

Valdemar Stelita Ferreira

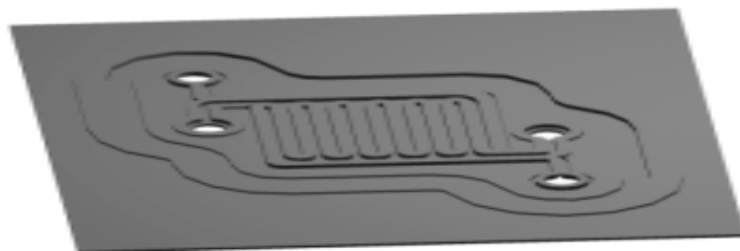
Carbon & Ion Exchange
Technologies



Polymer Electrolyte
Membrane Fuel Cells



Ultra Thin Graphite
Plates



Application Time Line

2006

Generators:
Stationary

Gás Natural



2007

Electronics:
Power < 80 Watt

Metanol



Celular

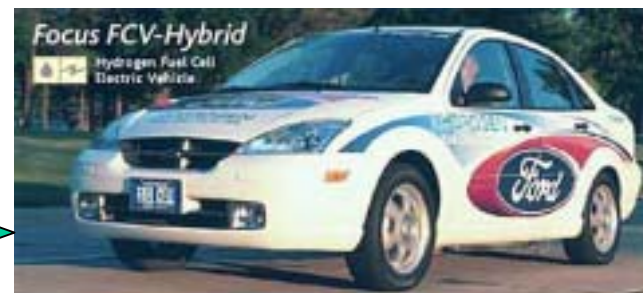
Lap Top



2015

Vehicles:
Power < 85 kWatt

Hidrogênio

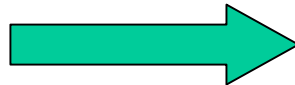


Players of
Same
Technology



Automotive → GM; Ford; Chrysler;
Integrators → Plug Power; Ballard;
Mat Suppliers → Dupont; 3M; Gore;

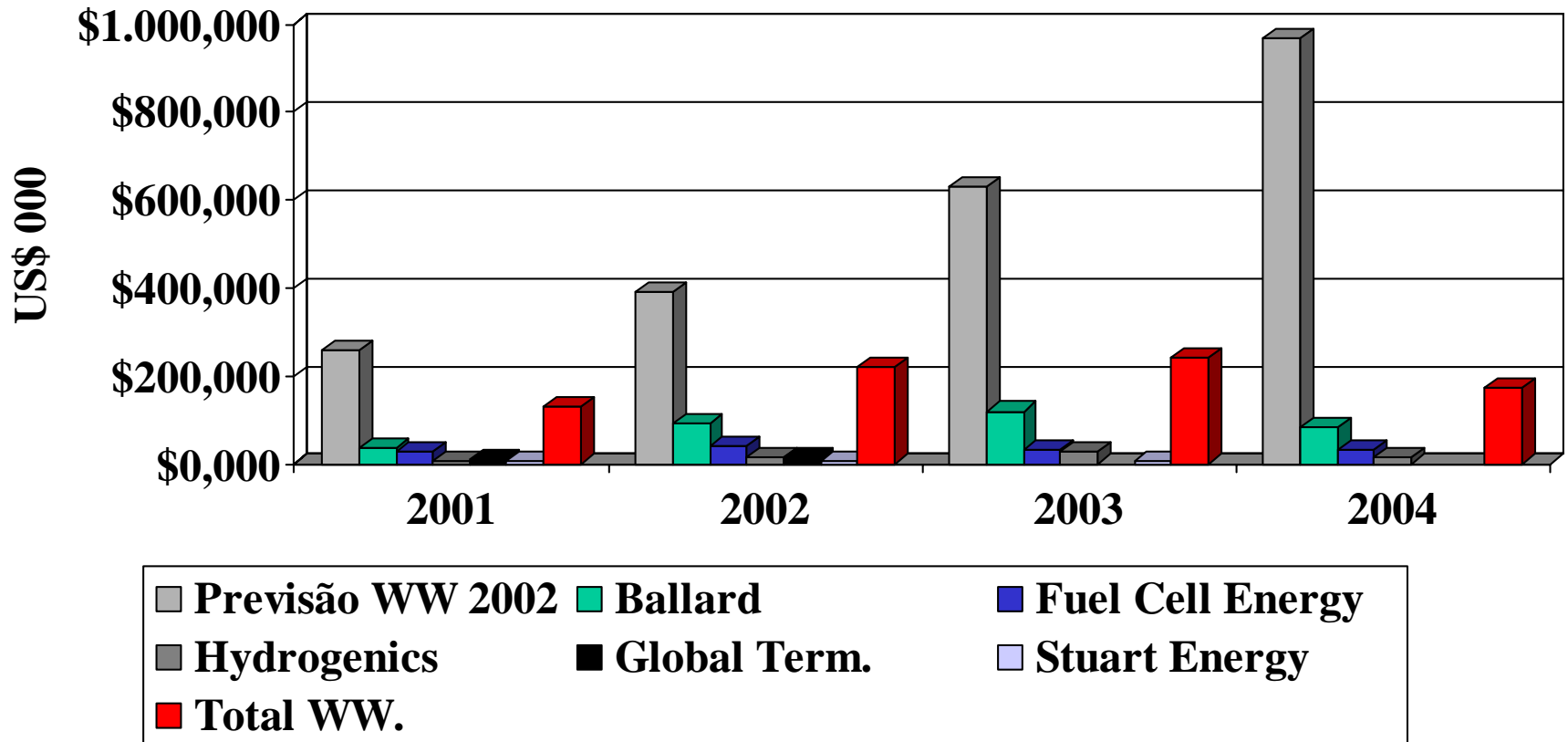
Competitors in
Bipolar Plates to
Fuel Cells



Germany	- SGL Carbon;
United States	- Graftech (Ex-Ucar);
England	- Porvair Fuel Cell;
Japan	- Mitsubishi H Ind.;
Others...	

Forecast x Real Market

MARKET	COST BARRIER	TECNICAL RIVAL	MATURATION
Stationary Generators	US\$ 1.500,00 / kWe	Geradores Diesel	2006
Portable Electronics	US\$ 3.000,00 / KWe	Baterias Lítio-Íon ¹	2007
Onboard Generators	US\$ 75,00 / KWe	Motor a Combustão	2010



INNOVATIONS :

At the Material

Modified Natural Graphite –

At Fabrication

CNTP – Low T, P, Time –

At Dimensions

~ Micron –

At Cooling Process

Based on Heat Pipes –



**Old CNC
Machined**

**Seald CNC
Machined
State of the
Art**

**NovoCell
Ultra thin
Plates**

INNOVATIONS :

At Financing

Venture Capital Model –

At Fabrication

Mass Production Plant –

Lean Production Strategy –

At Partners

Development Partners –

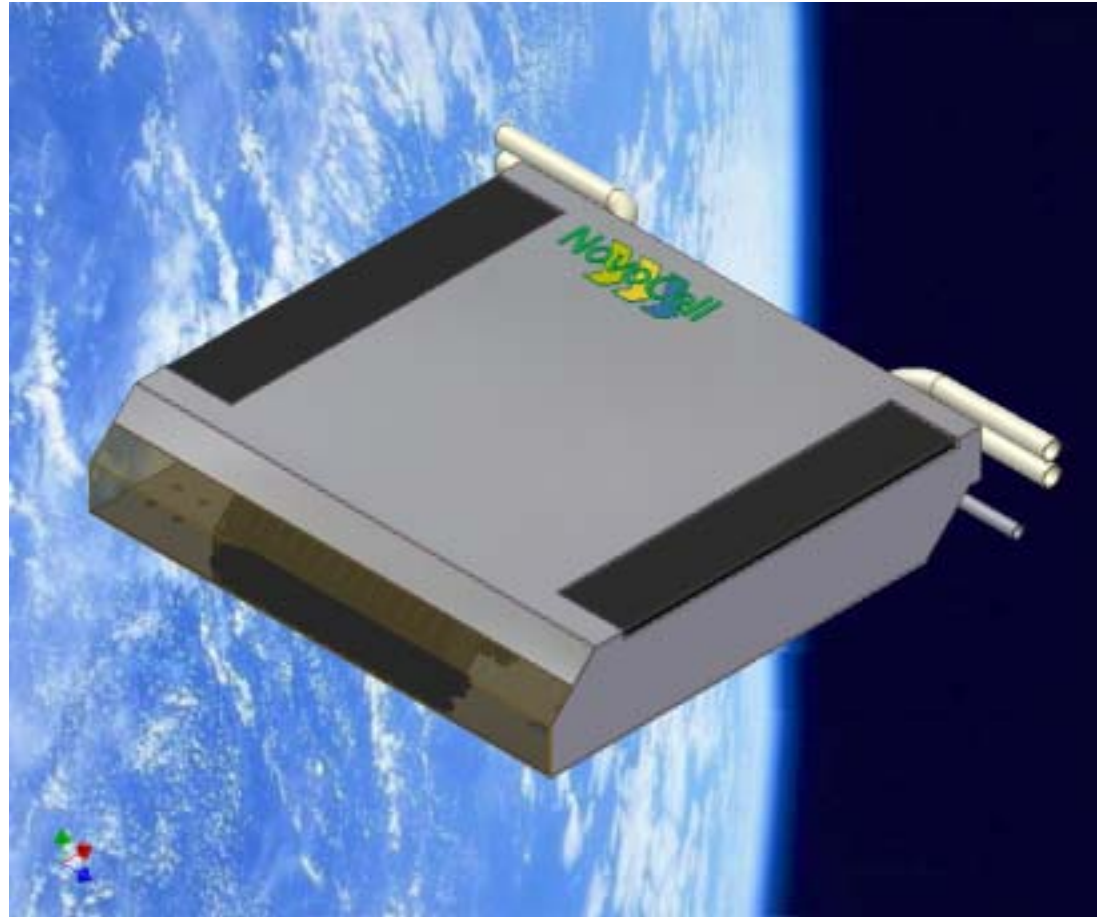
Research Institutes –

At Management

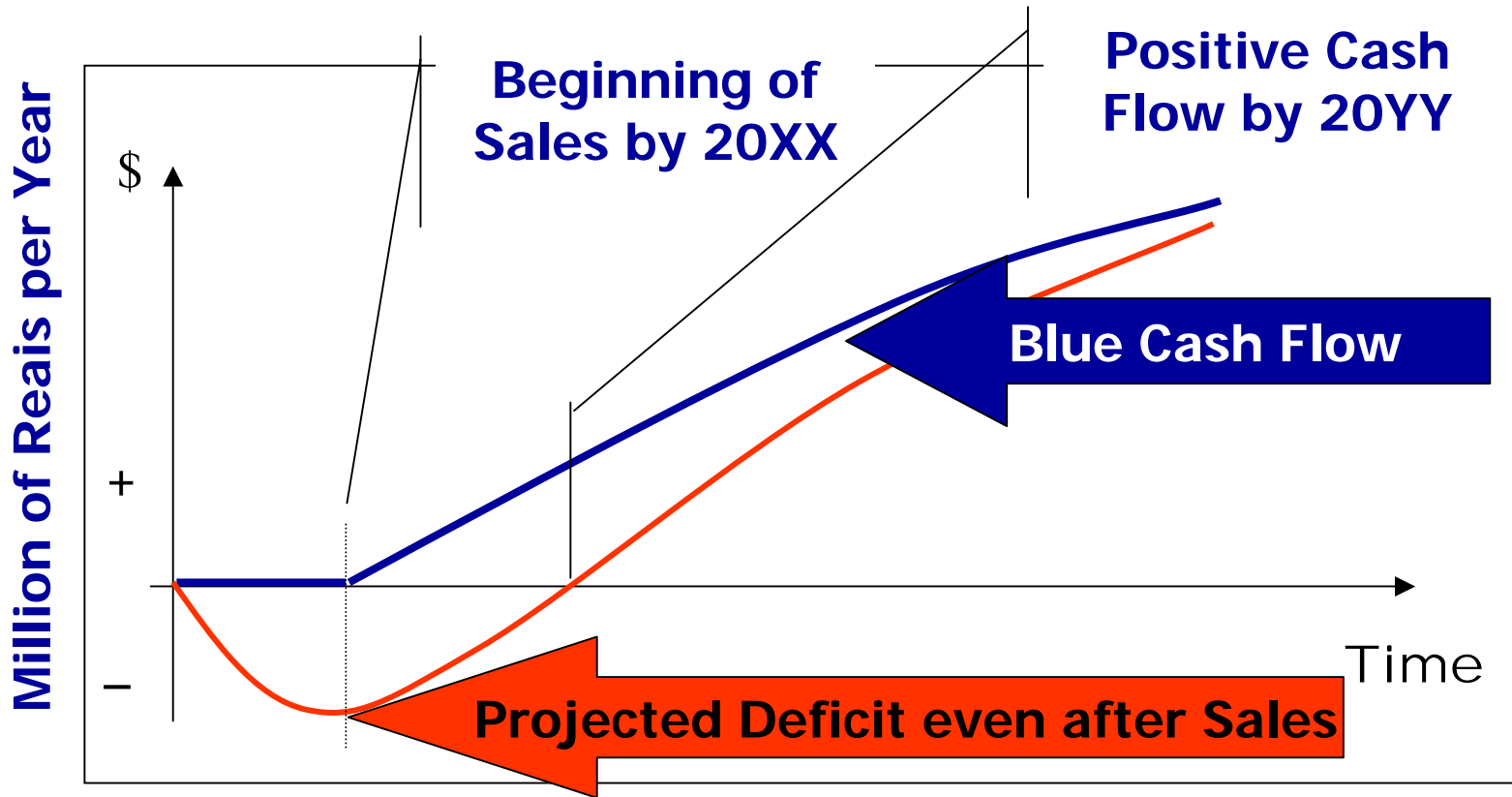
Based on Objectives –

Local Pilot Operation –

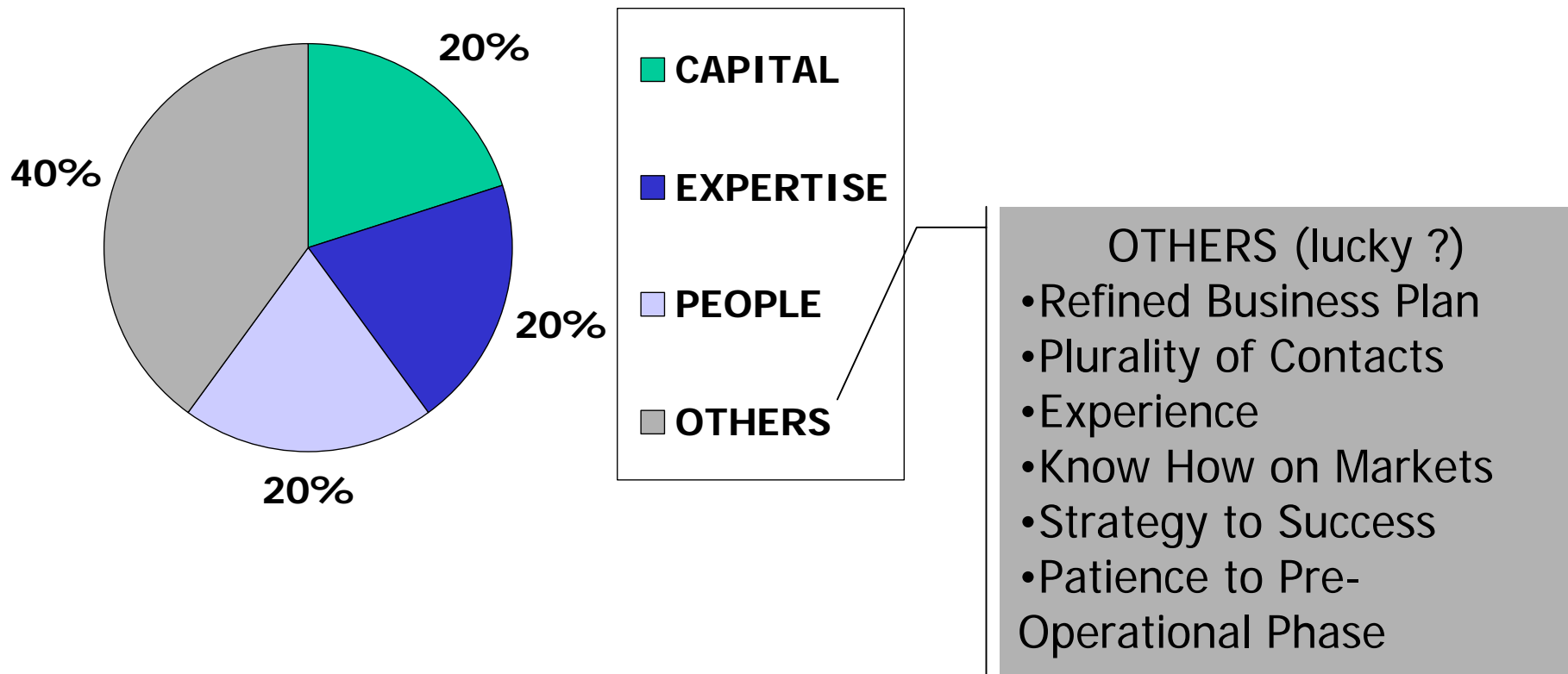
Future Exporting Plan –



Why to have Investment



Initial Innovation = Deficit = Investment



Point of View from NASDAQ Investors



Thank You Ladies and Gentlemen
for the Attention.

I Invite you to a Demonstration
Of our Fuel Cell Project

at the City of Americana / SP / Br.
at the Hannover Fair / 2005