REV TECHNOLOGIES INC.
CLOUD-BASED ENERGY AGGREGATION SYSTEMS

Launch Capital Required
$4,000,000 - $5,000,000

Executive Summary

October 2011
Corporate Overview

REV Technologies Inc, a Vancouver-based company, is a leading provider of energy aggregation and dispatch control services for networked electric vehicles. The Company’s core solution includes the AutoGrid Software Network, which will offer 20 different energy and capacity services to grid operators, utility companies and plug-in vehicle owners.

Investment Highlights

✓ **Massive New Market Opportunity**: Vehicle-to-grid energy management is predicted to be a $40B market with a 43% compound annual growth rate by 2020.

✓ **Leading Edge Technology**: Patent protected network technology enables highest per-asset revenue with feature-rich, flexible control for end users.

✓ **Proven Team**: REV’s management team combines veteran-level skills with high-multiple exits across key industry sectors: utility, cellular, automotive engineering, vehicle-to-grid and network infrastructure technologies.

✓ **Strong Early Market Position**: From its roots in electric vehicles, REV has executed on its vision to become an early leader in vehicle-to-grid technology with demonstrated results and defined a highly scalable market opportunity in energy asset management.

✓ **Partnerships With Industry Leaders**: SAIC and Honeywell Aerospace have led REV’s entrance into US Dept. of Defense contracts and formed deep partnerships.

✓ **Embedded Go To Market Plan**: Factory-integrating REV’s technology into automotive and battery partners’ products and revenue sharing captures long-term recurring revenue in every vehicle and battery sold.

Energy Asset Management Opportunity

By 2020, electric cars (EV’s) will store more total energy from 10 million electric cars than the US grid presently produces in an hour.

Cars are unused and parked for 96% of their useful life. While parked and plugged in, electric cars have the potential to be a vast network of energy storage reservoirs for the grid. REV’s patented AutoGrid Network is a cloud-based energy asset management system that synchronizes the stored energy of electric vehicles with the fluctuating needs of the electrical grid to enable EV’s to participate in the commodity electricity marketplace. With REV’s cloud-based energy aggregation and dispatch control technologies, the excess energy of EV’s will act as a virtual power plant decreasing the $100 billion in annual losses caused by power outages.

Based on the actual adoption rate of hybrid vehicles, projections for the plug-in vehicle markets have been made by a variety of respected publications and industry analysts. The figure below shows the expected demand for plug-in vehicle units through 2015. For comparison, 73 million ICE-based vehicles were produced globally in 2007 (source: Global Insight)
The AutoGrid Network is a core component of the forthcoming energy internet that bridges electric cars with the power grid to support an increase in renewable energy generation. The ability to control energy into and out of electric vehicles and battery assets will be used to help reduce facility energy costs, generate new revenues and increase resilience and reliability of the national power grid with ancillary services, and provide backup power during grid outages.

With 20 different services, the AutoGrid offers unparalleled flexibility, prediction and control for micro-grids, utilities and grid operators alike. It combines cloud-based energy control applications that talk to onboard vehicle or asset systems to assess the battery charge levels and driver/user requirements and then controls charging and discharging accordingly. With over a dozen sophisticated software tools working in concert with each other, the AutoGrid builds deep energy asset profiles, then predicts, analyzes and optimizes the excess capacity available from a fleet of assets. It can then dispatch the aggregated excess power while optimizing the asset's life and balancing the needs of its primary function in near real-time.

Forecasted to be a $40 billion dollar market by 2020 the AutoGrid Network can capture $4000 - $8000 in profit per vehicle per year over as many as 10 years per asset.

Major countries are forecasting over 1 million EV’s to be sold by 2015. REV is negotiating with several vehicle manufacturers to ensure their vehicles are AutoGrid-ready, enabling customers to simply plug in and be paid.

"We must rethink how energy storage is compensated and reflect the superior performance of storage for selected applications."
Source: California Energy Storage Alliance
Early Leadership: Technology Development

2009: Original conception of AutoGrid: Defined purpose and functionality
2010: Architecture design: Programming commenced
2011: Release of Version 1, testing and validation with US Army
2011: Continuing development of user interfaces, integration with patented exclusive revenue optimization engine and adding data aggregation
2012: Will build-in aggregation and brokerage and commence ISO integration and system testing to capture grid revenues

Early Leadership: Market Validation

- Completed first US Army contract of 4 AutoGrid-capable vehicles.
  Project value > $600,000.
- Development status: AutoGrid Network now capable of dispatching signals to multiple vehicles.
- Received contract for REV’s 2nd US Army AutoGrid validation.
  Project value of up to $720,000.
- 1st patent application submitted with 5 more in progress. Negotiating for an exclusive license of two revenue optimization US patents with the University of WA.
- Signed teaming agreement with SAIC, a major military contractor aiming to program manage the US Dept. of Defense’s (DoD) purchase of up to 200,000 vehicle-to-grid vehicles through 2015.
- Successfully demonstrated the AutoGrid’s capabilities to SAIC and the DoD’s RFP team in advance of their first purchase of 500 plug-in vehicles in 2012.
- Signing MOU’s with key fleet vehicle OEM’s to deliver their vehicles ‘AutoGrid-ready’.
- Quotes pending for 2 more US Army AutoGrid projects, one including AutoGrid integration with Chrysler USA. Engineering discussions are in progress.
- Received LOI’s from 3 Ontario power utilities for a $850,000 AutoGrid validation project with funding request submitted to the Ontario Power Authority.
- Expecting grant approval for $3.8M with NRCan EcoEnergy in Canada.
Past Performance And Forecasts

Working with many of the leading players in the US Federal government such as the US Army-TARDEC, SAIC and Honeywell Aerospace, REV is well positioned in this market. REV is presently the only company with the technology, an innovative solutions set and a well-defined business model that meets the requirements for the US DoD’s plans for enabling energy security and reducing fuel consumption across 200,000 GSA vehicles in the non-tactical vehicle segment. It’s an exciting time to be part of this nimble and innovative company.

Long-Term Forecast (in 000’s)

![Graph showing projected revenue and COGS](image)

Projected GPM by 2016: >50%

Revenue Assumptions

- By 2016, 3-6 automakers with REV licenses have delivered a cumulative 80,000 vehicles AutoGrid-ready earning $3,500 per year across multiple grid services. This is approximately 2% of the EV’s forecasted to be on the road by 2016.
- Grid-based revenues are maximized by a fully functioning AutoGrid that is intelligently optimizing existing contracts across several grid services with dynamic groupings of vehicles.
- Costs associated with fleet and OEM incentivization (revenue sharing), plus contract management and negotiations makes up 40% of direct COGS.
Management Team

Jay Giraud, Founder and CEO
- Built an industry-leading management team,
- Raised $3,000,000 in angel and non-dilutive government financing
- Captured over $1,000,000 in revenue from government, utility and Fortune 500 companies.
- Led the development and delivery of state of the art electric vehicles with market-leading integrated vehicle-to-grid technology.

Ron Steeper MBA, CIO
- Responsible for overall AutoGrid development and planning.
- Co-founded, developed and successfully exited from an internet broadcasting software company which led the establishment of several netcasting facilities.
- BC Hydro, reported directly to the CIO and led numerous multi-million dollar projects and programs across the enterprise.

Richard Woodruff MBA, Mech Eng, VP Sales and Business Development
- Leads sales, marketing and business development building REV’s partner channels with automakers and battery partners.
- More than 20 years of success selling technology-based integrated systems in V1.0 sectors. 14 years at Cisco, built high performance sales teams, consistently over-achieved revenue targets.
- Grew his operation’s annual sales by 240% to over $100M.
- Established partner relationships and optimized channel coverage to grow market share faster than competitors, and directed a $140M business to exceed targets.

Mike Liverton, Electronics Engineer, VP Strategy
- Responsible for identifying, developing and supporting strategic long-term relationships with large technology partners in the developing vehicle to grid market.
- Ran a successful cellular company. From startup to four years his cellular / internet sales distribution business exceeded sales of $20m p.a.
- Grew the business to over $100m in sales in the next 18 months.
- Established the company as the leading web based sales channel within the UK.
- Landed a strategic partner, completed an exit with Europe’s largest independent cellular sales company.

Josh Usher, BAppSc Eng Physics, Director of AutoGrid Technology
- Expert in the field of sustainable transport and energy.
- Ten years of experience working with electrified transport technologies from bicycles to trains, solar cars to plug-in hybrids and EV’s.
- Developed a diverse range of energy projects from modeling of mixed residential, commercial and retail developments to end-use modeling of appliances in a home.
- Most notable is Josh’s expertise in the research, development and management of groundbreaking projects and studies in the area of vehicle-to-grid with Australia’s largest utility company from 2007 to 2011.