

CORE

Continuous Onboard Rechargeable Environment



Re-Charge the World

Raymond Folk, Founder & Inventor

US Patent No.: US 11,635,477 B2

Why We Need CORE

Practical limitations inhibit transition to electric vehicles



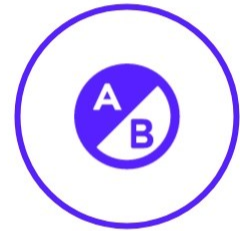
Range Anxiety

Charging infrastructure is limited and concentrated in urban areas. Fully-Electric and Hybrid-Electric vehicles suffer greatly from the issue of lack of sufficient charging stations and extended recharging times, that make using, much less owning an EV impractical, in comparison to modern combustion vehicles.



Cost

Electric vehicles continue to cost about \$10,000.00 more than gas-powered vehicles. For the average buyer, the increased cost to purchase an EV outweighs the perceived reduced cost of ownership, limiting EV purchases to a limited pool of buyers.



Variety

While manufacturers are starting to increase available EV options, there is still limited variety that addresses typical lifestyle needs.



The Time is Now

THE NEED IS CLEAR

* Source: <https://ourworldindata.org/grapher/fossil-fuel-price-index> ** Source: <https://www.nytimes.com/2022/07/02/business/economy/gas-prices-global.html#:~:text=The%20staggering%20increase%20in%20the%20price%20of%20fuel,and%20hampering%20efforts%20to%20combat%20ruinous%20climate%20change.>

1

EV's aren't the only issue

In the area of marine and aviation application, cost of ownership is high and very little infrastructure.

2

Energy prices impact everything

staggering price increases rewires global social, political and economical relations around the world.

3

Fuel Cost Volatility

Gas and fossil fuel prices are dramatically increasing, rising from an index of 100 in 2018 to 215 in 2023.

CORE

Developed to efficiently and inexpensively extend the range of current electric vehicles/crafts on the market. CORE is applied to personal and commercial, transportation, personal and commercial marine craft, and short and long-range electric aviation and aerospace vehicles. *

* Not a complete listing of Use-Cases. Core can be adapted and applied to many other devices and areas, not listed above.

The CORE Solution



Simultaneously recharge a battery while in use - just like laptops and other battery-powered equipment can operate while in use.



Adaptable to combustion type vehicles so can be applied to existing platforms, aftermarket.



Initially for medium and long-range transportation, can be applied to any electrical motor with a rotating shaft and battery array.



Sustainable, affordable, and capable of overcoming EV adoption barriers.



The CORE Design

Adaptable

CORE technology is designed to be integrated into current electric vehicle technology as well as future design.

Real-time

Provides a constant and steady charging voltage to allow recharging of the existing Main Battery while the vehicle is in motion.

Self-Contained

Designed to replicate the input charging energy of an external charging station.

The CORE Difference

What sets CORE apart from the competition

No Plug-In Required

CORE reuses its own energy, created as the engine operates, and doesn't need any form of recharging or plug in when stationary. The chargeability extends to the life of the battery. CORE will not alter the vehicle behavior itself, so if at any point CORE stops working, the vehicle will revert back to its prior operation mode.

Modular

No other vehicle is required to facilitate CORE as it develops the voltages from the vehicle movement itself. CORE can be added to any combustion vehicle, so variety is no longer an issue. Any existing vehicle can be easily modified with a small attachment to the engine allowing for immediate sustainable benefits.

Unlimited Range

CORE recharges itself 100% of the time eliminating range anxiety and the need for charging infrastructure. This is a novel technology that directly addresses the main challenges for EV adoption and means that the entire market can open up almost immediately as compared to other EV solutions.

Affordable

Once testing is complete, the CORE module will be extremely affordable overcoming the increased cost to entry for anyone hoping to go electric. Vehicle manufacturers will have the option to license or purchase the module/technology for integration into existing models/designs.

Current Renewable Energy Consumption

The market is "Wide Open"

Figure 1. Renewable energy consumption in the nation's energy supply, 2010

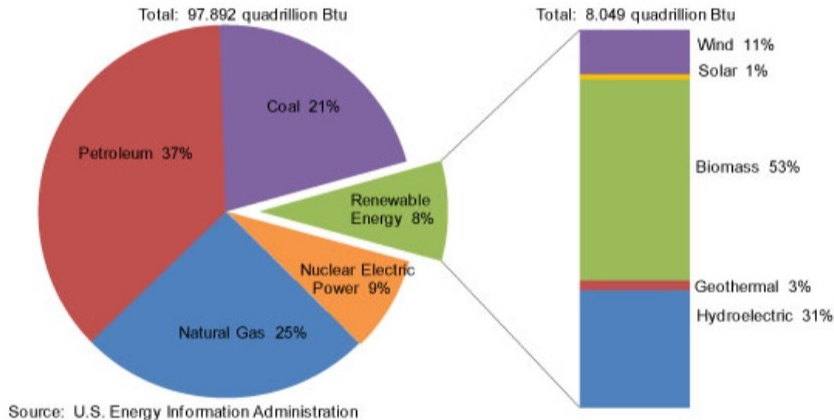
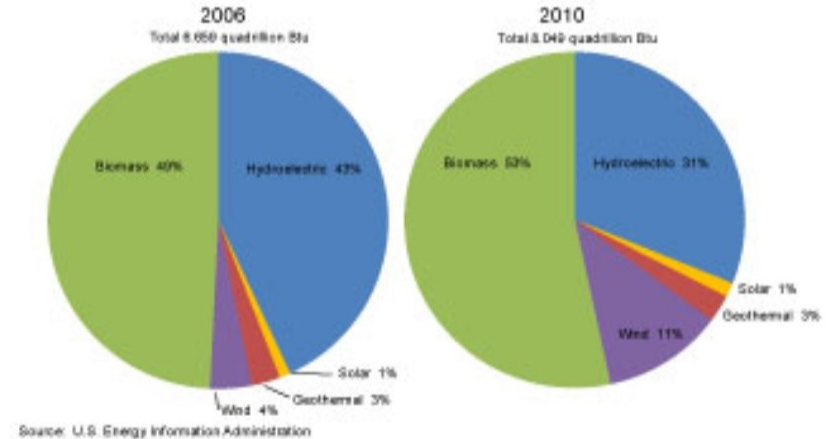


Figure 2. Renewable energy consumption by energy source, 2008 and 2010



Source: <https://www.eia.gov/renewable/annual/preliminary/>

Market Predictions

- **\$823.75B**

EV and Hybrid-EV market projection by 2030

- **\$12.1B**

Electric aircraft and aerospace market projection by 2026

- **\$40.91B**

Electric marine market projection by 2026

- **\$6.94B**

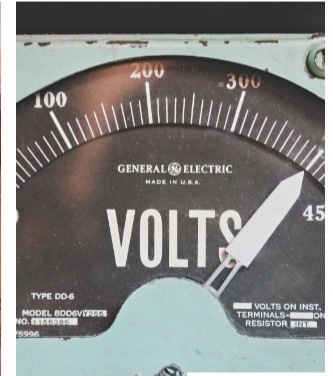
Electric generators market projection by 2028

Source: <https://www.alliedmarketresearch.com/electric-vehicle-market>

Source: <https://www.marketsandmarkets.com/Market-Reports/aircraft-electric-motors-market-3248447.html>

Source: <https://www.mordorintelligence.com/industry-reports/marine-propulsion-engine-market>

Source: <https://www.fortunebusinessinsights.com/u-s-generator-sales-market-106160>



Target Markets

This is just a sampling of the key opportunities



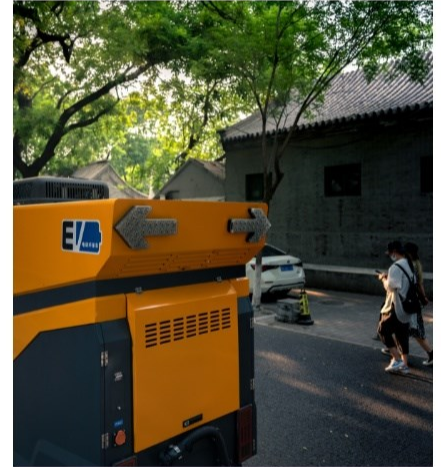
Full Electric/Hybrid Electric
Vehicles



Global Electric/Aerospace
Market

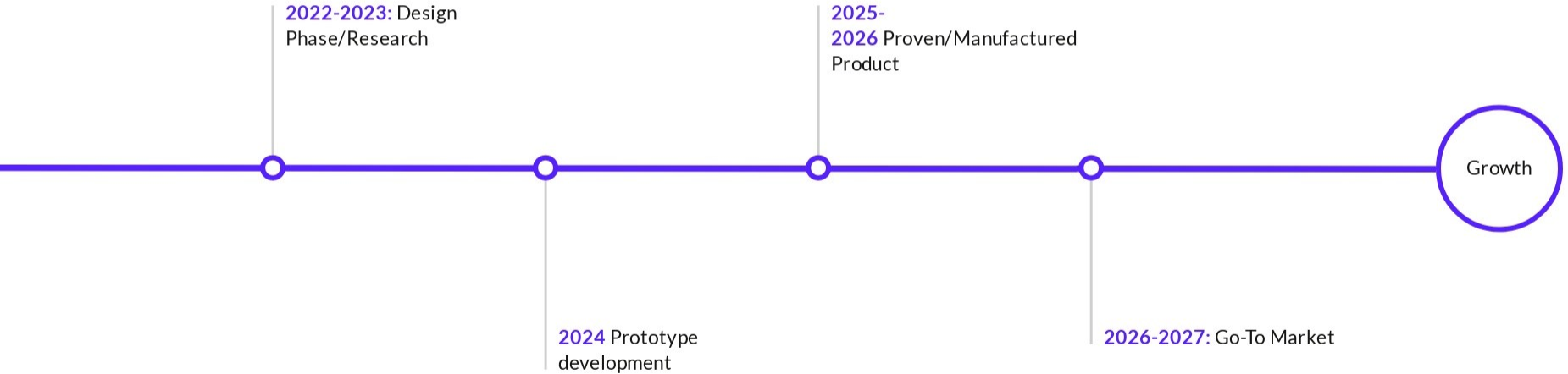


Marine Propulsion Market



Portable/Home Electric
Generator

The Ask: Roadmap to Success



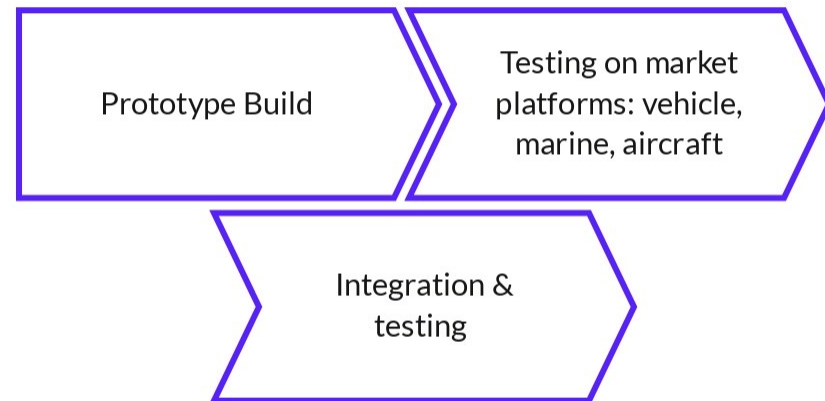
The Ask

Strategic Partner & Investment

\$1.5m to unlock the patented potential of CORE.

Minimal investment is needed to demonstrate the capability and because the patent is already awarded, there are no barriers to entry once the work is complete. Funding would be used for these key activities:

- Material Procurement for prototype
- Testing platforms for each key market segment
 - vehicle, marine, and aircraft
- Final integration and testing



The Team



Ray Folk, Founder/CEO

38+ years as an RF/microwave and computer engineer, experienced technologist, and entrepreneur

US Veteran



Amy Folk, CFO

30+ years experience as paralegal and bookkeeper,

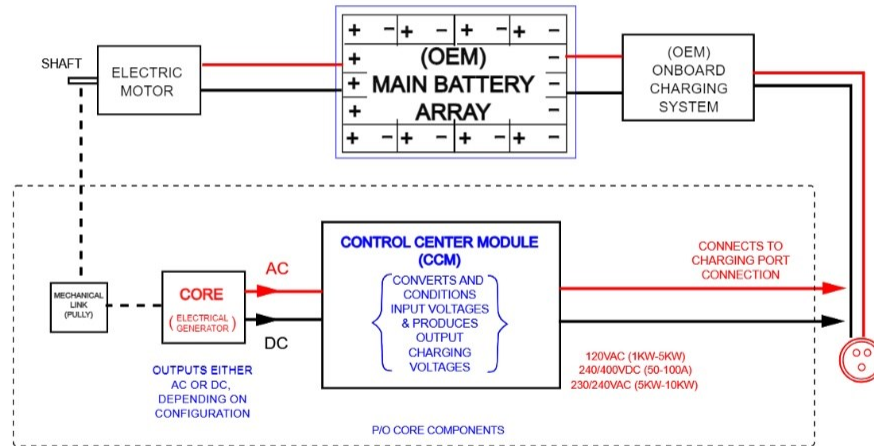


Tara Leigh Goode, Strategic Advisor

Nearly two decades in public service, energy, and weather technology. Part of founding team that launched Climavision - a game-changing climate-tech company. Founder/owner of boutique consulting firm and Endeavor Mentor

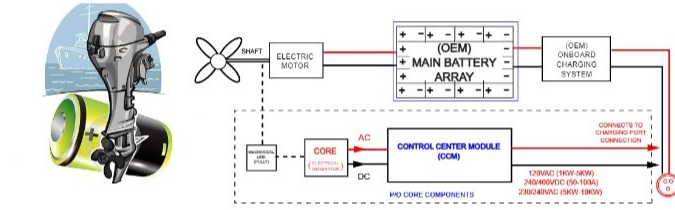
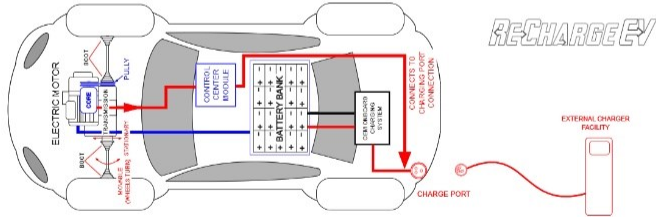
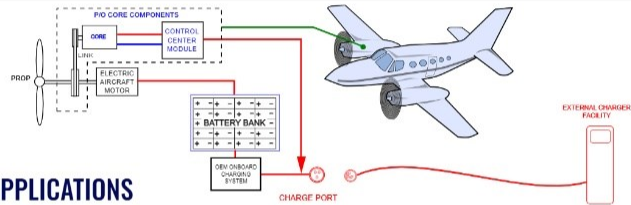
Appendix

CORE Flow Diagram



CORE Applications

CORE APPLICATIONS



FURTHER CORE APPLICATIONS

