METHAPOWER
FUEL CELLS

Manufacturer of fuel cell engines - renewable energy company

Proposal by Methapower fuel cells

Fuel cell equipped scooters in Taiwan

J.V. project with T.G.TIGER Motorcycles

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Summary

1. METHAPOWER COMPANY OVERVIEW

1.1. About us…

As air pollution gets more serious, governments around the world are actively promoting the use of electric vehicles (Evs), which are emissions-free. But due to the lack of a suitable power source, the EV industry remains stagnant, making EV commercialisation unfeasible.

Methapower **arises to resolve this critical challenge faced by the EV industry.**

1.1.1. Company profile

Methapower is a renewable energy company based in Paris. Our main focus is on investing, developing, and commercializing hydrogen fuel cell power system. In the past recent years, we have made significant scientific breakthroughs in the area of this technology.

1.1.2. Company history

Founded in September 16, 1999 by a group of visionary entrepreneurs and talented scientists, Methapower has grown rapidly from a small start-up company to an international company on the verge of commercializing one of the world's most important new energy sources. Currently, we have our headquarters in Bercy, Paris, our R&D Center is based in Shangai , China, our plants are although based in Shangai. Methapower is planning to develop a new manufacturing plant in the United States.

A chronological overview

Sep 16, 1999. The team Puertolas, Ercolani, Roudière, Cougouille, Richard and Vincent have decided to create a firm in the aim of developing the project. At this moment ***Methapower*** was founded in Paris to oversee the whole project.
Sep 17- 22, 1999. The team filed three patents related to their fuell cell technology with the French. Patent & Trademark Office.
Sep 22-24, 1999. ***Methapower*** participated in the **Advanced Transportation Industry Conference** organized by Calstart. This is the first introduction of Proton Exchange Membrane's fuel cell prototype to the U.S. and France advanced transportation.
Sep 22 -26, 1999. Mr Lin Yung-jen, one of the pioneers of Taiwan's EV industry, paid a special visit to ***Methapower***. He proposed to make an investment of US$5,000,000 in the project. At the same time, he signed a preliminary agreement to purchase 200,000 Proton Exchange Membrane Fuel Cell.
Jan 4, 2000. ***Methapower*** had a preliminary discussion with the **Community Initiatives Development Corp (CIDC)**, a non-profit organization that provides financing and

development services for housing and economic development projects throughout the U.S. They offered to help ***Methapower*** to establish a plant in Florida.
Feb 2000. ***Methapower*** moved its pilot plant in Shanghai, China.
Feb-Mar 2000. Prominent leaders from both the public and private sectors of Taiwan's EV industry visited ***Methapower*** 's new Shanghai plant. They personally rode on fuel cell engines powered by ***Methapower***, and were impressed by their outstanding performance.

Jun 28 - Jul 1, 2000. ***Methapower*** participated in **EV China 2000**, an international EV event. Its technologies left a deep impression on the audience. The company received a conditional purchase order for 580,000 Proton Exchange Membrane Fuell Cell.
Jul 22, 2000. Dr. T.S. Chin, a famous Taiwanese EV battery researcher from Tsing Hua University (Taiwan), visited ***Methapower*'s** Shanghai plant. He invited ***Methapower*** to participate in the organization of the 2001 Fuell Cell Battery International Conference.
Sep 26, 2000. Mr. Albert R. Boscov, a Florida philanthropist, and representatives from CIDC came to ***Methapower's*** headquarters in France to discuss about the construction of its Plants in Florida.

Oct 2000. Mr. William Loewenstein, the president of CIDC, invited ***Methapower*** to visit Florida. He promised to help ***Methapower*** secure a loan of US$12 million and a grant of US$3 - 3.5 million from the Florida state government and the city government of Reading to support ***Methapower*'s** development.
June 25-30, 2001. The official Open House of the Shanghai Plant. Visitors from the global EV and battery industries took a tour round the facilities. See Shangai Plant Open House.
Aug 23-24, 2001. Mr. Chris Wessels and Dr. Nanne Vegter from Cross Continental Energy Storage Systems (Pty) Ltd., a South African company, paid a visit to ***Methapower***'s headquarters in Paris for a preliminary discussion about the adoption of its fuel cell technology for the South African market.
?Oct 2001. Taiwan Green Tiger Motorcycles, TGTM, is looking for an international partner. They ask ***Methapower*** to develop a joint Venture for fuel cell equipped scooters in Taiwan.

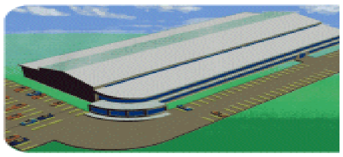
1.1.3. Corporate fact sheet

Founded: September 16, 1999.
Nature of business: Develops and commercialises hydrogen fuel cell power system.

Headquarters:
Bercy, bât Zeus
75100 Paris
Tel: 33 1 65 64 63 62
Fax: 331 65 62 63 64

R&D and Production Center:
1200 Huajing Road
Xuhui District
Shanghai 200231
P.R. China
Tel: 86-21-54101211
Fax: 86-21-54208755

Plants:
Manufacturing Plant
Florida



A Perspectiv

Key Market: China, Taiwan and The Unites States.

Key Personnel:

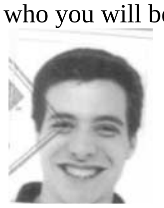
Louis Cougouille, Chairman E-mail : louis_cougouille@hotmail.com
Julie ERCOLANI, Chief Technology Officer E-mail: Julie.ercolani@laposte.net
Mathieu RICHARD, Chief Financial Officer E-mail: mat_richard@hotmail.com
Audrey ROUDIERE, Marketing E-mail: audrey.roudiere@wanadoo.fr
Charles VINCENT, Commercial E-mail : vincentcharles@hotmail.com
Delphine PUERTOLAS, Human Resources E-mail: delphine_puertolas@hotmail.com

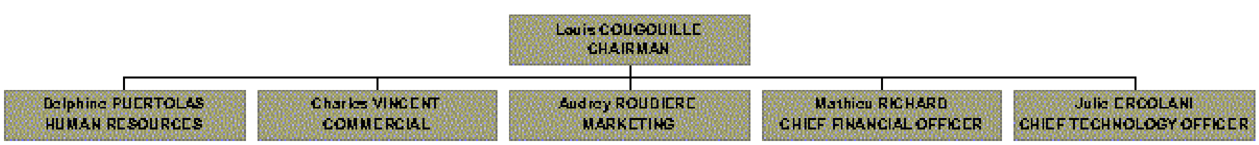
1.1.4. Management

The key personnel:

Methapower employ 220 employees : 20 in the headquarters,
200 in the R&D and production center.

You can see following, the six main employees with who you will be in touch for the Joint Venture project.









1.2. Technology

The fuel cell is a system that generates electricity (continuous current) from the non-polluting chemical reaction : $2\ H_2 + O_2 > 2\ H_2O$. A fuel cell consists of two electrodes sandwiched around an electrolyte. Oxygen passes over one electrode and hydrogen over the other, generating electricity, water and heat.

1.2.1. PEM fuel cell - Methanol fuel cell

Though today several types of fuel cells exist, our company is concentrating its research program on the **PEM (Proton Exchange Membrane),** which is the technology that interest the most the car industry. Indeed it seems to be the most promising technology.

Fuel cells generally run on hydrogen, but any hydrogen-rich material can serve as a possible fuel source. This includes fossil fuels **– methanol**, ethanol, natural gas, petroleum distillates, liquid propane and gasified coal. The hydrogen is produced from these materials by a process known as reforming.

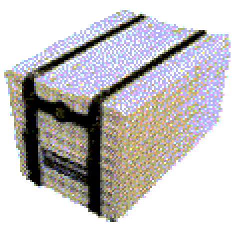
For **security** and **cost reasons**, our firm is developing **methanol fuel cells**. In fact, the stocking is more easy to realize and less dangerous. These cells are similar to the PEM cells in that they both use a polymer membrane as the electrolyte. ©©However, in the DMFC, the anode catalyst itself draws the hydrogen from the liquid methanol, eliminating the need for a fuel reformer.

1.2.2. Fuel cell engine

we make fuel cell engines with several cells electrically and physically connected in a box-shaped “stack”.

1.3. Products…

Fuel cell stack manufactures by Methapower:



Methapower fuell cell engine ®

Methapower Cell ®

+ Methapower hydrogen storage module ®
+ Methapower electric motor/controller module ®

1.4. Business opportunities

1.4.1. Market in East Asia

Here is the map representative for the repartition of the risk in the region.

1.4.2. Potential market

According to geographic and cultural proximity, political and economic relations improvements through OMC, the highest level of volume and growth, and the concurrence virginity, we are sure that our JV has big interests to export its fuel sell scooters "abroad".
We thought to three countries:

	COFACE mark of economical risk	Economic growth rate	Population	Purchasing power	Target rate	Volume of our market
Taiwan	good	5,0%	22 100 000	$ 14 500	35,70%	**7 889 700**
China	good	7,5%	1 238 600 000	$ 3 051	9,00%	111 474 000
South Core	good	5,0%	46 400 000	$ 13 286	15,70%	7 284 800
Hon Kong	good	5,0%	6 700 000	$ 20 763	25,40%	1 701 800
					TOTAL	***128 350 300***

2. METHAPOWER FUEL CELL : THE GREEN ENERGY

2.1. Environmental and Energetic background

2.1.1. Taiwan - Environmental issues and stakes

2.1.1.1. Sources of concern

The pollution of air and water in urban areas, stores of nuclear and toxic wastes, loss of fisheries and coastal ecosystems, and an overall degradation of the country's natural landscape.

2.1.1.2. About air quality

Pollutant Standard Index (PSI) is used in Taiwan to examine the quality of air. The main air pollutants are :

- Suspended Particulate (PM_{10})
- Ozone (O_3) mainly emitted by motor vehicles and factories.

Industry, diesel-powered vehicles, and the omnipresent two-wheeled, two-stroke scooters all contribute to the extremely dirty air. In the recent decade, the number of motor vehicles has increased 7.3 millions, nearly 76%. The motor vehicle density approaches 367 per sq. kilometre. PSI for Taiwan is 6 times higher than North America's. 95% of the air pollution in Taipei comes from motor vehicle exhaust.

The government issued the **Air Pollution Control Act in 1975** and has revised it numerous times in the last decade.
It introduced **"polluter pay"**. The first-stage air pollution fee (APF) was collected from July 1995 to June 1998. The EPA collects fees based on the fuel consumption of factories and motor vehicles and establishes the Air Pollution Control Foundation (APCF).
These fees are specifically applied in the air pollution control tasks. The collected APFs are collected from the factories and motor vehicles. As a result, the air quality of Taiwan, is gradually improving, which is shown in the table below. However, there is still much to be done in order to restore the air to its best. The development of fuel cell technology is very much needed.

2.1.1.3. Stakes

Taiwan is focused on air pollution, because of the **high fraction of scooters** in its vehicle fleet, its **poor air quality**, and because it is **one of the top six producers of scooters in the world**. Being wealthier than many of the other countries with high scooter densities, Taiwan can afford to spend money on novel vehicle designs; on the other hand, it should be noted that any improved scooters that were developed would be of great benefit in reducing high air pollution levels in other developing countries.

2.1.2. The scooter case

2.1.2.1. Scooter

Fitting symbol of Taiwan. Every 1.9 person owns one motorcycle or scooter.
The crowded cities, warm weather, dense population and limited land continue to make scooters popular. Scooters have the advantage of being able to swarm through the congested car traffic in cities. Currently, there are over 10 million scooters, 60% are low-power scooters under 50 cc (cubic centimetres) in cylinder displacement.11 The largest cylinder size (i.e. most powerful engine)
allowed in Taiwanese scooters is 150 cc. Especially high-polluting two-stroke vehicles made up 40% of all vehicles in Taipei (1996).

2.1.2.2. Causes of pollution

The major vehicle pollutants are carbon monoxide (CO), nitrogen oxides (NOx), sulfur oxides (Sox), particulate matter (PM) and various hydrocarbons (HC). Combustion also produces carbon dioxide, a greenhouse gas. Two-stroke engines produce significant amounts of unburned hydrocarbons, atomised lubricating oil, and CO due to their design, but little NOx.

2.1.3. Energy policy

Taiwan has virtually no energy resources of its own and imports the vast majority of its fuel. Its primary energy consumption is over 50% oil, approximately 25% coal, 10% nuclear, 5% natural gas, and under 5% hydroelectricity.

2.1.3.1. Petroleum

Dominating fuel in Taiwan.
71% of the market.
Annual consumption is 41,118 MLOE (Megaliter Oil Equivalence) in 2000.
35% goes to the use in transportation reflecting a 7.4% growth in the last twenty years.
Deficiency in energy reserves -> Taiwan has a very high degree of dependence on energy imports.

2.1.3.2. Energy policy

To solve this problem, the **Ministry of Economic Affairs (MOEA)** issues energy policy that ensures
- the stabilization of energy supplies
- the upgrading of the efficiency of energy use
- the extension of energy conservation concepts and methods.

MOEA encourages the development and promotion of new and clean energy by granting tax incentives to companies that research in this area.

transportation *consumes more than 1/3 of petroleum use in Taiwan.*

2.1.4. Government policy approaches

Taiwan has virtually no energy resources of its own and imports the vast majority of its fuel. Its primary energy consumption is over 50% oil, approximately 25% coal, 10% nuclear, 5% natural gas, and under 5% hydroelectricity.

2.1.4.1. Environmental Protection Administration (EPA)

The Taiwanese Environmental Protection Administration (EPA) has adopted a series of regulations and incentives to promote electric scooters. In 1995, it required the EV industry to sell electric scooters in quantity equal to 2% of the total annual local produced and imported scooters. At the end of the same year, the EPA started to provide funding to recharging stations and bonuses to manufacturers for every electric scooter sold. And, on May 20, 1998, the EPA revised its latest standards for electric scooters.

2.1.4.2. Industrial Technology Research Institute (ITRI)

The Industrial Technology Research Institute (ITRI) is a national-level, government-sponsored non-profit organisation for applied research which accelerates industrial technology development, promotes industrial growth, and enhances the social well being of Taiwan.
In 1991, ITRI researchers estimated that by 1996, up to 50% of scooters would have to be replaced by electric scooters to prevent continued degradation of air quality. This was in addition to the adoption of second stage emission standards and gradual replacement of the existing fleet by more advanced vehicles.

The objective appears to be to convert small engine (50 cc) scooters to electric power, while keeping clean four-stroke engines for the larger (100 cc and up) scooters. By 1997, there were approximately 300 electric scooters in use in Taiwan. There is currently a $5,000 New Taiwan Dollar (USD $150) subsidy for each electric vehicle purchased.

This "Electric Motorcycle Development Action Plan" will be funded by the government at a cost of NTD $3.8 billion (USD $115 million) from 1999 to 2002. This money is to go to research funding and subsidizes for electric scooter purchases.

2.1.4.3. Government Investment Incentives

Research and Development (R&D) Incentives:
- A company can enjoy a 25% tax credit against income tax payable for any expenditure for developing new products, improving production technology, advancing technology for provision of services, or improving the manufacturing process.
- Equipment and instruments exclusively used for R&D, experiments or quality inspection can be depreciated over a two-year period.
- Private companies engaged in R&D of new industrial products may apply for loans to cover basic R&D expenditures.
- Professional consultation and financial assistance for developing new products or new production technology are available to companies engaged in traditional industries.
- Manufacturing machinery and equipment, apparatus and equipment exclusively used for research, experiment and quality inspection that are not manufactured domestically can be imported duty-free with approval of the MOEA (Ministry of Economic Affairs).

Incentives to Improve Pollution Control:
- Any company expenditure for purchase of locally made environmental protection equipment can be granted a 20% tax credit against income tax payable. The tax credit rate for imported equipment is 10%, and for pollution control technology, 5%.

Incentives for Energy Conservation:
- Between 5% and 20% of a company's expenditure on equipment or technology for use of new and clean energy, energy conservation, or improved energy efficiency may be credited against its income tax payable.

Incentives for Reducing Greenhouse Gas Emissions
- Between 5% to 20% of a company's expenditure on equipment or technology for reducing greenhouse gas emissions may be credited against its income tax payable.

2.2. Methapower fuel cell technology

2.2.1. Methanol fuel cells (MFC) and urban air pollution

METHANOL FUEL CELLS COULD BE A MAJOR BREAKTHROUGH IN ENERGY CONSUMPTION AND CONSERVATION. THE BRAVE NEW TECHNOLOGY COULD DRASTICALLY CUT AIR POLLUTION FROM AUTO EMISSIONS AND OTHER SOURCES.

Air pollution is associated with large metropolitan areas where many vehicles, homes and industries are found. The principal pollutants regulated by the CAA and its amendments are CO, NOx, volatile organic compounds (unburned hydrocarbons or VOCs), and PM. The MFC will all but eliminate these pollutants from vehicles. The MFCV (Vehicle) is an inherently clean vehicle. Even the cleanest gasoline ICE vehicle will not be as clean as a MFCV.

The gasoline vehicle depends on elaborate control technologies and computerized diagnostics to maintain its level of emissions control. Since the MFCV relies on an electric drivetrain, it is feasible that the MFCV will not be required by states to have regular emissions testing.

The MFCV can pass from owner to owner and its pollution profile will remain very low: zero in some pollutant categories, close to zero in others.

Methanol has a much lower vapor pressure than gasoline. This implies that methanol will exhibit lower evaporative emissions when compared to gasoline.

2.2.2. MFC and greenhouse effect

WE ARE CONVINCED THAT METHANOL IS A SUITABLE AND SAFE FUEL FOR THE FUEL CELL VEHICLES OF TOMORROW.

In most industrialised nations, the transportation sector is a major source of GHG emissions.

FCVs have the potential to substantially reduce GHGs in addition to virtually eliminating urban smog. The choice of fuel for the fuel cell can significantly impact the GHG benefit received. In countries without pipeline natural gas, methanol derived from natural gas offers the greatest CO2 reductions. Of the liquid fuels considered for FCVs, methanol clearly provides the largest benefits for reducing GHG emissions, nearly twice that of low sulfur gasoline.

2.2.3. MFC and water pollution

“OUR STUDY ON THE FATE AND TRANSPORT OF METHANOL IN THE ENVIRONMENT SHOWED THAT, RELATIVE TO GASOLINE AND ITS CONSTITUENTS LIKE ENZENE, METHANOL WILL LIKELY HAVE FAR FEWER ADVERSE IMPACTS ON THE ENVIRONMENT.”

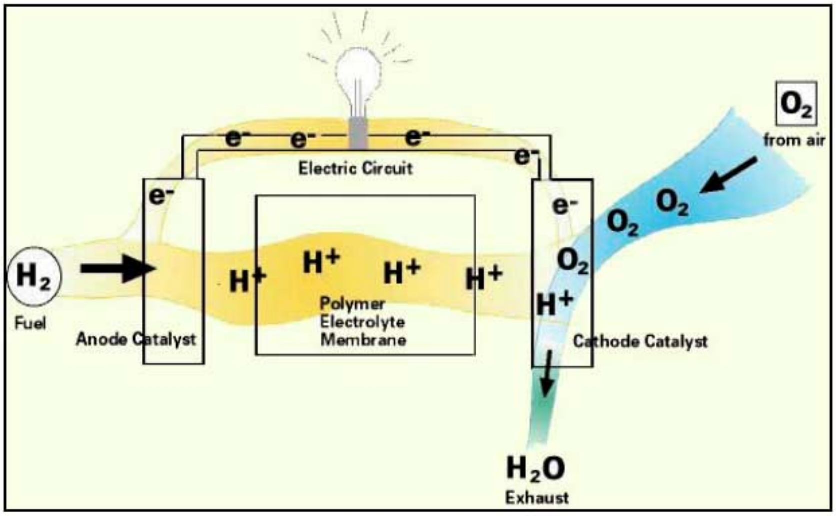
The MFCV, in addition to lowering harmful emissions into the atmosphere, will also prove to be a major advancement toward improved protection of water quality on land and in the ocean. Methanol is intrinsically less damaging to the environment. Methanol is easily biodegradable in aerobic and anaerobic environments.

3. THE METHANOL FUEL CELL : CHARACTERISTICS AND TECHNICAL ASPECTS

3.1. What is a fuel cell ?

The fuel cell is a system that generate electricity (continuous current) from the non-polluting chemical reaction : 2 H_2 +O_2 >2 H_2O.
Though today several types of fuel cells exist, our company is concentrating its research program on the PEM (Proton Exchange Membrane), which is the technology that interest the most the car industry. Indeed it seems to be the most promising technology.

In principle, a fuel cell operates like a battery. Unlike a battery, a fuel cell does not run down or require recharging. It will produce energy in the form of electricity and heat as long as fuel is supplied.
A fuel cell consists of two electrodes sandwiched around an electrolyte. Oxygen passes over one electrode and hydrogen over the other, generating electricity, water and heat.



Hydrogen fuel is fed into the "anode" of the fuel cell. Oxygen O_2(or air) enters the fuel cell through the cathode. Encouraged by a catalyst, the hydrogen (H_2) atom splits into a proton (H^+) and an electron (e^-), which take different paths to the cathode.
The reaction is : H_2 (gas) => $2H^+ + 2e^-$

The proton passes through the electrolyte. The electrons create a separate current that can be utilized before they return to the cathode, to be reunited with the hydrogen and oxygen in a molecule of water. The reaction is : _ O_2 +$2H^+ + 2e^-$ => H_2O.
The transfer of the electrons by the external circuit is at the origin of the current that is supplying the electrical motor.

3.2. Why using fuel cells ? What is our competitive advantage ?

There are a lot of advantages of the technology :

less polluting
Relatively to other fuels, the pollution emitted is 97% less important. Fuel cells vehicles are producing neither greenhouse effect gas, nor emission of carbon monoxide.

silent
This kind of battery doesn't emit any noise, its functioning is silent, contrary to gas turbines. It represents a real asset to reduce the noise pollution of a big city as Taiwan in rush hours.

the size of the motor
The modern technology – miniaturization- now allows to solve a major handicap of the battery: its dimensions. Our last researches brought a miniaturization so that our new battery is without any problem contained in a scooter.

the vehicle's yield
The yield of a fuel cell vehicle is equal and even superior to the yield of a diesel vehicle. Some energy could be recovered to other functions.

demands
The demand in terms of non-polluting transports technology is increasing, particularly in a city like Taiwan. The reason : to struggle against the poor air quality in urban environment.
This demand enables us to accelerate our research plans : indeed, the researches need money to advance. This money is brought by societies which are interested in our revolutionary technology, for example EDF, Siemens, Mercedes, Daimler-Chrysler…

the motor's temperature
The inside temperature of the motor reaches only 80 ° Celsius whereas the temperature of the heart a diesel motor exceeds 1000 ° Celsius.

the maintenance
Our fuel cell motor doesn't induce any erosion and consequently doesn't need any maintenance.

3.3. The use of fuel cell motors for vehicles

According to the international symposium of electrical vehicles of Montreal (that took place the 15th and 16th October 2001), the use of fuel cell vehicles is very promising. The hydrogen fuel cell raises a lot of problems, especially on the aspect of the stocking. To fill in a tank with liquid hydrogen is not very easy : the temperature has to be nearly – 253 ° Celsius. The infrastructure needed to keep this temperature is complex.
Actually, our firm is developing methanol fuel cells. In fact, the stocking is more easy to realize and less dangerous.
Methanol, a convenient liquid fuel made from natural gas or renewable resources is a leading candidate to provide the hydrogen necessary to power fuel cell vehicles (FCV). In the last few years, much progress has been made by our company in bringing methanol fuel cell technology closer to the marketplace.

Fuel cells generally run on hydrogen, but any hydrogen-rich material can serve as a possible fuel source. This includes fossil fuels – methanol, ethanol, natural gas, petroleum distillates, liquid propane and gasified coal. The hydrogen is produced from these materials by a process known as reforming.

Polymer electrolyte membranes can be made extremely thin in our laboratories, less than 50 µm, making for densely packed stacks and, consequently, high power densities. The thinness of the polymer electrolyte also means high conductance and low ohmic resistance losses. The moderate conditions that the fuel cell runs under are also a benefit when compared to the alternatives - highly corrosive acids, or high temperature ceramics and molten salts.

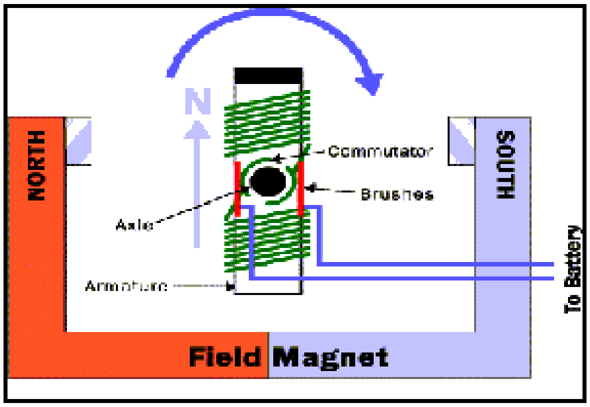
On the other hand, Proton Exchange Membranes Fuel Cells (PEMFC) are especially vulnerable to “flooding”: the membrane becomes over-wet due to production of water at the cathode and diffusion of reactants is blocked. Also, platinum is required, less than 0.4 mg/cm_ for each of anode and cathode, mainly to resist the effects of carbon monoxide poisoning from impure hydrogen. Part of the reason is that PEMFC operate at a relatively low temperature, under 100° C, because higher temperatures remove water from the membrane and damage it. At these low temperature catalysts are simply not as active. More catalyst is required at the cathode than at the anode due to the much lower activity of oxygen ionisation.
For security and cost reasons, our company would prefer to use direct methanol fuel cells. These cells are similar to the PEM cells in that they both use a polymer membrane as the electrolyte. However, in the DMFC (Methanol Fuel Cells), the anode catalyst itself draws the hydrogen from the liquid methanol, eliminating the need for a fuel reformer. Efficiencies of about 40% are expected with this type of fuel cell, which would typically operate at a temperature between 120-190 degrees F. Higher efficiencies are achieved at higher temperatures.
Methanol can be made relatively easily from gasoline or biomass, and although it only has a fifth the energy density of hydrogen by weight, as a liquid it offers more than four times the energy per volume when compared to hydrogen at 250 atmospheres.

According to our researches, we make fuel cell engines with several cells electrically and physically connected in a box-shaped “stack”. Oxygen and hydrogen are brought to the membranes where they can react, while the membranes themselves are kept wet so that they can conduct the hydrogen ions (protons). Surplus water is pushed out of the stack, and waste heat is rejected from the stack to avoid overheating and membrane damage. The cells, which are made of electrically conductive graphite or metal, are constructed in series so voltages from each cell add up; the same current flows through the entire stack. The hydrogen and oxygen flow in molded manifolds typically built off the side of the stack, and are divided into parallel feeds into the individual cells; water and exhaust gas are collected in another manifold and rejected to the atmosphere (the water may be recycled to humidify the incoming gases).

3.4. The engine combined to our fuel cell

As we did before with other manufacturers, we are using electrical motors which have the following characteristics :

Model	A5.53036
KW	5,5
rpm	3500
type	B3
voltage	380/660
H.A.	132
D.A.	38



3.5. The scooter's performances specifications

Specification	Fuel cell scooter
Max motor power output	4-6 kW
Range before refuelling at 30 km/h cruising speed	200 kms
Fuel efficiency	> 100 mpge
Acceleration	0-30 m in less than 5 seconds
Maximum speed	60 km/h

Our firm focus on a fuel cell design for a scooter of approximately 5 or 6 kW, a niche that was previously unexplored. Size, weight, and cost restrictions force the design to be simple and to remove any unnecessary systems. Where data were not well known and assumptions were necessary, performances were assumed to be worse than expected to ensure a feasible design.
Cooling of the fuel cell system proved to be a significant problem. A radiator was chosen that could handle the maximum continuous cooling load (produced by slope climbing requiring 3020 W of power for an indefinite period).

The complete drive system configuration (fuel cell, battery, motor, controller, hydrogen storage in DTI-modelled metal hydride) is summarized below.

3.6. The characteristics and capabilities of the scooter

System size is approximately the same as current electric scooters, at 43 L and 61 kg for the fuel cell, hydrogen storage, and electric motor / controller. Manufacturing costs of fuel cell scooters are expected to be of $1,450 the first two years and to decrease to under $1,300 in the long term (5 to 6 years), with per-km fuel costs half of those for gasoline scooters.
The important performance criteria are vehicle range before refuelling, power, cost, and to a lesser extent vehicle weight.
Our company studied several different sizes of fuel cells and calculated manufacturing costs for the various components of the cell stack (auxiliaries like compressors and cooling pumps were not examined). But we finally choose the best quality-price ratio.

	Proposal by TGTM	**Proposal for the JV**
Engine (stroke)	2 stroke, single cylinder, air cooled	2 stroke, air-cooled
Displacement	49.26 cc	49 cc
Max Horsepower	3.7hp / 5500rpm	3500 rpm
Maximum Speed	62 km / hour	60 km/h
Fuel Consumption	45 km / l	
Starter	Electric and kick starter	Electric and kick starter
Frame	Pressed steel monocoque	TGTM's skeleton
Dry weight	75kg	140 kg

3.7. Details of the cost to manufacturing

Fuel cell stack	$220,00
Starter battery	$10,00
Methanol storage	$190,00
Heat exchanger	$60,00
Coolant pump	$10,00
Blower	$110,00
Plumbing	$50,00
DC brushless motor	$125,00
Controller	$150,00
Vehicle shell	$295,00
TOTAL	**$1 220,00**

3.8. Details of the sale price (for the final consumer)

Cost to manufacturing	$1 220,00

Proposal by Methapower fuel cells
Fuel cell equipped scooters in Taiwan

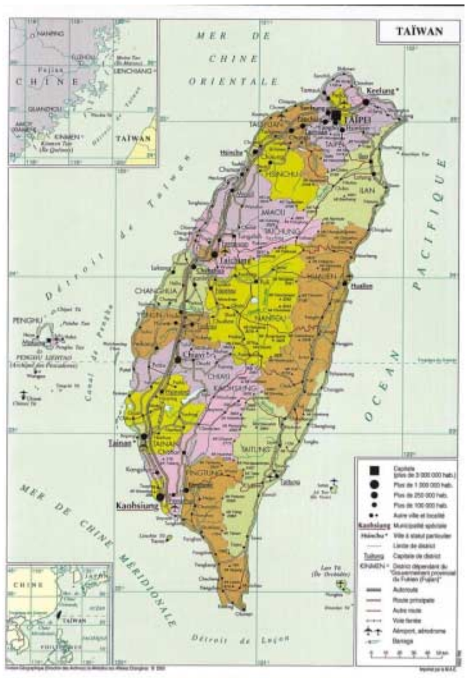
J.V. project with T.G.TIGER Motorcycles

Advertising	$200,00
Sales force	$80,00
After sales service	$100,00
Distribution	$80,00
Others	$50,00
Personnel costs	$200,00
Margin	$470,00
RETAIL PRICE	**$2 400,00**

4. TAIWANESE MARKET

4.1. Taiwanese situation of the market

4.1.1. Taiwan's geopolitic



Situated in the Pacific Ocean, the Taiwan island belong to East Asian countries. This country has been in difficulties for a long time. But from 2000 to nowadays the country situation has positively changed.

Taiwan entrance in the OMC in the year 2000, allowed to establish trade relations between Asian countries, particularly with China.
Those new relations has developed Taiwanese investments in China, which has conducted to the economic revival.

4.1.2. Taiwan's safety and security

With the following economic indicators we can assume that the situation of Taiwan is safe.

Economic indicators (billions of $)	1999	2000	2001
Economic growth (%)	5,5	6,5	5,0
Inflation (%)	0,2	1,2	1,3
Exportations	121,1	148,7	149,0
Importations	105,8	142,9	143,3
Exterior debts	35,0	35,5	40,7

- ✓ The growth is based on safe basis, with savings rate and high stable productive investments.
- ✓ Poor unemployment and inflation rates.
- ✓ Strong adaptability and solidity of the financial structure of firms.
- ✓ Moderated exteriors debts.
- ✓ Consolidation of the democracy
  - ⇒ Taiwan is a country relatively safe and secure.

4.2. Potential market

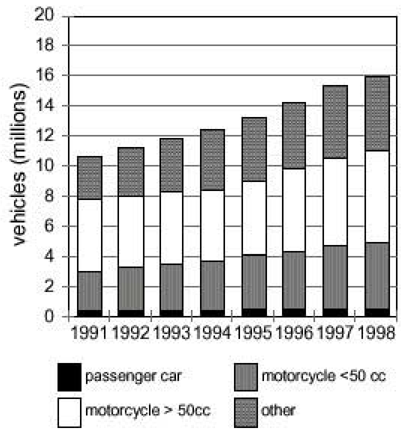
4.2.1. Generalities

There are approximately 100 million motorcycles in the world. The greatest numbers are concentrated in Asia, and it is here that alternative scooters could have major impact. Some illustrative countries are listed below, where you can observed the high percentage of scooters in several countries:

Country	Motorcycles	% of total vehicles
China	3,047,520	41.2%
Hong Kong	17,100	5.00%
India	7,666,640	69.6%
Indonesia	5,890,760	69.6%
Japan	18,451,300	26.0%
Korea	1,066,800	34.4%
Malaysia	2,460,640	59.0%
Pakistan	627,170	48.8%
Philippines	281,530	27.2%
Taiwan	9,232,889	73.4%
Thailand	6,343,558	66.1%

We can notice that Taiwan has got the higher percentage of scooters in its country. That is why it can be the country which can adopt the new generation of scooters.

4.2.2. Taiwan vehicle fleet



Taiwan's transportation split its interesting. Historically, the lack of an automative industry in the critical growth period meant that people rapidly adopted scooters and then did not switch to automobiles as they become more wealthy.

- The crowded cities with a total of 22,.70,461 million of citizen,
- Warm weather,
- Dense population,
- And limited land continue to make scooters popular.

As it can be observed in this graphic the main vehicles used in Taiwan are scooters.

4.2.3. Taiwan : a new preoccupation, a new product

Since several years a new preoccupation appears air pollution and so the quality of life.
That is why, today Methapower really think that there is an important potential market in Taiwan. The new generation of scooters just need being presented to the population.

The PEM scooter presented by Methapower will fit the requirements of today Taiwanese customers because in addition of being less polluting , the prototype is:

- silent,
- the size of the engine is smaller,
- less deterioration of the engine, the scooter gets less damaged,
- become cheaper than a scooter at the use.

With all these advantages, Methapower's fuel cell scooter should be the firs one to invest the Taiwan market.

4.3. Methapower's competitors

Metapower has got several worldwide competitors, all manufacturers of fuel cell.
Some come from the scooters manufacturers like Zincair, the others come from cars manufacturers like Ford Motor Company or Mazda.

But in Taiwan there is no direct competitors for the new generation of scooters. We can just fin alternatives competitors:

- classical scooters,
- cars,
- buses,
- taxi,
- bicycles,
- human being (by walk).

Moreover, we know that there are some manufacturers that want to invest Taiwanese market like the two firms: FUEL CELL TECHNOLOGY and CLEAN TECH.

4.4. The joint venture's target

In the aim of defining the target for fuel cell scooters, the age structure must be analysed.
Below, only one group can be selected, the 15-64 years one. Because it is generally in this range of age that are found the users of scooters.

Age groups	% of Total	Male	Female
0-14 years	21.22	2,470,270	2,276,108
15-64 years	69.97	7,944,451	7,707,250
65 years and over	8.81	1,034,230	938,152

But, we cannot say that there are 15,6 million potential buyers.
Here, we have to take in account that the new generation scooter are more expensive at the buy : approximately $ 2 400. That is why, the socio-professional group must be examined.

Generally there are three different groups : low, average and high. Only the two last can be observed.
We consider that 35,7% of the population can fit those requirements. This percentage came from a French book “Risque pays 2001, Taiwan”.

⇒ **The target can be a woman or a man, who is a teenagers, a young people or a business man with an average or high socio-professional group.**

⇒ **That means there are 7,889,700 million people who fit into the target market for marketing fuel cells scooters in Taiwan.**

5. COMMERCIAL STRATEGY

Having told you about our ambitions, we want you and our JV to become a leader on Asian fuel cell scooters market for a long time. Then follow us on external market and we will insure you exclusivity on this Region in full spring.

5.1. Target proximity

We have the chance to be integrated on the Asiatic market where cultural aspects are some of the hugest barriers to enter. Then we have an advantage on European competitors who are trying to gain market share in all sectors nowadays. Actually, Taiwan is a Chinese civilization with lots of common points with those in Asia. The philosophy of Confucianism is the original link between all those populations.
Geographically, Taiwan is also in the middle of the region which is an advantage for frequent contacts. Demographically, the others countries towns are also densely populated because of the respect of green areas. Therefore Fuel Cell Scooter will be also attractive for those people.

In this Cultural and historical background, a specific launch product campaign for the whole Asiatic countries would have a huge impact. It have to deal with Asiatic creativity, respect of environment for the whole world; love of tradition, silence, originality of Confucianism culture in comparison with occidental habits.
Playing on the Asiatic proudness, Fuel Cell Scooter will become a civilization symbol and a mean of identification for each Asian people.

5.2. Country Risk

Countries in East of Asia have been come back from the last crisis yet, which purify their economy. Those are recovered their name of “Tiger” according to their original dynamism which none countries in the world can imitate and their ability to cope with difficulties. The region is also the most populated. Then the region will insure us a market always increasing. All the more, competition level in those countries is very low. The market seems to be virgin.

Target Countries are chosen for their low risk COFACE mark, as you have just seen it on the map upon.

China is the hugest market, which is going to enter in OMC with Taiwan. Newspapers show the integration of the two countries as a real sign of reconciliation. If the average purchasing power is one of the lowest of the region the volume of rich people makes China the most important market. China is also the first destination of Taiwan investments with between 20 and 30 billions of dollars.

North Korea is the most developed economy not so far from the best. It can also become a gate to the Japanese market.

Hong Kong has the advantage to be the first Asiatic country of exportation for Taiwan. It is also becoming a part of China.

Singapore, Malaysia and Philippine should become also targets for our JV but we do not want for our future little structure an unrealistic goal.

5.3. The best countries of the market in term of risk

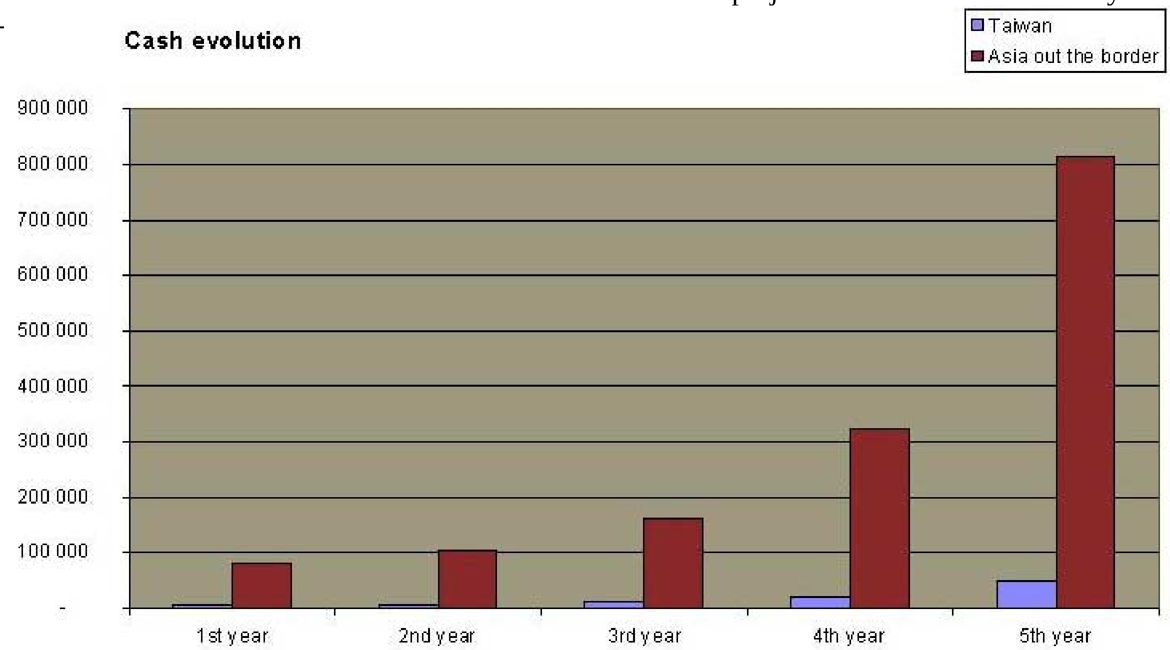
	COFACE Risk Mark	**Growth rate**	Population	**Purchasing power**	**Target rate**	**Volume of the market**	Sustainable volume in the first year	**Sustainable Cash**
Taiwan	good	5,0%	22 100 000	$ 14 500	35,70%	***7 889 700***	***5 000***	***$ 12 000 000***
Chine	good	7,5%	1 238 600 000	$ 3 051	9,00%	111 474 000	70 645	$ 169 548 652
South Korea	good	5,0%	46 400 000	$ 13 286	15,70%	7 284 800	4 617	$ 11 079 965
Honkong	good	5,0%	6 700 000	$ 20 763	25,40%	1 701 800	1 078	$ 2 588 387
					TOTAL	***128 350 300***	***81 340***	***$ 195 217 004***

5.4. Market Share Evolution

In Comparison with Taiwan and respectful of your first previsions, let's see our progression on this market with approximately the same increasing market share rate of 26%.

Market Share Growth rate	**26%**	**Taiwan**		**China Korea Honk-Kong**	
Period	**Market share**	**Volume**	**CA predicted**	**Volume**	**Cash predicted**
1st year	0,06%	5 000	$ 12 000 000	81 340	$ 195 217 004
2nd year	0,08%	6 295	$ 15 107 105	102 402	$ 245 763 648
3rd year	0,10%	9 976	$ 23 943 148	162 295	$ 389 509 132
4th year	0,13%	19 905	$ 47 772 860	323 822	$ 777 172 893
5th year	0,16%	50 000	$ 120 000 000	813 404	$ 1 952 170 045

It means for a number of 5000 Fuel Cell Scooter corresponding to 0,06% of market share, you can have a volume of 81340 for the same share in the other market.



5.5. Costs Integration

China Korea Honk-Kong

Period	Fret	Duane	Commercialization	Total of costs	Cash minus costs
1st year	$ 4 067 021	$ 19 521 700	$ 6 507 233	$ 30 095 955	$ 165 121 050
2nd year	$ 5 120 076	$ 24 576 365	$ 8 192 122	$ 37 888 562	$ 207 875 085
3rd year	$ 8 114 774	$ 38 950 913	$ 12 983 638	$ 60 049 325	$ 329 459 808
4th year	$ 16 191 102	$ 77 717 289	$ 25 905 763	$ 119 814 154	$ 657 358 739
5th year	$ 40 670 209	$ 195 217 004	$ 65 072 335	$ 300 959 549	$1 651 210 496

Fret is estimated by an average of $50 per scooter.
Duane of 10% is a minimum average through all countries.
Commercialization cost $80 per scooter like in Taiwan becau
…age of 15,5% … rogress
…rnational trea…

…ow you wha… build
…the market … of our
competitors in the future.

6. MANUFACTURING PROCESS

6.1. Place of the joint venture in the manufacturing process

Place of the JV in the manufacturing process :

Methapower

fuel cell engine Methapower FCE @ :
manufacture and tests

Contribution:
Fuel cell stack
+ design of the motor.

TGTM

Scooter shell, assembly, controls and assorted other ancillaries:
manufacture and tests

Contribution:
Vehicle shell +Industrial parts
(blowers, radiators, starting batteries, coolant pumps…)

JV

Manufacture of fuel cell scooters:
2 assembly lines

6.2. Manufacturing plant

6.2.1. Plant

The TGTM manufacturing facility is large enough to accommodate a new line for the production of fuel cell powered scooters. The JV will use the available room of TGTM plant to build 3 new assembly lines.
In addition, The JV will use TGTM available storage areas.

6.2.2. Creation of the assembly lines

	Year N-1		**Year N**		**Year N+1**		**Year N+2**	
Assembly line 2		■	■					
Assembly line 3		■	■					
Assembly line 1			■	■				

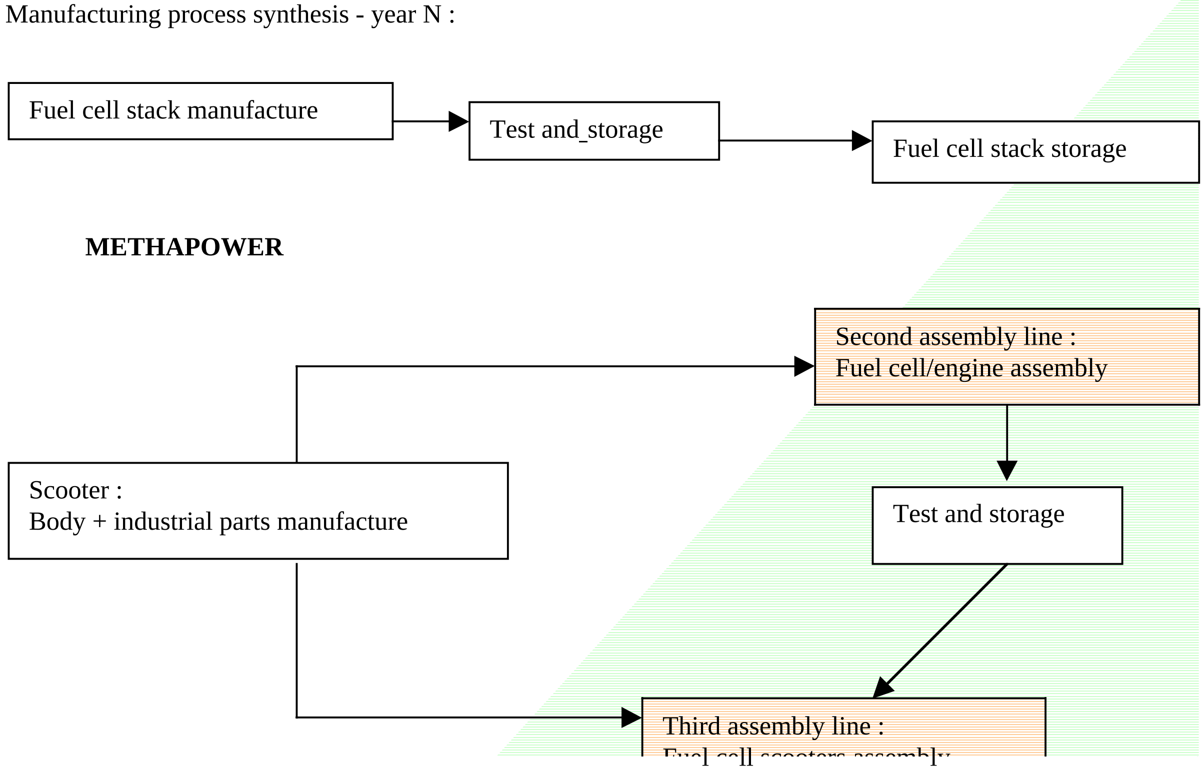
6.3. Manufacturing process

6.3.1. Year N

Fuel cell stacks are imported from Methapower production plant in Shanghai. They have already been tested by Methapower.
They are stored in the JV manufacturing plant storage areas.
The second assembly line is responsible for fuel cell/engine assembly. It has been designed by both parties :
Methapower : know-how of fuel cell/engine manufacturing process
TGTM: furniture of industrial parts (blowers, radiators, starting batteries…)

The fuel cell/engine stack is tested . The third assembly line is responsible for the whole scooter assembly: body parts + fuel cell/engine/scooter assembly.. The vehicle is tested and then ready for delivery.

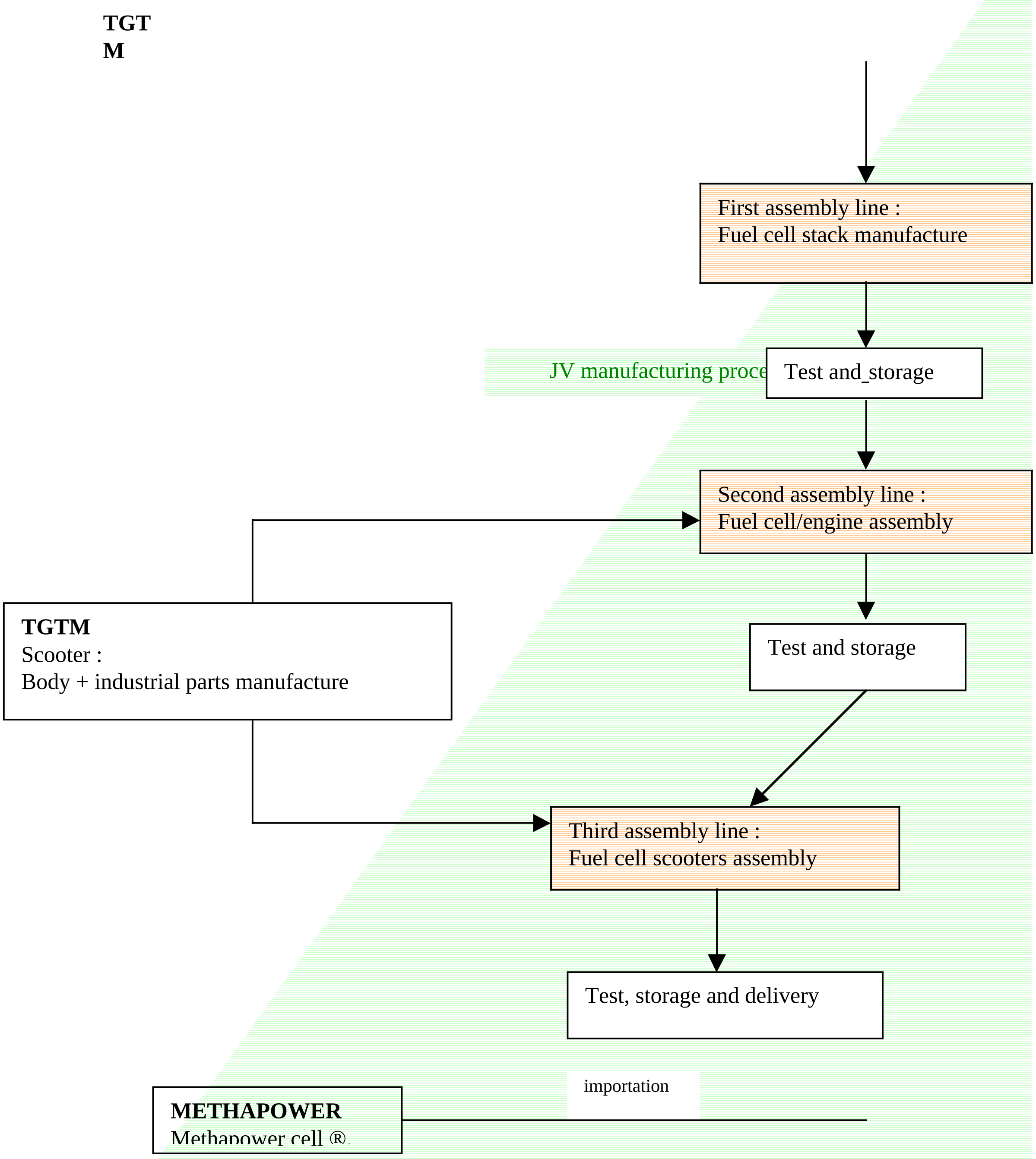
Manufacturing process synthesis - year N :



6.3.2. Year N+1

The first assembly line is built : Fuel cell stack manufacture .The JV is responsible for the manufacturing process of the whole scooter. Only the master piece of METHAPOWER is imported from China : Methapower cell ®.

Manufacturing process synthesis - year N+1 :



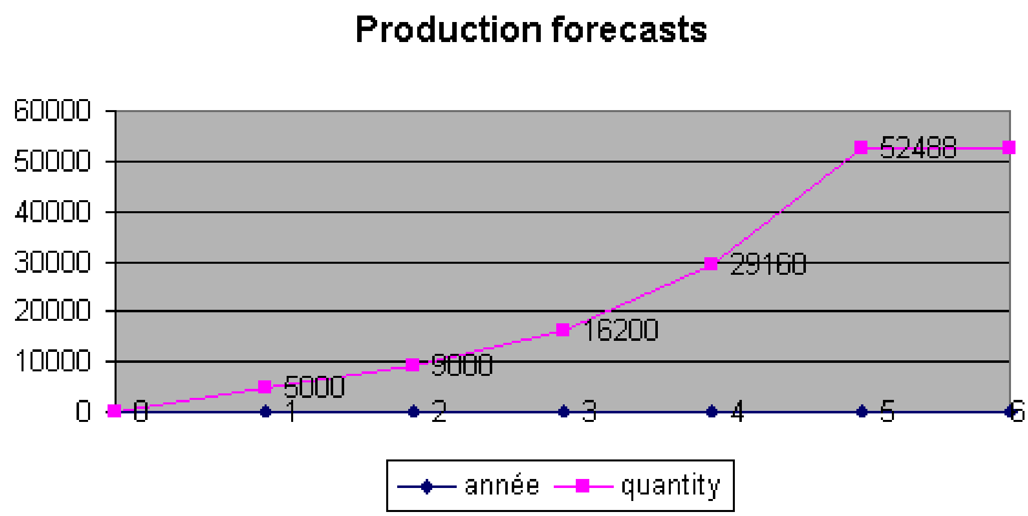
JV manufacturing process - year N+1

6.4. Advantages of the manufacturing process

- equitable collaboration of both parties in the manufacturing process
- reliable product (equipment tests)
- no time consuming problems or delay (use of storage areas)

7. PRODUCTION FORECASTS

7.1. Electric scooter production



7.2. Considerations

The maximum scooter quantity the JV can produce is estimated to 52488 units/year. This amount can be reached at the beginning of the 5th year.

8. THE METHANOL FUEL : PERSPECTIVES, DISTRIBUTION NETWORK AND COSTS

8.1. Methanol : the future fundamental resource ?

In 2000, worldwide methanol production capacity stands at 12.5 billion gallons (37.5 million tons) per year, with a utilization rate of just under 80 percent. The world methanol industry has a significant impact on the global economy, generating over $12 billion in annual economic activity while creating over 100,000 direct and indirect jobs.

Today, methanol is being produced from otherwise flared or vented natural gas in many other parts of the world. If only 10 percent of the natural gas flared each year was made available for the methanol fuel market; it would be enough to power 9.5 million FCV annually.

8.2. Where to buy methanol fuel?

Consumers have come to expect near universal availability of fuel for their automobiles. In Taiwan nearly $10 billion in undepreciated capital is invested in the infrastructure to produce, refine, distribute and retail market motor fuels. Each year more than $1 billion is spent to maintain and upgrade this network of 80,000 retail gasoline stations and 5,000 diesel stations. Cars and scooters with methanol fuel cells would do little to change the regular routine of consumers at the filling station. A driver would simply stop at a pump and fill up with methanol rather than gasoline.
The existing wholesale methanol distribution infra-structure in Taiwan is relatively smaller, but well established and capable of delivering product to markets worldwide. Methanol distribution to the transportation sector would involve utilizing the existing gasoline distribution system by adding methanol-fuelling capacity to retail gasoline outlets. The global distribution system includes significant maritime movements on vessels as large as 45,000 tons, and Methanex, the world leader in methanol production and marketing, has a new 100,000 dead weight ton (dwt) vessel, the Millennium Explorer. For delivery to inland locations, an extensive barge, rail car, and tanker truck network already exists to feed most locations in Taiwan and in the rest of the world. A major expansion of the system would be required if methanol fuel demand increased significantly.

Converting an existing double-walled gasoline under-ground storage tank to methanol use, and installing new piping and a dispenser is the lowest cost option for retail station conversion. An existing gasoline or diesel tank can be cleaned and a methanol dispensing

system added for slightly less than $20,000. The capital cost for adding methanol capacity to an existing gasoline station by installing a new 10,000-gallon, double-walled,

underground storage tank, piping and dispenser is about $62,400. Adding an aboveground storage tank, used by fleet operators and rural retail stations, costs roughly $54,500.

Taiwan's highly populated areas are strong candidates because they tend to have higher levels of air pollution, and at the same time offer maximum scale efficiencies for the first wave of a methanol-fuelling infrastructure. More customers for each fuel pump means lower cost in the crucial early phases of methanol fuel cell vehicles (MFCV) introduction. By simultaneously introducing their MFCV in Taiwan and Japan as well as in the United States, global automotive companies will achieve higher production runs that will help lower costs.

8.3. The partnerships with fuel distributors and companies

The participation of the oil industry would help facilitate the establishment of a methanol-fuelling network. Although the costs of installing methanol storage and pumping facilities are relatively low, the costs for real estate, buildings and developing brand name recognition can be much higher. Today drivers want the convenient availability they enjoy with gasoline. In 1998, Ford announced a strategic alliance with ExxonMobil Corporation to develop cleaner fuel and engine systems, including technology for fuel reformers. DaimlerChrysler entered into a similar alliance with Shell Oil to cooperate on fuel cell and reformer technology, and to evaluate Shell s catalytic POX technology that transforms conventional fuel into hydrogen-rich gas.

DaimlerChrysler and Ford are working with oil companies including BP, ExxonMobil and Texaco to develop the filling-station infrastructure for FCVs. The DaimlerChrysler/Ford partnership is currently urging oil companies to consider installing liquid methanol pumps and tanks in their service stations. In addition, oil companies, automakers and the methanol industry are collaborating in the Methanol Specification Council, formed in 1999 to develop worldwide specifications for methanol fuel for use in FCV.
Today some partnership with an oil company seems to be an ambitious idea. The firms with which we are used to work already made agreements in Taiwan. We confidentially know that in the next 6 months, a lot of oil distributors are going to introduce methanol tank refuelling in their oil station because of the strategic pressure of the automobile companies.
We are to use the development of this network to the imminent launching campaign of out fuel cells scooters.

8.4. The cost of the methanol fuel

The future fuel cost of operating a MFCV cannot be determined precisely, but a relative sense can be inferred from past data. Historical price data can be used to calculate what it would cost to operate a MFCV, in comparison to a standard ICE vehicle getting 27.5 mpg using gasoline. Since 1975, the average wholesale spot price for methanol has been 36

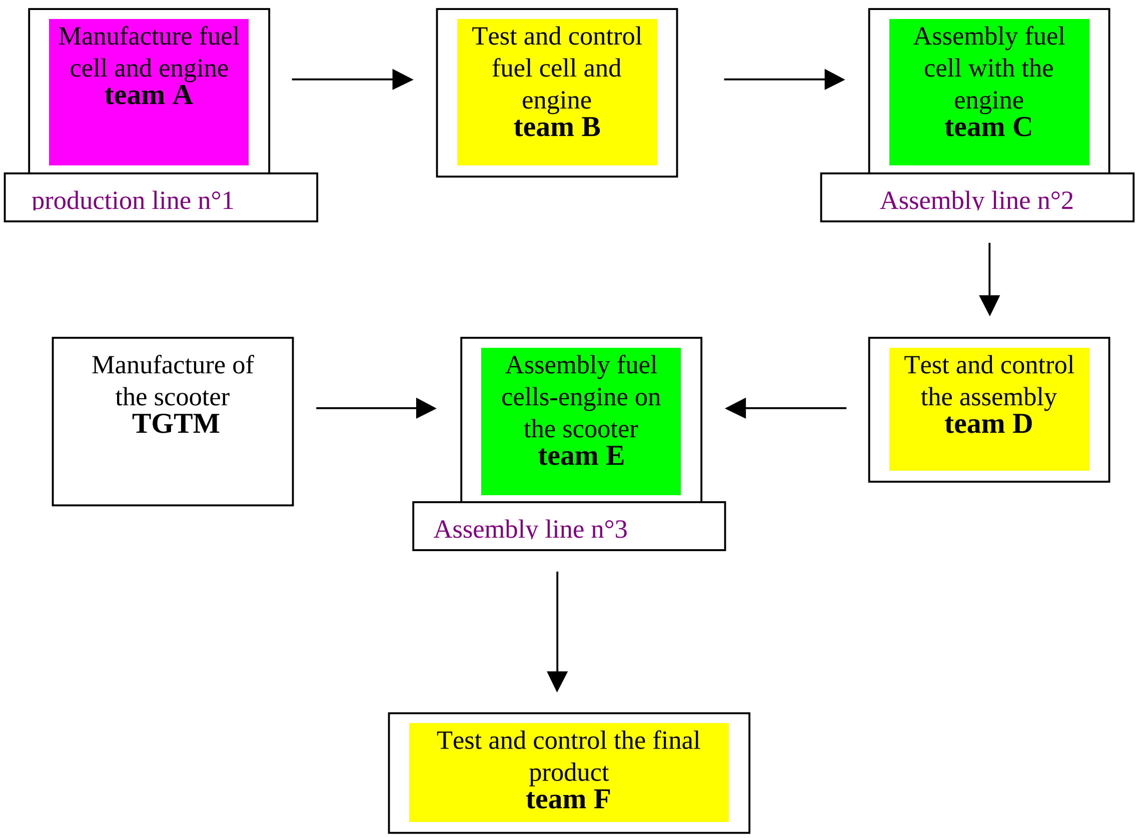
cents-per-gallon on a non-inflation adjusted basis. The cost structure of the methanol industry has been decreasing in real terms due to economies of scale achieved through the construction of larger, more efficient plants and the distribution of methanol in much larger seagoing vessels. New technologies such as jumbo methanol plants on a scale of 10,000 tons-per-day (the equivalent of 1.2 billion gallons per year), are extremely efficient and capable of producing at a forecasted bulk methanol price of approximately 23 cents-per-gallon that includes full capital cost recovery and a reasonable return for investors.
Methanol, like gasoline, has experienced pricing highs and lows, but it is clear from the data that on average, methanol is substantially cheaper per gallon than gasoline. To determine the potential pump price of methanol, assume the average cost to bring a gallon of methanol to the retail station includes the following: 10 cents for regional transportation and distribution, 4 cents for local distribution and 5 cents for the station owner, or an overall pre-tax cost of 19 cents. Based on the wholesale spot price of 30-45 cents-per-gallon for methanol, and the addition of other costs, the pump price may fall between 56-62 cents-per-gallon.
While methanol contains just one-half the energy of gasoline, because the fuel cell car has a fuel economy of 2-times greater than a gasoline ICE, the actual cost to the consumer to fuel a MFCV will be between 67-84 cents per gasoline-equivalent- gallon. At this price, methanol will be able to compete quite well with gasoline, and provide a significant return on investment to retailers converting pumps to methanol operation.

9. TECHNOLOGICAL TRANSFER AND TRAINING PLAN

9.1. Tasks distribution

7 Chinese teams will be created in the Joint Venture:

team A: Manufacture fuel cell and engine
team B: Test and control during the process
team C: Do the assembly of the fuel cell with the electrical engine
team D: Test and control after the assembly
team E: Do the assembly on the scooter
team F: Test and control the final product
team G: Do the maintenance of the machines on the production and assembly lines.



Each team A,C,E G will be composed of
- 1 technical engineer,
- 2 technicians,
- 10 workers.

Each team B,D,F
- 1 control and quality engineer,
- 2 technicians,
- 10 workers.

The 70 workers, 14 technicians and 7 engineers will be recruited.

9.2. The training

For the training 3 of our best Chinese engineers and 2 technicians of our R&D Center in Shangaï will teach the process. They will be easily integrate to the team, they speak also fluently English. The technological transfer will take one year and 6 month.

1.1.1. Organization

During the first year, two assembly lines(n°2 and n°3) will be built, one to assembly fuel cells with engine and the other to assembly the fuel cell-engine to the scooter. The first six month, workers, technicians and engineers of team C,D,E,F,G will do the theoretical training and the last six month they'll do the technical training (10h/day). At he beginning of year N, as we import ours fuel cells and engines, the work force will do themselves the assembly of the fuel cells-engine with the scooter.

For team A and B, they'll learn how manufacturing the fuel cells and the engine during the year N-1 (theoretical aspects). During the six month of the year N they 'll learn all the technical aspects. Their production line (n°1) will be ready in the middle of the year N.

Teams	N-1 Year												Year N					
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C	X	X	X	X	X	X	X	X	X	X	X	X						
D	X	X	X	X	X	X	X	X	X	X	X	X						
E	X	X	X	X	X	X	X	X	X	X	X	X						
F	X	X	X	X	X	X	X	X	X	X	X	X						
G	X	X	X	X	X	X	X	X	X	X	X	X						

X: Theoretical courses
X: Technical courses

1.1.2. Programs of the courses

Each team will receive a general training of:

- -Security and safety
- -Mechanic
- -Electronic

Specifical training will be taught:

- -Manufacturing procedures
- -Quality and control
- -Management
- -Chemical

The training repartition is presented here:

	Team A			*Team B*			*Team C*			*Team D*			*Team E*			*Team F*			*Team G*		
	W	**T**	**E**	**W**	**T**	**E**	**W**	**T**	**E**	**W**	**T**	**E**	**W**	**T**	**E**	**W**	**T**	**E**	**W**	**T**	**E**
Security and safety training	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mechanical training	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Electronic training	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Management		X	X		X	X		X	X		X	X		X	X		X	X		X	X
Chemical training	X	X	X	X	X	X	X	X	X				X	X	X						
Quality and control training				X	X	X				X	X	X				X	X	X			
Manufacturing procedures	X	X	X				X	X	X				X	X	X				X	X	X

W: workers
T: technicians
E: engineers

9.3. Human resources evolution

The joint venture is being growing, to follow , new wage earners will be recruited after year N.

	workers	technicians	engineers
Year N-1	70	14	7
new wage earners	-	-	-
Year N	70	14	7
new wage earners	+40	+4	+5
Year N+1	110	18	12
new wage earners	+30	+4	+6
Year N+2	140	22	16
new wage earners	+30	+5	+6
Year N+3	170	28	22
new wage earners	+50	+5	+5
Year N+4	220	33	27

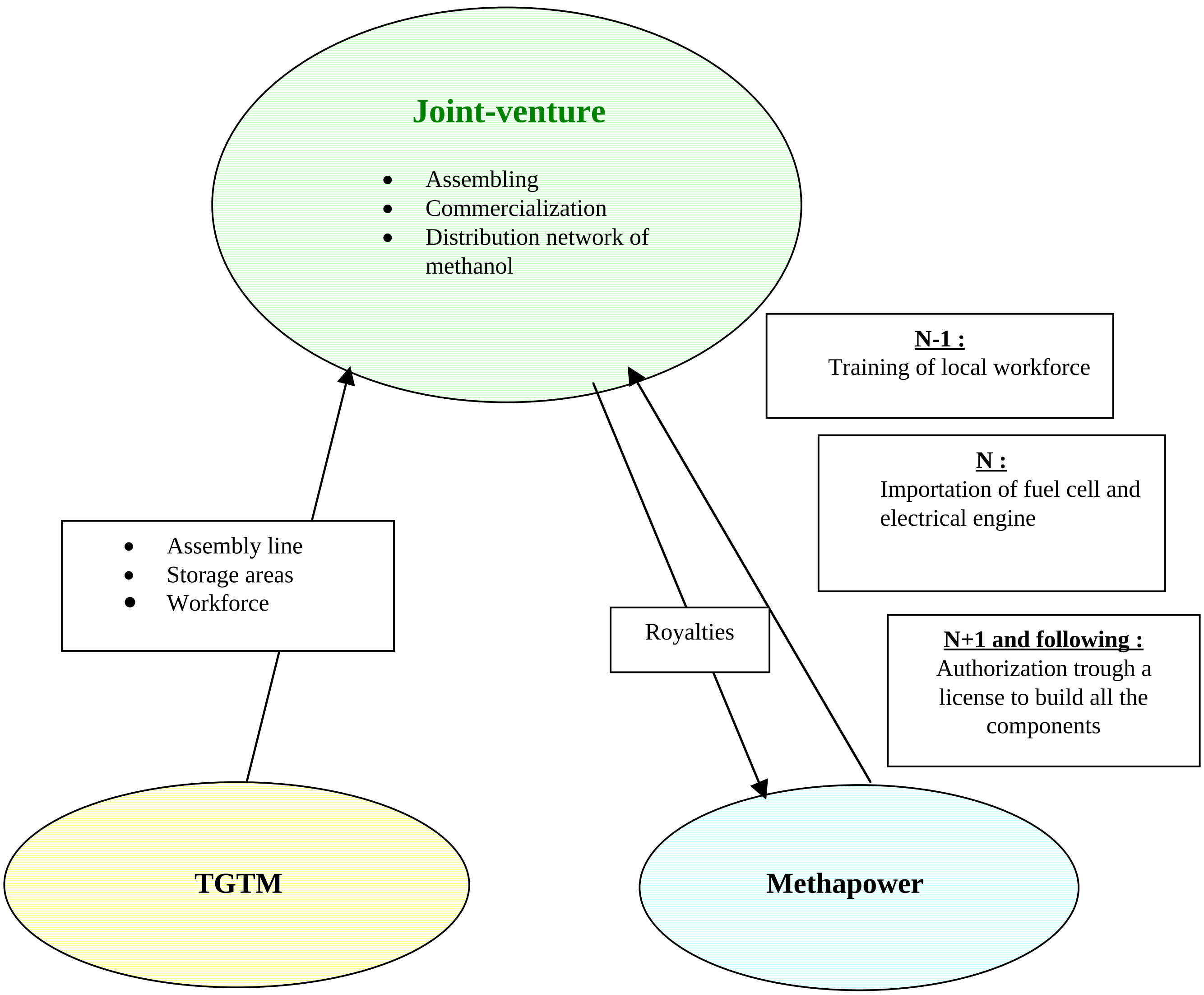
10. JOINT VENTURE OVERVIEW

This is our proposal of joint-venture. It tackles the problems of the relationships between us, equity and capital structure as well as treasury forecast planning.

10.1. Relationships in the JV

What will be the relationships between Taiwan Green Tiger Motorcycle, Methapower and the joint-venture? The links and exchanges within the three entities are symbolized in the following chart and then detailed chronologically below .

10.1.1. Symbolization of the relationships :



10.1.2. Chronological evolution:

10.1.2.1. Year N-1

While you will set up the two first assembly lines for electrical scooters, our staff will train the local workforce.

10.1.2.2. Year N

The joint-venture will start to assemble the scooter skeleton and a package composed of a fuel cell, and electrical engine and a methanol tank (Cf. technical specifications). The package will be imported for each scooter from the Methapower plant. Methapower will act as a supplier, selling these package at 450$.

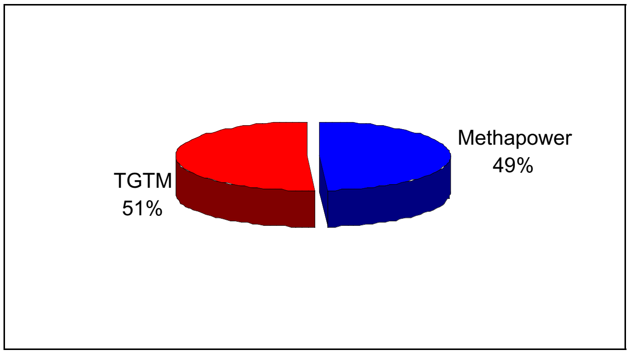
10.1.2.3. Years N+1 and following

The skilled workers will be able to produce themselves the fuel cell and the engine through a license agreement. Methapower will control the quality of the production and receive royalties as a counterpart. Royalties are calculated in function of the turnover (1% of the turnover).

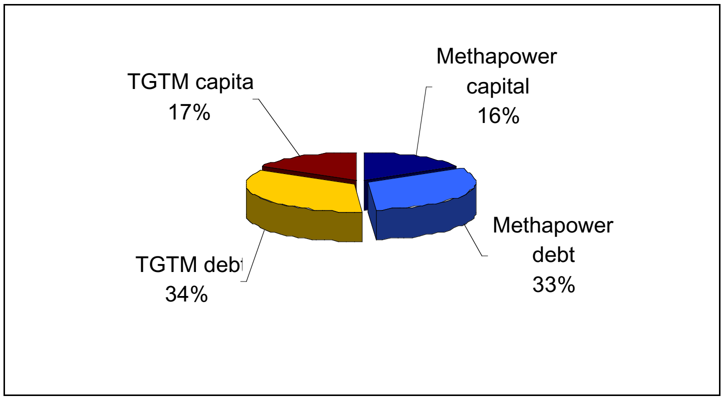
10.2. Equity and capital structure

Given the contribution of each companies, we propose you an equitable repartition of equity and capital. The following pie-charts are explaining in what way we are ready to invest and what we expect from this project.

10.2.1. Equity breakdown :



10.2.2. Capital breakdown :

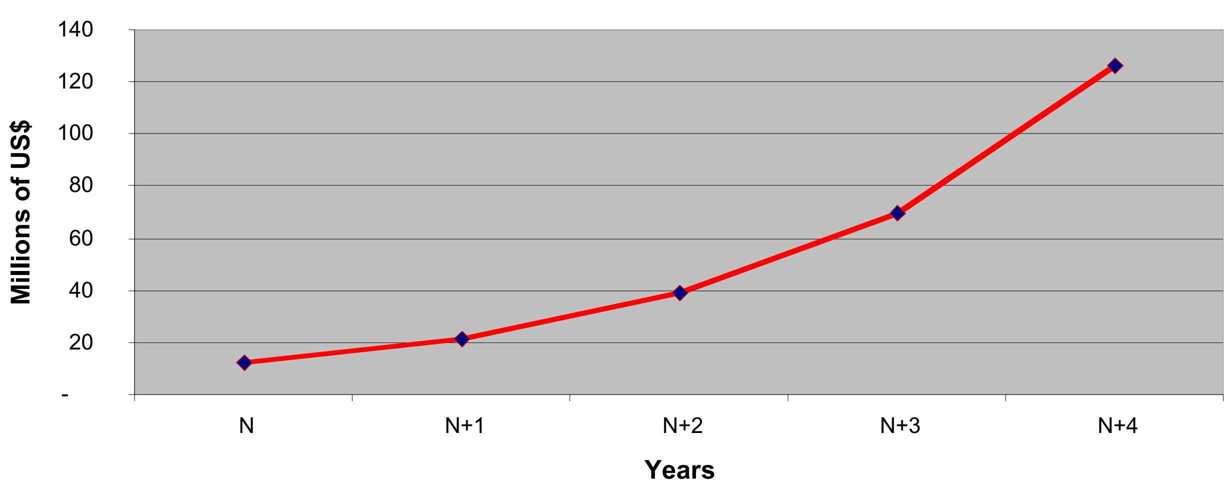


10.3. Treasury forecast planning

	N-1	N	N+1	N+2	N+3	N+4
Estimated Turnover		12 000 000	21 600 000	38 880 000	69 984 000	125 971 200
Purchases						
Raw Materials		6 825 000	12 096 000	21 250 000	37 660 140	67 724 640
Fuel cells+engines	2 250 000					
TOTAL PURCHASES	2 250 000	6 825 000	12 096 000	21 250 000	37 660 140	67 724 640
Wages						
Staff training	88 244	88 244	-	-	-	-
Skilled workers	975 728	975 728	1 532 756	1 975 834	2 545 052	3 178 401
Administration	83 203	83 203	148 657	170 476	170 476	192 294
Top management	458 182	458 182	458 182	458 182	458 182	458 182
TOTAL WAGES	88 244	1 605 357	2 139 595	2 604 492	3 173 710	3 828 876
Investments						
First assembly line	200 000	600 000	600 000	600 000		
Secon assembly line	200 000	600 000	600 000	600 000		
Third assembly line		600 000	600 000	600 000	600 000	
TOTAL INVESTMENTS	400 000	1 800 000	1 800 000	1 800 000	600 000	-
Technology costs						
Royalties		120 000	216 000	388 800	699 840	1 259 712
Subsidies and aids						
Tax credits and financial assistance	450 000	350 000	250 000	200 000		
Others						
Marketing budget	100 000	1 000 000	1 200 000	850 000	800 000	700 000
Distribution and after sales	-	720 000	1 296 000	2 332 800	4 199 040	7 558 272
Loans						
Financial fees		600 000	493 000	380 000	261 000	134 000
Cash flow (beginning of the period)	-	- 2 388 244	- 2 708 601	- 99 196	9 374 712	31 964 983
Cash flow (end of the period)	**- 2 388 244**	**- 2 708 601**	**- 99 196**	**9 374 712**	**31 964 983**	**76 730 682**
Cash flow variation	- 2 388 244	- 320 357	2 609 405	9 473 908	22 590 270	44 765 700

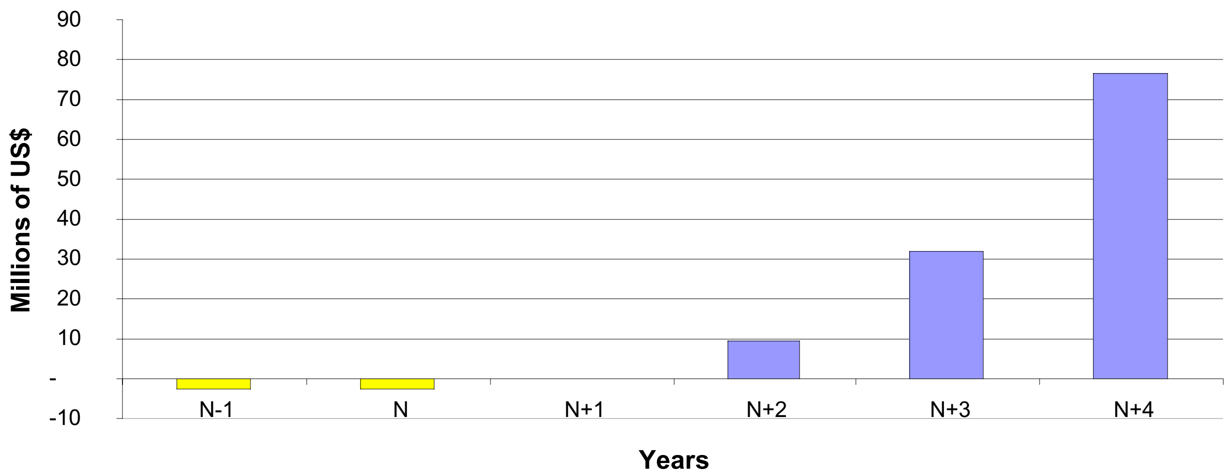
(For any details, please have a look on the Excel sheet in the annexes)

Estimated Turnover :



~~There is no scooters produced on the first year, but after that arrives an exponential growth.~~

Estimated Cash flow :



The return on investment (R.O.I.) happens between the third and the fourth year.

11. TERMS AND CONDITIONS OF AGREEMENT

In the expectation of a JV agreement:

11.1. Administration and Governance.

11.1.1. Obligations of the Parties

The parties agree to work together to accomplish the objectives of the project and agree to carry out their responsibilities as set forth in the proposal and the future JV Agreement.

11.1.2. Program Management

The Administrator shall perform the day-to-day management and administration in accordance with all legal and regulatory requirements.

11.1.3. Management Committee

The Management Committee, composed of one representative of each Party, shall direct the conduct of the Program in all respects, through the Administrator.

11.2. Proprietary Information

Each of the Parties agrees that it will not, either during the term of the JV Agreement or at any time after its termination, use Technology or Background Technology of another Party for any purpose the commercial exploitation of the results and it will not divulge such Background Technology to any person without the prior written consent of the disclosing Party; provided, however, Background Technology shall not be considered proprietary which:

- Is in the public domain at the time of disclosure or thereafter enters the public domain other than through a breach of this Agreement; or
- Is in the possession of the receiving Party prior to its receipt from the disclosing Party; or Is lawfully obtained from a third party under circumstances permitting the receiving Party to use or disclose the information without restrictions; or
- Is independently developed by the receiving Party; or
- Is required to be disclosed as a result of governmental or judicial action.

11.3. Intellectual Property.

The protection of intellectual property rights including Subject Inventions, Technology and trade secrets under the JV project will be in accordance with the Proposal and the future JV Agreement.

11.4. Term

An individual Party may cease participation in the JV project only in a manner consistent with the JV Agreement.

11.5. Liability, Warranty, Insurance.

11.5.1. Liability

Each Party acknowledges that it shall be responsible for any loss, cost, damage, claim or other charge that arises out of or is caused by the actions of that Party or its employees or agents. No Party shall be liable for any loss, cost, damage, claim or other charge that arises out of or is caused by the actions of any other Party or its employees or agents. Joint and several liability will not attach to the Parties; no Party is responsible for the actions of any other Party, but is only responsible for those tasks assigned to it and to which it agrees in the Statement of Work contained in the proposal. The Parties agree that in no event will consequential or punitive damages be applicable or awarded with respect to any dispute that may arise between or among the Parties in connection with this future JV Agreement.

11.5.2. Insurance

Each Party agrees to obtain and maintain appropriate public liability and casualty insurance, or adequate levels of self insurance, to insure against any liability caused by that Party's obligations under the future JV Agreement.

Looking forward to hearing from you, we hope that this proposal will fit your needs and that you will share the fuel cell scooter challenge with us…

Methapower company

END OF DOCUMENT