



# AIRFUTURE → GROUP



I RUN ON AIR / *Green' Air*

*Brief Introduction*

# Australasian Climate Innovation

Compressed Air Transport & Energy Products  
with Distributed Micro Manufacture



**TRANSPORT:** From golf carts to waste vehicles.    **ENERGY STORAGE:** From homes to microgrids.

**Compressed Air Energy – a solution for a cleaner climate future. With global replication.**

1 JANUARY 2023 | Website (AFG): [www.airfuturegroup.com.au](http://www.airfuturegroup.com.au) | Website (MDI): [www.mdi.lu](http://www.mdi.lu)

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# AIRFUTURE → GROUP



REPLICABLE  
GLOBALLY

Affordable, long duration, scalable, energy storage with local supply chain manufacture & security, plus clean transport for everyone; individuals, masses & commercial

## Brief Introduction Showcasing Australasia A New Climate Technology

Decentralised micro compressed air: energy storage & transport for homes, communities, businesses, micro grids and virtual power plants...

...providing affordable, modular, long duration storage without embedded emissions.

*(This document is not stand alone but an introduction to the full Showcase Document)*

1 NOVEMBER 2022



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AFG prepared Flyer available that introduces our showcase.



## About this document.

Australasian Air Future Group (AFG) and its European technology partner Motor Development International Sa (MDI) are committed to creating an Australasian showcase rolling out the innovative micro compressed air energy technology created by MDI. Applications span transport, energy storage, and decentralised micro manufacture.

Over some decades MDI has completed the technology and products, and provided specially commissioned products to major parties like Veolia with waste vehicles and the World Expo with people mover transport. Along the way MDI has been supported by parties like Tata Motors (who acquired a licence for India), KLM and Airbus, and more recently Cartol Industries in manufacturing.

MDI has participated in many exhibitions and been awarded by the United Nations under the umbrella of “powering the future we want”. MDI licence AFG to commercialise.

AFG seeks to create an Australasian Showcase over 2023 – 2025 (Australia, New Zealand & Pacific Islands), with global replicability. Both MDI and Cartol will participate in the early stage. Once establishing AFG will be seeking to roll-out distributed micro factories and develop further products.

### Current transport & energy products

The products herein Green’Air, AirPod, AirPower, AirWall, AirBom waste vehicle, Expo AirTrain are all in existence, and the Modul’air is available based on the AirTrain. MDI & Cartol are prepared for orders and for outsourced initial mass production, which AFG will be sourcing regionally.

### New transport & energy products

AFG will seek to develop new products locally in specific areas in conjunction with MDI and local businesses. Examples include buses, marine, farming, and light personal and commercial transport. Australia is a solar energy global leader and we will seek to integrate the technology with that.

### Pictures

Product and manufacturing pictures herein are sourced from brochures, and as is general practice uses a combination of actual photos and digitally generated marketing ones.

### Disclaimer

AFG places much reliance on the information from its technology partner MDI, and also similarly does so for general information sourced publicly. AFG makes no guarantees for any information sourced externally, or for projections made internally, although applying best endeavours.





## CEO Letter

Dear Reader,

During a long technology gestation time our Australasian based Air Future Group (AFG) has been a close colleague and funder of our technology partner Motor Development International (MDI) in France.

MDI are the world leader in their technology, and at this point a number of key events have positioned us for the exciting Australasian commercialisation commencement, including:

- ▶ MDI completion of their unique micro compressed air energy storage technology, and the innovative construction approach for mass and bespoke vehicles and energy products.
- ▶ The global climate challenge has reached severity, the current transition pace is not meeting essential targets, and the solutions in play have innumerable hurdles unresolved.
- ▶ Fortuitously the applications and products MDI have developed provide solutions & adaptations to address the hurdles and the climate challenges in Australasia and globally.
- ▶ Together AFG and MDI intend to roll-out an Australasian Showcase over 2023 to 2025 to progressively address markets across the continent and enable global replication.
- ▶ Roll-out includes progressive parallel projects, leading to distributed regional micro manufacture and further entrepreneurial product development added to the initial products.

AFG leads this commercialisation, a function that MDI licences to them. To hasten the commencement we will initially outsource the entry products to major manufacturer Cartol Industry in France, who will then along with MDI assist our turnkey factory roll-out.

For the technological reader you can identify the state-of-the-art integration of mechanics, thermodynamics, and digital science that go to the heart of addressing items like light weight affordable cleaner vehicles, long duration modular and efficient energy, and far less emissions.

For the aesthetic reader you may appreciate the futuristic and practicality of the product designs for a cleaner energy world, and for imminent changes in centralised and decentralised transport and energy.

For the climate centric reader we invite you to join us in the journey via one of the many areas of participation, spanning customers, investors, or partners across regions or in development.



A handwritten signature in blue ink that reads 'John Mennega'.

**John Mennega**



## Australasian showcase – replicability

Australasian Air Future Group (AFG) has a long term partnership with European Motor Development International (MDI) to roll out a showcase of innovative compressed air vehicles and energy storage across Australasia (Australia, New Zealand, and Pacific Islands).

MDI are the world leader in their field, with a range of entry vehicles and energy storage products, and have demonstrated their capabilities via major corporate client commissioned products. Mass roll-out is the next stage which AFG undertakes via licences for Australasia.

To facilitate a speedy launch the AFG/MDI partnership will outsource product and in due course establish turnkey distributed manufacturing across the region. French based manufacturing firm Cartol is providing initial outsourcing and then factory support. Production and delivery of entry vehicles is being scheduled and ready to receive orders.

### Commercialisation



### Technology



### Interim Manufacture



### Products & sales

Commercialisation focuses on product and technology promotion and seeking expressions of interest and orders – both at a mass market level and for bespoke customers and fleets. The thrust will be simultaneously across products, markets, industries and regions, involving:

- Sales, promotion & marketing to markets, distribution, industries, regions and government.
- Products & manufacture for demonstrations, pilots, expressions of interest and orders.
- Customer relations including customising, delivery, service, finance and insurance.
- Resources and partners alliances, recruitment and training to facilitate the above.

### Investment & partners

Whilst within MDI the technology, products and initial bespoke customers are completed, MDI themselves do not mass commercialise, which AFG does under licence, with initial focus on a replicable Australasian Showcase progressively over 2023-2025.

AFG immediate focus will be on funding and investment and on partners and alliances, across transport, energy storage, manufacture, and the regions. This is a progressive and ongoing exercise, and an early focus will be on working capital to secure the necessary resources to progress this entry stage and maintain its administration.

# Regional manufacture – distributed

With the extent of global conflicts in 2022 concerning supply chains and trade conflicts there could never be a better time to provide the benefits of distributed micro manufacture, and this technology is ideally suited for it. The process is not isolating and the global economy of scale purchasing benefits are retained where appropriate. It is a two stage process.

## Outsource & import

Commencing with outsourcing, and if from overseas, hence importing. The initial outsourcing will be with French manufacturing company Cartol Industries, who are already in partnership with MDI.

## Factories & export

The next stage is to establish local micro manufacture and partners across Australasia. This is done on a turnkey basis with MDI and Cartol, with the design, construction and training and markets aspects supported by them as our partners. On the commercialisation front we will be world leaders.

## Development

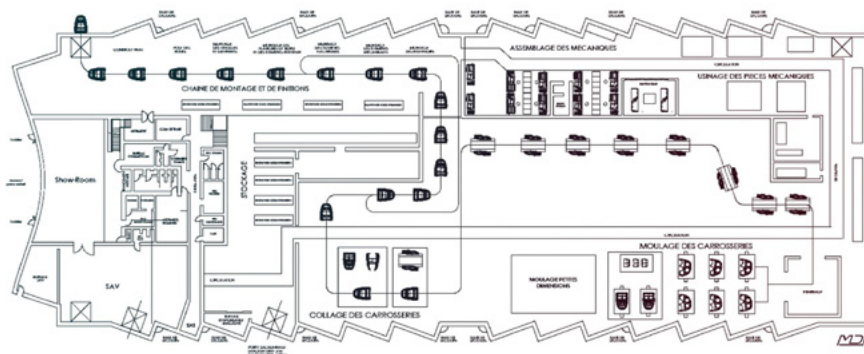
The relative affordability, cleanliness, and funding potential for distributed micro manufacturing opens up the doors across Australasia to gain benefits from manufacturing and funding locally. Where this is not practical existing factories can export across Australasia, similarly to the intention globally alongside MDI.



Cartol Industries, Cerizay, France



Licensors R&D development factory in France



Layout of turnkey factory for AirPods



# Product roll-out – transport & energy

Section A addresses the entry product roll-out over 2023 and beyond. It also addresses under the development section some of the new intended products.

The entry products based on MDI brochures include the Green’Air, AirPod, Modul’Air and AirPower and AirWall. All products run on compressed air. Development products are next.

## Green’Air

The Green’Air sets the themes of one technology, numerous products, and numerous applications, which applies to all products and is a core strength. The Green’Air has five modules spanning a range of applications from Golf to Worker, to Passenger, to Exclusive Yacht version, to Cargo which itself has 4 versions. This multiple application approach has benefits in cost, sustainability, and the scope of markets able to be serviced. This is the entry product.



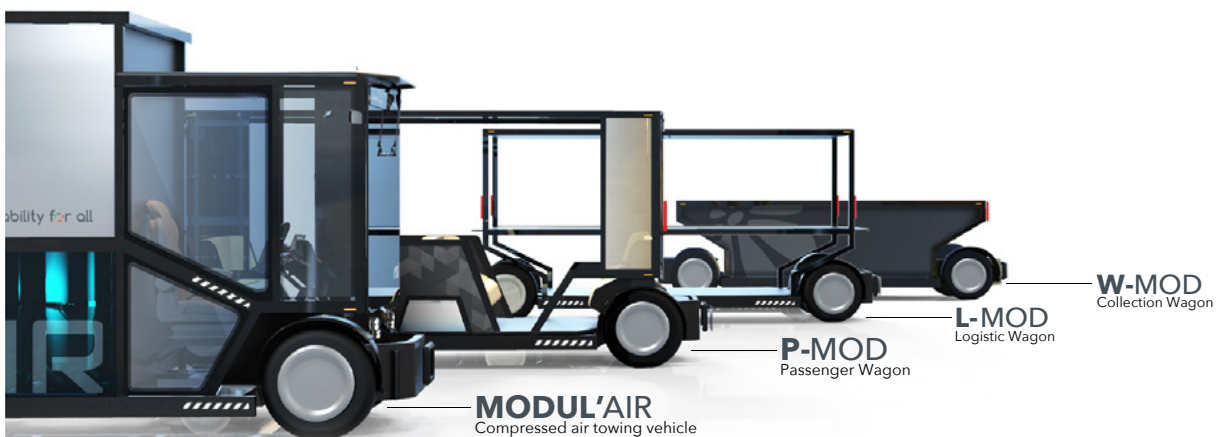
## AirPod 2.0

The AirPod 2.0 standard version is a futuristic vehicle targeted at climate change evolution for short trips, city and suburbs, and family or multiple car run-about. For public roads it will need to be certified (category L7e is certified in northern hemisphere but awaiting same in southern). In the meantime the AirPod will cater to the large off road gated community and commercial / industrial markets with its numerous models.



## Modul’Air

A commercial vehicle with models catering to passenger transport, logistic transport, and waste collection. The sheer flexibility and modularity of the Modul’Air make it a potential winner. It is based on the design work of the very successful AirTrain commissioned by the World Expo to move people around its enormous Dubai campus, as well as the Veolia commissioned Air’Volution waste vehicle.

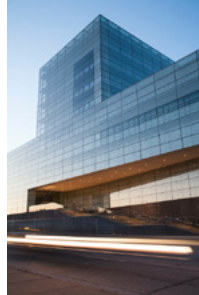


## AirPower, AirWall

**AirWall - Applications:** Because of the scalability of the MDI technology, the AirWall can be used in most of the applications needing energy storage, among which are:



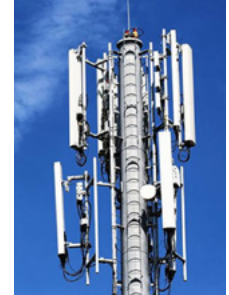
Homes



Offices



Factories



Cells/Antennas

The compressed air technology can equally be applied to transport and to energy storage and generation. Whilst the transport products once designed or customised are relatively fixed, the energy products are entirely catered to their application. And these applications are very diverse.

And they are applications which currently face energy storage hurdles which micro compressed air storage is ideally suited to overcome. This capability gets into the serious end of the compressed air technology. The relatively straightforward side is the following:

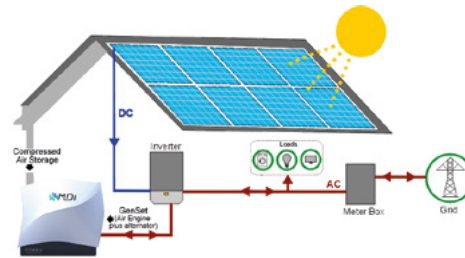
### Home electricity generation & energy storage



AirPower



AirWall - Homes & buildings



Microgrids - Communities

The more complex but very exciting side is the future of decentralised energy and its need for longer duration larger capacity affordable storage. Microgrids and virtual power plants.

### Development

One of the greatest strengths of the technology innovation is the ability to cater to all product needs quickly and affordably – transport, energy, and other applications. This has already been proven with commissioned products, and is an exciting opportunity for Australasia, including the potential for retrofitting the compressed air to other products.

## Technology & transfer

The technology is both simple to understand at a high level and complex at a detail level. So this is addressed in the Addendum. There we address not only the compressed air process and engine, but also the importance of a system perspective, and both for transport and energy.