



# AUSTRALIAN HYDROGEN GENERATION

## Electrolyser Systems for Hydrogen Generation

We have been running six hydrogen generating machines since 2013 around Australia and New Zealand. We provide turnkey solutions - generation, purification, compression, storage and dispensing – plus installation and maintenance for the hydrogen industry.

We believe the best economical model starts with heavy transport – buses, trucks, etc - in a back to base setting. H2 vehicles are best suited to heavy loads and/or longer routes, where battery has limited reach and the compounding issue of batteries weight reduces pay load.

AHG is proudly working with Hyzon Motors, a reputable supplier of heavy hydrogen vehicles and we believe Hyzon is a proven supplier around the world.

At AHG, we believe onsite generation of your hydrogen is by far the cheapest way to power your vehicles. With 2000 Alkaline Hydrogen Generators working worldwide, onsite generation has never been more efficient and reliable with our monitored long-life guaranteed systems.

We offer containerised modular systems for outdoor or skid-based indoor. A typical refueling station from AHG needs only tap water and power supply and will output the highest purity refueling hydrogen specifically for your transport needs.

### Amtronics

#### Australian Hydrogen Generation New Zealand Hydrogen Generation

We are a sales and service provider based in Australia and New Zealand. We provide and support the following products:

- ▶ Hydrogen generation from small units to large scale plants
- ▶ Gas and Hydrogen purification systems
- ▶ Gas compressors
- ▶ Storage solutions
- ▶ Hydrogen fuel dispensing stations



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Unit 42, 49-51 Mitchell Road, Brookvale NSW 2100  
Phone: +61 2 8012 9602 [www.h2gen.com.au](http://www.h2gen.com.au)





## Example 1

- ▶ 4 vehicles @ 40kg of H<sub>2</sub> per day
- ▶ Approx. \$2.3mill
- ▶ Size approx 3 x 40'HC containers
- ▶ Power input +/- 480KW

## Example 2

- ▶ 10 vehicles @ 40kg of H<sub>2</sub> per day
- ▶ Approx. \$4 mill
- ▶ Size approx 5 x 40'HC containers or building approx. 250m<sup>2</sup>
- ▶ Power input +/- 1.2MW

## What's Included?

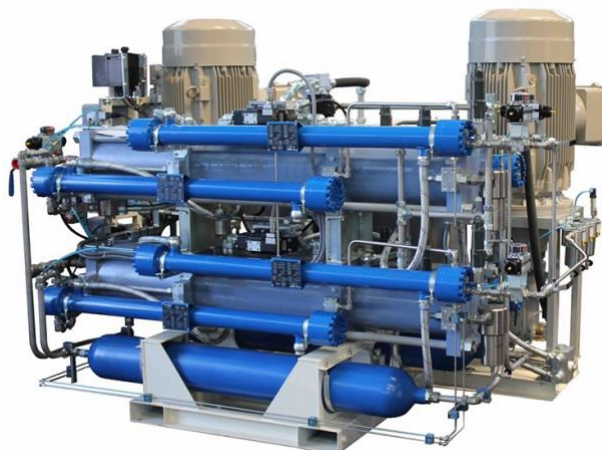
1. Transformer/power controller unit
2. Water purification system
3. Hydrogen generator
4. Control systems
5. Cooling systems
6. Safety monitoring systems
7. Booster to 450bar
8. Buffer vessels
9. 450 bar storage vessels
10. Dispenser unit @ 350 bar

This turn-key solution only needs power and tap water

### Containerised Generators



### Booster / Compressor



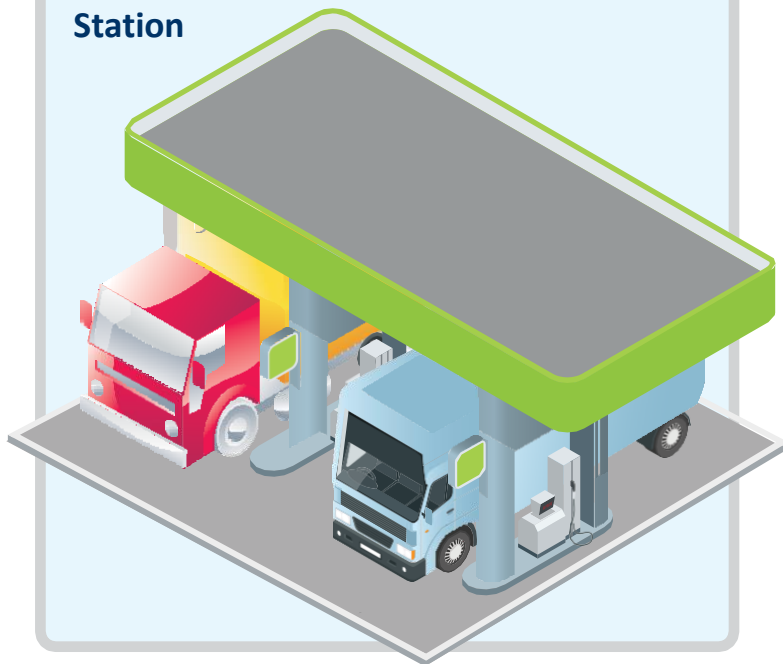
### Refuelling / Dispensing





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**Refuelling  
Station**



**Production of Hydrogen from  
Renewables**



**Hydrogen  
Generator  
Unit**



**Compressor / Booster**



**Bottle Storage 450  
Bar**



**Dispenser  
350 Bar (x2)**



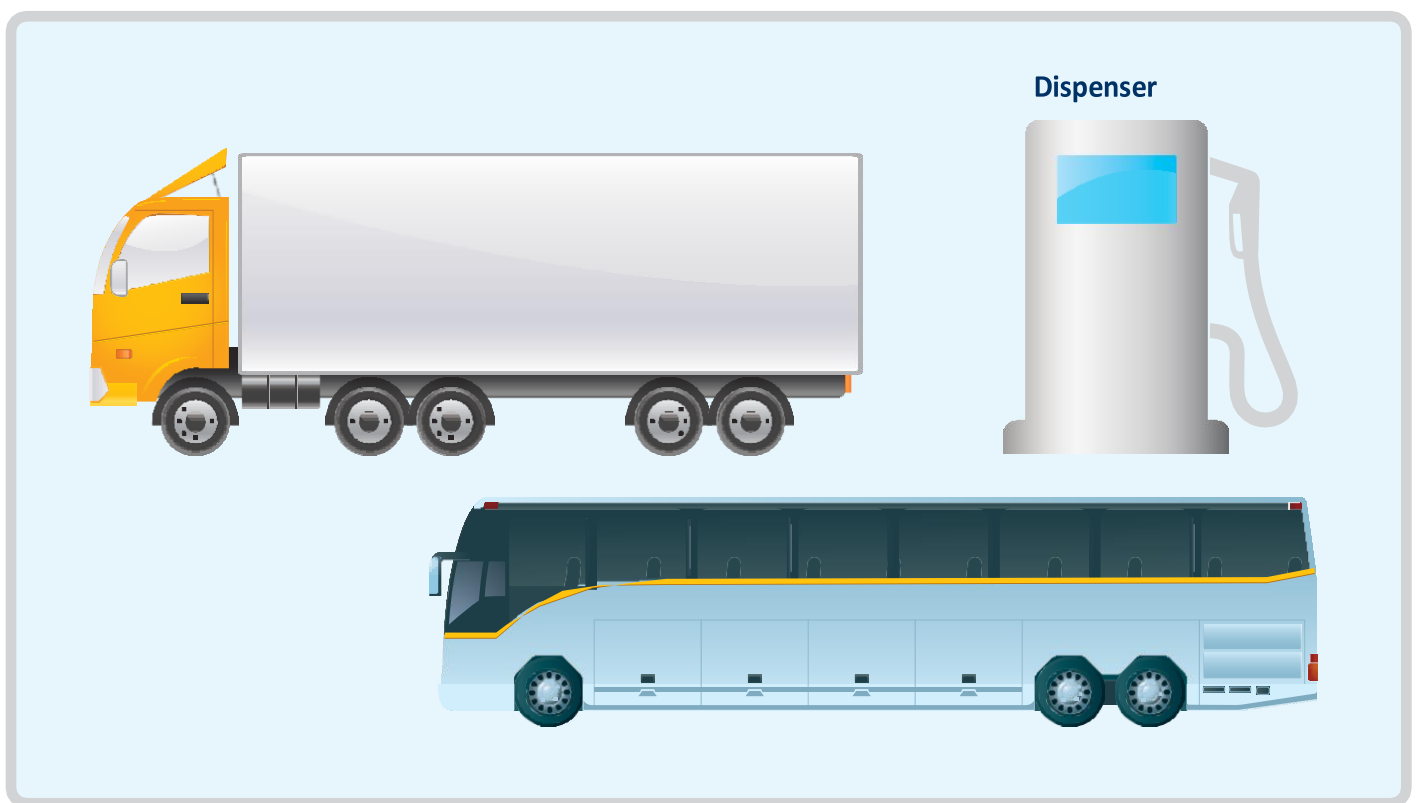
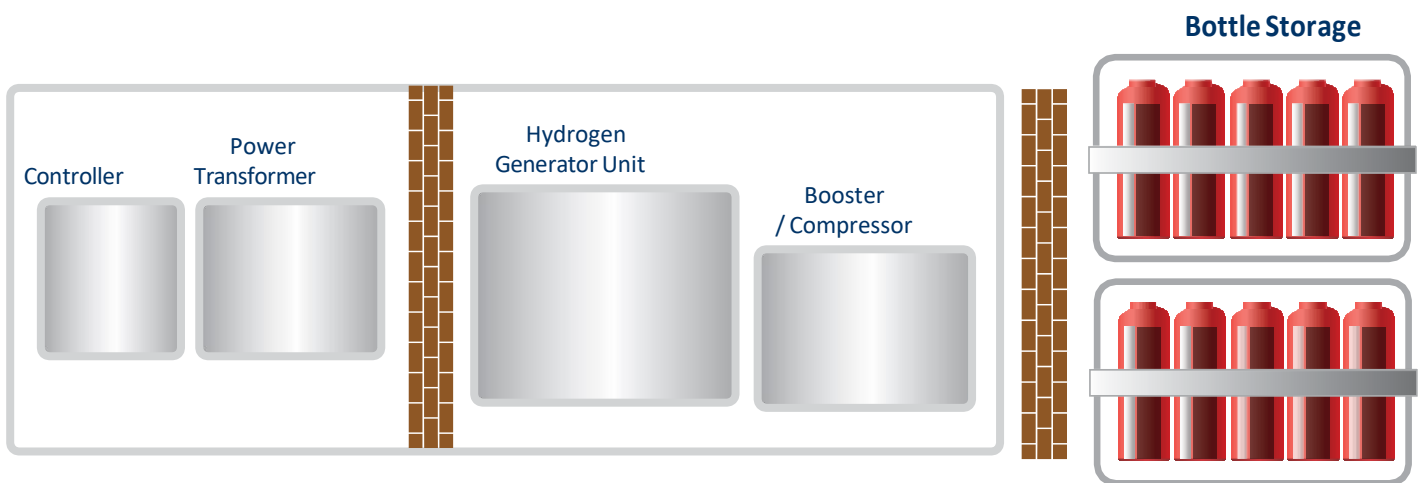
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**AMTRONICS**



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### All-in-one Small Refilling Unit



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## FAQs

**Q: How much hydrogen (H2) will I need to go 400 kms in my coach/truck?**

**A:** Like any diesel vehicle, this really depends on your payload. E.g. A 46 tonne H2 Hyzon truck(Hymax 500) can go around 400 kms on 45kg of H2 or up to 600 kms on 65 kg of H2.

As storage can be a very expensive component, it is best to consume the H2 on a dailybasis to keep the costs down

**Q: Can I store many days of H2 on site?**

**A:** As storage can be a very expensive component, it is best to consume the H2 on adaily basis to keep the costs down

**Q: Can I fill up my coach / truck in 8 minutes?**

**A:** Yes, you can, but it is much more expensive, as a fast-refuelling station means you need to coolit down and you will need more safety protocols. The most economical way is to connect the vehicle to the pump at the end of the day and do a slow refuel overnight.

**Q: What is the maintenance cost of the unit?**

**A:** It's roughly 7% per annum of the total cost.

**Q: Are there any government subsidies involved?**

**A:** ARENA and the CEFC have subsidies available for some projects.

Most state governments may also have subsidies available, but you will need to contact them.

If you have any queries, please do not hesitate to contact me.Best regards,

**Sebastian Ruis**

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