



THE MOBILITY HOUSE

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The Mobility House (TMH) is a 11-year old technology company with 200 employees based across offices in Silicon Valley, Munich, and Zurich, serving customers in over 10 countries. TMH has built a technology platform, ChargePilot, that enables reliable and efficient charging of electric vehicle fleets and vehicle-grid integration using intelligent charging, energy management, and storage solutions.

Mobility Services

- Electric vehicle charging stations
- Software operation system
- Technology management platform

Website

- https://www.mobilityhouse.com/usa_en/

Contact

- Zoheb Davar, VP Business Development and Growth, zoheb.davar@mobilityhouse.com

References

- Center for Transportation and the Environment, CA
- Ocean View School District, CA
- M.A. Mortenson Company

Experience



The Mobility House has provided charging and energy management solutions to numerous partners. In the United States, TMH has provided this charging and energy management solution to numerous partners such as the Mortenson Company, the Stockton Unified School District, and St. Louis Metro Transit. Globally, ChargePilot is operational at more than 350 sites.

TMH has worked with numerous disadvantaged communities in the United States and has no limitations with providing its mobility products to communities of concern in this program. For example, TMH has worked with the Stockton Unified School District to procure 24 chargers, design an optimized charging strategy, as well as implement its charging and energy management software on-site.

Service

The Mobility House works with the partners listed below to resell various AC (Level 2) and DC (Depot chargers, Opportunity Chargers, Level 3) charging stations (EVSE):



- BTC Power
- Heliox
- Tritium
- ABB
- Delta

These chargers use open communication standards and are already integrated with TMH's charging and energy management platform, ChargePilot. Using the Open Charge Point Protocol (OCPP), TMH can control power over time with its proprietary, smart charging algorithms to optimize the operational costs of zero-emission vehicles.

Equity



Engagement

TMH has worked on community engagement projects to help build consensus and is willing to host town hall meetings to allow for community participation in decision making. In addition, TMH is dedicated to promoting equity and inclusion through its corporate offerings and hiring.

Language

TMH has the capability to work with a variety of community partners, and the US team can converse in Spanish, Hindi, Tamil, German, and Chinese, and communicate complex technical requirements.

Access without Smartphone and Unbanked

TMH has built its service offering to enable access to its platform through Radio Frequency Identification Cards (RFID), which are provided free of charge to CMO partners. This can allow users that are unbanked or without mobile devices to access its platform.

Financial



Cost

The Mobility House is able to engage in a shared savings model with any partner that wants to explore new models that may unlock longer-term, sustainable, financial benefits. To engage in this arrangement, the partner must be willing to purchase and implement TMH's charging and energy management solution, ChargePilot, using voucher funds.

ChargePilot will provide significant savings for the customer through reduced demand charges and optimized charging with time-of-use rates, and TMH is willing to take a percentage of those shared savings, over time, in exchange for providing certain portions of the upfront project costs such as procurement and installation of chargers.

The partner must also be willing to share a year of utility bills and agree to a monthly "true-up" process in which TMH will compare projected charging costs with actual charging costs. Furthermore, the partner must be willing to engage in discussions surrounding the allocation of Low Carbon Fuel Standard (LCFS) credits, which can also be used to offset other project costs.

The cost of equipment will vary based on electric vehicle supply equipment (EVSE), original equipment manufacturer (OEM), order volume, amperage, mounting, number of plugs, and other add-ons such as extended warranty and cable management kit.

Pricing

- Shared Savings Model: TMH is willing to engage in bilateral negotiations with any recipient of CMO voucher funding to evenly distribute savings that are earned from use of TMH's products. TMH has built an internal tool to value a deal under this model and would be inclined to find an agreement that works for all stakeholders to ensure long-term sustainability.
- Vehicle-Grid Integration (VGI) Revenue: TMH is also willing to engage in bilateral negotiations with any recipient of voucher funding to evenly

distribute any revenues that are earned from charger participation in energy markets.

Revenue

TMH USA takes revenues generated from its operations and reinvests in personnel of TMH USA to continue to operate and develop electric vehicle projects throughout the state of California. TMH USA and its partners through the CMO program would receive revenue through these services. TMH USA requires coverage for network charges and installation costs, which both will vary based on project size and scope. For example, larger projects will remit more data to TMH's backend, which will incur larger charges with cellular providers.

Financial Sustainability

TMH has built a core technology and corporate strategy around the ability of vehicles to also act as grid resources and be compensated as such, referred to as "Vehicle-Grid-Integration" (VGI), wherein a vehicle processes signals from grid operators to either curtail charging or remit power back to the grid. TMH has built its technology around the expectation that vehicles will be able to generate revenue by participating in open energy markets within 3 years.

Data



TMH has databases that are isolated from the outside world, i.e. are not accessible from the internet. Any data read/write actions are solely going through dedicated servers using specific endpoints protected by JSON Web Tokens (JWT) with a very short TTL (time to live). Every customer is a unique entity in the database with individual users who have access to customer-specific data, limited in their scope by means of the above-described JWT token. Every environment has a different VPC (Virtual Private Cloud), i.e. there are no connections to each other.

Specific connections needed to access services are available through the AWS load balancer.

TMH does not collect any personal information (PII). TMH has a data protection officer and engages in regular data protection audits that are compliant with the European Union's General Data Protection Regulation. TMH backs up all of its data on a daily basis.