

# The **A**DVISOR

Energy Development Corporation - BUY

January 11, 2012



### Revitalizing growth

Energy Development corporation (PSE:EDC) is one of the leading geothermal energy companies around the world with over 30 years of experience, it is also the biggest geothermal producer in the Philippines.

### Investment Merits:

**The current outlook on the Power sector is complimentary for EDC.** There is an impending energy shortage given the rise in demand. The Department of Energy estimates that Luzon alone will need an additional capacity of 11,900MW to meet peak demand. Our government now seeks to adjust the energy supply with renewable energy resource, one of which is geothermal, which is cheap and highly reliable. The Philippines has vast reserves of geothermal energy with only 33% developed out of reserves.

**We estimate EDC to have stable earnings growth and better profit margins in the coming years.** The projected compounded annual growth rate of revenues will be 9.4% from 2011 to 2014. EBITDA margin will improve by 692 bps for 2012 and 147 bps for 2013. We think that the company will achieve a turnaround after having a lower core income for 2011 due to the impairment of the Northern Negros power plant and rehabilitation of the Bacman power plant. Revenues and core income will grow by 22% and 82% respectively during the turnaround year.

**Valuations estimates remain attractive for EDC.** Our DCF analysis estimates equity value amounting to P139 billion based on a dual stage DCF valuation. We assumed a range of terminal values ranging from P134 to P144 billion based on constant growth and exit multiple methodologies. Meanwhile, Our EV/EBITDA analysis shows that EDC trades at a premium compared to its peers, We think that this is warranted given the favorable industry backdrop and growing profitability of the company.

We initiate our coverage on EDC with a **BUY** rating due to its steady earnings growth projection and complimentary sector outlook amid attractive valuation estimates. We have a target price of P7.47, a significant 18.31% upside based on the DCF analysis.

### Performance

	Absolute	Relative
1mos	4.13%	6.26%
3mos	11.68%	6.44%
6mos	-6.66%	3.87%
12mos	7.50%	10.92%

Source: Technistock

### Valuation Summary

DCF-Stg. 1	0.82
DCF-Stg. 2	1.45
Constant Growth	3.58
Exit Multiple	3.86
Total DCF	9.71
Debt	-2.24
Target price	7.47
Price	6.31
Upside	18.31%

Source: ABCSI Research Estimates

### Gregg Adrian R. Ilag

Equities Analyst

AB Capital Securities, Inc.  
14F Tower One and Exchange Plaza  
Ayala Triangle, Ayala Avenue  
Makati City, Philippines  
Tel.: 898-7555  
Fax No.: 898-7596

e-mail: [abcsi@abcapitalonline.com.ph](mailto:abcsi@abcapitalonline.com.ph)

website: [www.abcapitalonline.com](http://www.abcapitalonline.com)

### Earnings Summary (in Php Millions) and Financial Data

	2008	2009	2010	2011E	2012E	2013E	2014E
Total Revenue	20,526	22,065	24,901	25,692	31,563	33,857	36,335
Core EBITDA	11,654	10,600	13,573	13,854	19,212	21,107	23,173
Core Income	7,851	2,996	5,990	5,372	9,814	10,966	12,437
Core EPS	0.42	0.16	0.32	0.29	0.52	0.58	0.66
BVS	1.53	1.62	1.72	1.77	2.22	2.53	2.76
Core EBITDA Margin	56.78%	48.04%	54.51%	53.92%	60.87%	62.34%	63.78%
Core Income Margin	38.25%	13.58%	24.06%	20.91%	31.09%	32.39%	34.23%
EPS Growth		-61.84%	99.93%	-10.32%	82.71%	11.74%	13.41%
ROIC	15.01%	4.92%	8.33%	7.14%	10.89%	11.17%	12.30%
P/BV	1.24	2.91	3.41	3.57	2.84	2.49	2.29
P/E	4.54	29.41	18.37	22.03	12.05	10.79	9.51
EV/EBITDA	11.27	10.94	11.77	11.02	7.95	7.24	6.59

Source: Company Data, ABCSI Research Estimates

The information contained herein is based on sources which we believe are reliable, but is not guaranteed by us and is not to be considered all inclusive. It is not to be construed as an offer or solicitation of an offer to sell or buy the securities herein mentioned. This firm and its Directors and Officers and/or members of their families may have a position in the securities herein mentioned and may make purchases and/or sales of the securities from time to time in the open-market and otherwise.

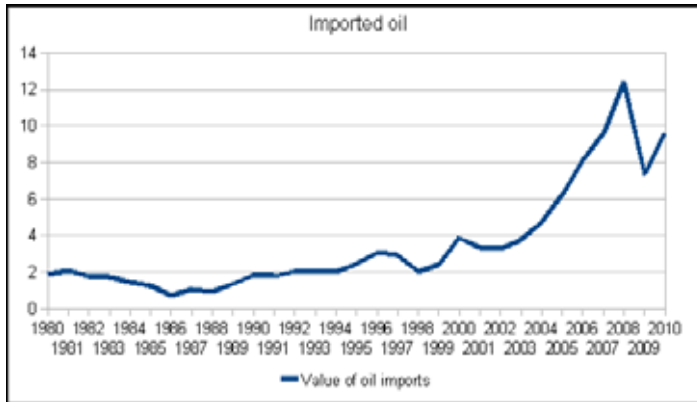
**The Power Sector**

**Impending Shortage**

***Philippine estimated 2030 peak demand***

	Peak demand (MW)	Additional Capacity Required(MW)
Luzon	17,636	11,900
Visayas	3,404	2,150
Mondanao	3,493	2,500

Source: Department of Energy



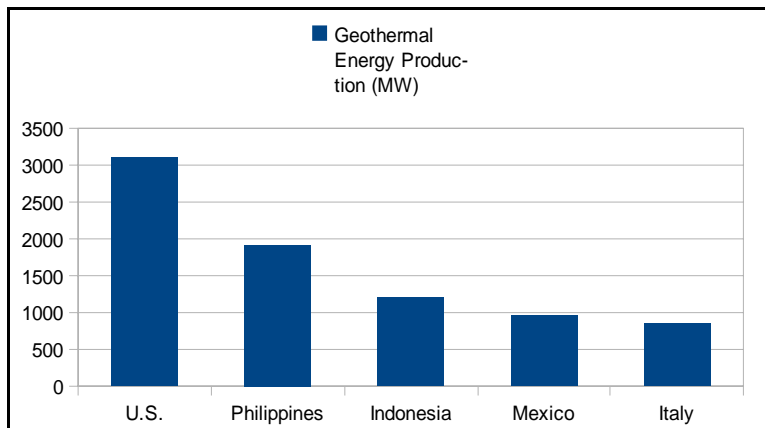
Source: Index Mundi

The Philippines' demand for power is estimated to increase substantially over the next 18 years. Peak demand is projected to grow continuously, The Department of Energy projects that by 2030 we will need a total of 11,900MW additional capacity to meet the projected peak demand for Luzon, 2,150 MW for Visayas and 2,500 MW for Mindanao. Peak Demand is estimated to grow by an average of 4.53% for Luzon, 4.98% for Visayas and 4.62% for Mindanao.

A total of 73.1% of the country's energy is still produced by fossil fuels and it accounts for 66.3% of the total capacity. Reliance on fossil fuels such as oil, coal and natural gas risks of exposure to volatile oil prices. The Department of Energy seeks a sustainable and natural source of energy to lessen the country's dependence on fossil fuels.

**Geothermal Energy**

Geothermal energy accounts for only 12% of the total installed capacity in the Philippines. Furthermore, it contributes only 15.1% of the total power generated. Philippines has a vast resource of geothermal energy because we are situated in the Pacific Ring of Fire. Our country is the second largest producer of geothermal energy in the World. EDC estimates that only 33% of the geothermal reserves have been developed which means there is still much room for investment opportunities. Geothermal energy generally costs less and is highly reliable as most geothermal powerplants run at 90% reliability.



Source: Company Data

**Energy Development Corporation** is positioned to benefit from the current industry situation because it has a renewable energy portfolio.

Note: please refer to our power sector report for the full review and outlook.

### ***Energy Development Corporation(EDC)***

Energy Development Corporation is one of the leading geothermal energy companies around the world with over 30 years of experience, it is also the biggest geothermal producer in the Philippines. EDC has power generation as its primary business utilizing the vast geothermal energy resource of the Philippines. The company accounts for 61% of the total geothermal installed capacity in the Philippines and 66% of the total geothermal energy produced as of 2010. EDC also has several projects which are under the planning and exploration stage such as Burgos Wind project, Bacman 3 power plant, Nasulo project, Kayabon project and Mindanao 3 project. The company is also currently exploring potential projects in Chile by participating in the bidding of geothermal contracts of the Chilean government. These projects are part of EDC's diversification strategies and further enhancement of its renewable energy portfolio.

#### ***Potential EDC projects capacity***

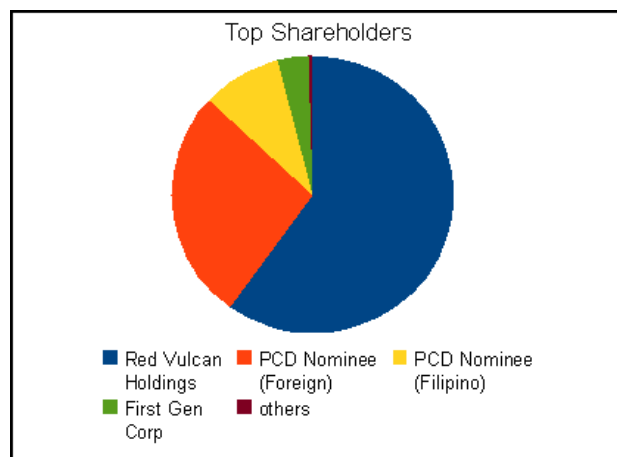
Burgos Wind	86MW
Nasulo project	20MW
Kayabon	40MW
Mindanao 3	50MW

Source: Company Data

#### ***Geothermal companies around the world\****

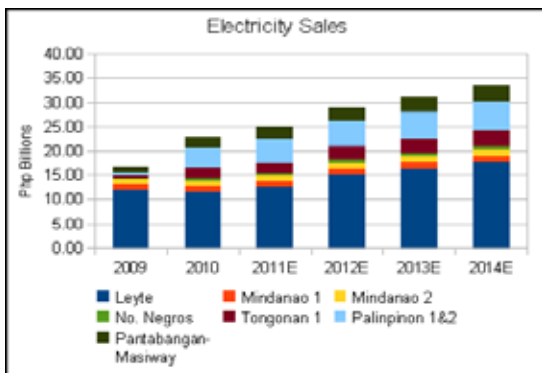
Chevron	1273
EDC	1199
ENEL	742
Calpine Corporation	725
Ormat	520
Mighty River	400

Source: Company Data

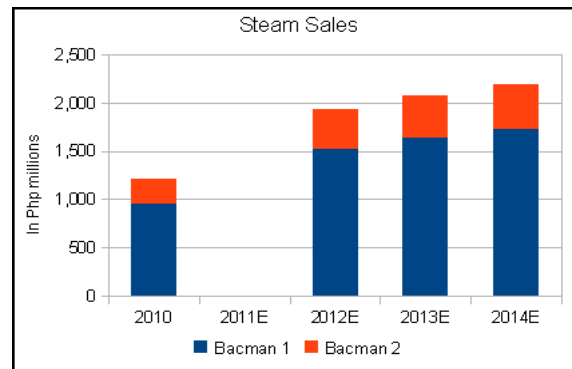


Source: Company Data

### ***Revenue Breakdown***



Source: Company Data, ABCSI Research Estimates



Source: Company Data, ABCSI Research Estimates

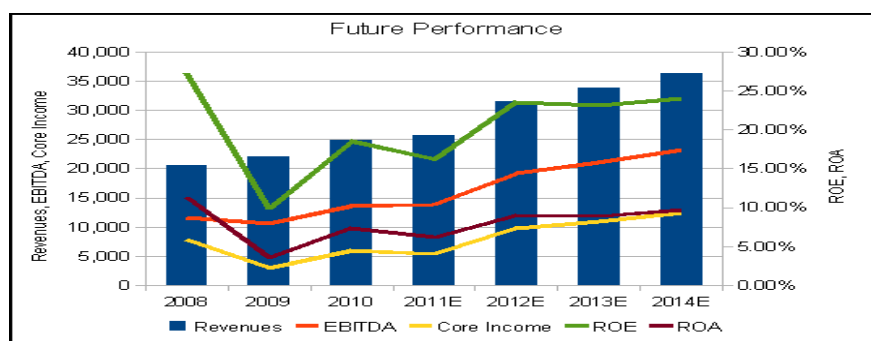
Electricity and Steam Sales account for more than 95% of EDC's revenue. We projected energy sales and steam sales on a per plant basis. P/Kwh will grow in conjunction with inflation or industry demand, based on the plant's specific contract. We assume that the company will at least meet its minimum take or pay plant factor and minimum energy off-take. We also think the Bacman 1 and 2 will be operational by 2012 meeting its 75% plant factor requirement in the take or pay agreement. Meanwhile the Northern Negros Power plant performance has been sub par in the past years, We only expect a small contribution of revenue from this plant (2% FY 2012). The compounded annual growth rate of revenues will be 9.05% from 2011 to 2014 based on these assumptions.

*Temporary setbacks*

Comparable Utilities	Revenue Growth	EPS growth	EBITDA Margin	Net income Margin	Current Ratio (x)	D/E (x)	ROA	ROE
EDC	-1.42%	-22.37%	51.78%	18.94%	1.97	1.52	5.45%	13.70%
AP	-8.00%	-12.42%	58.00%	39.00%	2.58	1.31	13.00%	32.00%
MER	2.12%	14.88%	9.89%	5.20%	1.26	2.13	8.45%	27.11%
PCOR	19.00%	42.50%	7.00%	3.40%	1.64	1.89	3.30%	9.57%
MWC	7.00%	24.92%	74.00%	35.00%	1.09	2	5.59%	16.81%
Average	3.74%	9.50%	40.13%	20.31%	1.71	1.77	7.16%	19.84%

Source: Company Data, ABCSI Research Estimates

EDC's current performance appears inferior to its utility peers. Last year (2011) was a period of transition for EDC which means that the current laggard performance is only temporary. EDC has modest profit margin levels and ample short term liquidity. Return on Assets (ROA) and net income margins are near the industry average. Return on Equity (ROE) lags due to temporary lower earnings in 9m2011, this is also the reason why revenue and EPS growth are negative.

*Steady Outlook*

Source: Company Data, ABCSI Research Estimates

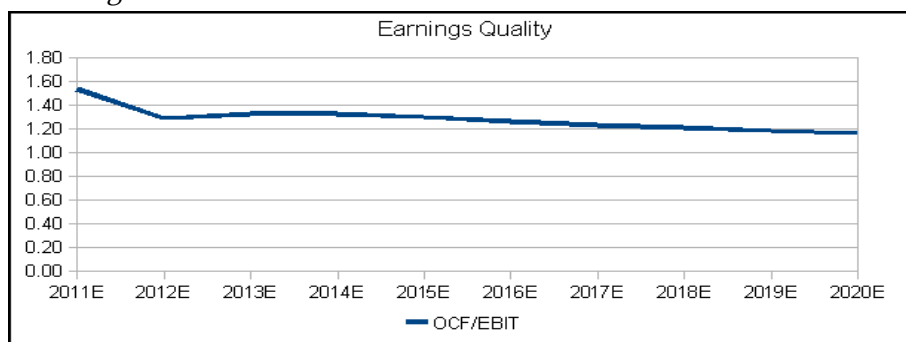
The company's future performance looks profitable. Revenue growth will come from rising P/KWh and improving GWh sales. We think that profit margins will improve overtime because of the company's low cost structure and fiscal incentives of the RE Law. ROE and ROA will be better in conjunction with the growing revenues. We project an EPS growth of 58.34% FY2012 and 25.14% FY 2013.

Financial stability looks healthy for EDC, we estimate the company to maintain its current capital structure. Current ratios are maintained at a favorable level near 2, while debt ratios are expected to be maintained above 60%, which are still healthy levels for acquiring debt. Asset Utilization will be near 30% as the company's continuous growth in revenues is coupled with increase in capital spending.

	2008	2009	2010	2011E	2012E	2013E	2014E
<b>Asset Utilization</b>							
Assets	29.60%	26.03%	30.63%	29.45%	28.90%	27.44%	28.33%
Fixed Assets	36.90%	33.82%	37.43%	37.00%	38.77%	35.04%	34.23%
<b>Profitability</b>							
EBITDA Margin	56.78%	48.04%	54.51%	53.92%	60.87%	62.34%	63.78%
EBIT Margin	53.48%	42.55%	40.67%	32.18%	42.28%	43.04%	43.97%
Net Income Margin	38.25%	13.58%	24.06%	20.91%	31.09%	32.39%	34.23%
ROE	27.32%	9.88%	18.58%	16.23%	23.57%	23.11%	24.07%
ROA	11.32%	3.53%	7.37%	6.16%	8.99%	8.89%	9.70%
<b>Liquidity</b>							
Current Ratio	0.87	0.90	1.97	2.23	2.29	2.33	2.65
Quick Ratio	0.41	0.77	1.44	1.71	1.88	1.87	1.98
D/E	1.41	1.80	1.52	1.63	1.62	1.60	1.48
D/A	59%	64%	60%	62%	62%	62%	60%
Interest coverage	1.14	2.74	2.39	0.19	3.91	4.45	5.51

Source: Company Data, ABCSI Research Estimates

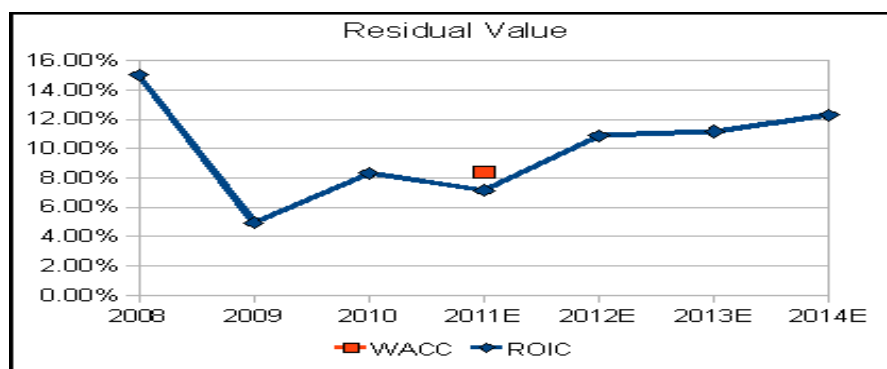
*Quality remains high*



Source: ABCSI Research Estimates

OCF to Ebit is an accurate measure of how much cash a firm generates out of its profits. Our calculation shows that the company will have an average of 1.28x (this excludes our capex projections). We think that the high level of earnings is anchored on the company's low cost structure.

*Value Creation*



Source: ABCSI Research Estimates

EDC's Return on Invested Capital (ROIC) is projected to improve in the near future. The lower ROIC for 2011 is caused by the absence of steam sales. We used core income for ROIC since it best captures the true earning capacity of the company. We think that revenues will start to be on track again in 2012, EDC's future prospects look favorable as the firm will be able to earn more than its capital cost producing residual value in the process.

*Few surprises*

Revenue per quarter (in Php millions)					
	Sept. 2010	Dec. 2010	Mar. 2011	Jun. 2011	Sept 2011
Consensus estimate	5,906	6,802	6,078	6,315	6,457
Actual	6,300	5,580	5,953	5,783	6,486
Beat/(disappoint)	394	-1222	-125	-532	29

Source: Thomson Reuters

The company has only been able to beat estimates 2 out of 5 times for the last 5 quarters implying a 40% probability. Even though there are more disappointments, these disappointments remain small and are not enough to change our optimistic outlook on the firm. We think that the company will be able to mitigate the losses for 2011. 9M11 results are inline with our estimates, revenues already represent 70.88% of our estimates and core income is already 73.84% of the forecast

**Valuation***DCF Analysis(existing assets)*

DCF Valuation (in Php Millions)				
	Stages		Terminal values	
	Stage 1	Stage 2	Constant growth	Exit multiple
Total Cash flows	21,454	56,626	324,509	350,294
Present value	15,346	27,267	134,118	144,775
average terminal value	139,447			
Total	182,060			
Debt	42,083			
Equity Value	139,977			
Target Price	7.47			
Assumptions				
Years	2012 to 2016	2017 to 2022	Beyond 2022	Beyond 2022
Constant growth*		7.81%	3.00%	
long term EV/EBITDA**				9.06
Operating Leverage	1.10	1.04		
Total Capex	67,854	130,620		

\*Compounded annual growth rate of energy consumption 1990-2010

\*\*based on the longterm EV/EBITDA average of Meralco, AP, EDC and PCOR (2007-2013E)

Source: ABCSI Research Estimates

A dual staged DCF valuation was used to value EDC and only existing plants were included to apply conservatism. Stage 1 of the valuation uses the four year income statement and balance sheet projection with an extended two year period. The two year period uses the 8% mean revenue growth and 1.51x operating leverage. Stage 2 assumes a lower growth of 6.63% as new competitors enter the power generation industry. We estimate higher operating leverage and capital expenditures for the period, as the company strives to maintain market share. Operating leverage will be 1.1x as we expect cost structure to be improved given the company's expertise. We used two terminal value assumptions to address renewal and non renewal of EDC's contracts. Constant growth terminal value assumes value until perpetuity using the compounded annual growth rate of electricity consumption. Meanwhile the Exit multiple assumes that the company will be sold at the industry's long term EV/EBITDA. The terminal value ranges from P119 billion to P143 billion, which translates to P139 billion average value. We then added the cash flows of the two stages to arrive at a target price of P7.47.

*Enterprise Multiple Analysis*

Enterprise Multiple analysis												
	EV/Sales				EV/EBITDA				EV/EBIT			
	LTM	2011E	2012E	2013E	LTM	2011E	2012E	2013E	LTM	2011E	2012E	2013E
EDC	5.83	5.95	4.84	4.51	11.77	11.02	7.95	7.24	16.34	18.48	11.45	10.48
AP	3.85	3.75	3.55	3.43	7.38	8.82	8.54	8.70	8.17	10.19	9.00	9.82
MER	1.03	1.21	1.16	1.12	12.17	9.30	9.26	8.95	17.33	11.47	11.66	11.04
PCOR	0.96	0.64	0.60	0.58	12.00	8.32	7.99	7.26	14.88	10.95	9.79	8.72
Mean	2.92	2.89	2.54	2.41	10.83	9.37	8.43	8.04	14.18	12.77	10.47	10.02
Median	2.44	2.48	2.36	2.27	11.89	9.06	8.26	7.98	15.61	11.21	10.62	10.15
High	5.83	5.95	4.84	4.51	12.17	11.02	9.26	8.95	17.33	18.48	11.66	11.04
Low	0.96	0.64	0.60	0.58	7.38	8.32	7.95	7.24	8.17	10.19	9.00	8.72

Source: ABCSI Research Estimates

In order to assess better the value of EDC, we used enterprise multiples (EV/EBITDA, EV/EBIT and EV/Sales). We put more focus on enterprise multiples since it is capital structure neutral. EDC has higher debt levels thus price multiples (P/E, P/BV etc) would not evenly relate the value. EDC trades at higher levels in terms of enterprise multiples. We think that the firm's renewable portfolio is being priced with a premium by the market. EDC's profitability outlook looks favorable and overall industry prospects are beneficial, this means that the premium on EDC is warranted.

<b>Forward Enterprise Multiples</b>	2011E	2012E	2013E	2014E
EV/SALES	5.95	4.84	4.51	4.20
EV/EBITDA	11.02	7.95	7.24	6.59
EV/EBIT	18.48	11.45	10.48	9.56
<b>Forward Price Multiples</b>	2011E	2012E	2013E	2014E
P/E	22.20	12.15	10.87	9.59
P/BV	3.60	2.86	2.51	2.31
P/S	4.64	3.78	3.52	3.28

Source: ABCSI Research Estimates

We estimate enterprise ratios and price multiple ratios to be lower as EDC's future performance becomes better overtime. Higher margins in the near term will drive enterprise ratios lower. Growing sales and EPS will lead to lower price ratios for EDC as we expect growing industry demand. P/BV will still be higher as we project the company to maintain its current debt structure as having more debt than equity.

We ground our **BUY** rating on EDC based on these valuation estimate.

These are the Summary of Assumptions:

<b>Assumptions for WACC</b>		
Variable	Value	Basis
Risk Free rate	8.75%	20 Year Bond last issue (july 2011)
Market Return	11.34%	Mean PSEi Monthly HPY 1991-2011
Beta	0.92	Published by Bloomberg
Average Corporate Bond Yields	6.55%	PDEX corporate Bonds
Debt ratio	60.54%	Company Data
WACC	8.44%	ABCSI Research Estimates

### **Risks:**

#### *Regulatory risk*

Contract Renewals for Geothermal Resource Sales Contracts and Steam Sales Agreements are uncertain because they are subject to government approval.

#### *Operational risk*

Different calamities adversely affect EDC's performance; accidents, typhoons and several disasters on power plants affect its real capacity and EDC's top line revenues

#### *Foreign exchange risk*

Foreign denominated debt exposes uncertainty during foreign currency exchange rate fluctuations. This affects payments and retirements of debt

#### *Execution risk*

Potential project delays are always present in the company's exploration of potential sites for power plants and rehabilitation of existing plants.

#### *Industry risk*

EDC's will soon have more competitors as new industry players enter the power sector arena.

**Sensitivity Analysis**

Financial Model	Change in	
	Revenue Growth	EPS Growth
Additional P1 P/Kwh on all plants	0.45%	3.11%
Additional 1% capacity factor on all plants	1.56%	4.77%

Source: ABCSI Research Estimates

Our sensitivity analysis shows that revenues and profits are more likely to be affected by changes in quantity rather than changes in price. Meanwhile EPS change is bigger because of EDC's higher debt levels implying financial leverage effects on profits.

Valuation	target price change
DCF	
Stage 1 change in sales growth 1%	0.87
Stage 2 change in sales growth 1%	0.71
change in WACC 1%	1.37
change in terminal growth 1%	0.86
change in long term EV/EBITDA 1x	0.42

Source: ABCSI Research Estimates

The WACC estimate gives the biggest effect on the price target. Stage 1 and 2 of the valuation has moderate effects, Meanwhile long term EV/EBITDA has the smallest effect on valuation estimates.

Financial Summary							
Income Statement Summary	2008	2009	2010	2011E	2012E	2013E	2014E
Total Revenue	20,526	22,065	24,901	25,692	31,563	33,857	36,335
total operating expenses	8,872	11,465	11,328	16,836	12,351	12,750	13,162
Core EBITDA	11,654	10,600	13,573	13,854	19,212	21,107	23,173
Core EBIT	10,978	9,389	10,128	8,267	13,345	14,572	15,977
EBT*	2,447	7,907	8,846	542	10,905	12,185	13,818
Core Income	7,851	2,996	5,990	5,372	9,814	10,966	12,437
* adjusted as net of unusual items, EBT on the cash flow summary is as stated in the annual report							
Cash Flow Summary	2008	2009	2010	2011E	2012E	2013E	2014E
EBT	2,654	7,270	5,175	542	10,905	12,185	13,818
WC charges and others	5,363	1,922	5,772	8,471	11,208	10,056	10,579
CFO	8,017	9,192	10,947	9,013	22,113	22,240	24,398
CFI (includes capex)	-3,383	-12,370	-7,432	-5,402	-17,046	-21,704	-16,783
CFF (includes long term debt)	-6,973	13,449	-8,545	-915	3,147	-2,374	-13,064
cash beginning	3,296	953	11,217	6,156	8,852	17,066	15,228
change in cash	-2,339	10,271	-5,030	2,696	8,214	-1,838	-5,449
cash ending	953	11,217	6,156	8,852	17,066	15,228	9,779
Balance Sheet Summary	2008	2009	2010	2011E	2012E	2013E	2014E
Cash	957	11,220	6,157	8,852	17,066	15,228	9,779
Current Assets	13,724	19,530	14,778	17,801	27,808	26,731	22,097
PPE	5,280	56,981	56,679	59,255	70,004	84,635	93,537
Non current assets	55,621	65,233	66,525	69,430	81,414	96,634	106,150
Total assets	69,345	84,763	81,303	87,231	109,222	123,365	128,247
Long term debt due	8,672	16,930	1,527	1,639	1,639	1,639	3,138
Current Liabilities	15,702	21,763	7,486	7,965	12,167	11,482	8,348
Long term debt net	23,557	30,533	39,678	42,083	48,481	50,689	49,441
Non current Liabilities	24,907	32,679	41,576	46,160	55,415	64,423	68,228
Total Liabilities	40,609	54,442	49,062	54,126	67,582	75,906	76,576
Total Shareholders Equity	28,736	30,321	32,241	33,105	41,640	47,460	51,671

Source: ABCSI Research Estimates