RENEWABLE INNOVATIONS

# Green Hydrogen Powered **Rapid EV Charging As A Service**

## National USA Network

## 100% Powered by Green Hydrogen.

- **Quick Deployment**
- **Zero Infrastructure Costs**
- **200 to 600 kW Chargers**
- **Full Rapid EV Charge in 20 to 30 Minutes**
- **Lower Price per kW**

Clean  Scalable  Power


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# 3 Year Plan

## 2022

Up to **20** Rapid EV Charge Stations Across **Utah**

## 2023

Up to **200** Rapid EV Charge Stations Along National **Interstate Roads**

## 2024

Up to **500** Rapid EV Charge Stations **Across the USA**



Renewable Innovations provide design, modeling and production services to deliver Hydrogen Fuel Cell power systems that will make the difference to your business.

Move towards a carbon-free Hydrogen integrated power infrastructure for primary and/or backup power and see what the future of independent power generation, storage and management can do.

Contact us today to find out how to integrate Hydrogen Fuel Cells into power systems for all applications.

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## Super Fast - Rapid EV Charge in 20 to 30 minutes

**Now you can get EV charge speeds that were not previously available to consumers and were too difficult for business users to install and operate.**

**Rapid EV charging will change the growth of EV cars and trucks across the USA.**

## Zero Infrastructure Cost for Installation

**One of the biggest attractions for local businesses is the simple deployment process. At no cost to the retail site, these Rapid EV Charge Stations can be installed and up and running very quickly. Drop-and-go technology!**

## National Network of Rapid EV Charge Stations

**Starting in Utah, this is a plan to quickly roll out rapid EV charge stations within easy reach of the majority of EV divers across the country.**

**We understand the importance of not just delivering power, but making it available exactly where it is needed.**

## 100% Powered by Green Hydrogen

This is one of the unique characteristics of this EV solution. A truly carbon-neutral energy solution that does not add to the existing overburdened grid power network, but replaces the need for it - without 'costing the earth!'

## Lowest EV Charge Price Per kW

Simply put, this will be a very competitive price option for the customer who wants fast, renewable EV charging without paying inflated energy prices.

## Business Opportunities

As retailers partner with Renewable Innovations, the installation of a Hydrogen powered rapid EV charge station brings with it effective advertising, marketing, increases local sales opportunities, recurring revenue, customer loyalty and technology education to help create a new generation of energy users.

- National Network of Rapid EV Charge Stations
- Rapid EV Chargers Every 50 to 100 miles
- Super Fast - Rapid Charge in 20 to 30 minutes
- 100% Powered by Green Hydrogen
- Lowest Cost Per kW
- Zero Infrastructure Cost for Installation
- Business Opportunities for Local Retailers
- Renewable Hydrogen Technology with Public Education

## Rapid EV Charge Stations Every 50 to 100 miles

As the new rapid EV chargers are deployed in strategic locations this will create a very accessible network of charge stations.

It will become a lot easier to travel locally and across the country without worrying about your next battery charge.

Keeping electric vehicles on the road longer and recharge times shorter.

# RAPID EV CHARGER.

## SUPER FAST AND HIGH POWER

## With a drop-n-go deployment and a high-power system, you can rapid charge EVs anywhere.

EV charging is a topic on everyone's minds as there are real energy issues at stake in our business and domestic environments.

The main issues include:

- You want to recharge your EV more quickly so you can travel longer distances without lengthy recharge stops.
- You want to provide rapid EV charging but can't upgrade the power supply sufficiently.
- You have space for a rapid EV charge station but not enough local energy supply or the required finances for more.

All of these issues are addressed with the rapid EV charger from Renewable Innovations.

### Quick Installation

As a pre-built solution there is a very quick delivery and installation process. Simply provide a level concrete pad and access for delivery and we can deploy very quickly..

No additional utility power required and you will be up and running with up to 8 rapid EV charge outlets. Plus, with our Renewable Power As A Service, we manage every detail.

### No Utility Required

All power to operate is included via the on-board Hydrogen Fuel Cells, battery and inverters.

Up to 700 kg of Hydrogen gas storage at 700 bar built in to the charge station. Additional Hydrogen storage units can be installed on site and connected.

Four dual-port rapid EV charge stations scalable up to 600 kW per station. Smart user-interface and point of sale as required with interactive charge status dashboard,

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## Built-in Hydrogen

The standard Rapid EV Charge Station has 700 kg of integrated Hydrogen storage and this can be upgraded with an additional Hydrogen storage module.

## 600 kW EV Charger

The powerful fuel cell and battery combination allows for some truly rapid power charging. As vehicle on-board battery sizes increase, rapid charging becomes imperative.

## Facility Power

Having this large power source on your property provides the added benefit of a ready-made emergency power supply for your existing facility.

Integrate this with your facility power supply to have a Hydrogen powered UPS system or additional power for peak energy demands.

## Rapid Economics

An on-site rapid EV charger also offers additional retail opportunities as the station attracts more customers with lower charging prices, 100% green energy and super quick charge times.

Hydrogen Fuel Cells, inverters and batteries. Minimum 700 kW fuel cell system with minimum 300 kWh battery array.


Utility/facility connection, connected as a grid-tie system, as an off-grid supply, or as a UPS for the site..

## Rapid EV Charger

As the name suggests, this unit allows EV drivers to recharge their vehicle as little as 20 minutes rather than hours.

Fueled by Hydrogen, this is a truly renewable energy supply with no carbon footprint.

The built-in **Smart Charge system** provides quick customer connection, identification and EV charge management.

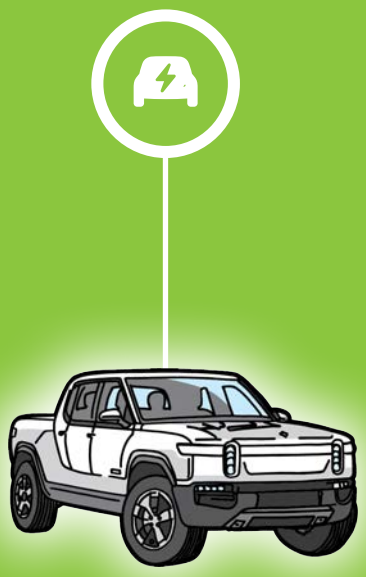
Units are delivered and installed ready to go with built-in Hydrogen storage.

Simply plug in, be amazed and refill with Hydrogen as you need more.

PHASE I

2022

WALK



**"Speed, cost, and being green are all important to me."**

An effective EV rapid charging network across Utah makes everything possible for EV drivers. As well as very competitive energy prices, the charge times are minutes instead of hours with the comforting knowledge that the Hydrogen fuel is generated locally and is carbon free.

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# UTAH ROLL OUT.

## THE CROSSROADS TO THE WEST

The first step is to enable Utah with an extensive rapid EV charging network with locations that combine together to create an effective coverage for the largest possible percentage of EV drivers.

### Rapid Charge Station Locations

Up to 20 rapid charge stations will be deployed at the following locations across the state of Utah.

| | |
|---|---|
| Inland Port | Provo-Orem |
| Nephi | Layton |
| Scipio | Beaver |
| Cedar City | St George |
| Tremonton | Wendover |
| Low | Westwater |
| Green River | Glen Water |
| Emery | Blanding |
| Escalante | West Route 6 |
| Fort Duchesne | Lakeside |

### Extended Coverage

When these rapid charge stations are in place there will be a large percentage of highways within easy reach of rapid EV charging.

The diagram opposite shows some proposed locations with the reach of 25 and 50 mile radius borders.

### Green Hydrogen Production

Green Hydrogen will be produced locally in state by a collection of technology partners and distributed as needed to the Rapid EV Charge Stations.

### EV Driver Benefits

- Effective rapid EV charging across the state
- Eliminate range anxiety
- Very fast recharge times - minutes instead of hours
- Lower energy costs for recharge
- Carbon free charging - powered by green Hydrogen
- Special retail offers from the host charge location

### Community and Business Benefits

- EV fleet vehicles become more economical
- EV vehicles can be on the road for more hours in the day

### Convenience Store Host Benefits

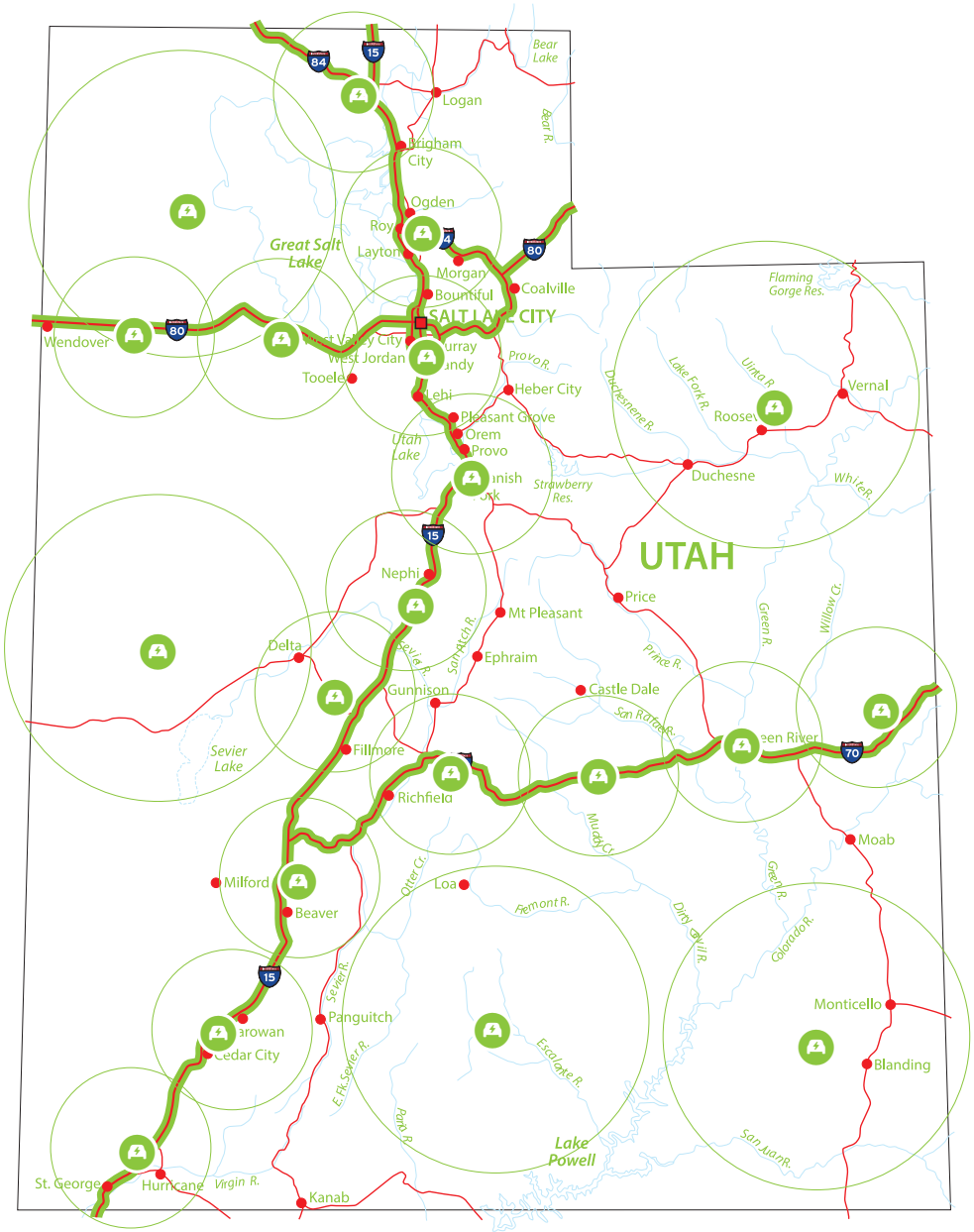
- Increase retail sales while the vehicles charge
- Advertising opportunities at POS charge point, in App advertising, bill-board and social media
- Charge more vehicles per day than with traditional charge stations
- Attract repeat customers due to economical energy charges
- Increased awareness and technology education opportunities

### Built in Emergency Power Supply

Each Rapid EV Charge Station has the inbuilt power capacity to operate as a UPS emergency power supply for the facility (if required). This brings additional services to the hosting facility at no extra cost.

# Utah EV Rapid Charge Map

The circles on this map show both 25 and 50 mile radius plots from the proposed rapid EV charge Stations. This will give effective coverage of all the major routes across the state.




# Convenience Store Hosting Opportunities

Here are listed some of the most widely established convenience stores across Utah. Many of these will make ideal locations for the Rapid EV Charge Stations to be located

| Retail Chain |
|---|
| Maverik |
| Flying J |
| Crest |
| Speedway |
| Circle K |
| Top Stop |
| Smiths |
| Maceys |
| Sinclair |
| Kicks 66 |
| Holiday |
| 7-Eleven |
| Chevron |
| Phillips 66 |
| Hearts |
| Harmons |
| Walmart |
| Kum & Go |
| Costco |
| Kangaroo Express |

# Battery and Hydrogen EV

The Rapid EV Charge Station from Renewable Innovations has the additional benefit of being able to offer both super-fast electrical charging for Battery EVs as well as compressed Hydrogen gas for Hydrogen EVs.

As both types of EV begin to become popular in the marketplace the charge stations can support them all.

PHASE II

2023

RUN

**"Eliminate EV Driver Range Anxiety"**

**With the ability to recharge an EV from 20% to Full in around 20 to 30 minutes there will be no need to be anxious as an EV driver. Long journeys will not be a problem and total journey time will be unchanged.**

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# COAST TO COAST INTERSTATE.

## READY, SET, GO!

With Utah electrified with a rapid EV charge station network the foundation is in place for spreading this life changing technology across the country. This will connect the east and west coasts with a reliable network of rapid chargers.

EV drivers (both commercial and domestic) will now be able to cross country in the same time as an existing gas engine vehicle.

The Utah phase one in 2022 prepares the necessary scaling of production to enable this interstate deployment.

## The Retail Opportunity

Every RI Rapid EV Charge Station is supported by considerable marketing, promotion and education activities to move EV drivers to visit and utilize these facilities.

These include:

- In App advertising (EV Charger location Apps)
- Billboard and roadside ads
- Social media campaigns
- Web and AI promotions
- POS customer experiences
- Vehicle dealer partnerships

## In App Promotion

There are a number of mobile Apps that help EV drivers locate their nearest EV charge station.

As this network of green Hydrogen fueled rapid EV charge stations begin to appear on the highways of America they will show up in the mobile Apps under a new category.

These charging points will become the sought after locations for all EV drivers that want to plan longer, quicker journeys, without having an impact on the environment.

## Enhanced POS Opportunities

The touch screen of the EV charge unit provides a very large space to offer some unique opportunities to the host retail business.

- Expanded charge information for the EV driver
- Digital advertisements for the host convenience store ('click to add' retail opportunities)
- Other banner (media) advertising
- Informative education media to build public knowledge and awareness about green Hydrogen solutions

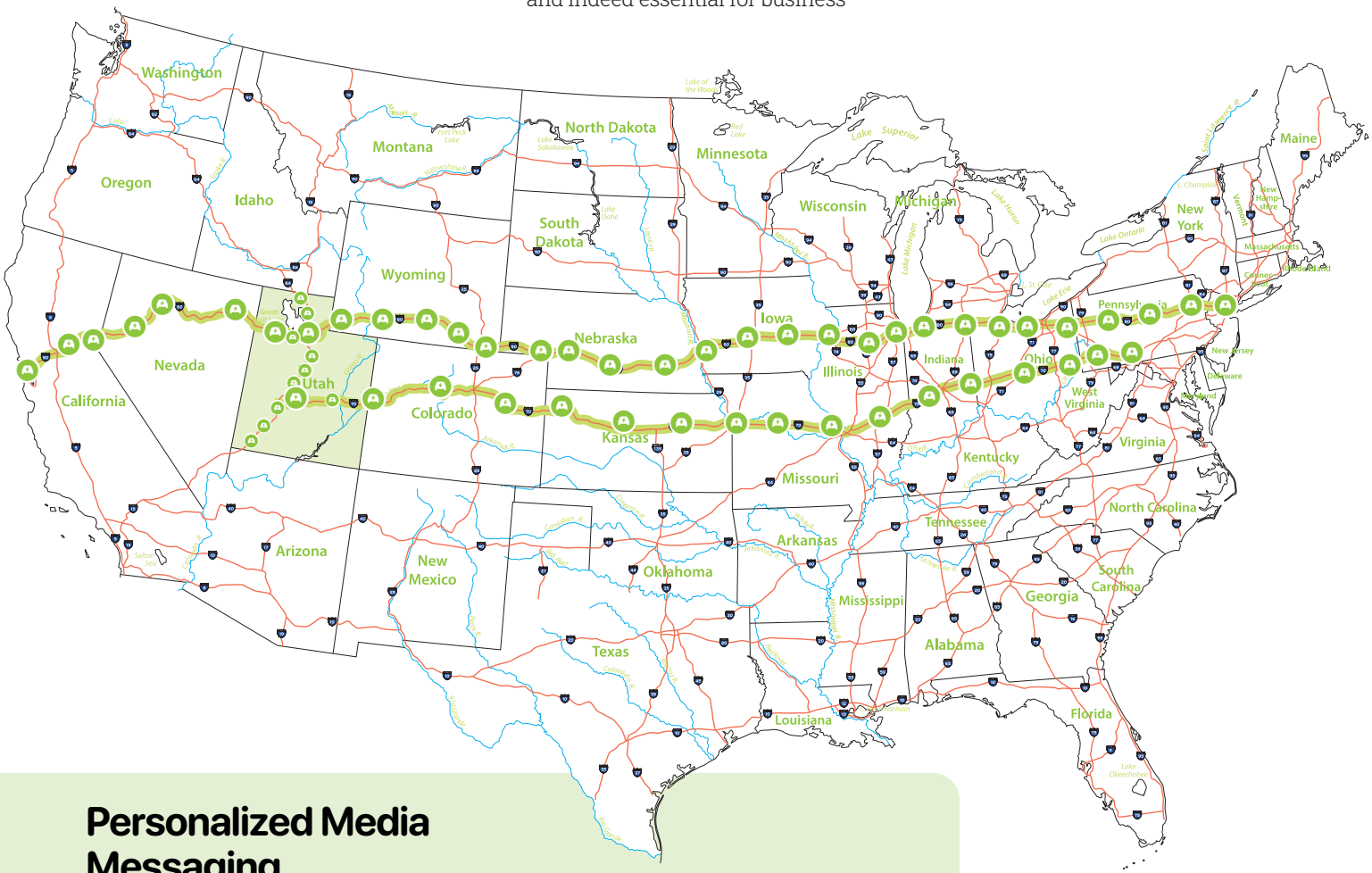
# Up to 200 Rapid EV Charge Stations Along National Interstate Highways

Every major city across the two main cross-nation highways will host a Renewable Innovations Rapid EV Charge Station powered by Green Hydrogen.

This has only ever been a large scale plan for changing the energy landscape relating to EV charging. The next step in this 'big picture' is to provide continuous EV Rapid Charging right across the country.

Long interstate journeys are common and indeed essential for business and domestic purposes. With the deployment of 200 Rapid EV Charge Stations along these already well used interstate routes, it will open up both customer and business retailer opportunities.

This is truly a 'win-win' solution that has minimal environmental impact.




## Personalized Media Messaging


1. **News banner**
   Display local/national news headlines
2. **Retail advertisments**
   Targeted retail adds for products and services offered by the store
3. **Sponsored advertisments**
   Promoting local businesses
4. **Hydrogen pedigree statement**
   Showing details of the generation, source, storage, and delivery
5. **EV charge status**
   State of charge of the vehicle, time to 100%, power of the charger and battery condition.

## Carbon Free Rapid EV Charging

Green Hydrogen is the fuel that makes this all possible. Each rapid EV charge station is fueled by Hydrogen and powered by a series of Hydrogen fuel cells and high power batteries.

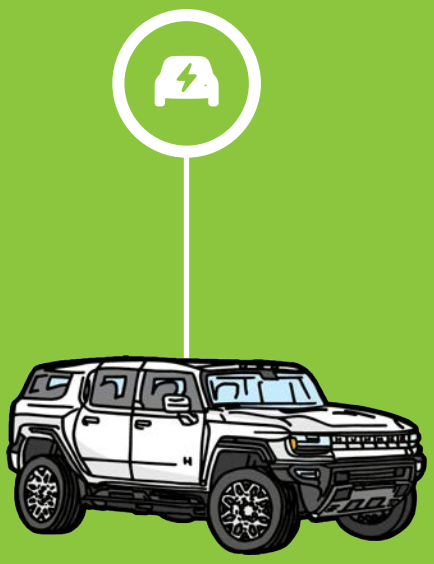
This truly allows the EV drivers to cross the country without their fuel impacting the environment.

It also enables the host business for the rapid EV charger to differentiate themselves from other EV charging points and draw in more customers.

PHASE III

2024

FLY



## "Retail Model of the Future"

The opportunities that are now available from this EV Rapid Charging as a Service are attractive to any convenience store, retail chain or existing gas filling station.

No infrastructure change is needed and no upfront costs to become an active EV rapid charging location in the growing US network.

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# INSTALLATIONS ACROSS THE USA.

## HERE, THERE, AND ANYWHERE

With an additional 500 Rapid EV Charge Stations installed across the whole country there will be huge coverage for EV drivers.

Access to carbon-free EV charging at very competitive energy prices will both help the EV driver as well as the local services available at the charging locations.

### Efficient Hydrogen Delivery

Green Hydrogen will be delivered to all the charging network stations with a fleet of transport refuelers.

The REnewable Innovations Transport Refueler can hold a minimum of 1,000 kg of Hydrogen at a pressure of up to 700 bar (enough to power a Rapid EV Charge Station for days.) The trailer technology includes built-in compression and chilling equipment (powered by the on-board Hydrogen Fuel Cells), as well as various options for delivery connections.

### Convenience Store Hosting Opportunities

From data about the top 100 convenience stores across the whole of the USA, here are some examples of those with the greatest number of locations.

| Retail Chain | Stores |
|---|---|
| 7-Eleven | 9519 |
| Alimentation Couche-Tard | 7142 |
| Speedway | 3854 |
| Casey's General Stores | 2230 |
| EG America | 1704 |
| Murphy USA | 1500 |
| GPM Investments | 1330 |
| BP America | 1026 |
| ExtraMile | 975 |
| Wawa | 917 |
| QuikTrip | 850 |
| Kwik Trip | 768 |
| Pilot | 754 |
| Sheetz | 615 |
| Racetrac Petroleum | 567 |
| Love's | 543 |
| United Pacific | 451 |

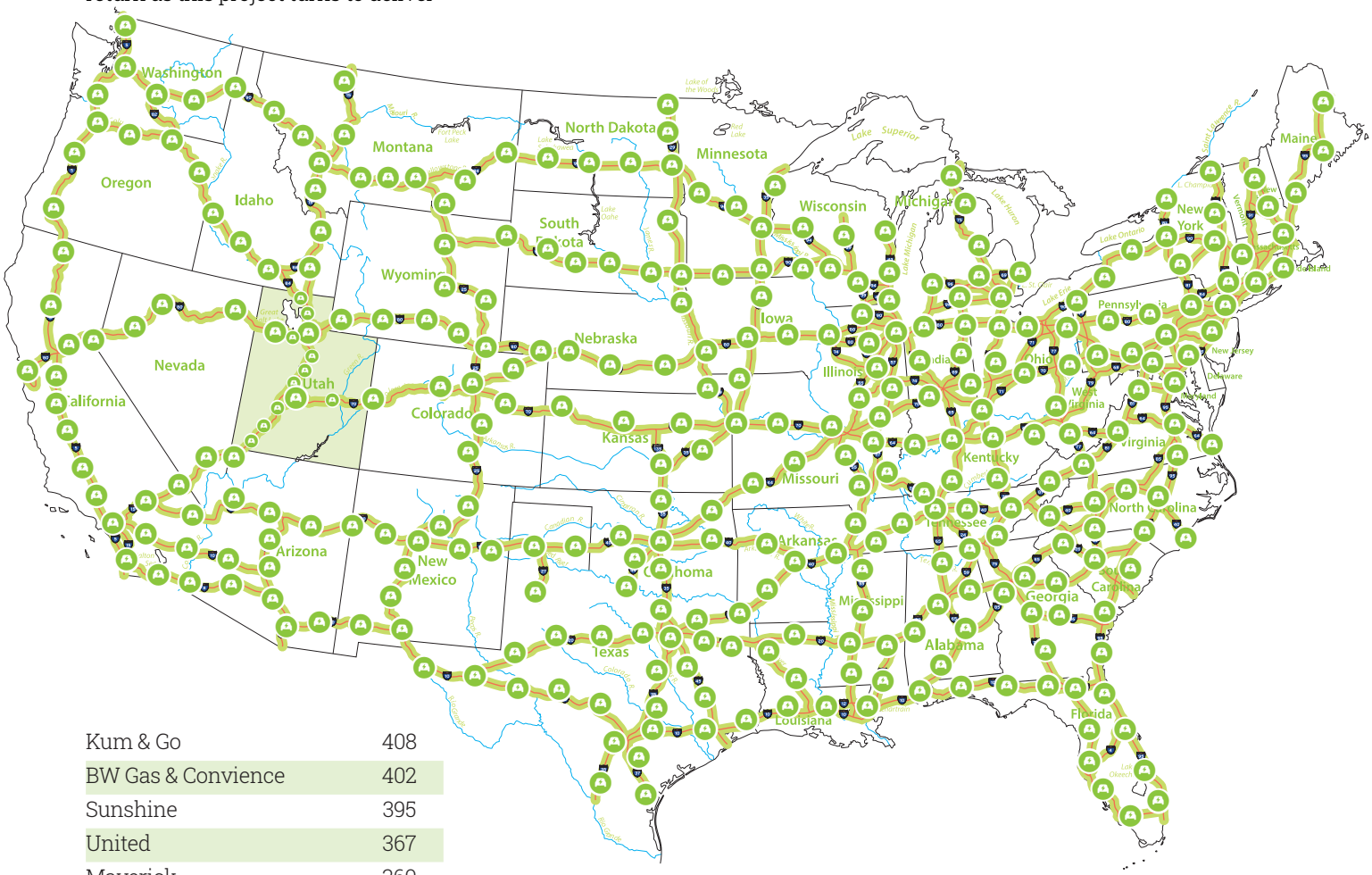
# Up to 500 Rapid EV Charge Stations Across the USA

The expansion of the Rapid EV Charge Station network to cover all major highways across the country is an trigger for the next phase of commercial return as this project turns to deliver huge scale as well as all the benefits to the customers, retailers and EV drivers.

The national network increases the profitability of the Hydrogen delivery and offers much wider customer interaction on a national scale. There will be no need for EV drivers to settle for anything less than super-fast rapid charging.

# Critical Step for Hydrogen

This project is not just ambitious, but critical to the effective roll out of our national Hydrogen network across the USA.




| | |
|---|---|
| Kum & Go | 408 |
| BW Gas & Convience | 402 |
| Sunshine | 395 |
| United | 367 |
| Maverick | 360 |
| Anabi Oil | 350 |
| Stewart's Shops | 348 |
| MAPCO | 345 |
| Sunco | 343 |
| Global Partners | 277 |
| Travel Centers | 272 |
| Giant Eagle | 266 |
| Jackson Food Stores | 264 |
| Bolla Oil | 260 |
| Delek | 253 |
| Royal Farms | 242 |
| Sams | 231 |
| Landmark | 230 |
| Meijer | 224 |
| Cal's | 209 |
| Thortons | 207 |

## Key Players in our Ecosystem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