

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

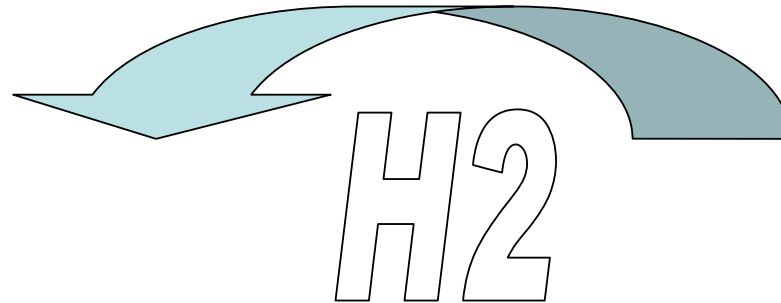


International Energy Agency (IEA) Estimations: Investments are 20% below (20,000 billion investment) needed to assure suitable supply during the next 25 years.

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

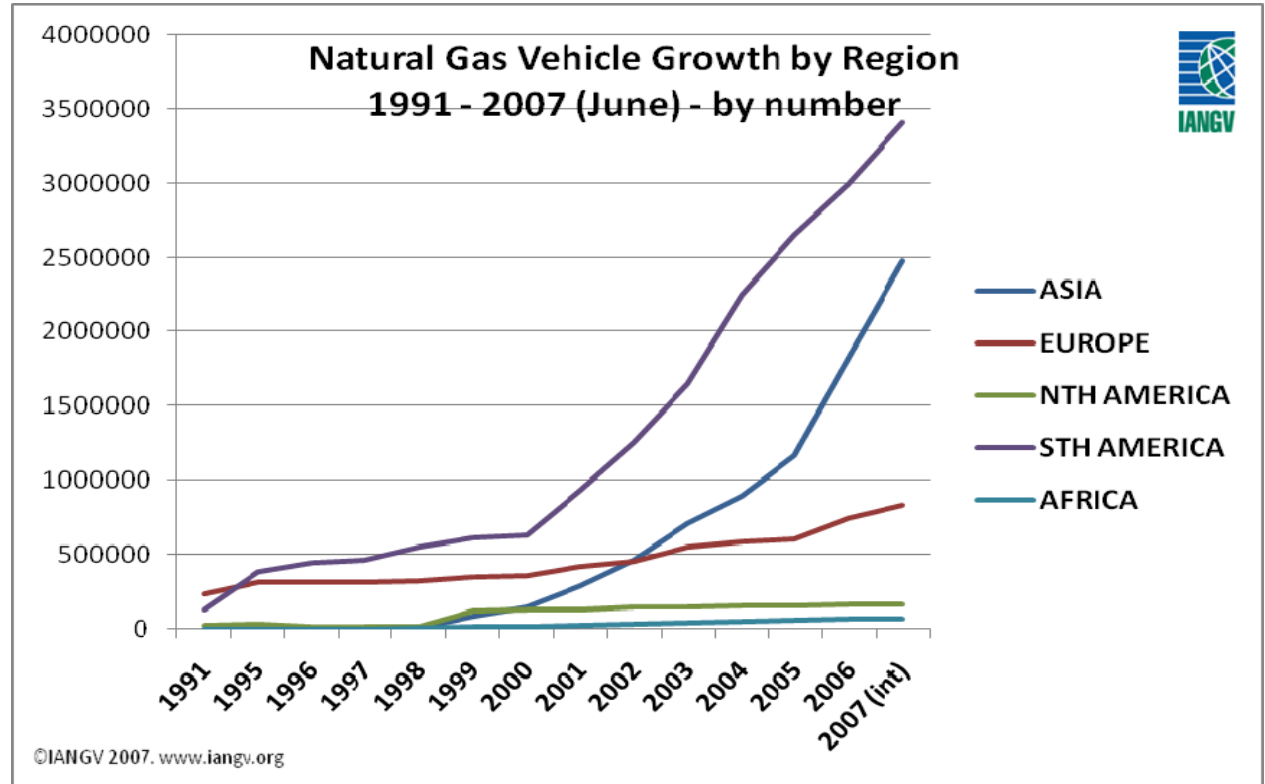


GLOBAL MARKET

SAFETY

INSTALLED CAPACITY

STATION LOCATION



The Argentinean Case



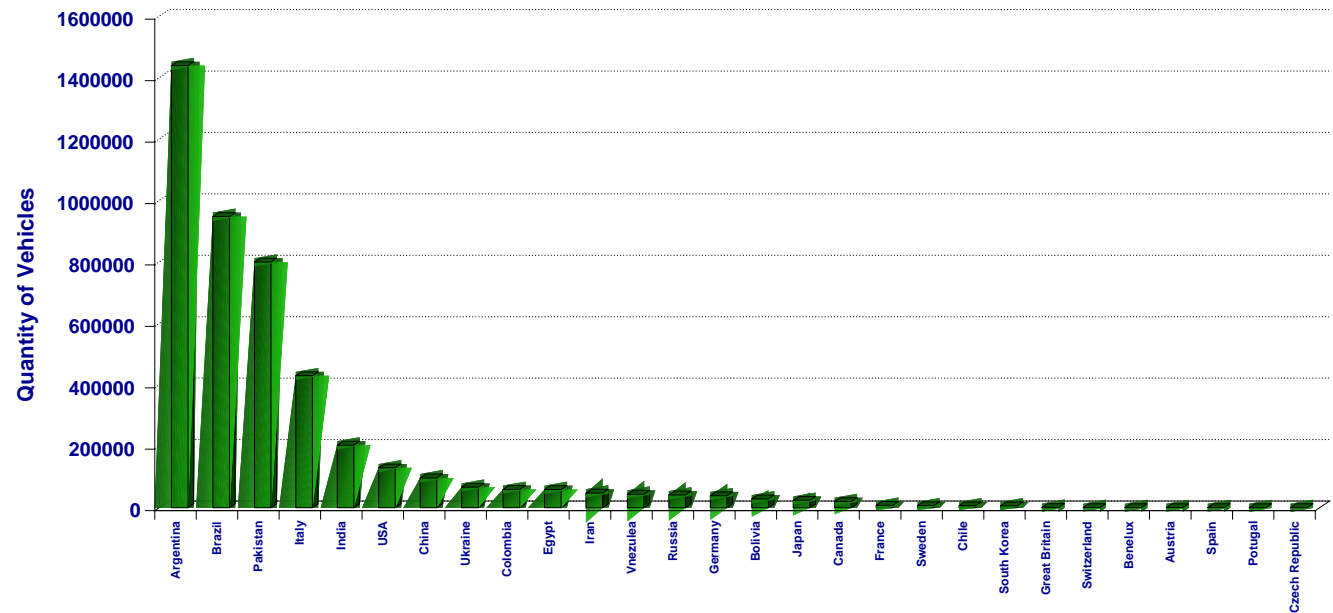
GLOBAL MARKET

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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



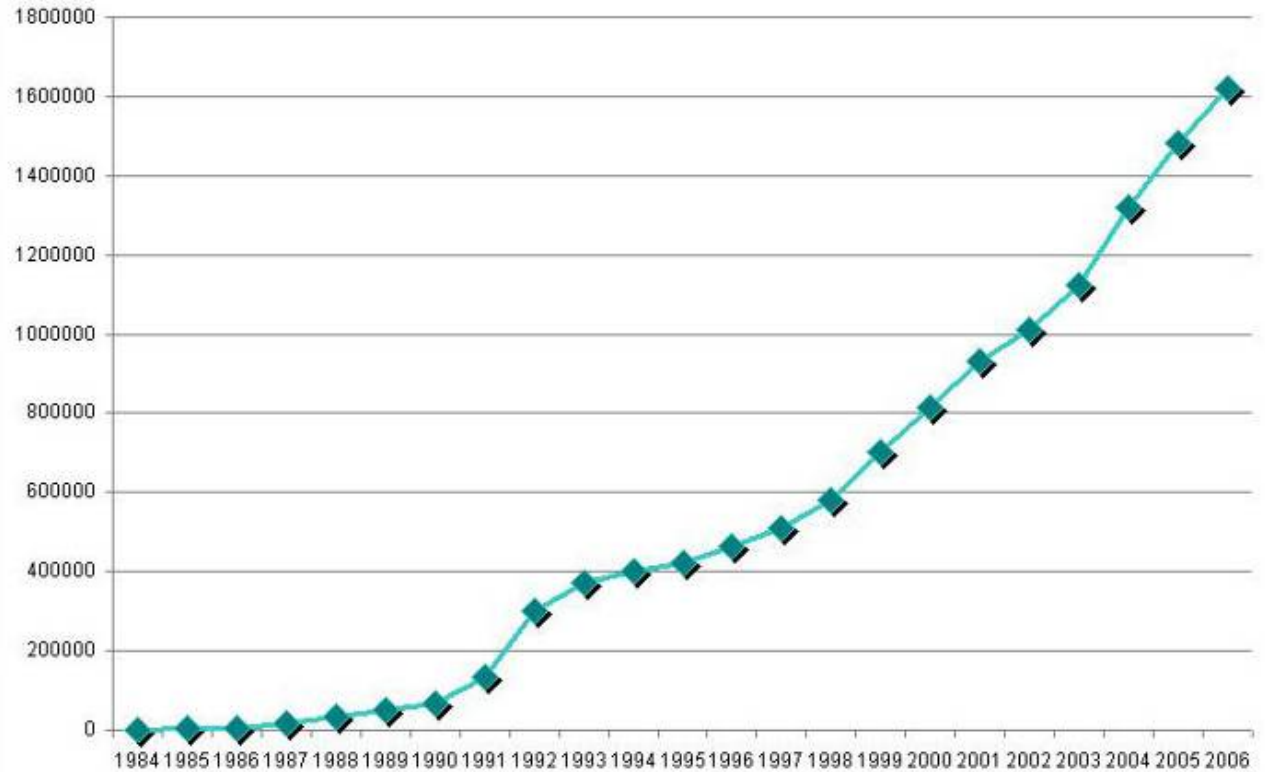
GLOBAL MARKET

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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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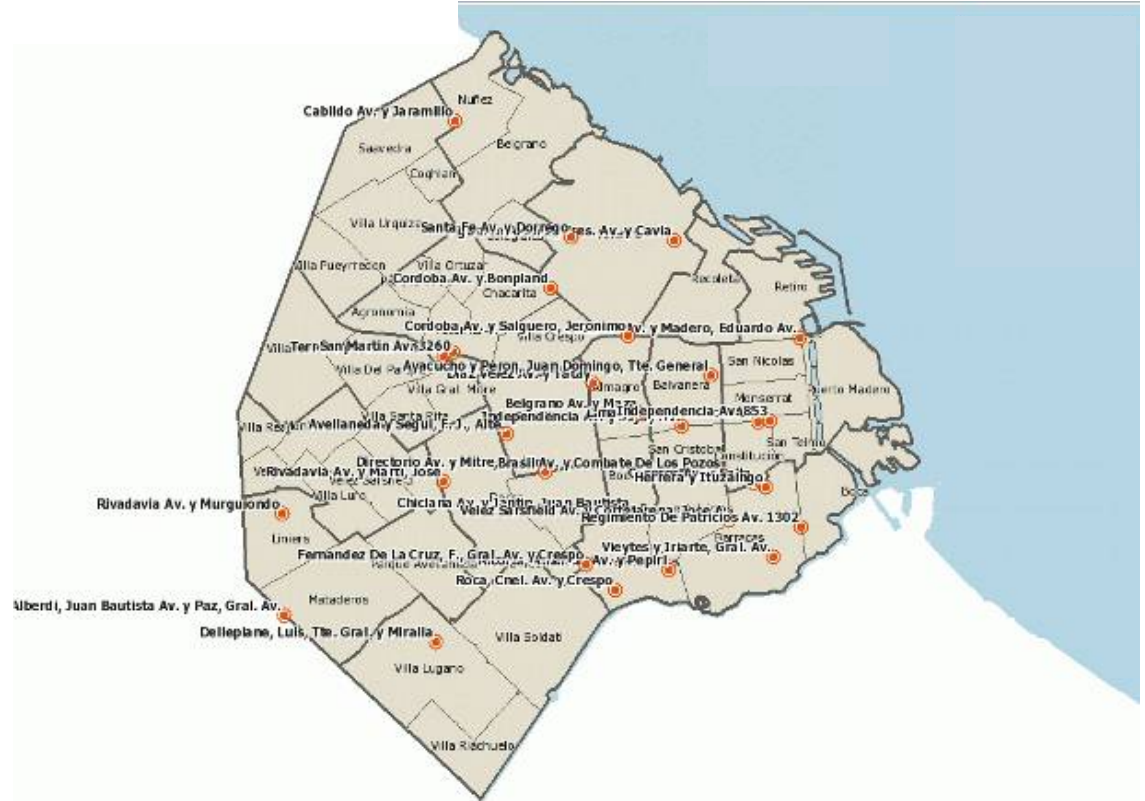


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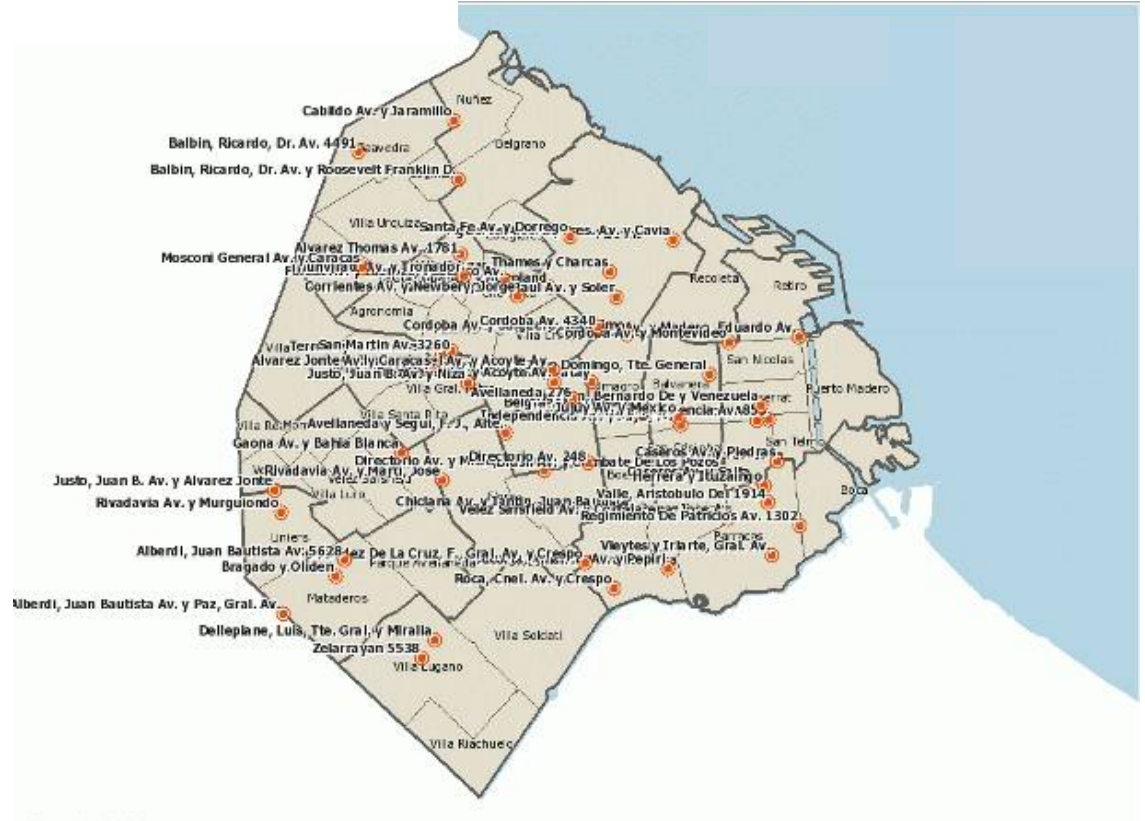


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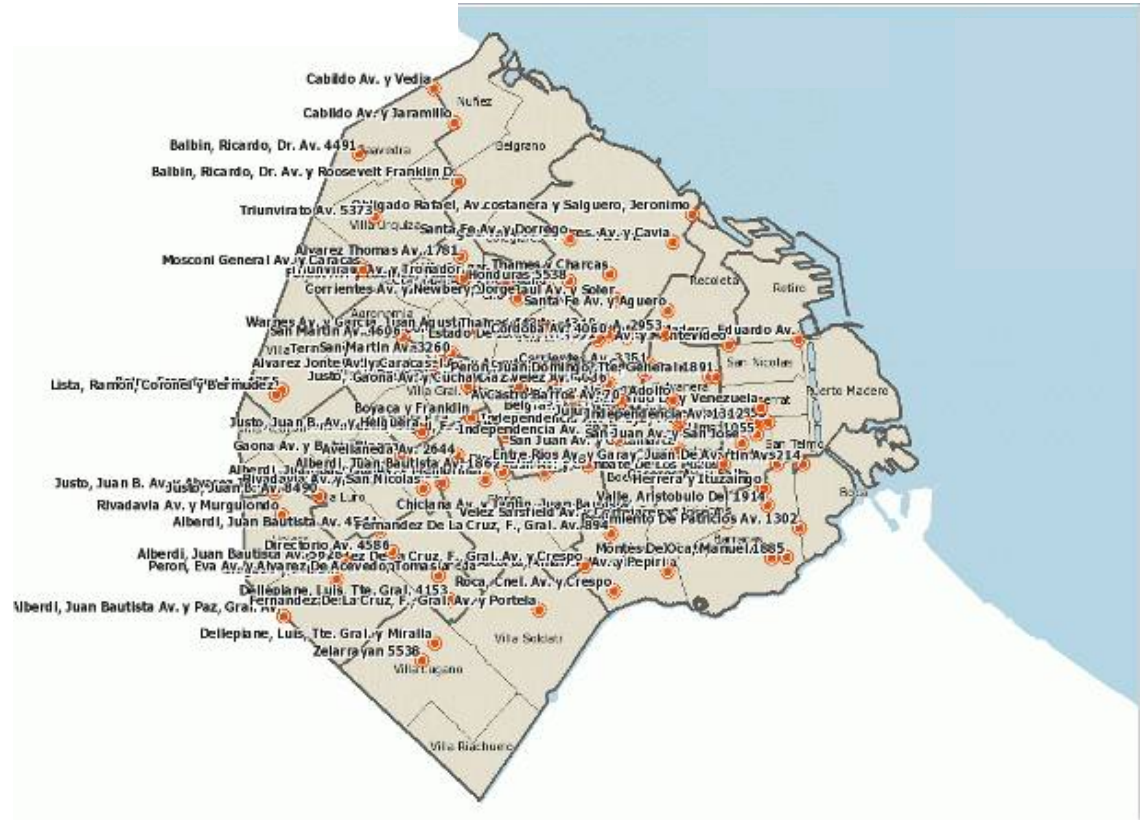


GLOBAL MARKET

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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



CNGAPPLICABLE
TO**H2**

✓ SAFE

✓ AVAILABLE

✓ COMMUNICATED

✓ AT A COMPETITIVE COST

✓ SAFE

✓ AVAILABLE

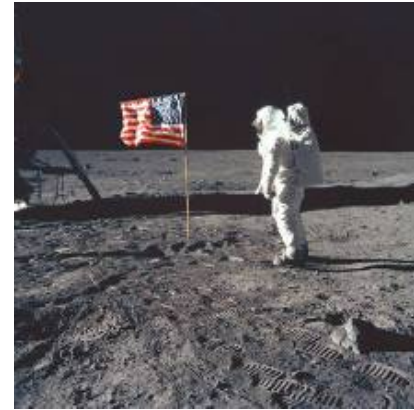
✓ COMMUNICATED

✓ 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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