



***Eden Energy Ltd***

**A Leading Alternative  
Energy Company**

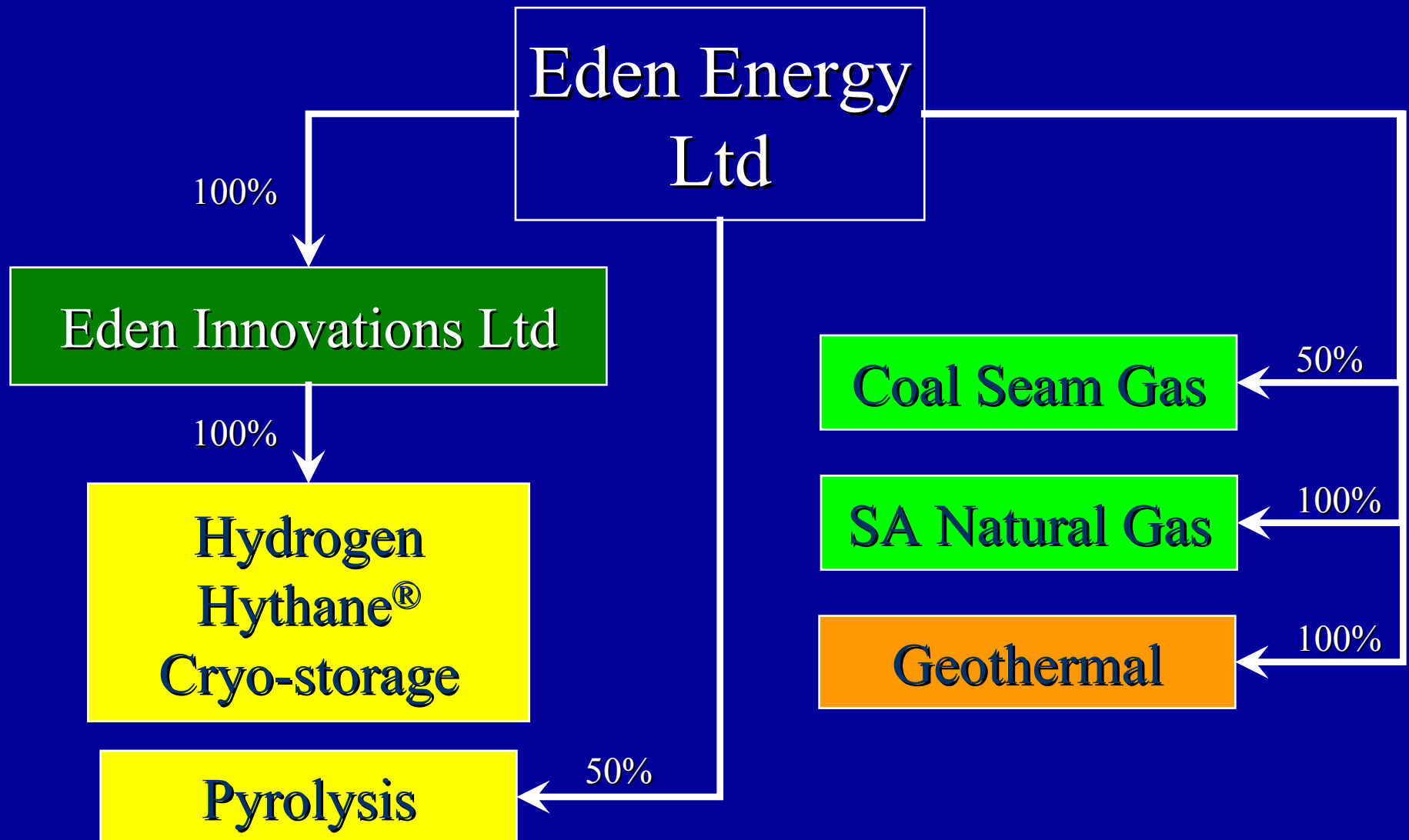
Presentation by:  
**Greg Solomon, LLB**  
Executive Chairman  
23 November 2007

# DISCLAIMER- Forward looking Projections

Whilst reasonable care has been taken in compiling the forward projections in this presentation, they necessarily are based on many assumptions and factors that are beyond the control of the company and accordingly there is no representation or warranty given that these projections will be achieved. There are many uncertain risk factors, particularly related to the Indian market, which are beyond the control of the company and which could significantly impact on both the prices that are achieved, the sales turnover and the production and operating costs. These risks include delays in the rollout of the Natural Gas pipeline system and the accessibility of Natural Gas in India, limitations in the available quantities of Natural Gas, increases in the price of Natural Gas, reduction in the price of alternate fuels such as diesel, changes in Indian Government or Indian Supreme Court policies and rulings, market competition, shortages in raw materials and labour, increases in cost of labour and materials, national or international political or economic instability, problems with reliability of equipment produced and sold, warranty claims, currency fluctuations, restrictions on foreign investment, disputes with potential joint venturers, market resistance to the products or services offered, lack of available capital or finance, restrictions on international travel and similar factors beyond the control of the company. For these reasons, all potential investors and others must satisfy themselves on the reliability of these forward looking projections before acting upon any information provided to them in relation to forward looking projections, and neither the company nor any of its officers make any representations, warranties or commitments that these or any other forward projections will necessarily be achieved.



# Eden Energy Corporate Overview



# **E** Hydrogen & Hythane<sup>®</sup>

**Objective - to be the world's leading  
hydrogen technology company specialising  
in:**

**Production, Storage, Transport & Use  
of Hydrogen**



# Eden Group Companies

## WORLD CLASS HYDROGEN TECHNOLOGY

- **Hythane Company LLC** (Denver, Colorado)
  - Hythane® production and use
- **HyRadix Inc** (Chicago, Illinois)
  - On site hydrogen production systems
- **Eden Cryogenics LLC** ( Columbus, Ohio)
  - Cryogenic storage technology and production



# Hythane Company LLC

A wholly owned subsidiary of Eden Energy

- **Products/ Patents**

  - US/ Canadian Patent on fuel blend

  - Patent on CryoHythane®

  - Patented Hythane® blending equipment

  - Patented Hythane® production equipment

  - Patented Engine conversion technology

  - Hythane® Trademark

- **Major Markets** → India, USA, China, Europe

- **World class team** of employees and consultants



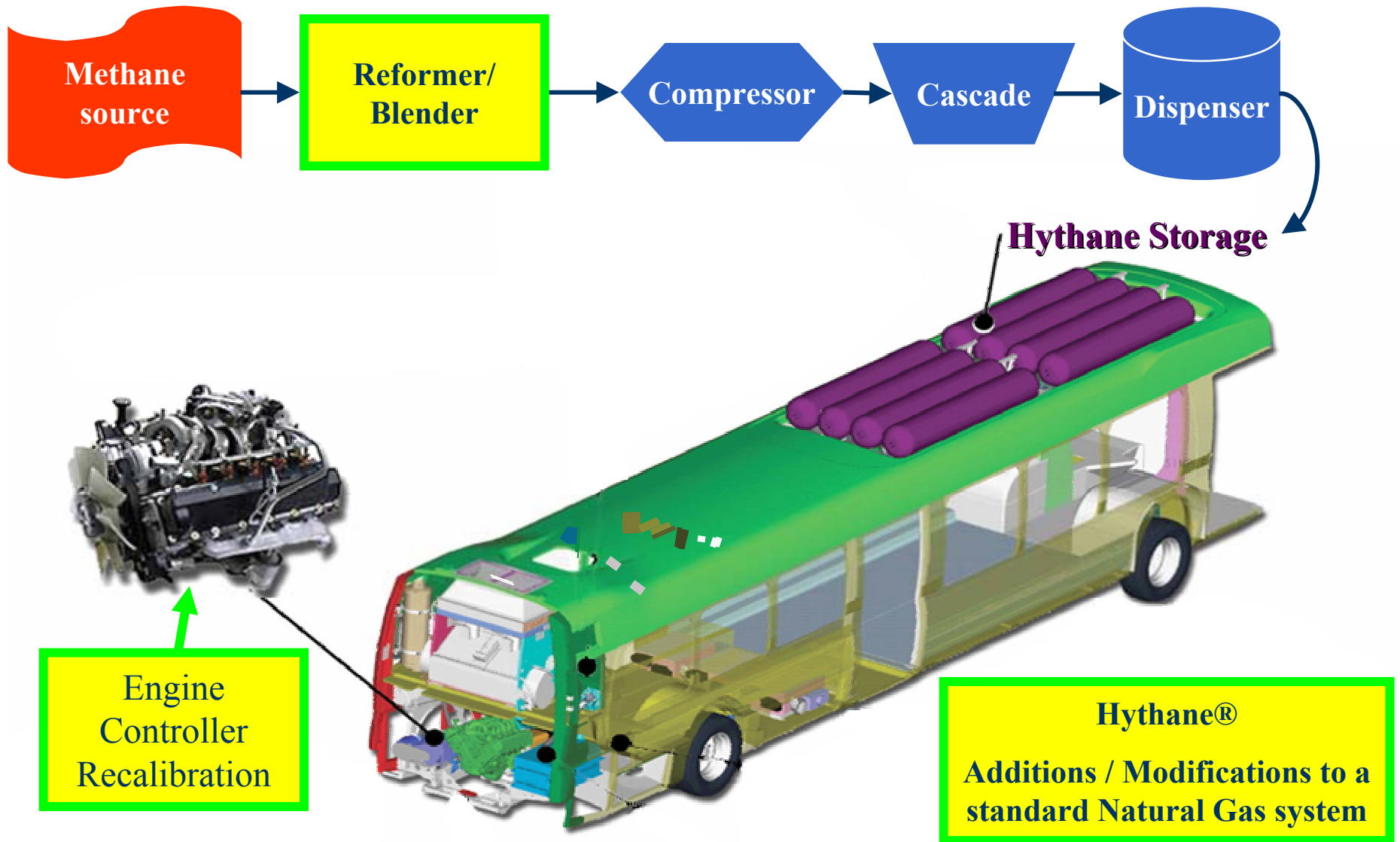
# Hythane® - the transition fuel

## *Hydrocarbons to Hydrogen*

- Low-cost premium blend of Natural Gas (5-7% H<sub>2</sub>)
  - ultra-low emissions (50% NO<sub>x</sub>)
  - high efficiency
- Uses existing Natural Gas infrastructure
- Achieves new low emission standards
- Suitable for use with CNG / LNG / Dual fuel
- Proven by over 15 years real world testing
- Everything in place for rollout in India



# Hythane Operating System







# Hythane® Applications

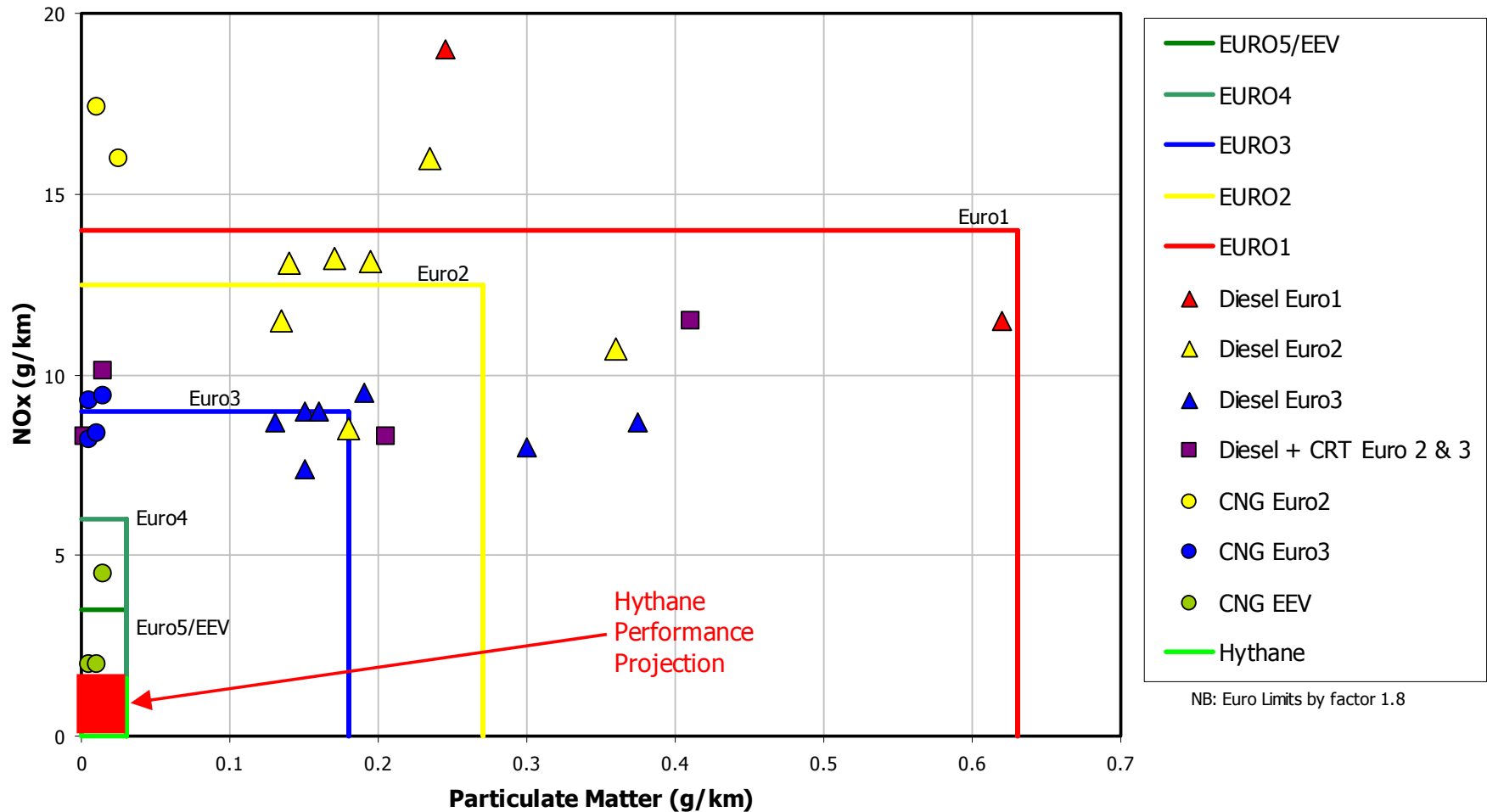
- CNG/ LNG/ Dual Fuel
- Buses
- Generators/ gas turbines
- Taxis, auto-rickshaws, automobi
- Trucks
- Locomotives





# Hythane® meets Euro I to V

## NO<sub>x</sub> & PM emissions over the Braunschweig city bus cycle





# Hythane® Bus Projects

Montreal 1993-1995



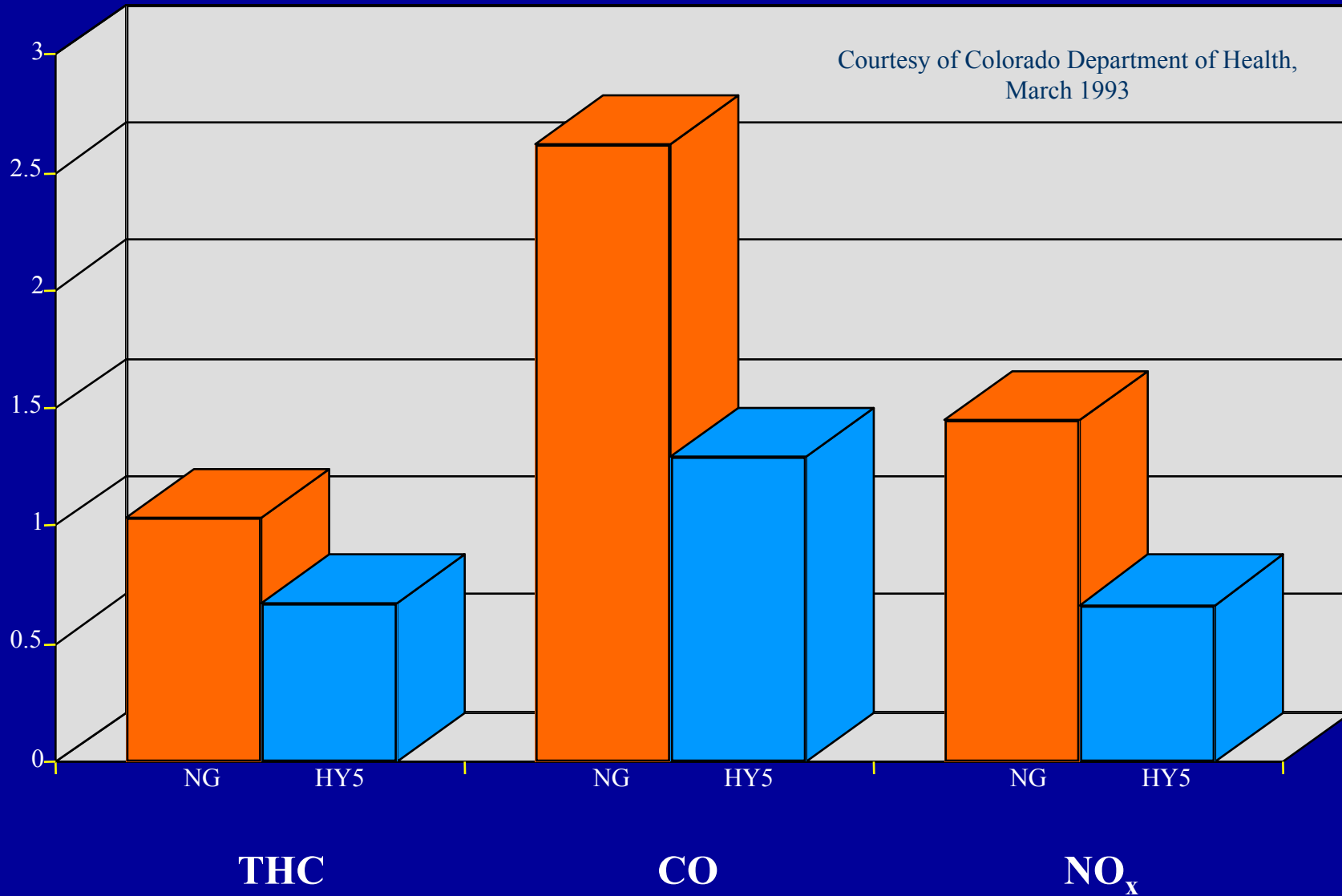
California 2002-2004



# Denver Hythane® Project Results

HOT 505 EMISSIONS, GRAMS/ML.

Courtesy of Colorado Department of Health,  
March 1993



50% Reductions in CO and NO<sub>x</sub>, 5% H<sub>2</sub>: Leverage Factor = 10!



# Suitable Hydrogen Sources

- Reforming of Natural Gas ( produces  $H_2 + CO_2$  )
- Pyrolosis of Natural Gas (produces  $H_2$  & C)
- Electrolysis of water (produces  $H_2$  &  $O_2$ )
- By-product  $H_2$  from industrial waste streams
  - Low purity  $H_2$  (90% +) suitable for Hythane®



# HyRadix Inc

- World leading on-site hydrogen production
  - industrial applications, fuel cells, transportation
- Operating systems in USA, China and Malaysia
- Over US \$40 million spent on product development
- Chicago based world class team of employees
- Significant Patents and Trademark



Proven, economic on site hydrogen generation systems

→ Today for transportation fuel and merchant industrial hydrogen

→ Tomorrow for the entire hydrogen economy



## Customer Case Study



- SunLine Transit Agency –California
  - Primary H<sub>2</sub> Supply
  - H<sub>2</sub> vehicles in daily operation
- Demonstration Unit Performance
  - In operation since April 2004
  - 10,000+ hours of operation
  - 120,000 miles driven since 2004
  - 50% hydrogen cost savings
  - 50% NO<sub>x</sub> reduction
- Commercial Unit Installed August 2006
  - First large-scale commercial H<sub>2</sub> filling station in USA





## Aptus / Adéo Performance

- Natural Gas or LPG Feed
- Hydrogen Capacity
  - 50 Nm<sup>3</sup>/h - 100 Nm<sup>3</sup>/h
- Product Purity: 99.95% - 99.999%
- Operation
  - Fast start-up times
  - Operates at 25-100% of capacity
- Packaging
  - Skid mounted
  - Installation – 2 weeks
  - Footprint: 7 ft x 20 ft





# Indian Hythane® Market

- Markets for Hythane® (CNG / Dual Fuel/ LNG)
  - buses / taxis/ trucks / autorickshaws
  - generators
  - locomotives
- Products
  - Hythane® fuel
  - H2 reformers
  - Blenders
  - Engine conversions



# Factors Driving Hythane® in India

- Government H<sub>2</sub> plan- 1 million Hythane® vehicles by 2020
- Significant supply of domestic / imported Natural Gas
- Low cost of Natural Gas 40% less than diesel
- Natural Gas supply to increase from 5M tpa to 25M tpa and infrastructure availability to 60% of 1.1 billion population in 5 years
- Extreme air pollution( photochemical smog) and Supreme Court rulings
- Natural Gas MRT bus systems planned in over 50 cities.



# Indian Hythane® Marketing Progress

Govt Policy Hythane® to be vehicle CNG standard

2020 target 20% of all vehicles (>1 million Hythane® vehicles)

-buses, taxis, trucks, autorickshaws

- generators/ locomotives (CNG / Dual Fuel)

- 10 year agreement with Ashok Leyland
  - 80% of Indian Government bus fleets
  - bus/ genset engine conversion in progress
- Prelim agreement with Cummins- 167,000 gensets
- Agreements with GSPC and Larsen& Toubro
- Indian production of hydrogen reformers commences
- Bus and genset demonstration projects for 2008



# Indian Hythane® Market Targets

Buses ( Potential market 500,000 +) (CNG /LNG)

- Carbon Credit potential (<15 tonnes CO<sup>2</sup>/ bus / year )

Generators ( Potential market 20,000 +) (CNG / Dual Fuel)

- Carbon Credit potential (<530 tonnes CO<sup>2</sup>/ genset /yr)

## Targeted Market Penetration

	Buses	Gensets
2008	100	10
2009	1,000	200
2010	5,000	500
2011	10,000	1,000



# USA Hythane® Market

- First DoE contract for Hythane®/ hydrogen engines
- MOUs for several demonstration projects signed/  
under negotiation in California /northeast USA- first  
project expected before end 2007
- New tough 2010 Californian emission standards
- High Petrol / Diesel prices v low Natural Gas prices



# Chinese Hythane® Market

- Huge market for transport and generators
- Extreme air pollution
- Preliminary Approval for 16 City Clean Air Program
- Six MOUs signed in 2005
- Yuchai engine conversion - Euro IV equivalent emission levels on Hythane®
- Government and Academic Support
- Large / cheap Natural Gas supply
- Current renewed interest



# Hythane® Business Model

- Strategic partnerships
- Multiple revenue sources
  - Hythane® fuel
  - Carbon Credits
  - Engine conversions
  - Commissions on engine controllers/ engines





# Hydrogen Production using Low Temperature Pyrolysis



# Pyrolysis - 50% JV with UQ

- Produces  $H_2$  & solid Carbon from  $CH_4$  (no  $CO_2$ )
- Low temperature, Low energy, Low cost
- Carbon Credits / Huge potential - No  $CO_2$
- High value solid carbon production
- Patent application lodged
- Scale-up/commercialisation work underway



South Wales  
Coal Bed Methane  
&  
Petroleum

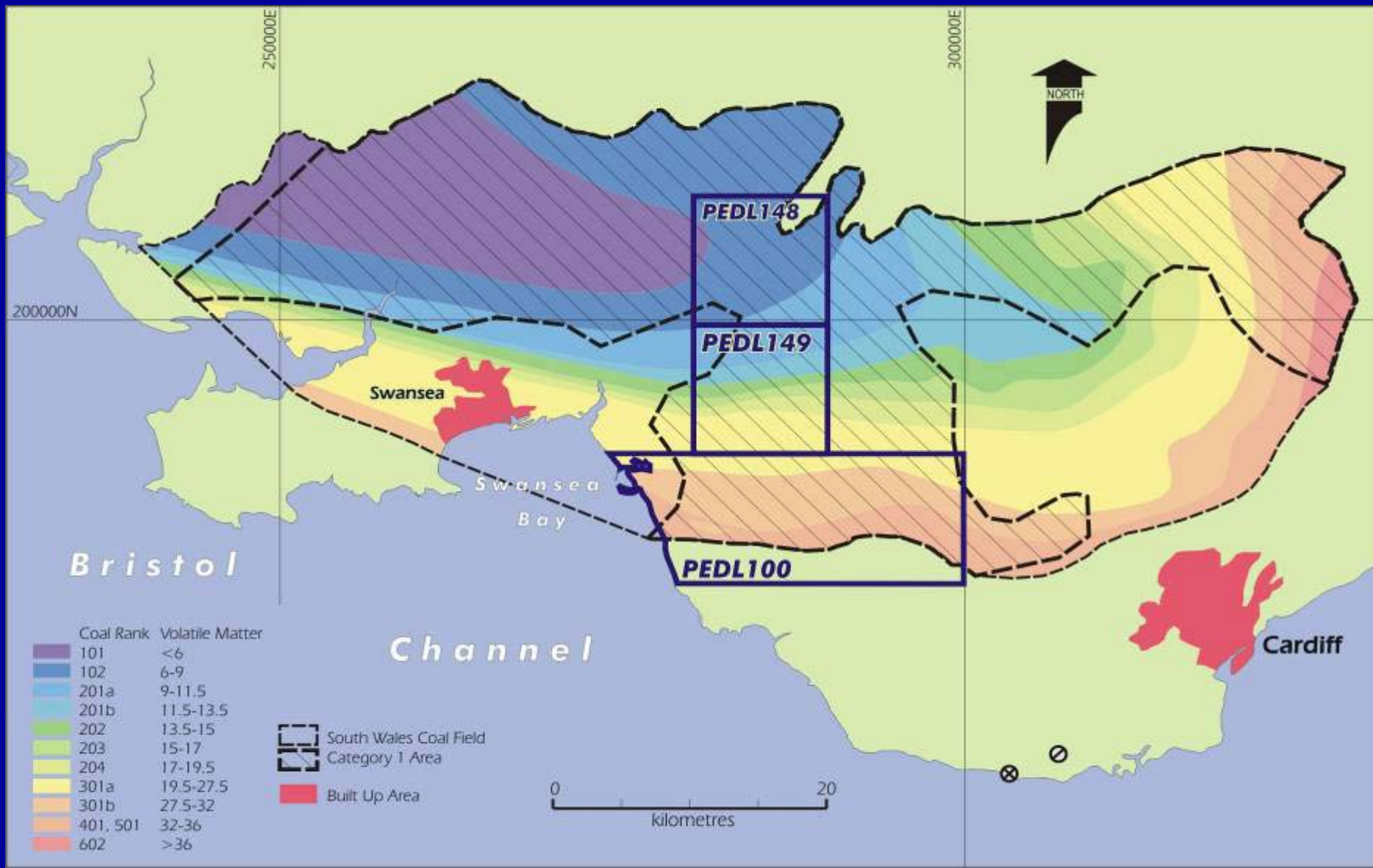


# South Wales

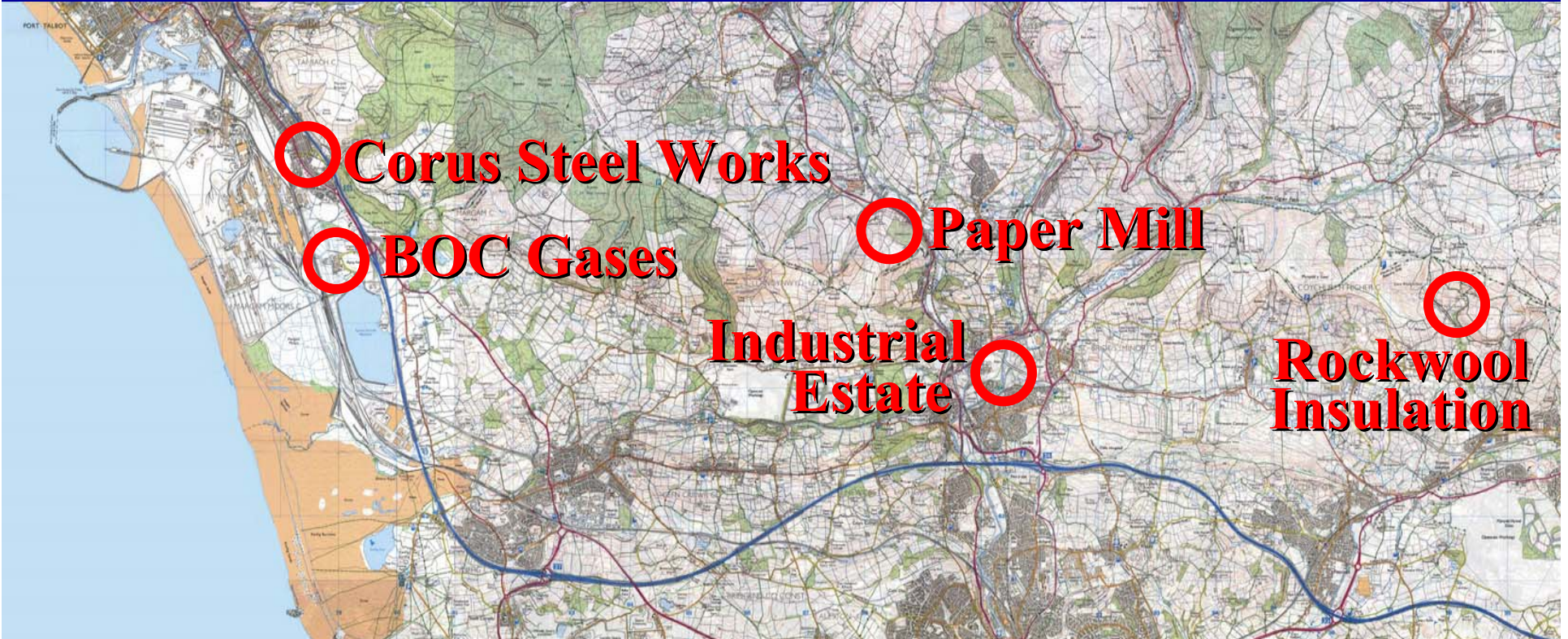
- Drilling 3 CSM Wells – Q2 2007- Q1 2008
  - very encouraging gas content/ permeability from 1st well
  - 2nd well underway- all results by March 2007.
- Drilling AMM – Q4 2007
- Seismic survey - Conventional – Q1 2008
- Drilling Conventional petroleum targets - 2008
- Large accessible market/ high prices
- Negotiations with multinational majors underway

# E

## South Wales Coal Rank and Volatile Matter



# **E** South Wales Coalfield & Potential Markets



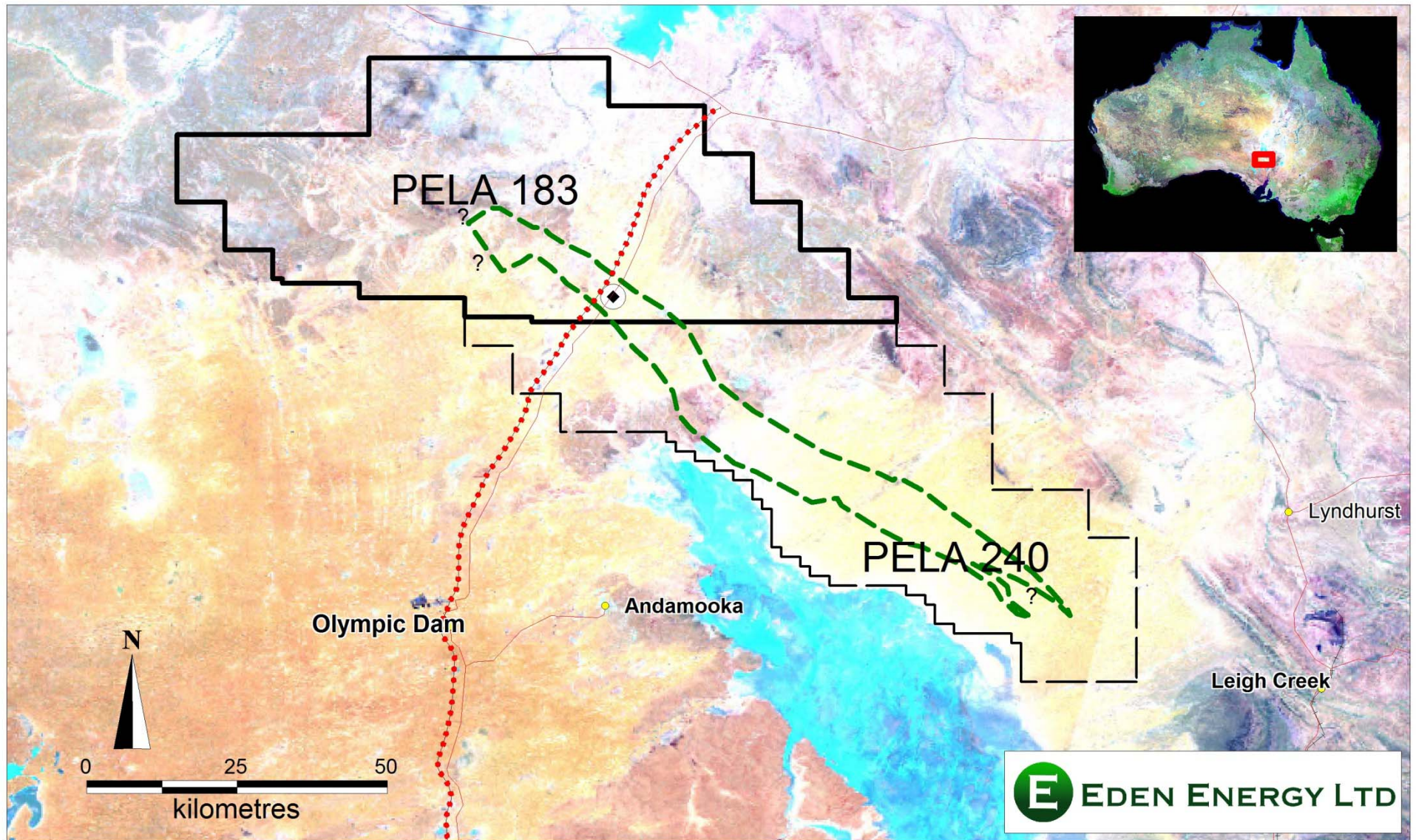


# SA Natural Gas

- First licence ( PEL 183) granted
- Totally untested structure- 100km x10km
- Olympic Dam- huge market- 60 kms away
- Potentially several tcf in structure
- Possibly will seek JV partner
- Drill well in 2008 when drill rig available



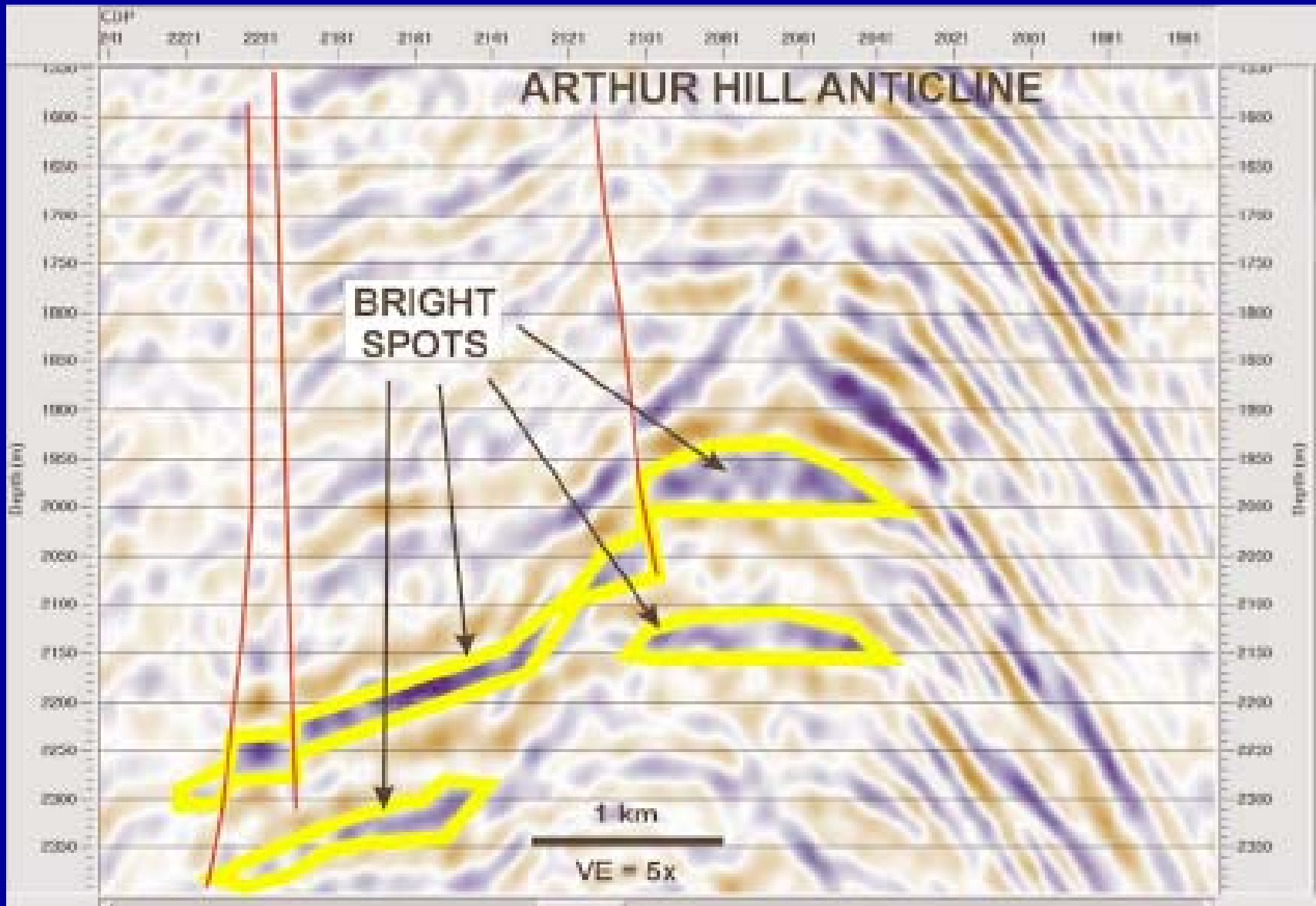
# South Australian Natural Gas





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# SA Natural Gas Targets



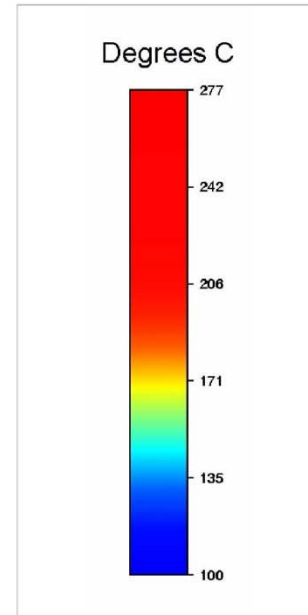
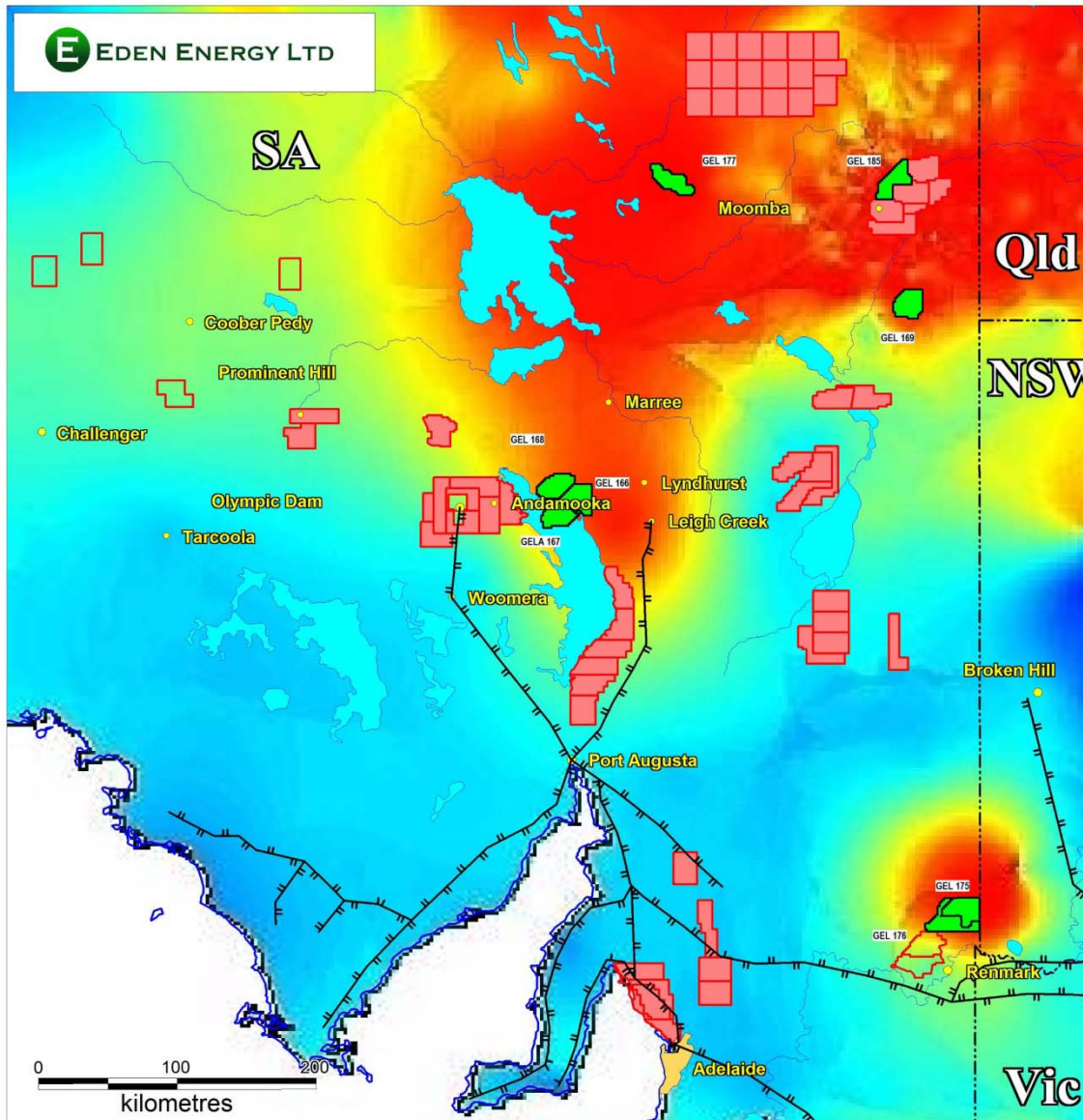





# Geothermal

- Significant Government support
- 8 Prospective licences in SA
- Adjoin Geodynamics in Cooper basin
- Drilling first well - Renmark in late 2007
- Govt drilling subsidy- \$100,000
- \$10-15M IPO planned Q1 2008



# SA Geothermal Exploration Targets



-  EDE GELs
-  GEL applications
-  Granted GELs
-  Powerlines

## **E** Projected Revenue Sources

- HyRadix - Global sales ( current)
- Cryogenic division ( current)
- Hythane® - ( 2008/9 ) - India and US
  - Margin on Hythane® fuel
  - Engine conversions/royalties
  - Sales commission - controllers, engines and vehicles
- Carbon Credits ( 2008/9)
- South Wales gas & AMM electricity sales ( 2008/9)



## Management

- Highly experienced board of directors
- World leading hydrogen technology teams

## Major Shareholdings

- Tasman Resources ~ 26.4% ( fully diluted)
- M. Coote interests ~ 13.5% ( fully diluted)
- Directors ~ 10% ( fully diluted)
- Goldman Sachs ~ 5.1%
- Macquarie ~ 4.7%

## **E** Major Targets for 2007/2008

- Geothermal IPO ~\$10-15M Q1 2008
- List Eden securities on AIM -Q1 2008
- SA Natural Gas - JV-drill first well - Q 2/3 2008
- Major Joint Venture on Welsh CBM Project following completion of current drilling/ testing- Q1/2 2008
- Hythane® - Indian bus and generator demonstration projects leading to commercial rollout- Q3/4 2008
  - US demonstration projects- Q1/2 2008



## Capital Structure at 23 November 2007

ASX Code (Ticker)	EDE/EDEO
AIM Listing planned Q1 2008	
Capital raised	A\$30 M
Total Shares (EDE)	158.5 M
Total Options (EDEO)	91.5 M
Share Price (EDE)	49 (A\$) cents
Option Price (EDE)	25 (A\$) cents
Market Cap (fully diluted)	A\$100.5 M
Cash	A\$8.1 M