

22-24 JULY

# **Hydro Fuel**

# (66)

## Problem: The Impact of Fossil fuel

Ever increasing cost of Fuel Environmental, high carbon emissions Adapting solution to current technology

## 1.4 BILLION

Carbon Emission Vehicles on the world's roads today

# 6.44 BILLION Metric Tons

Amount of Carbon Emissions released into our environment per year

# 1.288 BILLION Metric Tons

Hydrogen Fuel will decrease Vehicles emissions by

## What do we do with the old?

Just throw them away?







#### Our Mission

#### **Creating H2 Fuel**

Our Enviropreneur is developing an On Demand Hydrogen generator.

# Adapt H<sub>2</sub> Fuel to Current Technology

The system needs to work with current technology.

Including:

Vehicles, Generators, Electricity generation

### **Growth Opportunities**

Using the Just Transition model of job creation

During all our processes.



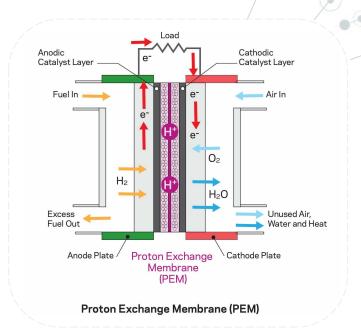
## Creating Hydrogen Fuel

H<sub>2</sub> fuel will be created by using Electrolysis.

This process separates water(H<sub>2</sub>O) into Oxygen(O<sub>2</sub>) and Hydrogen(H<sub>2</sub>).

Our PEM Electrolyzer will create a small On Demand Hydrogen that is stable and safe to use.

Additive Free



## **Adapt H2 Fuel to Current Technology**

The H2 Fuel machine
is compact
will be easily installed into
motor vehicles and generators
where this will help
lower the fossil fuel consumption
between 15-50%.

Without needing to replace the entire vehicle.



# Adapt H<sub>2</sub> Fuel to Current Technology Disadvantages

#### Infrastructure

Because fossil fuels have been used for decades, the infrastructure for this power supply already exists.

Large scale adoption of hydrogen fuel cell technology for automotive applications will require new On Demand H2 system to support it

### **Regulatory Issues**

There are also barriers around regulatory issues concerning the framework that defines commercial deployment models.

Without clear regulatory frameworks to allow commercial projects to understand their cost and revenue basis, commercial projects can struggle to reach a financial investment decision (FID).

### **Hydrogen Extraction**

Despite being the most abundant element in the Universe, hydrogen does not exist on its own so needs to be extracted from water via electrolysis or separated from carbon fossil fuels. Both of these processes require a significant amount of energy to achieve.

# Adapt H<sub>2</sub> Fuel to Current Technology Advantages

#### **Decreases Emissions**

Unlike fossil fuel sources

Hydrogen fuel cells do not generate greenhouse gas emissions,

As a result reducing pollution and improving air quality.

Greatly Reducing Carbon Footprints

### Long Usage Times

Hydrogen fuel cells offer greater efficiencies with regard to usage times.

A hydrogen adapted vehicle uses

Avg. 1lt (H2O)/1000km

Drastically increasing the range of those that use just fossil fuels.

This is superior to that currently offered by electric vehicles (EVs), which are increasingly being developed with fuel cell power units as 'range-extenders'

### **Hydrogen Extraction**

The PEM system uses reduced amounts of energy to

efficiently create

On Demand H<sub>2</sub>

Ensuring that low amounts of H<sub>2</sub> is kept on hand to avoid volatile containment requirements.

## **Growth Opportunities**

Growth Opportunities exist in these key areas.

Requiring Enviropreneur, Engineers, Hydrologist, Business Management amongst others.

# Development & Manufacture



Installation & Maintenance



Water Purification & Footprint



## Our Team



Thabang



Maison



Monique



Keeno



Orrabile

