008 - Bought 1 May Heating Oil @ 3.5038  
12/04/2009 - Sold 1 May Heating Oil @ 5.2038  
  
5.2038 - 3.5038 = 1.7000 profit  
  
1.7000 x 42,000 gallons per contract  
=\$71,400 net profit

#### Sep 14, 2009

The price of diesel has fallen dramatically, now costing only \$0.86/litre. Transport Inc. pays \$135,880 for its diesel, \$28,440 less than had been expected. October heating oil has also fallen in price, from \$3.5378/gallon to \$2.8795/gallon. The loss on the futures transaction is \$27,648.60. Overall, Transport Inc. saved only \$791.40 when the price of diesel fuel declined.

28/07/2008 - Bought 1 Oct Heating Oil @ 3.5378  
14/09/2009 - Sold 1 Oct Heating Oil @ 2.8795  
  
2.8795 - 3.5378 = -0.6583 loss  
  
-0.6583 x 42,000 gallons per contract  
=-\$27,648.60 net loss