Zacks Equity Research

September 6, 2010
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Acorn Energy, Inc. (ACFN-NASDAQ)

ACFN: Zacks Co. Report – OUTPERFORM

Current Recommendation	**Outperform**
Prior Recommendation	N/A
Date of Last Change	08/29/2010
Current Price (09/03/10)	$4.52
Six- Month Target Price	**$6.00**

OUTLOOK

Acorn's largest company, CoaLogix, will benefit from the replacement cycle of catalyst regeneration that is necessary for many coal-fired power plants to remain in compliance with the Clean Air Act. With a second plant coming online, the revenues of CoaLogix ought to dramatically improve. The keys to the Acorn's profitability lie in management's ability to control SG&A and R&D expenses at all five operating companies. In order to optimally benefit from the potential of each and every operating company, management needs to prudently balance the investment expenditures with currently obtainable revenue streams.

SUMMARY DATA

52-Week High	**$8.06**
52-Week Low	**$4.30**
One-Year Return (%)	**-1.74**
Beta	**0.96**
Average Daily Volume (shrs.)	**34,102**
Shares Outstanding (million)	**15**
Market Capitalization ($mil.)	**$71**
Short Interest Ratio (days)	**1.78**
Institutional Ownership (%)	**18**
Insider Ownership (%)	**5**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**34.4**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/M**
P/E using 2010 Estimate	**N/M**
P/E using 2011 Estimate	**N/M**
Zacks Rank	**4**

Risk Level	**Average**
Type of Stock	**Small - Value**
Industry	**Elect. Prods. – Misc.**
Zacks Rank in Industry	**24 of 25**

ZACKS ESTIMATES

Revenue
(in millions of $)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2008	4.3 A	3.6 A	4.6 A	8.2 A	20.7 A
2009	8.5 A	7.8 A	6.5 A	8.6 A	31.3 A
2010	7.9 A	9.1 A	9.7 E	13.4 E	40.1 E
2011	14.0 E	14.5 E	14.5 E	15.2 E	58.2 E

Earnings per Share
(EPS is operating earnings before non recurring items)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2008	-$0.21 A	-$0.14 A	-$0.50 A	-$0.35 A	-$1.20 A
2009	-$0.13 A	-$0.04 A	-$0.15 A	-$0.33 A	-$0.65 A
2010	-$0.25 A	-$0.21 A	-$0.20 E	-$0.11 E	-$0.75 E
2011	-$0.16 E	-$0.13 E	-$0.12 E	-$0.09 E	-$0.50 E

Zacks Projected EPS Growth Rate - Next 5 Years % **N/M**

Quarterly numbers may not equal annual total due to rounding.

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KEY POINTS

- Coverage of Acorn Energy is initiated with an Outperform rating. Our price target of $6.00 is based on the expectations that the stock should be valued at a 2.8 price-to-sales ratio (see Valuation section).
- Acorn Energy is a holding company with a portfolio of five operating companies that are focused on addressing the challenges of the energy sector, particularly the opportunities in repairing, monitoring, updating, expanding, and protecting the existing global energy infrastructure.
- CEO John Moore has a successful track record of investing in small emerging companies and enhancing their value. Shareholders of Acorn Energy have the opportunity to participate in his latest venture into Cleantech.

OVERVIEW

Based in Montchanin, Delaware, Acorn Energy (ACFN) is a holding company of five operating companies, which share the common theme of applying technology to improve the productivity and security of existing infrastructure within various energy industries. Currently, all five operating companies are consolidated with **CoaLogix, Inc.** being 72% owned by Acorn Energy and **DSIT Solutions Ltd**., being 84% owned. **Coreworx, Inc.** and **GridSense Pty Ltd**. are wholly-owned. Acorn Energy is increasing its ownership of **US Sensor Systems** with its options to increase ownership to 84% (on a fully diluted basis) by May 2011. In 2009, when only CoaLogix, DSIT, and Coreworx were consolidated, CoaLogix accounted for 58% of revenues, DSIT Solutions Ltd. 29%, and Coreworx 13%.

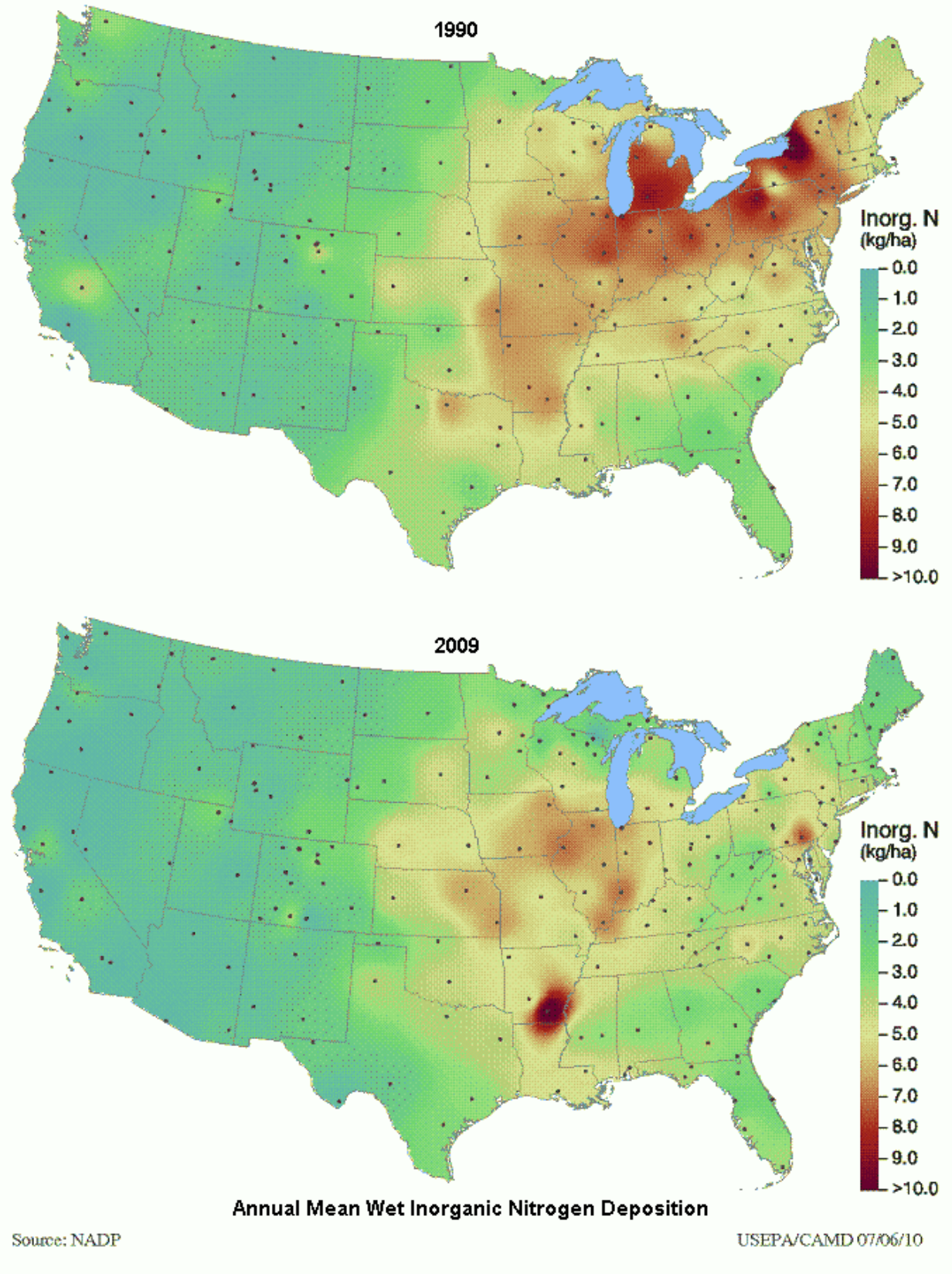
Acorn is focused on addressing the challenges of the energy sector, from improving the efficiency and environmental impact of the energy production to dealing with security risks related to the ownership of large energy assets. There are substantial business opportunities in repairing, monitoring, updating, expanding, and protecting the existing global energy infrastructure. Acorn's strategy is to take controlling positions (at significant discount to previously invested capital) in viable companies that are and will be benefiting from these opportunities. In 2009, 70% of consolidated revenues were generated in the U.S. & Canada, 18% in Israel, and 11% in Asia.

CoaLogix™

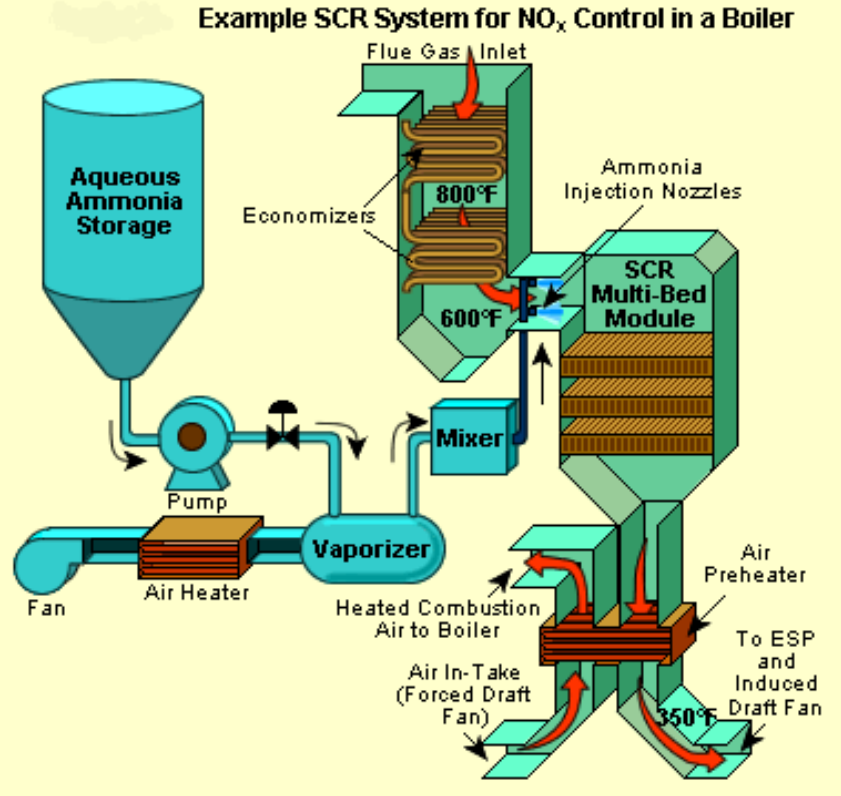
Located in Charlotte, NC, **CoaLogix, Inc.**, through its subsidiary SCR-Tech LLC, is a major participant in SCR (Selective Catalytic Reduction) catalyst replacement market for coal-fired power plants and the attendant catalyst management services. The company has successfully commercialized the catalyst replacement process for plate, corrugated, and honeycomb substrates used in the implementation of SCR technology. Through August 2010, CoaLogix has regenerated over 21,000 modules of catalyst. Currently, CoaLogix has over 40,000 MW under contract for catalyst management services. CoaLogix is 72% owned by Acorn Energy, 27% owned by EnerTech Capital III LP, and approximately 1% owned by certain members of management.

Charged by Congress with protecting the nation's land, air, and water resources, the U. S. Environmental Protection Agency (EPA) has mandated sulfur dioxide (SO_2), nitrogen oxides (NO_X), and mercury (Hg) reductions as part of Title IV of the Clean Air Act Amendments of 1990. Subsequent regulations have established annual allowable emission limitations for nitrogen oxides by boilers of coal-fired electric generation units depending on boiler type (q.v. 40 CFR Part 76). Plant operators have several options for complying with the limits. One of very attractive alternatives is the use of SCR technology. For example, essentially all coal-fired boilers in Germany are equipped with SCR technology, since SCR significantly reduces all three pollutants by more than 80%. In the United States, SCR technology has been applied

mainly to coal-fired boilers with capacities between 25 to 800 megawatts (MW) and in total represents over 100 gigawatts (GW) of coal-fired capacity, up from 2 GW in 1997. These SCR systems have experienced relatively few operational or maintenance problems. As a result of the enforcement of The Clean Air Act, pollutant levels have been substantially reduced; for example, wet inorganic nitrogen deposition has been dramatically decreased (see maps below).



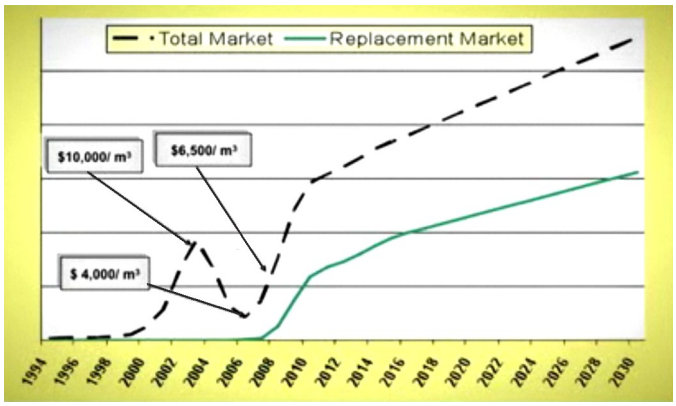
SCR technology reduces nitrogen oxide levels through a catalyst-accelerated reaction of nitrogen oxide with ammonia, reducing nitrogen oxides to water and nitrogen. The reaction takes place on the surface of catalysts within the catalyst chamber, labeled as the SCR Multi-Bed Module in the diagram below. The catalytic materials are coated onto substrate structures that are layered within the chamber.



Source: U.S. Department of Energy

According to EPA report 600/R-01/087, the average catalyst life is assumed to be approximately 15,000 to 20,000 hours. SCR-Tech cleans, rejuvenates, and regenerates the catalyst on the substrates at a significant 40% cost savings versus purchasing new catalyst. SCR-Tech's regeneration process removes catalyst poisons, along with blinding and masking agents, from the substrate and places new active ingredients back onto the catalyst substrate and/or regenerates the existing catalyst.

The SCR catalyst market boomed between 2000 and 2003 (see chart below) as many SCR technology-based systems were initially installed. The first major replacement cycle is imminent and SCR-Tech is building a second plant in Steele Creek, NC to meet the increasing demand. The plant should be operational in the third quarter of 2010.



Source: CoaLogix.com

SCR-Tech also provides consulting services and SCR system management programs to help power plant operators reduce nitrogen oxide compliance costs and optimize operational efficiency. Having provided SCR services for years, customers can benefit from the unique experience of SCR-Tech's employees and the company's patented regeneration process.

In 2009, revenue at CoaLogix increased 79% to $18.1 million due to continued penetration of the SCR regeneration market along with the addition of capacity by a plant expansion project completed in the fourth quarter of 2008. The gross margin increased to 34.8% from 24.3% in 2008 due improved operational efficiency.

Based in Givat Shmuel, Israel, **DSIT Solutions** provides sonar and acoustic-related solutions for port security of strategic energy installations, in addition to related defense and homeland security markets. The flagship product is AquaShield™, a Diver Detection Sonar (DDS) system that provides coastal and offshore protection by detecting and then tracking divers, swimmers, swimmer delivery vehicles, submersibles, and small surface vessels. DSIT's sonar and acoustic technologies have a myriad of other applications, such as naval radiated noise measurement and sonar training simulation. In addition other companies are using sonar building blocks built by DSIT in the construction of their own sonar systems.

In 2009, approximately 57% of DSIT's revenues were derived from inside of Israel, down from 85% in 2008. The company is quickly penetrating European, Asian, and US markets. For example, in March 2009, the U.S. Nuclear Regulatory Commission (NRC) increased the security requirements for nuclear power reactors to require detection and assessment systems at all licensed US nuclear power plants. As a result, managers of strategic coastal waterfront energy installations (especially naval ports, oil terminals, off-shore oil and gas rigs, liquid natural gas plants, and desalination plants) are realizing the need for increased security, which should translate into increased demand for DDS systems. The company estimates that there are at least 3,000 waterfront facilities in need of enhanced maritime security.

In 2009, revenue at DSIT increased 10% to $9.2 million. The gross margin increased to 44% from 34% in the 2008 due to an improved product mix shift to higher-margin naval projects. In 2009, three customers accounted for 83% of DSIT's sales 2009 (38%, 32%, and 13%, respectively). Obviously, the loss of any one of these customers could have a materially adverse effect on DSIT.

Located in Waterloo, Ontario, Canada, **Coreworx** Inc. provides software tools that improve the productivity in managing major capital projects in the oil & gas, power, and mining sectors. The Coreworx web-based software system integrates project information enabling engineering and construction (E&C) contractors to reduce costs, mitigate business risks, and better control a project through its lifecycle. The system enables the secure exchange of 100,000's of documents and drawings that are necessary in mega-projects. In addition, efficiency is enhanced as project teams have access to the most up-to-date information. Large-scale, sophisticated projects tend to be highly regulated, and the Coreworx software platform creates audit trails to comply with demands of authorities and simultaneously mitigating business risk.

Coreworx software is running in 40 countries on over 500 large capital projects cumulatively worth approximately $500 billion. These highly complex projects are in the oil & gas, power generation, and mining industries. Two large customers in the oil & gas industry are Chevron (CHV-NYSE) and Fluor (FLR-NYSE). In the power generation, the Coreworx software product is being used to manage the licensing process of new nuclear plants, in addition to returning older fossil plants back into service. The Coreworx software platform is also being used on the world's largest mega-project, Chevron's $30 billion Wheatstone liquefied natural gas ((LNG) project off the western coast of Australia.

Currently, Coreworx is operating at a loss as product development and sales/marketing costs are greater than the company's revenues.

GridSense™

Headquartered in Sydney, Australia, **GridSense** provides a range of smart monitoring sensors and systems that provide real-time information in electric power transmission and utility distribution networks. GridSense's products address the old and aging electric power delivery system infrastructure of electric utilities, i.e. between the power generation facilities and the end-user. In addition, GridSense should be a beneficiary of increased demand as smart grid stimulus grants from the U.S. Federal government are released to electric utilities. GridSense has over 200 customers in the U.S. and Canada.

GridSense's product offerings detect and measure critical aspects at vital points along the electricity transmission and distribution systems, namely at substations and transformers, and on distribution and transmission lines. Products include LineTracker overhead line recorders, PowerMonic low voltage power analyzers, TransformerIQ transformer monitors, and LiveLine high voltage inspection cameras. For example, GridSense's low-cost ($3,000) transformer monitoring solution, TransformerIQ, monitors 24 different failure points, which can help extend the life of a $300,000 transformer by measuring real-time load and re-routing power during times of high demand. By layering in a demand response mechanism in the distribution network, utilities can delay or avoid building new infrastructure, such as additional power generation facilities and/or transmission lines. LiveLine camera is appropriately insulated to be used around energized high voltage lines by linemen in order to examine connections, read name plates, find faults, and read gauges and meters.

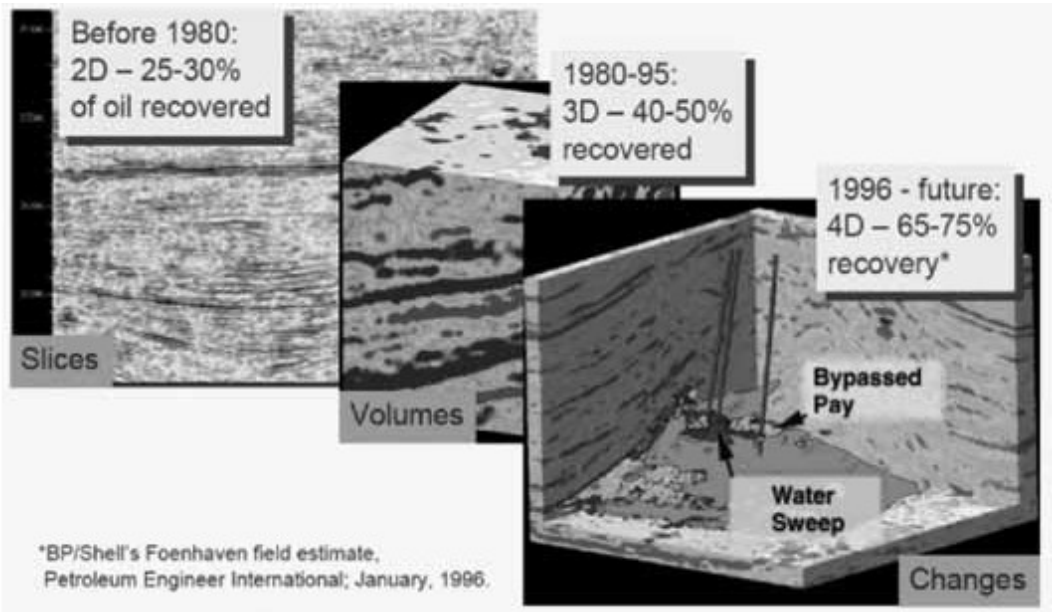
In 2009, Acorn Energy owned 31% of GridSense, and the investment was accounted for using the equity method. After acquiring all the outstanding shares of GridSense for 356,000 shares of ACFN and $1.5 million in cash, Acorn began to fully consolidate GridSense on May 12, 2010. Also in May 2010, GridSense acquired Online Monitoring, Inc., which produces specialty monitors for specific transformer parts.

US SENSOR SYSTEMS INC

Located in Los Angeles, **US Sensor Systems** Inc. (USSI) designs, manufactures, and sells optical fiber sensing systems to the energy and defense markets. USSI utilizes All-Optical sensing technology, which employs Fiber Bragg Gratings (FBGs) embedded into the core of the optical fiber, thereby allowing the fiber itself to be a sensor. The fiber is then packaged into cables appropriate for each application. USSI's optic fiber can be laid on the ocean bottom for undersea surveillance or around marine facilities for harbor security. And it can also be buried along a fence line for commercial, industrial, military or homeland security. Or it can be placed in a coal mine or along a pipeline to monitor structural integrity. USSI's optical fiber systems have four distinct competitive advantages over traditional legacy electronic monitors: 1) the sensing optical cables are able withstand extreme environments, 2) the sensing coverage of optical cable is continuous over the entire length of the cable while electronic monitors have

gaps in coverage between sensors, 3) the optical fiber cable has no moving parts and is not subject to failure as discrete electronic sensors are, and 4) the electronics for detecting the acoustic disturbances along a FBG fiber optic cable can be located in a benign location. USSI's optical fiber-based products are designed to replace existing, legacy, electronics-based sensor systems. USSI's optical fiber systems are being installed for evaluation by several companies in North America, Asia, and Eastern Europe. In the first half of 2010, USSI was awarded a $0.3 million contract by the U.S. Navy for the design, development and testing of a prototype security system, which will be evaluated to protect 360 US ports and harbors.

The optical sensor technology of USSI's optical fiber has the exciting potential to become an enabling technology for 4D seismic in the exploration and production of oil & gas. The use of 3-D seismic has been an enabler for both fossil fuel exploration and reserve augmentation over the last two decades. For example, before 1985 deepwater drilling achieved only a 10% success rate, but by 2002, the global average was 30%. In 2009, Anadarko Petroleum (APC: NYSE) achieved a 50% success rate. Between 1993 and 2002, 75% of global liquid reserve additions came from revisions and extensions of known reserves, not from new field discoveries. These increases in reserves include the application of enhanced oil recovery techniques that utilize 3D monitoring systems. The transition from 3D seismic to 4D seismic monitoring should greatly enhance recoveries from and significantly increase reserves in existing oilfields. By adding the dimension of time to 3D monitoring (by taking snapshots of the subsurface at regular intervals - see diagram below), 4D seismic monitoring (aka designer vertical seismic profiling or VSP) should result in significantly enhanced recovery factors. USSI is developing products for downhole fiber optic sensor systems to provide the energy industry with a tool needed to make the transition from 3D seismic to 4D seismic monitoring. During the second half of 2010, USSI's fiber optic oilfield sensing equipment will be in multiple field trials with major oil and oil service companies.



Source: Petroleum Engineer International, January 1996

Initially, Acorn Energy invested $200,000 in USSI to help the company fund a fiber optic geophone technology trial at the Department of Energy (DOE) with a major oil service company. The positive results from the trial resulted in another investment of $300,000 on February 23, 2010, bringing Acorn's ownership of USSI to 146,386 shares or 10% of USSI's fully diluted capitalization. Having acquired a series of options to purchase up to 84% of USSI for $6,100,000 in cash and stock through May 2011, Acorn Energy began to fully consolidate USSI as of February 23, 2010.

MANAGEMENT – THE CEO FACTOR

John A. Moore has been a Director and Chief Executive Officer of the Acorn Energy since March 10, 2006. He is a tireless executive with a passion for investing in small emerging companies and building up their value. John initially was attracted to Acorn when it was Data Systems & Software Inc. (DSSI), primarily because DSSI was the largest shareholder of Comverge, a company that provides capacity solutions to electric utilities and grid operators. John repositioned DSSI's focus to investing in emerging companies and aiding their growth through funding and synergistic bolt-on acquisitions. The company was ultimately renamed Acorn Energy. In April 2007, Comverge (COMV: NASDAQ) went public at eight times 12-month trailing revenues, and in December 2007, Comverge completed a secondary offering lead by Goldman Sachs (GS: NYSE) at 16 times revenues. Acorn Energy sold 889,005 shares of COMV stock for $25.8 million in the secondary offering, 1,261,165 shares for $15.4 million in 2008, and the remaining 502,500 shares for $4.0 million in 2009.

John career began at Lehman Brothers, where he converted defaulted debt into equity of a small public company (CGS Scientific) for a 50 bagger over three years. After a series of business investments[1], John co-founded and was President of Edson Moore Healthcare Ventures, a fund which acquired $150 million portfolio of 16 joint venture health care-related assets from Elan Pharmaceuticals in July 2002. Over time, the assets were sold at a considerable profit. Also, he was a co-founder and CEO of Optimer Inc., which was sold to a leveraged buyout fund (Sterling Capital) in 2007.

John is an advocate for increasing productivity in the energy sector by utilizing technological innovation on existing infrastructure (aka Cleantech) as evident by his co-authorship of The Hidden Cleantech Revolution, soon to be published in 2010. He has appropriately named his blog: betthejockey.

RECENT NEWS

On August 28, 2010, Acorn Energy reported second quarter results for the three month period ending June 30, 2010. Revenues increased 17.3% to $9.12 million from 7.78 million, driven by incremental demand at CoaLogix and DSIT's successful penetration into the security market of exposed waterfront commercial installations. Gross profit increased 19.5% to $4.17 million from $3.49 million in the comparable period last year. Acorn reported a loss of $3.15 million due to substantial investments in new product development and sales and marketing on lower revenues at Coreworx. Management expects a stronger second half after modest revenue growth in the first half due to new CoaLogix plant coming on stream in the third quarter and the pipeline of proposals at Coreworx for providing software solutions to several major energy infrastructure construction projects. The gross profit margin increased 44 basis points (bps) to 45.7% from 44.9% in the comparable year-ago quarter. However, SG&A significantly increased to 82.9% of sales, negatively impacting profitability. EPS were a loss of $0.21 per diluted share.

On August 25, 2010, CoaLogix announced five-year contract that establishes provisions for SCR catalyst regeneration for American Electric Power's (AEP: NYSE) fleet of units equipped with selective catalytic reduction (SCR) systems. The long-term agreement will enable AEP to optimize its catalyst management program by including regeneration in its catalyst management options. SCR-Tech has already regenerated over 340 SCR catalyst modules for use at two of AEP's coal-fired power plants.

On August 11, 2010, CoaLogix and Cormetech (a joint equity company of Corning and Mitsubishi Heavy Industries) announced the signing of an agreement that combines the technical, service and marketing

[1] American Electromedics, October Films, Virata, and BlueGill Technologies

experience of both companies to provide long-term SCR-based emissions reduction solutions for fossil-fueled power plants. The agreement was effective immediately.

On May 24, 2010, GridSense announced the acquisition of On-Line Monitoring for the assumption of debt.

On May 12, 2010, Acorn began consolidating the results of GridSense, after acquiring the remaining outstanding shares of GridSense.

On April 30, 2010, Coreworx completed the acquisition of Calgary-based Decision Dynamics Technology in consideration for the issuance of 1,000,000 shares of Acorn Energy. Decision Dynamics will add real-time cost control modules to Coreworx's software platform application and give project managers a complete, real-time financial view of payments as they move through the project.

On April 12, 2010, Acorn Energy announced a change of independent accountants.

On February 23, 2010, Acorn began consolidating the results of U.S. Sensor Systems.

VALUATION

The appropriate valuation methodology for Acorn Energy is based on price-to-sales (P/S) due the character of Acorn's enterprise, namely a small-capitalization company with negative profitability, but with a sales profile that should grow and expand over time as management makes investments in the underlying businesses. Ultimately, the growing revenue stream should manifest itself into positive earnings. Based on historical norms for similar companies and the company's historical P/S range, a price-to-sales valuation range between 1.1 and 3.2 is expected. Our $6.00 price target is based on a 2.8 price-to-sales ratio valuation. At $4.52, the current P/S ratio of Acorn's stock is 2.15.

A critical step in the methodology of determining the appropriate price-to-sales ratio is the debt level of the company. Debt should be added to the "price." In other words, the price-to-sales ratio is calculated as equity plus debt divided by sales.

Significant fundamental events can considerably increase the company's valuation parameter in a step-fashion. One such event would be the company's achievement of positive profitability, in which case the stock could experience multiple expansion in short order. Management has the ability to dramatically lower SG&A and achieve profitability sooner than expected, since current expenses are above-trend due to heavy investments aimed at driving revenue growth.

Another step-up event would be the re-valuation of one of the company's operating companies, possibly through an initial public offering (IPO) or an industry demand-enhancing catalyst. Investors should be cognizant of precedents with somewhat similar characteristics. For example, the anticipation for increased usage of smart meters and the expected government stimulus for electricity grid modernization drove Itron's stock (ITRI: NYSE), a mid-sized manufacturer of smart meters, to a 5.7 price-to-sales valuation in mid-2007. And CEO John Moore sold Comverge at 16 times sales, also in 2007.

When the company achieves a permanent upward shift in the level of profitability, the appropriate valuation methodology should shift to the price-to-earnings (P/E) ratio unless the foundation of the business' demand is highly sensitive to the economic cycle. When a price-to-earnings ratio is applicable, other factors, such as the operating margin and return-on-equity, will take on increased importance in determining the expected P/E valuation range.

Acorn Energy Earnings Model

	FISCAL YRS ENDING 12/31	Q1	Q2	Q3	Q4	2008	Q1	Q2	Q3	Q4	2009
INCOME STATEMENT (000 except EPS)											
CoaLogix	revenues	2,249	1,352	1,840	4,658	**10,099**	5,390	4,547	2,824	5,338	**18,099**
DSIT	revenues	1,908	2,133	1,918	1,946	**7,905**	1,966	2,036	2,154	2,651	**8,807**
Coreworx	revenues	0	0	767	1,563	**2,330**	1,027	1,075	1,385	511	**3,999**
GridSense	revenues					**0**					**0**
US Sensor	revenues					**0**					**0**
Other	revenues	138	122	103	0	**363**	95	122	100	95	**412**
TOTAL REVENUES		4,295	3,607	4,627	8,167	**20,696**	8,478	7,780	6,463	8,596	**31,317**
CoaLogix	cost of goods sold	1,491	1,007	2,075	3,069	**7,642**	3,535	2,931	2,126	3,211	**11,803**
DSIT	cost of goods sold	1,307	1,470	1,314	1,227	**5,318**	1,219	1,132	1,215	1,380	**4,946**
Coreworx	cost of goods sold	0	0	257	664	**921**	271	145	183	99	**698**
GridSense	cost of goods sold					**0**					**0**
US Sensor	cost of goods sold					**0**					**0**
Other	cost of goods sold	99	98	85	0	**282**	74	82	78	84	**318**
TOTAL COST OF GOODS SOLD		2,897	2,575	3,731	4,961	**14,163**	5,099	4,289	3,602	4,774	**17,765**
Gross Profit		1,398	1,032	897	3,206	6,533	3,379	3,491	2,861	3,822	13,552
TOTAL SG&A		2,305	2,418	3,401	3,543	**11,667**	4,108	4,629	4,565	5,215	**18,517**
	R&D expense	(51)	(57)	(402)	(659)	**(1,169)**	(276)	624	(424)	(493)	**(569)**
	In process R&D Coreworx			(551)	(1,893)	**(2,444)**					**0**
	Dividends from EnerTech					**0**					**0**
	Impairments	(248)	(268)	(2,454)	(694)	**(3,664)**	(70)		0	(2,611)	**(2,692)**
OPERATING INCOME		(1,206)	(1,711)	(5,911)	(3,583)	**(12,411)**	(1,075)	(514)	(2,128)	(4,497)	**(8,226)**
	Interest expense	(2,988)	88	(50)	(81)	**(3,031)**	(169)	85	297	(444)	**(231)**
	Gain on early redemption	1,259	0	0	0	**1,259**					**0**
	Gain on Sale Comverge	0	5,782	3,079	0	**8,861**	417	810	176	0	**1,403**
	Gain (loss) private placement			7		**7**					**0**
	Gain on investment GridSense					**0**					**0**
Pretax income		(2,935)	4,159	(2,875)	(3,664)	**(5,315)**	(827)	381	(1,655)	(4,941)	**(7,054)**
	Taxes	642	(640)	(691)	347	**(342)**	0	0	72	672	**744**
Net Income after taxes		(2,293)	3,519	(3,566)	(3,317)	**(5,657)**	(827)	381	(1,583)	(4,269)	**(6,310)**
	Equity income (loss) Paketeria	(287)	(374)	(899)	0	**(1,560)**	0	0	263	0	**263**
	Equity income (loss) GridSense	0	(134)	(60)	(732)	**(926)**	(129)	0	0	0	**(129)**
	Minority interest	(9)	89	204	(36)	**248**	(107)	(37)	96	468	**420**
REPORTED NET INCOME		(2,589)	3,100	(4,321)	(4,085)	**(7,895)**	(1,063)	344	(1,224)	(3,801)	**(5,745)**
	Weighted Avg. Shares Out. Diluted	11,050	12,138	11,538	11,637	**11,374**	11,535	11,553	11,186	11,592	**11,445**
REPORTED NET INCOME		(0.23)	0.26	(0.37)	(0.35)	**(0.69)**	(0.09)	0.03	(0.11)	(0.33)	**(0.50)**
NRI	ex-Comverge	(2,589)	(2,042)	(6,709)			(1,480)	(466)	(1,400)		
	Paketeria	287	374	899					(263)		
	Zacks Dilluted Earnings before NRI	(2,302)	(1,668)	(5,810)	(4,085)	**(13,865)**	(1,480)	(466)	(1,663)	(3,801)	**(7,411)**
Zacks Diluted EPS before NRI		-0.21	-0.14	-0.50	-0.35	**(1.20)**	-0.13	-0.04	-0.15	(0.33)	**(0.65)**

Acorn Energy Earnings Model

	FISCAL YRS ENDING 12/31	Q1	Q2	Q3 E	Q4 E	2010 E	2011 E
INCOME STATEMENT (000 except EPS)							
CoaLogix	revenues	4,478	4,855	5,200	8,000	**22,533**	**36,800**
DSIT	revenues	2,507	2,751	2,910	3,582	**11,750**	**13,500**
Coreworx	revenues	770	897	900	1,200	**3,767**	**4,200**
GridSense	revenues	0	517	540	575	**1,632**	**3,000**
US Sensor	revenues	0	104	120	135	**359**	**700**
Other	revenues	99	0	0	0	**99**	
TOTAL REVENUES		7,854	9,124	9,670	13,492	**40,140**	**58,200**
CoaLogix	cost of goods sold	2,546	3,000	3,213	4,943	**13,703**	**20,141**
DSIT	cost of goods sold	1,342	1,475	1,560	1,921	**6,298**	**7,019**
Coreworx	cost of goods sold	176	204	205	273	**858**	**714**
GridSense	cost of goods sold	0	191	199	212	**603**	**1,075**
US Sensor	cost of goods sold	0	83	90	95	**268**	**420**
Other	cost of goods sold	82	0	0	0	**82**	
TOTAL COST OF GOODS SOLD		4,146	4,953	5,268	7,444	**21,811**	**29,368**
Gross Profit		3,708	4,171	4,403	6,048	**18,330**	**28,832**
TOTAL SG&A		6,321	7,565	7,000	7,000	**27,886**	**34,920**
	R&D expense	(670)	(872)	(400)	(500)	**(2,442)**	**(1,500)**
	In process R&D Coreworx					**0**	**0**
	Dividends from EnerTech	135				**135**	**0**
	Impairments					**0**	**0**
OPERATING INCOME		(3,148)	(4,266)	(2,997)	(1,452)	**(11,863)**	**(7,588)**
	Interest expense	50	(355)	124	(263)	**(444)**	**(350)**
	Gain on early redemption					**0**	
	Gain on Sale Comverge					**0**	
	Gain (loss) private placement					**0**	
	Gain on investment GridSense		1,327			**1,327**	
Pretax income		(3,098)	(3,294)	(2,874)	(1,714)	**(10,980)**	**(7,938)**
	Taxes	(75)	(123)	(150)	(100)	**(448)**	**0**
Net Income after taxes		(3,173)	(3,417)	(3,024)	(1,814)	**(11,428)**	**(7,938)**
	Equity income (loss) Paketeria	0	0	0	0	**0**	**0**
	Equity income (loss) GridSense	0	0	0	0	**0**	
	Minority interest	0	265	0	0	**265**	
REPORTED NET INCOME		(3,173)	(3,152)	(3,024)	(1,814)	**(11,163)**	**(7,938)**
	Weighted Avg. Shares Out. Diluted	12,498	15,161	15,161	16,500	**14,830**	**16,000**
REPORTED NET INCOME		(0.25)	(0.21)	(0.20)	(0.11)	**(0.75)**	**(0.50)**
NRI	ex-Comverge Paketeria						
	Zacks Dilluted Earnings before NRI	(3,173)	(3,152)	(3,024)	(1,814)	**(11,163)**	**(7,938)**
Zacks Diluted EPS before NRI		(0.25)	(0.21)	(0.20)	(0.11)	**(0.75)**	**(0.50)**

INSIDER TRADING AND OWNERSHIP

Corporate insiders own 5.4% of the outstanding common stock and have engaged in a relatively small amount of open-market activity except for John Moore, CEO, who owns 682,411 shares of Acorn Energy and has been steadily accumulating shares in 5,000 share increments throughout 2010.

Institutional investors own 17.7% of the shares outstanding of Acorn Energy as of the end of the latest reporting period (June 30, 2010). Austin Marxe & David Greenhouse was the largest holder with (8.1% of the shares outstanding). Other major institutional holders include Dimensional Fund Advisors (3.5%), Cutter & Company (1.6%), Artis Capital Management (1.6%), Perritt Capital Management (0.9%), and RBC Capital Markets (1.2%). Cutter & Company and Artis Capital Management increased their holdings during the latest reported quarter, Dimensional Fund Advisors and RBC Capital Markets reduced their holdings, while Austin Marxe & David Greenhouse and Perritt Capital Management maintained their holdings in Acorn Energy.

PROJECTED INCOME STATEMENT & BALANCE SHEET

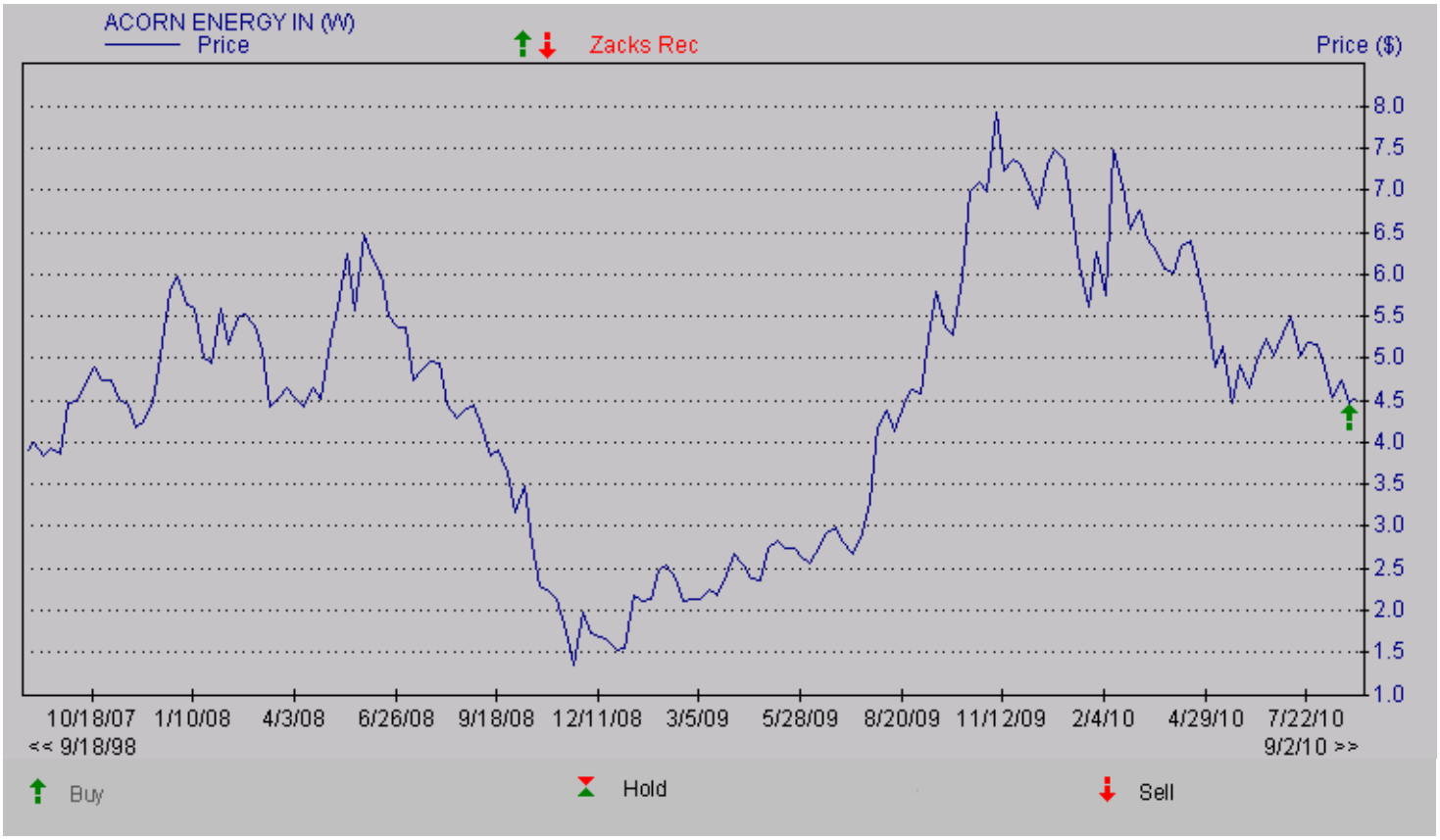
Acorn Energy, Inc.

Income Statement and Balance Sheet

(Dollars in millions, except EPS data)

	12/05	12/06	12/07	12/08	12/09	12/10E
Revenues	4.2	4.1	5.6	20.7	31.3	40.1
Cost of Goods Sold	2.9	2.8	4.2	14.2	17.8	21.8
SG&A	3.5	4.6	5.3	11.7	18.5	27.9
Interest expense	0.1	0.0	1.6	3.0	0.2	0.4
Other	0.4	0.8	-0.3	5.7	2.2	1.2
Zacks Adjusted Income before NRI	-2.7	-4.1	-5.2	-13.9	-7.4	-11.2
Net Income	-1.3	-6.1	32.5	-7.9	-5.7	-11.2
Diluted EPS before NRI	-0.33	-0.48	-0.45	-1.20	-0.65	-0.75
Reported EPS	-0.16	-0.71	3.30	-0.69	-0.50	-0.75
Cash & Marketable Securities	0.9	1.5	19.6	15.1	11.2	9.9
Current Assets	6.6	3.6	24.7	25.6	24.7	35.0
Current Liabilities	5.2	3.3	10.9	11.8	8.4	18.4
Long Term Debt	0.1	0.0	0.0	0.0	0.4	0.3
Shareholder's Equity	0.8	-0.5	67.3	36.1	36.1	54.0

HISTORICAL ZACKS RECOMMENDATIONS



DISCLOSURES

The analysts contributing to this report do not hold any shares of ACFN. Zacks EPS and revenue forecasts are not consensus forecasts. Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts' personal views as to the subject securities and issuers. Zacks certifies that no part of the analysts' compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report. Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Because of individual objectives, the report should not be construed as advice designed to meet the particular investment needs of any investor. Any opinions expressed herein are subject to change. This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. Zacks or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. Zacks uses the following rating system for the securities it covers. **Outperform**- Zacks expects that the subject company will outperform the broader U.S. equity market over the next one to two quarters. **Neutral**- Zacks expects that the company will perform in line with the broader U.S. equity market over the next one to two quarters. **Underperform**- Zacks expects the company will under perform the broader U.S. Equity market over the next one to two quarters. The current distribution of Zacks Ratings is as follows on the 1006 companies covered: Outperform- 14.0%, Neutral- 79.2%, Underperform – 6.3%. Data is as of midnight on the business day immediately prior to this publication.