ENERGY DEVELOPMENT CORPORATION

Philippine Utilities   PSE Ticker: EDC

Rating BUY

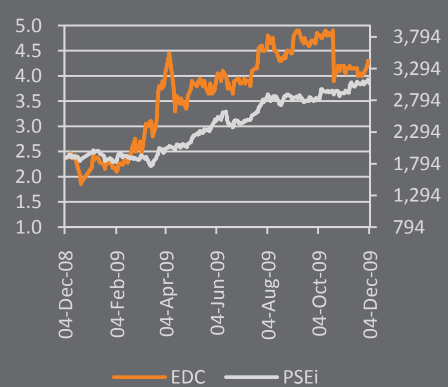
Target Price (Php): 6.30
Price, 04 Dec 09 (Php): 4.30
Upside (%): 47.1

Market Data

52-week high (Php)	4.95
52-week low (Php)	1.82
Previous close (Php)	4.30
Market cap (Mil Php)	79,688
Outstanding shares (Mil)	18,750
Free float (%)	60.0
EPS (31 Dec 08)	0.07
Trailing P/E Ratio (X)	10.4

Sources: PSE, EDC, Team estimates

Share Price Movement



Source: PSE

Full Steam Ahead

We ground our initial **BUY** rating for Energy Development Corporation (EDC) on its favorable business environment and organic growth strategies on top of stable, recurring cash flows. Using a WACC of 10.7% to discount its FCFF and deducting the market value of debt, we arrive at an intrinsic value of Php 6.30, a 47.1% upside from its current share price.

- **Revenues up 16.9% due to newly acquired plants.** The successful acquisition and turnover of the Tongonan (112.5 MW) and Palinpinon I and II (192.5 MW) plants last September 2009 for USD 220M (Php 10.75B) coupled with planned improvements to increase utilization rates are expected to boost revenues by Php 4.8B in 2010. In addition, the company plans to build seven new plants to be completed from 2013 to 2021. We expect the three plants commencing operations from 2013 to 2015 alone to increase revenues by Php 4.0B or 13.0% in 2016.

- **Core operations in green energy to address power crisis.** EDC's core business of generating green, cheap and sustainable energy places it at the forefront of meeting the projected Philippine electricity shortage. We foresee the steady growth of energy demand at 2.4% per year and shortfall in industry exploration to spark an energy crisis by 2011. While new entrants have begun penetrating the industry, we believe the company's vertically-integrated operations give it an edge to withstand competition.

- **Php 3.7B savings in 2010 as Renewable Energy Law (RE) takes effect.** Passage of the RE Law allows EDC to take advantage of lower corporate income tax rates of 10.0%, a seven-year income tax holiday for new plants and reduced royalty fee payments of 1.5% of gross revenues.

- **Foreign currency exposure down 49.5% to Php 11.3B by 2010.** The company's reduced exposure to foreign currency denominated loans will be achieved through its Peso debt issuances in 2009 and maturity of Php 12M Miyazawa II Yen bond in 2010. We believe this reflects the company's effort to manage its exchange rate risk after a Php 9.3B foreign exchange loss in 2008 nearly wiped out profits. Other risks are expected to be mitigated through the company's fundamental strengths and strategies.

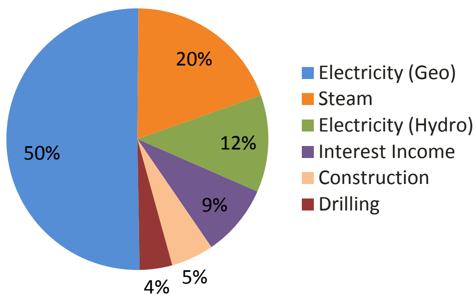
- **Defensive play with Php 11.1B recurring cash flows.** The company's stable, recurring cash flows establish it as a defensive play. This is reflected in its solid stock market performance amidst volatile economic conditions.

FORECAST SUMMARY

	2007	2008	2009E	2010E	2011E	2012E	2013E	2014E
Php Millions								
Revenues	19,001	20,527	28,635	33,550	37,043	36,777	36,410	38,089
EBITDA	10,283	11,841	15,551	17,426	19,109	18,885	19,254	19,755
Net Income	8,768	1,345	10,745	11,326	12,361	11,782	11,659	12,079
Php Per Share								
Net Income	0.47	0.07	0.57	0.60	0.66	0.63	0.62	0.64
Dividends	0.08	0.28	0.51	0.18	0.40	0.69	0.61	0.58
Returns (%)								
Total Equity	28.33	4.25	36.60	33.37	30.62	27.88	27.90	28.42

Source: Company data, Team estimates

Figure 1. Breakdown of 2008 Revenues



Source: Company data

Table 1. Power Plants by Island Group

Plant Grid Location	Installed Capacity (in MW)	2008 Revenue (in Php billions)
Luzon	150*	4.24
Visayas	943	10.95
Mindanao	106	1.16
TOTAL	1,199	16.35

*Steam field operations supplying to NPC-owned plants
Source: Company data

Business Description

EDC is the largest producer of geothermal energy in the Philippines. It is primarily engaged in generating steam and electricity for sale to various distributors through its operations of steam fields and power plants in five geothermal service contract areas.

Incorporated in 1976, EDC is formerly a wholly-owned subsidiary of Philippine National Oil Company (PNOC), a Government Owned and Controlled Corporation (GOCC). It held its Initial Public Offering (IPO) in December 2006. The company was fully privatized in November 2007 when Red Vulcan Holdings Corporation, a First Gen (FG) subsidiary, acquired a 60.0% controlling interest.

The company generates revenues from electricity sales (geothermal and hydroelectric), steam sales, and third-party geothermal and drilling services. Serving as the backbone of the company's operations are two steam fields servicing National Power Corporation (NPC) power plants with a capacity of 150 MW, and 10 geothermal power plants and related steam fields with a total installed capacity of 1,049 MW.

EDC is also venturing into other renewables through its recent acquisition of a 60.0% stake in FG Hydro, which operates the 112.5 MW Pantabangan-Masiway hydro plant in Nueva Ecija.

Industry Analysis

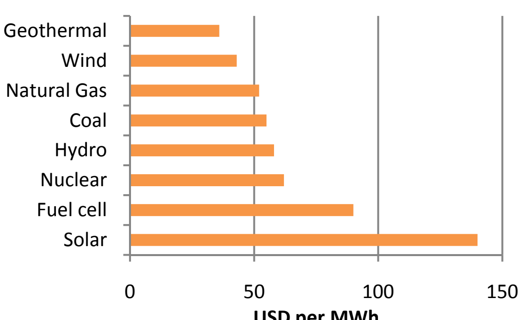
WIDE PROSPECTS FOR GEOTHERMAL ENERGY

The Pursuit of Clean and Sustainable Energy

The pressing threats of climate change and fossil fuel depletion have shifted the world's focus to renewable sources of power, one of which is geothermal energy. Geothermal energy has become increasingly attractive for several reasons: (1) It is virtually inexhaustible due to its fundamental dependence on the earth's natural supply of heat and water; (2) Geothermal power plants are among the most reliable generating plants, running on average at 90-98% of the time compared to coal-fired plants that run only 65-75% of the time; and (3) Despite the high upfront capital investments required to construct geothermal power plants, the levelized costs of geothermal plants are significantly lower than that of plants that run on fossil fuels and other renewables.

Levelized cost of electricity refers to the average cost of power production over the life of a plant. It considers: (1) upfront capital investments, (2) operating and maintenance costs and (3) fuel costs for plants that rely on external fuel sources.

Figure 2. Levelized Cost of Electricity in 2009



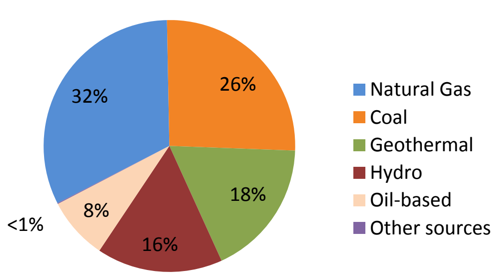
Source: Credit Suisse

As one of the cleanest and cheapest alternative sources of power, geothermal energy can be expected to play a major role in the global energy supply in the future.

A Vast Pool of Untapped Potential

Situated in the Pacific Ring of Fire, the Philippines has emerged as the second largest producer of geothermal power in the world. While geothermal power currently constitutes 18.0% of the country's energy mix, the government estimates that less than half of the country's geothermal resources have been tapped. Approximately 2,600 MW out of 4,500 MW of energy has yet to be explored. With electricity generation from geothermal sources growing at 5.0% per year, a rate more than twice that of the total energy industry in the Philippines, we see plenty of leg room for development of this resource.

Figure 3. 2008 Philippine Energy Mix: Electricity Generated in GWh



Source: Department of Energy (DOE)

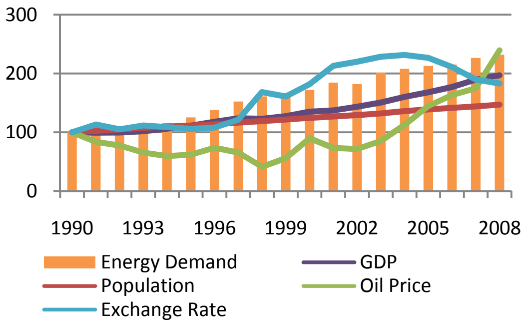
Table 2. Top 5 Countries in Installed Geothermal Capacity as of 2008

	Country	Geothermal Capacity in MW
1	USA	2,687
2	Philippines	1,976
3	Indonesia	992
4	Mexico	953
5	Italy	810

Source: Geo Resources Council Bulletin

ECONOMIC FORCES DRIVING GROWTH MOMENTUM

Figure 4. Rebased Energy Demand



Sources: BSP, NCSB, IMF, and DOE

No Slowdown in Energy Consumption

Driven by an annual 4.3% increase in GDP and a 1.5% growth in population, energy consumption is expected to increase steadily at approximately 2.4% every year up to 2030. We expect this trend to remain resilient to increases in oil prices and currency devaluations as energy demand has proven to be insensitive to sudden price hikes as long as economic activities measured by GDP continue to prosper.

Power Shortage to Sweep the Nation

Certain provinces in the Visayas are already experiencing rotating blackouts during peak hours because the supply of electricity in the region is not enough to meet demand. Demand is also expected to outpace supply in Mindanao by 2010 and in Luzon by 2011. Due to this disconnect between growing demand and a shortfall in exploration and retirement of decades-old plants, a power crisis is expected to sweep the nation in two years. EDC's upgrades of existing power plants and new projects in Visayas and Mindanao are expected to benefit from this supply shortage.

Table 3. Visayas Energy Demand and Supply

Island	Supply	Demand and Reserves	Excess (Deficit)
Leyte	668	287	381
Bohol	21	59	-38
Cebu	399	589	-190
Negros	185	263	-78
Panay	201	294	-93
Total	1,474	1,492	-18

Source: DOE

Soaring Oil Prices a Recipe for Disaster

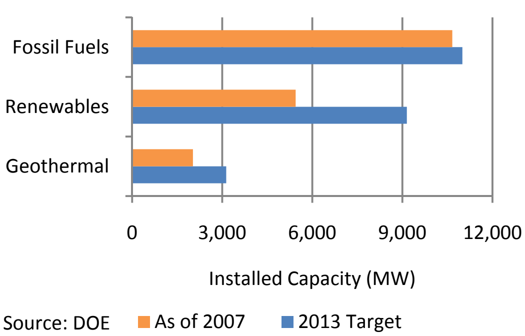
With 54.0% of the country's power relying on fossil fuels such as coal and oil, the rising oil prices and declining oil reserves will further aggravate the power crisis as these inputs are primarily sourced from other countries. If the government does not look for alternatives to rely on, this will spell the formula for a national energy crisis.

With the increasing demand, shortfall in supply, and towering oil prices, EDC will become increasingly relevant as the Philippines looks to the company to increase the country's installed capacity of renewable energy sources.

TIMELY GOVERNMENT INITIATIVES CREATE FAVORABLE ENVIRONMENT

In light of the impending energy crisis, the government has been encouraging private investment in RE projects through various forms of legislation.

Figure 5. RE vs. Fossil Fuels Development Targets



Source: DOE

Renewable Energy Plays Prominent Role in DOE Plans

DOE has made it a top priority to lessen the country's dependence on imported fuels as part of its thrust for 60.0% Philippine energy self-sufficiency by 2010. This has accelerated the development of indigenous renewable sources, creating a favorable environment for a pure-play company like EDC.

By 2013, the government envisions the country to be the number one producer of geothermal energy in the world. It has set a target installation of an additional 1,200 MW of geothermal capacity, 50.0% or 610 MW of which is said to be situated within EDC contract areas. With the government aggressively bidding-out areas for exploration and providing generous fiscal and non-fiscal incentives for RE companies, EDC stands to gain from such favorable circumstances.

Table 4. Geothermal Plants for Privatization

Year	NPC asset	Capacity (in MW)	Winning Bidder
2007	Tiwi-Makban	747.5	Aboitiz
2009	Tongonan	112.5	EDC
2009	Palinpinon I & II	192.0	EDC
2010	BacMan I & II	150.0	-

Source: Power Sector Assets and Liabilities Management

Restructured Energy Market Opens Windows of Opportunity

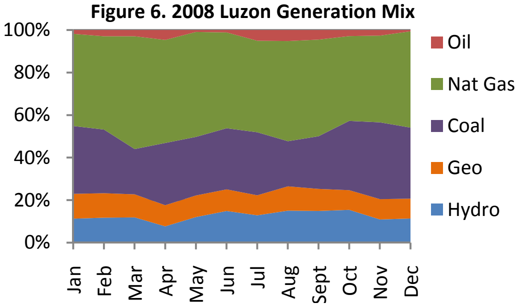
The passage of the Electric Power Industry Reform Act (EPIRA) set into motion the deregulation of the power industry and the privatization of NPC-owned enterprises. While transitioning into an open market introduces competition, we believe that the barriers to entry in the geothermal industry are sufficiently high to deter new players from making significant headway in the market. Instead, this restructuring has served as an opportunity for EDC to expand and further vertically integrate its operations by purchasing NPC's power plants available for bid. In 2008, EDC successfully won the bid for three power plants in Visayas – Tongonan, Palinpinon I and II – all of which are expected to boost revenues substantially beginning 2010. Another two power plants situated on an EDC steam field in Bacon-Manito (BacMan), Albay, will also be up for privatization in January 2010.

Table 5. Energy Sources Ranked by Cost

Energy Source	Cost Estimate (Php per kWh)
Hydroelectric	2.72
Geothermal	3.47
Coal	4.23
Natural gas	4.36
Oil-based	5.82

Source: UP College of Engineering

Figure 6. 2008 Luzon Generation Mix



Source: WESM Annual Report

Table 6. Changes Effected by the RE Law

	Existing Legislation	RE Law
Tax rate	30%	10%
Income tax holiday	6 years as pioneer, 4 years as non-pioneer, plus one bonus year	7 years from commercial operation
Royalty fees	60.0% of gross values or 6.0% of gross income	1.5% of gross income

Source: Renewable Energy Act of 2008

Table 7. Philippine Geothermal Industry Players

Player	Steam Field	Power Plant
EDC	Yes	Yes
Chevron	Yes	No
Aboitiz	No	Yes

Source: DOE

The enactment of EPIRA also led to the creation of a Wholesale Electricity Spot Market (WESM) in Luzon in 2006. Prior to WESM, a large portion of all electricity produced was sold solely to NPC at pre-determined prices. WESM now provides for two different mechanisms for generation companies to sell electricity to private distributors: spot market or bilateral contracts.

In the spot market, energy sources are dispatched according to cost, from lowest to highest, until electricity demand is satisfied. The low generating cost of geothermal energy puts it at the forefront of the dispatch mechanism during non-peak hours and second during peak hours.

Generation companies can also opt to enter into bilateral contracts with private entities in which prices and volumes are negotiated six months prior to delivery. This ensures a stable supply of electricity and relatively fixed prices for distributors.

By virtue of geothermal energy's low cost, both mechanisms practically guarantee that all geothermal energy produced is sold. Pricing however, may slightly differ as energy sold in the spot market is priced at market clearing price (the price of the last energy dispatched, usually oil-based), while contract prices are based on effective grid rates for electricity. Either way, both rates are at a significant premium to the cost estimate of geothermal energy.

Renewable Energy Law Reinforces Government Commitment

The recent RE Act is expected to accelerate the exploration and development of geothermal resources in the Philippines through the reduction of taxes and fees remitted to the government. Such fiscal incentives create an attractive business environment for EDC to operate in the years to come.

Company Analysis

STRONG HEAD START AND EXPERTISE TO WITHSTAND COMPETITION

With over 30 years of experience, EDC is in a prime position to maximize the benefits of the growing energy demand and favorable legislation. Alongside other global industry leaders such as Ormat, Chevron, Enel, and Calpine, EDC is the only Philippine company to have achieved full vertical integration from the development to the operation of steam fields. This gives EDC nationwide economies-of-scale, which fortifies a significant barrier-to-entry against new players. In addition, it has solidified its position as the only company in the Philippines to have a business portfolio covering geothermal steam fields and power plants.

Figure 7. Global Industry Players Classified According to Scope of Operations

R&D	Exploration	Drilling	Confirmation	Engineering	Construction	O&M
EDC (PH), Ormat (US), Chevron (US), Enel (IT), Calpine (US)						
	PT Pertamina (ID), Reykjavik Energy (IS)					
	Boart Longyear (US), Halliburton (US)			Sumitomo (JP), Shaw Group (US)		
Govt/Univ Labs (All)		Iceland Drilling Co. (IS), Baker Drilling (US), Parker Drilling (US), ThermaSource (US), GeothermEx (US)		Siemens (DE), Enex (IS)		
				Mannvit (IS), Power Eng (US)	MHI (JP), GE (US), Fuji (JP), UTC	

Source: New Energy Finance, 2008

DE: Denmark | ID: Indonesia | IS: Iceland | IT: Italy | JP: Japan | PH: Philippines | US: United States

FACILITY UPGRADES IMPROVE PLANT UTILIZATION

Currently, 58.0% of the company's facilities, equivalent to 694.4 MW installed capacity, are operating at high utilization rates ranging from 87.7% to 97.0%. EDC is continuously undertaking facility upgrades to improve efficiency and increase output: Php 65.4M Leyte Steam Augmentation was completed in 2009 Q1; augmentation projects are lined up for the Northern Negros facility; and upgrades of the newly-acquired Tongonan and Palinpinon I and II power plants are planned for 2010.

Table 8. EDC Expansion Plans

New Projects*	Island Group	Capacity (MW)	Target Full Operations
Nasulo	Visayas	20	2013
Tanawon	Luzon	50	2013
Mindanao III	Mindanao	50	2015
Rangas	Luzon	40	2017
Kayabon	Luzon	40	2018
Dauin	Visayas	40	2019
South Leyte	Visayas	40	2021
TOTAL		280	

* All projects have completed the exploration stage and are currently undergoing development.
Source: Company data

GROWING OPERATIONS TO MEET ENERGY DEMAND

In 2009, EDC increased its installed capacity through the transfer of the Mindanao I and II Build-Operate-Transfer (BOT) plants and the former NPC-owned Tongonan, Palinpinon I and II plants. Seven new projects are in the pipeline to meet the projected growth in electricity demand and are expected to strengthen the company's position in the open market ahead. Aside from these, the company's other growth potentials are its targeted expansion in drilling services, initial foray into the global arena with its satellite office in Indonesia and wind project in Ilocos Norte.

FINANCIAL STABILITY GROUNDS EDC ON SOLID PLATFORM

Seven out of ten EDC power plants are still operating under minimum take-or-pay arrangements, thus giving short- to medium-term stability on the company's cash flows. The recent Aaa-rated Php 12B oversubscribed bond offering in November 2009 highlights strong investor confidence. In the second quarter of 2009, EDC also declared a 25.0% common stock dividend increasing its outstanding shares from 15B to 18.75B. It also increased the authorized capital from Php 15B to Php 30B.

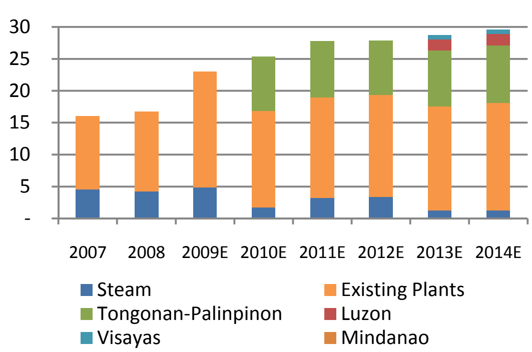
SUSTAINABLE FUTURE FOR EDC AND THE COMMUNITY

The Grand Anvil Award is conferred by the Public Relations Society of the Philippines to outstanding public relations programs and tools designed and implemented in the past year.

Aside from being a pure play renewable energy company, EDC extends its dedication to social and environmental development through its various projects. It recently bagged the Grand Anvil Award for its "Harmonizing Environment and Technology" communication plan regarding its steam augmentation project at the buffer zone of the Mt. Kanlaon Natural Park.

Financial Analysis

Figure 8. Revenues (Php B)

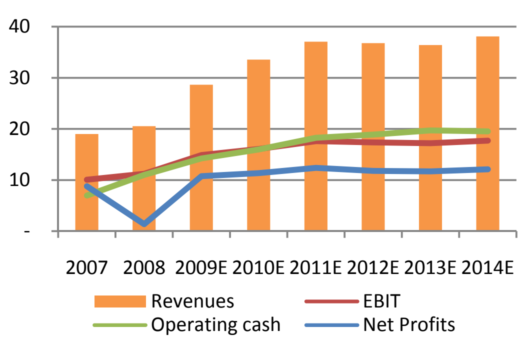


Source: Company data, Team estimates

NEW PLANTS AND IMPROVEMENTS SPARK REVENUE GROWTH

Company revenues are expected to grow steadily at 5.9% over the next five years behind rising billed energy volume. This rises primarily with capacity expansion as energy demand far exceeds supply. The recent acquisition of the Tongonan-Palinpinon plants (305 MW) and planned capital expenditures to improve their efficiency are expected to boost revenues by Php 4.8B or 16.9% in 2010. Plans to improve utilization rates, such as the Leyte Augmentation Project (60 MW) among others are also expected to supplement this. Although there is a slight slowdown in revenue growth in 2012 due to the expiration of some take-or-pay agreements, new geothermal power plants in Nasulo (20 MW), Tanawon (50 MW) and Mindanao (50 MW) are expected to more than offset this with revenues of Php 4.0B or 13.0% in 2016. These projects keep EDC at the forefront of meeting the growing energy demand in the country.

Figure 9. Profit Margins (Php B)



Source: Company data, Team estimates

LOW-COST STRUCTURE BOOSTS MARGINS

Operating costs of geothermal energy are expected to remain low relative to other energy sources. Major components of these costs include personnel costs and repairs and maintenance. EBIT margins are projected to remain stable at an average of 50.0%. In addition, fiscal incentives through the RE Law are projected to increase net profits by a total of Php 3.7B in 2010 from the special corporate tax rate of 10.0% and changes in royalty fee computations.

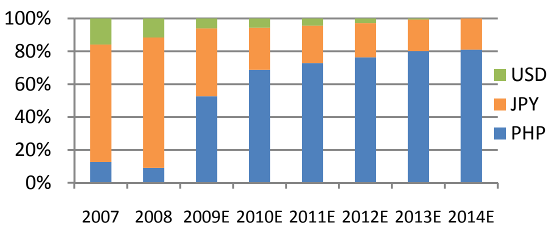
STEADY CASH FLOWS KEEP EARNINGS QUALITY HIGH

Healthy streams of operating cash flows of Php 14.2B to Php 19.0B are expected to be generated from operating income over the projection period. This is supported by an earnings quality ratio (OCF per EBIT) projected to remain at an average of 90.0% over the forecast period. These stable and recurring cash flows prove the value of the company's earnings.

STRONG BALANCE SHEET

EDC's expansion plans are supported by a healthy cash position and a robust balance sheet. The current ratio is maintained at close to 1.00 to provide ample resources to satisfy current liabilities. The debt ratio is kept at close to 60.0%, a safe distance from the 70.0 to 30.0% debt ratio required by debt covenants. The maturity of the bullet Miyazawa II bond in 2010 will significantly reduce the debt level and provide the company with sufficient room to obtain fresh debt capital to finance future expansion plans. The recently approved increase in authorized capital from Php 15B to Php 30B is also expected to provide more room to obtain financing in future years.

Figure 10. Foreign Currency Exposure



Source: Company data, Team estimates

REDUCED FOREIGN CURRENCY EXPOSURE

Since being privatized, the company's foreign-currency denominated loans carried over from government ownership have resulted to heavy foreign exchange losses and substantial net income volatility. The company's foreign exchange exposure will decline due to the Php 12B bond issuance and the bullet maturity of the Miyazawa II Yen-denominated bond (approximately Php 12B) in 2010. The proportion of Peso-denominated loans in the debt financing mix will increase from 9.0% in 2008 to 68.7% in 2010, reducing vulnerability to foreign exchange losses.

KEY FINANCIAL RATIOS	2007	2008	2009E	2010E	2011E	2012E	2013E	2014E
Turnover								
Receivables (X)	4.01	3.90	4.55	4.49	4.57	4.36	4.28	4.36
Fixed Assets (X)	1.26	1.16	1.11	0.90	0.84	0.74	0.68	0.66
Total Assets (X)	0.25	0.29	0.37	0.36	0.35	0.32	0.30	0.30
Profitability								
EBITDA Margin (%)	54.12	57.68	54.31	51.94	51.58	51.35	52.88	51.87
EBIT Margin (%)	52.84	54.48	51.91	47.84	47.47	47.16	47.19	46.40
Net Profit Margin (%)	46.15	6.55	37.52	33.76	33.37	32.04	32.02	31.71
Return on Assets (%)	13.44	15.83	18.96	17.39	16.72	15.01	14.25	13.79
Return on Equity (%)	28.33	4.25	36.60	33.37	30.62	27.88	27.90	28.42
Solvency								
Total Debt Ratio (%)	52.03	58.56	65.70	61.02	62.10	64.67	66.02	67.60
Long-term Debt Ratio (%)	35.74	46.48	55.59	38.78	31.75	29.22	25.27	20.76
Liquidity								
Interest Coverage (X)	6.27	5.20	6.37	4.61	4.45	3.99	3.82	3.87
Current Ratio (X)	1.33	0.87	1.02	1.28	1.18	0.84	0.71	0.59
Acid Test Ratio (X)	0.74	0.41	0.70	0.81	0.85	0.60	0.49	0.40
Per Share Data								
Recurring Earnings (Php)	0.25	0.57	0.62	0.62	0.67	0.64	0.63	0.65
Dividends (Php)	0.08	0.28	0.51	0.18	0.40	0.69	0.61	0.58
Book Value (Php)	1.84	1.53	1.59	2.02	2.28	2.22	2.23	2.30

Source: Company data, Team estimates

Valuation

DISCOUNTED CASH FLOW MODEL

Recurring Earnings Lead to Stable Cash Flows

We projected EDC's revenues on a per-plant per-year basis until 2031, when most Geothermal Service Contracts (GSCs) end. We used escalation factors to determine prices, while DOE projections, current market share data, plant capacities and utilization rates were applied to establish volume. We expect EDC to maintain its cost structure, driven mainly by revenues and asset acquisitions, except for some notable changes, such as the elimination of BOT fees. EDC enjoys strong recurring earnings and cash flows which put it on a defensive play against local macro fundamentals.

Intrinsic Value		
VALUE DRIVERS	**FCFE**	**DDM**
Value of Recurring Earnings	**2.21**	**3.09**
Preferential tax treatment	2.32	0.84
Lower royalty fees	0.51	0.40
RE Law Savings on Old Plants	**2.83**	**1.24**
Value of Old Plants with Savings	**5.04**	**4.33**
New Luzon plants	0.73	0.43
New Visayas plants	0.38	0.20
New Mindanao plants	0.18	0.08
Value Creation by New Plants*	1.29	0.71
CURRENT INTRINSIC VALUE	**6.30**	**5.00**

*Net of additional RE Law savings thereon
Source: Team estimates

RE Law Savings Lift Price Target

Under the RE Law, the company is entitled to a preferential tax treatment of 10.0% on income before taxes and lowered royalty fees of 1.5% of gross revenues. These fiscal incentives lift the intrinsic value by Php 2.83 or 128.0% over the target price arising from recurring earnings.

New Plants Drive Value Further

EDC plans to build seven new plants from 2013 to 2021 with a combined annualized practical capacity of 472 GWh by 2014 and 1,887 GWh by 2031, leading to an upside of Php 1.29 or 58.0% of the base value from recurring earnings. This also takes into account the seven-year income tax holiday these plants enjoy because of the RE Law.

Continued Operations into the Future

Since EDC's organic growth will roll out beyond 2014, we have projected its financial performance, position and cash flows year-on-year until 2031, when its GSCs expire. During construction from 2012 to 2021, its capital expenditures will take up as much as 3.6% of operating cash flows.

We impute a terminal value by projecting 2031 cash flows into perpetuity considering the company's continuing ownership and operation of its power plants. Only Php 0.87 or 13.8% of our current intrinsic value arises from the terminal value. The terminal growth assumption of 4.4% at 2031 for FCFF is based on the most recent 10-year growth of nominal GDP.

We ground our BUY rating on the unique combination of these business environment opportunities and the company's new projects.

Terminal Value Assumptions	
FCFF Growth Rate	4.40%
WACC	10.49%

Source: Team estimates

VALUATION SUMMARY	Total	2010E	2011E	2012E	2013E	2014E
Operating cash flows		15,978	18,252	18,901	19,707	19,517
Capital expenditures		-840	-676	-	-564	-204
Free cash flows to firm		**15,138**	**17,576**	**18,901**	**19,143**	**19,313**
FCFF from 2015E - 2031E		-	-	-	-	186,140
Terminal value of FCFF		-	-	-	-	64,000
Future value of FCFF		**15,138**	**17,576**	**18,901**	**19,143**	**269,453**
WAVE cost of capital		9.93%	9.98%	10.44%	10.66%	10.64%
Present value of FCFF	**217,613**	**13,771**	**14,531**	**14,031**	**12,765**	**162,516**
Debt issue (payment)		-14,641	-5,974	-5,938	-7,922	-8,153
Debt from 2015E - 2031E		-	-	-	-	-63,418
Terminal value of debt		-	-	-	-	-31,000
Future value of debt		**-14,641**	**-5,974**	**-5,938**	**-7,922**	**-102,571**
WAVE cost of debt		6.72%	6.80%	7.65%	8.02%	7.98%
Present value of debt	**-99,414**	**-13,719**	**-5,237**	**-4,761**	**-5,819**	**-69,879**
Present value of FCFE	**118,199**	**52**	**9,294**	**9,270**	**6,946**	**92,636**
Shares outstanding	18,750	18,750	18,750	18,750	18,750	18,750
Present value per share	**6.30**	**0.00**	**0.50**	**0.50**	**0.40**	**4.90**

PRICE RELATIVE ESTIMATES

EDC Standing Out Among Peers

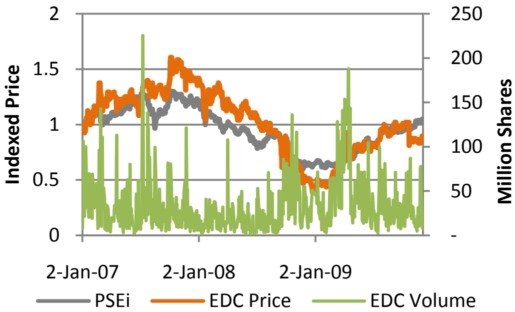
Among Philippine utilities, EDC is most closely comparable to Aboitiz Power, which also engages in the renewable energy generation business. EDC's P/E ratio, currently at 10.4x, lies close to Aboitiz' 11.8x. Its P/E ratio also fares well against other Asian utilities. Although the company's P/E of 10.4x is above the average of 7.3x for Asian energy companies, the company's distribution of special cash dividends over regular dividends at 30.0% of recurring earnings provides a healthy return for investors and justifies its current price. All these support our BUY recommendation for the stock. (We use recurring earnings as a substitute for net profit as we believe this is a better indicator of projected performance.)

Peer Comparison as of 04 Dec 2009		
Company	**PER (TTM)***	**PSR (TTM)**
EDC	**10.4x**	**3.9x**
US Utilities	15.6x	0.9x
Asian Utilities	22.7x	0.2x
Asian Energy Utilities	7.3x	0.6x
Selected US Energy Utilities		
Ormat Technologies	29.8x	4.7x
Calpine Corporation	89.2x	0.8x
Chevron Corporation	12.8x	1.0x
Selected Asian Energy Utilities		
HK Electric Holdings	12.0x	7.8x
Electricity Gen Co. (TH)	5.6x	4.5x
Selected Philippine Utilities		
Aboitiz Power	11.8x	3.7x
Meralco	57.2x	1.3x
Manila Water	13.2x	4.3x

Source: Business Week, PSE
*Recurring Earnings | TTM – Trailing 12 Months | PER – Price/Earnings Ratio | PSR – Price/Sales Ratio

Price Relative Ratios and Estimates		
	TTM	2010E
P/E	11.40x	PhP 7.10
P/S	4.30x	PhP 6.80
P/CF	7.60x	PhP 6.40
P/BV	2.86x	PhP 5.70

Source: Team estimates



Source: PSE

Price Relative Price Estimates Lie Close to Intrinsic Value

We also use industry averages of price relative ratios to forecast 2010 target share price. Our intrinsic value of Php 6.30 derived from our FCFF model falls within the range of prices from Php 5.70 – Php 7.10 per share obtained from price relative estimates. This establishes the consistency and reliability of our intrinsic value estimates.

Solid Stock Performance since IPO

Since its privatization in December 2006, EDC's stock has performed well relative to the Philippine Composite. Its trading volume has been stable ever since its IPO despite the onset of the recent financial crisis. This is also reflected in the above-average performance compared to other Philippine and Asian utilities.

Risks

Risks At A Glance

Risk	Mitigating Factor
Increased competition with open-market access	EDC's low cost structure, technical expertise and financial capacity equips it to win contract bids
Natural occurrences may disrupt plant efficiency	Widely spread portfolio of plant assets and Enterprise Risk Management system
Inefficient transmission lines may reduce delivered energy	Privatization of transmission assets and integration of national grid increases reliability and efficiency
Unsuccessful exploration projects	Seven projects already in the pipeline until 2023
Labor and equipment instability	Regular upgrades of facilities
Terrorist attacks may cause asset damage and temporary shutdown	Adoption of heightened security measures in high-risk areas
NPC may default on take-or-pay agreements	EDC has never experienced such over the past 30 years and NPC obligations are backed by the government
GSCs may not be renewed	Expiration not until 2031 and EDC expertise to be basis for renewal
Foreign currency loans may cause significantly high cash outflows when Peso depreciates	EDC is now refinancing maturing foreign currency loans with Peso-denominated borrowings
Existing loans may be refinanced at higher interest rate levels	EDC faces minimal repayments in the next five years and its recent bond issue has been rated Aaa
New administration can change existing policies	Looming energy crisis ensures EDC's major role
Use of IFRIC 12 may not be proper given ownership of power plants	Minimal effect on cash flows due to tax differences on earnings

Source: Team estimates

OPERATIONAL RISKS

Open Market Welcomes Competition

Creating an open-access energy sector poses a threat of increased competition in the industry. We expect the company's expertise and strong financial capabilities to equip EDC to win government contract bids in the future and provide a distinct advantage against new players.

Natural Occurrences Disrupt Plant Efficiency

Past experience has shown that natural occurrences, such as typhoons and unfavorable geological incidents, could cause significant downtime and failure in affected plants. These could result in unforeseen drops in actual energy delivered. The current portfolio of widely-spread power plants, as well as an Enterprise Risk Management system, is expected to address this risk.

Value Chain Bottlenecks Limit Energy Delivery

Failure of external units in the value chain, such as the transmission lines, may taper delivered energy as supply is limited by the capacity of these units. The recent privatization of this sector will improve the coverage and dependability of its lines that should provide support to EDC's growth strategies.

Unsuccessful Exploration Projects Slow Growth

While most of its exploration projects in the past have been successful, there is no guarantee for continued success. This could slow company growth. However, in the medium term, we believe this will not be a significant issue because EDC's seven geothermal projects for 2011 to 2023 have already completed exploration.

Operational Failures Cause Downtime

Each facility contributes significant amount of revenues. Labor and equipment problems may cause failure of one unit and significantly decrease earnings, such as the Php 356M loss incurred in 2008. EDC's regular upgrades of its facilities are expected to lower this risk.

Terrorist Attacks Threaten Plant Operations

Terrorist or militant attacks can halt operations where steam fields and power plant operations are located. These may cause asset damage, temporary shutdown and loss of investor confidence. To mitigate this risk, EDC has adopted security measures in its plants to prevent armed hostilities.

CREDIT RISK | *Possible NPC Default on Numerous Obligations*

Almost 60.0% of EDC's installed capacity is still sold to the National Power Corporation (NPC) through take-or-pay agreements. The company may have to deal with NPC's sudden default on its obligations. However, through its 30 years of operations, EDC has never experienced such default. NPC obligations are also backed by the national government.

REGULATORY RISK | *Contract Renewal Uncertainty Endangers Profit Stability*

Core operations have been profitable, a big part due to its steam field operations, which are subject to 20-year GSC granted by government. Upon expiration, renewal of the GSCs is not guaranteed. The expiration of most contracts though, is not until 2031 and we find the company's strong track record and expertise to influence government to renew the contract with EDC.

EXCHANGE RATE RISK | *Foreign Currency Loans Cause Fluctuating Debt Repayments*

The company's foreign-currency denominated loans, carried over from its prior operations as a GOCC, depict poor matching of cash inflows in pesos and outflows in Yen or Dollars. Hence, depreciation of the Peso relative to the Dollar or the Yen will significantly increase the Peso value of these obligations, leading to high and unpredictable cash outflows. To mitigate this risk, the company is actively securing more Peso-denominated loans and has been hedging its foreign currency exposures.

MARKET RISK | *Potential Rise in Interest Rates Create Funding Risks*

Considering its reliance on financing through borrowings, the company is exposed to the risk that it may be unable to obtain new loans to refinance existing loans at favorable interest rate levels. The company's recent bond issuance that received Aaa rating, however, is proof of creditor trust in the company and should allow it to obtain relatively favorable interest rates in obtaining future debt financing.

POLITICAL RISK | *Political Instability Rattles Investors' Confidence*

Transition into the new administration after the May 2010 elections may pose instability issues. Changes in policy could hamper the company's development or affect investor sentiment. Still, the looming energy crisis proves EDC's role in the government's plans despite the change in leadership.

ACCOUNTING RISK | *EDC May Depart from IFRIC 12*

EDC has adopted IFRIC Interpretation 12 – Service Concession Arrangements to account for its steam fields and power plants in line with its operations of the regulated energy value chain. However, we recognize the risk of a sudden change in applicable accounting rule. Since the company owns the power plants and is not under the obligation of handing these back to the government, it may not qualify for IFRIC 12. While such treatment will have some effect on earnings, this is not expected to affect cash flows significantly.

Scenario Analysis

We consider the aforementioned risks in developing different scenarios to assess the vulnerability of the stock price to these market conditions.

UPSIDE POTENTIAL UPON CONTRACT RENEWAL

We look into the regulatory risk the company faces. In the base case, we assume that EDC's contracts over the steam fields are not renewed after they expire in 2031. Here, EDC needs to source steam from a third party to supply its power plants. If the GSCs are renewed, the company will continue to produce steam internally and stands to gain an upside potential of 27.0% over the base case.

SCENARIOS	Non-Renewal of GSC	Renewal of GSC
Steam	2031	Perpetual
Electricity	Perpetual	Perpetual
FCFE	6.30	8.00
DDM	5.00	5.60

Source: Team estimates

SCENARIOS	IFRIC 12	Non-IFRIC 12
Steam	2031	2031
Electricity	Perpetual	Perpetual
FCFE	6.30	6.27
DDM	5.00	5.02

Source: Team estimates

MINIMAL IMPACT OF NON-IFRIC 12 ACCOUNTING POLICY

We also consider the possibility that the company fails to meet the requirements of IFRIC 12. We do not foresee a significant effect on EDC's intrinsic value as IFRIC 12 mainly covers the immediate recognition of noncash revenues upon construction. This is reflected in the minimal decrease in share price from Php 6.30 to Php 6.27 due to the minimal tax effects on earnings.

INTRINSIC VALUE TO WITHSTAND NEGATIVE CONDITIONS

Finally, we test the financial consequences of certain risks through a scenario analysis of key variables.

RISKS	DETAIL	VARIABLE	Optimistic	Base	Pessimistic
Operational	Open market	Market share	5%	-	(5%)
	Natural occurrences	Utilization rates	5%	-	(5%)
	Equipment failures	Maintenance costs	(5%)	-	5%
Exchange Rate	Foreign currency exposure	Peso depreciation	(5%)	-	5%
Market	Rising interest rates	Interest costs	(2%)	-	2%
INTRINSIC VALUE (Php per share)			**7.90**	**6.30**	**4.80**

Source: Team estimates

We observe a pessimistic case where we take into account a decrease in market share resulting from increased competition in the open market and low utilization rates due to plant shutdown or unforeseen events. These variables are expected to take a toll on our revenue projections. These can be aggravated by unpredicted maintenance expenditures or labor problems, which substantially increase cash outflows. These operational issues could be coupled with an environment of currency depreciation and rising interest rates due to a rating downgrade of either the country or the company.

An optimistic scenario of continued company dominance, high efficiency measures and favorable business climate has also been considered. This analysis gives a range of values which proceeds from a low of Php 4.80 per share to a high of Php 7.90. Under these circumstances, we maintain our BUY rating for EDC reflecting both the stability and potency inherent in its cash flows. ■

APPENDIX

APPENDIX A – FINANCIAL STATEMENTS

STATEMENT OF PROFIT OR LOSS

Php millions	2007	2008	2009 E	2010 E	2011 E	2012 E	2013 E	2014 E
Electricity	11,509	12,518	18,158	23,647	24,633	24,392	27,522	28,309
Steam	4,521	4,242	4,850	1,696	3,196	3,424	1,227	1,301
Interest	2,237	2,108	1,970	1,706	1,556	1,449	1,336	1,216
Drilling	625	726	1,041	1,127	1,224	1,219	1,153	1,180
Construction	109	932	2,617	5,373	6,435	6,293	5,172	6,083
REVENUES	**19,001**	**20,527**	**28,635**	**33,550**	**37,043**	**36,777**	**36,410**	**38,089**
Service costs	(3,111)	(1,524)	(1,646)	(1,625)	(1,765)	(1,758)	(1,777)	(1,821)
Construction	(101)	(804)	(2,405)	(4,938)	(5,914)	(5,783)	(4,753)	(5,590)
Operations	(3,079)	(5,046)	(6,272)	(6,922)	(7,514)	(7,502)	(7,678)	(7,884)
Administration	(2,426)	(1,313)	(2,762)	(2,639)	(2,742)	(2,848)	(2,948)	(3,039)
EBITDA	**10,283**	**11,841**	**15,551**	**17,426**	**19,109**	**18,885**	**19,254**	**19,755**
Depreciation	(244)	(657)	(687)	(1,374)	(1,525)	(1,542)	(2,070)	(2,082)
EBIT	**10,039**	**11,183**	**14,864**	**16,051**	**17,584**	**17,343**	**17,184**	**17,673**
Interest income	650	333	333	333	333	333	333	333
Interest expense	(1,600)	(2,153)	(2,334)	(3,483)	(3,954)	(4,349)	(4,500)	(4,570)
Translation losses	3,996	(9,357)	(939)	(352)	(272)	(280)	(230)	(182)
Other line items	(148)	2,646	-	-	-	-	-	-
PRETAX PROFIT	**12,937**	**2,653**	**11,924**	**12,549**	**13,690**	**13,047**	**12,786**	**13,254**
Income tax	(4,168)	(1,308)	(1,179)	(1,223)	(1,329)	(1,265)	(1,127)	(1,175)
NET PROFIT	**8,768**	**1,345**	**10,745**	**11,326**	**12,361**	**11,782**	**11,659**	**12,079**

STATEMENT OF FINANCIAL POSITION

Php millions	2007	2008	2009 E	2010 E	2011 E	2012 E	2013 E	2014 E
Cash	3,297	957	5,471	2,485	6,600	6,506	6,143	6,331
Receivables	42,022	40,108	39,825	35,195	33,967	31,925	30,013	27,986
Inventories	1,141	1,563	1,941	1,955	1,966	1,958	2,577	2,744
Intangibles	11,329	11,883	24,837	32,824	38,120	43,418	47,053	51,601
Fixed assets	4,712	5,280	7,110	7,568	7,837	7,411	7,563	7,342
Exploration costs	1,172	1,000	1,466	10,460	17,805	20,000	23,155	30,301
Other assets	8,317	8,555	6,757	6,757	6,757	6,757	6,757	6,757
TOTAL ASSETS	**71,990**	**69,346**	**87,408**	**97,244**	**113,052**	**117,976**	**123,262**	**133,061**
Trade payables	4,243	3,065	5,599	9,920	15,457	20,840	26,115	30,906
Royalty fees	1,734	1,688	1,489	699	498	282	112	127
Long term debt	25,733	32,229	48,712	47,096	52,626	53,542	53,524	57,283
Other liabilities	5,748	3,628	1,628	1,628	1,628	1,628	1,628	1,628
TOTAL DEBT	**37,457**	**40,610**	**57,427**	**59,343**	**70,209**	**76,291**	**81,379**	**89,943**
Retained profits	13,172	9,978	11,164	18,687	23,388	22,304	22,547	23,772
Minority interest	3,345	1,484	1,543	1,941	2,182	2,108	2,063	2,072
Other equities	18,015	17,273	17,273	17,273	17,273	17,273	17,273	17,273
TOTAL EQUITIES	**34,532**	**28,735**	**29,981**	**37,901**	**42,843**	**41,685**	**41,883**	**43,118**
TOTAL CAPITAL	**71,990**	**69,346**	**87,408**	**97,244**	**113,052**	**117,976**	**123,262**	**133,061**

STATEMENT OF CASH FLOWS

Php millions	2007	2008	2009 E	2010 E	2011 E	2012 E	2013 E	2014 E
Cash revenues	21,857	24,244	26,308	29,457	31,837	32,526	32,524	33,866
Cash expenses	(10,396)	(18,300)	(12,918)	(16,524)	(17,776)	(18,086)	(17,191)	(18,173)
ST financing	(1,058)	(1,508)	839	3,044	4,191	4,461	4,374	3,824
CORE CFO	**10,403**	**4,436**	**14,229**	**15,978**	**18,252**	**18,901**	**19,707**	**19,517**
Exploration costs	462	264	(348)	277	-	143	143	145
Fixed assets	(183)	(1,073)	(2,128)	(840)	(676)	-	(564)	(204)
Intangibles	(109)	(932)	(10,747)	(277)	-	(143)	(143)	(145)
CORE CFI	**170**	**(1,741)**	**(13,223)**	**(840)**	**(676)**	**-**	**(564)**	**(204)**
Loan principals	(9,843)	(528)	13,421	(11,158)	(2,019)	(1,589)	(3,422)	(3,583)
Dividends	(1,485)	(5,303)	(9,499)	(3,405)	(7,419)	(12,940)	(11,461)	(10,844)
Interest	(1,170)	(1,825)	(2,334)	(3,483)	(3,954)	(4,349)	(4,500)	(4,570)
CORE CFF	**(12,498)**	**(7,656)**	**1,587**	**(18,046)**	**(13,393)**	**(18,878)**	**(19,383)**	**(18,997)**
Translation effect	(8)	2	122	(78)	(68)	(116)	(123)	(128)
Other line items	(4,770)	2,619	1,798	-	-	-	-	-
CASH INC (DEC)	**(6,703)**	**(2,339)**	**4,514**	**(2,986)**	**4,115**	**(93)**	**(363)**	**188**

APPENDIX B – DISCOUNT RATE ASSUMPTIONS

ASSUMPTIONS		
VARIABLE	**VALUE**	**REFERENCE**
EQUITY FINANCING		
Levered beta	**1.13**	Group's calculations using market data - Jan 2007 to June 2009
Riskless return	**9.25%**	03 Nov 2009 auction for 25-year on-the-run Treasury Bond
Market return	**12.86%**	Group's calculations using market data - Jan 1987 to June 2009
Terminal growth	**4.40%**	International Monetary Fund, CAGR from 1999 to 2008
DEBT FINANCING		
Pretax cost of debt	**8.64%**	12 Nov 2009 final prospectus for 5.5-year Fixed Rate Bonds
New tax rate	**10.00%**	RA 9513 - Renewable Energy Act of 2008
Historical tax rate	**30.00%**	PD 1158 as amended - National Internal Revenue Code of 1997
LT Debt-to-equity	**1.22**	30 Sep 2009 Quarterly Report - Note 34 on Capital Management

APPENDIX C – CONTRACTS

The power industry has long been regulated by the government, resulting in several long-term contractual arrangements existing between EDC and various government entities. Two particular kinds of contracts significantly affect the company's operations:

(1) GSCs give EDC the right to extract steam from steam fields (also known as geothermal service areas) for a period of 25 years. In return, EDC remits to the government royalty fees computed based on a percentage of steam sales. The last of these contracts will expire by 2031 and we assume that they will not be renewed for our base case.

(2) Sales agreements with NPC, a government-owned and controlled corporation, impose pre-determined prices and volumes with regard to EDC's steam and electricity sales. These agreements however, are slowly being replaced by bilateral contracts and spot market sales to private companies as part of the privatization of the energy industry. The table below illustrates the transition from EDC's current contracts with NPC to spot market contracts which it plans to enter into in the future.

SALES CONTRACTS OF EDC

<table>
<tr><th>Field or Plant</th><th>Present - 2012</th><th>2013 - 2022</th><th>2023-2024</th><th>2025 - 2031</th></tr>
<tr><td>Tongonan</td><td colspan="4">Bilateral Contracts***</td></tr>
<tr><td>Unified Leyte</td><td colspan="2">Electricity Sales Agreement*</td><td colspan="2">Bilateral Contracts***</td></tr>
<tr><td>Northern Negros</td><td>Electricity Sales Agreement**</td><td colspan="3">Bilateral Contracts***</td></tr>
<tr><td>Palinpinon I</td><td colspan="4">Bilateral Contracts***</td></tr>
<tr><td>Palinpinon II</td><td colspan="4">Bilateral Contracts***</td></tr>
<tr><td>BacMan I</td><td colspan="4">Steam Sales Agreement*</td></tr>
<tr><td>BacMan II</td><td colspan="4">Steam Sales Agreement*</td></tr>
<tr><td>Mindanao I</td><td colspan="2">Electricity Sales Agreement*</td><td colspan="2">Bilateral Contracts***</td></tr>
<tr><td>Mindanao II</td><td colspan="3">Electricity Sales Agreement*</td><td>Bilateral Contracts***</td></tr>
</table>

*With NPC **With private cooperatives ***EDC's stated preference over spot sales

Source: Company data