

ALSET

Materials Innovations In An Emerging Hydrogen Economy
February 24th, 2008

**Title: Introduction of the Hydrogen Economy in
Emerging Markets**

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- **Company:**

Alset Technology LLC is an American Technology Company, with offices in several locations including Argentina

- **Areas of R&D:**

Alset is working on technologies for the transition to the Hydrogen economy:

- **INTERNAL COMBUSTION OF HYDROGEN**
- **HYDROGEN PRODUCTION**

Hydrogen Economy Overview

Main Implications

Key Issues for the New Economy

Example of successful implementation of a new fuel

Key Aspects of the implementation

Conclusions



*The Hydrogen Economy is more than **“RUNNING WITH A NEW FUEL”***

Major impact in the following areas:

Affected Areas

Economy
Environmental

Areas of action

Education
New Policies
Economy Driven
by the Market
Industry Transformation

Outcome

National Security
Sustainable Growth



The Economy
was driven by
Global Market



The Economy
is driven by
Politics

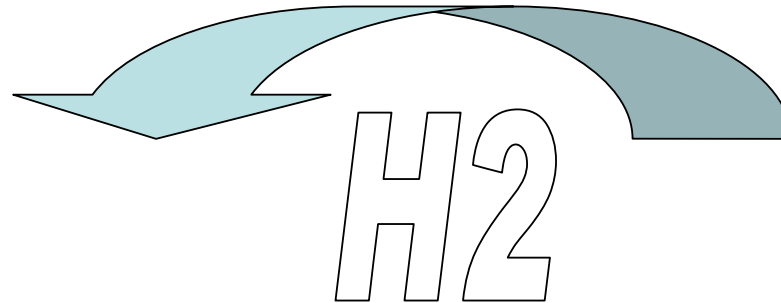


International Energy Agency (IEA) Estimations: Investments are 20% below (20,000 billion investment) needed to assure suitable supply during the next 25 years.

Permanent conflict between offer and demand that force to higher oil prices (The US imports 60% of its oil consumption)

Energy Independency becomes a National Security Issue.





**The Economy
driven by
Global Market**

**The Economy
driven by
Politics**



Source: Financial Times



*For a successful Implementation of the Hydrogen Economy,
people have to*

***ACKNOWLEDGE HYDROGEN AS A
VALID ALTERNATIVE TO GASOLINE.***



This means that Hydrogen must be:

- SAFE
- AVAILABLE
- ADEQUATELY COMMUNICATED
- AT A COMPETITIVE COST
- CERTIFICATIONS
- STRATEGIC PLANNING
- MARKETING AND PUBLIC RELATIONS
- ENERGY INDEPENDENCY
- ECONOMIC STRATEGY
- TECHNOLOGY

NEED FOR



Example: Introduction of an alternative fuel (CNG) in an Emerging Economy

THE ARGENTINEAN CASE

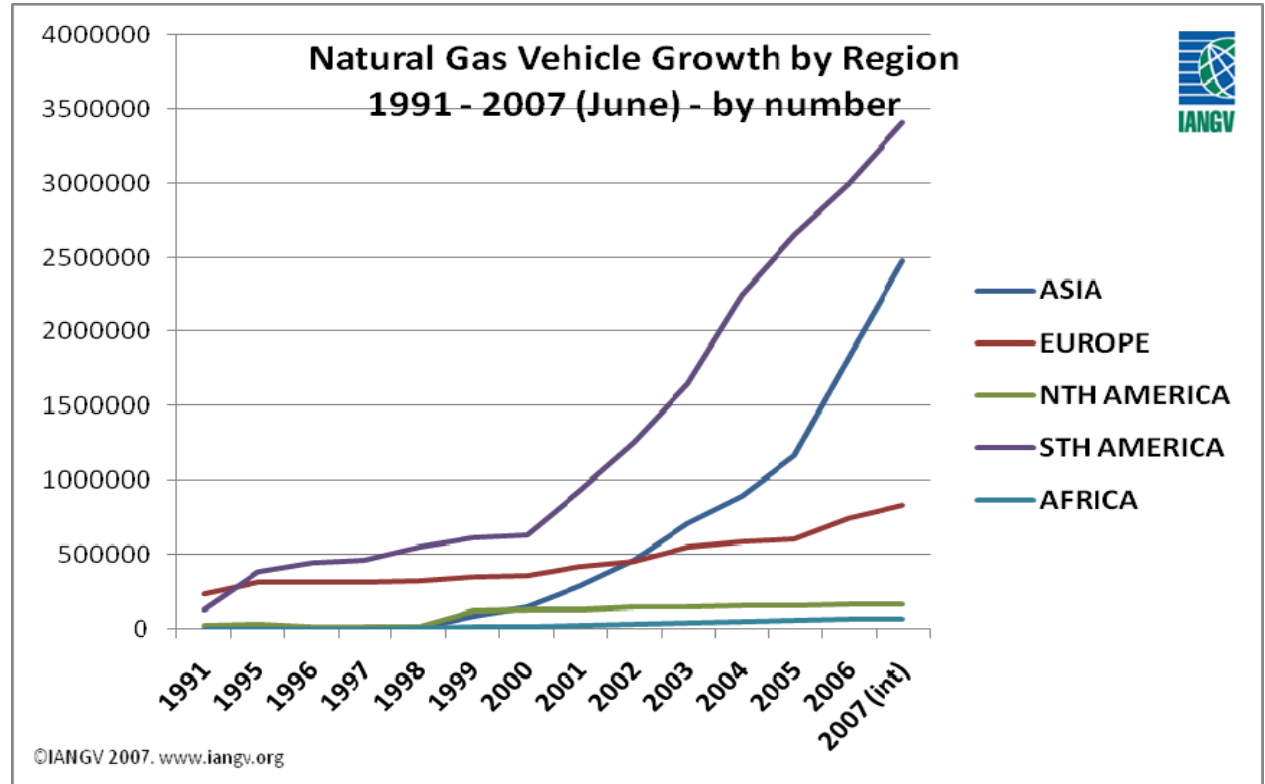


GLOBAL MARKET

SAFETY

INSTALLED CAPACITY

STATION LOCATION



The Argentinean Case



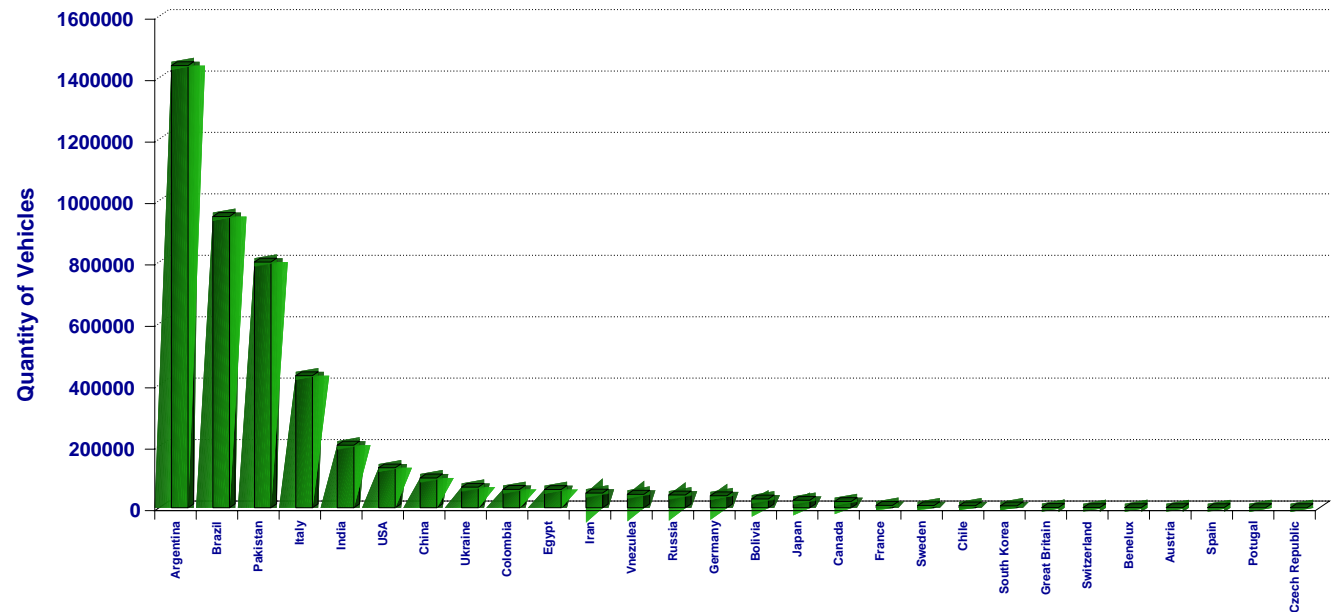
GLOBAL MARKET

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Development of the CNG car transformation in the world



The Argentinean Case



GLOBAL MARKET

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Enargas is an entity that controls everything related to Safety issues: Components, Installations, Stations, among others.



The Argentinean Case



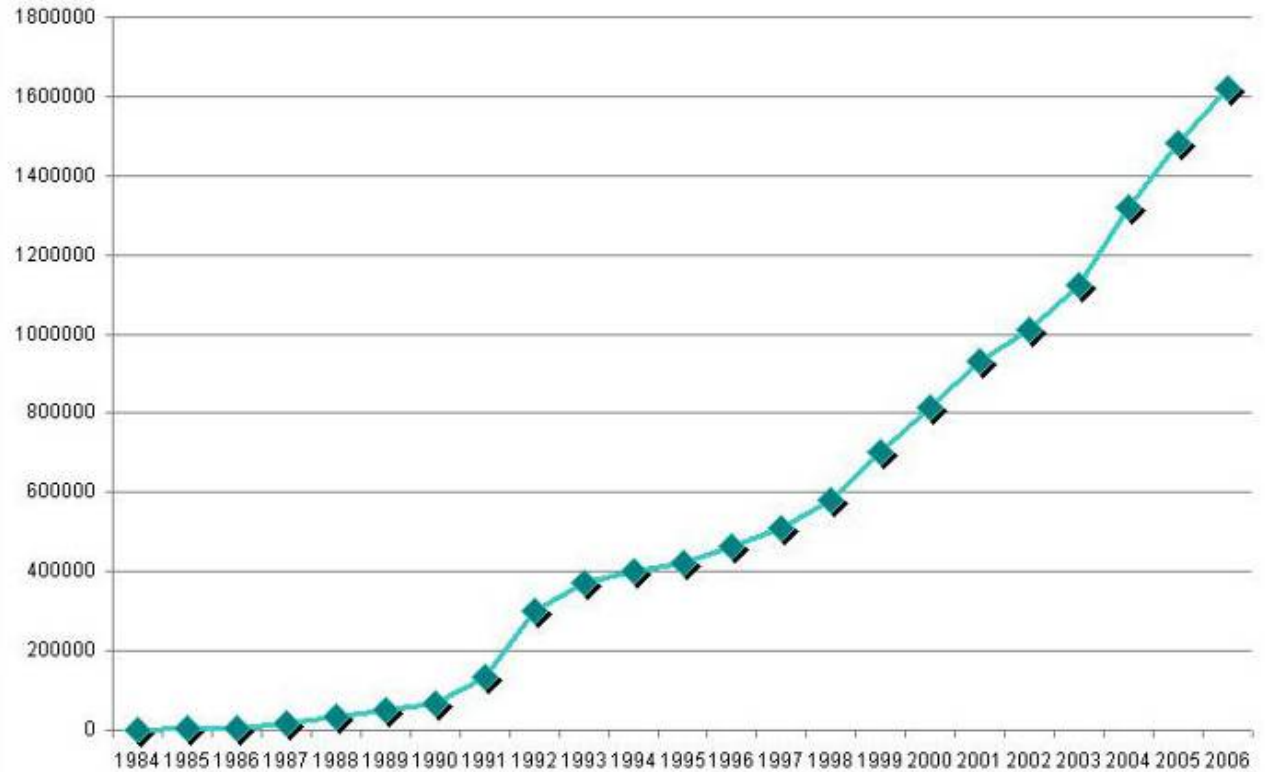
GLOBAL MARKET

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STATION LOCATION

Installed Capacity (m3/h)



The Argentinean Case



GLOBAL MARKET

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STATION LOCATION

*The amount of CNG stations grew **exponentially** in the last 10 years.*

The first stations were located at high traffic points to gain maximum exposure in the general public.

They were initially established in low-income neighborhoods (that appreciated the economic advantage)



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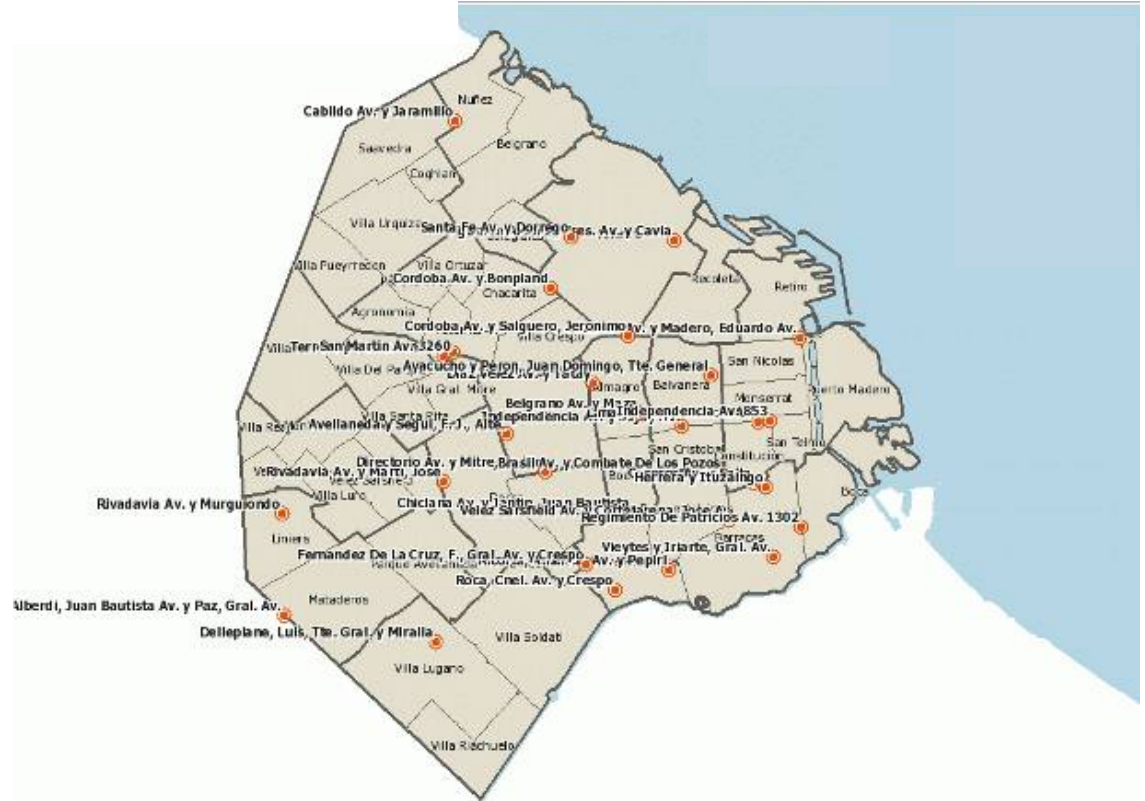


GLOBAL MARKET

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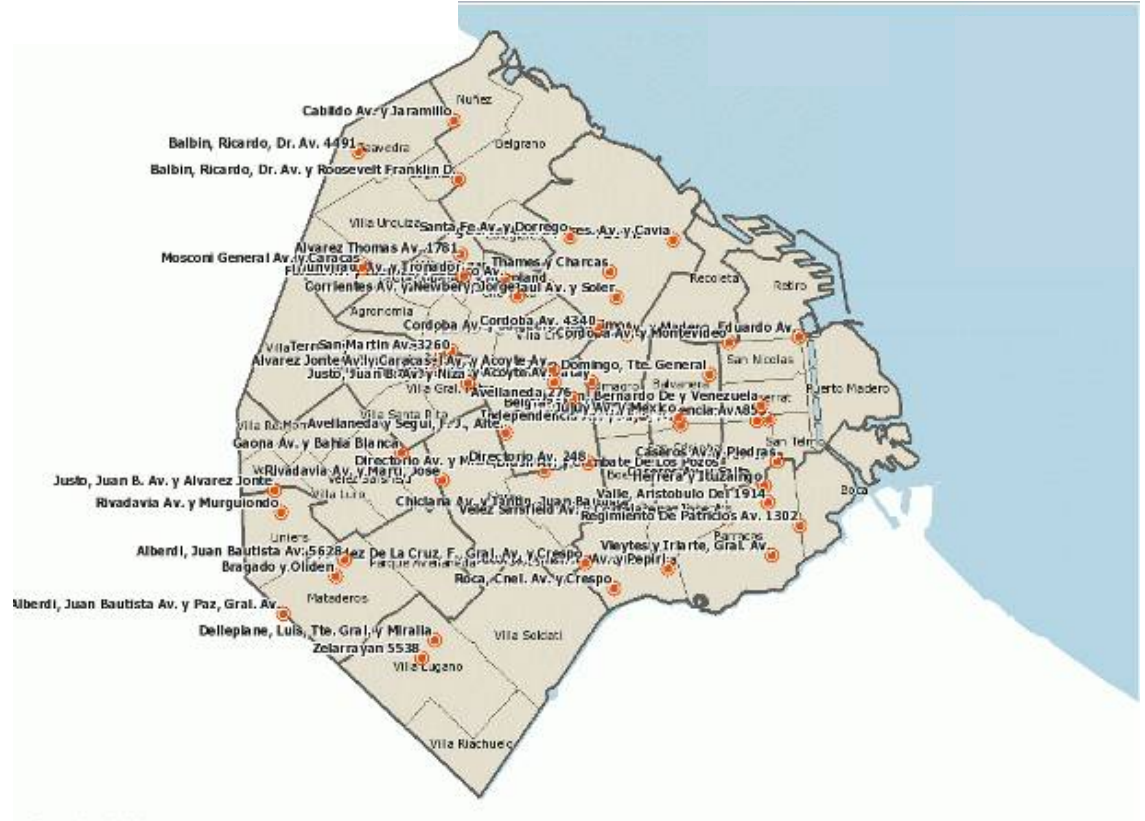


GLOBAL MARKET

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STATION LOCATION



From the CNG experience, we can draw several conclusions:

✓ SAFE

✓ CERTIFICATIONS

✓ AVAILABLE

✓ STRATEGIC PLANNING

✓ ADEQUATELY
COMMUNICATED

✓ MARKETING AND PUBLIC RELATIONS

NEED FOR

✓ AT A COMPETITIVE COST

✓ ENERGY INDEPENDENCY

✓ ECONOMIC STRATEGY

✓ TECHNOLOGY



CNG

APPLICABLE
TO

H2

✓ SAFE

✓ AVAILABLE

✓ COMMUNICATED

✓ AT A COMPETITIVE COST

✓ SAFE

✓ AVAILABLE

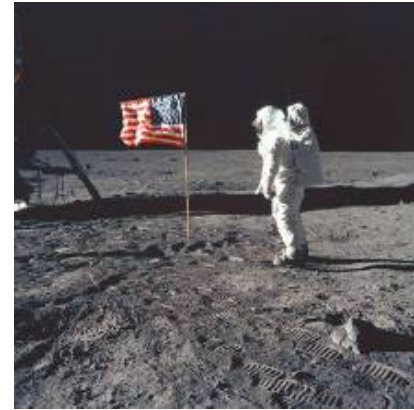
✓ COMMUNICATED

✓ AT A COMPETITIVE COST



LEADERSHIP ISSUE

***THE UNITED STATES HAS
THE CAPACITY TO LEAD
THIS TRANSITION TO THE
HYDROGEN ECONOMY***



***THE HYDROGEN ECONOMY SHOULD BE
The Next Shared vision of America...***



ALSET

Redefining
the future
of power generation

THANK YOU VERY MUCH

ALSET

Be the change you wish to see

Jose Ignacio Galindo – CEO

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