ACORN ENERGY, INC.
Form 10-K
March 16, 2011

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2010 Commission file number: 0-19771

ACORN ENERGY, INC.
(Exact name of registrant as specified in charter)

Delaware (State or other jurisdiction of incorporation or organization)	22-2786081 (I.R.S. Employer Identification No.)
4 West Rockland Road, Montchanin, Delaware (Address of principal executive offices)	19710 (Zip Code)

302-656-1707
Registrant's telephone number, including area code

Securities registered pursuant to Section 12(b) of the Act:

Title of Class	Name of Each Exchange on Which Registered
Common Stock, par value $.01 per share	The NASDAQ Global Market

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ¨ No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ¨No ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ¨

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ¨ Accelerated filer x Non-accelerated filer ¨ Smaller reporting company x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ¨ No x

As of last day of the second fiscal quarter of 2010, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately $76.4 million based on the closing sale price on that date as reported on the NASDAQ Global Market. As of March 9, 2011 there were 17,343,005 shares of Common Stock, $0.01 par value per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

None.

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Certain statements contained in this report are forward-looking in nature. These statements can be identified by the use of forward-looking terminology such as “believes”, “expects”, “may”, “will”, “should” or “anticipates”, or the nega thereof, or comparable terminology, or by discussions of strategy. You are cautioned that our business and operations are subject to a variety of risks and uncertainties and, consequently, our actual results may materially differ from those projected by any forward-looking statements. Certain of such risks and uncertainties are discussed below under the heading “Item 1A. Risk Factors.”

AquaShield™ and PointShieldTM are trademarks of our DSIT Solutions Ltd. subsidiary. CoaLogix™ and MetalliFix™ are trademarks of our CoaLogix subsidiary. Line IQTM, Transformer IQTM, Bushing IQTM and PowerMonicTM are trademarks of our GridSense subsidiary.

PART I

ITEM 1.BUSINESS

OVERVIEW

Acorn Energy, Inc. (the Company") is a holding company focused on technology driven solutions for energy infrastructure asset management. Our four businesses improve the world's energy infrastructure by making it cleaner and less expensive to operate air pollution systems for coal and gas-fired power plants (CoaLogix), more secure by providing security solutions for underwater energy infrastructure (DSIT), more reliable by providing condition monitoring instruments for critical assets on the electric grid (GridSense) and more productive and efficient by increasing oil and gas production while lowering costs through use of ultra-high sensitive seismic tools for more precise pinpointing of oil and gas reservoirs (USSI).

Through our majority or wholly-owned operating subsidiaries we provide the following services and products:

- Air Pollution Control Services. We provide selective catalytic reduction ("SCR") catalyst and management services for coal-fired power plants through our CoaLogix Inc. ("CoaLogix") subsidiary. These services include SCR catalyst management, cleaning and regeneration as well as consulting services to help power plant operators optimize efficiency and reduce overall nitrogen oxides ("NOx") compliance costs through CoaLogix's SCR-Tech LLC ("SCR-Tech") subsidiary.

- Energy & Security Sonar Solutions (formerly known as Naval and RT Solutions). We provide sonar and acoustic related solutions for energy, defense and commercial markets with a focus on underwater site security for strategic energy installations and other real-time and embedded hardware and software development and production through our DSIT Solutions Ltd. ("DSIT") subsidiary.

- Smart Grid Distribution Automation. These products and services are provided by our GridSense subsidiary which develops markets and sells remote monitoring and control systems to electric utilities and industrial facilities worldwide.

- Energy and Security Sensor Systems. These products and services are provided by our US Sensor Systems Inc. subsidiary ("USSI") which develops and produces "state of the art" fiber optic sensing systems for the energy, commercial security and defense markets worldwide.

During 2010, each of the four abovementioned activities represented a reportable segment. In addition, our "Other" segment represents IT and consulting activities at our DSIT subsidiary.

REVENUES BY COMPANY

The following table shows, for the periods indicated, the dollar amount (in thousands) of the consolidated revenues attributable to each of our consolidated companies. The revenues of USSI are included in our consolidated financial statements effective February 23, 2010. The revenues of GridSense are included in our consolidated financial statements effective May 12, 2010. Accordingly, there are no comparative revenues reported for these activities for 2009. On December 17, 2010, we discontinued our Coreworx activities. Accordingly, Coreworx' revenues and results are excluded for all periods indicated.

	Year ended December 31,		Three months ended December 31,	
	2009	2010	2009	2010
CoaLogix	$ 18,099	$ 21,450	$ 5,338	$ 6,638
DSIT Solutions	9,219	11,457	2,746	2,843
GridSense	—	2,382	—	1,194
USSI	—	405	—	212
Total	$ 27,318	$ 35,694	$ 8,084	$ 10,887

AIR POLLUTION CONTROL SERVICES – COALOGIX

Through SCR-Tech, which is 100% owned by our 72% owned CoaLogix subsidiary, we offer a variety of services for coal-fired power plants that use SCR systems to reduce nitrogen oxides ("NOx") emissions. NOx emissions are contributors to ground-level ozone (smog), particulate matter and acid rain. These services include SCR catalyst management, cleaning and regeneration, as well as consulting services to help power plant operators optimize efficiency and reduce overall NOx compliance costs.

Coal-fired power plants, in particular, continue to be a primary target for NOx reduction, and selective catalytic reduction remains the most widely used technology by plant operators to control NOx. With NOx removal efficiencies of up to 95%, SCR systems are considered to be the most effective NOx reduction solution, and we expect it to remain the dominant technology choice for coal-fired power plants to meet increasingly stringent U.S. air quality regulations.

The average useful life of SCR catalyst used at coal-fired power plants is approximately 24,000 hours (equivalent to three years of year-round operation). Until 2003, the only solution in the U.S. for restoring activity and NOx reduction performance was to replace spent catalyst with costly new catalyst. Since 2003, SCR-Tech has offered U.S. power plant operators a more cost-effective alternative in the form of catalyst regeneration.

Regulatory Drivers

The 1990 Clean Air Act Amendments were implemented to improve air quality in the U.S., and are enforced by the U.S. Environmental Protection Agency ("EPA"). Under the Clean Air Act, the EPA limits how much of a pollutant can be in the air anywhere in the United States, with each state responsible for developing individual state implementation plans ("SIPs") to meet the EPA's set limits for various pollutants. Emissions of NOx from coal-fired power plants are included in the EPA's criteria pollutants for which limits have been established. Operators of large power plants, particularly in the Eastern half of the U.S., have been required to significantly reduce their NOx emissions.

The original regulatory driver of SCR-Tech's business was the EPA's NOx SIP Call program which was designed to mitigate the regional transport of NOx and required energy producers and other industries operating large power plants in the Eastern half of the U.S. to reduce their NOx emissions substantially and to maintain them at reduced levels particularly during the five-month “ozone season” (May 1-September 30) in 19 Midwestern and Eastern states and the District of Columbia. This program has resulted in a dramatic increase in the number of SCR system installations at coal-fired power plants for the removal of NOx.

The Clean Air Interstate Rule ("CAIR") is another regulatory driver of our SCR service business. Phase I caps on NOx emissions took effect January 1, 2009, and are designed to permanently cap and achieve substantial reductions in emissions of NOx across 28 Eastern states and the District of Columbia that we believe will further increase the size of our addressable market. By 2015, CAIR is expected to significantly reduce NOx emissions in these states from 2003 levels by plants utilizing a cap-and-trade approach. This rule builds on the NOx SIP Call with the objective of further mitigating air pollution moving across state boundaries, and is designed to cut NOx emissions from power plants significantly with the 2009 Phase I caps and by the implementation of Phase II caps in 2015. CAIR's Phase I caps require year-round SCR system operation for many power plants (with increased NOx reduction required during ozone season) to meet the more stringent requirements. With year-round operation of SCRs needed by many power plants to comply with CAIR, coal-fired power plant operators will be required to replenish the catalyst used in SCR systems with new or regenerated catalyst on a much more frequent basis.

On July 11, 2008, the D.C. Court of Appeals vacated CAIR and the associated Federal Implementation Plan. On December 23, 2008, the court subsequently re-instated CAIR to give the EPA an opportunity to fix flaws found by the court in its previous decision. The court did not provide a time limit for the EPA to complete the changes. The changes required by the court do not affect SCR usage or required emission caps or limits.

On July 6, 2010, the EPA issued the proposed replacement for CAIR, the "Transport Rules". The public comment period ended in October, 2010 and the EPA is in the process of finalizing the proposed regulation. According to the EPA, by 2014, the Transport Rule will have the effect of reducing NOx from power plants by 52% over 2005 levels.

Market for SCR Catalyst and Management Services

Coal-fired plants represent approximately 50% of U.S. power generating capacity, and we believe they will continue to play an important role in the U.S. electricity generation market in the years ahead. Department of Energy (DOE) projections indicate that coal-fired electric power generation will grow gradually through 2035. The recent growth in SCR system installations in coal-fired power plants driven by the NOx SIP Call and CAIR has resulted in a large and growing U.S. market for SCR catalyst and management services. Based upon the substantial number of SCR systems that commenced operation between 2000 and 2006 combined with the CAIR Phase I caps which began on January 1, 2009, we expect the market for catalyst replenishment to increase dramatically, and result in a total addressable market for catalyst cleaning and regeneration estimated in excess of $100 million in 2011.

By offering customers more economical ways to operate and maintain their SCR units, along with a lower cost regeneration alternative to purchasing new catalyst, we believe SCR-Tech has the potential to play a significant role in the growing U.S. market for SCR catalyst and management services.

SCR-Tech's Service Offerings

Catalyst Cleaning, Rejuvenation and Regeneration

We offer proprietary and patented processes that can improve the NOx removal efficiency and restore the useful life of installed SCR catalyst, providing a compelling economic alternative to catalyst replacement. SCR-Tech's processes are capable of not only physically cleaning and rejuvenating the most severely plugged, blinded or poisoned catalyst, but of also chemically reactivating deactivated catalyst. Depending upon the state of the installed catalyst, SCR-Tech offers several alternatives for restoring its NOx removal efficiency and extending its life. The chemicals and raw materials used in the cleaning and regeneration processes are commonly and readily available.

SCR-Tech's regeneration process has several advantages over purchasing new catalyst by (i) offering cost savings, (ii) eliminating or reducing environmental related disposal issues, (iii) enhancing catalyst activity and (iv) reducing sulfur dioxide conversion.

SCR and Catalyst Management

We provide a broad array of customized SCR and catalyst management services, including guidance on effective SCR and catalyst management strategies, with the objective of assisting plant operators in optimizing the operation and performance of their SCR systems while reducing their operation and maintenance costs and achieving cost-effective NOx compliance. All SCR and catalyst management services are offered as either a complete package or "a la carte," allowing the flexibility to select and combine various services on an as-needed basis tailored to the individual SCR system.

Customers

Our SCR catalyst and management services business currently primarily serves the U.S. coal-fired power generation market. Our customer base ranges from large investor-owned utilities and independent power producers to smaller municipal power generators. As part of an ongoing growth and revenue diversification strategy, SCR-Tech continues to actively target SCR operators at coal-fired power plants throughout the United States, and the Eastern U.S. in particular, to further expand its customer base and broaden its reach in the marketplace. In 2010, four customers represented approximately 54% of SCR-Tech's revenue (18%, 15%, 11%, and 10%), and one of those customers (the Tennessee Valley Authority) comprised approximately 11% ($3.9 million) of Acorn's consolidated revenues for 2010. In 2009, two customers represented approximately 36% of SCR-Tech's revenue, with one of those customers, Allegheny Energy, comprising 16.0% of Acorn's sales for 2009. The loss of one or more of these customers could have a material effect on this segment.

Competition

We are aware of one company, Evonik Energy Services LLC ("Evonik LLC"), which entered the U.S. catalyst regeneration market that offers competing SCR regeneration and cleaning services beginning in 2008, and has a regeneration facility in North Carolina. Evonik LLC, based in Charlotte, North Carolina, is a subsidiary of a large German company, Evonik Steag GmbH. We are currently involved in litigation with Evonik LLC. See Item 3. Legal Proceedings. Another company, Enerfab Inc. provides catalyst management, and also cleans and rejuvenates catalyst but does not regenerate catalyst (which involves reactivating catalyst with chemicals to restore the catalyst to its maximum efficiency). In addition, new catalyst replacement is the primary competition for SCR-Tech's regeneration process when a replenishment of catalyst activity is necessary. The basis of competition is often price as many projects are subject to competitive bidding. Quality and service can also be competitive factors.

Production Facilities

SCR-Tech's business operations are located in Charlotte, North Carolina in two production facilities (Mount Holly and Steele Creek) with a total of approximately 270,000 square feet for the cleaning and regeneration of SCR catalyst.

In September 2009, SCR-Tech entered into an agreement to lease approximately 7.3 acres of land in Charlotte, North Carolina together with a building containing approximately 143,500 square feet of office, production and warehouse space (the Steele Creek facility). SCR-Tech entered into this lease to provide it with additional space for manufacturing, warehousing, research and development and administration. SCR-Tech leased 98,460 square feet through July 31, 2010 and added the remaining 45,040 square feet to the lease on August 1, 2010.

The Mount Holly facility is also located in Charlotte, North Carolina and contains approximately 126,000 square feet of leased office, production, laboratory and warehouse space. Since the opening of the Steele Creek facility, the Company continues to use the Mount Holly facility for production, laboratory and warehouse space. The Mount Holly facility's lease expires on June 30, 2012 and the company has two five years options to renew. CoaLogix is currently in the process of determining whether or not to exercise its option to extend the Mt. Holly lease. If CoaLogix does not exercise its option to extend the Mt. Holly lease, it is possible to increase production capacity at the Steele Creek facility to cover CoaLogix' near term production needs.

We believe that both production facilities (or an expanded Steele Creek facility if the Mt. Holly lease extension is not exercised) provide sufficient capacity for cleaning and regenerating SCR catalysts for the near future.

Intellectual Property

We use a combination of patents, trade secrets, contracts, copyrights and trademarks to protect the proprietary aspects of our core technologies, technological advances and innovations, including our cleaning and regeneration processes and other know-how, and we work to actively maintain protection of our proprietary technologies and processes over time through follow-on patent filings associated with technology and process improvements that we continually develop. A significant portion of our know-how is protected as trade secrets and supported through contractual agreements with our employees, suppliers, partners and customers.

We either own (exclusively or jointly) or hold exclusive license rights from third parties for seven U.S. patents, three Canadian patents, one German patent and eight pending U.S. applications, three pending Chinese patents applications, one pending German application and one pending Canadian application. We anticipate that when our early patents expire, we will rely on subsequently filed and additional patents along with trade secrets and other know-how to protect the foundation technology and cleaning and regeneration processes. We plan to continue to file new patent applications as we gain knowledge and experience with our various processes and service offerings.

ENERGY & SECURITY SONAR SOLUTIONS – DSIT SOLUTIONS LTD.

DSIT Solutions Ltd., which is 84% owned by Acorn, is a globally-oriented company based in Israel with expertise in sonar and acoustics and development capabilities in the areas of real-time and embedded systems. Based on these capabilities, we offer a full range of sonar and acoustic-related solutions to strategic energy installations as well as defense and homeland security markets. In addition, based on expertise in fields such as signal acquisition and processing applications, communication technologies, computerized vision for the semiconductor industry and command, control and communication management ("C3") we provide wide ranging solutions to both governmental and commercial customers.

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Products and Services

DSIT's Energy & Security Sonar Solutions activities are focused on two areas – sonar and acoustic solutions for naval and security markets and other real-time and embedded hardware and software development and production.

Energy & Security Sonar Solutions. Our energy & security sonar solutions include a full range of sonar and acoustic-related solutions to the strategic energy installation, defense and homeland security markets. These solutions include:

- AquaShield™ Diver Detection Sonar ("DDS") – DSIT has developed an innovative, cost-effective DDS system, the AquaShield™, that provides critical coastal and offshore protection of sites through long-range detection, tracking, classification and warning of unauthorized divers and Swimmer Delivery Vehicles ("SDVs") for rapid deployment and effective response. Our AquaShield™ DDS system is fully automatic and customizable, and requires intervention of a security person only for final decision and response to the threat. The DDS sensors can be integrated with other sensors into a comprehensive command and control ("C&C") system to provide a complete tactical picture both above and below the water for more intelligent evaluation of and effective response to threats.

- PointShield™ Portable Diver Detection Sonar (PDDS) – DSIT has added another solution to its underwater family of "Shield" products – the PointShield™. The PointShield™ PDDS is a medium range portable diver detection sonar aimed at protecting vessels at anchorage and cover restricted areas such as water canals and intakes. The PointShield™ is a cost-effective system tailored to meet the needs of customers, whose main concern is portability and flexibility.

- PortView™ Harbor Surveillance System ("HSS") – DSIT in cooperation with a partner company –HarTech Technologies, Ltd. has developed an integrated HSS that incorporates DDS sensors with above-water surveillance sensors to create a comprehensive above and below water security system to coastal and offshore sites such as energy terminals, offshore rigs, nuclear power plants and ports. The system reliably detects, tracks, and warns of intruders such as divers, swimmers, SDVs, semi-submersibles, small surface vessels and other potential intruders.

- Mobile Acoustic Range ("MAR") – The MAR accurately measures a submarine's or surface vessel's radiated noise; thus enabling navies and shipyards to monitor and control the radiated noise and to silence their submarines and ships. By continuously tracking the measured vessel and transmitting the data to a measurement ship, the MAR system enables real time radiated noise processing, analysis and display. The system also includes a platform database for measurement results management and provides playback and post analysis capability.

- Generic Sonar Simulator ("GSS") – DSIT has developed a GSS for the rapid and comprehensive training of Anti-Submarine Warfare ("ASW"), submarine, and mine detection sonar operators. This advanced, low cost, PC-based training simulator is designed for all levels of sonar operators from beginners to the most experienced, including ship ASW teams. The simulator includes all aspects of sonar operation, with emphasis on training in weak target detection in the presence of noise and reverberation, torpedo detection, audio listening and classification.

- Underwater Acoustic Signal Analysis system ("UASA") – DSIT's UASA system processes and analyzes all types of acoustic signals radiated by various sources and received by naval sonar systems (submarine, surface and air platforms, fixed bottom moored sonar systems, etc.).

Other Real-Time and Embedded Solutions

Additional areas of development and production in real-time and embedded hardware and software include:

- Applications - DSIT specializes in Weapon/C&C Operating Consoles for unique air and naval applications, designed through synergistic interaction with the end-user. Weapon/C&C Consoles utilize Human-Machine Interface (“HMI”) prototyping supported on a variety of platforms as an integral part of the HMI definition and refinement process. Weapon/C&C Console specific applications driven by HMI include signal processing and data fusion and tracking.

- Computerized Vision for the Semiconductor Industry - DSIT has been cooperating with global leaders of state-of-the-art semiconductor wafer inspection systems in developing cutting edge technologies to enable the semiconductor industry to detect defects in the manufacture of silicon wafers. DSIT develops and manufactures hardware and embedded software for computerized vision systems, and we supply this multi-disciplinary field in the integration of digital and analog technologies, image processing and intricate logic development.

- Modems, data links and telemetry systems – DSIT is working with major defense industries in Israel such as Rafael Advanced Defense Systems Ltd. and Israel Aerospace Industries Ltd., developing modems, advanced wideband datalinks and telemetry systems for airborne and missile systems. DSIT is providing development and production services of hardware and embedded signal processing software with high quality control standards.

- Sonar Building Blocks – based on our sonar capabilities and development of the DDS, DSIT has developed a number of generic building blocks of sonar systems such as Signal Processing Systems and Sonar Power Amplifiers (SPA). Some customers designing and building their own sonar systems have purchased these building blocks from us. These elements are specifically tailored and optimized for Sonar systems and have advantages over generic standard building blocks.

DSIT’s other operations include IT and consulting activities whose results are not included in the Energy & Security Sonar Solutions segment.

Customers and Markets

All of this segment’s operations (excluding sales and product delivery, set-up and service) take place in Israel. In 2010, approximately 55% of this segment's revenues were derived from outside of Israel. In 2009, approximately 43% of the segment’s revenues were derived from outside of Israel While in 2008, only 15% of this segment’s revenues were derived from outside of Israel. We expect this trend of increasing shares of this segment’s revenues to be generated from outside of Israel to continue in 2011. DSIT continues to invest considerable effort to penetrate European, Asian, U.S. and other markets in order to broaden its geographic sales base with respect to its sonar technology solutions. We have significant customer relationships with some of Israel’s largest companies in its defense and electronics industries as well as relationships with some of the biggest Asian defense integrators. We are currently exploring several cooperation opportunities within Europe and the US.

The global war on terror has shifted the focus of governments and Homeland Security agencies to invest in situational awareness equipment to better protect their national infrastructure. For example, in March 2009, the U.S. Nuclear Regulatory Commission ("NRC") amended the security requirements for nuclear power reactors to require detection and assessment systems at all licensed U.S. nuclear power plants. In addition, commercial enterprises are also increasingly aware of the need to protect critical coastal and waterfront infrastructures. These critical infrastructures include ports, oil terminals, off-shore oil and gas rigs, liquid natural gas (“LNG”) plants and terminals, nuclear power plants, coal terminals, dams and canals. We believe there will be a growing demand by governmental agencies and commercial owners of these facilities for products and services such as our energy and security sonar solutions described above.

We believe that in 2011, we will see an increased flow of orders for our AquaShield DDS generated by customers realizing the potential threat to their coastal and offshore critical facilities. DSIT is currently in discussions with numerous potential energy, commercial and governmental customers who have shown interest in the company's underwater security systems.

Three customers accounted for approximately 68% of segment sales in 2010 (39%, 17% and 12%), one of which accounted for 11% ($4.0 million) of Acorn's consolidated revenues for 2010. In 2009, three customers accounted for 83% (38%, 32% and 13%, respectively) of segment sales. The loss of any one or more of these customers could have a material adverse effect on this segment.

Competition

Our Energy & Security Sonar Solutions segment faces competition from several competitors, large and small, operating in worldwide markets, (such as Sonardyne International Ltd. (based in the United Kingdom), Atlas Elektronik (based in Germany) and the Kongsberg group of companies (based in Norway)) with substantially greater financial and marketing resources, particularly with respect to our energy and security sonar solutions. We believe that our wide range of experience and long-term relationships with large businesses as well as the strategic partnerships that we are developing will enable us to compete successfully and obtain future business. In 2010, DSIT participated in a head-to-head in-the-water competition with its aforementioned primary competitors. DSIT's AquaShield DDS achieved a much better performance, than its competitors, particularly in the areas of detection range and automatic classification.

Intellectual Property

DSIT rigorously attempts to protect its proprietary know-how, proprietary technologies, processes and other intellectual property.

DSIT's systems are heavily based on software implementing advanced acoustic signal processing algorithms. The foundation of the systems and DSIT's competitive edge lies in these algorithms. Our strategy is to identify these key intellectual property elements developed by us in order to protect them in a timely and effective manner, and to continually use such intellectual property to our competitive advantage in the marketplace.

We keep the detailed description of these core algorithms as proprietary information and accordingly they are not disclosed to the public or to customers. We use contractual measures such as non-disclosure agreements and special contract terms to protect this intellectual and proprietary information. It is uncommon for companies such as ours to rely on patents, as the patent itself may disclose critical information.

A significant portion of our know-how is protected as commercial secrets and supported through contractual agreements with our employees, suppliers, partners and customers.

Facilities

DSIT's activities are conducted in approximately 18,000 square feet of office space in the Tel Aviv metropolitan area under a lease that expires in August 2012. We believe that DSIT's current premises are sufficient to handle the anticipated increase in sales for the near future.

SMART GRID DISTRIBUTION AUTOMATION – GRIDSENSE

In accordance with applicable accounting standards, we began consolidating the results of GridSense beginning May 12, 2010, the date we acquired the outstanding GridSense shares not previously owned by us. Prior to that date we accounted for our GridSense investment using the equity method.

GridSense develops and markets remote monitoring systems to electric utilities and industrial facilities worldwide. These systems, used in a wide range of utility applications including outage management, power quality monitoring, system planning, trouble shooting and proactive maintenance, and condition monitoring, provide transmission and distribution network operators with the intelligence to better and more efficiently operate grid operations.

Due to increasing stresses on these systems, old and aging infrastructure and greater demands for power quality and reliability of supply, utilities are striving to modernize their electrical infrastructures with "SmartGrid" initiatives. Cost-effective and easily deployable, GridSense solutions provide critical components of the future grid.

GridSense's patented solutions allow end-users to cost effectively monitor the power quality and reliability parameters of electric transmission and distribution systems in applications where competitive offerings are non-existent or cost-prohibitive. GridSense has developed a range of offerings that addresses all the critical points of the electricity delivery system, including distribution and transmission lines, substations and transformers, and the point of electricity consumption.

GridSense operates from offices in the U.S. and Australia and has utility customers throughout the world, including the Americas, Asia, Australia, Africa, and the United Kingdom.

GridSense Offerings & Solutions

GridSense has a range of commercially proven offerings sold to customers worldwide. The success of GridSense's offerings is based on being able to provide identifiable and quantifiable value to its utility customers by minimizing inconveniences and productivity losses for their consumers, optimizing operations of existing assets, reducing costs of identifying and rectifying outages and disturbances on their networks, and providing them with the requisite information to make better capital expenditure decisions. GridSense’s offerings include:

- PowerMonicTM Systems - The PowerMonicTM range of outdoor power analyzers and analytical software allows electric utilities to monitor and investigate power quality problems in homes, offices, factories, and key points on the electricity distribution infrastructure.

- Line IQTM Systems - The Line IQTM provides real-time monitoring of electricity grids and captures important operational, maintenance, planning and regulatory reporting information such as current, temperature and power factor. The Line IQTM provides all these applications at a fraction of the cost of alternative solutions in the market.

- Transformer IQTM – The Transformer IQTM is a comprehensive monitoring system that consolidates all transformer monitoring functions onto a single platform using industry-proven hardware, and allows utilities to effectively predict nearly all the failure modes known to occur to transformers.

- Bushing IQTM – The Bushing IQTM is a continuous online system for monitoring power factor in hight voltage capacitive bushings.

Customers and Markets

Within Australia where GridSense has an established sales team and support infrastructure, GridSense sells the PowerMonicTM, Line IQTM, Transformer IQTM and Bushing IQTM range of products directly to electric utilities and industrial customers. Outside of Australia, GridSense utilizes a network of resellers, including rental companies, electrical engineering firms, distributors, independent manufacturers' representatives and agents. In addition, in North America, GridSense employs five sales professionals. By leveraging off this indirect sales network, GridSense has expanded into international territories while minimizing the risk and financial burden of maintaining a direct sales organization.

Strategically important markets outside of Australia include North America, UK and South Africa. Having invested heavily in an organization to support its customers in the US and Canada, GridSense has grown its customer base from just a handful a few years ago to over 200 utility companies ranging from municipal utilities and cooperatives to large investor owned utilities. The penetration of this market in the relatively short time since GridSense established operations in the US has been made possible with the establishment of a manufacturers' rep network covering the region. Given the size of the North American utility market, sales from this territory are expected to grow, and we believe North America will eventually represent the largest portion of overall company sales in the future. Unlike North America which is characterized by a large number of electricity suppliers over a vast geographic territory, the opportunities in the United Kingdom and South Africa are focused on a small number of large electric utility operators. The company is currently pursuing deployment opportunities in both the United Kingdom and South Africa.

GridSense has activities in other international markets but continues a measured and disciplined approach toward expansion. Validation of the market opportunity takes place before actual deployment of resources. GridSense mitigates its operational and financial risks by aligning itself with resellers that exhibit technical competency, established customer relationships and on-the-ground resources to support our offerings.

Two customers accounted for approximately 27% of GridSense's sales (14% and 13%) during the period following our consolidation of GridSense in May 2010. The loss of one or more of these customers could have a material effect on this segment.

Production Facilities and Locations

GridSense is headquartered in Sydney, Australia in an 8,100 square foot leased facility and has a 5,500 square foot leased facility in Sacramento, California, both of which GridSense management deems sufficient to meet its needs for the foreseeable future. GridSense has successfully outsourced many production aspects to external parties. The transfer of production to accredited contract manufacturers has reduced the Company's fixed manufacturing overhead and freed up resources to focus on quality assurance and service.

Competition

The industry in which GridSense operates is characterized by intense competition from both large, established companies as well as smaller companies with specialized offerings. Such competitors include General Electric, Siemens, Qualitrol Company LLC, PowerSense and Schweitzer Engineering Laboratories. To avoid direct competition with larger, more established companies GridSense focuses on niches where it can offer a differentiated product based on superior cost and performance. As GridSense grows and penetrates markets where larger companies have been established, it may experience more competition. GridSense is in a field where electronics and software/firmware dominate. This fast changing area may generate new methods of detecting and monitoring disturbances. GridSense closely monitors trends and changes in technologies and customer demand that could adversely impact its competitiveness and overall success. Price, quality and experience are the primary competitive factors.

Intellectual Property

GridSense invests significant resources in product development and research in order to maintain its competitiveness in the marketplace. Keeping proprietary information safe from unauthorized use or disclosure is therefore an important objective. In order to protect its proprietary know-how and technology, GridSense uses a combination of patents, trade secrets, contracts, copyrights and trademarks. GridSense owns three Australian patents and three U.S. patents, and has one patent pending in both Australia and the U.S. In addition, GridSense owns three patents in Canada, two in Europe, two in South Africa and one in Great Britain. However, some of GridSense’s know-how and technology may not be patentable. To protect its rights, GridSense requires employees, consultants, advisors and collaborators to enter into confidentiality agreements. While these agreements will provide some level of protection, they cannot provide absolute assurance that GridSense’s trade secrets, know-how or other proprietary information are fully safeguarded. Whenever intellectual property is developed internally or acquired, GridSense will evaluate and determine the optimal mix of controls to protect itself.

ENERGY AND SECURITY SENSOR SYSTEMS - U.S. SENSOR SYSTEMS INC.

In accordance with applicable accounting standards, we began consolidating the results of US Sensor Systems Inc. ("USSI") beginning February 23, 2010, the date we effectively acquired USSI. USSI is a Delaware corporation based in Northridge, California which was established in October 2007. In a series of investments, option exercises and exchanges of shares beginning in November 2009 through our most recent exercise in February 2011, we have acquired an aggregate of approximately 81% of USSI. In addition, we hold an additional option that can increase our holdings to approximately 87% by May 2011.

USSI's primary focus is to develop and produce “state of the art” fiber optic sensing systems for the energy and security (both commercial and defense) markets. USSI’s patented ultra-high sensitivity fiber optic sensors are being designed to replace the legacy expensive, unreliable, and bulky electronic sensors currently in widespread use today with small, low cost, ultra-reliable, and inherently-safe fiber optic sensors. USSI’s fiber optic sensors have demonstrated greater than three hundred times the sensitivity as compared to the legacy electronic sensors and sell for a fraction of the cost of traditional electronic sensors.

USSI’s new fiber optic sensing systems provide its users with a competitive advantage over those relying on existing sensor technology. As further described below, primary product lines for which USSI is currently developing products include downhole fiber optic sensor systems for oilfield 4D seismic reservoir monitoring, shale gas microseismic monitoring, fiber optic perimeter security systems (including commercial and defense), and fiber optic pipeline/coal mine monitoring systems. USSI’s systems are currently being installed for evaluation by companies in North America, Asia, and Eastern Europe.

Products and Services

4D reservoir & shale gas monitoring. New oil discoveries are not keeping pace with the worldwide demand for oil. To make up for this shortfall, more oil must be produced from existing fields, which dictates increased use of 4D seismic techniques (repeated 3D seismic images to monitor the movement of oil reservoir fluids over time) to increase the percentage of oil extracted. For 4D to be cost-effective, permanently-installed seismic sensors are needed. Current mainstream oilfield seismic sensing systems are based upon 50 year-old technology that is costly and unreliable for permanent installations. USSI's fiber optic seismic sensors can meet the demanding performance, cost, and reliability requirements needed for advanced 4D seismic analysis.

In addition to oilfield seismic sensing, there is also a great need for the USSI technology in the harvesting of natural gas. There is a fundamental shift underway within the oil and gas industry as major oil companies are increasingly focusing on natural gas as new horizontal drilling techniques combined with hydro fracking are making the world's vast tight gas shale fields economical to produce. Natural gas burns cleaner than oil and is also gaining traction as a fuel for transportation. USSI's fiber optic sensors can provide the ability to monitor the fracking process to improve production efficiency and minimize potential environmental damage at a fraction of the cost of competing technology.

Fiber optic pipeline monitoring. There are currently approximately 134,000 miles of oil pipelines and 387,000 miles of gas pipelines in the US, most of which were built before the end of World War II. USSI provides pipeline monitoring for Oil and Gas pipelines, through a similar revolutionary, all-in-one, fiber optic sensing cable. Since the optical fiber is the sensor, there are no electronics required in the sensor cable, and every inch of the cable is acoustically sensitive ensuring that there are no gaps in coverage. The USSI system detects unusual acoustic activity such as leaks, tampering, theft or damage caused by construction equipment. The USSI system can effectively detect attempted illegal tapping of pipelines in remote areas as well as intrusion into pipeline facilities for terrorist activities. The unique ability of USSI's sensor to monitor hundreds of miles of pipeline in real-time, with no electronics on the pipeline is a distinct advantage over competing systems.

Fiber optic perimeter security. USSI has developed an all-optical security system based upon a microphonic cable that can be mounted on a fence, buried along a border/perimeter, or placed underwater in a harbor. We believe the USSI fiber optic microphonic cable is the most sensitive available as it can detect disturbance signals that are 100 times quieter than competing systems. In addition, the USSI system is unique in its ability to detect and classify multiple simultaneous events. The system utilizes sophisticated signal processing techniques to screen out false alarms, and will detect, pinpoint, and notify on any attempts to infiltrate a facility.

The USSI security sensing system features low noise, high sensitivity, high dynamic range, providing a true reproduction of acoustic signals, and clearly defined, independent sensing zones. We believe the USSI buried fiber optic sensing system has the lowest noise floor of any competing fiber optic perimeter security system. This advantage enables the USSI system to detect in-ground disturbance signals that may be very weak or that occur at much larger distances. In addition, the USSI system is unique in its ability to detect and classify multiple simultaneous events on single or multiple zones. This capability is very important in that it prevents a potential intruder from foiling the system by masking an intrusion attempt by simultaneously applying loud noise at an alternate location.

Customers and Markets

In the period since our acquisition of USSI, it has recorded revenues of approximately $0.4 million. However, USSI has initiated numerous project proposals for all of its products and services as well as successfully demonstrated its sensor technology at numerous test sites for potential customers.

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Energy. USSI targets its products into the oilfield geophysics market, which has about a $12 billion annual market size, of which about $10 billion is for seismic acquisition and processing activities, and about $2 billion is for equipment such as seismic sources and sensors. USSI's sensor systems fall into the oilfield geophysical equipment market, and its potential customers are the oilfield service companies. The leading oilfield service companies are Schlumberger, Halliburton, and Baker Hughes.

Three companies account for 90% of the Oilfield Geophysical Equipment market. Sercel, S.A, a subsidiary of Compagnie Generale de Geophysique-Veritas (CGGVeritas) represents 54% of the market, ION Geophysical Corporation represents 28% and Oyo Geospace Corporation represents about 8%. The majority of this equipment is currently used for marine seismic and land (surface) seismic applications, with downhole seismic and microseismic making up only about 10%. USSI is initially pursuing the downhole seismic and microseismic market as these are the least mature but the fastest growing market. USSI believes the size of this market to be in excess of $150 million in 2011. After addressing these markets, USSI plans to pursue the larger, more mature marine and land seismic markets.

Security. As a result of the attacks of September 11, the United States and many of its international partners have embarked on a massive, long-term effort to enhance the security of their homelands. Waging a cost effective campaign to enhance homeland security demands new, highly developed technologies. USSI's all fiber optic security systems are an example of one of those technologies. For these applications, what is needed is an unobtrusive sensor system that will allow military forces and/or border security personnel to monitor long stretches of territory from protected sites at extended standoff ranges.

According to Homeland Security Research Corporation, a consulting firm, the U.S. market for homeland security products and services was approximately $23.8 billion in 2006, and barring any future attacks, that figure is expected to increase by roughly 50 percent by 2011.

USSI's potential customers are the large and small commercial security system integrators, government organizations such as the U.S. Department of Homeland Security, and large government contractors such as Boeing, Northrop Grumman, Lockheed Martin, and Raytheon as well as leading commercial system integrators such as ADT Ltd. (a subsidiary of Tyco International Ltd.), Protection One, Inc., and Monitronics, International, Inc.

Competition

Oil & Gas. USSI's primary competition comes from oilfield equipment providers using conventional retrievable downhole sensor technology. This technology is well-proven and widely used. The leaders include OYO Geospace Corporation, Sercel S.A., and ION Geophysical Corporation. Our target market is the emerging permanent downhole sensor market. The existing conventional technology is not suited for permanent installations for the following reasons:

- Cost - downhole sensor arrays using existing technology cost $4M to $6M per copy. The equivalent USSI downhole system sells for a fraction of that price.
- Reliability - existing technology requires expensive downhole electronics that cannot be serviced or repaired if permanently installed. The USSI system has no downhole electronics.

USSI also has competition from other oilfield fiber optic sensor companies such as Stingray Geophysical Ltd. (Stingray), Weatherford International Ltd., and Petroleum Geo-Services ASA (PGS). Stingray and PGS use early generation fiber optic sensor technology which is expensive and difficult to manufacture. The Weatherford sensor technology is also expensive and its highest reported performance is significantly less than published USSI performance. The USSI sensor technology is protected via multiple patents/patent applications.

Security Systems. USSI's competition in the security market comes from well established companies utilizing conventional (leaky-coax cable) technology and relatively new companies utilizing fiber optic technology. Both technologies can be mounted to a fence or buried around a perimeter. The leading competitors using conventional technology are Southwest Microwave Inc., and Magal Security Systems, Ltd. The leading fiber optic competitors are Future Fibre Technologies Pty Ltd., FiberSensys Inc., Sensoptics Ltd., and Senstar Corporation.

Existing conventional technology, which has been installed in tens of thousands of locations, has multiple drawbacks. These drawbacks include susceptibility to electromagnetic interference (EMI), radio frequency interference (RFI) and lightning. The traditional geophones that are part of existing conventional technology consist of a moving coil of wires around a stationary magnet. If an outside magnetic field is introduced (EMI), it will interfere with the geophone's performance. If a radio (or cell phone, or other wireless device) is transmitting near a system (RFI) that contains existing conventional technology, it could interfere with the system's performance as well. Furthermore, it is expensive to install and maintain the existing conventional technology, requiring multiple electronics boxes and unreliable batteries in the field. These aforementioned problems with existing conventional technology led to the emergence of fiber optic-based security systems. The problems with the competing fiber optic security systems include an inability to detect multiple simultaneous events, low sensitivity (10 to 100 times less sensitive than USSI technology), and low signal fidelity (making it difficult to distinguish false alarms).

The USSI approach features low noise, high sensitivity, high dynamic range, providing a true reproduction of acoustic signals, and clearly defined, independent sensing zones. We believe the USSI buried fiber optic sensing system has the lowest noise floor of any competing fiber optic perimeter security system. This advantage enables the USSI system to detect in-ground disturbance signals that may be very weak or that occur at much larger distances. In addition, the USSI system is unique in its ability to detect and classify multiple simultaneous events on single or multiple zones. This capability is very important in that it prevents a potential intruder from foiling the system by masking an intrusion attempt by simultaneously applying loud noise at an alternate location.

Intellectual Property

USSI invests significant resources in product development and research in order to protect its future competitiveness in the marketplace. Keeping proprietary information safe from unauthorized use or disclosure is therefore an important objective. In order to protect its proprietary know-how and technology, USSI uses a combination of patents, trade secrets, contracts, and trademarks. However, some of USSI's know-how and technology may not be patentable. To protect its rights, USSI requires employees, consultants, advisors and collaborators to enter into confidentiality agreements. While these agreements will provide some level of protection, they cannot provide absolute assurance that USSI's trade secrets, know-how or other proprietary information are fully safeguarded. Whenever intellectual property is developed internally or acquired, USSI will evaluate and determine the optimal mix of controls to protect itself. USSI owns one U.S. patent, seven applications pending in the U.S. (two non-provisional and five provisional) and three patent applications pending internationally. USSI also has five provisional applications currently active in the US.

Facilities

USSI's activities are conducted in approximately 4,400 square feet of office and production space in the San Fernando Valley (a suburb north of Los Angeles, CA) under a lease that expires in April 2011. We believe that USSI's current premises will not be sufficient to handle the anticipated increase in sales for the near future and that USSI will have to increase their office and production space when their lease expires in 2011. USSI is currently exploring options for expanded facilities in the San Fernando Valley.

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BACKLOG

As of December 31, 2010, our backlog of work to be completed and the amounts expected to be completed in 2011 were as follows (amounts in millions of U.S. dollars):

	Backlog at December 31, 2010	Amount expected to be completed in 2011
CoaLogix	$ 7.6	$ 6.7
DSIT Solutions	6.4	5.0
GridSense	0.4	0.4
USSI	0.5	0.5
Total	$ 14.9	$ 12.6

RESEARCH AND DEVELOPMENT EXPENSE

Research and development expense recorded for the years ended December 31, 2009 and 2010 for each of our consolidated subsidiaries is as follows (amounts in thousands of U.S. dollars):

	Years ended December 31, 2009	2010	
CoaLogix	$ 86	$ 166	
DSIT Solutions	457	323	
GridSense	—	259	*
USSI	—	383	**
Total	$ 543	$ 1,131	

* GridSense was acquired on May 12, 2010. Accordingly, the research and development expense recorded with respect to GridSense relates only to the period after its acquisition.

** USSI was effectively acquired on February 23, 2010. Accordingly, the research and development expense recorded with respect to USSI relates only to the period after its acquisition.

EMPLOYEES

At December 31, 2010, we employed a total of 228 employees, including 178 full-time employees. We consider our relationship with our employees to be satisfactory.

A breakdown of our full-time employees by geographic location can be seen below:

	Employee count at December 31, 2010 U.S	Australia	Israel	Total
CoaLogix	79	—	—	79
DSIT Solutions	—	—	55	55
GridSense	14	21	—	35

USSI	7	—	—	7
Acorn	2	—	—	2
Total	102	21	55	178

A breakdown of our full-time employees by activity can be seen below:

	Employee count at December 31, 2010			
	Production, Engineering and Technical Support	Marketing and Sales	Management, Administrative and Finance	Total
CoaLogix	66	2	11	79
DSIT Solutions	45	1	9	55
GridSense	20	6	9	35
USSI	5	1	1	7
Acorn	—	—	2	2
Total	136	10	32	178

We have no collective bargaining agreements with any of our employees. However, with regard to our Israeli activities, certain provisions of the collective bargaining agreements between the Israeli Histadrut (General Federation of Labor in Israel) and the Israeli Coordination Bureau of Economic Organizations (including the Industrialists Association) are applicable by order of the Israeli Ministry of Labor. These provisions mainly concern the length of the workday, contributions to a pension fund, insurance for work-related accidents, procedures for dismissing employees, determination of severance pay and other conditions of employment. We generally provide our Israeli employees with benefits and working conditions beyond the required minimums. Israeli law generally requires severance pay upon the retirement or death of an employee or termination of employment without due cause. Furthermore, Israeli employees and employers are required to pay specified amounts to the National Insurance Institute, which administers Israel's social security programs. The payments to the National Insurance Institute include health tax and are approximately 5.5% of wages (up to a specified amount), of which the employee contributes approximately 70% and the employer approximately 30%.

In Australia, all employers are required to make contributions to retirement investment funds benefiting employees called Superannuation. GridSense is required to pay 9% of salary as a contribution toward Superannuation funds nominated by its employees. Further, the Australian Government stipulates that employees are entitled to severance pay if their position is terminated as a result of company restructuring.

ADDITIONAL FINANCIAL INFORMATION

For additional financial information regarding our operating segments, foreign and domestic operations and sales, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 22 to our Consolidated Financial Statements included in this Annual Report.

ITEM 1A.RISK FACTORS

We may from time to time make written or oral statements that contain forward-looking information. However, our actual results may differ materially from our expectations, statements or projections. The following risks and uncertainties could cause actual results to differ from our expectations, statements or projections.

GENERAL FACTORS

The ongoing crisis in global credit and financial markets could materially and adversely affect our business and results of operations.

The ongoing global financial crisis may limit our ability to access the capital markets at a time when we would like, or need, to raise capital, which could have an impact on our ability to react to changing economic and business conditions. Accordingly, if the global financial crisis and current economic downturn continue or worsen, our business, results of operations and financial condition could be materially and adversely affected.

We have a history of operating losses and have used increasing amounts of cash for operations and to fund our acquisitions and investments.

We have a history of operating losses, and have used significant amounts of cash to fund our operating activities over the years. In 2009 and 2010, we had operating losses of $5.0 million and $6.8 million, respectively. Cash used in continuing operations in 2009 and 2010 was $3.2 million and $6.4 million, respectively.

In addition, we continue to pursue additional acquisitions and investment opportunities and may need to support the financing needs of our subsidiaries. Following our recent capital raise, we currently have enough cash on hand to fund our operations for the next 12 months. However, we may need additional funds to finance future investment and acquisition activity we wish to undertake. We do not know if such funds will be available if needed on terms that we consider acceptable. We may have to limit or adjust our investment/acquisition strategy or sell some of our assets in order to continue to pursue our corporate goals.

We depend on key management for the success of our business.

Our success is largely dependent on the skills, experience and efforts of our senior management team and other key personnel. In particular, our success depends on the continued efforts of John A. Moore, our CEO, William J. McMahon, CEO of CoaLogix/SCR-Tech, Benny Sela, CEO of DSIT, Lindon Shiao, CEO of GridSense and Jim Andersen, CEO of USSI and other key management level employees. The loss of the services of any of these key employees could materially harm our business, financial condition, future results and cash flow. We do not maintain "key person" life insurance policies on any of our employees other than for our CEO, John A. Moore. Although to date we have been successful in retaining the services of senior management and have entered into employment agreements with them, members of our senior management may terminate their employment agreements without cause and with various notice periods. We may also not be able to locate or employ on acceptable terms qualified replacements for our senior management or key employees if their services were no longer available.

Loss of the services of a few key employees could harm our operations.

We depend on key technical employees and sales personnel. The loss of certain personnel could diminish our ability to develop and maintain relationships with customers and potential customers. The loss of certain technical personnel could harm our ability to meet development and implementation schedules. The loss of key sales personnel could have a negative effect on sales to certain current customers. Most of our significant employees are bound by confidentiality and non-competition agreements. Our future success also depends on our continuing ability to identify, hire, train and retain other highly qualified technical and managerial personnel. If we fail to attract or retain highly qualified technical and managerial personnel in the future, our business could be disrupted.

Our awards of stock options to employees may not have their intended effect.

A portion of our total compensation program for our executive officers and key personnel has historically included the award of options to buy our common shares or the common stock of our subsidiaries. If the price of our common stock performs poorly, such performance may adversely affect our ability to retain or attract critical personnel. In addition, any changes made to our stock option policies, or to any other of our compensation practices, which are made necessary by governmental regulations or competitive pressures could affect our ability to retain and motivate existing personnel and recruit new personnel.

Compliance with changing regulation of corporate governance, public disclosure and financial accounting standards may result in additional expenses and affect our reported results of operations.

Keeping informed of, and in compliance with, changing laws, regulations and standards relating to corporate governance, public disclosure and accounting standards, including the Sarbanes-Oxley Act, Dodd-Frank Act, as well as new and proposed SEC regulations and accounting standards, has required an increased amount of management attention and external resources. Compliance with such requirements may result in increased general and administrative expenses and an increased allocation of management time and attention to compliance activities.

We may not be able to successfully integrate companies which we may invest in or acquire in the future, which could materially and adversely affect our business, financial condition, future results and cash flow.

We effectively acquired USSI in February 2010, and we closed on our acquisition of GridSense in May 2010. Any failure to effectively integrate USSI's or GridSense's management into our controls, systems and procedures could materially adversely affect our business, results of operations and financial condition.

Our strategy is to continue to integrate our newly acquired companies and grow the businesses of all of our companies. Integrating acquisitions is often costly, and we may not be able to successfully integrate our acquired companies with our existing operations without substantial costs, delays or other adverse operational or financial consequences. Integrating our acquired companies involves a number of risks that could materially and adversely affect our business, including:

- failure of the acquired companies to achieve the results we expect;
- inability to retain key personnel of the acquired companies;
- dilution of existing stockholders;
- potential disruption of our ongoing business activities and distraction of our management;
- difficulties in retaining business relationships with suppliers and customers of the acquired companies;
- difficulties in coordinating and integrating overall business strategies, sales and marketing, and research and development efforts; and
- the difficulty of establishing and maintaining uniform standards, controls, procedures and policies, including accounting controls and procedures.

If any of our acquired companies suffers customer dissatisfaction or performance problems, the same could adversely affect the reputation of our group of companies and could materially and adversely affect our business, financial condition, future results and cash flow.

In order to grow, one or more of our companies may decide to pursue growth through acquisitions. Any significant acquisition by one or more of our operating companies could require substantial use of our capital and may require significant debt or equity financing. We cannot provide any assurance as to the availability or terms of any such financing or its effect on our liquidity and capital resources.

We incur substantial costs as a result of being a public company.

As a public company, we incur significant legal, accounting, and other expenses in connection with our reporting requirements. The Sarbanes-Oxley Act of 2002, Dodd-Frank Act and the rules subsequently implemented by the Securities and Exchange Commission ("SEC") and NASDAQ, have required changes in corporate governance practices of public companies. These rules and regulations have already increased our legal and financial compliance costs and the amount of time and effort we devote to compliance activities. We expect that as a result of continued compliance to these rules and regulations, we will continue to incur significant legal and financial compliance costs. We continue to regularly monitor and evaluate developments with respect to these new rules with our legal counsel, but we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

We are currently involved in litigation and may in the future become involved in litigation that may materially adversely affect us.

We are currently parties to litigation matters which are described under “Item 3. Legal Proceedings.” Also, from time to time in the ordinary course of our business, we may become involved in various legal proceedings, including commercial, product liability, employment, class action and other litigation and claims, as well as governmental and other regulatory investigations and proceedings. Such matters can be time-consuming, divert management’s attention and resources and cause us to incur significant expenses. Furthermore, because litigation is inherently unpredictable, the results of any such actions may have a material adverse effect on our business, operations or financial condition.

Goodwill recorded in connection with our acquisitions is subject to mandatory annual impairment evaluations and as a result, we could be required to write off some or all of this goodwill, which may adversely affect our financial condition and results of operations.

In accordance with applicable accounting principles, goodwill is not amortized but is reviewed annually or more frequently for impairment and other intangibles are also reviewed if certain conditions exist. During the year ended December 31, 2010, we recorded a $5.0 million impairment of goodwill associated with our former Coreworx subsidiary following our decision to stop funding the company and an impairment of $1.2 million associated with our GridSense segment. Any additional impairment of the value of goodwill will result in an additional charge against earnings which could materially adversely affect our reported results of operations and financial position in future periods.

While we have not reported any material weaknesses in internal controls over financial reporting in the past, we cannot assure you that material weaknesses will not be identified in the future. If our internal control over financial reporting or disclosure controls and procedures are not effective, there may be errors in our financial statements that could require a restatement or our filings may not be timely and investors may lose confidence in our reported financial information.

Section 404 of the Sarbanes-Oxley Act of 2002 requires us to evaluate the effectiveness of our internal control over financial reporting as of the end of each year, and to include a management report assessing the effectiveness of our internal control over financial reporting in each Annual Report on Form 10-K.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. Over time, controls may become inadequate because changes in conditions or deterioration in the degree of compliance with policies or procedures may occur. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

As a result, we cannot assure you that significant deficiencies or material weaknesses in our internal control over financial reporting will not be identified in the future. Any failure to maintain or implement required new or improved controls, or any difficulties we encounter in their implementation, could result in significant deficiencies or material weaknesses, cause us to fail to timely meet our periodic reporting obligations, or result in material misstatements in our financial statements. Any such failure could also adversely affect the results of periodic management evaluations regarding disclosure controls and the effectiveness of our internal control over financial reporting required under Section 404 of the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder. The existence of a material weakness could result in errors in our financial statements that could result in a restatement of financial statements, cause us to fail to timely meet our reporting obligations and cause investors to lose confidence in our reported financial information.

If we are unable to protect our intellectual property, or our intellectual property protection efforts are unsuccessful, others may duplicate our technology.

Our operating companies rely on a combination of patents, trademarks, copyrights, trade secret laws and restrictions on disclosure to protect our intellectual property rights. Our ability to compete effectively will depend, in part, on our ability to protect our proprietary technology, systems designs and manufacturing processes. The ability of others to use our intellectual property could allow them to duplicate the benefits of our products and reduce our competitive advantage. We do not know whether any of our pending patent applications will be issued or, in the case of patents issued, that the claims allowed are or will be sufficiently broad to protect our technology or processes. Further, a patent issued covering one use of our technology may not be broad enough to cover uses of that technology in other business areas. Even if all our patent applications are issued and are sufficiently broad, they may be challenged or invalidated or our competitors may independently develop or patent technologies or processes that are equivalent or superior to ours. We could incur substantial costs in prosecuting patent and other intellectual property infringement suits and defending the validity of our patents and other intellectual property. While we have attempted to safeguard and maintain our property rights, we do not know whether we have been or will be completely successful in doing so. These actions could place our patents, trademarks and other intellectual property rights at risk and could result in the loss of patent, trademark or other intellectual property rights protection for the products, systems and services on which our business strategy partly depends.

We rely, to a significant degree, on contractual provisions to protect our trade secrets and proprietary knowledge. These trade secrets cannot be protected by patent protection. These agreements may be breached, and we may not have adequate remedies for any breach. Our trade secrets may also be known without breach of such agreements or may be independently developed by competitors.

Third parties may claim that we are infringing their intellectual property, and we could suffer significant litigation or licensing expenses or be prevented from selling products and services if these claims are successful. We also may incur significant expenses in affirmatively protecting our intellectual property rights.

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In recent years, there has been significant litigation involving patents and other intellectual property rights in many technology-related industries and we believe that the industries that certain of our subsidiaries operate have a significant amount of patent activity. Third parties may claim that the technology or intellectual property that we incorporate into or use to develop, manufacture or provide our current and future products, systems or services infringe, induce or contribute to the infringement of their intellectual property rights, and we may be found to infringe, induce or contribute to the infringement of those intellectual property rights and may be required to obtain a license to use those rights. We may also be required to engage in costly efforts to design our products, systems and services around the intellectual property rights of others. The intellectual property rights of others may cover some of our technology, products, systems and services. In addition, the scope and validity of any particular third party patent may be subject to significant uncertainty.

Litigation regarding patents or other intellectual property rights is costly and time consuming, and could divert the attention of our management and key personnel from our business operations. The complexity of the technology involved and the uncertainty of intellectual property litigation increase these risks. Claims of intellectual property infringement might also require us to enter into costly royalty or license agreements or to indemnify our customers. However, we may not be able to obtain royalty or license agreements on terms acceptable to us or at all. Any inability on our part to obtain needed licenses could delay or prevent the development, manufacture and sale of our products, systems or services. We may also be subject to significant damages or injunctions against development, manufacture and sale of our products, systems or services.

We also may be required to incur significant time and expense in pursuing claims against companies we believe are infringing or have misappropriated our intellectual property rights. We are currently pursuing one such claim as described under “Item 3 – Legal Proceedings” and may find it necessary to commence such litigation in the future to protect our rights and future business opportunities. We can offer no assurance as to the outcome of any such litigation.

Concentrations of credit risk

Financial instruments, which potentially subject us to concentrations of credit risk, consist principally of cash and cash equivalents and trade receivables. The counterparty to a significant amount of our cash equivalents and restricted cash deposits is a money market of a major financial institution. We do not believe there is significant risk of non-performance by this counterparty. Approximately 43% of the trade accounts receivable at December 31, 2010 was due from three customers that pay their trade receivables over usual credit periods. Credit risk with respect to the balance of trade receivables is generally diversified due to the number of entities comprising our customer base.

RISKS RELATED TO COALOGIX

CoaLogix has incurred losses since inception and may never achieve sustained profitability.

CoaLogix has incurred net losses of $0.3 million and $2.7 million for the years ended December 31, 2010 and 2009, respectively. We believe that CoaLogix’ 2011 operating results will improve compared to the results as seen in 2010. However, we can provide no assurance that CoaLogix will generate sufficient revenues to allow it to become profitable or to sustain profitability.

The market for CoaLogix’ business is in the early formative stage.

Through its subsidiary, SCR-Tech LLC, CoaLogix offers SCR catalyst cleaning, rejuvenation and regeneration, as well as SCR system management and consulting services. The size and growth rate for this market will ultimately be determined by a number of factors, including environmental regulations, the growth in the use of SCR systems to reduce NOx and other pollutants, the length of operation of SCR systems, the adoption of regeneration versus replacement, the expansion of warranty coverage from SCR catalyst OEMs, the cost of new SCR catalyst, and other factors, most of which are beyond the control of CoaLogix. There is limited historical evidence in the United States as to the cycle of replacement, cleaning and regeneration of SCR catalyst so as to accurately estimate the potential growth of the business. In addition, the number of times a catalyst can be regenerated is dependent upon factors which cannot be foreseen such as wear and tear and other mechanical damage to the catalyst. Any delay in the development of the market could significantly and adversely affect our results of operations and financial condition.

CoaLogix may be subject to vigorous competition with very large competitors that have substantially greater resources and operating histories.

We are aware of one company, Evonik Energy Services, LLC, formerly known as Steag ("Evonik LLC"), which entered the U.S. catalyst regeneration market in 2008. Evonik LLC has currently built a regeneration facility in North Carolina. Evonik LLC, based in Kings Mountain, North Carolina, is a subsidiary of a German power producer, Evonik Steag GmbH ("Evonik GmbH"). Evonik GmbH is very large and has substantially greater resources than CoaLogix or us. Competition from Evonik may have a material adverse effect on our operations, including a potential reduction in operating margins and a loss of potential business.

We are also aware of at least one other company, Enerfab, Inc. that provides SCR catalyst management, rejuvenation and cleaning services. We are aware of certain companies, including Babcock-Hitachi, who have indicated an interest in offering catalyst cleaning and regeneration, and it is possible that manufacturers of new catalyst and other companies may enter the business of SCR catalyst regeneration. There also are a number of SCR catalyst manufacturers with substantial parent companies that may seek to maintain market share by significantly reducing prices of new SCR catalyst which will put pressure on our operating margins. These companies include Cormetech Inc. (owned by Mitsubishi Heavy Industries and Corning, Inc.), Argillon Group (owned by Johnson Matthey), CERAM, Haldor-Topsoe, Inc. and Babcock-Hitachi. Further, if the SCR catalyst regeneration market expands as we expect, additional competitors could emerge. In addition, if our intellectual property protection is weakened, competition could more easily develop.

SCR-Tech's lawsuit against Evonik Energy Services LLC, et al. may not be successful, and the counterclaims of Evonik Energy Services LLC against SCR-Tech may be successful. We will incur significant expenses in pursuing our lawsuit against Evonik and in defending against Evonik's counterclaims.

SCR-Tech's lawsuit against Evonik Energy Services, LLC and other defendants as described in Item 3, Legal Proceedings, is associated with certain significant risks. The lawsuit will require the time and attention of senior management of SCR-Tech, and could divert attention from other business matters. Expenses of the lawsuit may cause a diversion of significant funds needed by SCR-Tech to fund operations for other aspects of the business.

Due to the nature of litigation, it is not possible to predict the outcome of the lawsuit. We anticipate that the Evonik LLC defendants will continue vigorously defending themselves, and that Evonik LLC will vigorously pursue its counterclaims against SCR-Tech. In the event SCR-Tech is unsuccessful in the lawsuit and Evonik LLC prevails in its counterclaims, Evonik LLC may be awarded substantial damages against SCR-Tech. SCR-Tech has not reserved funds for any loss contingency or legal fees associated with this litigation. In addition, if SCR-Tech is unsuccessful, Evonik LLC will remain a competitor of SCR-Tech.

CoaLogix' business is subject to customer concentration.

CoaLogix offers SCR catalyst cleaning, rejuvenation and regeneration, as well as SCR system management and consulting services to coal-fired power plants. Some of the utilities operating these plants are exceptionally large and operate a number of such power plants. Thus, one or more large utilities could provide a very large order or orders to CoaLogix which likely would result in one or two such utilities providing most of the orders and revenues for CoaLogix for a particular quarterly or annual period. During 2010, four customers represented approximately 54% of CoaLogix' revenue. During 2009, two customers represented about 36% of CoaLogix' revenue. During 2008, three customers represented about 75% of CoaLogix' revenue. Although large orders are beneficial to CoaLogix by providing a large and consistent source of orders and revenues without the additional cost associated with marketing to a larger number of smaller customers, CoaLogix is dependent on a relatively small number of large utilities for its business. The loss of one of these customers would have a much greater adverse effect on CoaLogix than the loss of a smaller customer. This may also result in significant swings in orders and revenues on a quarterly basis as well as impacting on our cash flows.

CoaLogix' business may be impacted by changes in government regulation and environmental legislation.

Our business is significantly dependent on the nature and level of government regulation of emissions. For instance, the Environmental Protection Agency's (EPA) Clean Air Interstate Rule (CAIR) was vacated by the District of Columbia Court of Appeals in July 2008, and was subsequently re-instated in December 2008 by the same court just days before the vacature became effective. We expect the EPA to revise CAIR or replace it with other clean air regulations, but we cannot at this time predict the nature of such revisions or replacement regulations. On July 6, 2010, the EPA issued the proposed replacement for CAIR, the "Transport Rule." The public comment period ended in October, 2010, and the EPA is in the process of finalizing the proposed regulation. According to the EPA, the Transport Rule will have the effect of reducing NOx from power plants by 52% over 2005 levels. Without government regulation of coal-fired power generation, SCR catalyst would not be used by utilities, there would be no need for utilities to acquire, clean or regenerate SCR catalyst, and CoaLogix would have no business purpose. Further, changes in or adverse interpretations of governmental accounting or rate-based emissions regulations also could have a material adverse effect on our business. Although government regulation of emissions has become increasingly stringent in recent years, the growing costs associated with such regulations and the economic downturn in the U.S. may limit the level of increase and scope of emissions requirements, which could limit the potential growth of our target markets. Any easing, delay or deferral of governmental emissions requirements or the growth rate of such requirements could have a material adverse effect on our business.

In addition, the coal industry is subject to regular enactment of new or amended federal, state and local environmental and health and safety statutes, regulations and ballot initiatives, as well as judicial decisions interpreting these requirements. These requirements may impose substantial capital and operating costs and operational limitations on us and may adversely affect our business. The requirements may also affect our customers' decisions to utilize our services which may materially adversely affect our business.

Decreases in demand for electricity resulting from economic, weather changes or other conditions could adversely affect demand for CoaLogix' services and its results of operations.

Overall economic activity and the associated demands for power by industrial users can have significant effects on overall electricity demand. An economic slowdown can significantly slow the growth of electrical demand and could result in utilities using their SCR systems less thus extending the life of SCR catalyst. During the current recession demand for electricity has weakened in the U.S. Significant declines in the rate of economic growth in the U.S. could materially affect demand for electricity, which may have an adverse effect on demand for CoaLogix' services.

The use of alternative energy sources for power generation could reduce the use of coal by electric utilities in the U.S., which could result in lower demand for CoaLogix' services and materially and adversely affect our business and results of operations.

Although the Energy Information Agency of the U.S. Department of Energy projects only a gradual decline in use of coal to generate electricity through 2035, the use of coal as a source of power generation in the U.S. could be adversely affected by, among other things:

- the location, availability, quality and price of alternative energy sources for power generation, such as natural gas, fuel oil, nuclear, hydroelectric, wind, biomass and solar power; and

- technological developments, including those related to alternative energy sources.

Gas-fueled generation has the potential to displace coal-fueled generation, particularly from older, less efficient coal-powered generators. We expect that many of the new power plants needed to meet increasing demand for electricity generation will be fueled by natural gas because gas-fired plants are cheaper to construct and permits to construct these plants are easier to obtain as natural gas is seen as having a lower environmental impact than coal-fueled generators. Several states have enacted legislative mandates requiring electricity suppliers to use renewable energy sources to generate a certain percentage of power. There have been numerous proposals to establish a similar uniform, national standard although none of these proposals have been enacted to date. Possible advances in technologies and incentives, such as tax credits, to enhance the economics of renewable energy sources could make these sources more competitive with coal. Any reduction in the amount of coal consumed by domestic electric power generators could reduce the demand for CoaLogix' services, thereby reducing our revenues and materially and adversely affecting our business and results of operations.

CoaLogix' business is subject to potential seasonality.

Prior to the January 1, 2009 effective date of Phase I of CAIR, some utilities and IPPs operated their SCR units only during the "ozone season" (May 1 — September 30). Because of this, CoaLogix' business was more limited than if SCR units were required to operate on a continual basis. During non-ozone season periods, most operators had limited (if any) requirements to run their SCR systems. Given that Phase I of CAIR effectively requires operators run their SCR systems on a continual basis beginning January 1, 2009, we expect less concentration of CoaLogix business during the ozone season each year. However, utilities and IPPs may continue to schedule outages and down time for maintenance during periods beyond our control, resulting in seasonality of CoaLogix' business. These potential fluctuations in revenues and cash flow during a year may be significant and could materially impact our quarterly earnings and cash flow. This may have a material adverse effect on the perception of our business and the market price for Acorn's common stock.

CoaLogix does not own its regeneration facilities, and it is subject to risks inherent in leasing its sites of its operations.

CoaLogix does not own its two regeneration sites; instead it leases one, the Mt. Holly facility, from Clariant Corporation, the U.S. subsidiary of a Switzerland-based public company ("Clariant"), and the other, the Steele Creek facility, from Fat Boy Trading Company ("Fat Boy"), an independent owner of the site, for a combined operating space of approximately 270,000 square feet. Although we believe the Clariant lease terms are favorable, the dependence on Clariant and the site for about 126,000 square feet of operating space could subject SCR-Tech to increased risk in the event Clariant experiences financial setbacks or loses its right to operate the site. This risk is heightened because the site is a Federal Superfund site (under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA")), which increases the risks that the site ultimately could be shut down or that Clariant will be financially unable to continue its ownership of the site or uphold its environmental indemnification covenants. It may be difficult to relocate operations at the Clariant facility to another site on a timely or cost-effective basis in order to maintain our current combined operating space of 270,000 square feet, and CoaLogix' business could be negatively impacted by any problems with continuing to conduct its operations at this site.

CoaLogix could be subject to environmental risks as a result of the operation of its business and the location of its Mt. Holly facility.

The operation of CoaLogix' business and the nature of its assets create various environmental risks. CoaLogix ‘ leases one of its sites for operations at a property listed on the National Priority List as a Federal Superfund site (the Mt. Holly facility). Five CERCLA Areas (those areas of concern identified under the CERCLA program) are identified on the property, and while CoaLogix does not lease any property identified as a CERCLA Area, one such CERCLA Area has resulted in contamination of groundwater flowing underneath one of the buildings leased by CoaLogix. Although CoaLogix has indemnification from Clariant for any environmental liability arising prior to the operation of CoaLogix’ business at the site, we can provide no assurance that such indemnification will be sufficient or that CoaLogix would be protected from an environmental claim from the nature of the site. In addition, the operation of CoaLogix’ business involves removal of hazardous wastes from catalyst and the use of significant chemical materials. As a result, CoaLogix could be subject to potential liability resulting from such operations at either facility. To date, neither Acorn nor CoaLogix has been identified as a potential responsible party to such environmental risks, nor have any amounts been recorded to accrue for these potential exposures.

We will be required to continue to make significant capital expenditures to expand CoaLogix’ production facilities or for other purposes; we may require additional capital for such purposes.

We incurred substantial capital expenditures during 2010 in order to meet anticipated demand for increased orders for SCR regeneration services in 2010 and beyond. The capital expenditures were used to construct a second SCR regeneration plant at the Steele Creek facility.

If the market does not develop as we expect or increased competition results in loss of significant business, we may not generate enough additional revenue from the capital expenditures incurred during 2010. This could adversely impact our results of operations and financial position going forward. Moreover, other unanticipated expenses for CoaLogix such as litigation or other costs for protecting intellectual property rights or as a result of a significant corporate transaction could result in the need for additional capital. These additional funding requirements may be significant, and funds may not be available when required or may be available only on terms unsatisfactory to us.

Our cash requirements will depend on many factors, including but not limited to the market acceptance of our product and service offerings, the ability of CoaLogix to generate significant cash flow, the rate of expansion of our sales and marketing activities, additional demand for expansion of our production capacity, our ability to manage selling, general and administrative expenditures and the timing and extent of CoaLogix related research and development projects.

In addition, we continue to actively pursue possible business opportunities, including but not limited to, mergers, acquisitions or other strategic arrangements. Such strategic opportunities could require the use of additional cash, or could require additional equity or debt financing. The nature and amount of any such financing or the use of any capital in any such transaction cannot be predicted and will depend on the terms and conditions of the particular transaction.

We believe the demand for CoaLogix’ services will continue to increase leading to need for expansion in the future. Such expansion may involve expansion of CoaLogix’s, existing facilities or construction of a new facility – all requiring additional capital. There is no assurance that CoaLogix will be able to obtain such additional capital and if CoaLogix is not able to do so, CoaLogix’s growth and results of operations will be adversely affected.

Certain of CoaLogix’ capital equipment is unique to our business and would be difficult and expensive to repair or replace.

Certain of the capital equipment used in the services performed by CoaLogix has been developed and made specifically for us and would be difficult to repair or replace if it were to become damaged or stop working. In addition, certain of our equipment is not readily available from multiple vendors. Consequently, any damage to or breakdown of our equipment at a time when we are regenerating large amounts of SCR catalyst at CoaLogix may have a material adverse impact on our business.

CoaLogix is dependent on third parties to perform certain testing required to confirm successful regeneration.

In connection with the regeneration of SCR catalyst, CoaLogix generally must have an independent company provide testing services to determine the level of success of regeneration. Currently there are a limited number of companies providing this service. If CoaLogix is unable to obtain this service on a cost-effective basis, CoaLogix may not be able to perform its regeneration services. In addition, if the testing cannot be completed in a timely manner, there may be a slowdown of operations which can negatively impact the profitability and financial condition of the Company.

Significant price increases in key materials may reduce CoaLogix' gross margins and profitability of regeneration of SCR Catalyst.

The prices of various chemicals used to regenerate SCR catalyst can be volatile. If the long-term costs of these materials were to increase significantly, we would attempt to reduce material usage or find substitute materials. If these efforts were not successful or if these cost increases could not be reflected in our price to customers, then our gross margins and profitability of regenerating SCR Catalyst would be reduced and our ability to operate CoaLogix profitably could be compromised.

There are risks associated with our purchase of used SCR catalyst.

CoaLogix' primary business involves the cleaning and regenerating of customer-owned SCR catalyst. In certain instances, however, CoaLogix may purchase used or "spent" catalyst from utilities for regeneration, as when, for example, a utility wishes to avoid the costs and potential hazardous waste issues associated with the disposal of used or "spent" catalyst. CoaLogix may purchase SCR catalyst for a nominal sum and then regenerate such catalyst for immediate sale, or may purchase spent SCR catalyst on an opportunistic basis for future regeneration and sale. The purchase of spent SCR catalyst involves potential risks to CoaLogix. For example, spent SCR catalyst includes significant hazardous waste, and unlike the regeneration of customer-owned SCR catalyst, the purchase of spent SCR catalyst requires CoaLogix to take ownership or "title" to the SCR catalyst, which may potentially increase CoaLogix environmental risk exposure. Furthermore, if CoaLogix cannot find a customer to purchase the regenerated catalyst, then CoaLogix must either store the spent catalyst, subject to the inherent risk of holding catalyst which has not been regenerated and contains hazardous waste, or incur significant costs to dispose of the spent catalyst in a manner which complies with the strict requirements of applicable environmental laws. In addition, the sale of SCR catalyst may expose CoaLogix to risks not inherent in the cleaning and regeneration of SCR catalyst, including product liability claims. It is unclear as to the amount of SCR catalyst which CoaLogix may purchase, but it is possible such purchases ultimately may be substantial, and may significantly increase the risk profile of CoaLogix' business.

Many of the risks of our business have only limited insurance coverage and many of our business risks are uninsurable.

Our business operations are subject to potential environmental, product liability, employee and other risks. Although we have insurance to cover some of these risks, the amount of this insurance is limited and includes numerous exceptions and limitations to coverage. Further, no insurance is available to cover certain types of risks, such as acts of God, war, terrorism, major economic and business disruptions and similar events. In the event we were to suffer a significant environmental, product liability, employee or other claim in excess of our insurance or a loss or damages relating to an uninsurable risk, our financial condition could be negatively impacted. In addition, the cost of our insurance has increased substantially in recent years and may prove to be prohibitively expensive, thus making it impractical to obtain insurance. This may result in the need to abandon certain business activities or subject ourselves to the risks of uninsured operations.

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New technologies could be developed which make SCR catalyst obsolete.

CoaLogix' business is dependent upon the needs of coal-fired power plants to replace or regenerate SCR catalyst. It is possible that at some point in the future new technology may be developed which replaces SCR catalyst as the preferred solution for removing NOx from the power plant exhaust. In such event, CoaLogix' business would be materially and adversely affected.

Inability to meet customer guarantees.

CoaLogix is often required to provide its customers with guarantees for performance of the SCR catalyst regenerated by CoaLogix. If CoaLogix is unable to meet customer guarantees, CoaLogix may have to re-perform the affected regeneration job, pay liquidated damages to the customer or both, any of which would have the effect of reducing CoaLogix' profit margin and possibly materially adversely affecting its results of operations.

RISKS RELATED TO DSIT SOLUTIONS

Failure to accurately forecast costs of fixed-priced contracts could reduce our margins.

When working on a fixed-price basis, we undertake to deliver software or integrated hardware/software solutions to a customer's specifications or requirements for a particular project. The profits from these projects are primarily determined by our success in correctly estimating and thereafter controlling project costs. Costs may in fact vary substantially as a result of various factors, including underestimating costs, difficulties with new technologies and economic and other changes that may occur during the term of the contract. If, for any reason, our costs are substantially higher than expected, we may incur losses on fixed-price contracts.

Hostilities in the Middle East region may slow down the Israeli high-tech market and may harm our Israeli operations; our Israeli operations may be negatively affected by the obligations of our personnel to perform military service.

Our software consulting and development services segment is currently conducted in Israel. Accordingly, political, economic and military conditions in Israel may directly affect DSIT. Any increase in hostilities in the Middle East involving Israel could weaken the Israeli hi-tech market, which may result in a significant deterioration of the results of our Israeli operations. In addition, an increase in hostilities in Israel could cause serious disruption to our Israeli operations if acts associated with such hostilities result in any serious damage to our offices or those of our customers or harm to our personnel.

Exchange rate fluctuations could increase the cost of our Israeli operations.

A majority of DSIT's sales are based on contracts or orders which are in U.S dollars or are in New Israeli Shekels ("NIS") linked to the U.S. dollar. At the same time, most of DSIT's expenses are denominated in NIS (primarily labor costs) and are not linked to any foreign currency. While the dollar value of the revenues of our operations in Israel will increase if the dollar is devalued in relation to the NIS, the net effect of such devaluation is that DSIT's costs in dollar terms increase more than our revenues.

In 2010 the NIS strengthened in relation to the U.S. dollar by 6.0%. DSIT enters into forward contracts to try to mitigate its exposures to exchange rate fluctuations; however, we can provide no assurance that such controls will be implemented successfully.

We are substantially dependent on a small number of customers and the loss of one or more of these customers may cause revenues and cash flow to decline.

In 2010, 60% of DSIT's revenues were concentrated in three customers. These customers are expected to continue to make up a significant portion of DSIT's revenues and cash flow for 2011. A significant reduction of future orders or delay in milestone payments from any of these customers could have a material adverse effect on the performance of DSIT.

We are dependent on meeting milestones to provide cash flow for operations.

Our present operations, as we are currently structured, place a great reliance on our meeting project milestones in order to generate cash flow to finance our operations. Should we encounter difficulties in meeting significant project milestones, resulting cash flow difficulties could have a material adverse effect on our operations.

We must at times provide significant guarantees in order to secure projects. These guarantees are often collateralized by restricted deposits.

Some of the projects we perform require significant performance and/or bank guarantees. At December 31, 2010, DSIT has $3.1 million of performance and bank guarantees outstanding. In addition, DSIT has on deposit at two Israeli banks approximately $1.0 million collateralizing some of these guarantees. These deposits are restricted and, accordingly, DSIT cannot use these funds for operations until the guarantees which are being collateralized are released. At times, this can create cash flow difficulties which could have a material adverse effect on our operations.

In addition, DSIT may not always be able to supply such guarantees without financial assistance from Acorn. If Acorn needs to provide financial guarantees for DSIT, Acorn may not have sufficient funds available to it to invest in other emerging ventures or take advantage of opportunities available to us in a timely manner. At December 31, 2010, Acorn had on deposit $0.3 million of restricted cash at two Israeli banks collateralizing DSIT guarantees.

If we are unable to keep pace with rapid technological change, our results of operations, financial condition and cash flows may suffer.

Some of our solutions are characterized by rapidly changing technologies and industry standards and technological obsolescence. Our competitiveness and future success depends on our ability to keep pace with changing technologies and industry standards on a timely and cost-effective basis. A fundamental shift in technologies could have a material adverse effect on our competitive position. Our failure to react to changes in existing technologies could materially delay our development of new products, which could result in technological obsolescence, decreased revenues, and/or a loss of market share to competitors. To the extent that we fail to keep pace with technological change, our revenues and financial condition could be materially adversely affected.

We are dependent on a number of suppliers who provide us with components for some of our products.

A number of our suppliers provide us with major components for some of our products for our Energy & Security Sonar Solutions. Some of these components are long-lead items. If for some reason, the suppliers cannot provide us with the component when we need it and we cannot easily find substitute suppliers on similar terms, we may have increased costs and/or delays in delivering a product to a customer and incur penalties and lose customer confidence. In addition, project delays can also slow down revenue recognition and our financial condition could be materially adversely affected. While we are constantly attempting to develop secondary and tertiary suppliers for these components, we can provide no assurance that we will be successful in doing so on terms acceptable to us.

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We are a relatively small company with limited resources compared to some of our current and potential competitors, which may hinder our ability to compete effectively.

Some of our current and potential competitors have longer operating histories, significantly greater resources and broader name recognition than we have. As a result, these competitors may have greater credibility with our existing and potential customers. They also may be able to adopt more aggressive pricing policies and devote greater resources to the development, promotion and sale of their products than we can to ours, which would allow them to respond more quickly than us to new or emerging technologies or changes in customer requirements.

RISKS RELATED TO GRIDSENSE

GridSense has incurred net losses and may never achieve sustained profitability.

GridSense has incurred net losses for the years ended December 31, 2009 and 2010. We believe that GridSense will reduce its losses in 2011; however, we can provide no assurance that GridSense will generate sufficient revenues and cash flow to allow it to become profitable or to sustain profitability or to have positive cash flows.

GridSense will need additional financing to grow and finance its operations

GridSense will continue to require additional working capital support in order to finance its operations in 2011. This support may be in the form of a bank line, new investment by others, additional investment by Acorn, or a combination of the above. Since January 1, 2011, Acorn has lent GridSense $250,000. We have no assurance that such additional support will be available in sufficient amounts, in a timely manner and on acceptable terms. The availability and amount of any additional investment from Acorn may be limited by the working capital needs of our corporate activities and other operating companies

GridSense's products and services may not gain market acceptance or competitors may introduce offerings that surpass those of GridSense.

The primary market for GridSense's products and services is rapidly evolving which means that the level of acceptance of products and services that have been released recently or that are planned for future release by the marketplace is not certain. If the markets for GridSense's products and services fail to develop, develop more slowly than expected or become subject to intense competition, its business will suffer. As a result, GridSense may be unable to: (i) successfully market its current products and services, (ii) develop new products, services and enhancements to current products and services, (iii) complete customer installations on a timely basis or (iv) complete products and services currently under development. If GridSense's products and services are not accepted by its customers or by other businesses in the marketplace, GridSense's business and operating results will be materially affected. In addition, we can provide no assurance that GridSense will be successful in deriving significant revenue growth through its current strategy and marketing initiatives.

GridSense's products are subject to regulatory approvals.

Numerous regulations govern the manufacture and sale of GridSense's products in the United States and other countries where GridSense intends to market its products. Such regulation bears upon the approval of manufacturing techniques, testing procedures and approval for the manufacturing and sale of GridSense's products, including advertising and labeling.

Any failure or delay in obtaining regulatory approvals would adversely affect our ability to market our products. Furthermore, product approvals may be withdrawn if problems occur following initial marketing or if compliance with regulatory standards is not maintained. The failure, delay or withdrawal of a previously given regulatory approval could materially adversely affect our revenues, cash flows and financial position.

Sales to utilities are generally characterized by long sales cycles.

GridSense's sales are largely dependent on the sales cycle of electric utilities which is typically long and requires much technical and application support. The purchasing cycle for a utility may involve an evaluation trial or pilot, analysis of data and results, review of competitor's offerings and smaller scale deployments, before a purchasing decision is made. For large orders, some utilities are required to solicit competitive bids from other vendors which can contribute more time. The entire process can take anywhere between several weeks to several quarters. Delays in securing purchase orders can materially adversely affect our revenues, cash flows and financial condition.

GridSense is attempting to broaden its revenue base by expanding into the North American market.

GridSense is currently generating a large portion of its revenue from sales in Australia (more than 60% for the 2010 calendar year). GridSense believes that its continued growth and profitability will require additional expansion of sales in other markets, most notably the North American market. To the extent that GridSense is unable to expand sales into other markets in a timely and cost-effective manner, its business, operating results and financial condition could be materially adversely affected. In addition, even with the successful recruitment of additional personnel and international resellers, there can be no assurance that GridSense will be successful in maintaining or increasing international market demand for its products.

Exchange rate fluctuations could increase the cost of GridSense's Australian operations.

GridSense has operations in both the U.S. and Australia. Its Australian operations are subject to the volatility of the Australian dollar vis-à-vis the U.S. dollar (in 2010 the Australian dollar strengthened in relation to the U.S. dollar by 13%). While risks are somewhat mitigated by the fact that GridSense's Australian operation's sales and expenses are primarily denominated in Australian dollars, currency fluctuations may impact the translation of certain balance sheet items, affect the economics of manufacturing and ultimately affect its financial performance.

GridSense's market is subject to rapidly changing technologies.

GridSense's markets its products in a field where electronics and software/firmware dominate. This fast changing area may generate unknown methods of detecting and monitoring disturbances that could render GridSense's technology inferior, resulting in GridSense's results of operations being materially adversely affected. GridSense does, however, closely monitor trends and changes in technologies and customer demand that could adversely impact its competitiveness and overall success.

GridSense is subject to vigorous competition with very large competitors that have substantially greater resources and operating histories.

Some of GridSense's competitors in the markets it serves are larger, better capitalized and have greater resources than GridSense. As GridSense grows and penetrates markets where larger companies have been established, it may experience a reduced rate of growth due to competitive forces. Competition from these competitors may have a material adverse effect on our operations, including a potential reduction in operating margins and a loss of potential business.

RISKS RELATED TO USSI

USSI is a development stage company with a limited operating history.

USSI was formed in November 2007 and has a limited operating history. Many of its products are at a research and development stage and substantial time, effort and financial resources may be required before we will be profitable. USSI's operations are subject to all of the risks inherent in the establishment of a new business enterprise, especially one that is dependent on developing new products for the oil & gas and security industries. The likelihood of USSI's success should be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered in connection with establishing a new business such as uncertainty in product development, uncertainty in market acceptance of the its products, competition, and changes in business strategy. USSI has no assurance that it will be successful in its business activities.

History of Operating Losses; Anticipated Losses

Since its inception, USSI has had annual operating losses. USSI expects to continue to have operating losses for year ended December 31, 2011 and possibly beyond as a result of increases in operating expenses required to commence manufacturing and to expand its sales and marketing operations. USSI can provide no assurance that it will ultimately generate sufficient revenues to allow it to become profitable, to sustain profitability or to have positive cash flows.

USSI will need additional financing to grow its business and finance its operations

In the period since Acorn's initial investment in November 2009 through February 28, 2011, it has invested $2.5 million in USSI. In addition, Acorn has an option to invest an additional $1.5 million in USSI by May 31, 2011.

USSI has no assurance that Acorn will exercise this option. USSI also has no assurance that even if Acorn does exercise all of these options, that USSI's future capital needs will not exceed these amounts or that USSI will generate sufficient cash flow to fund its operations in the absence of additional funding sources. USSI will likely need to raise additional funds if revenues fail to meet projections or to fund a rapid expansion to meet product demand, respond to competitive pressures or acquire complementary products, businesses or technologies. If additional funds are raised through the direct issuance of equity or convertible debt securities to third parties, Acorn's percentage ownership of USSI may be reduced.

In addition, should additional funds be needed, there can be no assurance that additional financing will be available on terms acceptable to USSI. If funds are not available, or are not available on acceptable terms, USSI may not be able to fund its growth, respond to competitive pressures or take advantage of unanticipated acquisition opportunities. Accordingly, this could materially and adversely affect USSI's business, results of operations and financial condition.

USSI is a small company with limited resources compared to some of its current and potential competitors, which may hinder its ability to compete effectively.

Some of USSI's current and potential competitors have longer operating histories, significantly greater resources and broader name recognition than does USSI. As a result, these competitors may have greater credibility with USSI's existing and potential customers. They also may be able to adopt more aggressive pricing policies and devote greater resources to the development, promotion and sale of their products than can USSI to its products, which would allow them to respond more quickly than USSI to new or emerging technologies or changes in customer requirements.

If USSI is unable to keep pace with technological change, USSI's results of operations, financial condition and cash flows may suffer.

Many of USSI's products are in the research and development stage. In addition, some of USSI's existing products may require additional engineering and upgrades in conjunction with market developments as well as specific customer needs. There can be no assurance that USSI will continue to be successful in its engineering efforts regarding the development of its products and future technological difficulties could adversely affect its business, results of operations and financial condition.

USSI is not yet ready to manufacture its products in commercial quantities.

In order to be successful, USSI's products must be manufactured in commercial quantities at an acceptable cost and must meet the specifications required by the customers regarding quality. USSI's space and manufacturing capabilities at its current facilities in Northridge, California are not expected to be sufficient to handle the anticipated increase in sales for the near future. Should USSI require additional manufacturing capacity, there can be no assurance it will be able to increase the size and quality of its manufacturing processes fast enough to meet demand. Any material delays by USSI or any unanticipated manufacturing difficulties could materially and adversely affect its business, results of operations and financial condition.

USSI is dependent on a number of suppliers who provide it with key components for some of its products.

USSI's products incorporate "state of the art" technologies. As such, in many cases there are limited supplies of key components. In particular, USSI currently relies on a single source for the development of its high-end interrogators for some of its technologically advanced product offerings. USSI has not yet found a second source supplier that is economically feasible to use at this time. While USSI continues to try to mitigate the risks associated with this key component, any production delays by this supplier or any adverse change to its financial condition could materially and adversely affect USSI's business, results of operations and financial condition.

USSI's targeted customers may be reluctant to try its alternative solution despite its increased reliability and lower cost.

Potential customers may elect to continue to use the existing expensive and less reliable technologies given their familiarity of the existing products in the market plane. The competition in USSI's markets may have superior resources and marketing ability which could lead to potential customers selecting existing products over USSI's products. While USSI continues to develop its products and invest in marketing efforts accordingly, there is no assurance that USSI's products will be preferred in the market place relative to the competition with superior overall resources. If the market place does not adopt USSI's products as anticipated, USSI's business, results of operations and financial condition could be materially and adversely affected.

Failure to accurately forecast costs of fixed-priced contracts could reduce USSI's margins.

When working on a fixed-price basis, USSI undertakes to deliver solutions to a customer's specifications or requirements for a particular project. The profits from these projects are primarily determined by USSI's success in correctly estimating and thereafter controlling project costs. Costs may in fact vary substantially as a result of various factors, including underestimating costs, difficulties with new technologies and economic and other changes that may occur during the term of the contract. If, for any reason, USSI's costs are substantially higher than expected, USSI may incur losses on fixed-price contracts.

USSI may lose sales if it is unable to obtain government authorization to export its products.

The export of some of USSI's products may be subject to export controls imposed by the U.S. government and administered by the U.S. Departments of State and Commerce. In certain instances, these regulations may require pre-shipment authorization from the administering department. For products subject to the Export Administration Regulations ("EAR") administered by the Department of Commerce's Bureau of Industry and Security, the requirement for a license is dependent on the type and end use of the product, the final destination and the identity of the end user. All USSI products that are exported are subject to EAR; however, most of USSI's equipment is considered EAR99. EAR99 items generally consist of low-technology consumer goods and do not require a license in many situations. However, if USSI were to attempt to export an EAR99 item to an embargoed country, to an end-user of concern (as defined by the U.S. Department of Commerce) or in support of a prohibited end-use (as defined by the U.S. Department of Commerce), USSI would be required to obtain a license.

Exports of certain USSI products may also be subject to the International Traffic in Arms Regulations ("ITAR") regulations administered by the Department of State's Directorate of Defense Trade Controls require a license.

Obtaining export licenses can be difficult and time-consuming. Failure to obtain export licenses could significantly reduce our revenue and materially adversely affect USSI's business, financial condition and results of operations. Compliance with U.S. government regulations may also subject USSI to additional fees and costs. The absence of comparable restrictions on competitors in other countries may adversely affect USSI's competitive position.

Limited Protection of Proprietary Technology; Risks of Infringement

USSI's success is heavily dependent upon its internally developed technology. USSI has filed patents covering the specific use and novel inventions developed internally. To further protect its proprietary rights, USSI relies on a combination of patent, trade secret, nondisclosure and other contractual restrictions. As part of its confidentiality procedures, USSI enters into nondisclosure agreements with its employees, consultants and strategic partners and limit access to and distribution of its designs and proprietary information. Despite these efforts, USSI may be unable to effectively protect its proprietary rights. In addition, the expense associated with the enforcement of USSI's proprietary rights may be substantial.

RISKS RELATED TO OUR SECURITIES

Our stock price is highly volatile.

The market price of our common stock has fluctuated substantially in the past and is likely to continue to be highly volatile and subject to wide fluctuations. Since January 1, 2010 our common stock has traded at prices as low as $3.55 and as high as $7.49 per share. Fluctuations in our stock price may continue to occur in response to various factors, many of which we cannot control, including:

- general economic and political conditions and specific conditions in the markets we address, including the continued volatility in the energy industry and the general economy;
- quarter-to-quarter variations in our operating results;
- announcements of changes in our senior management;
- the gain or loss of one or more significant customers or suppliers;
- announcements of technological innovations or new products by our competitors, customers or us;
- the gain or loss of market share in any of our markets;
- changes in accounting rules;
- changes in investor perceptions; or

- changes in expectations relating to our products, plans and strategic position or those of our competitors or customers.

In addition, the market prices of securities of energy related companies have been and remain volatile. This volatility has significantly affected the market prices of securities of many companies for reasons frequently unrelated to the operating performance of the specific companies.

Our share price may decline due to the large number of shares of our common stock eligible for future sale in the public market including shares underlying warrants and options.

Almost all of our outstanding shares of common stock are, or could upon exercise of options or warrants would become, eligible for sale in the public market as described below. Sales of a substantial number of shares of our common stock in the public market, or the possibility of these sales, may adversely affect our stock price.

As of March 1, 2011, 17,343,005 shares of our common stock were issued and outstanding. As of that date we had 313,806 warrants outstanding and exercisable with a weighted average exercise price of $4.29 and 1,527,955 options outstanding and exercisable with a weighted average exercise price of $3.72 per share, which if exercised would result in the issuance of additional shares of our common stock. In addition to the options noted above, at March 1, 2011, 212,710 options are outstanding, but have not yet vested and are not yet exercisable.

ITEM 2.PROPERTIES

Our corporate activities are conducted in office space in Wilmington, Delaware. The lease is currently on a month-to-month basis at a monthly rent of $3,900 per month.

SCR-Tech leases approximately 126,000 square feet of office, production, laboratory and warehouse space in Charlotte, North Carolina at the Mt. Holly facility. The annual rent is approximately $644,000. This lease expires on June 30, 2012, with two options to renew for five years each. In September 2009, SCR-Tech entered into an agreement to lease approximately 7.3 acres of land in Charlotte, North Carolina together with a building containing approximately 143,500 square feet of office and warehouse space at the Fat Boy facility. SCR-Tech entered into this lease in order to begin operating a second manufacturing, warehousing and research and development facility. SCR-Tech leased 98,460 square feet through August 31, 2010 and added the remaining 45,040 square feet to the lease on September 1, 2010. Lease payments on the initial 98,460 square feet were abated until June 2010 and the balance of 45,040 square feet is abated until March 2011. Annual rent after the March 2011 abatement period is approximately $399,000.

Our DSIT subsidiary's activities are conducted in approximately 17,000 square feet of office space in the Tel Aviv, Israel metropolitan area under a lease that expires in August 2012. The annual rent is approximately $236,000.

GridSense operates facilities in Sydney, Australia and West Sacramento, CA. The Sydney office occupies approximately 8,100 square feet of office, testing laboratory, production and warehouse space. The company has entered into a three year lease agreement expiring July 2013. The annual rent is approximately US$90,000 and is subject to annual increases based on the Australian CPI index. The Sacramento office is approximately 5,500 square feet and its annual rent is approximately $52,000. The lease agreement expires on May 2015. The annual rent at the Sacramento office increases 3% per year.

USSI's activities are conducted in approximately 4,400 square feet of office and production space in the San Fernando Valley (a suburb north of Los Angeles, CA) under a lease that expires in April 2011. The monthly rent at this facility is $5,975 per month. We believe that USSI's current premises will not be sufficient to handle the anticipated increase in sales for the near future and that USSI will have to increase their office and production space when their lease expires. USSI is currently exploring options for expanded facilities in the San Fernando Valley.

ITEM 3.LEGAL PROCEEDINGS

Lawsuit filed by SCR-Tech against Evonik Energy Services, LLC and Others

As reported previously in our Quarterly Reports on Form 10-Q and Annual Reports Form 10-K filed since November 13, 2008, on July 30, 2008, SCR-Tech LLC ("SCR-Tech"), a subsidiary of CoaLogix, filed suit in Mecklenburg County, North Carolina, Superior Court against Evonik Energy Services LLC ("Evonik LLC"), Hans-Ulrich Hartenstein and Brigitte Hartenstein (the "Hartensteins"), and three of Evonik LLC's German parent companies: Evonik Energy Services GmbH, Evonik Steag GmbH and Evonik Industries AG (the "German Defendants"). The Hartensteins, Evonik LLC and the German Defendants are collectively referred to as the "Evonik Defendants."

On February 25, 2010, the Evonik Defendants filed motions for summary judgment on the nonexistence of SCR-Tech's trade secrets or confidential information, statutes of limitation, release and lack of standing and motion requesting that the court stay discovery. SCR-Tech filed responses to these motions. The court, after hearing argument on these motions, issued its order dated July 12, 2010 denying the Evonik Defendants' motions for summary judgment on statutes of limitation, release and lack of standing, and with respect to the motion for summary judgment on non-existence of trade secrets or confidential information the court held such motion in abeyance pending completion of limited discovery as directed by the court. Such limited discovery has concluded, the parties have filed briefs with the court and are awaiting the court's decision regarding the pending motion for summary judgment.

In the answers filed by the Evonik Defendants, the Evonik Defendants have asserted counterclaims against SCR-Tech with unspecified amounts of damages. CoaLogix believes that such counterclaims are without merit, and that any award of any material amount with respect to such counterclaims is remote. Therefore, no accrual for any contingency relating to such counterclaims has been made nor can the range of any possible loss due to such counterclaims be reasonably estimated at this time.

ITEM 4.RESERVED

PART II

ITEM 5.MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is currently traded on the NASDAQ Global Market under the symbol "ACFN". The following table sets forth, for the periods indicated, the high and low reported sales prices per share of our common stock on NASDAQ.

	High	Low
2009:		
First Quarter	$2.55	$1.56
Second Quarter	2.99	2.26
Third Quarter	5.81	2.67
Fourth Quarter	8.06	5.29
2010:		
First Quarter	$7.49	$5.63
Second Quarter	6.68	4.45
Third Quarter	5.51	4.30
Fourth Quarter	5.04	3.55

As of March 9, 2011, the last reported sales price of our common stock on the Nasdaq Global Market was $3.85, there were 152 record holders of our common stock and we estimate that there were approximately 3,900 beneficial owners of our common stock.

We paid no dividends in 2009 or 2010, and do not intend to pay any dividends in 2011.

ITEM 6.SELECTED FINANCIAL DATA

The selected consolidated statement of operations data for the years ended December 31, 2009 and 2010 and consolidated balance sheet data as of December 31, 2009 and 2010 has been derived from our audited Consolidated Financial Statements included in this Annual Report. The selected consolidated statement of operations data for the years ended December 31, 2006, 2007 and 2008 and the selected consolidated balance sheet data as of December 31, 2006, 2007 and 2008 has been derived from our audited consolidated financial statements not included herein.

This data should be read in conjunction with our Consolidated Financial Statements and related notes included herein and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

Selected Consolidated Statement of Operations Data:

	For the Years Ended December 31,				
	2006	2007	2008	2009	2010
	(in thousands, except per share data)				
Revenues	$4,117	$5,660	$18,366	$27,318	$35,694
Cost of sales	2,763	4,248	13,242	17,067	22,533
Gross profit	1,354	1,412	5,124	10,251	13,161
Research and development expenses, net	324	415	236	543	1,131
Selling, general and administrative expenses	4,618	5,278	10,190	12,028	17,685
Impairments	40	112	3,664	2,692	1,166
Operating loss	(3,628)	(4,393)	(8,966)	(5,012)	(6,821)
Finance expense, net	(30)	(1,585)	(2,853)	(86)	(239)
Gain on early redemption of Convertible Debentures	—	—	1,259	—	—
Gain on Comverge IPO	—	16,169	—	—	—
Gain on sale of shares in Comverge	—	23,124	8,861	1,403	—
Gain (loss) on private placement of equity investments	—	(37)	7	—	—
Gain on investment in GridSense	—	—	—	—	1,327
Dividends received from EnerTech	—	—	—	—	135
Loss on sale of EnerTech	—	—	—	—	(1,821)
Other income, net	330	—	—	—	—
Income (loss) from operations before taxes on income	(3,328)	33,278	(1,692)	(3,695)	(7,419)
Income tax benefit (expense)	(183)	445	(342)	719	(671)
Income (loss) from operations of the Company and its consolidated subsidiaries	(3,511)	33,723	(2,034)	(2,976)	(8,090)
Share of losses in Comverge	(210)	—	—	—	—
Share of income (losses) in Paketeria	(424)	(1,206)	(1,560)	263	—
Share of losses in GridSense	—	—	(926)	(129)	—
Income (loss) from continuing operations	(4,145)	32,517	(4,520)	(2,842)	(8,090)
Loss on sale of discontinued operations and contract settlement, net of income taxes	(2,069)	—	—	—	—
In-process research and development expense recorded in acquisition of discontinued operation	—	—	(2,444)	—	—
Gain on the deconsolidation of Coreworx	—	—	—	—	1,834
Loss from discontinued operations, net of income taxes	—	—	(1,179)	(3,334)	(19,494)
Net income (loss).	(6,214)	32,517	(8,143)	(6,176)	(25,750)
Net loss attributable to non-controlling interests	78	—	248	420	662
Net income (loss) attributable to Acorn Energy, Inc shareholders	$(6,136)	$32,517	$(7,895)	$(5,756)	$(25,088)
Basic net income (loss) per share attributable to Acorn Energy, Inc. shareholders:					
Income (loss) from continuing operations	$(0.48)	$3.30	$(0.37)	$(0.21)	$(0.50)

Discontinued operations	(0.23)	—	(0.32)	(0.29)	$(1.18)
Net income (loss) per share attributable to Acorn Energy Inc. shareholders	$(0.71)	$3.30	$(0.69)	$(0.50)	$(1.68)
Weighted average number of shares outstanding attributable to Acorn Energy Inc shareholders	8,689	9,848	11,374	11,445	14,910
Diluted net income (loss) per share attributable to Acorn Energy Inc. shareholders:					
Income (loss) from continuing operations attributable to Acorn Energy Inc. shareholders	$(0.48)	$2.80	$(0.37)	$(0.21)	$(0.50)
Discontinued operations	(0.23)	—	(0.32)	(0.29)	$(1.18)
Net income (loss) per share	$(0.71)	$2.80	$(0.69)	$(0.50)	$(1.68)
Weighted average number of shares outstanding attributable to Acorn Energy Inc. shareholders	8,689	12,177	11,374	11,445	14,910

Selected Consolidated Balance Sheet Data:

	As of December 31,				
	2006	2007	2008	2009	2010
	(in thousands)				
Working capital	$259	$13,843	$13,838	$16,220	$14,599
Total assets	7,258	96,967	51,055	48,735	59,785
Short-term and long-term debt	788	5,010	3,845	835	1,920
Total Acorn Energy, Inc. shareholders' equity (deficit)	(461)	67,325	33,448	30,777	33,373
Non-controlling interests	—	—	2,675	5,321	8,504
Total equity (deficit)	(461)	67,325	36,123	36,098	41,877

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

RECENT DEVELOPMENTS

Acorn Exercise of USSI Options

In January and February of 2011, Acorn exercised a series of its options to invest in USSI by investing an aggregate of $1.0 million in USSI and increasing its holdings to approximately 81%. Acorn has an additional option to invest an additional $1.5 million in USSI and increase its holdings to approximately 87%.

OVERVIEW AND TREND INFORMATION

The following discussion includes statements that are forward-looking in nature. Whether such statements ultimately prove to be accurate depends upon a variety of factors that may affect our business and operations. Certain of these factors are discussed in "Item 1A. Risk Factors."

We operate in four reportable segments: CoaLogix, Energy & Security Sonar Solutions (through our DSIT subsidiary), GridSense and USSI.

The following analysis should be read together with the segment information provided in Note 22 to our Consolidated Financial Statements included in this report.

CoaLogix

In April 2009, we entered into an agreement with CoaLogix, EnerTech and certain members of CoaLogix' senior management pursuant to which Acorn and EnerTech each agreed to invest $5.6 million, and certain members of CoaLogix' senior management agreed to invest an aggregate of approximately $260,000, in CoaLogix. Through September 30, 2010, CoaLogix received the entire $11.5 million (including the $5.6 million from Acorn) investment commitment from Acorn, EnerTech and CoaLogix' senior management, including $5.9 million invested ($2.9 million by Acorn) in 2010. Proceeds of the investment were used by CoaLogix primarily for development of CoaLogix' new Steele Creek facility, technology development, legal expenses and computer software.

In August 2010, CoaLogix completed the building of its Steele Creek facility and began operations at that site. The opening of the Steele Creek facility approximately doubled CoaLogix' throughput capacity. This expansion enabled SCR-Tech to meet the growing demands of the catalyst and catalyst regeneration markets.

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CoaLogix' revenues in 2010 were approximately $21.5 million compared to 2009 revenues of $18.1 million. The 19% increase in CoaLogix' revenues in 2010 compared to 2009 is due to increased penetration in the growing regeneration market combined with the increased throughput capacity provided by CoaLogix' new Steele Creek facility. CoaLogix' revenues in the fourth quarter of 2010 of $6.6 million represents an 24% increase over fourth quarter 2009 revenues of $5.3 million and a 21% increase over third quarter 2010 revenues of $5.5 million. The year-on-year increase in revenues was attributable largely to increased production volume facilitated by improved production efficiency and the plant expansion. The increase from third quarter 2010 revenues was due primarily to the plant expansion. During 2010, CoaLogix replaced and increased its inventory of SCR modules available for sale based on customer demands from $1.3 million to $2.5 million.

CoaLogix' gross profit in 2010 was $7.1 million compared to 2009 gross profit of $6.3 million. The increase in CoaLogix' gross profit in 2010 was attributable to the increase in revenues. Gross margins decreased from 35% in 2009 to 33% in 2010, primarily due to the negative impact of startup activities and related increased resources associated with the opening of the Steele Creek facility in late 2010. We expect gross margins to increase in 2011 as the Steele Creek facility becomes fully optimized.

CoaLogix' gross profit in the fourth quarter of 2010 was $2.4 million representing a $0.3 million or 13% increase over the gross profit of $2.1 million recorded by CoaLogix in the fourth quarter of 2009. CoaLogix' gross profit in the fourth quarter of 2010 also represented a $1.5 million increase in gross profit compared to the third quarter of 2010. The increase in CoaLogix' fourth quarter gross profit for 2010 over 2009 was attributable to higher sales volume which more than compensated for the decrease in gross margin from 40% to 36%. The decrease in the gross margin in the fourth quarter of 2010 as compared to the fourth quarter of 2009 was due to a higher cost base from operating two operating facilities starting in August. The gross margin is expected to improve over time as the new facility becomes fully optimized. The increase in CoaLogix' fourth quarter 2010 gross profit compared to the third quarter of 2010 was attributable to the increase in sales ($1.2 million) combined with third quarter gross profit being negatively impacted by startup activities and related increased resources associated with the opening of the Steele Creek facility during the third quarter of 2010.

During 2010, CoaLogix recorded approximately $7.2 million of selling, general and administrative (SG&A) expense as compared to approximately $6.3 million recorded during 2009. The increase in CoaLogix' SG&A expense is attributable to increased overhead costs resulting from the company's growth, which includes new staff hires and expenses associated with the Steele Creek facility prior to commencement of the August start up.

On July 22, 2010, the subsidiaries of CoaLogix executed an amendment of its credit facility which extended and increased its credit availability to a $4 million formula based line-of-credit, a $1 million non-formula based line-of-credit and $1 million non-formula based letter of credit. The credit facility expires June 30, 2011 and carries an interest rate of the greater of 1.50% above prime rate or 5.50% on the formula line of credit and the greater of 2.00% above prime rate or 6.00% on the non-formula line of credit. The maximum amount of outstanding credit under the facility is $5 million.

CoaLogix' backlog at December 31, 2010 was approximately $7.6 million. We expect to recognize in income approximately $6.7 million of that amount in 2011. In 2011, we expect CoaLogix to continue to increase its revenues as it continues to penetrate the local U.S. regeneration market and as we continue to expand capacity and efficiency at our Steele Creek plant. However, we expect that first quarter 2011 revenues will be below fourth quarter 2010 and may be lower than first quarter 2010 revenues due to seasonal budgeting and lower demand for electricity by industrial customers during the economic downturn and the subsequent postponement of catalyst replacement. The level of our revenues may also be impacted by our revenue recognition policy as we do not recognize revenue until we have receipt of satisfactory third party test results on the regeneration of modules. The lease at our Mt. Holly facility expires in June 2012. While we have an option to continue to operate at this site, we are evaluating other options such as expanding production at the Steele Creek facility and construction of an additional production facility. Our 2011 profitability will continue to be impacted by professional fees for our lawsuit against Evonik (see Item 3 - Legal Proceedings), costs associated with our possible entry into the Chinese and other regeneration markets and costs for certain research and development initiatives to maintain our technological edge.

DSIT Solutions

In 2010, DSIT continued to focus on marketing and developing its energy and security sonar solutions and products; particularly its products related to underwater security for energy and other strategic sites. Revenue of our DSIT subsidiary increased by $2.2 million, or 24%, from $9.2 million in 2009 to $11.5 million in 2010. The increase was due to increased revenue in the Energy & Security Sonar Solutions segment while Other revenue (representing certain IT and consulting work performed by DSIT) remained stable. Fourth quarter 2010 revenue for DSIT was $2.8 million reflecting a slight increase over fourth quarter 2009 revenue of $2.7 million. Fourth quarter 2010 revenues ($2.8 million) were below third quarter 2010 revenues ($3.2 million) due to the winding down of certain AquaShieldTM projects combined with a decrease in revenue recognized on certain projects as well as a delay in the receipt of an anticipated follow-up expansion order of our AquaShieldTM systems.

Gross profit in DSIT in 2010 was $4.9 million which reflects an increase of $0.9 million or 22% from $4.0 million in 2009. DSIT's gross profit of $1.0 million during the fourth quarter of 2010 represented a $0.3 million decrease over DSIT's gross profit in the fourth quarter of 2009. The increase in the year-on-year gross profit was attributable to the increased revenues, particularly in DSIT's Energy & Sonar Security projects. The decrease in DSIT's quarter-on-quarter gross profit was due to primarily to decreased margins in DSIT's non-energy and sonar solutions projects caused by unanticipated delays in completing certain projects. Fourth quarter 2010 gross profit was also $0.4 million below third quarter 2010 gross profit ($1.4 million) due to decreased sales and reduced gross margins.

DSIT gross margin in 2010 was 42%, down slightly from 2009's gross margin of 43%. This followed an increase in its gross margin from 34% in 2008. Fourth quarter 2010 gross margin was 34% as compared to 47% in the fourth quarter of 2009 and 44% in the third quarter of 2010. The decrease in gross margins in the fourth quarter of 2010 was primarily due to reduced margins in certain projects which encountered technological difficulties which caused greater than expected labor costs to bring the projects to completion.

During 2010, DSIT recorded approximately $3.0 million of SG&A expense as compared to approximately $2.4 million recorded during 2009. The increase in DSIT SG&A expense is attributable to increased marketing costs as well as increased salary costs (primarily one-time charges).

DSIT recorded net income of $1.1 million in 2010 ($1.3 million in 2009 and $0.5 million in 2008). Decreased net income in 2010 as compared to 2009 is due to 2009 benefiting from an income tax benefit of approximately $170,000 while 2010 incurred a tax expense of approximately $430,000. DSIT's backlog at December 31, 2010 was approximately $6.4 million of which it expects to recognize approximately $5.0 million in 2011. DSIT expects to continue to show revenue growth in 2011 and expects 2011 to be profitable as well at a level at least equal to 2010. This, however, is dependent upon the receipt of an anticipated follow-up order from an existing customer in the first quarter of 2011. If this follow-up order is received later than expected, while we still expect to be profitable, we cannot at this time determine at what level of profitability we expect to complete the 2011 year. If this follow-up order is not received we may have to take certain cost cutting measures in order to maintain profitability.

Energy & Security Sonar Solutions

During 2009 and 2010, revenues from our Energy & Security Sonar Solutions segment in our DSIT subsidiary were $8.0 million and $10.2 million, respectively, accounting for approximately 87% and 89% of DSIT's revenues for 2009 and 2010, respectively. The balance of DSIT's revenues of $1.2 million and $1.3 million for the years ending December 31, 2009 and 2010 were derived from DSIT's other IT and consulting activities.

This segment's revenues increased by $2.2 million or 27% in 2010 as compared to 2009. This followed an increase of $0.8 million or 11% in 2009 as compared to 2008. The increase in sales was the result of revenue recorded from the sale of DSIT's AquaShield™ DDS systems to an undisclosed EMEA customer as well as a slight increase ($0.2 million) in revenues recorded in other real-time and embedded hardware and software projects.

Segment gross profit continued to increase (from $3.5 million in 2009 to $4.4 million in 2010). The increased gross profit in 2010 as compared to 2009 was due to increased sales of our energy and sonar solutions products. Segment gross margins decreased slightly from 44% in 2009 to 43% in 2010.

We anticipate continued growth in sales in 2011, particularly from our acoustic and sonar solutions projects with our embedded hardware and software development projects expected to remain relatively stable. We anticipate new customers from new regions (primarily Asia based) placing orders for our sonar and acoustic products in 2011.

GridSense

In 2010, GridSense continued its focus on delivering solutions that address the power quality and reliability needs of utilities. Each of GridSense's main product lines (the Line IQTM, PowerMonicTM and Transformer IQTM) addresses different aspects of the power delivery system. In addition to its existing product range, GridSense continues to invest in new technology which may lead to the commercialization of new products and revenue drivers for the business. One of such investment was the acquisition of OMI Inc in May 2010, which complemented GridSense's Transformer IQTM product family with a proprietary technology for monitoring bushings.

In 2010, full year revenues were $3.3 million compared to $3.6 million in 2009. The decline of $0.3 million or 8% from 2009 to 2010 was due to a number of factors including weak global market conditions which affected the utility spending in most markets.

In 2010, full year gross profit was $1.7 million compared to $2.0 million in 2009. The decline is $0.3 million or 12% from 2009 to 2010. The gross margin percentage remained unchanged at 53% in both 2010 and 2009. Such gross profit and gross margin for 2010 excludes amortization expense of intangible assets of $0.1 million which is included in cost of sales in 2010 following Acorn's full consolidation beginning in May 2010.

In 2010, GridSense's U.S. operations contributed $1.2 million to the GridSense's total revenue; virtually unchanged from 2009. The lack of growth is attributed to weakness in utility spending as well as disruptions to the U.S. sales organization during the year. The Australia operations contributed $2.2 million in 2010 compared to $2.4 million in 2009, a slight decrease of $0.2 million or 8%. The decrease is attributable to a reduction of bulk orders from major utilities in Australia which was partially offset by the strengthened Australian dollar which increased revenues denominated in Australian dollars to U.S. dollars.

GridSense's full year revenues by main product lines for 2009 and 2010 are as follows:

	2009	2010
	(in thousands of U.S dollars)	
PowerMonicTM	$ 1,698	$ 1,386
Line IQTM	1,230	1,116
Transformer IQTM	—	89
Other	681	724
Total	$ 3,609	$ 3,315

Sales across all product lines declined in 2010 compared to 2009. Management expects sales for all product lines to resume growth as market conditions improve. In 2010 Line IQTM sales represented 33% of GridSense's revenues. In 2010, Transformer IQTM sales represented 3% of overall company sales. Management expects sales from both the Line IQTM and Transformer IQTM to represent a greater portion of overall sales in the future. These product lines are expected to drive sales growth for the company.

The Line IQTM product family will be introducing a newly redesigned advanced sensor which improves both the functionality and price of its predecessor product. Management expects increases in the size of deployment with existing Line IQTM users as well as adoption by new utility customers.

The Transformer IQTM was recently commercially introduced and the market was seeded with this product during 2010. Ongoing deployments and customer evaluations are going smoothly and management expects these installations to expand in size. Management also expects growth from new customers as marketing and sales efforts expand to the broad market.

USSI

In 2010, USSI continued to focus on customer "proof-of-concept" contracts for its major product lines. In particular, USSI had contract revenue related to 4D reservoir & shale gas monitoring, commercial revenue from fiber optic perimeter security systems, and government contract revenue from fiber optic underwater security system development for diver detection. Full year revenue for USSI increased modestly from 2009 to 2010. The increase in 2010 was primarily from contractual revenue in the 4D reservoir & shale gas monitoring system development.

We anticipate significant growth in revenues in 2011, particularly from our fiber optic perimeter security systems as we commence with the installation of our recently received Latin America contract with PCSC, a global security solutions provider based in Torrance, CA. In addition, we anticipate new customers in 2011 related to our 4D reservoir & shale gas monitoring systems as a result of the numerous demonstrations scheduled in 2011 as well as continued progress on USSI's existing contracts.

Coreworx

In December 2010, following a decision by the Acorn's board of directors to cease providing funding for Coreworx, we entered into an agreement (the "Agreement") with Coreworx to sell all of our common stock in Coreworx to a management buyout group consisting of Coreworx' management and certain employees and other investors. We have not attributed any value to the any of the instruments noted below. Under the terms of the agreement:

i. Coreworx' remaining indebtedness owed to us of approximately $5.4 million was reduced to $4.0 million by our exchanging all of our shares of common stock of Coreworx for 10% of the newly issued and outstanding shares of common stock of Coreworx with such shares received by us being non-voting shares ("New Coreworx Shares");

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ii. We received at closing a warrant to acquire 3,625,209 shares of common stock of Coreworx for C$0.10 (US$ 0.10) per share for 5 years from the closing date, Dec. 17, 2010. The warrant represents 10% of Coreworx current common stock outstanding.

iii. The debt of $4.0 million owed by Coreworx to us (the "Coreworx Debt") is non-interest bearing, and the first payment is due January 31, 2012.

iv. The Coreworx Debt is to be repaid in an amount equal to 4% of Coreworx' gross revenues commencing at the date of closing, and payments for the period commencing on the closing date through December 31, 2011 are to be paid in 12 equal monthly installments starting on January 31, 2012 and on the last day of each of the following 11 months.

v. The payments of the Coreworx Debt for revenue periods subsequent to Coreworx' 2011 fiscal year will be payable on a quarterly basis within 45 days following the end of Coreworx' fiscal quarter-end periods.

vi. Following repayment of the Coreworx Debt, Coreworx is to pay us a royalty fee (the "Royalty") equal to 4% of Coreworx' gross revenues up to a maximum amount of $20 million.

vii. The Royalty shall be paid on a quarterly basis within 45 days following the end of Coreworx' fiscal quarter-end periods.

viii. Coreworx is to pay us a restructuring fee of $40,000 on or before July 1, 2011.

Repayment of the Coreworx Debt is secured by a security interest in Coreworx' intellectual property on a pari passu basis with the other holders of Coreworx' common stock following closing which necessitated us releasing at closing our prior security interest in Coreworx' other personal property and intangibles.

In connection with the sale of our shares of common stock of Coreworx, we recorded a gain of approximately $1.8 million as a result of the disposition of Coreworx.

The gain on the deconsolidation of Coreworx is comprised of the following:

- A gain of $5.9 million on the deconsolidation of Coreworx' assets and liabilities.
- A full provision on the Coreworx Debt of $4.0 million due us from Coreworx following the MBO Transaction as there is significant doubt as to Coreworx' ability to repay the debt.
- An estimated $0.1 million of legal fees.

In addition, Coreworx had losses of $3.3 million and $19.5 million for the year ended December 31, 2009 and for the period from January 1, 2010 to December 17, 2010 respectively. The loss for 2010 includes the impairment of the goodwill and intangibles of $9.5 million that were recorded as at October 31, 2010 following the Company's decision to stop funding Coreworx and is reflected as Loss from Discontinued Operations in the Company's Consolidated Statements of Income.

We have not attributed any value to the 10% holdings retained by us following the sale of our stake in Coreworx on December 17, 2010, the warrants to acquire an additional 10% of Coreworx, the $4.0 million of Coreworx Debt or the $40,000 restructuring fee due from Coreworx on July 1, 2011.

Corporate

Corporate general and administrative expense in 2010 reflected a $1.0 million increase to $4.3 million as compared to $3.3 million of expense in 2009. The increase in corporate general and administrative expense in 2010 is due primarily to bonuses recorded in the first quarter of 2010 combined with increased professional fees (primarily associated with an SEC inquiry regarding our sales of Comverge stock, registered direct offering and our acquisitions), increased investor relations costs and corporate personnel. Fourth quarter corporate general and administrative expense of $0.7 million reflected a $0.3 million decrease as compared to the third quarter corporate general and administrative expense. We expect our annual corporate general and administrative costs to decrease in 2011 as compared to 2010 as we begin to benefit from our cost cutting measures taken in the fourth quarter. Such measures included personnel reductions and reducing investor relation costs.

CRITICAL ACCOUNTING POLICIES

The SEC defines "critical accounting policies" as those that require application of management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods.

The following discussion of critical accounting policies represents our attempt to report on those accounting policies, which we believe are critical to our consolidated financial statements and other financial disclosure. It is not intended to be a comprehensive list of all of our significant accounting policies, which are more fully described in Note 2 of the Notes to the Consolidated Financial Statements included in this Annual Report. In many cases, the accounting treatment of a particular transaction is specifically dictated by generally accepted accounting principles, with no need for management's judgment in their application. There are also areas in which the selection of an available alternative policy would not produce a materially different result.

We have identified the following as critical accounting policies affecting our Company: principles of consolidation and investments in associated companies; business combinations, impairments in goodwill and intangible assets, revenue recognition, foreign currency transactions and stock-based compensation.

Principles of Consolidation and Investments in Associated Companies

Our consolidated financial statements include the accounts of all majority-owned subsidiaries. All intercompany balances and transactions have been eliminated.

Investments in other entities are accounted for using the equity method or cost basis depending upon the level of ownership and/or our ability to exercise significant influence over the operating and financial policies of the investee. Investments of this nature are recorded at original cost and adjusted periodically to recognize our proportionate share of the investee's net income or losses after the date of investment. When net losses from an investment accounted for under the equity method exceed its carrying amount, the investment balance is reduced to zero and additional losses are not recorded. We resume accounting for the investment under the equity method when the entity subsequently reports net income and our share of that net income exceeds the share of net losses not recognized during the period the equity method was suspended. Investments are written down only when there is clear evidence that a decline in value that is other than temporary has occurred.

In the year ending December 31, 2010, we began consolidating the results of USSI effective February 23, 2010 following the signing of option agreements with USSI and certain shareholders of USSI whereby we received options to acquire up to 87% of the company (see Note 4(b) to our Consolidated Financial Statements). We also began consolidating the results of GridSense on May 12 2010 following our acquisition of the approximately 70% of the company we did not previously own. On December 17, 2010, we ceased consolidating the results of Coreworx following the sale of all of our common stock in the company to a management buyout group consisting of Coreworx' management and certain employees and other investors. The results of Coreworx are presented as discontinued operations for all the periods since our acquisition of them in August 2008.

Business combination accounting

We have acquired a number of businesses during the last several years, and we may acquire additional businesses in the future. Business combination accounting, often referred to as purchase accounting, requires us to determine the fair value of all assets acquired, including identifiable intangible assets, and liabilities assumed. The cost of the acquisition is allocated to the assets acquired and liabilities assumed in amounts equal to the estimated fair value of each asset and liability, and any remaining acquisition cost is classified as an amortizable intangible asset, a non-amortizable intangible asset or goodwill. This allocation process requires extensive use of estimates and assumptions, including estimates of future cash flows to be generated by the acquired assets. Certain identifiable intangible assets, such as customer lists and covenants not to compete, are amortized based on the pattern in which the economic benefits of the intangible assets are consumed over the intangible asset's estimated useful life. The estimated useful life of our amortizable identifiable intangible assets ranges from three to twenty years. Goodwill is not amortized. Accordingly, the acquisition cost allocation has had, and will continue to have, a significant impact on our current operating results.

Goodwill and Intangibles

As a result of our various acquisitions, we have recorded goodwill and various amortizable intangible assets. Businesses acquired are recorded at their fair value on the date of acquisition. The excess of the purchase price over the fair value of assets acquired and liabilities assumed is recognized as goodwill. We also sometimes acquire specific intangibles such as our acquisition in 2010 of a license agreement.

Our goodwill at December 31, 2010 was approximately \$8.4 million representing approximately 14% of our total assets. Our goodwill is allocated to our segments as follows: CoaLogix – approximately \$3.7 million, Energy & Security Sonar Solutions – approximately \$0.6 million, GridSense – approximately \$2.7 million and USSI – approximately \$1.4 million.

Our intangible assets that have finite useful lives recorded at fair value at the time of the acquisition, and are carried at such value less accumulated amortization. Our net intangible asset balance at December 31, 2010 was approximately \$9.3 million representing approximately 15% of our total assets. The composition of our intangible assets at December 31, 2010 consisted of SCR Technologies in our CoaLogix segment (\$4.0 million, net of accumulated amortization), Naval Technologies in our Energy & Security Sonar Solutions segment (\$0.4 million, net of accumulated amortization), Software and Customer Relationships in our GridSense segment (\$2.5 million, net of accumulated amortization) and Sensor Technologies in our USSI segment ((\$2.5 million, net of accumulated amortization). We amortize these intangible assets on a straight-line basis over their estimated useful lives.

We review our goodwill for impairment annually at the reporting unit level in the fourth quarter of each fiscal year. Each of our reportable operating segments (CoaLogix, Energy & Security Sonar Solutions, GridSense and USSI) is deemed to be a reporting unit. These reporting units have been identified based on appropriate accounting principles, which considers, among other things, the manner in which we operate our business and the availability of discrete financial information. Assets acquired and liabilities assumed are assigned to a reporting unit as of the date of acquisition. In the event we reorganize our business, we reassign the assets (including goodwill) and liabilities among the affected reporting units. Our corporate activities and those relating to our non-reporting segment are not assigned to our reporting units. We periodically review these reporting units to ensure that they continue to reflect the manner in which the business is operated.

We also analyze whether any indicators of impairment for goodwill and intangibles exist each quarter. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include a sustained, significant decline in our share price and market capitalization, a decline in our expected future cash flows, a significant adverse change in legal factors or in the business climate, unanticipated competition, the testing for recoverability of our long-lived assets, and/or slower growth rates, among others.

The first step of our annual evaluation is to compare the estimated fair value of our reporting units to their respective carrying values to determine whether there is an indicator of potential impairment. If the carrying amount of a reporting unit exceeds its estimated fair value, we conduct a second step, in which we calculate the implied fair value of goodwill. If the carrying amount of the reporting unit's goodwill exceeds the calculated implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess. The implied fair value of goodwill is determined in the same manner as the amount of goodwill recognized in a business combination. The fair value of the reporting unit is allocated to all of the assets and liabilities of that unit (including any unrecognized intangible assets such as the assembled workforce) as if the reporting unit had been acquired in a business combination at the date of assessment and the fair value of the reporting unit was the purchase price paid to acquire the reporting unit.

We estimate the fair value of our reporting units using discounted expected future cash flows. We performed a valuation analysis, utilizing an income approach in our goodwill assessment process. The following describes the valuation methodology used to derive the fair value of our reporting units.

- Income Approach: To determine each reporting unit's estimated fair value, we discount the expected cash flows of our reporting units. We estimate our future cash flows after considering current economic conditions and trends; estimated future operating results, growth rates, anticipated future economic and regulatory conditions; and the availability of necessary technology. The discount rate used represents the estimated weighted average cost of capital, which reflects the overall level of inherent risk involved in our operations and the rate of return an outside investor would expect to earn. To estimate cash flows beyond the final year of our model, we use a terminal value approach. Under this approach, we use estimated operating income before depreciation and amortization in the final year of our model, adjust it to estimate a normalized cash flow, apply a perpetuity growth assumption and discount by a perpetuity discount factor to determine the terminal value. We incorporate the present value of the resulting terminal value into our estimate of fair value.

The preparation of the long-range forecasts, the selection of the discount rates and the estimation of the multiples used in valuing the terminal tear involve significant judgments. Changes to these assumptions could affect the estimated fair value of our reporting units and could result in a goodwill impairment charge in a future period. The assumptions and method in determining the fair value of our CoaLogix and Energy & Security Sonar Solutions reporting unit have not materially changed since 2009. This was the first year that we have performed an impairment analysis for our GridSense and USSI subsidiaries as we began consolidating their results earlier in 2010.

During the fourth quarter of 2010, we determined that goodwill associated with the GridSense reporting unit was impaired and recorded a charge of $1.2 million in our consolidated statements of operations. We believe that the continuing global economic crisis and lower than expected sales by GridSense during the period since our acquisition of the remaining 70% shares of GridSense not previously owned by us led to the impairment charge. In addition to the goodwill impairment analysis, we also analyzed GridSense intangible assets for impairment. No impairment was found. Also during the fourth quarter of 2010, we recorded an impairment of $5.0 million effective October 1, 2010 with respect to all of the goodwill associated with our Coreworx subsidiary following our decision to stop funding Coreworx operations. At the same time, we also recorded an impairment charge of the remaining unamortized balance of all the Coreworx amortizable intangible assets ($4.5 million). Impairment charges related to Coreworx are included in Loss from Discontinued Operations following the sale of our shares in the company in a management buyout transaction.

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In the fourth quarter of 2010, we also evaluated the goodwill associated with our CoaLogix, Energy & Security Sonar Solutions and USSI reporting units for impairment and determined that the fair values of the reporting units exceeded their carrying values on that date. Should certain assumptions used in the development of the fair values of our reporting units change, we may be required to recognize additional goodwill impairments. The estimated fair values of the CoaLogix, Energy & Security Sonar Solutions and USSI reporting units used in those analyses exceeded their carrying values by more than 300% each.

We did not prepare updated interim goodwill impairment analyses as of December 31, 2010 for any reporting unit, as we believed, based on our financial performance during the fourth quarter of 2010 and the financial forecasts that there were no indicators of potential impairments.

Revenue Recognition

In the year ended December 31, 2010, we recorded approximately $21.5 million of revenues representing approximately 60% of our consolidated revenues in our CoaLogix subsidiary. Revenues related to SCR catalyst regeneration and cleaning services are recognized when the service is completed for each catalyst module. Customer acceptance is not required for regeneration and cleaning services in that CoaLogix's contracts currently provide that services are completed upon successful testing results in compliance with contract requirements.

From time to time, CoaLogix purchases spent catalyst modules for its inventory. In the event that a customer purchases spent catalyst modules and enters a service contract for regeneration with CoaLogix, revenues are recognized upon successful testing results in compliance with contract requirements.

Costs associated with performing SCR catalyst regeneration and cleaning services are expensed in relation to revenue recognition, which is based on the extent of performance achieved. Revenue and costs are deferred when billing milestones precede the scheduled receipt of testing by independent third parties that confirm compliance with contract requirements. In the situation where revenue is deferred due to collectability uncertainties, CoaLogix does not defer costs due to the uncertainties related to payment for such services. There were no uncertainties of collectability as of December 31, 2010.

Revenue from time-and-materials service contracts, maintenance agreements and other services is recognized as services are provided.

In the year ended December 31, 2010, we recorded approximately $11.5 million of revenues representing approximately 32% of our consolidated revenues in our DSIT subsidiary. In 2010, DSIT derived approximately $9.7 million or 84% of its revenues from fixed-price type contracts. Fixed-price type contracts require the accurate estimation of the cost, scope and duration of each engagement. Revenue and the related costs for these projects are recognized for a particular period, using the percentage-of-completion method as costs (primarily direct labor) are incurred, with revisions to estimates reflected in the period in which changes become known. If we do not accurately estimate the resources required or the scope of work to be performed, or do not manage our projects properly within the planned periods of time or satisfy our obligations under the contracts, then future revenue and consulting margins may be significantly and negatively affected and losses on existing contracts may need to be recognized. Any such resulting changes in revenues and reductions in margins or contract losses could be material to our results of operations.

In 2010, during the period since our acquisition of shares that we didn't previously own (May 12, 2010), GridSense recorded approximately $2.4 million of revenue representing approximately 7% of our consolidated revenue for the year.

Revenue from sales of GridSense monitoring equipment is recognized at the time title to the equipment and significant risks of ownership pass to the customer, which is generally upon shipment when all significant contractual obligations have been satisfied and collection is reasonably assured. Revenue from customer support services on monitoring equipment includes sales of parts and servicing of equipment. Sales of parts revenue is recognized when the parts are shipped to the customer or when the part is installed in the customer's equipment. Servicing of equipment revenue is recognized as the related service work is performed.

Foreign Currency Transactions

The currency of the primary economic environment in which our corporate headquarters and our U.S. subsidiaries operate is the United States dollar ("dollar"). Accordingly, the Company and all of its U.S. subsidiaries use the dollar as their functional currency.

DSIT's functional currency is the New Israeli Shekel ("NIS") while GridSense's functional currency for its Australian operations is the Australian dollar ("AUS$"). In the year ended December 31, 2010, 32% of our consolidated revenues (34% in the year ended December 31, 2009) came from our DSIT subsidiary while 7% of our consolidated revenue in the year ended December 31, 2010 came from GridSense's Australian subsidiary. Their financial statements have been translated using the exchange rates in effect at the balance sheet date. Statements of operations amounts have been translated using the average exchange rate for the year or the specific exchange rate on the date of a specific transaction. All exchange gains and losses denominated in non-functional currencies are reflected in finance expense, net in the consolidated statement of operations when they arise.

Stock-based Compensation

We recognize share-based compensation expense based on the fair value recognition provision of applicable accounting principles, using the Black-Scholes option valuation method. Accordingly, we are required to measure the cost of employee services received in exchange for an award of equity instruments based on the grant-date fair value of the award and to recognize that cost over the period during which an employee is required to provide service in exchange for the award. Under the Black-Scholes method, we make assumptions with respect to the expected lives of the options that have been granted and are outstanding, the expected volatility and the dividend yield percentage of our common stock and the risk-free interest rate at the respective dates of grant.

The expected volatility factor used to value stock options in 2010 was based on the historical volatility of the market price of the Company's common stock over a period equal to the estimated weighted average life of the options. For the expected term of the option, we used an estimate of the expected option life based on historical experience. The risk-free interest rate used is based upon U.S. Treasury yields for a period consistent with the expected term of the options. Historically, we have not paid dividends and we do not anticipate paying dividends in the foreseeable future; accordingly, our expected dividend rate is zero. We recognize this expense on an accelerated basis over the requisite service period. Due to the numerous assumptions involved in calculating share-based compensation expense, the expense recognized in our consolidated financial statements may differ significantly from the value realized by employees on exercise of the share-based instruments. In accordance with the prescribed methodology, we do not adjust our recognized compensation expense to reflect these differences. Recognition of share-based compensation expense had, and will likely continue to have, a material effect on our selling, general and administrative and other items within our consolidated statements of operations and also may have a material effect on our deferred income taxes and additional paid-in capital line items within our consolidated balance sheets. We are also required to use judgment in estimating the amount of stock-based awards that are expected to be forfeited. If actual forfeitures differ significantly from the original estimate, stock-based compensation expense and our results of operations could be materially impacted.

For each of the years ended December 31, 2010 and 2009, we incurred stock compensation expense of approximately $1.1 million and $1.2 million, respectively. The 2010 and 2009 expense each includes approximately $0.5 million of stock compensation expense recorded with respect to stock option grants in our CoaLogix subsidiary.

See Note 18 to the consolidated financial statements for the assumptions used to calculate the fair value of share-based employee compensation.

RESULTS OF OPERATIONS

The following table sets forth selected consolidated statement of operations data as a percentage of our total sales:

	Year ended December 31,				
	2006	2007	2008	2009	2010
Revenues	100%	100%	100%	100%	100%
Cost of sales	67	75	72	62	63
Gross profit	33	25	28	38	37
Research and development expenses	8	7	1	2	3
Selling, general and administrative expenses	112	93	55	44	50
Impairments	1	2	20	10	3
Operating loss	(88)	(78)	(49)	(18)	(19)
Finance expense, net	(1)	(28)	(16)	0	(1)
Gain on early redemption of convertible debentures	—	—	7	—	—
Gain on sale of shares in Comverge	—	409	48	5	—
Gain on IPO of Comverge	—	286	—	—	—
Loss on private placement of equity investments	—	(1)	—	—	—
Gain on investment in GridSense	—	—	—	—	4
Dividends received from EnerTech	—	—	—	—	0
Loss on sale of EnerTech	—	—	—	—	(5)
Other income, net	8	—	—	—	—
Income (loss) from operations before taxes on income	(81)	588	(9)	(14)	(21)
Income tax benefit (expense)	(4)	8	(2)	3	(2)
Income (loss) from operations of the Company and its consolidated subsidiaries	(85)	596	(11)	(11)	(23)
Share of income (losses) in Paketeria	(10)	(21)	(8)	1	—
Share of losses in GridSense	—	—	(5)	0	—
Share of losses in Comverge	(5)	—	—	—	—
Income (loss) from continuing operations	(101)	575	(25)	(10)	(23)
Loss on sale of discontinued operations and contract settlement, net of income taxes	(50)	—	—	—	—
In-process research and development expense recorded in acquisition of discontinued operation	—	—	(13)	—	—
Gain on the deconsolidation of Coreworx	—	—	—	—	5
Income (loss) from discontinued operations, net of income taxes	2	—	(6)	(12)	(55)
Net income (loss) attributable to non-controlling interests	(149)	575	(44)	(23)	(72)
Non-controlling interests	—	—	1	2	2
Net income (loss) attributable to Acorn Energy, Inc.	(149)%	575%	(43)%	(21)%	(70)%

The following table sets forth certain information with respect to revenues and profits of our reportable business segments for the years ended December 31, 2010 and 2009, including the percentages of revenues attributable to such segments. (See Note 22 to our consolidated financial statements for the definitions of our reporting segments.). The column marked “Other” aggregates information relating to miscellaneous operating activities in our DSIT subsidiary, which may be combined for reporting under applicable accounting principles.

	CoaLogix	Energy & Security Sonar Solutions	GridSense	USSI	Other	Total
Year ended December 31, 2010:						
Revenues from external customers	$ 21,450	$ 10,179	$ 2,382	$ 405	$ 1,278	$ 35,694
Percentage of total revenues from external customers	60 %	28 %	7 %	1 %	4 %	100 %
Segment gross profit	7,117	4,380	1,172	23	469	13,161
Depreciation and amortization	1,302	172	242	141	23	1,880
Stock compensation expense	440	42	—	—	—	482
Impairments	—	—	1,166	—	—	1,166
Segment net income (loss) before income taxes	(309)	1,488	(2,852)*	(1,191)	77	(2,787)
Year ended December 31, 2009:						
Revenues from external customers	$ 18,099	$ 7,985	$ —	$ —	$ 1,234	$ 27,318
Percentage of total revenues from external customers	66 %	29 %	—	—	5 %	100 %
Segment gross profit	6,296	3,540	—	—	415	10,251
Depreciation and amortization	1,182	189	—	—	25	1,396
Stock compensation expense	513	2	—	—	—	515
Impairments	2,612	—	—	—	—	2,612
Segment net income (loss) before income taxes	(2,742)	1,051	—	—	64	(1,627)

* includes the impairment charge of $1,166

2010 COMPARED TO 2009

Revenues. Revenues increased by $8.4 million or 31% to $35.7 million in 2010 as compared to sales of $27.3 million in 2009. The increase in revenue was due to the increase in CoaLogix revenue of $3.4 million (19%) to $21.5 million compared to 2009 revenue of $18.1 million. DSIT’s revenue also increased $2.2 million (24%) from $9.2 million to $11.5 million. Our 2010 sales also include $2.4 million and $0.4 million of sales by our recently acquired GridSense and USSI subsidiaries whose results since our acquisition are included in our results for 2010. The increase in CoaLogix revenue was due to continued penetration in the regeneration market combined with the ability to process more SCR modules facilitated by the completion the Steele Creek facility in the third quarter of 2010. The increase in DSIT's Energy & Security Sonar Solutions revenues was due to increased revenues from DSIT's AquaShieldTM projects.

Gross profit. Gross profit in 2010 increased by $2.9 million or 28%, to $13.2 million from $10.3 million in 2009. Both CoaLogix and DSIT recorded increased gross profits ($0.8 million or 13% for CoaLogix and $0.9 million or 23% for DSIT). Our 2010 gross profit also includes $1.2 million of gross profit by our recently acquired GridSense subsidiary whose results since our acquisition are included in our results for 2010. USSI's contribution to our gross profit since our acquisition of it was negligible. The increase in both CoaLogix and DSIT gross profits were almost wholly attributable to the increase in sales as gross margins decreased slightly.

Gross margin for CoaLogix decreased slightly from 35% in 2009 to 33% in 2010 due mostly to startup activities and related increased resources associated with the opening of the Steele Creek facility. Consolidated gross margin at DSIT was 42% in 2010, a slight decrease from 43% in 2009.

Research and development expenses ("R&D"). R&D of $1.1 million in 2010 reflects an increase of $0.6 million or 108% as compared to 2009. Our 2010 R&D includes $0.3 million and $0.4 million of R&D by our recently acquired GridSense and USSI subsidiaries whose results since our acquisition are included in our results for 2010.

Impairments. During 2010, we recorded a non-cash impairment charge of $1.2 million. The 2010 impairment was with respect to previously recorded goodwill associated with our GridSense subsidiary. The impairment was recorded following our annual impairment analysis which is performed in the fourth quarter.

Selling, general and administrative expenses ("SG&A"). SG&A increased from $12.0 million in 2009 by $5.7 million to $17.7 million in 2010. CoaLogix's and DSIT's SG&A costs in 2010 increased by $0.9 million and $0.6 million, respectively, as compared to 2009. Corporate general and administrative costs increased by $1.0 million in 2010 compared to 2009. In addition, our 2010 SG&A includes $2.3 million and $0.8 million of SG&A by our recently acquired GridSense and USSI subsidiaries whose results since our acquisition are included in our results for 2010.

CoaLogix' increased SG&A costs reflect increased overhead costs resulting from the company's growth. DSIT's increased SG&A costs primarily reflect increased marketing costs as well as increased salary costs and non-recurring provisions recorded associated with salary adjustments. Increased corporate general and administrative costs reflect bonuses recorded in the first half of 2010 combined with increased administrative and salary costs and professional and investor relation fees.

Loss on sale of EnerTech. In December 2010, we sold our investment in EnerTech and received proceeds of approximately $1.1 million. We recorded a loss of approximately $1.8 million on the sale. As a result of the sale, we no longer have any commitment to fund capital calls in EnerTech.

Discontinued operations. On December 17, 2010, we entered into an agreement to sell all of our common stock in Coreworx to a management buyout group consisting of Coreworx' management and certain employees and other investors. As a result, all of Coreworx's net activity for 2010 (a loss of $19.5 million) through that date which includes a charge of $9.5 million with respect to the impairment of the goodwill and intangibles associated with Coreworx. In addition, we recorded a gain of $1.8 million on the disposition of Coreworx which is comprised of a gain of $5.9 million on the deconsolidation of Coreworx assets and liabilities less a full provision on Coreworx debt of $4.0 million due to us from Coreworx following the management buyout transaction and an estimated $0.1 million of legal fees.

Net loss. We had a net loss of $25.1 million in 2010 compared with net loss of $5.8 million in 2009. Our loss in 2010 was primarily due to losses associated with our former Coreworx' subsidiary which are reflected in discontinued operations ($19.5 million of losses is losses from discontinued operation partially offset by the gain of $1.8 million on the deconsolidation of Coreworx). In addition, CoaLogix losses of $0.3 million, GridSense and USSI losses since our acquisition of $3.0 million (which includes a non-cash $1.2 million impairment charge against goodwill) and $1.2 million, respectively, corporate expenses of $4.3 million and a loss of $1.8 million on the sale of our EnerTech investment which were partially offset by net income from our DSIT subsidiary of $1.1 million, $0.7 million of non-controlling interests' share in our losses and a gain of $1.3 million we recorded with respect to the step-up of the previous carrying value of our investment in GridSense to fair value in accordance with generally accepted accounting principles for step acquisitions.

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LIQUIDITY AND CAPITAL RESOURCES

As of December 31, 2010, we had working capital of $14.6 million, including $7.4 million of cash and cash equivalents and not including current and non-current restricted deposits of $2.0 million (of which approximately $0.3 million has already been released). Net cash used in the year ending December 31, 2010, was $3.6 million, which included $6.4 million used in operating activities from continuing operations.

The primary use of cash in operating activities from continuing operations during 2010 was the cash used in operations in our corporate operations of $3.8 million. In addition, our CoaLogix, GridSense and USSI subsidiaries used $0.6 million, $1.0 and $1.2 million, respectively, in their operating activities in 2010. DSIT generated approximately $0.2 million of cash from its operating activities during 2010.

Net cash of $10.3 million was used in investing activities during 2010. Our primary uses of cash during 2010 were (1) $8.5 million used for the acquisition of property and equipment (primarily at CoaLogix for its new Steele Creek facility), (2) approximately $1.4 million used in the acquisition of GridSense (net of cash acquired), and (3) $0.9 million used to fund capitals call at EnerTech. These uses of cash were partially offset by the proceeds of $1.1 million from the sale of our interests in EnerTech at the end of 2010.

Net cash of $19.5 million was provided for in financing activities, primarily from the two financing transactions we had in 2010 which netted us approximately $15.2 million after transaction costs. In addition, $3.0 million of cash from financing activities was provided by an investment made by EnerTech and CoaLogix management in CoaLogix, $0.2 million of proceeds from the exercise of warrants and employee stock options and $1.1 million from the proceeds of short-term and long-term borrowings (net of repayments).

At December 31, 2010, DSIT had approximately $1.1 million in Israeli credit lines available to it from two Israeli banks (approximately $564,000 from each bank), nearly all of which was then being used. DSIT's credit lines at one bank are available to it until June 2011 and at the second bank until January 2012. The credit lines at the bank whose term expires in June 2011 are expected to be renewed for another year at terms similar to current terms. The lines of credit are denominated in NIS and bear interest at a weighted average rate of the Israeli prime rate per annum plus 3.0%. The Israeli prime rate fluctuates and as of December 31, 2010 was 3.5%. The lines-of-credit are subject to maintaining certain financial covenants. At December 31, 2010, DSIT was in compliance with its financial covenants. The Company has a floating lien and provided guarantees with respect to DSIT's outstanding lines of credit.

As at December 31, 2010, DSIT also has an outstanding term loan from an Israeli bank in the amount of approximately $431,000. The loan is denominated in NIS and bears interest at the rate of the Israeli prime rate per annum plus 0.9%. The loan is to be repaid over a period of 48 months of equal payments of approximately $13,000 per month (principal and interest).

As collateral for the term-loan, DSIT has deposited with an Israeli bank approximately $85,000 as a non-current restricted deposit. In addition to this restricted deposit, DSIT has also deposited with two Israeli banks approximately $1.0 million as collateral for various performance and bank guarantees for various projects as well as for its credit facilities at the banks. DSIT expects that these deposits will be released during 2011, but expects to redeposit a majority of these funds again as collateral for new guarantees for new projects and for renewing its credit facilities.

On February 28, 2011, DSIT had approximately $1.5 million of cash of which $1.4 million was restricted ($1.3 million current and $0.1 million non-current) and was utilizing approximately $600,000 of its lines-of-credit. We believe that DSIT will have sufficient liquidity to finance its activities from cash flows from its own operations over the next 12 months. This is based on continued utilization of its line-of-credit and expected continued improvement of operating results from anticipated growth in sales.

In July, 2010, the subsidiaries of CoaLogix executed an amendment of its credit facility which extended and increased its credit availability to a $4.0 million formula based line-of-credit, a $1.0 million non-formula based line-of-credit and $1.0 million non-formula based letter of credit. The credit facility expires June 30, 2011 and carries an interest rate of the greater of 1.50% above prime rate or 5.50% on the formula line of credit and the greater of 2.00% above prime rate or 6.00% on the non-formula line of credit. The U.S. prime rate at December 31, 2010 was 3.25%. CoaLogix expects to be able to renew the credit for another year at terms similar to current terms. The maximum amount of outstanding credit under the facility is $5.0 million. At December 31, 2010, CoaLogix was utilizing $200,000 of the formula based line-of-credit. The credit facility is subject to certain financial covenants. CoaLogix was in compliance with its financial covenants at December 31, 2010. On February 28, 2011, CoaLogix had $1.4 million (including approximately $0.6 million of restricted cash) of cash on hand and was utilizing approximately $0.4 million of its lines-of-credit. We believe that CoaLogix will have sufficient liquidity to finance its operating activities and bank financing over the next 12 months. This is based on continued utilization of its line-of-credit and expected continued improvement of operating results from anticipated growth in sales.

We expect that GridSense will continue to require additional working capital support in order to finance its working capital needs in 2011. During the period from January 1, 2011 – February 28, 2011, we have lent GridSense $250,000. Additional support for GridSense for 2011 may be in the form of a bank line, new investment by others, additional investment by Acorn, or a combination of the above. There is no assurance that such support will be available from such sources in sufficient amounts, in a timely manner and on acceptable terms. The availability and amount of any additional investment from Acorn in GridSense may be limited by the working capital needs of Acorn's corporate activities and other operating companies.

USSI currently has no other sources of financing other than its internally generated sales and the funds from the exercise of our options. Since January 1, 2011, we have invested $1.0 million in USSI through the exercise of our options. As of February 28, 2011, USSI had cash on hand of approximately $1.0 million. We have another option to invest an additional $1.5 million on May 31, 2011. If we do not exercise this option, we have no assurance that USSI will not need additional financing from time-to-time to finance its working capital needs. Additional financing for USSI in 2011 may be in the form of a bank line, new investment by others, additional investment by Acorn, or a combination of the above. There is no assurance that such support will be available from such sources in sufficient amounts, in a timely manner and on acceptable terms. The amount of any additional investment from us in USSI may be limited by the working capital needs of our corporate activities and other operating companies.

As at February 28, 2011, the Company's corporate operations (not including cash at any of our subsidiaries) had a total of approximately $4.8 million in unrestricted cash and cash equivalents reflecting a $1.5 million decrease from the balance as of December 31, 2010. The decrease in unrestricted corporate cash is due primarily to a $1.0 million investment in USSI as a result of our option exercises, loans of $250,000 to GridSense and approximately $550,000 of corporate expenses. Those expenditures were partially offset by the release of $300,000 of restricted cash.

We believe that our current cash plus the cash generated from operations and borrowing from available lines of credit, if necessary will provide more than sufficient liquidity to finance the activities of Acorn and its operating companies for the foreseeable future and for the next 12 months in particular.

Contractual Obligations and Commitments

The table below provides information concerning obligations under certain categories of our contractual obligations as of December 31, 2010.

CASH PAYMENTS DUE TO CONTRACTUAL OBLIGATIONS

	Years Ending December 31, (in thousands)				
	Total	2011	2012-2013	2014-2015	2016 and thereafter
Bank debt and utilized lines of credit	$1,698	$1,405	$293	$—	$—
Capital leases obligations and other debt	222	127	54	41	—
Operating leases	4,657	1,348	1,603	1,040	666
Potential severance obligations (1)	3,749	34	—	1,528	2,187
Purchase commitments	50	50	—	—	—
Royalties	155	5	30	70	50
Total contractual cash obligations	$10,531	$2,969	$1,980	$2,679	$2,903

We expect to finance these contractual commitments from cash currently on hand and cash generated from operations.

(1) Under Israeli law and labor agreements, DSIT is required to make severance payments to dismissed employees and to employees leaving employment under certain other circumstances. The obligation for severance pay benefits, as determined by the Israeli Severance Pay Law, is based upon length of service and last salary. These obligations are substantially covered by regular deposits with recognized severance pay and pension funds and by the purchase of insurance policies. As of December 31, 2010, we accrued a total of $3.7 million for potential severance obligations to our Israeli employees of which approximately $2.5 million was funded.

Certain Information Concerning Off-Balance Sheet Arrangements

Our DSIT subsidiary provides various performance, advance and tender guarantees as required in the normal course of its operations. As at December 31, 2010, such guarantees totaled approximately $3.1 million and a majority were due to expire through 2011. As security for a portion of these guarantees, Acorn has deposited with an Israeli bank $300,000 and DSIT has deposited approximately $1.0 million which is shown as restricted cash on our Consolidated Balance Sheets. As DSIT's restricted cash is released from the completion of projects and the end of the guarantees, it expects to provide additional security deposits for new guarantees for new projects throughout the 2011 calendar year.

Our CoaLogix subsidiary provides various performance, advance and tender guarantees as required in the normal course of its operations. As at December 31, 2010, such guarantees totaled approximately $3.2 million and were due to expire through 2011. As a security for a portion of these guarantees, the Company has deposited with a U.S. bank approximately $0.6 million which is shown as a restricted deposit on the Company's Consolidated Balance Sheets. The Company expects the entire restricted deposit to be released in 2011.

Impact of Inflation and Interest Rate & Currency Fluctuations

In the normal course of business, we are exposed to fluctuations in interest rates on our lines-of-credit ($1.1 million available) and long-term debt incurred ($0.4 million balance at December 31, 2010) to finance our operations in Israel. Such lines-of-credit and loan bear interest at interest rates that are linked to the Israeli prime rate (3.5% at December 31, 2010 and 2.5% at December 31, 2009).

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Our non-US dollar monetary assets and liabilities (net assets of approximately $0.1 million at December 31, 2010) in Israel are exposed to fluctuations in exchange rates. Furthermore, $0.4 million of our backlog of projects are contracts and orders that are denominated in NIS.

Historically, a majority of DSIT's sales have been denominated in dollars or denominated in NIS linked to the dollar. Such sales transactions are negotiated in dollars; however, for the convenience of the customer they are often settled in NIS. These transaction amounts are linked to the dollar between the date the transactions are entered into until the date they are effected and billed. From the time these transactions are effected and billed through the date of settlement, amounts are primarily unlinked. As DSIT increases its sales to customers outside of Israel, a greater portion of its receipts from customers will be settled in dollars. In 2011, we expect a significant portion of DSIT's sales to be settled in dollars. A significant majority of DSIT's expenses in Israel are in NIS (primarily labor costs), while a portion is in dollars or dollar-linked NIS.

The dollar cost of our operations in Israel may be adversely affected in the future by a revaluation of the NIS in relation to the dollar. In 2010 the appreciation of the NIS against the dollar was 6.0% while in 2009 it was 0.7%.

As of December 31, 2010, virtually all of DSIT's monetary assets and liabilities that were not denominated in dollars or dollar-linked NIS were denominated in NIS. In the event that in the future we have material net monetary assets or liabilities that are not denominated in dollar-linked NIS, such net assets or liabilities would be subject to the risk of currency fluctuations. DSIT purchases forward contracts to attempt to reduce its exposure to currency fluctuations.

In addition, our non-US dollar assets and liabilities (net liability of approximately $0.8 million at December 31, 2010) in Australia at our GridSense subsidiary's Australian operations are also exposed to fluctuations in exchange rates. The dollar cost of our operations in Australia may also be adversely affected in the future by a revaluation of the Australian dollar in relation to the U.S. dollar. In 2010 the appreciation of the Australian dollar against the U.S. dollar was 13.3%.

SUMMARY QUARTERLY FINANCIAL DATA (Unaudited)

The following table sets forth certain of our unaudited quarterly consolidated financial information for the years ended December 31, 2009 and 2010. This information should be read in conjunction with our Consolidated Financial Statements and the notes thereto.

	2009				2010			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(in thousands, except per share amounts							
Revenues	$ 7,451	$ 6,705	$ 5,078	$ 8,084	$ 7,084	$ 8,227	$ 9,496	$ 10,887
Cost of sales	4,827	4,146	3,419	4,675	3,970	4,749	6,783	7,031
Gross profit	2,624	2,559	1,659	3,409	3,114	3,478	2,713	3,856
Research and development expenses, net	85	165	136	157	48	189	282	612
Impairments	70	10	—	2,612	—	—	—	1,166
Selling, general and administrative expenses	2,784	2,946	2,960	3,338	4,147	4,662	4,629	4,247
Operating loss	(315)	(562)	(1,437)	(2,698)	(1,081)	(1,373)	(2,198)	(2,169)
Finance income (expense), net	(102)	(92)	118	(10)	—	(197)	48	(90)
Gain on investment in GridSense	—	—	—	—	—	1,327	—	—
Gain on sale of Comverge shares	417	810	176	—	—	—	—	—
Distribution received from EnerTech	—	—	—	—	135	—	—	—
Loss on the sale of EnerTech	—	—	—	—	—	—	—	(1,821)
Income (loss) before taxes on income	—	156	(1,143)	(2,708)	(946)	(243)	(2,150)	(4,080)
Income tax benefit (expense)	—	—	72	647	(75)	(123)	(372)	(101)
Income (loss) from operations of the Company and its consolidated subsidiaries	—	156	(1,071)	(2,061)	(1,021)	(366)	(2,522)	(4,181)
Share of income in Paketeria	—	—	263	—	—	—	—	—
Share of loss in GridSense	(129)	—	—	—	—	—	—	—
Net income (loss) from continuing operations	(129)	156	(808)	(2,061)	(1,021)	(366)	(2,522)	(4,181)
Gain on deconsolidation of Coreworx	—	—	—	—	—	—	—	1,834
Income (loss) from discontinued operations, net of income taxes	(827)	224	(512)	(2,219)	(2,152)	(3,051)	(2,418)	(11,873)
Net income (loss)	(956)	380	(1,320)	(4,280)	(3,173)	(3,417)	(4,940)	(14,220)
	(107)	(37)	96	468	50	265	373	(26)

Net (income) loss attributable to non-controlling interests								
Net income (loss) attributable to Acorn Energy, Inc	$ (1,063)	$ 343	$ (1,224)	$ (3,812)	$ (3,123)	$ (3,152)	$ (4,567)	$ (14,246)
Basic net income (loss) per share attributable to Acorn Energy Inc. shareholders:								
From continuing operations	$ (0.02)	$ 0.01	$ (0.06)	$ (0.14)	$ (0.08)	$ (0.01)	$ (0.14)	$ (0.26)
From discontinued operations	(0.07)	0.02	(0.05)	(0.19)	(0.17)	(0.20)	(0.15)	(0.62)
Total attributable to Acorn Energy Inc. shareholders.	$ (0.09)	$ 0.03	$ (0.11)	$ (0.33)	$ (0.25)	$ (0.21)	$ (0.29)	$ (0.88)
Diluted net income (loss) per share attributable to Acorn Energy Inc. shareholders:								
From continuing operations	$ (0.02)	$ 0.01	$ (0.06)	$ (0.14)	$ (0.08)	$ (0.01)	$ (0.14)	$ (0.26)
From discontinued operations	(0.07)	0.02	(0.05)	(0.19)	(0.17)	(0.20)	(0.15)	(0.62)
Total attributable to Acorn Energy Inc. shareholders.	$ (0.09)	$ 0.03	$ (0.11)	$ (0.33)	$ (0.25)	$ (0.21)	$ (0.29)	$ (0.88)
Weighted average number of shares outstanding attributable to Acorn Energy Inc. – basic	11,535	11,377	11,186	11,692	12,498	15,161	15,721	16,254
Weighted average number of shares outstanding attributable to Acorn Energy Inc. – diluted	11,535	11,553	11,186	11,692	12,498	15,161	15,721	16,254

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Not applicable.

ITEM 8.FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Furnished at the end of this report commencing on page F-1.

ITEM 9.CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9ACONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Act") as of the end of the period covered by this annual report on Form 10-K. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that these disclosure controls and procedures were effective as of such date, at a reasonable level of assurance, in ensuring that the information required to be disclosed by our company in the reports we file or submit under the Act is (i) accumulated and communicated to our management (including the Chief Executive Officer and Chief Financial Officer) in a timely manner, and (ii) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the criteria in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation, management has concluded that our internal control over financial reporting was effective as of December 31, 2010. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. The effectiveness of our internal controls over financial reporting as of December 31, 2010, has been audited by Freidman LLP, our independent registered public accounting firm, as stated in their attestation report contained in their report, which is included herein.

On February 23, 2010 and May 12, 2010, Acorn Energy, Inc. completed the acquisition of US Sensor Systems Inc. and GridSense Pty and GridSense Inc. (together "GridSense"), respectively. Management excluded from its assessment of the effectiveness of Acorn Energy Inc.'s internal control over financial reporting as of December 31, 2010, US Sensor Systems Inc.'s and GridSense's internal control over financial reporting associated with total revenues of approximately $0.4 million and $2.4 million, respectively, included in the consolidated financial statements of Acorn Energy, Inc. for the year ended December 31, 2010. Our exclusion of US Sensor Systems Inc. and GridSense's internal control over financial reporting is allowed by the Securities and Exchange Commission's response to Question No. 2

contained in the Frequently Asked Questions entitled Management’s Report on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, Frequently Asked Questions (revised October 6, 2004).

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended) during our last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B.OTHER INFORMATION

None.

PART III

ITEM 10.DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Directors and Executive Officers

Set forth below is certain information concerning the directors and certain officers of the Company:

Name	Age	Position
John A. Moore	45	Director, Chairman of the Board, President and Chief Executive Officer
George Morgenstern	77	Founder, Chairman Emeritus; Chairman of the Board of our DSIT Solutions Ltd. subsidiary ("DSIT")
Samuel M. Zentman	66	Director and member of our Audit Committee
Richard J. Giacco	58	Director
Richard Rimer	45	Director and member of our Audit Committee
Joe Musanti	53	Director and Chairman of our Audit Committee
Steven Ledger	53	Director
William J. McMahon	55	Chief Executive Officer and President of CoaLogix
Benny Sela	63	Chief Executive Officer and President of DSIT
Lindon Shiao	36	Chief Executive Officer and President of GridSense
Jim Andersen	54	Chief Executive Officer, Chief Financial Officer and President of USSI
Michael Barth	50	Chief Financial Officer of the Company and DSIT
Joe B. Cogdell, Jr.	57	Vice President, General Counsel & Secretary

John A. Moore has been a director and President and Chief Executive Officer of our Company since March 2006. Mr. Moore was elected Chairman of the Board on March 25, 2009. Mr. Moore also served as a director of Comverge from March 2006 through January 2008. Mr. Moore is the President and founder of Edson Moore Healthcare Ventures, which he founded to acquire $150 million of drug delivery assets from Elan Pharmaceuticals in 2002. Mr. Moore was Chairman and EVP of ImaRx Therapeutics, a drug and medical therapy development company, from February 2004 to February 2006 and Chairman of Elite Pharmaceuticals from February 2003 to October 2004. He is currently a member of the Board of Directors of Voltaix, Inc., a leading provider of specialty gases to the solar and semiconductor industries. He was CEO of Optimer, Inc. (a research based polymer development company) from inception in 1994 until 2002 and Chairman from inception until its sale in February 2008 to Sterling Capital. Mr.

Moore serves as a director on the board of directors for each of our subsidiaries.

Key Attributes, Experience and Skills. Mr. Moore brings his strategic vision for our Company to the Board together with his leadership and business, deal making and investor relations skills. Mr. Moore has an immense knowledge of our Company and the energy technology industry which is beneficial to the Board. Mr. Moore’s service as Chairman and CEO of the Company bridges a critical gap between the Company’s management and the Board, enabling the Board to benefit from management’s perspective on the Company’s business while the Board performs its oversight function.

George Morgenstern, founder of the Company, has been a director since 1986. Mr. Morgenstern served as Chairman of the Board from June 1993 through March 2009 and has served as Chairman Emeritus since March 2009. Mr. Morgenstern served as our President and Chief Executive Officer from our incorporation in 1986 until March 2006. Mr. Morgenstern also serves as Chairman of the Board of DSIT. Mr. Morgenstern served as a member of the Board of Directors of Comverge from October 1997 to March 2006 and as Chairman until April 2003.

Key Attributes, Experience and Skills. Mr. Morgenstern, as founder of the Company, brings a unique perspective to the Board. Mr. Morgenstern has over 50 years of experience in all aspects of the computer software and systems industry and has special knowledge of the business environment in Israel. Mr. Morgenstern is an accomplished businessman experienced in fostering growth of developing companies. Mr. Morgenstern’s deep knowledge of our Company and his leadership and management experience are valuable resources to the Company. Mr. Morgenstern serves as Chairman of the Board of DSIT, and has a strong understanding of DSIT’s business and industry segment.

Samuel M. Zentman has been one of our directors since November 2004. From 1980 until 2006, Dr. Zentman was the president and chief executive officer of a privately-held textile firm, where he also served as vice president of finance and administration from 1978 to 1980. From 1973 to 1978, Dr. Zentman served in various capacities at American Motors Corporation. He holds a Ph.D. in Complex Analysis. Dr. Zentman serves on the boards of Powersafe Technology Corp. as well as several national charitable organizations devoted to advancing the quality of education.

Key Attributes, Experience and Skills. Dr. Zentman’s long-time experience as a businessman trained together with his experience with computer systems and software enables him to bring valuable insights to the Board. Dr. Zentman has a broad, fundamental understanding of the business drivers affecting our Company, in particular our DSIT subsidiary. Dr. Zentman also brings leadership and oversight experience to the Board.

Richard J. Giacco was elected to the Board in September 2006. Mr. Giacco has been President of Empower Materials, Inc., a manufacturer of carbon dioxide based thermoplastics, since January 1999. Mr. Giacco was the Managing Member of Ajedium Film Group, LLC, a manufacturer of thermoplastic films from its inception until its sale in 2008. Mr. Giacco served as Associate General Counsel of Safeguard Scientifics, Inc. from 1984 to 1990.

Key Attributes, Experience and Skills. Mr. Giacco brings strong operational and strategic background and valuable business, leadership and management experience to our Company. Mr. Giacco’s experience helping to lead the growth and ultimate sale of a family business provides strategic vision and insights as the Company implements its growth strategies. Mr. Giacco also brings legal experience to the Board, and he serves as a director of our CoaLogix subsidiary.

Richard Rimer was elected to the Board in September 2006. Mr. Rimer is a principal of Top Quartile Partners, an investment fund. From 2001 to 2006, Mr. Rimer was a Partner at Index Ventures, a private investment company. He formerly served on the boards of Direct Medica, a provider of marketing services to pharmaceutical companies, and Addex Pharmaceuticals, a pharmaceutical research and development company. Prior to joining Index Ventures, Mr. Rimer was the co-founder of MediService, the leading direct service pharmacy in Switzerland and had served as a consultant with McKinsey & Co.

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Key Attributes, Experience and Skills. Mr. Rimer brings to the Board broad business experience, and a deep understanding of capital markets. As a successful entrepreneur, Mr. Rimer founded a company in Holland which he successfully sold and went on to found MediService – one of Europe's leading mail service pharmacies (sold to Galenica GALN-SW). While at Index Ventures, Mr. Rimer led work on multiple deals including sourcing, due diligence, deal structuring and negotiation, monitored growth of portfolio companies, syndicated subsequent financings, supported exit negotiations as well as helped with key recruits. These experiences enable Mr. Rimer to bring valuable resources to the Company in addition to Mr. Rimer's leadership, analytical skills and broad familiarity with international and cross-border transactions.

Joe Musanti was elected to the Board in September 2007. Since 2006, Mr. Musanti has served as President of Main Tape Inc., a leading manufacturer of surface protection film and paper products, based in Cranbury, New Jersey. From 2003 to 2006, prior to becoming President, Mr. Musanti served as Vice President Finance of Main Tape. Prior to that, Mr. Musanti was Vice President Finance of Rheometric Scientific, Inc., a manufacturer of thermal analytical instrumentation products where he held significant domestic and foreign, operational, managerial, financial and accounting positions.

Key Attributes, Experience and Skills. Mr. Musanti's training and extensive experience in financial management at both public and private companies provide the Board with valuable insights and skills necessary to lead the Audit Committee. Mr. Musanti's strong operational and business background complement his accounting and finance experience, and are valuable resources to the Board as it exercises its oversight duties and support of the Company's growth strategies.

Steven Ledger was elected to the Board on July 29, 2010. Mr. Ledger has served as Managing Member of Tamalpais Partners LLC since January 2009. Prior to that, Mr. Ledger was founder and manager of MCF Fund LP from October 2002 through December 2008, and co-founding managing partner of eCompanies Venture Group from September 1999 through December 2002. From January 1994 through December 1999, Mr. Ledger served as co-founder and manager of Storie Partners LP. Mr. Ledger also served as portfolio manager for Kayne Anderson Investment Management from October 1989 through September 1993 and for Fidelity Management & Research from May 1983 through September 1989. Mr. Ledger earned a B.A. in Economics from the University of Connecticut in 1982. Mr. Ledger also serves as a director of Crossroads Systems, Inc., a global provider of data security and protection systems.

Key Attributes, Experience and Skills. Mr. Ledger has extensive experience in the financial industry having served in multiple and increasing roles of responsibility over his 27 year career. Mr. Ledger's experience and deep understanding of the financial industry brings these valuable attributes to our board. The Company has regularly, and expects to continue to do so from time-to-time in the future, raise capital, and Mr. Ledger's insight into the financial industry and skills with corporate finance will be valuable to the Company in raising capital and structuring financings. In addition, Mr. Ledger is entrepreneurial minded having founded or co-founded four investment companies, and his skills as a businessman will be helpful to the Company particularly in promoting the growth of the Company's operating companies.

William J. McMahon has served as Chief Executive Officer and President of CoaLogix since its creation in November 2007. Mr. McMahon also serves as president of SCR-Tech, LLC, a position he has held since March 2005. Prior to that, Mr. McMahon served as Group Vice President of the Ultrapure Water division of Ionics, Inc. from 2000 to 2004. From 1997 to 2000, he held several executive level positions including Chairman, President and Chief Executive Officer of Pantellos; President and Chief Executive Officer of Stone & Webster Sonat Energy Resources; and President of Stone & Webster Energy Services Inc. From 1978 to 1997, Mr. McMahon held positions at DB Riley, Inc. and at The Babcock & Wilcox Company. Mr. McMahon earned a B.S. degree in Nuclear Engineering from Georgia Institute of Technology and an MBA from Xavier University.

Benny Sela serves as the CEO of DSIT, a position he has held since July 2007. Previously, he held the position of Executive Vice President and head of the company's Real Time Division since 1996. Mr. Sela joined DSIT in February 1989. Prior to that, Mr. Sela served in the Israeli Air Force reaching the position of Lt. Colonel (Ret.). During his service in the Israeli Air Force, Mr. Sela was head of the Electronic Warfare branch, working on both the F-16 and Lavi projects. He holds a B.Sc. in Electrical Engineering, a Masters Degree in Operations Research from Stanford University, and an MBA.

Lindon Shiao serves as CEO and President of GridSense, a position he has held since 2006. Mr. Shiao was a co-founder and principal of Prime Powered Holdings LLC and a main shareholder of Prime Energy Partners Ltd. As an integral member of a team from AES-New Energy, Mr. Shiao co-led the spin-off and growth management of Catalyst PowerPartners LLC as a principal and key member of the operating team. Prior to Catalyst Power, Mr. Shiao led M&A teams at Arthur Andersen supporting buy-side transactions across different industries, including manufacturing, consumer marketing & distribution, healthcare services, and real estate. Mr. Shiao earned a B.S. from the Haas Business School at the University of California at Berkeley, and is a C.P.A.

Jim Andersen serves as CEO, President and CFO of USSI, positions that he has held since he founded USSI in October 2007. Mr. Andersen began his career as an Engineering Officer on US Navy Nuclear Submarines, and upon leaving the Navy, went on to hold a variety of technical and senior management positions in high technology companies, including Westinghouse, Whitehall/Hydroscience, Litton Industries and Northrop Grumman. He was the Business Unit Director for Litton's Fiber Optic Acoustic Systems, heading the company's fastest growing business unit from 1995 to 2002. At Litton, he landed the first major (and still the largest) production contract for fiber optic sensors, a sonar system on the US Navy's newest Virginia class submarines, valued at over $400 million. Prior to that, Mr. Andersen held technical and executive positions in companies that developed systems for oil exploration and ocean applications.

Michael Barth has been our Chief Financial Officer and the Chief Financial Officer of DSIT since December 2005. For the six years prior, he served as Deputy Chief Financial Officer and Controller of DSIT. Mr. Barth is a Certified Public Accountant in both the U.S. and Israel and has over twenty years of experience in public and private accounting.

Joe B. Cogdell, Jr. joined Acorn and CoaLogix as Vice President, General Counsel and Secretary of each corporation on January 2, 2009. For the twenty years prior, Mr. Cogdell was a member of the Corporate and Securities Practice Group of the law firm Womble Carlyle Sandridge & Rice, PLLC in the firm's Charlotte, North Carolina office. Mr. Cogdell has over thirty years experience as a corporate and business lawyer.

Audit Committee; Audit Committee Financial Expert

The Company has a separately designated standing Audit Committee established and administered in accordance with SEC rules. The three members of the Audit Committee are Joe Musanti, Richard Rimer and Samuel M. Zentman. The Board of Directors has determined that each member of the Audit Committee meets the independence criteria prescribed by NASDAQ governing the qualifications of for audit committee members and each Audit Committee member meets NASDAQ's financial knowledge requirements. Our Board has determined that Joe Musanti qualifies as an "audit committee financial expert," as defined in the rules and regulations of the SEC.

Compliance with Section 16(a) of the Securities Exchange Act of 1934

Section 16(a) of the Securities Exchange Act of 1934 (the "Exchange Act") requires our executive officers and directors, and persons who own more than 10% of a registered class of our equity securities to file reports of ownership and changes in ownership with the SEC. These persons are also required by SEC regulation to furnish us with copies of all Section 16(a) forms they file. Based solely on our review of such forms or written representations from certain reporting persons, we believe that during 2010 our executive officers and directors complied with the filing requirements of Section 16(a) except that a Form 4 related to the purchase of shares by Mr. Moore was not timely filed due to an electronic submission error.

We have implemented measures to assure timely filing of Section 16(a) reports by our executive officers and directors in the future.

Code of Ethics

We have adopted a code of ethics that applies to our principal executive officer, principal financial officer, and principal accounting officer or controller, and/or persons performing similar functions. Our code of ethics may be accessed on the Internet at http://www.acornenergy.com/rsc/docs/55.pdf

ITEM 11.EXECUTIVE COMPENSATION

Summary Compensation Table

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($)		All Other Compensation ($)		Total ($)
John A. Moore								
President and CEO	2010	364,904	—	—		12,000	(1)	376,904
	2009	350,000	160,000	103,652	(2)	12,000	(1)	625,652
William J. McMahon								
CEO and President of CoaLogix								
and SCR-Tech	2010	280,000	93,500	—		13,725	(3)	387,225
	2009	250,000	136,880	175,574	(4)	13,200	(3)	575,654
Benny Sela								
CEO and President of DSIT	2010	195,432	85,995	25,644	(5)	80,633	(6)	387,704
	2009	167,259	70,688	18,041	(7)	66,320	(6)	322,308
David Beatson								
CTO and VP of Corporate								
Development (8)	2010	212,308	—	474,864	(9)	5,538	(1)	692,710

(1) Consists of automobile expense allowance.

(2) Represents the grant date fair value calculated in accordance with applicable accounting principles with respect to 75,000 stock options granted on February 20, 2009 with an exercise price of $2.51.The fair value of the options was determined using the Black-Scholes option pricing model using the following assumptions: (i) a risk-free interest rate of 1.8% (ii) an expected term of 4.5 years (iii) an assumed volatility of 68% and (iv) no dividends.

(3) Represents 401k contributions.

(4) Represents the grant date fair value calculated in accordance with applicable accounting principles with respect to 40,513 CoaLogix stock options granted on April 8, 2009 with an exercise price of $7.20. The fair value of the options was determined using the Black-Scholes option pricing model using the following assumptions: (i) a risk-free interest rate of 1.8% (ii) an expected term of 6.1 years (iii) an assumed volatility of 65% and (iv) no dividends.

(5) Represents the grant date fair value calculated in accordance with applicable accounting principles with respect to 10,000 stock options granted on December 27, 2010 with an exercise price of $4.09 per share. The fair value of the options was determined using the Black-Scholes option pricing model using the following assumptions: (i) a risk-free interest rate of 2.02% (ii) an expected term of 6.3 years (iii) an assumed volatility of 67% and (iv) no dividends.

(6) Consists of contributions to severance and pension funds and automobile fringe benefits. Contributions to severance and pension funds are made on substantially the same basis as those made on behalf of other Israeli executives.

(7) Represents the grant date fair value calculated in accordance with applicable accounting principles with respect to 20,000 stock options granted on February 12, 2009 with an exercise price of $2.51 per share. The fair value of the options was determined using the Black-Scholes option pricing model using the following assumptions: (i) a risk-free interest rate of 0.95% (ii) an expected term of 1.8 years (iii) an assumed volatility of 68% and (iv) no dividends.

(8) Appointed as Chief Technology Officer and Vice President of Corporate Development commencing January 18, 2010. Mr. Beatson was terminated on November 4, 2010.

(9) Represents the grant date fair value calculated in accordance with applicable accounting principles with respect to 120,000 stock options granted on January 18, 2010 with an exercise price of $6.13 per share. The fair value of the options was determined using the Black-Scholes option pricing model using the following assumptions: (i) a risk-free interest rate of 3.24% (ii) an expected term of 6.3 years (iii) an assumed volatility of 68% and (iv) no dividends.

Employment Arrangements

The employment arrangements of each named executive officer and certain other officers are described below.

John A. Moore became our President and Chief Executive Officer in March 2006. In March, 2008, we entered into a three-year Employment Agreement with Mr. Moore. Under the terms of the Employment Agreement, Mr. Moore's initial base salary was $325,000 per annum, retroactive to January 1, 2008, increasing to $350,000 per annum on the first anniversary of the Employment Agreement and increasing to $375,000 per annum on the second anniversary. Effective November 1, 2010, Mr. Moore voluntarily reduced his annual salary to $300,000 per annum. In March 2011, we entered into a one-year extension of the Employment Agreement with Mr. Moore at the reduced salary of $300,000 per annum. Mr. Moore is eligible to receive an annual cash bonus of up to $200,000, based upon the attainment of agreed upon personal and company performance goals and milestones for the preceding fiscal year, as determined by the Board. Under the Employment Agreement, Mr. Moore is also entitled to (i) the employee benefits generally made available to the registrant's executive officers, (ii) short-term and long-term disability insurance for the benefit of Mr. Moore, and (iii) a monthly automobile expense allowance of $1,000. Under the Employment Agreement, Mr. Moore was also granted non-qualified stock options to purchase 200,000 shares of common stock at an exercise price of $5.11 per share. The options vest in equal quarterly installments over a four-year period, commencing 90 days from the date of grant and expire in March 2018. In February 2009, in lieu of a bonus for 2008, Mr. Moore was awarded 75,000 stock options exercisable until February 20, 2014 at an exercise price of $2.51 per share, exercisable immediately as to one-fourth of the options, with the remainder to vest in equal installments on June 30, September 30 and December 31, 2009. Mr. Moore received a bonus of $160,000 for 2009 that was paid in 2010. In March 2011, in lieu of a bonus for 2010, Mr. Moore was awarded 66,666 stock options exercisable until March 14, 2016 at an exercise price of $3.70 per share, exercisable immediately as to one-fourth of the options, with the remainder to vest in equal installments on June 30, September 30 and December 31, 2011.

David T. Beatson has served as Chief Technology Officer and Vice-President of Corporate Development January 2010 until his termination in November 2010. Mr. Beatson's employment terms were based on an employment agreement signed effective January 18, 2010 between Mr. Beatson and the Company. The agreement was on an "at-will" basis. Mr. Beatson's employment agreement called for a base salary of $230,000 per year with a potential 40% annual bonus based upon the attainment of pre-agreed objectives and goals. Mr. Beatson received no bonus for 2010. Mr. Beatson also received a car allowance of $500 per month, reimbursement of his monthly premium cost for health insurance and four weeks of paid vacation. Mr. Beatson also received 120,000 non-qualified options of the Company's common stock under the Acorn Energy 2006 Stock Incentive Plan. Mr. Beatson was terminated prior to the vesting of those options.

William J. McMahon has served as Chief Executive Officer and President of CoaLogix since the Company's acquisition of SCR-Tech and its related companies on November 7, 2007. Mr. McMahon employment terms are based on employment agreement signed effective January 1, 2007 between Mr. McMahon and SCR-Tech's former parent company. The employment agreement was subsequently assumed and modified on November 7, 2007 in conjunction with the Company's acquisition of SCR-Tech. The agreement has no fixed term and the employment is on an "at-will" basis. Mr. McMahon's employment agreement calls for base salary of $215,000 per year with cost of living increases (a base salary of $280,000 in 2010 which was increased to $305,000 for 2011). In April 2009 and April 2008, Mr. McMahon also received options under the CoaLogix Inc. 2008 Stock Option Plan and a 40% participation in the CoaLogix Capital Appreciation Rights Plan. Under the Capital Appreciation Rights Plan, plan participants are entitled to participate in an award pool based upon the sales proceeds (less sales expenses) attributable to a sale or other change of control of CoaLogix which exceeds an internal rate of return of 30% on the Company's initial investment in CoaLogix of $11,038,200 and any additional capital contributed by Acorn to CoaLogix. If such internal rate of return threshold is met, the award pool under the Capital Appreciation Rights Plan would be equal to 5% of the sales proceeds less sales expenses, the CoaLogix' stockholders' initial investment and any additional capital contributed by the stockholders to CoaLogix. Mr. McMahon is eligible to receive an annual bonus with a target payment equal to 50% of his base salary based upon criteria developed by the board of directors of CoaLogix. The actual bonus payout may be more or less than the target level base upon achievement of annual goals approved by its board of directors. Mr. McMahon's bonus for 2010 was $93,500.

Benny Sela has served as President and Chief Executive Officer of DSIT beginning July 1, 2007. Mr. Sela's employment agreement provided for a base salary which is denominated in Israeli Consumer Price Index ("CPI") linked NIS, equivalent to approximately $195,000 per annum. In addition to his base salary, Mr. Sela is also entitled to receive a bonus payment equal to 1.75% of DSIT's gross profit. Mr. Sela's bonus for 2009 was $70,688 which was paid in 2010. Mr. Sela's bonus for 2010 was $85,995.

Lindon Shiao has served as CEO and President of GridSense since 2006. Mr. Shiao's employment terms are based on employment agreement signed effective October 1, 2002 between Mr. Shiao and GridSense. The agreement has no fixed term and the employment is on an "at-will" basis. For 2010, Mr. Shiao's annual salary was $240,000. During 2010, Mr. Shiao deferred payment of $140,000 of his salary in 2010 to ease GridSense's cash flow burden. Mr. Shiao is expected to receive the deferred salary payment of $140,000 in 2011. Through February 28, 2011, Mr. Shiao has not yet received any of the deferred salary payment. Mr. Shiao did not receive a bonus for 2010.

Jim Andersen has served as CEO, President and CFO of USSI since he founded USSI in October 2007. Mr. Andersen's employment terms are based on employment agreement signed effective November 1, 2007 between Mr. Andersen and USSI. The agreement has no fixed term and the employment is on an "at-will" basis. The agreement does not state any salary or other compensation terms. For 2010, Mr. Andersen's agreed upon annual salary was $150,000, however, Mr. Andersen voluntarily reduced his annual salary from $150,000 to $96,000 in order to conserve cash at USSI. Mr. Andersen did not receive a bonus for 2010.

Michael Barth has served as Chief Financial Officer of the Company and Chief Financial Officer of DSIT beginning December 1, 2005. In August 2009, the Board approved new employment terms for Mr. Barth effective August 1, 2009. According to the terms of the new employment terms, Mr. Barth was entitled to a salary increase from $150,000 to $175,000 per annum retroactive to August 1, 2009. One half of Mr. Barth's salary is fixed in NIS at the November 1, 2007 exchange rate and linked to the Israel CPI and adjusted semi-annually. Mr. Barth's current annual salary following such linkage adjustments is approximately $187,500. Mr. Barth's bonus for 2009 was $75,000 which was paid in 2010. Mr. Barth did not receive a bonus for 2010.

Joe B. Cogdell, Jr. became Vice President, General Counsel and Secretary of each of the Company and CoaLogix commencing January 2, 2009. Mr. Cogdell's initial base salary was $312,000 per annum, and his base salary was increased to $318,240 for 2011. The agreement has no fixed term, and the employment is on an "at-will" basis. He is eligible to receive an annual bonus of up to 30% of his base salary, based upon the attainment of performance goals. Mr. Cogdell's bonus for 2009 was $90,380 which was paid in 2010. Mr. Cogdell's bonus for 2010 was $35,960.

Under the employment agreement, in January 2009 Mr. Cogdell was awarded 120,000 options to purchase Acorn common stock at an exercise price of $1.61 per share, vesting as to 30,000 on the first anniversary of the date of grant and as to the remainder in equal quarterly installments over a three year period following the first anniversary of the date of grant, exercisable through January 5, 2019. Under the employment agreement, Mr. Cogdell will also have the right to participate in any future financing of CoaLogix at the same level and priority as Acorn so long as he is employed. Mr. Cogdell also received options under the CoaLogix Inc. 2008 Stock Option Plan and a participation in the CoaLogix Capital Appreciation Rights Plan. Mr. Cogdell is also entitled to the employee benefits generally made available to other senior executives, officer's liability and legal malpractice insurance, as well as bar and legal association dues and continuing legal education programs. Under the employment agreement, Mr. Cogdell is subject to non-solicitation and non-compete covenants, which continue for 18 months after termination of his employment.

Acorn and CoaLogix have entered into an agreement regarding certain aspects of their joint employment of Mr. Cogdell including allocation of the costs of employment, bonus determinations, termination and severance issues and indemnities. Mr. Cogdell's compensation is currently apportioned 50/50 between Acorn and CoaLogix, subject to periodic review.

Outstanding Equity Awards at 2010 Fiscal Year End

The following tables set forth all outstanding equity awards made to each of the Named Executive Officers that are outstanding at December 31, 2010.

OPTIONS TO PURCHASE ACORN ENERGY, INC. STOCK

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
John A. Moore	350,000	—	2.60	March 31, 2011
	60,000	—	4.53	March 31, 2011
	137,500	62,500(1)	5.11	March 4, 2018
	75,000	—	2.51	February 20, 2014
William J. McMahon	—	—	—	—
Benny Sela	20,000	—	2.51	February 12, 2011
	10,000	—	4.09	December 28, 2017
David T. Beatson	—	—	—	—

(1) These options vest 12,500 options quarterly from March 4, 2011 through March 4, 2012.

OPTIONS TO PURCHASE COALOGIX INC. STOCK

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
John A. Moore	—	—	—	—
William J. McMahon	110,286	36,764(2)	5.05	April 8, 2018
	15,193	25,320(3)	7.20	April 7, 2019
Benny Sela	—	—	—	—
David T. Beatson	—	—	—	—

(2) These options vest 9,191 options quarterly from January 8, 2011 through November 7, 2011.
(3) These options vest 2,532 options quarterly from January 5, 2011 through April 8, 2013.

OPTIONS TO PURCHASE DSIT SOLUTIONS LTD. STOCK

Name	Number of Securities Underlying	Number of Securities Underlying	Option Exercise Price ($)	Option Expiration Date

	Unexercised Options (#) Exercisable	Unexercised Options (#) Unexercisable		
John A. Moore	—	—	—	—
William J. McMahon	—	—	—	—
Benny Sela	—	476(4)	126.05	December 31, 2013
David T. Beatson	—	—	—	—

(4) These options vest only upon an exit transaction by Acorn.

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Estimated Payments and Benefits Upon Termination or Change in Control

The amount of compensation and benefits payable to each named executive officer and certain other officers in various termination situations is described in the tables below.

John A. Moore

Under the terms of the employment agreement with Mr. Moore, our President and Chief Executive Officer, upon termination by the Company for cause (as defined in the agreement) and upon termination by Mr. Moore without good reason (as defined in the agreement), all compensation due to Mr. Moore under his agreement would cease, except that Mr. Moore would receive all accrued but unpaid base salary up to the date of termination, and reimbursement of all previously unreimbursed expenses. All vested and unexercised options granted by the Company as of the date of termination would be exercisable in accordance with the terms of the applicable stock option plan and agreements, provided that Mr. Moore would have only three months to exercise such previously vested options. All options that had not vested as of the date of termination would expire.

In the event that within three months prior to or one year following a change of control (as defined in the agreement), either (i) the Company terminates the employment of Mr. Moore, other than for cause, or (ii) Mr. Moore terminates for good reason, Mr. Moore would receive the following (except to the extent that any payment would constitute an "excess parachute payment" under the IRS Code): (i) an amount equal to (A) 24 months of then-current base salary and (B) two times his most recent annual bonus; (ii) reimbursement of all previously unreimbursed expenses; (iii) the full vesting of any and all stock options granted to Mr. Moore by the Company prior to such termination, and extended exercisability thereof until their respective expiration dates; and (iv) the continuation of all medical and dental benefits at the Company's sole expense for a period of one year after termination.

In the event that (i) the Company terminates the employment of Mr. Moore (including a non-renewal of his agreement at the end of the three-year term provided therein, but not including non-renewal following any subsequent renewal of the term), other than upon a change of control, death, disability or for cause, or (ii) Mr. Moore terminates for good reason, other than in connection with a change of control, Mr. Moore shall receive the following (except to the extent that any payment would constitute an "excess parachute payment" under the IRS Code): (i) an amount equal to (A) 12 months of then-current base salary and (B) his most recent annual bonus; (ii) reimbursement of all previously unreimbursed expenses; (iii) accelerated vesting of all unvested options that otherwise would have vested within 24 months of the date of termination, with such accelerated options and all other vested and unexercised options granted by the Company as of the date of termination to be exercisable for a period of one year from the date of termination of employment in accordance with the terms of the applicable stock option plan and agreements; and (iv) the continuation of all medical and dental benefits at the Company's sole expense for a period of one year after termination.

In the event of any change of control, all stock options granted to Mr. Moore prior to such change of control vest and remain exercisable until their respective expiration dates.

The term of Mr. Moore's agreement would end immediately upon his death, or upon termination by the Company for cause or disability (as defined in the agreement) or by Mr. Moore for good reason. Upon termination due to Mr. Moore's death, all compensation due Mr. Moore under his agreement would cease.

The following table describes the potential payments and benefits upon termination of employment for Mr. Moore, as if his employment terminated as of December 31, 2010, the last day of our last fiscal year.

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Payments and benefits	Voluntary resignation		Circumstances of Termination Termination not for cause		Change of control		Death or disability
Compensation:							
Base salary	—	(1)	$ 300,000	(2)	$600,000	(5)	—
Bonus	—		—	(3)	—	(3)	—
Benefits and perquisites:							
Perquisites and other personal benefits	—		8,160	(4)	8,160	(4)	—
Total	—		$ 308,160		$608,160		—

(1) Assumes that there is no earned but unpaid base salary at the time of termination.
(2) The $300,000 represents 12 months of Mr. Moore's base salary.
(3) No amounts are included for target bonus as there was no bonus for 2010.
(4) The $8,160 represents 12 months of health insurance payments.
(5) The $600,000 represents 24 months of Mr. Moore's base salary.

William J. McMahon

Under the terms of the employment agreement with Mr. McMahon, the President and Chief Executive Officer of our CoaLogix subsidiary, as modified by the Modification Agreement signed with Mr. McMahon upon acquisition of SCR-Tech by the Company, in the event of his involuntarily termination (as defined in the agreement) other than for cause (as defined in the agreement), Mr. McMahon would be entitled to receive a lump sum cash payment in an amount equal to two hundred percent (200%) of his annual compensation (as defined in the agreement). He would also receive 100% company-paid health, dental and life insurance coverage at the same level of coverage as was provided to him and his dependents immediately prior to the termination for up to a maximum of two years from the date of his termination.

If Mr. McMahon's employment terminates by reason of his voluntary resignation (and is not an involuntary termination), or if he is terminated for cause, then he would not be entitled to receive severance or other benefits under his employment agreement.

If the Company terminates Mr. McMahon's employment as a result of his disability (as defined in the agreement), or his employment is terminated due to his death, then he would not be entitled to receive severance or other benefits under his employment agreement.

The following table describes the potential payments and benefits upon termination of employment for Mr. McMahon, as if his employment terminated as of December 31, 2010, the last day of our last fiscal year.

Payments and benefits	Voluntary resignation		Circumstances of Termination Termination not for cause		Change of control		Death or disability
Compensation:							
Base salary	—	(1)	$ 560,000	(2)	$560,000	(2)	—
Bonus	—		280,000	(3)	280,000	(3)	—
Benefits and perquisites:							
Perquisites and other personal benefits	—		9,376	(4)	23,167	(5)	—
Total	—		$ 849,376		$863,167		—

(1) Assumes that there is no earned but unpaid base salary at the time of termination.
(2) Represents 200% of Mr. McMahon's base salary
(3) Represents 200% of Mr. McMahon's target bonus.
(4) Represents 12 months of subsidized health and dental insurance payments
(5) Represents 24 months of health, dental and life insurance payments.

Benny Sela

Under the terms of the employment agreement with Mr. Sela, the President and Chief Executive Officer of our DSIT subsidiary, we are obligated to make certain payments to fund in part our severance obligations to him. We are required to pay Mr. Sela an amount equal to 150% of his last month's salary multiplied by the number of years (including partial years) that Mr. Sela has worked for us. This severance obligation would be reduced by the amount contributed by us to certain Israeli pension and severance funds pursuant to Mr. Sela's employment agreement. As of December 31, 2010, the unfunded portion of these payments was $201,638. Mr. Sela would also receive a lump sum payment equal to six months base salary in the event of a voluntary resignation, and a lump sum payment equal to nine months salary in the event of termination not for cause.

The following table describes the potential payments and benefits upon termination of employment for Mr. Sela, as if his employment terminated as of December 31, 2010, the last day of our last fiscal year.

	Circumstances of Termination						
Payments and benefits	Voluntary resignation		Termination not for cause		Change of control	Death or disability	
Compensation:							
Base salary	$103,963	(1)	$ 155,944	(2)	—	$155,944	(2)
Benefits and perquisites:							
Perquisites and other personal benefits	546,136	(3)	560,380	(4)	—	560,380	(4)
Total	$650,099		$ 716,324		—	$716,324	

(1) Assumes that there is no earned but unpaid base salary at the time of termination. The $103,963 represents a lump sum payment of six months' salary due to Mr. Sela.

(2) Assumes that there is no earned but unpaid base salary at the time of termination. The $155,944 represents a lump sum payment of nine months' salary due to Mr. Sela.

(3) Includes $569,944 of severance pay based in accordance with Israeli labor law calculated based on his last month's salary multiplied by the number of years (including partial years) that Mr. Sela worked for us multiplied by 150% in accordance with his contract. Of the $569,944 due Mr. Sela, we have funded $368,306 in an insurance fund. Also includes accumulated, but unpaid vacation days ($25,705), car benefits ($6,000) and payments for pension and education funds ($22,487) less $78,000 of benefits waived in support of DSIT's operations in 2007.

(4) Includes $569,944 of severance pay based in accordance with Israeli labor law calculated based on his last month's salary multiplied by the number of years (including partial years) that Mr. Sela worked for us multiplied by 150% in accordance with his contract. Of the $569,944 due Mr. Sela, we have funded $368,306 in an insurance fund. Also includes accumulated, but unpaid vacation days ($25,705), car benefits ($9,000) and payments for pension and education funds ($33,731) less $78,000 of benefits waived in support of DSIT's operations in 2007.

Michael Barth

Under the terms of the employment arrangement with Mr. Barth, our Chief Financial Officer, we are obligated to make certain payments to fund in part our severance obligations to him. We would be required to pay Mr. Barth an amount equal to 120% of his last month's salary multiplied by the number of years (including partial years) that Mr. Barth worked for us. This severance obligation, which is customary for executives of Israeli companies, would be reduced by the amount contributed by us to certain Israeli pension and severance funds pursuant to Mr. Barth's employment arrangement. As of December 31, 2010, the unfunded portion of these payments was $118,925. In addition, the arrangement with Mr. Barth provides for an additional payment equal to six times his last month's total compensation, payable at the end of his employment with us.

The following table describes the potential payments and benefits upon termination of employment for Mr. Barth, as if his employment terminated as of December 31, 2010, the last day of our last fiscal year.

	Circumstances of Termination						
Payments and benefits	Voluntary resignation		Termination not for cause		Change of control	Death or disability	
Compensation:							
Base salary	$31,244	(1)	$ 93,731	(2)	—	$93,731	(2)
Benefits and perquisites:							
Perquisites and other personal benefits	79,550	(3)	215,992	(4)	—	215,992	(4)
Total	$110,794		$ 309,723		—	$309,723	

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(1) Assumes that there is no earned but unpaid base salary at the time of termination. The $31,244 represents a lump sum payment of two months' salary due to Mr. Barth.

(2) Assumes that there is no earned but unpaid base salary at the time of termination. The $93,732 represents a lump sum payment of 6 months' salary due to Mr. Barth upon termination without cause or by death or disability.

(3) Includes $89,761 of severance pay based on the amounts funded in for Mr. Barth's severance in accordance with Israeli labor law. Also includes accumulated, but unpaid vacation days ($29,031), car benefits ($2,000) and payments for pension and education funds ($6,758) less $48,000 of benefits waived in support of DSIT's operations in 2007.

(4) Includes $208,687 of severance pay based in accordance with Israeli labor law calculated based on his last month's salary multiplied by the number of years (including partial years) that Mr. Barth worked for us multiplied by 120% in accordance with his contract. Of the $208,687 due Mr. Barth, we have funded $89,761 in an insurance fund. Also includes accumulated, but unpaid vacation days ($29,031), car benefits ($6,000) and payments for pension and education funds ($20,274) less $48,000 of benefits waived in support of DSIT's operations in 2007.

Lindon Shiao

Under the terms of the employment agreement with Mr. Shiao, there are no amounts due under any termination scenario.

Jim Andersen

Under the terms of the employment agreement with Mr. Andersen, there are no amounts due under any termination scenario.

Joe B. Cogdell, Jr.

Under the terms of the employment agreement with Mr. Cogdell, Vice President, General Counsel and Secretary of each of the Company and CoaLogix, if he were to be terminated as a result of an involuntary termination without cause (each as defined in the agreement), Mr. Cogdell would be entitled to receive, as severance, (i) an amount in cash equal to twice his annual compensation (determined by reference to base salary and bonus) (the "Cash Severance Amount") payable over 24 months and (ii) for up to 18 months post-termination, CoaLogix-subsidized COBRA premiums for continuing participation by Mr. Cogdell and his eligible dependents in the companies' group health plans such that Mr. Cogdell is required to pay no more than an active employee. If, however, any such termination were to occur in connection with a change of control (as defined in the agreement), the Cash Severance Amount would be payable in one lump sum and the employee benefits obligation would be increased such that CoaLogix would be fully responsible for the cost thereof and the benefits would be broadened to include health, dental and life insurance coverage to the extent Mr. Cogdell and his eligible dependents participated in the same prior to the change of control. Mr. Cogdell would not be entitled to severance under the employment agreement in the event that his employment is terminated for cause or due to voluntary resignation, death or disability (as defined in the agreement).

Payments and benefits	Voluntary resignation		Circumstances of Termination: Termination not for cause		Change of control		Death or disability
Compensation:							
Base salary	—	(1)	$ 624,000	(2)	$624,000	(2)	—
Bonus	—		187,200	(3)	187,200	(3)	—
Benefits and perquisites:							
Perquisites and other personal benefits	—		18,845	(4)	23,569	(5)	—
Total	—		$ 830,045		$834,769		—

(1) Assumes that there is no earned but unpaid base salary at the time of termination.
(2) Represents 200% of Mr. Cogdell's annual compensation.
(3) Represents 200% of Mr. Cogdell's targeted bonus.
(4) Represents 18 months of subsidized health and dental insurance payments.
(5) Represents 18 months of health, dental and life insurance payments.

David T. Beatson

Following the termination of our former CTO on November 4, 2010, we have paid Mr. Beatson a total of $59,000 representing three months of salary and car allowance.

Compensation of Directors

In October 2007, we agreed that each of our non-employee directors would be paid an annual cash retainer of $40,000 payable quarterly in advance, as well as meeting fees for Board and Committee meetings of $1,000 per meeting. In 2009, we agreed that certain directors would receive an additional annual cash retainer; $12,000 for the lead director for CoaLogix matters (in an effort to conserve corporate cash, the lead director for CoaLogix matters has voluntarily reduced the payment to $1,000 per CoaLogix board meeting) and $10,000 for the Chairman of the Audit Committee. As an employee, Mr. Moore is not entitled to separate compensation in his capacity as a director.

Our 2006 Stock Option Plan for Non-Employee Directors, which was adopted in February 2007 and amended and restated in November 2008, provides for formula grants to non-employee directors equal to an option to purchase (i) 25,000 shares of our common stock upon a member's initial appointment or election to the Board of Directors and (ii) 10,000 shares of our common stock to each director, other than newly appointed or elected directors, immediately following each annual meeting of stockholders. The initial grant to purchase 25,000 shares of our common stock vests one-third per year for each of the three years following the date of appointment or election and the annual grant to purchase 10,000 shares vests one year from the date of grant. Both options shall be granted at an exercise price equal to the closing price on NASDAQ on the day preceding the date of grant and shall be exercisable until the earlier of (a) seven years from the date of grant or (b) 18 months from the date that the director ceases to be a director, officer, employee, or consultant. The plan also provides for non-formula grants at the Board's discretion. The maximum number of shares of our common stock to be issued under the plan is 400,000. The Plan is administered by the Board of Directors.

Consulting Agreement with Mr. Morgenstern

Mr. Morgenstern, our Chairman Emeritus, has been retained as a consultant by our Company since March 2006 primarily to provide oversight of our Israeli activities. Mr. Morgenstern's consulting agreement, which was due to expire on March 31, 2011, provided for the payment of an annual consulting fee of $1.00 and a non-accountable expense allowance of $75,000 per year plus a payment of a bonus of $25,000 under certain circumstances. The agreement was amended in March 2011 to extend the term to March 31, 2012, adjust the annual non-accountable expense allowance to $56,250 and to eliminate the bonus provision.

The following table sets forth information concerning the compensation earned for service on our Board of Directors during the fiscal year ended December 31, 2010 by each individual (other than Mr. Moore who is not separately compensated for Board service) who served as a director at any time during the fiscal year.

DIRECTOR COMPENSATION IN 2010

Name	Fees Earned or Paid in Cash ($)		Option Awards ($) (1)	All Other Compensation ($)		Total ($)
Joe Musanti	54,000	(2)	31,860	—		85,860
George Morgenstern	43,000		31,860	75,000	(3)	149,860
Samuel M. Zentman	44,000		31,860	12,000	(4)	87,860
Richard J. Giacco	44,000		31,860	4,000	(5)	79,860
Richard Rimer	44,000		31,860	—		75,860
Steven Ledger	18,667		79,727	—		98,394

(1) On June 10, 2010, Joe Musanti, George Morgenstern, Samuel M. Zentman, Richard J. Giacco and Richard Rimer were each granted 10,000 options to acquire stock in the Company. The options have an exercise price of $5.00 and expire on June 10, 2017. The fair value of the options was determined using the Black-Scholes option pricing model using the following assumptions: (i) a risk-free interest rate of 2.67% (ii) an expected term of 6.3 years (iii) an assumed volatility of 68% and (iv) no dividends. On July 29, 2010, Steven Ledger was granted 25,000 options to acquire stock in the Company. The options have an exercise price of $5.05 and expire on July 29, 2017. The fair value of the options was determined using the Black-Scholes option pricing model using the following assumptions: (i) a risk-free interest rate of 2.40% (ii) an expected term of 6.3 years (iii) an assumed volatility of 67% and (iv) no dividends. All options awarded to directors in 2010 remained outstanding at fiscal year-end. As of December 31, 2010, the number of stock options held by each of the above persons was: Joe Musanti, 55,000; George Morgenstern, 247,500; Samuel Zentman, 87,500; Richard Giacco, 65,000; Richard Rimer, 115,000; and Steven Ledger, 25,000.

(2) Includes $10,000 Mr. Musanti received for services rendered as the Chairman of the Audit Committee.

(3) Mr. Morgenstern received a non-accountable expense allowance of $75,000 to cover travel and other expenses pursuant to a consulting agreement.

(4) Mr. Zentman received $12,000 for services rendered with respect to his overseeing the Company’s investment in Coreworx Inc.

(5) Mr. Giacco received $4,000 ($1,000 per CoaLogix board meeting) for services rendered with respect to his overseeing the Company’s investment in CoaLogix Inc.

ITEM 12.SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table and the notes thereto set forth information, as of March 1, 2011 (except as otherwise set forth herein), concerning beneficial ownership (as defined in Rule 13d-3 under the Securities Exchange Act of 1934) of common stock by (i) each director of the Company, (ii) each executive officer (iii) all executive officers and directors as a group, and (iv) each holder of 5% or more of the Company's outstanding shares of common stock.

Name and Address of Beneficial Owner (1) (2)	Number of Shares of common stock Beneficially Owned (2)		Percentage of common stock Outstanding (2)	
George Morgenstern	348,861	(3)	2.0	%
John A. Moore	1,342,676	(4)	7.5	%
Richard J. Giacco	84,429	(5)	*	
Joseph Musanti	49,200	(6)	*	
Richard Rimer	145,000	(7)	*	
Samuel M. Zentman	121,621	(8)	*	
Steven Ledger	50,000	(9)	*	
Michael Barth	145,434	(10)	*	
Joe B. Cogdell, Jr.	95,600	(11)	*	
William J. McMahon	10,500	(12)	*	
Benny Sela	30,000	(13)	*	
Lindon Shiao	5,684	(14)	*	
Jim Andersen	—	(15)	—	
All executive officers and directors of the Company as a group (13 people)	2,429,005	(16)	13.0	%
Austin W. Marxe and David M. Greenhouse	1,045,116	(17)	6.0	%
Artis Capital Management, L.P.	976,292	(18)	5.6	%

* Less than 1%

(1) Unless otherwise indicated, the address for each of the beneficial owners listed in the table is in care of the Company, 4 West Rockland Road, Montchanin, Delaware 19710.

(2) Unless otherwise indicated, each person has sole investment and voting power with respect to the shares indicated. For purposes of this table, a person or group of persons is deemed to have "beneficial ownership" of any shares as of a given date which such person has the right to acquire within 60 days after such date. Percentage information is based on the 18,144,925 shares outstanding as of March 1, 2011.

(3) Consists of 61,922 shares, 237,500 shares underlying currently exercisable options, and 49,439 shares owned by Mr. Morgenstern's wife.

(4) Consists of 707,676 shares (7,200 of which are held in an IRA account) and 635,000 shares underlying currently exercisable options.

(5) Consists of 29,429 shares and 55,000 shares underlying currently exercisable options.

(6) Consists of 4,200 shares and 45,000 shares underlying currently exercisable options.

(7) Consists of 40,000 shares and 105,000 shares underlying currently exercisable options.

(8) Consists of 44,121 shares and 77,500 shares underlying currently exercisable options.

(9) Consists solely of shares.

(10) Consists of 12,789 shares, 1,645 shares underlying currently exercisable warrants and 131,000 shares underlying currently exercisable options. Mr. Barth also owns 569 shares of DSIT representing approximately 4.0% of the DSIT's outstanding shares.

(11) Consists of 28,100 shares (10,000 of which are held in an IRA account) and 67,500 shares underlying currently exercisable options. Mr. Cogdell also owns 5,088 shares of CoaLogix and options to purchase 1,352 CoaLogix shares, representing less than 1.0% of CoaLogix's outstanding shares.

(12) Consists solely of shares. Mr. McMahon also owns 3,391 shares of CoaLogix and currently exercisable options to purchase 130,289 CoaLogix shares, representing approximately 2.9% of CoaLogix's outstanding shares.

(13) Consists of 20,000 shares and 10,000 shares underlying currently exercisable options. Mr. Sela also owns 925 shares of DSIT representing approximately 6.5% of the DSIT's outstanding shares.

(14) Consists solely of shares.

(15) Mr. Andersen does not own any shares of Acorn stock nor does he have any options to purchase Acorn stock. Mr. Andersen owns 370,000 shares of USSI, representing approximately 11.9% of the USSI's outstanding shares as if March 1, 2011.

(16) Consists of 1,063,860 shares, 1,645 shares underlying currently exercisable warrants and 1,363,500 shares underlying currently exercisable options.

(17) The information presented with respect to these beneficial owners is based on a Schedule 13G filed with the SEC on February 11, 2011. Austin W. Marxe and David M. Greenhouse share sole voting and investment power over 221,368 shares of common stock owned by Special Situations Cayman Fund, L.P and 823,748 shares of common stock owned by Special Situations Fund III QP, L.P. The business address for Austin W. Marxe and David M. Greenhouse is 527 Madison Avenue, Suite 2600, New York, NY 10022.

(18) The information presented with respect to this beneficial owner is based on a Schedule 13G filed with the SEC on February 14, 2011. Artis Capital Management, L.P., Artis Capital Management, Inc., and Stuart L. Peterson share voting power and dispositive power over the shares. Their business address is One Market Plaza, Stuart Street Tower, Suite 2700, San Francisco, CA 94105.

EQUITY COMPENSATION PLAN INFORMATION

The table below provides certain information concerning our equity compensation plans as of December 31, 2010.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity Compensation Plans Approved by Security Holders	759,500	$ 3.83	1,119,667
Equity Compensation Plans Not Approved by Security Holders	1,058,165	$ 3.59	—
Total	1,817,665	$ 3.69	1,119,667

The grants made under our equity compensation plans not approved by security holders were made under non-plan option agreements and under our 2006 Stock Incentive Plan and 2006 Stock Option Plan for Non-Employee Directors during the period from the adoption of such plans in January 2007 and the date of the approval of such plans by shareholders in November 2008. These grants were made to directors, officers, employees and consultants at exercise prices equal to the fair market value on the date of the grant. The options generally vest over a three year period and expire five to ten years from the date of the grant.

ITEM 13. CERTAIN RELATIONSHIPS, RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Transactions With Related Persons

We paid approximately $393,000 and $275,000 in the years ended December 31, 2010 and 2009, respectively, for legal services rendered and reimbursement of out-of-pocket expenses to Eilenberg & Krause LLP, a law firm in which Sheldon Krause, our former Secretary and former General Counsel, is a member. Such fees related to services rendered by Mr. Krause and other members and employees of his firm. Mr. Krause is the son-in-law of George Morgenstern, a director and our Chairman Emeritus, who up until March 2006, also served as our President and Chief Executive Officer. Mr. Krause continues to provide legal services to us in 2011.

In November 2010, the CEO of GridSense lent GridSense $50,000. The loan by the CEO of GridSense bears no interest. In 2010, $12,000 of the loan was repaid and at December 31, 2010, the outstanding balance was $38,000.

For information regarding our Stockholders' Agreement with CoaLogix and EnerTech, see Note 5 to our Consolidated Financial Statements.

Director Independence

Applying the definition of independence provided under the NASDAQ rules, the Board has determined that with the exception of Mr. Moore, all of the members of the Board of Directors are independent.

ITEM 14.PRINCIPAL ACCOUNTING FEES AND SERVICES

Accounting Fees

Friedman LLP

The following table summarized the fees billed to Acorn for professional services rendered by Friedman LLP for the year ended December 31, 2010.

	2010
Audit Fees	$ 240,000
Audit- Related Fees	6,000
Tax Fees	3,000
Other Fees	19,000
Total	$ 268,000

Audit Fees were for professional services rendered for the audits of the consolidated financial statements of the Company, assistance with review of documents filed with the SEC, consents, and other assistance required to be performed by our independent accountants.

Audit-Related Fees were for travel costs associated with our audit.

Tax Fees were for tax planning advice for one of our subsidiaries.

Other Fees were for due diligence services related to our GridSense acquisition and for a consent with respect to our recent capital raise.

Kesselman and Kesselman CPA

The following table summarized the fees billed to Acorn for professional services rendered by Kesselman and Kesselman for the years ended December 31, 2010 and 2009.

	2010	2009
Audit Fees	$21,000	$347,000
Audit- Related Fees	—	38,000
Tax Fees	19,000	—
Other Fees	132,000	8,000
Total	$172,000	$393,000

Audit Fees in 2009 were for professional services rendered for the audits of the consolidated financial statements of the Company, statutory audits of our Israeli subsidiaries, assistance with review of documents filed with the SEC, consents, and other assistance required to be performed by our independent accountants. In 2010, audit fees were for professional services rendered for statutory audits of our Israeli subsidiaries.

Audit-Related Fees were for FIN 48 analyses and travel expenses.

Tax Fees were for tax audit representation and tax planning advice with respect to one of our Israeli subsidiaries.

Other Fees were for services related to reviewing registration statements.

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Pre-Approval Policies and Procedures

The Audit Committee's current policy is to pre-approve all audit and non-audit services that are to be performed and fees to be charged by our independent auditor to assure that the provision of these services does not impair the independence of the auditor. The Audit Committee pre-approved all audit and non-audit services rendered by our principal accountant in 2010 and 2009.

PART IV

ITEM 15.EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) List of Financial Statements of the Registrant

The consolidated financial statements of the Registrant and the report thereon of the Registrant's Independent Registered Public Accounting Firms are included in this Annual Report beginning on page F-1.

Report of Friedman LLP
Report of Kesselman & Kesselman
Consolidated Balance Sheets as of December 31, 2009 and 2010
Consolidated Statements of Operations for the years ended December 31, 2009 and 2010
Consolidated Statements of Changes in Equity for the years ended December 31, 2009 and 2010
Consolidated Statements of Cash Flows for the years ended December 31, 2009 and 2010
Notes to Consolidated Financial Statements

(a)(3) List of Exhibits

No.	
3.1	Certificate of Incorporation of the Registrant, with amendments thereto (incorporated herein by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form S 1 (File No. 33 70482) (the "1993 Registration Statement")).
3.2	Certificate of Ownership and Merger dated September 15, 2006 effecting the name change to Acorn Factor, Inc. (incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed September 21, 2006).
3.3	Certificate of Ownership and Merger dated December 21, 2007 effecting the name change to Acorn Energy, Inc. (incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed January 3, 2008).
3.4	Certificate of Amendment to the Certificate of Incorporation, filed with the Secretary of State of the State of Delaware on June 15, 2010 (incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed June 16, 2010).
3.5	By laws of the Registrant (incorporated herein by reference to Exhibit 3.2 to the Registrant's Registration Statement on Form S 1 (File No. 33 44027) (the "1992 Registration Statement")).
3.6	Amendments to the By Laws of the Registrant adopted December 27, 1994 (incorporated herein by reference to Exhibit 3.3 of the Registrant's Current Report on Form 8-K dated January 10, 1995).
4.1	Specimen certificate for the common stock (incorporated herein by reference to Exhibit 4.2 to the 1992 Registration Statement).
4.2	Form of Warrant (incorporated herein by reference to Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006).
4.3	Form of Convertible Debenture (incorporated herein by reference to Exhibit 4.9 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2006).
4.4	Form of Warrant (incorporated herein by reference to Exhibit 4.10 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2006).
4.5	Form of Agent Warrant (incorporated herein by reference to Exhibit 4.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007).
4.6	Form of Placement Agent Warrant (incorporated herein by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K dated December 20, 2010).

10.1 1994 Stock Incentive Plan, as amended. (incorporated herein by reference to Exhibit 10.4 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2004 (the "2004 10-K")).*

10.2 1994 Stock Option Plan for Outside Directors, as amended (incorporated herein by reference to Exhibit 10.5 to the Registrant's Form 10-K for the year ended December 31, 1995 (the "1995 10- K")).*

10.3 1995 Stock Option Plan for Non-management Employees, as amended (incorporated herein by reference to Exhibit 10.6 to the 2004 10-K).*

10.4 Form of Stock Option Agreement to employees under the 1994 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.35 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2004 (the "2004 10-K").*

10.5 Form of Stock Option Agreement under the 1994 Stock Option Plan for Outside Directors (incorporated herein by reference to Exhibit 10.36 of the 2004 10-K).*

10.6 Form of Stock Option Agreement under the 1995 Stock Option Plan for Nonmanagement Employees (incorporated herein by reference to Exhibit 10.37 of the 2004 10-K).

10.7 Stock Option Agreement dated as of December 30, 2004 by and between George Morgenstern and the Registrant (incorporated herein by reference to Exhibit 10.38 of the 2004 10-K).*

10.8 Stock Option Agreement dated as of December 30, 2004 by and between Sheldon Krause and the Registrant (incorporated herein by reference to Exhibit 10.35 of the 2004 10-K).*

10.9 Stock Purchase Agreement dated as of March 9, 2006 by and between Shlomie Morgenstern, Databit Inc., and the Registrant (incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated March 16, 2006 (the "2006 8-K")).

10.10 Amendment Agreement to Option Agreements and Restricted Stock Agreement dated as of March 9, 2006 by and between George Morgenstern and the Registrant (incorporated herein by reference to Exhibit D to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated March 16, 2006 (the "2006 8-K")).*

10.11 Consulting Agreement dated as of March 9, 2006 by and between George Morgenstern and the Registrant (incorporated by reference to Exhibit E to Exhibit 10.1 to the 2006 8-K).*

10.12 Form of Common Stock Purchase Agreement (incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated August 17, 2006 (the "August 2006 8-K")).

10.13 Form of Note Purchase Agreement with Form of Convertible Promissory Note attached (incorporated herein by reference to Exhibit 10.2 to the August 2006 8-K).

10.14 Form of Stock Purchase Agreement (incorporated herein by reference to Exhibit 10.3 to the August 2006 8-K).

10.15 Form of Investors' Rights Agreement (incorporated herein by reference to Exhibit 10.4 to the August 2006 8-K).

10.16 Form of Non-Plan Option Agreement (incorporated herein by reference to Exhibit 10.5 to the August 2006 8-K).*

10.17 Acorn Factor, Inc. 2006 Stock Option Plan for Non-Employee Directors (incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed March 6, 2007).*

10.18 Acorn Energy, Inc. 2006 Amended and Restated Stock Incentive Plan (as amended and restated effective June 10, 2010) (incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed June 16, 2010).*

10.19 Form of Subscription Agreement (incorporated herein by reference to Exhibit 10.47 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2006).

10.20 Placement Agent Agreement between First Montauk Securities Corp. and the Registrant dated March 8, 2007 (incorporated herein by reference to Exhibit 10.48 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2006).

10.21 Promissory Note of Acorn Factor, Inc. in favor of John A. Moore, dated December 31, 2006 (incorporated herein by reference to Exhibit 4.11 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2007).

10.22 Amended and Restated Registration Rights Agreement between Acorn Factor, Inc. and Comverge, Inc., dated October 16, 2007(incorporated herein by reference to Exhibit 10.46 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2007).

10.23 Loan Agreement by and between Acorn Factor, Inc. and Citigroup Global Markets, Inc., dated as of November 1, 2007 (incorporated herein by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed November 14, 2007).
10.24 Stock Purchase Agreement by and among Acorn Factor, Inc., CoaLogix Inc., Catalytica Energy Systems, Inc., and with respect to Article 11 only, Renegy Holdings, Inc., dated as of November 7, 2007 (incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed November 14, 2007).
10.25 Employment Agreement between and among William J. McMahon III, Catalytica Energy Systems, Inc., SCR-Tech LLC and CESI-SCR, Inc., effective as of January 1, 2007 (incorporated herein by reference to Exhibit 10.1 to the Catalytica Energy Systems, Inc. Current Report on Form 8-K filed January 10, 2007).*
10.26 Modification Agreement by and among William J. McMahon III, SCR-Tech, LLC, CESI-SCR, Inc., CoaLogix Inc. and Acorn Factor, Inc., dated as of November 7, 2007(incorporated herein by reference to Exhibit 10.51 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2007).*
10.27 Lease Agreement dated December 16, 2002 and First Amendment to Lease Agreement dated February 18, 2004 (incorporated herein by reference to Exhibit 10.46 to the Catalytica Energy Systems, Inc. Annual Report on Form 10-K for the year ended December 31, 2003).
10.28 Second Amendment to Lease Agreement dated December 29, 2006 (incorporated herein by reference to Exhibit 10.74 to the Catalytica Energy Systems, Inc. Annual Report on Form 10-KSB for the year ended December 31, 2006).
10.29 Employment Agreement, dated as of March 4, 2008, by and between Acorn Energy, Inc. and John A. Moore (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008).*
10.30 Common Stock Purchase Agreement, dated as of February 29, 2008, by and between Acorn Energy, Inc. and EnerTech Capital Partners III L.P. (incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008).
10.31 Stockholders' Agreement, dated as of February 29, 2008, by and among CoaLogix, Inc., Acorn Energy, Inc. and the other stockholders named therein (incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008).
10.32 Stock Option Agreement with William J. McMahon under the CoaLogix Inc. 2008 Stock Option Plan (incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2008).*
10.33 Participation Agreement with William J. McMahon under the CoaLogix Inc. and Subsidiaries Capital Appreciation Rights Plan. (incorporated herein by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2008)*
10.34 Acorn Energy, Inc. 2006 Stock Incentive Plan (as amended and restated effective November 3, 2008) (incorporated herein by reference to Appendix A to the Registrant's Definitive Proxy Statement on Schedule 14A filed on October 8, 2008)*
10.35 Acorn Energy, Inc. 2006 Stock Option Plan For Non-Employee Directors (as amended and restated effective November 3, 2008) (incorporated herein by reference to Appendix B to the Registrant's Definitive Proxy Statement on Schedule 14A filed on October 8, 2008)*
10.36 Securities Purchase Agreement dated as of August 13, 2008, by and among Coreworx Inc., the debenture holders of Coreworx, the shareholders of Coreworx and Acorn Energy, Inc. (incorporated herein by reference to Exhibit 10.1 to Amendment No. 1 to the Registrant's Current Report on Form 8-K/A filed October 28, 2008).
10.37 Form of Repayment Note issued to Coreworx debenture holders (incorporated herein by reference to Exhibit 4.1 to Amendment No. 1 to the Registrant's Current Report on Form 8-K/A filed October 28, 2008)
10.38 CoaLogix Inc. 2008 Stock Option Plan (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).*
10.39 Forms of Option Agreements under the CoaLogix 2008 Stock Option Plan (incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).*

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10.40 CoaLogix Inc. and Subsidiaries Capital Appreciation Rights Plan (incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).*

10.41 Form of Participation Agreement under the CoaLogix Inc. and Subsidiaries Capital Appreciation Rights Plan (incorporated herein by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).*

10.42 Employment Agreement among the Registrant, CoaLogix and Joe B. Cogdell, Jr. dated September 15, 2008 (incorporated herein by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).*

10.43 Letter Agreement between the Registrant and CoaLogix dated September 15, 2008 related to the employment of Joe B. Cogdell, Jr. (incorporated herein by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008).*

10.44 Form of Option Agreement between the Registrant and John A. Moore dated March 4, 2008 (incorporated herein by reference to Exhibit 10.52 to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2008).*

10.45 Form of Option Agreement between the Registrant and Joe B. Cogdell, Jr. dated January 5, 2009 (incorporated herein by reference to Exhibit 10.53 to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2008).*

10.46 Amendment dated as of March 31, 2009 by and between George Morgenstern and the Registrant to the Consulting Agreement dated as of March 9, 2006 by and between George Morgenstern and the Registrant (incorporated herein by reference to Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2009).*

10.47 Common Stock Purchase Agreement dated as of April 8, 2009, by and among Acorn Energy, Inc., EnerTech Capital Partners III L.P. and the other purchasers named therein (incorporated by reference to Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009).

10.48 Amended and Restated Stockholders' Agreement, dated as of April 8, 2009, by and among CoaLogix Inc., Acorn Energy, Inc. and the other stockholders named therein (incorporated by reference to Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009).

10.49 Lease Agreement dated September 4, 2009 by and between SCR-Tech, LLC and Fat Boy Trading Company (incorporated herein by reference to Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009).

10.50 Form of Letter of Intent by and among Registrant, Gridsense Pty Ltd and certain shareholders of Gridsense Pty Ltd named therein dated October 29, 2009 (incorporated herein by reference to Exhibit 10.50 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2009).

10.51 Form of Arrangement Agreement by and among the Registrant, Coreworx Inc. and Decision Dynamics Technology LTD dated as of March 2, 2010 (incorporated herein by reference to Exhibit 10.51 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2009).

10.52 Forms of Option Award Certificate and Option Award Agreement under the Registrant's Amended and Restated 2006 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.52 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2009).

10.53 Forms of Option Award Certificate and Option Award Agreement under the Registrant's Amended and Restated 2006 Stock Option Plan for Non-Employee Directors (incorporated herein by reference to Exhibit 10.53 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2009).

10.54 Placement Agency Agreement between the Registrant and Merriman Curhan Ford & Co. dated as of March 8, 2010 (incorporated herein by reference to Exhibit 1.1 to the Registrant's Current Report on Form 8-K dated March 8, 2010).

10.55 Form of Investor Purchase Agreement (incorporated herein by reference to Exhibit 1.2 to the Registrant's Current Report on Form 8-K dated March 8, 2010).
10.56 Common Stock Option Purchase Agreement between the Registrant and US Sensor Systems Inc. dated as of February 23, 2010 (incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010).
10.57 Capital Stock Option Purchase Agreement by and among the Registrant, US Sensor Systems Inc. and other parties named therein dated as of February 23, 2010 (incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010).
10.58 Stockholders Agreement by and among the Registrant, US Sensor Systems Inc. and other parties named therein dated as of February 23, 2010 (incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010).
10.59 Amended and Restated Investors Rights Agreement by and among the Registrant, US Sensor Systems Inc. and other parties named therein dated as of February 23, 2010 (incorporated herein by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010).
#10.60 Share Sale Agreement by and among the Registrant, GridSense Pty Ltd and the other parties named therein dated as of April 28, 2010.
#10.61 Amended and Restated Loan and Security Agreement by and among CoaLogix Solutions Inc., CoaLogix Tech LLC, SCR-Tech, LLC, CoaLogix Technology Holdings Inc., Metallifix LLC and Square 1 Bank dated as of July 22, 2010.
#10.62 Share Exchange Agreement by and between the Registrant and Coreworx Inc. dated as of December 17, 2010.
#10.63 Debt Conversion Agreement by and between the Registrant and Coreworx Inc. dated as of December 17, 2010.
#10.64 Amended and Restated Loan Agreement by and between the Registrant and Coreworx Inc. dated as of December 17, 2010.
10.65 Placement Agent Agreement, dated as of December 17, 2010, by and between the Registrant and HFP Capital Markets LLC (incorporated herein by reference to Exhibit 1.1 of the Registrant's Current Report on Form 8-K dated December 20, 2010).
10.66 Form of Subscription Agreement (incorporated herein by reference to Exhibit 1.2 of the Registrant's Current Report on Form 8-K dated December 20, 2010).
14.1 Code of Business Conduct and Ethics of the Registrant (incorporated herein by reference to Exhibit 14 to the Registrant's Current Report on Form 8-K filed November 2, 2007).
#21.1 List of subsidiaries.
#23.1 Consent of Friedman LLP.
#23.2 Consent of Kesselman & Kesselman CPA.
#31.1 Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
#31.2 Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

#32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
#32.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

* This exhibit includes a management contract, compensatory plan or arrangement in which one or more directors or executive officers of the Registrant participate.

\# This exhibit is filed or furnished herewith.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the Township of Montchanin, State of Delaware, on March 16, 2011.

ACORN ENERGY, INC.

/s/ John A. Moore
By: John A. Moore
Chairman of the Board; President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant, in the capacities and on the dates indicated.

Signature	Title	Date
/s/ John A. Moore John A. Moore	Chairman of the Board; President; Chief Executive Officer; and Director	March 16, 2011
/s/ George Morgenstern George Morgenstern	Director	March 16, 2011
/s/ Michael Barth Michael Barth	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 16, 2011
/s/ Samuel M. Zentman Samuel M. Zentman	Director	March 16, 2011
/s/ Richard J. Giacco Richard J. Giacco	Director	March 16, 2011
/s/ Richard Rimer Richard Rimer	Director	March 16, 2011
/s/ Joe Musanti Joe Musanti	Director	March 16, 2011
/s/ Steven A. Ledger Steven A. Ledger	Director	March 16, 2011

ACORN ENERGY, INC.
AND SUBSIDIARIES

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
Acorn Energy Inc

We have audited the accompanying balance sheet of Acorn Energy Inc. (the "Company") and its subsidiaries as of December 31, 2010 and the related consolidated statements of operations, stockholders' equity and comprehensive loss and cash flows for the year ended December 31, 2010. We also have audited the Company's internal control over financial reporting as of December 31, 2010, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting, appearing in Item 9A. Our responsibility is to express an opinion on these financial statements and an opinion on the company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audit of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

As described in Management's Report on Internal Control over Financial Reporting appearing under Item 9A, management has excluded the US Sensors Systems Inc. and GridSense Pty. and GridSense Inc. (together "GridSense") from its assessment of internal control over financial reporting as of December 31, 2010 because the businesses were acquired in February and May of 2010, respectively. We have also excluded US Sensors Systems Inc. and GridSense from our audit of internal control over financial reporting. The total assets of US Sensors Systems Inc. and GridSense represent approximately \$4.3 million and \$7.5 million of the related consolidated financial statement amounts as of December 31, 2010. The total net sales of US Sensors Systems Inc. and GridSense represent approximately \$0.4 million and \$2.4 million of the related consolidated financial statement amounts for the year ended December 31, 2010.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Acorn Energy, Inc. as of December 31, 2010 and the results of its operations and its cash flows for the year ended December 31, 2010 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, Acorn Energy, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

/s/ Friedman LLP
East Hanover, New Jersey
March 16, 2011

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
Acorn Energy, Inc.

We have audited the consolidated balance sheet of Acorn Energy, Inc. (the "Company") and its subsidiaries as of December 31, 2009, and the related consolidated statement of operations, changes in equity and cash flows for the year ended December 31, 2009. These financial statements are the responsibility of the Company's Board of Directors and management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Company's Board of Directors and management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company and its subsidiaries as of December 31, 2009 and the results of their operations and of their cash flows for the year ended December 31, 2009, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for non-controlling interests as of January 1, 2009

March 22, 2010, except for Note 3(b) which is as of March 16, 2011.

/s/ Kesselman & Kesselman
Certified Public Accountants
A member of PricewaterhouseCoopers International Limited
Tel-Aviv, Israel

ACORN ENERGY, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)

	As of December 31, 2009	As of December 31, 2010
ASSETS		
Current assets:		
Cash and cash equivalents	$10,902	$7,356
Restricted deposit	1,627	1,925
Accounts receivable	3,401	8,873
Unbilled revenue and work-in-process	4,113	3,860
Inventory	1,848	4,314
Other current assets	1,798	1,488
Current assets of discontinued operations	965	—
Total current assets	24,654	27,816
Property and equipment, net	3,206	10,943
Other investments and loans to equity investees	2,796	—
Severance assets	2,074	2,498
Restricted deposit	611	85
Intangible assets, net	4,726	9,300
Goodwill	4,248	8,393
Deferred taxes	227	302
Other assets	120	448
Non-current assets of discontinued operations	6,073	—
Total assets	$48,735	$59,785
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term bank credit and current maturities of long-term bank debt	$430	$1,531
Accounts payable	1,192	4,547
Accrued payroll, payroll taxes and social benefits	1,466	2,043
Other current liabilities	3,670	5,096
Current liabilities of discontinued operations	1,676	—
Total current liabilities	8,434	13,217
Long-term liabilities:		
Accrued severance	3,129	3,715
Long-term debt	405	389
Other long-term liabilities	574	587
Long-term liabilities of discontinued operations	95	—
Total long-term liabilities	4,203	4,691
Commitments and contingencies (Note 17)		
Equity:		
Acorn Energy, Inc. shareholders		
Common stock - $0.01 par value per share:		
Authorized – 30,000,000 shares; Issued –13,248,813 and 18,067,925 shares at December 31, 2009 and 2010, respectively	132	180

Additional paid-in capital	58,373	83,596
Warrants	290	427
Accumulated deficit	(23,343)	(48,431)
Treasury stock, at cost – 1,275,081 and 801,920 shares at December 31, 2009 and 2010, respectively	(4,827)	(3,036)
Accumulated other comprehensive income (loss)	152	637
Total Acorn Energy, Inc. shareholders' equity	30,777	33,373
Non-controlling interests	5,321	8,504
Total equity	36,098	41,877
Total liabilities and equity	$48,735	$59,785

The accompanying notes are an integral part of these consolidated financial statements.

ACORN ENERGY, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(IN THOUSANDS, EXCEPT NET LOSS PER SHARE DATA)

	Year ended December 31, 2009	2010
Revenues:		
Catalytic regeneration	$18,099	$21,450
Projects	8,807	11,235
Smart grid distribution products and services	—	2,382
Other	412	627
Total revenues	27,318	35,694
Cost of sales:		
Catalytic regeneration	11,803	14,333
Projects	4,946	6,646
Smart grid distribution products and services	—	1,210
Other	318	344
Total cost of sales	17,067	22,533
Gross profit	10,251	13,161
Operating expenses:		
Research and development expenses, net of credits	543	1,131
Impairments	2,692	1,166
Selling, general and administrative expenses	12,028	17,685
Total operating expenses	15,263	19,982
Operating loss	(5,012)	(6,821)
Finance expense, net	(86)	(239)
Gain on sale of shares in Comverge	1,403	—
Gain on investment in GridSense	—	1,327
Distributions received from EnerTech	—	135
Loss on sale of EnerTech	—	(1,821)
Loss before taxes on income	(3,695)	(7,419)
Income tax benefit (expense)	719	(671)
Loss from operations of the Company and its consolidated subsidiaries	(2,976)	(8,090)
Share in income of Paketeria	263	—
Share in losses of GridSense	(129)	—
Net loss from continuing operations	(2,842)	(8,090)
Loss from discontinued operations, net of income taxes	(3,334)	(19,494)
Gain on the deconsolidation of Coreworx	—	1,834
Net loss	(6,176)	(25,750)
Net loss attributable to non-controlling interests	420	662
Net loss attributable to Acorn Energy, Inc shareholders.	$(5,756)	$(25,088)
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders – continuing operations	$(0.21)	$(0.50)
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders – discontinued operations	$(0.29)	$(1.18)

Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders	$(0.50)	$(1.68)
Weighted average number of shares outstanding attributable to Acorn Energy, Inc. shareholders – basic and diluted	11,445	14,910

The accompanying notes are an integral part of these consolidated financial statements.

ACORN ENERGY, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(IN THOUSANDS)

	Acorn Energy, Inc. Shareholders									
	Number of Shares	Common Stock	Additional Paid-In Capital	Warrants	Accumulated Deficit	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Acorn Energy, Inc. Shareholders' Equity	Non-controlling interests	Total Equity
Balances as of December 31, 2008	12,455	$ 124	$ 54,035	$ 1,020	$ (17,587)	$ (3,719)	$ (425)	$ 33,448	$ 2,675	$ 36,123
Net loss	—	—	—	—	(5,756)	—	—	(5,756)	(420)	(6,176)
Adjustment to fair market value of Comverge shares, net	—	—	—	—	—	—	125	125	—	125
Differences from translation of subsidiaries' financial statements	—	—	—	—	—	—	452	452	42	494
Comprehensive loss	—	—	—	—	—	—	—	(5,179)	(378)	(5,557)
Issuance by CoaLogix of CoaLogix shares to non-controlling interests	—	—	596	—	—	—	—	596	2,277	2,873
Stock option compensation	—	—	678	—	—	—	—	678	—	678
Stock option compensation of subsidiaries	—	—	—	—	—	—	—	—	747	747
Exercise of options and warrants	794	8	3,064	(730)	—	—	—	2,342	—	2,342
Purchase of treasury shares	—	—	—	—	—	(1,108)	—	(1,108)	—	(1,108)
Balances as of December 31, 2009	13,249	$ 132	$ 58,373	$ 290	$ (23,343)	$ (4,827)	$ 152	$ 30,777	$ 5,321	$ 36,098

The accompanying notes are an integral part of these consolidated financial statements.

ACORN ENERGY, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(IN THOUSANDS)

	Acorn Energy, Inc. Shareholders									
	Number of Shares	Common Stock	Additional Paid-In Capital	Warrants	Accumulated Deficit	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Acorn Energy, Inc. Shareholders' Equity	Non-controlling interests	Total Equity
Balances as of December 31, 2009	13,249	$ 132	$ 58,373	$ 290	$ (23,343)	$ (4,827)	$ 152	$ 30,777	$ 5,321	$ 36,098
Net loss	—	—	—	—	(25,088)	—	—	(25,088)	(662)	(25,750)
Differences from translation of subsidiaries' financial statements (see Deconsolidation of Coreworx below)	—	—	—	—	—	—	871	871	—	871
Comprehensive loss	—	—	—	—	—	—	—	(24,217)	(662)	(24,879)
Issuance by CoaLogix of CoaLogix shares to non-controlling interests (see Note 5)	—	—	587	—	—	—	—	587	2,423	3,010
Shares issued in March capital raise, net of transaction costs (see Note 18(b)(i))	2,232	22	11,445	—	—	—	—	11,467	—	11,467
Shares issued in the acquisition of Decision Dynamics (see Note 3(a))	1,000									