



Eden Energy Ltd

**A Major Alternative Energy
Opportunity**

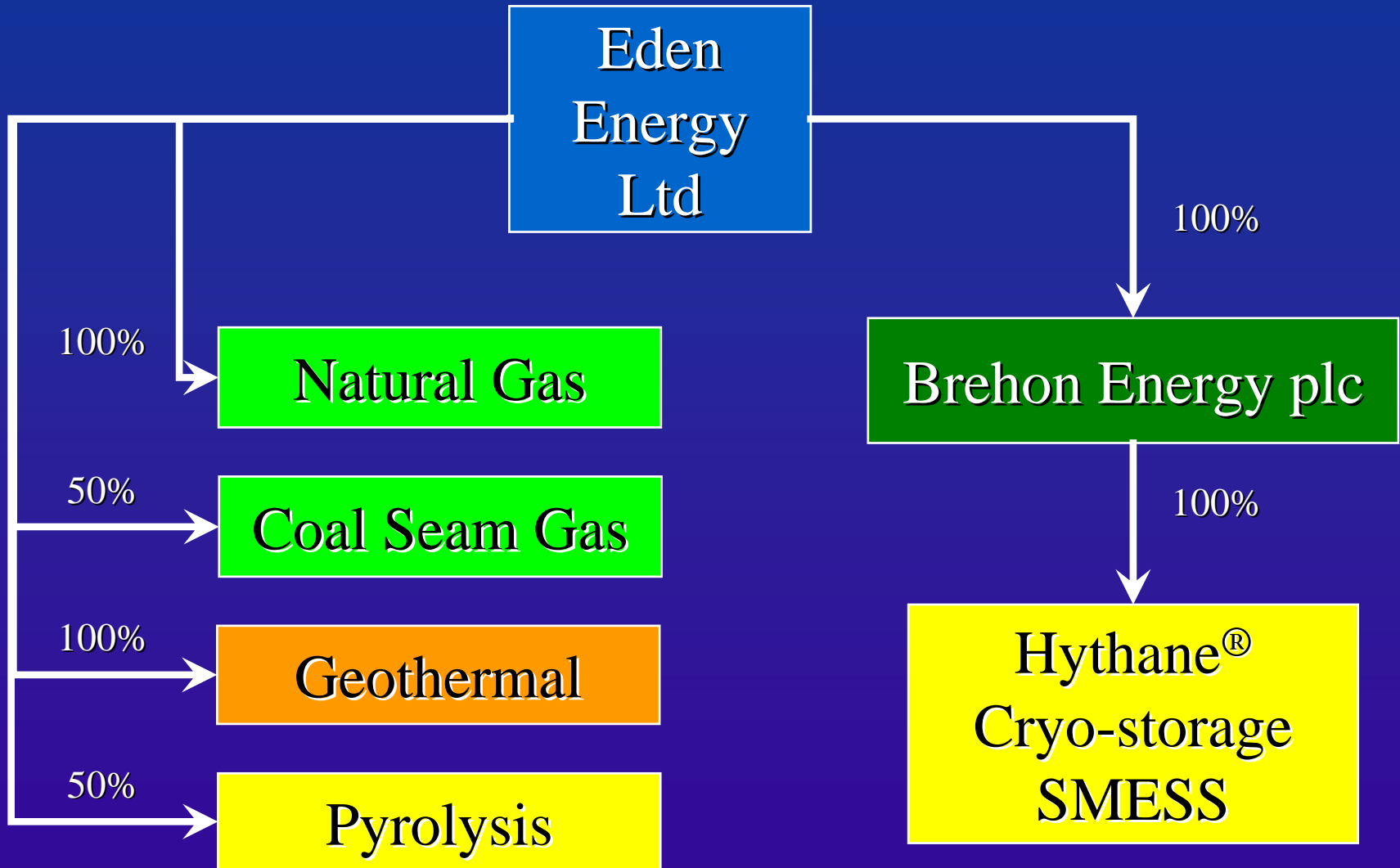
Presentation by:

Greg Solomon, LLB

Executive Chairman

30 November 2006

Corporate Overview



Hydrogen & Hythane[®]

Hythane Company LLC

A wholly owned subsidiary of Eden Energy/Brehon Energy

PRODUCTS

- **Hythane®** technology- a mixture of natural gas & hydrogen
- **Hythane®** - production and dispensing equipment
- **Cryogenic technology** - fuel storage/pipes/valves
- 14,000 sq. ft. R & D Facility in Littleton, Colorado
- World class team of employees and consultants
- Patents/ trademarks

World Class Technical Team

- **Frank Lynch**- invented Hythane, 35 years H₂ experience
- **Dr Tom Flynn**- 50 years NASA related H₂ projects
 - wrote leading texts on cryogenic engineering
- **Dr Bob Rudland**- 30 years experience in H₂ in aerospace
- **Dr Glen McIntosh**- 50 years NASA H₂ fabrication expert
- **Greg Egan**- 25 years experience in H₂
- **Roger Marmaro**- co-invented Hythane-15 years
- **Justin Fulton**- leading gas combustion engineer
- **Steve Hensley** - 25+ years in cryogenics

Patents and Trademarks

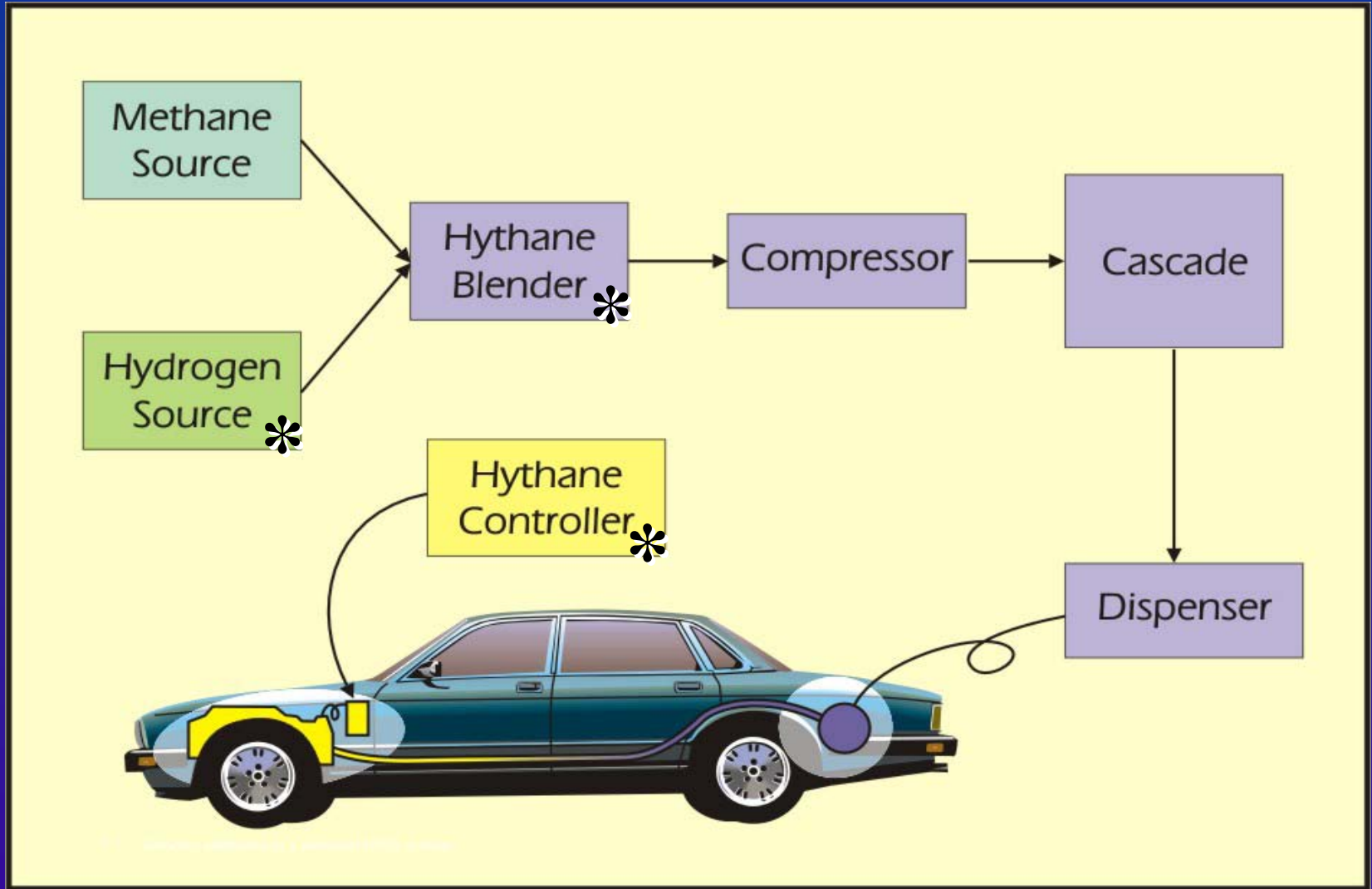
- Hythane® Patent- USA (granted)
- Hythane ® Blender- Worldwide (application)
- Cryogenic Storage Tank- Worldwide (application)
- Portable Superconducting Battery- Worldwide(application)
- Cryogenic Hythane (LNG/ H₂)- Worldwide (application)
- Hythane ® Operating System- Worldwide (application)
- Hythane ®Trademark-USA, Canada, Australia(granted)
 - India, China, Singapore(application)

Further patents under development

Hythane®-the transition fuel

- Low cost technology proven over 15 years
- Uses existing Natural Gas/H₂ infrastructure
- 5-7% by Energy H₂/Natural gas (no high purity required -can use waste H₂ streams)
- 50% NO_x reduction compared with NG
- Suitable for CNG / LNG/Dual fuel

Hythane[®] Operating System



Target - all Natural Gas vehicles, with buses as the primary market

*** = additions/modifications to a standard Natural Gas system**

CNG / Hythane® Dispensers

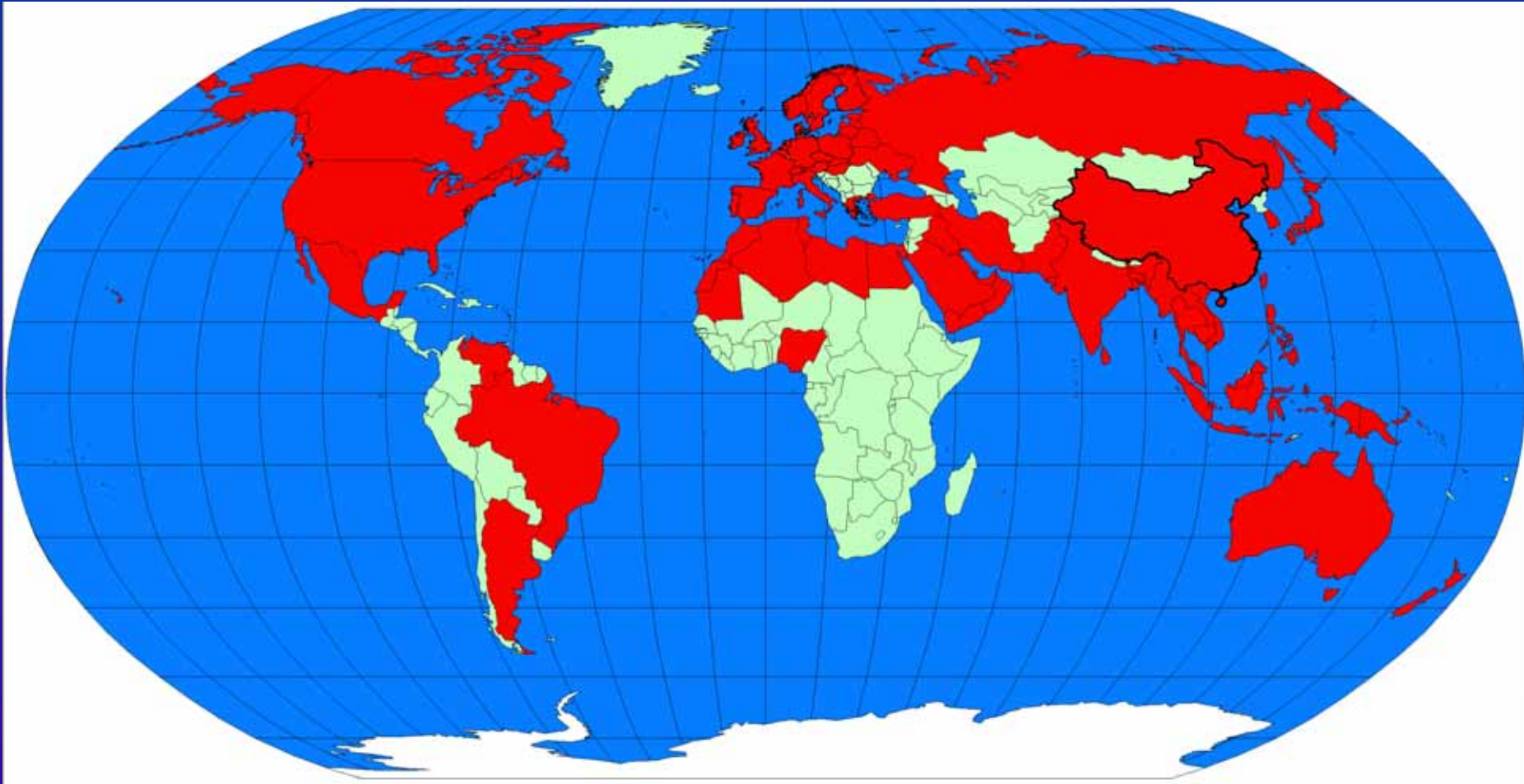


LNG Vehicles in California

LA/DoE Clean Corridor Project



Target markets for Hythane®

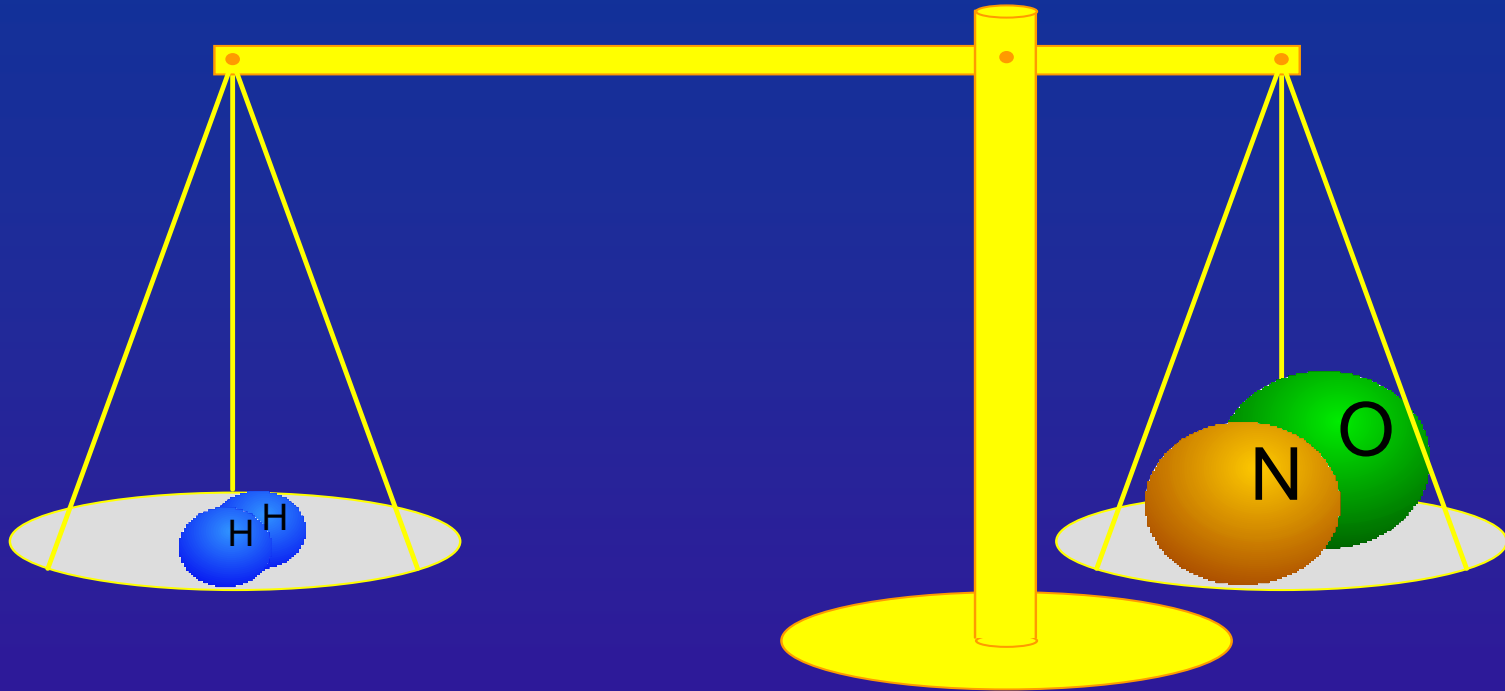


All Natural Gas Markets

Factors driving transition to Hydrogen

- Peak in global oil production / oil prices
- Concern over dependence on Middle East oil
- Concern over global climate change / warming
- New emission standards - US/ Europe
- Local Air Pollution- NO_x

Hythane® - leveraged use of hydrogen



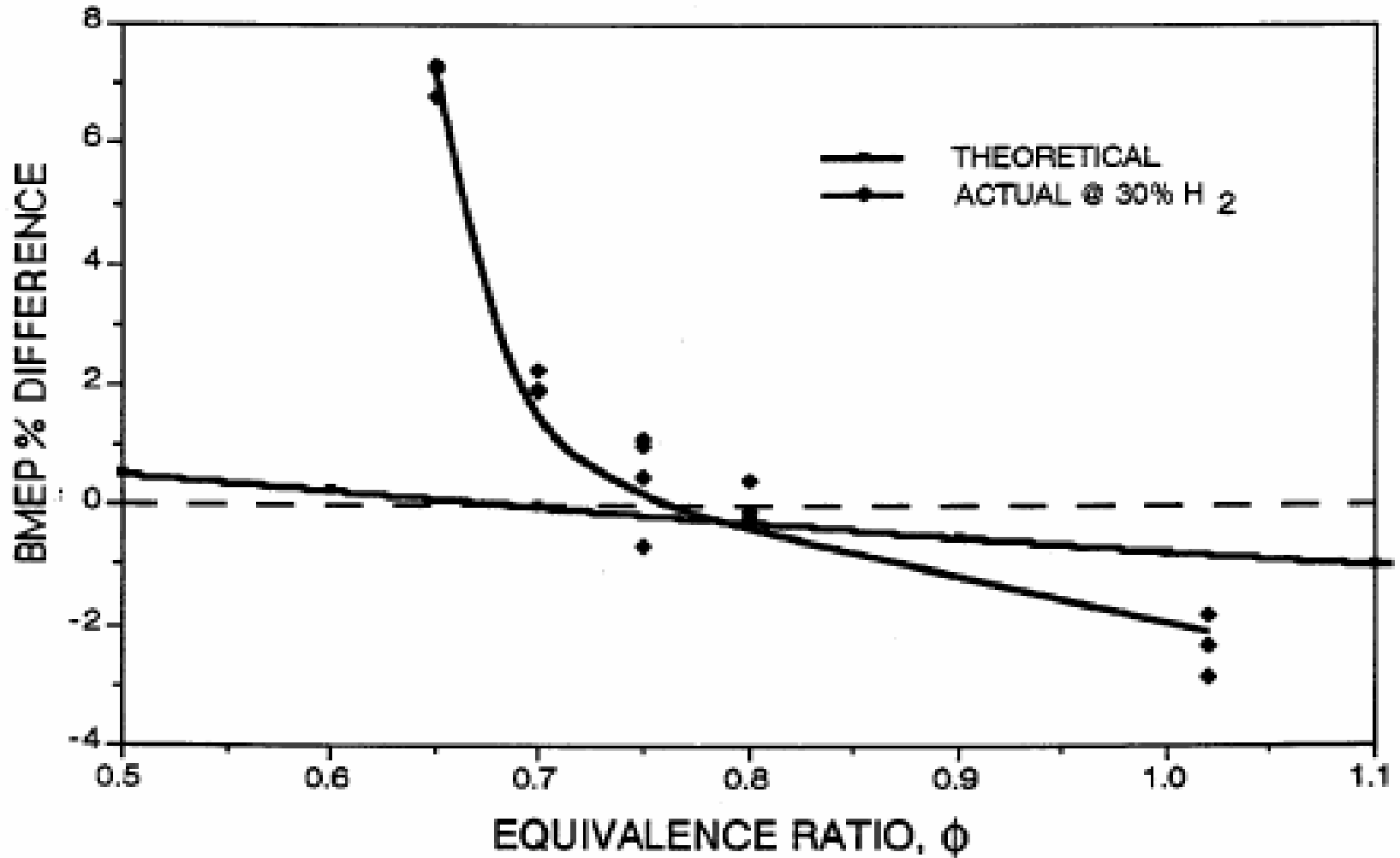
5-7% hydrogen(by energy)= 50% NO_x reduction

Hythane® reduces NO_x by 7+ times more than if used as pure H₂

Suitable Hydrogen Sources

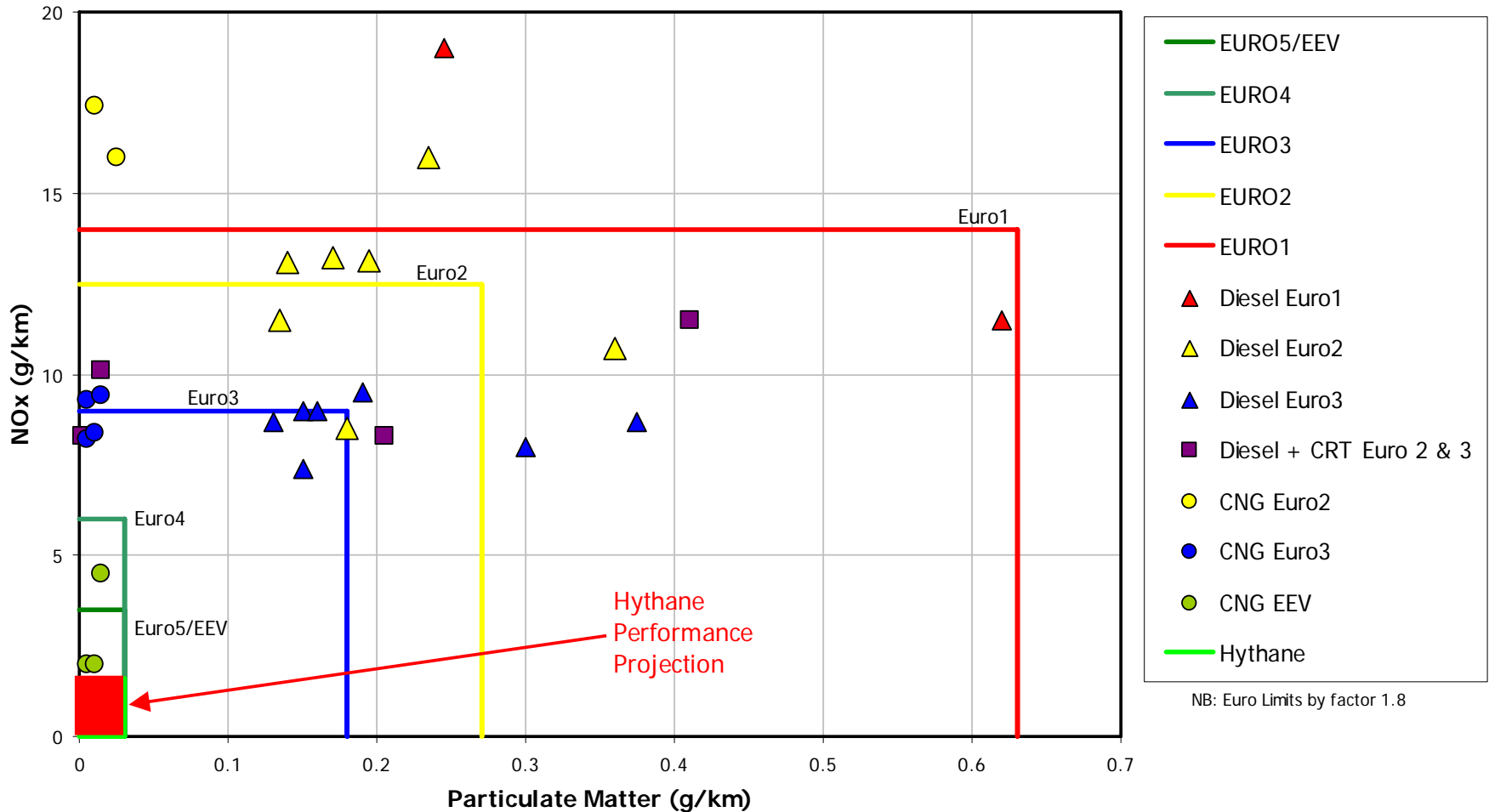
- Production from Natural Gas reformation
- Electrolysis
- Industrial Waste H₂ streams
- (e.g. Steel mills, Chlor-alkali and Glass Plants)
- Low purity (90% +) H₂ suitable for Hythane ®

Effect of Hydrogen Addition Near Lean Limit



Hythane® meets Euro 1 - 5

NO_x & PM emissions over the Braunschweig city bus cycle



Hythane® Projects

- 1990 HCI pickup truck – first Hythane® vehicle
- 1992 Denver - 3 light truck comparison project
- 1995-96 Montréal - 2 bus pilot project
- 2002-04 Palm Springs, California - 4 bus pilot project
- 2005 China - Yuchai engine conversion
- 2006-07 Projects planned- USA, India, Australia

First Hythane® Vehicle 1990



5% Hydrogen (by Energy Content), Balanced CNG

Tanks Under Truck Give 250 km Range

Denver Hythane® Project 1993



5% energy H₂ in CNG

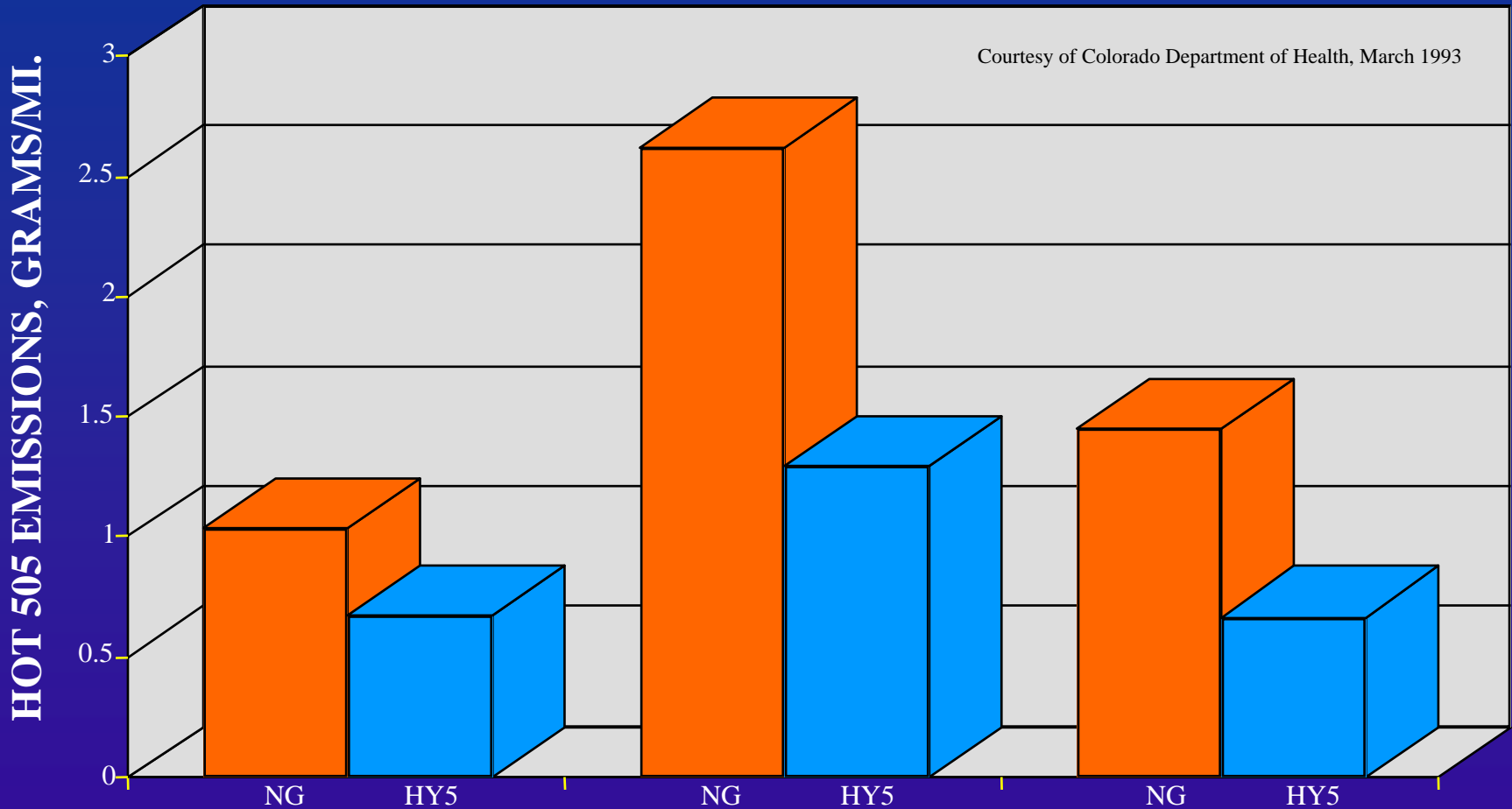
Hythane® Bus Projects

Montreal 1993-1995



California 2002-2004

Denver Hythane® Project Results



THC

CO

NO_x

50% Reductions in CO and NO_x, 5% H₂: Leverage Factor = 10!

Hythane[®] Strategy



Yuchai Hythane[®] engine

Objective:

- Reduce NO_x
- Reduce THC
- Increase Efficiency

3 interdependent parameters in adjusting a lean burn CNG engine for Hythane[®]. Changing any one affects the others.

