China Recycling Energy Corp.

OTC BB: CREG Industry: Clean Tech

January 25, 2010

MARKET DATA	
Share Price:	4.68
Market Cap:	181.49 M
52wk Range:	0.22—4.95
Ave. Volume:	76,000
Basic S/O:	38.78 M
Diluted S/O:	50.78 M
Float:	11.92 M
Institutional %:	0%
Insider %:	69%

FINANCIAL DATA (mrq)

Cash:	10.08 M
ST Debt:	2.93 M
LT (Convertible) Debt:	8.00 M
Book Value:	43.69 M
EBITDA (ttm):	14.00 M
CFFO (ttm):	18.80 M

USD	2008A	2009e	2010e	2011e
Revenue	(in Millio	ons of US	SD)	
March	0.00	4.32A	12.21	10.39
June	2.62	11.14A	10.40	30.70
Sept	4.26	18.43A	24.42	10.39
Dec	12.34	11.99	42.91	30.70
REV*	19.22	45.87	89.93	82.18
P/S	9.44	3.96	2.02	2.21

EPS

March	(0.04)	0.02A	0.06	0.09
June	(0.11)	0.07A	0.06	0.12
Sept	0.01	0.08A	0.10	0.10
Dec	0.04	0.05	0.14	0.14
EPS	(0.04)	0.24	0.37	0.45
P/E	N/A	19.50	12.65	10.40

*Revenue is recorded only at the start of a new lease. Interest Income in Sales-Type Leases, as can be seen on p. 4, provides a better picture of CREG's operations.

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First 9MW of Erdos contract completed, with the next 61MW now scheduled for completion in 2010.

Key Updates

The Company installed the first 9MW of Phase I of the Erdos Project, which will be recognized in Q4:09. The second 9MW of Phase I is scheduled to be completed during Q1:10. The JV has changed the timeline of the installation schedule, moving from seven phases for the initial 70MW to three phases. Phase II will consist of three-9MW units and Phase III will consist of one-25MW unit, all of which should be completed in 2010. The funding for Phases II and III will come from the capital raise discussed below. We now expect the remaining 50MW will be installed in 2011 (the funding for all projects post-2010 could come from a mix of debt and equity however for modeling purposes we are assuming only debt).

China Recycling raised RMB 206.88 million, or approximately \$30.29 million, in Ioan capital to fund the construction of its Erdos projects (the Company can expand this facility to RMB 300 million, or roughly \$44.0 million). The capital was raised through the formation of the Low Carbon Fortune-Energy Recycling No. 1 Collective Capital Trust Plan, with the proceeds to be Ioaned to the JV for use on Phase II and Phase III. RMB 165.5 million will be funded by Beijing International Trust, with the remaining RMB 41.38 million funded by the JV and China Recycling.

The Company announced it expects Q4 revenue to be in the range of \$11-\$12 million and net income between \$2.5 -\$3.0 million, or \$0.05-\$0.06 per diluted share. This translates into 2009 sales between \$45-\$46 million and net income of \$10.5-\$11.0 million, or \$0.22-\$0.23 per diluted share. Management expects to issue 2010 guidance by March 31, 2010.

Valuation

We are maintaining our Buy rating on China Recycling Energy Corp. and raising our target price from \$4.50 to \$6.00. The new target price is based on a P/E multiple of 16 times our revised 2010 diluted EPS estimate of \$0.37. The increased estimate reflects the acceleration of the original seven-phase Erdos project into three phases, all of which should be completed in 2010. Looking into 2011, we expect the Company to complete the remaining 50MW of the Erdos project and continue to fulfill the Zhonggang (Sinosteel) contract.

Business Summary

China Recycling Energy Corp., located in Xi'an, China, leases three types of energy generation systems through its BOT model that use captured industrial process waste streams as the fuel for its systems. It currently offers Pressure-to-Energy (TRT), Heat-to-Energy (CHPG), and Gas-to-Energy (WGPG and CCPP) Systems.



UPDATE Buy, \$ 6.00

COMPANY UPDATE

Erdos Phase I Installation & Project Changes

The Company installed the first 9MW of Phase I of the Erdos Project, which will be recognized in Q4:09. The second 9MW of Phase I is scheduled to be completed during Q1:10. The JV has changed the timeline of the installation schedule, moving from seven phases for the initial 70MW to three phases. Phase II will consist of three-9MW units and Phase III will consist of one-25MW unit, all of which should be completed in 2010. The funding for Phases II and III will come from the capital raise discussed below. We now expect the remaining 50MW will be installed in 2011 (the funding for all projects post-2010 could come from a mix of debt and equity however for modeling purposes we are assuming only debt).

Bank Debt Financing

Over the course of two tranches in December, China Recycling raised RMB 206.88 million, or approximately \$30.29 million, in Ioan capital to fund the construction of its Erdos projects (the Company can expand this facility to RMB 300 million, or roughly \$44.0 million). The capital was raised through the formation of the Low Carbon Fortune-Energy Recycling No. 1 Collective Capital Trust Plan, with the proceeds to be Ioaned to the Erdos TCH joint venture for use on Phase II and Phase III of the project. The plan includes a series of preferred trust units, each with a price of RMB 1. The Category A funds were financed by Beijing International Trust, with the Category B funds coming from the Erdos TCH Joint Venture and China Recycling (Xi'an TCH). Erdos TCH will also share the benefits of the Clean Development Mechanism (CDM) gained under the Kyoto Protocol equally with Beijing Trust during the term of the Ioan.

	Units	Value (RMB)	Value (USD)	Int. Rate	Term	Lender
Category A1	32,450,000	32,450,000	\$ 4.75 M	9.94%	2 years	Beijing Trust
Category A2	15,000,000	15,000,000	\$ 2.20 M	11.00%	3 years	Beijing Trust
Category A3	118,050,000	118,050,000	\$ 17.28 M	12.05%	4 years	Beijing Trust
Preferred A Trust	165,500,000	165,500,000	\$ 24.23 M			
Category B1	9,100,000	9,100,000	\$ 1.33 M	8.35%	4 years	Erdos TCH
Category B2	32,280,000	32,280,000	\$ 4.73 M	8.35%	4 years	Xi'an TCH
Secondary B Trust	41,380,000	41,380,000	\$ 6.06 M			
Total	206,880,000	206,880,000	\$ 30.29 M			

Preliminary Q4:09 and FY:09 Results

The Company announced it expects fourth quarter revenue to be in the range of \$11-\$12 million and net income between \$2.5 -\$3.0 million, or \$0.05-\$0.06 per diluted share. This translates into 2009 sales between \$45-\$46 million and net income of \$10.5-\$11.0 million, or \$0.22-\$0.23 per diluted share. Management expects to issue 2010 guidance by March 31, 2010.

New Board Member

The Company added Robert Chanson to the Board of Directors, naming him Chairman of the Compensation Committee. Mr. Chanson currently serves as Chairman of Calventis SA and Chairman of Samba Minerals, after holding the positions of Chairman and CEO of AmbioCare Holdings. This addition gives the Company an independent board (4-3).

RISKS

The Chinese Economy

A slowdown in the growth of the economy could dampen demand for the products manufactured in its lessee's facilities, such as steel and cement, which would reduce demand for CREG's systems.

Government Stimulus

The Company is indirectly dependent on the Chinese government's stimulus investments in infrastructure. Should it stop investing in infrastructure, as has been discussed, China Recycling may find it difficult to enter into contracts for guaranteed minimum lease payments at the same rate it currently enjoys.

Quarterly Results Volatility

Due to the nature of the Company's revenue recognition it will report lumpy sales results based on the timing of systems put into operation. While the figures are important and show the start of new leases, the Sales-Type Lease Interest Income line may be the better figure to track the Company's financial performance.

Competition

Although the Company enjoys relatively little competition and high returns on investment, it should be expected that competitors will quickly enter the market and drive down margins.

Potential Dilution

China Recycling will need to obtain additional funds to continue working through its project pipeline. While we have estimated this will be funded by bank debt (\$35 million spread over 2010 and 2011), the Company could choose to issue new equity.

Large Shareholders

CEO Ku Guohua owns 18.71 million and Carlyle Asia Growth Partners owns 16.72 million shares and share equivalents, together accounting for 70% of the total share and share equivalents outstanding.

Liquidity

The stock is thinly traded, which may make it difficult to take a position.

VALUATION

We are maintaining our Buy rating on China Recycling Energy Corp. and raising our target price from \$4.50 to \$6.00. The new target price is based on a P/E multiple of 16 times our revised 2010 diluted EPS estimate of \$0.37. The increased estimate reflects the acceleration of the original seven-phase Erdos project into three phases, all of which should be completed in 2010. Looking into 2011, we expect the Company to complete the remaining 50MW of the Erdos project and continue to fulfill the Zhong-gang (Sinosteel) contract.

China Recycling Energy Corp.

ESTIMATED INCOME STATEMENT

	2008A	Q1:09A	Q1:09A Q2:09A Q3:09A Q4	23:09A (:09e	2009e	Q1:10e	Q2:10e	Q3:10e	Q4:10e	2010e	Q1:11e	Q2:11e	Q3:11e	Q4:11e	2011e
Sales of Products	8,049	ı	9,513	18,426	11,988 3	39,927	12,209	10,395	24,419	42,906	89,929	10,395	30,696	10,395	30,696	82,183
Rental Income	11,169	4,323	1,624	ı	1	5,947	'	,	ı	ı	'	ı	'	'	'	1
Total Revenue	19,218	4,323	11,137	18,426	11,988	45,874	12,209	10,395	24,419	42,906	89,929	10,395	30,696	10,395	30,696	82,183
Cost of Products	6,192		7,318	14,180	9,078	30,576	9,078				69,579	8,053	25,216	8,053		66,537
Rental Expense	7,810	3,022	1,127	•	1	4,149	•		•	ı	'		'	'	'	•
Total Cost of Sales	14,002	3,022	8,445	14,180	,078	34,725	9,078	8,053	18,155	34,293	69,579	8,053	25,216	8,053	25,216	66,537
Product GP	1,857	ľ	2,195	4,246	2,910	9,351	3,132				20,350	2,343	5,481	2,343	5,481	15,647
Rental GP	3,359	1,301	497	'	I	1,798	·	ı	·	I	'	ı	'	1	'	ı
Gross Profit	5,216	1,301	2,692	4,246	910	11,149	3,132	2,343	6,263	8,613	20,350	2,343	5,481	2,343	5,481	15,647
Sales-Type Lease Int. Inc.	2,285	1,199	1,135	1,784	2,793	6,911	3,273	3,835	4,308	5,492	16,908	7,837	8,180	9,903		36,171
SG&A	3,354	796	560	1,375	1,645	4,376	1,780	1,915	2,050	2,295	8,040	2,605	2,740	2,941	3,075	11,361
Total Operating Income	4,147	1,704	3,267	4,655	4,057	13,683	4,625	4,262	8,521	11,810	29,218	7,575	10,921	9,305	12,657	40,458
EBITDA	5,602	2,100	3,328	5,350	4,064	14,842	4,632	4,269	8,528	11,817	29,246	7,582	10,928	9,312	12,664	40,486
Interest Expense, Net	(4,760)	(58)	(376)	142	(289)	(581)	(663)	(1,042)	(1,594)	(2,071)	(5,401)	(2,324)	(2,676)	(2,803)	(3,131) (10,933)	10,933)
Other Expense	108	(2)	(1)	(99)	1	(69)	·	,	ı	I	'	ı	'	'	'	ı
Exchange Loss	(82)	'	(2)	ı	'	(2)	•	,	ı	I	'	ı	'	'	'	ı
Income Before Taxes	(587)	1,644	2,888	4,731	3,768 1	13,031	3,932	3,220	6,927	9,738	23,818	5,251	8,245	6,502	9,526	29,524
Income Tax Expense	(1,633)	(568)	343	(642)	(161)	(1,958)	(260)	(483)	(1,039)	(1,461)	(3, 573)	(788)	(1,237)	(675)	(1,429)	(4,429)
Net Income	(2,220)	1,076	3,231	3,789	2,977	11,073	3,342	2,737	5,888	8,277	20,245	4,463	7,008	5,527	8,097	25,096
Minority Interest	I	'	(3)	(8)	495	484	504	0	949	1,471	2,924	367	1,204	559	1,405	3,535
Net Income	(2,220)	1,076	3,234	3,797	2,482	10,589	2,838	2,737	4,939	6,807	17,321	4,097	5,804	4,967	6,692	21,560
Basic EPS	(0.07)	0.03	0.08	0.10	0.06	0.28	0.07	0.07	0.13	0.18	0.45	0.11	0.15	0.13	0.17	0.56
Basic S/O	32,096	36,425	38,261	38,778	38,778 38,061	38,061	38,778	38,778	38,778	38,778	38,778	38,778	38,778	38,778	38,778	38,778
Diluted Net Income	10 0541	120	0000		1 1 1 1 C	611 11 011	090 0	070 C	5 074	6 011	17 067	900 V	2016	+ + + +	6 020	00100
Diluted FPS	(0.04)	0 00	0.07	0.08	0.05	0 24	0.06	0.06	010	0 14	0.37	0.09	0 10	010	0.14	0.45
Diluted S/O	1				47,505 4	505 46,692	47,876	48,165			48,256	48,743	48,876	48,991		48,925
	2008A	Q1:09A	Q1:09A Q2:09AQ3:09A Q4	33:09A C	:09e	2009e (Q1:10e	Q2:10e (Q3:10e	Q4:10e	2010e	Q1:11e	Q2:11e	Q3:11e	Q4:11e	2011e
Product GM	23.1%	N/A	23.1%	23.0%	24.3%	23.4%	25.7%	22.5%	25.7%	20.1%	22.6%	22.5%	17.9%	22.5%	17.9%	19.0%
Rental GM	30.1%	30.1%			Z	30.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gross Margin	27.1%			23.0%	24.3%	24.3%	25.7%	22.5%	25.7%	20.1%	22.6%	22.5%	17.9%	22.5%	17.9%	19.0%
Operating Margin	21.6%			25.3%	33.8%	29.8%	37.9%	41.0%	34.9%		32.5%	72.9%	35.6%	89.5%		49.2%
EBITDA Margin	29.1%			29.0%	33.9%	32.4%	37.9%	41.1%	34.9%		32.5%	72.9%	35.6%	89.6%		49.3%
Net Margin	-10.7%	26.3%	30.0%	21.3% 21	21.8%	24.0%	24.3%	27.6%	20.8%	16.2%	19.9%	40.7%	19.4%	49.2%	22.3%	26.9%
Source: Documents filed with the SEC by China Recycling Energy Corp. and Gar Wood Securities estimates	SEC by Ch	iina Recyci	ling Energy	r Corp. and	l Gar Woo	d Securitie	s estimate:	(0								

Gar Wood Securities

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DISCLOSURES

Distribution of Ratings

			<u>I.B. last 1</u>	2 months
Rating	Count	Percent	Count	Percent
BUY	8	89%	0	00%
HOLD	1	11%	0	00%
SELL	0	00%	0	00%
NO RATING	0	00%	0	00%

Explanation of Ratings

BUY:	Describes stocks we expect to provide a total return (capital appreciation + yield) of 15% or more in the next 12-month period.
HOLD:	Describes stocks we expect to provide a total return (capital appreciation + yield) of plus or minus 15% or more in the next 12-month period.
SELL:	Describes stocks we expect to provide a total negative return (capital depreciation + yield) of 15% or more in the next 12-month period.
NO RATING:	Describes stocks that have their investment rating and/or target price temporarily removed for fundamental or compliance-based reasons.

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Company	<u>Disclosures</u>
China Recycling Energy Corp.	6

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