FLNA Fleet

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PEPSICO

pepsi. Frito Lay Tropicana QUAKER

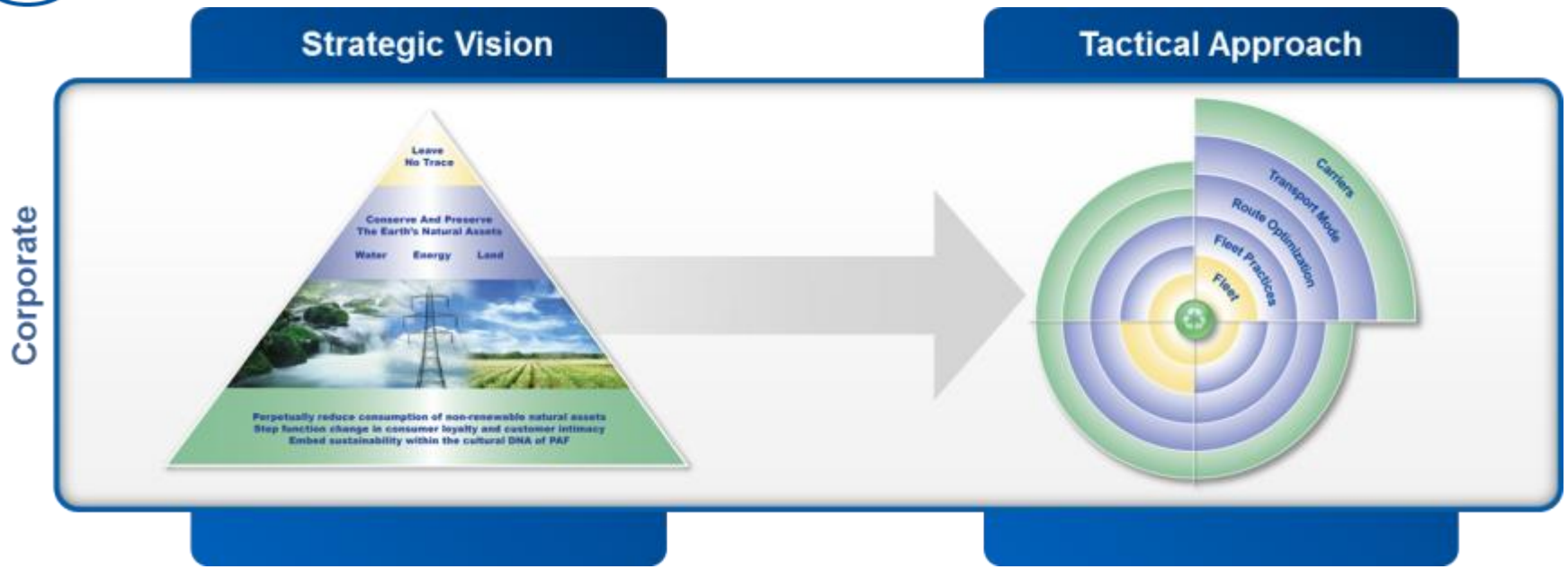
Frito Lay WORLD CLASS FLEET

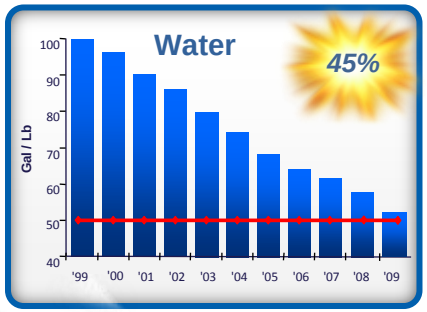
PepsiCo's Performance with Purpose…

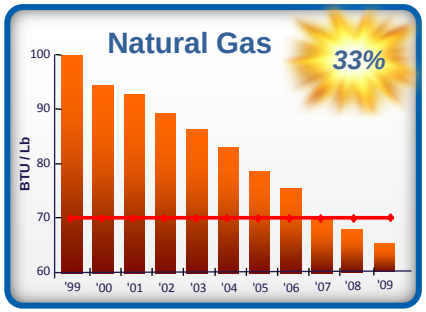
Performance with Purpose

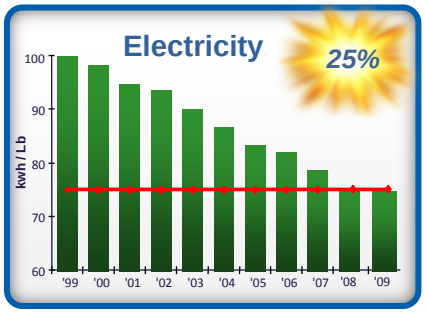
PEPSICO

Corporate Vision: Become A Pre-eminent Green Company









World Class Fleet

Reliability

Provide safe, dependable vehicles for all our associates and the customers we share the roads with everyday

Sustainability

Preserve the environment and reduce green house gases while becoming one of the most fuel efficient fleets in America

Capability

Build a powerful team of fleet professionals who continue to provide World Class Service

7th Largest Fleet in North America…

Todays Objective…

Provide practical "How To" example of implementation technique and tools…

Q: What is "Critical Mass" with an Alternative Fuel?

A: When it becomes "The Fuel" of choice and the predominant fuel in a segment of the fleet.

i.e. when most of your new vehicle purchases are the "alternative" fuel.

We Will Be Most Fuel-Efficient Fleet in America through People, Process, & Technology…

2008

2X MPG

6-7%

2010

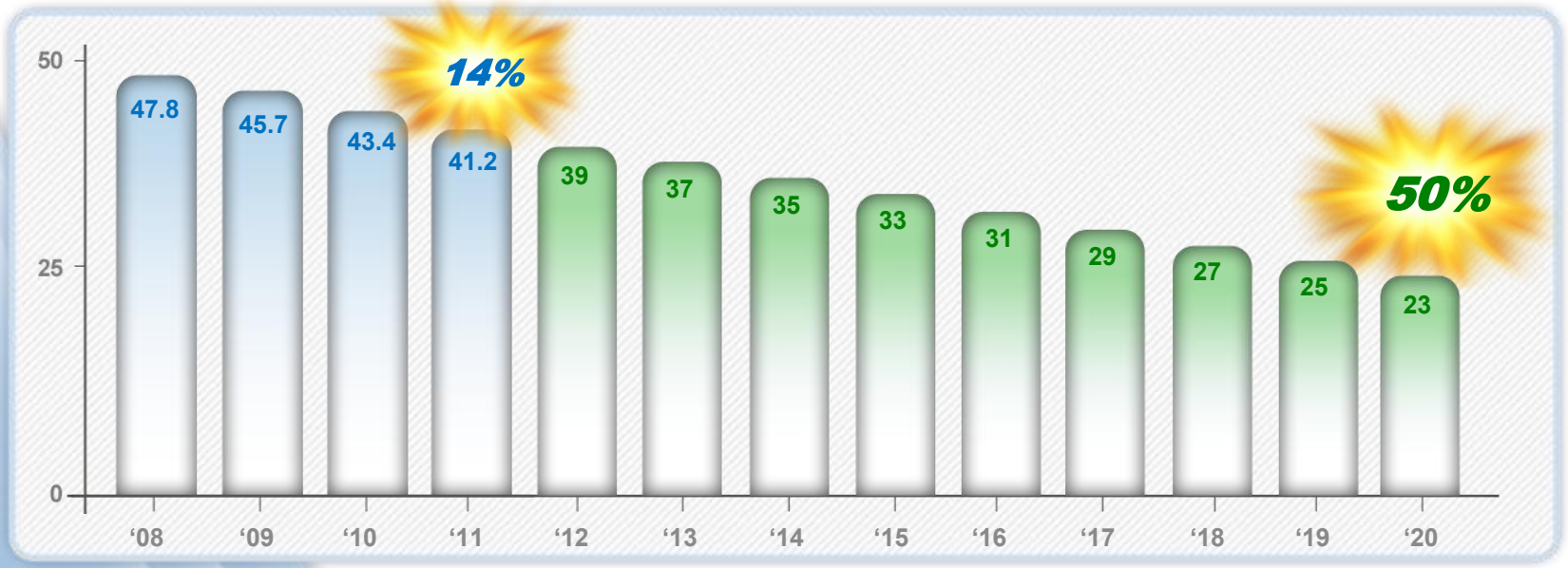
EV

8-10%

2012

CNG

2020



Electric Box Trucks…

Largest All-Electric Commercial Fleet in North America with 280 Vehicles by the End of 2013

$.30 per gal.

<75% GHG/mi

<89% $/mi

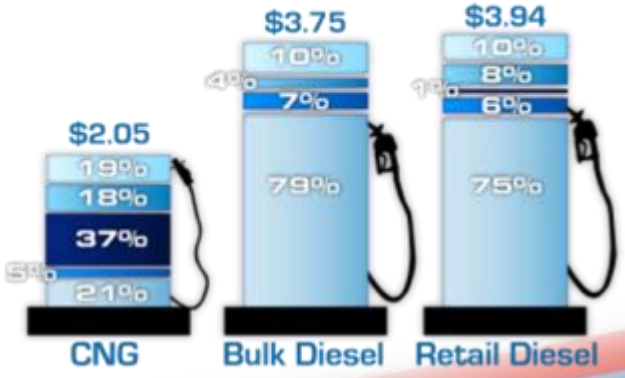
Why CNG…

Domestic

Cleaner

Abundant

Low Cost



How to implement NGV's?

Its about……

Which Fuel Where?

Equipment

Fuel

Maintenance

Business

Culture,

Organization &

Change Management

People

How to figure out what works where…

Segment your fleet and the fuel choices

Fuel	FL Application	Availability	Source	Renewable?	GHG/mi	Fuel $/mi	LCC/ROI	Future cost down?	Notes
Diesel	High mileage route, bulk & OTR	High	Import	NO			(baseline)		
Gasoline	Cars, route trucks	High	Import	NO			(baseline)		
Propane	route trucks	High	Domestic	NO					depends on annual miles and grant funding availability
CNG	OTR tractors	Low/Moderate	Domestic	Some					no funding requirements
Electric	mid-mileage bulk	High	Domestic	Some					currently still requires grant funding
Hydrogen	TBD	Low	Domestic	TBD			TBD	TBD	requires significant development
Ethanol/E85	Cars, route trucks	Moderate	Domestic	YES					net GHG uncertain, cost neutral
Biodiesel/B20	bulk & OTR	Moderate	Domestic	YES					net GHG uncertain, cost neutral
LNG	TBD	Low	Domestic	Some					
DME/syn diesel	TBD	Low	Domestic	TBD	TBD	TBD	TBD	TBD	less costly equipment

What's important?

Short vs long term

Cost vs annual miles

Renewable/Domestic

Domiciled vs. long-haul

Application	Annual Miles	Diesel	Gasoline	Propane	Electric	CNG	LNG	Hydrogen
Route Truck	Low							
	Med							
	High							
Bulk Truck	Low							
	Med							
	High							
Tractor	Low							
	Med							
	High							

?

?

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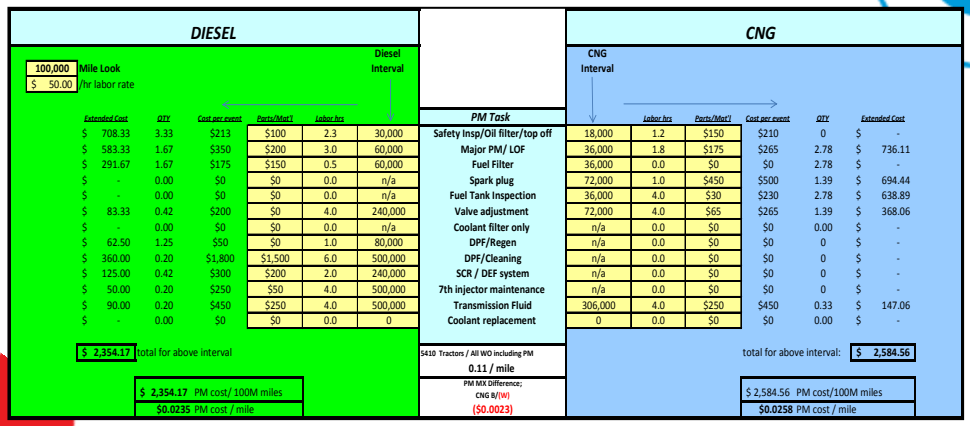
How to determine the economics…

- Side-by-side model
  - Investment
  - Fuel
  - Maintenance
- Maintenance & Garage conversion models
  - PM events
  - Frequency
  - Cost
  - Inside vs. outside labor

CNG Side-By-Side

Inputs in yellow
outputs/calculations in green

General	**Diesel**	**CNG**
# tractors	100	100
Base Unit MPG, diesel eq.	7.0	6.0
Engine Efficiency Factor	1.0	0.95
Transmission efficiency	1.0	0.90
Annual Miles/Unit	100,000	100,000
Total Annual Miles	10,000,000	10,000,000
Capital Investment		
Purchase Price ea- w/o incentives	$100,000	$150,000
Incentives - portion of incremental $		
Incentives - cash/rebate	$0	$1,000,000
Incentives - Tax credit	$0	$0
Garage Conversions	$0	$1,000,000
Net Capital Price	$10,000,000	$15,000,000
Book life, years	7	7
Fuel		
Fuel Price, $/gal (Bulk), GDE	$4.00	$2.00
Annual Fuel Used, gallons DE	1,428,571	1,666,667
Fuel cost/mi	$0.571	$0.333
Annual Fuel $	$5,714,286	$3,333,333
Repair & Maintenance		
Annual PM, base tractor	$206,878	$282,819
DEF	$114,286	$0
Subtotal, R&M	$321,163	$282,819
R&M, cost per mile	$0.03212	$0.02828
Other		
Fueling Frequency, x/wk	5.00	5.00
Labor hrs/fueling event	0	0.4
Labor rate, $/hr	$25	$25
Subtotal, fueling labor	$0.00	$260,000.00
SUMMARY - Annual/per truck		
Fixed expense (depr)	$1,428,571	$2,142,857
Fuel	$5,714,286	$3,333,333
R&M	$321,163	$282,819
Other	$0	$260,000
TOTAL annual	$7,464,021	$6,019,009
TOTAL per mi	$0.75	$0.60
GHG Generation, mTons	14528.6	12063.3
GHG g/mi/unit	1452.9	1206.3



- Applicable to any alt fuel
- Understand the main drivers
- Look for biggest opportunity areas
- Align with all functions on the numbers

CNG – How to source CNG Fuel

Our strategy is to pursue the anchor partner approach
Don't just sit and wait for fuel to come your way!

Type	Pros	Cons	Type of Agreement
Public fuel station	•No Capital •No volume commitment •No Operating complexity	•Location •Performance •Pricing	Best Negotiated Price; volume tiers may be available.
Anchor Partner	•No Capital •Pricing •Distance •Performance •Royalty potential	•Volume Commitment	Take-or-Pay Cost + (gas + capital + ops+ profit)
Internal Station	•Distance •Performance •Pricing	•Operational Complexity •Capital	Cost (gas + capital + ops & mx)

How to pursue stations: Anchor Partner Strategy – National RFP

- Commitment for fuel volume over 5 or 7 years.
- 14 potential sites for new stations
- Issued to national & local fuel providers
- Favorable Pricing, Station Performance, & Location
- Competitive bidding
- Awarded 7 stations for 2013

How to Manage the Change - People

- Engage drivers & technicians
- at site business reviews
- National Ops Meeting – Mgrs/Leaders
- Sign Boards
- National Calls – weekly, monthly

Over-communication!

- Training: leveraged OEs and NGVI
- Site Prep – countdown readiness
- Resourcing
  - Dedicated national program leader
  - Dedicated national technical expert

➢Invite & welcome people to challenge it

How to communicate – poster board examples

Simple, visual

Post in Driver's rooms, hallways, etc.

How to ensure the sites are ready – site Countdown/ checklist

Lead	Task Name	19-May	26-May	2-Jun	9-Jun
Michael B.	CNG Kickoff (QBR)				
David	Local Dealership identification				
Volvo/Agility	Meet with Local Dealership				
Michael B.	National or Regional OEM Field Service Contacts identified				
Lester W	Maintenance Training (Plan & Execute)				
	Tank inspection Training				
	Engine Training				
Jim J	PM interval identified				
Jim J	Communicate Road Side Assistance information				
Jim J	Educate site on fluid recommendations				
Lester W	PM Parts identified / ordered				
Lester W	CNG tools				
Michael B.	Tank Inspection Decals				
Michael B.	Provide Site OE contacts				
Michael B.	Site join national reliability call				
Jim J	PMI Method complete				
Jim J	Warranty Information communicated				
Michael B.	Payload / Range identified and communicated				
Local team	Determine runs CNG tractors are compatible to				
Hermes R	Garage assessment				
Local team	Site awareness communication - CNG Safety requirements				
Lester W	Shop facility warning signage				
Local team	Order appropriate CNG specific fuel cards				
Local team	Establish fuel protocol, primary, secondary, in-route				
Lester W	Provide Site with CNG Maintenance video				
Michael B.	Provide Site with CNG Safety / Operation Video's				
HQ/ Site	Driver Safety / Emergency Procedure				
Site	Ensure Site Saftey Manager is involved on CNG Project				

At launch: On-site HQ project team representation

High urgency and touch on any reliability or fuel issues (w/vendor support)

How to get a site ready – Demo truck

2 Demo tractors

Send to sites ahead of launch

Practice & get comfortable with driving and fueling

Leasing/Renting may be a viable option

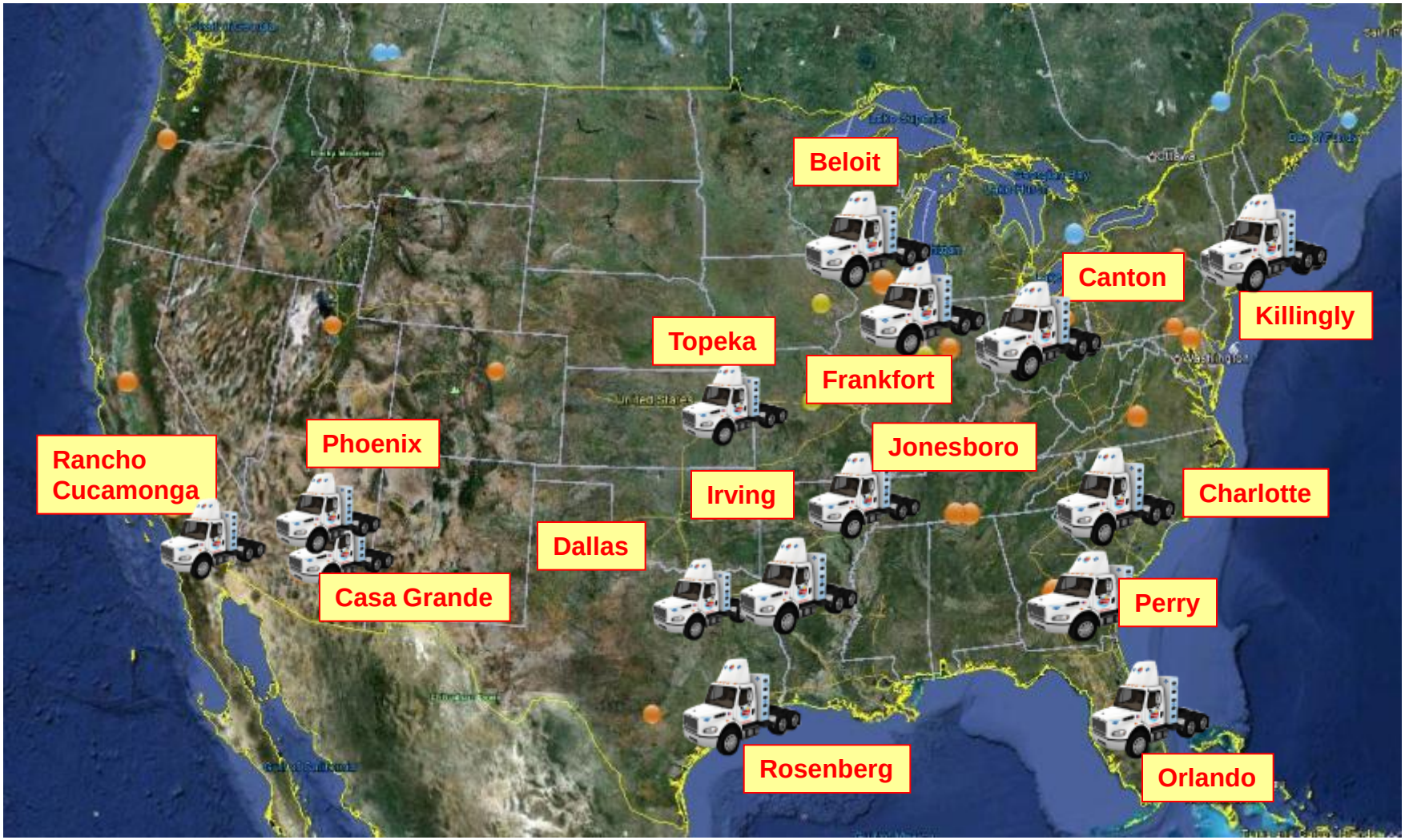
How to Educate

- Driver Round Tables/Meetings
- Field Participation in Pilot Reviews & Conferences
- Training/Familiarization Videos

Fueling Process Training
Safety Overview

Fuel Properties
Truck Safety
Tank Design & Testing

How has it worked?
CNG Sites 2013: 208 units = ~20% of fleet at 50% of locations



2013: 70% of new units are CNG 2014- : 80+%

Is the Frito-Lay fleet at " Critical Mass"

EV – close but not quite yet

Propane – close but not quite yet

CNG Class 8 – YES!

- ✓ Which Alt Fuel Where?
- ✓ Equipment
- ✓ Fuel
- ✓ Maintenance

- ✓ Culture,
- ✓ Organization &
- ✓ Change Management

Questions?