

tween hot and cold temperature extremes, pressure testing for cooling leaks and complete functional testing.

We also have a production cell for the assembly of our larger frame size, higher power lower volume prototype motors. The annual capacity of this cell is approximately 5,000 systems per shift per year.

The foregoing products are currently manufactured at our 28,000 square foot ISO 9001:2000 quality certified facility in Frederick, Colorado. We expect to relocate all of our manufacturing operations to our new facility over the next three months. After completion of the relocation, we expect to sell our existing manufacturing facility.

Over the last several years we have established a production engineering group with decades of manufacturing design and production experience, much of which is specific to the automotive industry. Today, this team consists of nearly twenty professionals. In the last two years we have made significant improvements in manufacturing systems, facilities and space utilization and we have adopted the Advanced Product Quality Planning (“APQP”) automotive procedures.



*CODA Automotive Sedan Powered by UQM® PowerPhase® Propulsion System*



In order to ensure our cost competitiveness, we have adopted a manufacturing strategy for the near term of designing all product components and then sourcing these parts with quality suppliers. Final assembly, testing, pack-out and shipping of the product is performed at our Colorado facility. We have established relationships with many high-quality, low-cost suppliers, including a number of international companies. Future plans are to continue the development and introduction of more advanced and automated manufacturing systems which we believe will ensure our competitiveness in new and emerging markets.

We are primarily focused on launching high volume production of electric propulsions systems for CODA

and potentially other electric and hybrid electric vehicle customers. We believe that the Company is well positioned to leverage its technology and pursue and win additional high volume production programs with major automotive, truck, bus and military vehicle OEMs and/or their Tier 1 suppliers.

## **Coda Automotive Program**

In June 2009 we entered into a ten year Supply Agreement with CODA Automotive to supply UQM® PowerPhase® electric propulsion systems to CODA Automotive’s production partner, HaFei. Initial shipments of production systems under the agreement are expected to begin later this calendar year and ramp up prior to scheduled deliveries of CODA’s full performance all-electric four-door sedan in the California market in the fall of 2010. CODA hopes to sell 14,000 vehicles in calendar year 2011 reaching an annual run rate of 20,000 vehicles, which, if achieved, would result in annual revenue to us well in excess of \$50 million.

The CODA all-electric sedan was developed by CODA’s internal team of engineers working with multiple external engineering partners, including Porsche Engineering. The vehicle is propelled by a 100 kW UQM® PowerPhase® electric propulsion system and is expected to carry a 5-star crash worthiness rating and sell in the mid \$30,000s after a \$7,500 Federal tax credit. Powered by a 33.8 kWh lithium-ion battery, the vehicle is expected to have a range between charges of 90 to 120 miles depending on individual driving habits. The on-board charger plugs into a 110V or a 220V outlet and can charge for a 40-mile commute in approximately two hours (full charge in less than six hours) at 220V.

The CODA electric sedan chassis will be assembled and tested, incorporating the UQM® powertrain on an existing large-scale assembly line operated by HaFei. Hafei is one of the premier production and R&D companies in China and is China’s third largest automobile manufacturer. Hafei has over 575,000 square meters of production facilities and 11,000 employees.

CODA announced that the battery system is being supplied by a joint venture between CODA Automotive and Tianjin Lishen Battery Co. (“Lishen”). Lishen is one of the world’s largest manufacturers of lithium-ion cells and a key supplier to Apple, Motorola, Samsung and Vodafone, among others. In March 2010, the CODA-Lishen joint venture announced that it had secured \$100 million in committed equity capital and received a commitment for a \$294 million line of credit from the Bank of Tianjin Joint-Stock Co., Ltd. CODA is working to establish U.S. based manufacturing of their joint venture batteries.

We understand that CODA is also working to establish final vehicle assembly in Southern California

where at a minimum the battery system would be installed in the chassis produced by Hafei. It is likely, that over time, the UQM propulsion system and other U.S.-sourced components would be assembled into the vehicle in Southern California, rather than China.

CODA advertises that the CODA sedan is backed by a three-year/36,000 mile warranty and an eight-year/100,000 mile battery warranty.

CODA Automotive states its strategy is to design, brand, market and distribute electric vehicles utilizing manufacturing partnerships which allow it to develop vehicles rapidly in a flexible manner - avoiding the traditionally capital-intensive nature of the automobile business. CODA expects to employ a direct distribution model, with initial sales of the all-electric sedan commencing in the late fall of 2010 in California. CODA plans to have vehicle maintenance and service performed through an outsourced network comprised of brand name car service partners. CODA Automotive has announced that to date it has raised \$125 million in capital to facilitate the execution of its business plan.

Other announced suppliers to the CODA program include: Continental (electronic stability control); Delphi (DC-to-DC converter and electric power steering); BorgWarner (transaxle); Hella (electric vacuum pump); Energy CS (battery management system); Lear (battery charger); OMITEC (main controller); and Mitsubishi (electric AC compressor).

## U.S. DOE Stimulus Grant

On January 13, 2010 (the "Grant Date"), we executed an Assistance Agreement (the "Agreement") for a \$45,145,534 grant (the "Grant") with the U.S. Department of Energy ("DOE") under the American Recovery and Reinvestment Act (the "Stimulus Act"). The Grant provides funds to facilitate the manufacture and deployment of electric drive vehicles, batteries and electric drive vehicle components in the United States. We were one of seven component manufacturers selected for an award and the only small business under the component category. Pursuant to the terms of the Agreement, the DOE will reimburse us for 50 percent of qualifying costs incurred on or after August 5, 2009 for the purchase of facilities, tooling and manufacturing equipment, and for engineering related to product qualification and testing of our electric propulsion systems and other products. The period of the Grant is through January 12, 2013.

The \$45.1 million size of the Grant is based on the estimated cost of a project to implement high volume

manufacturing operations provided in our application to the DOE under the Electric Drive Vehicle Battery and Component Manufacturing Initiative. Funding for qualifying project costs incurred during the period commencing August 5, 2009 through June 26, 2010 is initially limited to \$8.1 million until the following conditions are satisfied: 1) review and approval of our accounting system by the DCAA; and 2) mutual agreement by the parties on an updated total estimated cost

of the project. In the event either condition is not satisfied by June 26, 2010, the Grant may be terminated. In addition, we are required, no later than

January 12, 2011, to provide the DOE with an additional updated total estimated cost of the project along with evidence of firm commitments for our 50 percent share of the total estimated cost of the project. If all such funds have not been secured, we must submit, by such date, a funding plan to obtain the remainder of such funds, which is acceptable to the DOE.

The Grant is also subject to our compliance with certain reporting requirements. As specified in the Act, we are required to use the Grant funds in a manner that maximizes job creation and economic benefits. The Stimulus Act and the Agreement impose minimum construction wages and labor standards for projects funded by the Grant and some sourcing restrictions.

If we dispose of assets acquired using Grant funding, we may be required to reimburse the DOE upon such sale date if the fair value of the asset on the date of disposition exceeds \$5,000. The amount of any such reimbursement shall be equal to 50 percent of the fair value of the asset on the date of disposition.

While UQM has exclusive patent ownership rights for any technology developed with Grant funds, we are required to grant the DOE a non-exclusive, non-transferable, paid-up license to use such technology.

The Grant has numerous benefits to the Company and its shareholders including: 1) substantially reducing the Company's cost of capital; 2) substantially mitigating the financial risk of facilitating to manufacture products for an emerging market; 3) substantially reducing product qualification and testing costs; and 4) improving product margins on products manufactured on equipment subsidized by the Grant.

At March 31, 2010 we had received reimbursements from the DOE under the Grant for facilities and equipment totaling \$3.6 million and had approximately \$1.6 million of contingently reimbursable engineering costs related to product qualification and testing which we expect to receive in the first quarter of fiscal 2011. Fur-

***"We believe that the launch of high volume manufacturing of our PowerPhase 100kW electric propulsion system for CODA Automotive later this calendar year will give us a substantial "first-mover" advantage as a Tier 1 supplier to the clean vehicle market."***

ther, we expect to record in the quarter that the contingency is removed, a reduction of expense of a corresponding amount.

## Our Opportunity

We have developed a range of products including electric propulsion motors, generators, power electronic controllers and other power electronic products that we believe are ideally suited to the emerging markets for electric, hybrid electric and fuel cell electric vehicles.

Hybrid electric passenger vehicle sales have grown substantially since their introduction in the North American market in 2000, with over one million units being sold. As a result, the fuel economy and emission benefits of hybrid electric technology are broadly understood by consumers worldwide. This, in concert with \$25 billion of potential government grants and loans for the manufacture of clean vehicles under the Advanced Technology Vehicles Manufacturing Incentive Program, \$2.4 billion of grants under the ARRA's Electric Drive Vehicle Battery and Component Manufacturing Initiative (under which we received a \$45.1 million award), higher oil prices, tax credits for hybrid electric vehicle purchasers, stricter government emission regulations and growing environmental consciousness, has generated market demand for this class of vehicle.

Until recently, passenger vehicle makers have elected to develop their own electric and hybrid electric systems and components, either individually or in cooperation with Tier 1 automotive suppliers; however, we have supplied our propulsion systems to numerous international automotive manufacturers as part of their electric and hybrid electric vehicle development activities over the last eighteen months. Should any of these automakers elect to utilize our products in future model launches, it would have a material impact on our future rate of growth.

We believe that the launch of high volume manufacturing of our PowerPhase® 100 kW electric propulsion system for CODA Automotive later this calendar year will give us a substantial "first mover" advantage as a Tier 1 supplier to the clean vehicle market. Specifically, the introduction of our products that have been fully automotive qualified in commercial quantities will provide substantial economies of scale, permitting us to achieve production costs and pricing that will be difficult for others who have not launched similar high volume production to compete with. We expect that this pricing and product availability advantage will allow us to further expand the roster of automobile makers who select our propulsion systems for their future vehicle programs.

In addition to the passenger automobile market, vehicle makers of all types have been evaluating the potential of applying electric and hybrid electric technology

to their vehicle platforms. Of these manufacturers, medium and heavy-duty truck and bus builders and military manufacturers have been the most active, driven by the performance and fuel economy advantages available from this technology, the availability of large amounts of onboard and exportable power and stricter diesel emission mandates.

International Truck and Engine Corporation, a Navistar Company, currently offers for sale a diesel electric medium-duty truck, the International® DuraStar™ Hybrid. Similarly, Peterbilt Motors Company, a division of PACCAR Inc., offers for sale its Model 330 and Model 335 medium-duty hybrid electric trucks, and Freightliner Trucks, a division of Daimler Trucks North America LLC has introduced its Business Class® M2e hybrid electric Truck. All of these truck manufacturers use the Eaton Corporation hybrid electric system. Our automotive certified DC-to-DC converter which we manufacture for Eaton Corporation is installed on many of these hybrid trucks. We believe that these industry developments signal the beginning of a potentially large-scale deployment of electric propulsion and related electronic products into markets other than mass-market passenger automobiles. Should these products receive broad customer acceptance, as we expect they will, additional opportunities will likely develop over time for our company.

The operating characteristics of electric motors for vehicle propulsion are different from those of more conventional industrial motors. Propulsion motors ideally deliver high levels of torque efficiently at slow rotational speeds and possess the ability to transition from high torque to high speed over a relatively constant power curve allowing, in many cases, the elimination of conventional transmissions. Our proprietary propulsion systems have been specifically developed for these applications and deliver exceptional torque and high rotational speeds in a compact, energy efficient machine. We believe that our portfolio of propulsion motors, generators, power electronic controllers and related electronic products has well positioned our company to compete effectively in these emerging markets. Electric and hybrid electric vehicle makers to-date have generally adopted a 340-volt electrical system to deliver the energy from the battery pack to the electric components and vice versa. Conventional gasoline vehicles generally have a 12-volt electrical system that operates dashboard instruments, lights, horns, etc. The higher electrical system voltages of electric and hybrid vehicles are creating opportunities for companies such as ours to enter the automotive market with a wide-range of under-the-hood auxiliaries including generators and motors to drive water, oil and power steering pumps, air conditioning compressors, and cooling fans, that operate at the new higher voltage.

We are currently investing substantial amounts of human resource and capital on establishing the manufacturing infrastructure to meet CODA Automotive's requirements as well as the potential production requirements of our other existing and future customers. As the markets for our customers' clean vehicles expand, we expect to make additional investments in support of our strategy to aggressively introduce automotive certified products to satisfy our customers' requirements.

We also expect to experience potentially rapid growth in our revenue coincident with the introduction of electric products by our customers. In parallel to these activities in emerging markets, we expect to continue to pursue additional production opportunities for our proprietary technology in existing markets where the performance of our products can provide our customers with a competitive advantage in the markets they serve.