

Company Update

Buy (17E TP LAK8,720/US\$1.06)

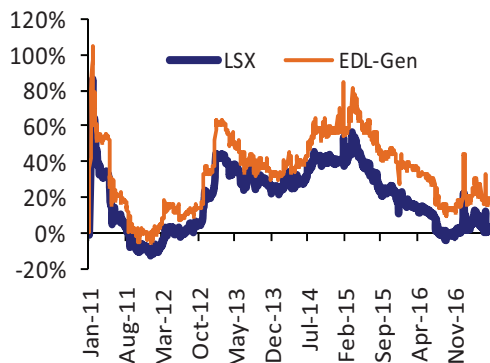
Earnings upgrade/Earnings downgrade/Overview unchanged

Close LAK5,050 / US\$0.61

June 8, 2017

2017E end of depressed earnings cycle; good years ahead

Price Performance (%)



Source: Bloomberg, KT ZMICO Research

	FY17	FY18
Consensus EPS (Kip)	238.81	425.87
KT ZMICO vs. consensus	n.a.	n.a.

Share data

Reuters / Bloomberg	EDL.BK/EDL LS
Paid-up Shares (m)	1,679.30
Par (USD, Kip)	0.49 / 4,000
Market cap (Kip bn/USDmn)	8,480.48 / 1,032.76
Foreign limit / actual (%)	25.00 / 13.2856
52 week High / Low (Kip)	6,200 / 4,700
Avg. daily T/O (shares 000)	71.683
Estimated free float (%)	11.7144
Beta	0.82
URL	www.edlgen.com.la

Note:

BCEL-KT Securities is the underwriter of EDL-Gen.
BCEL-KT Securities Co., Ltd. is a joint venture company between BCEL Bank and KT ZMICO Securities (Thailand).

KT ZMICO is a selling agent of EDL-Gen's capital increase totaling 453.09mn shares through rights offering and public offering with the subscription period during 28 Aug. 2015 – 8 Sept. 2015.

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Earnings cut; but positive earnings momentum in years ahead

We make a cut in EDL-Gen's earnings forecasts. However, we maintain our Buy rating as its share price has largely priced in its depressed earnings cycle, which is likely to end in 2017E followed by positive earnings momentum in the years ahead with forward PBV/ROE showing an undemanding trend at 0.12x in 2018E and below 0.1x from then on (vs. Thailand medium to large peers at the average of 0.13x 2018E PBV/ROE), against the company's profit contribution of 538mn kip/effective MW in 2018E, equivalent to Bt2.3mn/MW (vs. Thailand peers at the average of Bt1.9mn/MW).

Downward earnings revision

It delivered record-low NP of Bt16.2bn kip in 1Q17 (-78% YoY, -54% QoQ), weighed down by a sustained low profit contribution from IPPs, higher finance costs, and forex loss on the consolidated line. We cut EDL-Gen's 2017-21E NP by 18-58%, with a deep cut made in the front-end loaded years to reflect 1) the cut in power generation on both HPPs and IPPs; 2) the incorporation of the recent acquisition of new operating projects, namely, Nam San 3A and Nam San 3B (with combined 114MW capacity), with the contributions likely to kick off in 4Q17E; 3) the slip in the first contribution of new power projects in the pipeline totaling 868MW, with back-end loaded new capacity additions in 2019E and 2023E; and 4) higher finance cost from the new US\$312mn debentures issuance in Sept. 2016.

2018E: starting year of visible earnings improvement

2017E should be another year of low earnings. However, the year 2018E will be the start of visible earnings improvement, with our newly-revised forecasts calling for the company's 2018-21E NP growth at 30% CAGR thanks to an increase in the consolidated power generation at a faster rate than finance costs. This will lead to a higher profit contribution per effective MW in the period, which will likely exceed 800mn kip/effective MW given all projects in the pipeline to be fully felt in 2024E, along with improvement in ROE to nearly 14% in 2024E.

Capacity growth to be back-end loaded in 2019E and 2023E

The company has planned a capacity addition of 868MW to its portfolio, bringing total capacity to 1,999MW by 2024E (~77% growth from 1,131MW in 2016), with the accelerating pace to be back-end loaded in 2019E and 2023E. Given the uptrend of the CAPEX cycle, its debt-to-equity ratio will continue to climb, with the peak likely in 2019 at 1.5x, before entering a declining trend onward.

Financials and Valuation

FY Ended 31 Dec	2015	2016	2017E	2018E	2019E
Sales (Kipmn)	847,759	1,241,181	1,344,363	1,637,057	2,106,281
Net profit (Kipmn)	640,839	554,349	401,028	715,163	953,426
EPS (Kip) -weighted	456.44	330.11	238.81	425.87	567.75
EPS (Kip) - FD	381.61	330.11	238.81	425.87	567.75
EPS growth – FD (%)	(48.4)	(13.5)	(27.7)	78.3	33.3
DPS (Kip)	260	290	203	256	341
BV (Kip)	5,421	5,472	5,508	5,678	5,905
FY Ended 31 Dec	2015	2016	2017E	2018E	2019E
PER (x)	13.2	15.3	21.1	11.9	8.9
EV/EBITDA (x)	10.1	9.5	12.3	8.3	9.5
PBV (x)	0.9	0.9	0.9	0.9	0.9
Dividend yield (%)	5.1	5.7	4.0	5.1	6.7
ROE (%)	8.3	6.1	4.3	7.6	9.8
Net gearing (%)	13.8	30.6	89.0	69.2	139.9

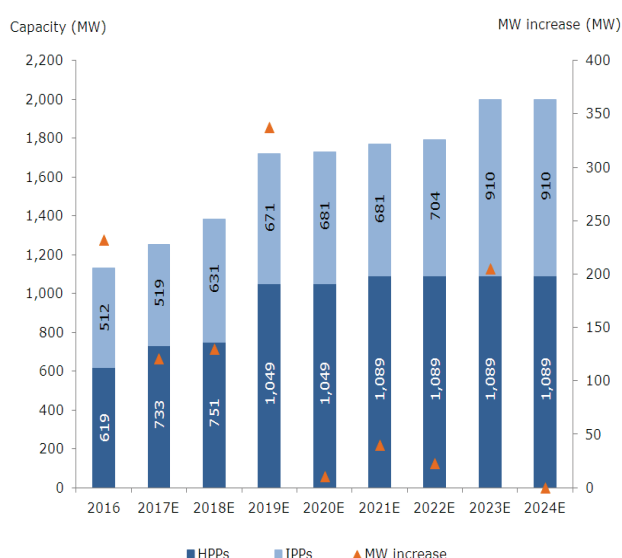
Capacity growth to be back-end loaded in 2019E and 2023E

Despite EDL-Gen's exciting growth story with the planned 868MW capacity expansion in the pipeline to enable its total power portfolio to achieve 1,999MW by 2024E, implying a soaring 77% growth from 1,131MW in 2016, we see moderate growth of the company's capacity expansion in 2017-18E before accelerating in 2019E and 2023E.

In 2017E, there will only be a small capacity addition if EDL-Gen doesn't acquire new operating assets, namely Nam San 3A and Nam San 3B, with combined 114MW installed capacity. The transaction and their contributions are likely to kick off in 4Q17E. The same growth momentum is likely to continue in 2018E with a new 130MW addition mostly from the group of IPP projects. Meanwhile, the accelerating development of capacity growth is visibly back-end loaded with combined 338MW equity capacity in 2019E, mostly driven by its large-scale wholly-owned hydropower plants (HPPs), namely, Nam Chiean1, Nam Ngum 1 Expansion DFE, and Nam Khan3, followed in 2023E by combined 206MW equity capacity with Nam Bi1-2-3 and the new potential Nam Theun1 as the growth catalyst. Note that their first contribution is based on the transfer schedule guided by the company plus our conservative call for another 6-12 month lag time due to a possible delay on the assets/stakes transfer from Electricite Du Laos (EDL) to EDL-Gen.

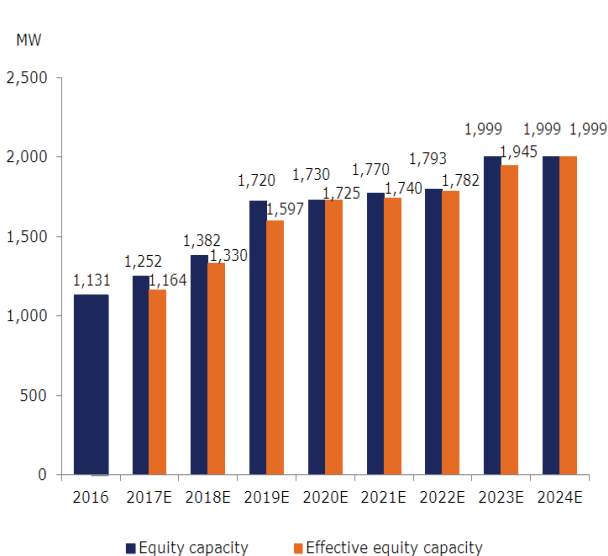
Meanwhile, Xekaman 3 with 37.5MW equity capacity is likely to be removed from the company's project portfolio given an incident causing suspension of the powerhouse operation, which is likely to require lengthy maintenance work with plant resumption targeted for mid-2019. Despite an equity investment of US\$29mn having been injected, the company is in talks with EDL over a possible trade of this project for another new project. At the same time, its first footprint solar projects have been added to the company's power portfolio with the first phase 10MW solar project out of a total of 32MW capacity to have its commercial kickoff in 1H17E. Moreover, the sizeable hydropower Nam Theun1 (installed capacity 650MW on a 100% basis; equity capacity 97.5MW on its 15% stake) is also counted as a new potential project.

Figure 1: EDL-Gen's equity capacity breakdown between HPPs and IPPs



Source: KT ZMICO Research

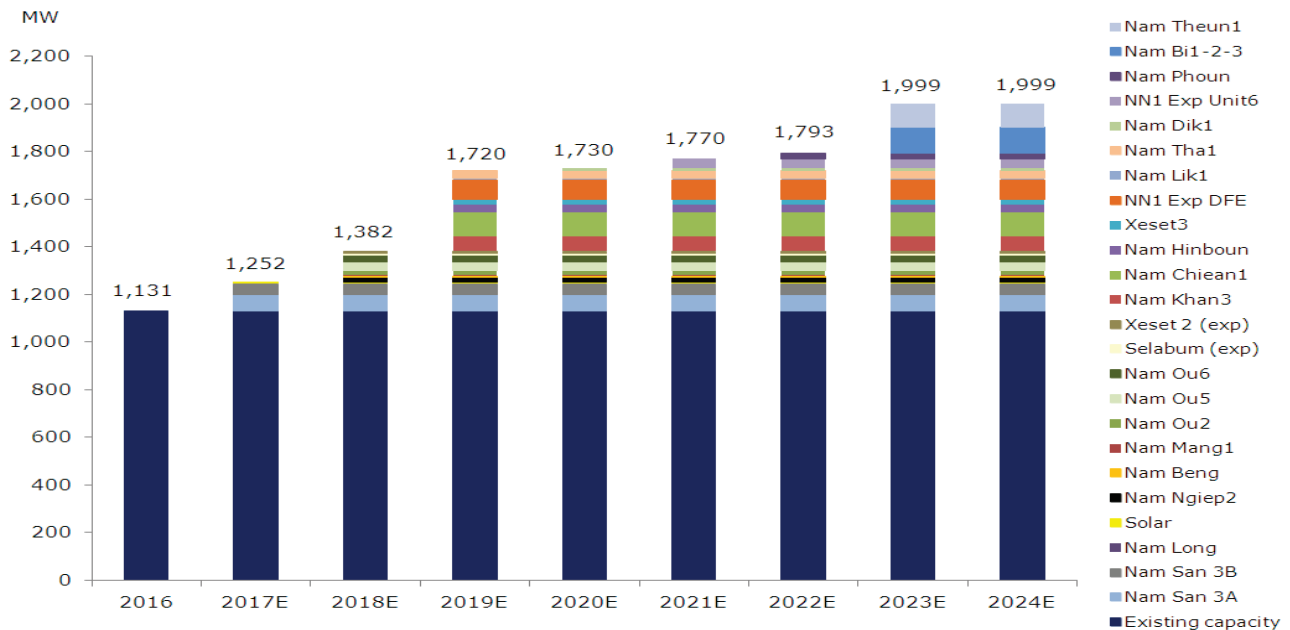
Figure 2: EDL-Gen's equity capacity and effective equity capacity*



Source: KT ZMICO Research

Note: effective equity capacity calculated based on the projected month contribution of each new project

Figure 3: EDL-Gen's capacity growth roadmap

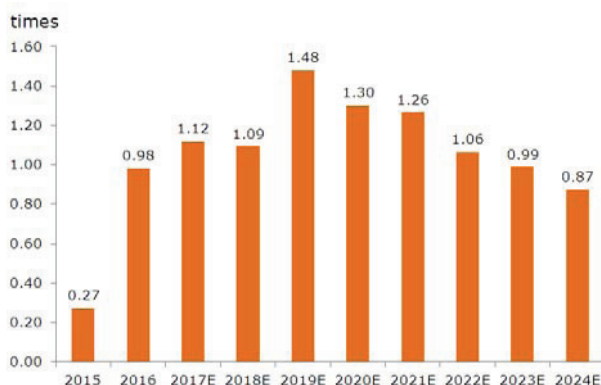


Source: KT ZMICO Research

Note: the kick-off of new capacity based on the company's guidance plus KT Zmico Research's adjusted 6-12 month lag time for a possible delay on assets/stakes transfer from Electricite Du Laos (EDL) to EDL-Gen.

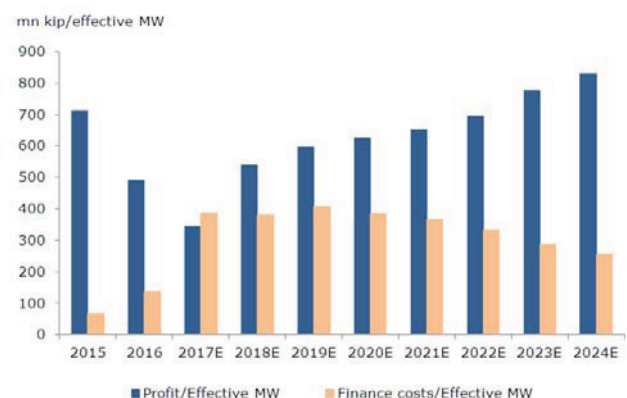
The sources of funds to facilitate the company's capacity expansion in the pipeline are from its capital increase in 2015 (~US\$339mn), and two slots of debenture issuances in late 2014 (US\$200mn) and late 2016 (~US\$312mn). Given the slow pace of new power asset injections, it looks overfunded with huge cash on hand against a higher finance cost burden but a small incremental contribution from new power assets. This will cause the company's interest-bearing debt-to-equity ratio to run up to its peak at 1.5x in 2019E, with finance costs likely to hit a record high at 408mn kip/effective MW in the year. However, this mismatch will largely fall in 2017E before improving from 2018E onward; subsequently, its profit contribution per effective MW will continue on an uptrend cycle and exceed 800mn kip/effective MW given all projects in the pipeline to be fully felt in 2024E.

Figure 4: EDL-Gen's projected debt to equity ratio



Source: KT ZMICO Research

Figure 5: EDL-Gen's projected finance costs and profit contribution per effective capacity



Source: KT ZMICO Research

Figure 6: Details of new power asset injections

Projects in the pipeline	Location	Stake	Installed MW	Equity MW	Project progress	Contribution kick-off*	Source of Funds	Remarks
HPPs								
Nam San 3A	Xiengkhouang	100%	69	69	Operating	late-2017E	Bond #2	Completion of acquisition transaction in late-2017
Nam San 3B	Xiengkhouang	100%	45	45	Operating	late-2017E	Bond #2	Completion of acquisition transaction in late-2017
Selabum (exp)	Champasak	100%	8	8	na.	late-2018E	Bond #2	under construction
Xeset 2 (exp)	Saravanh	100%	10	10	na.	late-2018E	Bond #2	under construction
Nam Khan 3	Luangprabang	100%	60	60	100.0%	2019E	Bond #1 Capital	Negotiation on asset transfer agreement
Nam Chiean	Xieng Kuang	100%	104	104	86.9%	2019E	Increase Capital	Negotiation on asset transfer agreement
Nam Hinboun	Khammuan	100%	30	30	79.0%	2019E	Increase Capital	Negotiation on asset transfer agreement
Xeset 3	Champasak	100%	24	24	96.7%	2019E	Increase Capital	Negotiation on asset transfer agreement
Nam Ngum 1 Ext DFE	Vientiane	100%	80	80	57.3%	2H19E	Increase Capital	Negotiation on asset transfer agreement
Nam Ngum 1 Ext Unit6	Vientiane	100%	40	40	na.	late-2021E	Increase	Negotiation on asset transfer agreement
IPPs								
Nam Long Solar	Luangnamtha	20%	5	1	100.0%	late-2017E	Bond #1	Ongoing project transfer agreement
	Vientiane	60%	10	6	100.0%	2Q17E	Bond #2 Capital	Initial phase 10MW out of the target 32MW
Nam Ngiep2	Kiangkhouang	10%	180	18	100.0%	2018E	Increase Capital	Negotiation on asset transfer agreement
Nam Beng	Oudomxay	20%	34	7	100.0%	2018E	Increase Capital	Negotiation on asset transfer agreement
Nam Mang1	Bolikhamxay	10%	64	6	99.5%	2H18E	Increase	Negotiation on asset transfer agreement
Nam Ou2	Luangprabang	15%	120	18	100.0%	late-2018E	Bond #1	Negotiation on asset transfer agreement
Nam Ou5	Phongsaly	15%	240	36	100.0%	2H18E	Bond #1	Negotiation on asset transfer agreement
Nam Ou6	Phongsaly	15%	180	27	100.0%	2H18E	Bond #1 Capital	Negotiation on asset transfer agreement
Nam Lik1	Vientiane	10%	60	6	47.5%	2H19E	Increase Capital	Negotiation on asset transfer agreement
Nam Tha1	Louangnamtha	20%	168	34	63.8%	late-2019E	Increase	Negotiation on asset transfer agreement
Nam Dik1	Borkeo	70%	15	11	na.	2H20E	Bond #2	Under construction
Nam Theun 1	Houaphanh	15%	650	98	na.	2023E	Bond #2	PPA negotiation with EGAT/Financial close likely in late 2017E
Direct Investment								
Nam Phoun	Xayaburi	51%	45	23	na.	2H22E	Bond #2	Awaiting the Concession Agreement
Nam Bi1-2-3	Sekong	80%	135	108	na.	2H23E	Bond #2	Awaiting the Concession Agreement
Grand Total			2,376	868				

Source: The Compnay, KT ZMICO Research

Note: *based on the company's guidance plus KT Zmico Research's adjusted 6-12 month lag time for the possible delay on assets/stakes transfer from Electricite Du Laos (EDL) to EDL-Gen.

To trade long-term potential assets for new operating assets with a quick contribution

The company is taking quick action in 2017 with its recent shareholder resolution to approve the acquisition of a 100% stake each in two new operating assets, namely Nam San 3A and Nam San 3B, with combined 114MW installed capacity. This transaction is scheduled to be completed and make its first contribution in 4Q17E. It involves a total investment cost of US\$107mn, translating to a reasonable acquisition cost of 1.2x PBV. This strategic move is to trade the investment in the long-term potential project, Pak Beng (173MW equity capacity), whose equity injection costs are nearly equal (approximately US\$110mn) but whose first contribution will take more than six years to kick off.

We preliminarily expect Nam San 3A and Nam San 3B to contribute profit generation of US\$6mn a year and to generate equity IRR of 8-9%. However, there is upside risk to our estimates given 1) a possible increase in the revenue structure from higher water diversion from tributaries, which could result in power generation being higher than designed at 278GWh/year for Nam San 3A and 174GWh/year for Nam San 3B; and 2) a possible change in the loan structure with an extended loan duration and a lower interest rate in negotiations to match with the projects' annual operating cash flow; this could possibly lead to higher equity IRR to 11% as required by the company.

Figure 7: Pair-trade between Nam San 3A/3B and Pak Beng

	(1)				(2)	
	Nam San 3A	Nam San 3B	Total	unit	Pak Beng	Variance (1)/(2)
Installed capacity	69	45	114	MW	912	
Project cost	173	117		\$mn	2,300	
Investment cost/MW	2.50	2.60		\$mn/MW	2.52	
D/E ratio	70/30	70/30			75/25	
EDL-Gen stake	100%	100%		%	19%	
Acquisition cost/Equity injection	64.8	42.2	107.0	\$mn	110.0	(3.00)
<i>Premium paid on acquisition cost</i>	<i>12.8</i>	<i>7.7</i>	<i>20.4</i>	<i>\$mn</i>		
What's to GET						
Equity capacity	69	45	114.0	MW	173	-34.2%
% increase in equity capacity*	6.1%	4.0%	10.1%		15.3%	
Annual profit contribution	3.6	2.5	6.1	\$mn/yr	2023E	Quick win; profit contribution \$6mn/yr
Estimated equity value - net off premium paid	16.8	22.1	39.0	\$mn	83.5	Trade-off with the advanced 6-year profit contribution ahead of Pak Beng project
Incremental value to 17E TP - net off premium paid	82	108	190	kip/sh	408	Potential upside risk from higher power generation and refinancing program
Estimated % equity IRR	8%	9%		%	13%	

Source: KT ZMICO Research

*based on 2016 equity capacity of 1,131MW

Recap: record-low 2016 NP in the past six years

EDL-Gen reported 2016 NP of 554.3bn kip (-13.5% YoY), with huge forex loss of 64.8bn kip. With another dry year, its core profit remained low at 619.1bn kip (-5% YoY) in 2016, with 71% shared by its HPPs (441.1bn kip, +21% YoY), and the remaining 29% by its IPPs (178.1bn kip, -38% YoY). Its 2016 core profit was lower than our forecast by 21%, given 1) the slowdown of growth momentum at its wholly-owned hydropower plants (HPPs), with uneconomic power generation at its new power asset Nam Khan 2 as the main pressure;



and 2) the record-low profit contribution from its IPPs, with their power generation falling short of the plan as the main weakness, particularly in the case of its 60%-owned Theun Hinboun, as well as the forex loss and the one-off write-off expense linked to the unfeasible Nam Bak project under Nam Ngum 2's operation.

The ten HPPs delivered power generation of 2,629GWh in 2016, up 32% YoY from 1,995GWh in 2015, given the first full-year contribution from three new projects with combined capacity of 232MW (comprising 130MW from Nam Khan 2, 88MW from Houay Lamphan Gnai, and 14MW from Nam Sana). However, the actual power generation lagged behind the plan by 10%, led by a substantially lower contribution from Nam Khan 2. Note that Nam Khan 2 reported only 282.8GWh in the year, approximately 41% behind the plan (478.7GWh), given the lower-than-designed water catchment in the reservoir due to the delay in relocation of a nearby village, as well as a delay in the transmission line upgrade by the off-taker, Electricite Du Laos (EDL), with the latter still in process.

Meanwhile, the five IPPs reported power generation on an equity basis totaling 1,989GWh in 2016, down 11% YoY and 14% behind the plan, with the two major contributors, Theun Hinboun and Nam Ngum 2, falling short of the target by 16% and 8%, respectively.

Its EBITDA margin remained solid at 87% in 2016 (vs. 85% in 2015), thanks to the kickoff of the contribution of new HPPs as mentioned above, along with strict cost control linked to both operations and SG&A (~10% of total revenue in 2016 vs. 14% in 2015). At the same time, its finance costs continued on an accelerating trend in 2016 in accordance with the higher project loan for new asset acquisitions and the new debentures issuance in Sept. 2016 to fund new potential projects.

It also announced a 2H16 DPS of 160kip, bringing the full-year DPS to 290kip, which implies a 5.7% dividend yield and an 88% payout ratio (vs. the normal historical level of a 60% payout ratio). This is to compensate shareholders during the depressed earnings cycle.

Continued low earnings in 1Q17

Meanwhile, its reported 1Q17 earnings showed record-low NP of Bt16.2bn kip (-78% YoY, -54% QoQ), with forex loss of 18.5bn kip on the consolidated line in the quarter. Stripping out the forex impact, its core profit remained low at 34.7bn kip in 1Q17 (-50% YoY, -65% QoQ), weighed down by the sustained low profit contribution from IPPs (given the weak core operation and forex loss) and higher finance costs.

Despite the on-plan power generation at its HPPs (10 hydropower plants with 100% holding) totaling 523.2GWh in 1Q17 (vs. the company's plan of 519GWh in the quarter), along with the strict cost control linked to both the operation and SG&A, its HPPs' performance in 1Q17 was impacted by higher finance costs, particularly in the case of new US\$312mn debentures issuance in late 2016 to facilitate future expansion. Note that its finance costs ballooned to 90.8bn kip in 1Q17, +2.2times YoY and +28% QoQ.

Moreover, the contribution from its affiliates (five IPPs) remained very low at 15.9bn kip in 1Q17 (reversing from a loss contribution in 1Q16, but dropping sharply 72% QoQ) given their sustained low power generation at 444.8GWh in the quarter, ~5% behind the plan and down 25% QoQ, pressured by the major overhaul at Theun Hinboun in the quarter and low water inflow at Nam Ngum 2, along with substantial forex loss at these two IPPs.

Figure 8: EDL-Gen's 2016 and 1Q17 earnings review

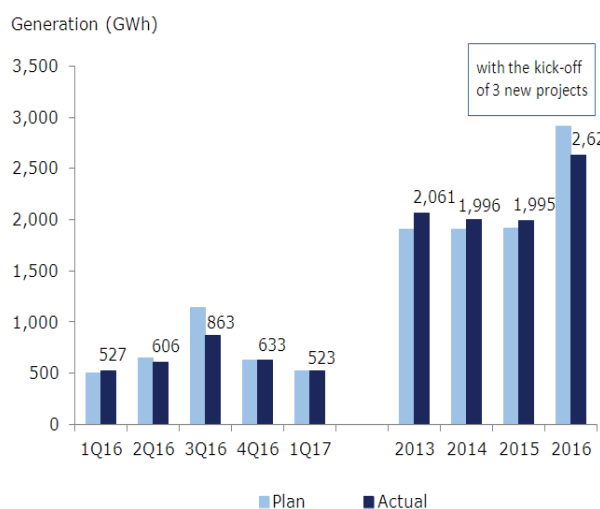
unit: mnkip	1Q16	2Q16	3Q16	4Q16	1Q17	% YoY	% QoQ	2016	2017E	% YoY	YTD (% 17E)
Electricity sales	286,318	278,678	389,860	286,325	243,194	(15.1)	(15.1)	1,241,181	1,344,363	8.3	18.1
Cost of sales	(139,444)	(114,840)	(112,096)	(120,011)	(113,694)	(18.5)	(5.3)	(486,391)	(519,324)	6.8	21.9
Gross profit	146,874	163,838	277,764	166,314	129,500	(11.8)	(22.1)	754,790	825,039	9.3	15.7
Profit from associates and JV	(18,865)	54,894	84,900	57,122	15,919	nm	(72.1)	178,051	235,664	32.4	6.8
Other income	3,388	1,793	1,147	4,737	5,381	58.8	13.6	11,065	11,223	1.4	47.9
Exchange gain (loss)	4,964	13,654	(20,202)	(63,216)	(18,492)	nm	nm	(64,800)	(26,253)	(59.5)	70.4
Total revenue	275,805	349,019	455,705	284,968	246,002	(10.8)	(13.7)	1,365,497	1,564,997	14.6	15.7
Gain before expenses	136,361	234,179	343,609	164,957	132,308	(3.0)	(19.8)	879,106	1,045,673	18.9	12.7
Administrative exp.	(22,720)	(20,697)	(22,835)	(54,477)	(21,680)	(4.6)	(60.2)	(120,729)	(146,793)	21.6	14.8
Finance costs	(28,477)	(22,862)	(32,493)	(71,086)	(90,802)	218.9	27.7	(154,918)	(450,487)	190.8	20.2
Income tax	(10,442)	(13,855)	(20,359)	(4,454)	(3,660)	(64.9)	(17.8)	(49,110)	(46,258)	(5.8)	7.9
Net profit	74,722	176,765	267,922	34,940	16,166	(78.4)	(53.7)	554,349	401,028	(27.7)	4.0
Core profit	69,758	163,111	288,124	98,156	34,658	(50.3)	(64.7)	619,149	427,282	(31.0)	8.1
EPS (kip)	44.50	105.26	159.54	20.81	9.63	(78.4)	(53.7)	330.11	238.81	(27.7)	4.0
GP margin (%)*	51.3	58.8	71.2	58.1	53.2			60.8	61.4		
EBITDA margin (%)	88.9	83.7	93.0	81.2	86.9			87.3	86.8		
NP margin (%)	27.1	50.6	58.8	12.3	6.6			40.6	25.6		
ROE (%)	3.3	7.7	11.7	1.5	0.7			6.1	4.3		
Debt/Equity (x)	0.26	0.72	0.98	0.98	0.98			0.98	1.12		

Note: *GP margin = gross profit from operation / electricity sales

Source: KT ZMICO Research

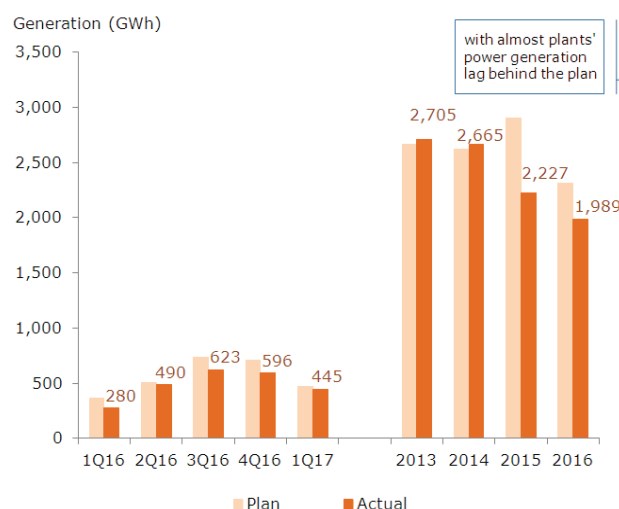
Figure 9: EDL-Gen's power generation of its wholly-owned HPPs and its IPPs

A) Power generation of its 10 wholly-owned hydropower projects



Source: Company, KT ZMICO Research

B) Power generation of its IPPs (on equity basis)

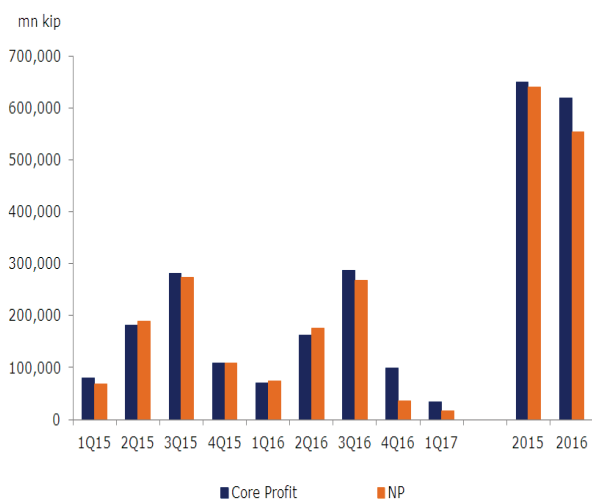


Source: Company, KT ZMICO Research

Note: Power generation of the IPPs shown is on an equity basis, with the Nam Ngum 2's power generation including only Primary Energy (PE)

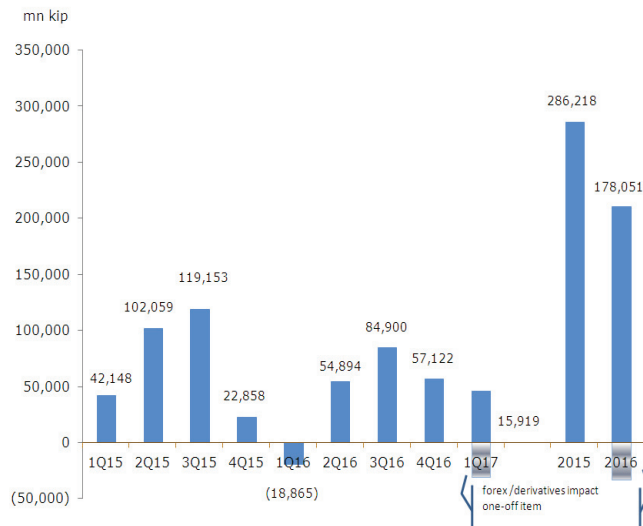
Figure 10: EDL-Gen's earnings performance

A) EDL-Gen's core profit and NP



Source: Company, KT ZMICO Research

B) Profit contribution from IPPs



Source: Company, KT ZMICO Research

Downward revision on 2017-21E earnings forecasts

We revise down our 2017-21E NP forecasts for EDL-Gen by 18-58%, with a deep cut made in the front-end loaded years, to reflect 1) the cut in power generation of its HPPs by 8% in 2017 and -1%/-2% during 2018-21E, mainly at Nam Khan 2 by 18% in 2017E with its power generation likely to remain low at 390GWh in 2017E before ramping up to 512-547GWh in the following years on the completion of the transmission line upgrade by EDL; meanwhile, there was slight fine-tuning at other HPPs consistent with the company's guidance; 2) the downward revision on its IPPs' power generation largely in 2017E by 12%, with the major cut done at Theun Hinboun by 8% following the major overhaul done in 1Q17 (causing the project's power generation to drop to 2,409GWh in 2017E on a 100% basis before rebounding to 2,800GWh and nearly 3,000GWh in the following years), as well as at Nam Ngum 2 by 17% due to the project's low water inflow (with our conservative newly-revised power generation for Primary Energy cut to 1,850GWh in 2017E on a 100% basis); 3) the incorporation of the recent acquisition of new operating projects, namely Nam San 3A (installed capacity 69MW) and Nam San 3B (installed capacity 45MW) at a 100% stake each, with the contribution kickoff likely in 4Q17E after the completion of the transaction process and a full-year contribution from 2018E onwards; 4) the slip in the contribution kickoff of new power projects in the pipeline totaling 868MW, with back-end loaded new capacity additions in 2019E and 2023E given the recent review of project progress, as well as the time consuming process of asset/stake transfer from EDL to EDL-Gen; and 5) higher finance costs from the new US\$312mn debentures issuance in Sept. 2016.

This results in consolidated power generation being slashed by 20%/12% in 2017-18E and slight fine-tuning by +0.2% to +1% during 2019-201E. Note that our newly-revised forecasts for the consolidated power generation (HPPs and IPPs on an equity basis) are on an accelerating trend in the next five years at 11% CAGR.

2018E: first year of visible earnings improvement in parallel with capacity growth

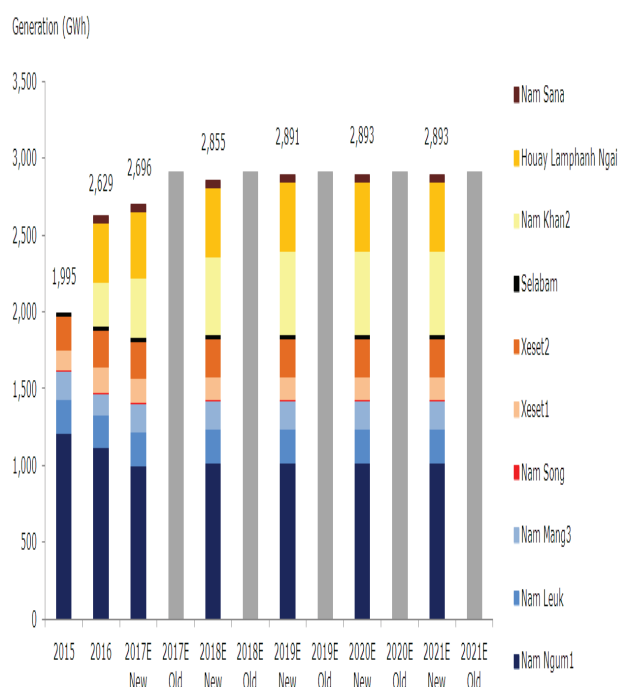
2017E should be another year of low earnings with projected NP at 401bn kip (-28% YoY) given 1) the projected power generation at moderate 6% growth to 4,900GWh (vs. 4,618GWh in 2016) mainly due to the sustained low power generation at Nam Khan 2 and Theun Hinboun against smaller power generation at Nam Ngum 2; 2) the absence of a sizeable capacity addition except Nam San 3A and Nam San 3B (with combined 114MW capacity), with only a one-quarter contribution expected in 4Q17E; and 3) the full-year realization of finance costs from the new US\$312mn debentures issuance in late 2016.

Meanwhile, the year 2018E will be the start of visible earnings improvement, with our newly-revised forecasts calling for the company's 2018-21E NP growth at 30% CAGR, thanks to the increase in consolidated power generation (driven by the existing projects and the successive new capacity additions from the power assets/stakes transferred from EDL) at a faster rate than finance costs.

This mismatch of the company's new project contributions and the accelerating finance costs to fund its investment expansion largely falls in 2017E and will subsequently improve from 2018E onwards. From that point, its profit contribution per effective MW will continue on an uptrend cycle and exceed 800mn kip/effective MW given all projects in the pipeline to be fully felt in 2024E.

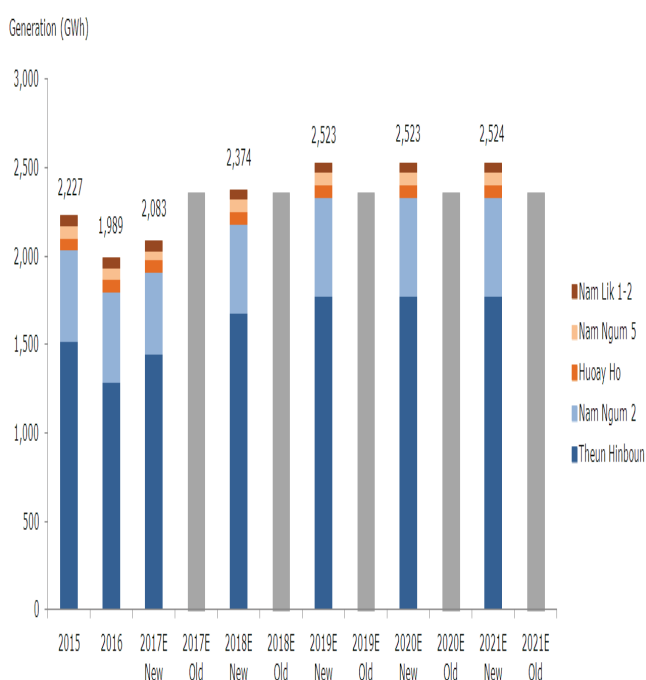
Figure 11: Downward revision on EDL-Gen's power generation

A) EDL-Gen's projected power generation at its ten HPPs – new & old



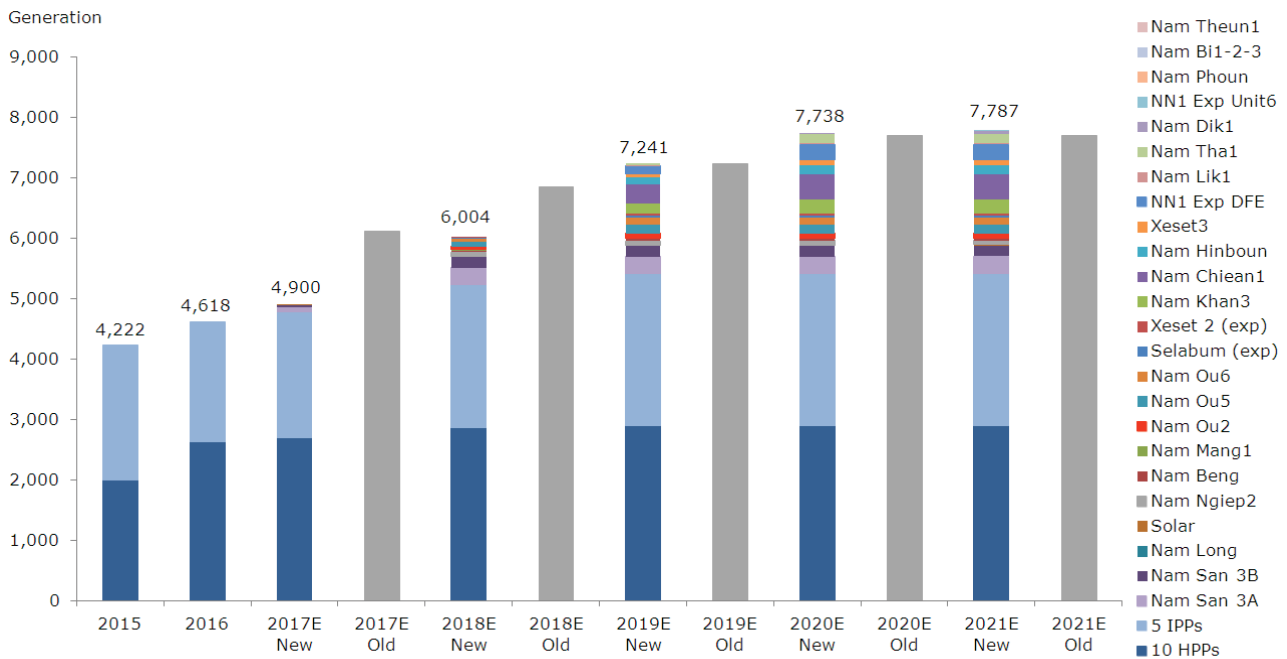
Source: KT ZMICO Research

B) EDL-Gen's equity power generation at its five IPPs – new & old



Source: KT ZMICO Research

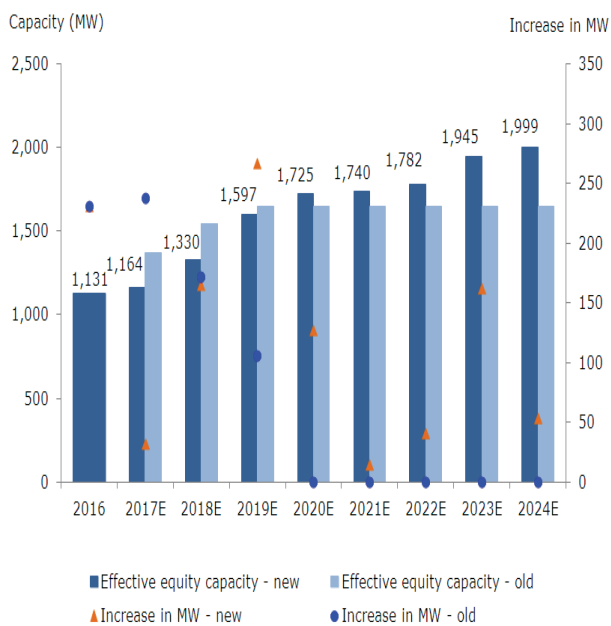
Figure 12: EDL-Gen's consolidated power generation (HPPs & IPPs) – new & old



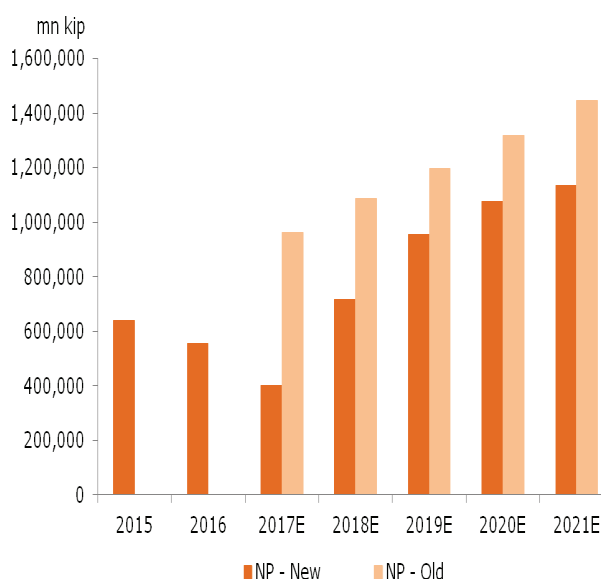
Source: KT ZMICO Research

Figure 13: EDL-Gen's capacity expansion, as well as earnings revision and earnings prospects

A) EDL-Gen's projected effective equity capacity (based on each project's month contribution) and the capacity addition (in MW) – new & old



B) EDL-Gen's projected NP (new & old)

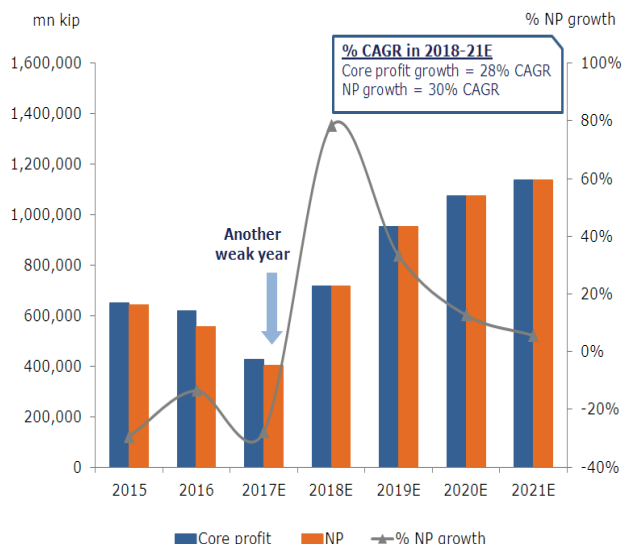


Source: KT ZMICO Research

Source: KT ZMICO Research

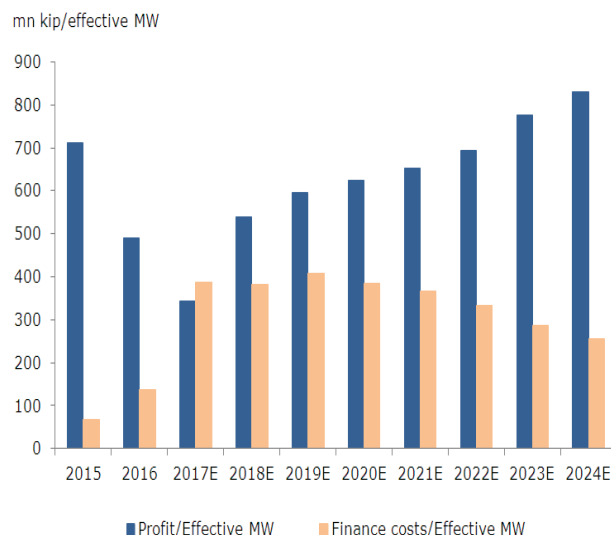
Note: *effective equity capacity calculated based on the projected month contribution of each new project

C) EDL-Gen's earnings forecasts and % growth



Source: KT ZMICO Research

D) EDL-Gen's projected finance costs and profit contribution per effective capacity



Source: KT ZMICO Research

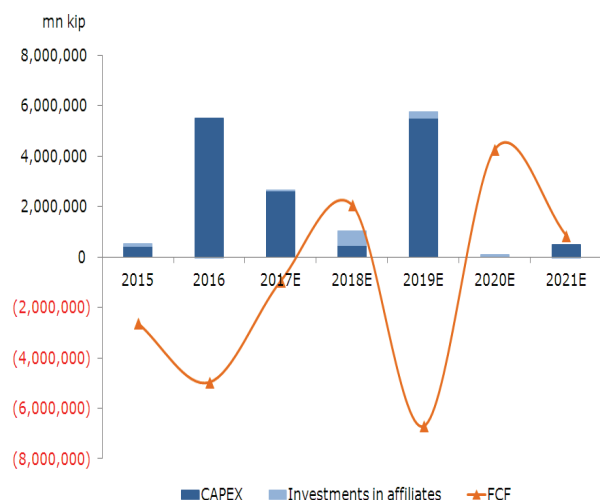
Entering the uptrend CAPEX cycle but at a manageable level

Given the company's continuing growth story with new capacity additions underway toward the target capacity of 1,999MW by 2024E, its capital expenditures (CAPEX) are on an uptrend with heavy investment involved in the wholly-owned HPPs largely falling in 2016-17E and 2019E, as well as equity injections in IPP projects mainly in 2018-19E and then back-end loaded in 2022-23E; we thus expect its free cash flow to be in the negative zone toward 2019E before reversing the trend from 2020E onward.

Given a greater contribution from new projects kicking off, as well as the proceeds from the capital increase (in 2015) and the two series of bond issuances (in late 2014 and 2016), the company's uptrend CAPEX cycle will be manageable. However, its debt-to-equity ratio will continue to climb with the peak likely in 2019 at 1.5x (vs. its threshold policy of 1.6x), before entering a declining trend onward. Meanwhile, its debt service coverage (DSCR) will wane but remain in the comfortable zone of 1.5-2.0x over the next five-year horizon (vs. its threshold policy of not less than 1.25x).

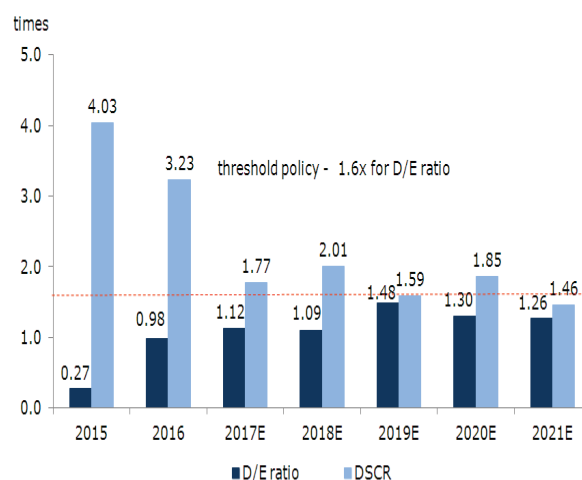
Figure 14: EDL-Gen's financial position

A) Projected Investment expenditures and free cash flow



Source: KT ZMICO Research

B) Projected D/E ratio and DSCR



Source: KT ZMICO Research

New 2017E TP at 8,720kip

Given the downward revision done on the company's earnings forecasts; the review of the kickoff of new contributions from projects in the pipeline; the inclusion of the two new operating asset acquisitions (namely, Nam San 3A and Nam San 3B); and new potential projects funded by the recent US\$312mn debentures issuance, we come up with EDL-Gen's new 2017E TP at 8,720kip/share.

Our valuation counts the combined 1,999MW equity capacity in the company's power portfolio (as detailed in Figure 15), including new capacity additions totaling 868MW in the pipeline with back-end loaded kickoffs in 2019E and 2023E. We expect its earnings to bottom out in 2017E and then deliver positive earnings momentum with projected NP growth at 30% CAGR during 2018-21E, enabling the profit contribution per effective MW to recover in the period and likely exceed 800mn kip/effective MW given all projects in the pipeline to be fully felt in 2024E; meanwhile, we should see improvement in ROE as well to nearly 14% in 2024E.

EDL-Gen's share price has largely priced in its depressed earnings cycle, which is likely to end in 2017E followed by positive earnings momentum in the years ahead with forward PBV/ROE showing an undemanding trend at 0.12x in 2018E and dropping below 0.1x from then on (vs. Thailand medium to large peers at the average of 0.13x 2018E PBV/ROE), against the company's profit contribution of 538mn kip/effective MW in 2018E, equivalent to Bt2.3mn/MW (vs. Thailand peers at the average of Bt1.9mn/MW).

Figure 15: Summary of EDL-Gen's 2017E TP valuation

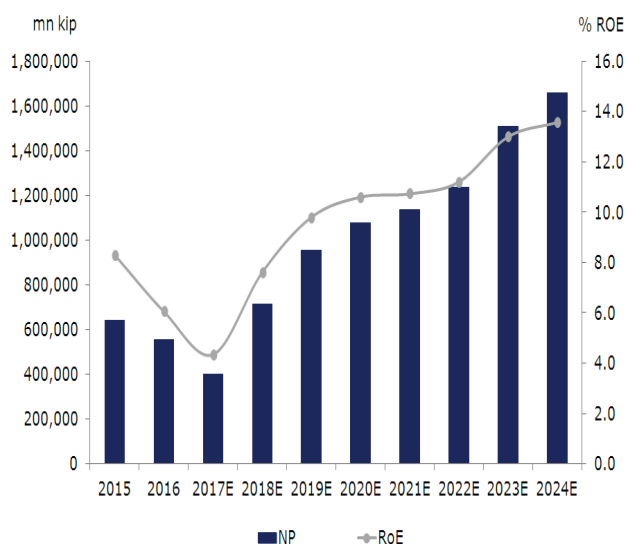
	Existing		Project in the pipeline						New Acquisition	
	10 HPPs 100%-owned	5 IPPs	100%-owned						Nam San 3A	Nam San 3B
			Nam Khan3	Nam Chiean	Nam Hinboun	Xeset 3	NN1 Exp DFE	NN1 Exp Unit6		
Installed capacity (MW)	619	1,485	60.0	104.0	30.0	24.0	80.0	40.0	69.0	45.0
Equity capacity by EDL-Gen (MW)	619	512	60.0	104.0	30.0	24.0	80.0	40.0	69.0	45.0
EDL-Gen's expected stake (%)			100%	100%	100%	100%	100%	100%	100%	100%
2017E Equity value (kip/share)	3,931	2,950	88	281	96	63	147	24	82	108
Estimated Equity IRR (%)			11.1%	12.9%	11.3%	12.8%	11.6%	10.1%	7.5%	9.3%

	IPPs										Self-developed	
	Nam Long	Nam Ou2	Nam Ou5	Nam Ou6	Nam Ngiep2	Nam Beng	Nam Lik1	Nam Mang1	Nam Tha1		Nam Phoun	Nam Bi 1-2-3
Installed capacity (MW)	5.0	120.0	240.0	180.0	180.0	34.0	60.0	64.0	168.0		45.0	135.0
Equity capacity by EDL-Gen (MW)	1.0	18.0	36.0	27.0	18.0	6.8	6.0	6.4	33.6		23.0	108.0
EDL-Gen's expected stake (%)	20%	15%	15%	15%	10%	20%	10%	10%	20%		51%	80%
2017E Equity value (kip/share)	10	58	251	102	59	18	12	18	26		22	158
Estimated Equity IRR (%)	19.8%	10.9%	22.0%	13.9%	13.8%	11.4%	14.0%	14.2%	10.6%		12.5%	13.8%

	New Potential Projects					Total
	Selabum (Exp)	Xeset 2 (Exp)	Nam Theun 1	Nam Dik1	Solar	
Installed capacity (MW)	8.0	10.0	650.0	15.0	10.0	4,480
Equity capacity by EDL-Gen (MW)	8.0	10.0	97.5	10.5	6.0	1,999
EDL-Gen's expected stake (%)	100%	100%	15%	70%	60%	
2017E Equity value (kip/share)	2	17	172	9	17	8,720
Estimated Equity IRR (%)	8.2%	8.4%	14.4%	11.3%	10.5%	

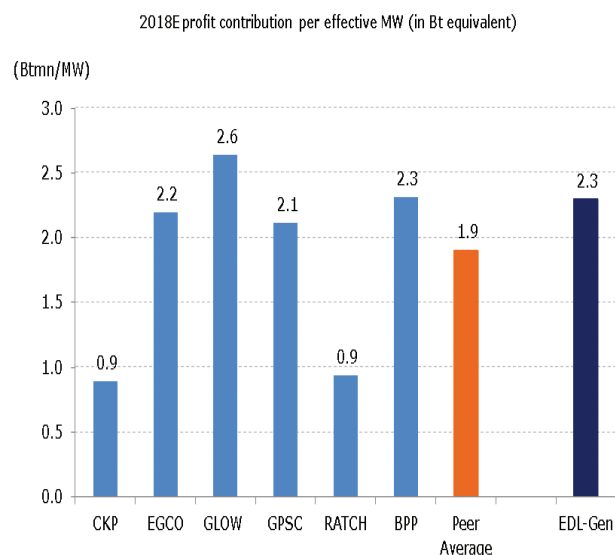
Source: KT ZMICO Research

Figure 16: EDL-Gen's projected NP and ROE



Source: KT ZMICO Research

Figure 17: Comparison of 2018E profit contribution per effective MW (in Bt equivalent)



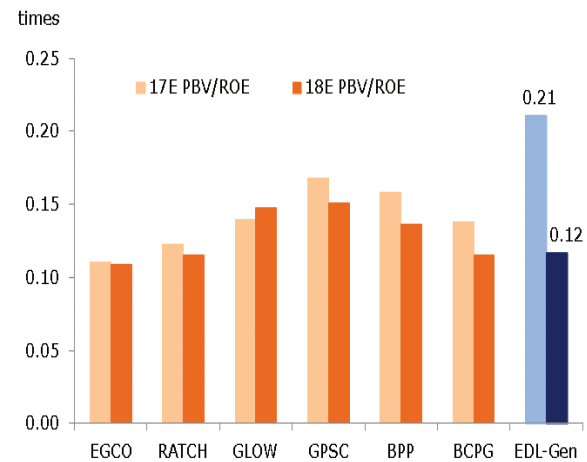
Source: KT ZMICO Research

Figure 18: EDL-Gen's PBV band



Source: KT ZMICO Research

Figure 19: PBV/ROE comparison between EDL-Gen and Thailand peers



Source: KT ZMICO Research

Figure 20: EDL-Gen's valuation comparison with regional peers

Name	Mkt Cap (USDmn)	PER (x)		PBV (x)		EV/EBITDA (x)		YLD (%)		ROE (%)		PBV/ROE (x)	
		17E	18E	17E	18E	17E	18E	17E	18E	17E	18E	17E	18E
CLP HOLDINGS LTD	31,351	16.6	16.1	2.0	1.9	11.0	10.8	3.4	3.5	12.5	12.1	0.16	0.16
DATANG INTL POWER GEN CO-H	9,524	12.5	8.2	0.8	0.8	9.9	8.2	1.2	4.0	5.9	8.3	0.14	0.09
HUANENG POWER INTL INC-H	18,541	18.0	10.9	1.1	1.1	10.4	8.6	2.5	4.1	5.3	9.0	0.21	0.12
HUADIAN POWER INTL CORP-H	7,875	15.7	8.9	0.8	0.7	9.1	7.6	2.0	3.8	5.2	8.3	0.15	0.09
CHINA POWER INTERNATIONAL	3,237	10.3	8.3	0.8	0.7	10.3	8.4	3.8	4.8	6.6	8.1	0.12	0.09
CHINA RESOURCES POWER HOLDIN	11,443	12.4	10.0	1.1	1.0	7.5	6.5	5.1	5.3	8.8	10.8	0.12	0.10
Hong Kong		14.2	10.4	1.1	1.0	9.7	8.3	3.0	4.3	7.4	9.5	0.15	0.11
KOREA ELECTRIC POWER CORP	24,559	5.5	4.9	0.4	0.3	4.2	4.0	4.0	4.4	6.9	7.3	0.05	0.05
S. Korea		5.5	4.9	0.4	0.3	4.2	4.0	4.0	4.4	6.9	7.3	0.05	0.05
TENAGA NASIONAL BHD	18,861	10.6	10.7	1.4	1.3	6.4	6.4	3.5	3.7	14.0	12.8	0.10	0.10
YTL POWER INTERNATIONAL BHD	2,732	16.0	13.8	1.0	1.0	11.0	10.2	5.7	6.1	6.3	8.0	0.16	0.12
PETRONAS GAS BHD	8,834	21.2	19.6	3.0	2.9	12.1	11.1	3.3	3.6	14.5	14.8	0.21	0.19
Malaysia		15.9	14.7	1.8	1.7	9.8	9.2	4.2	4.4	11.6	11.9	0.15	0.14
NTPC LTD	20,192	11.5	9.6	1.3	1.2	9.0	7.6	3.0	3.4	11.2	12.3	0.11	0.09
TATA POWER CO LTD	3,367	13.1	11.3	1.5	1.4	7.4	6.9	1.8	1.9	11.3	11.8	0.13	0.12
POWER GRID CORP OF INDIA LTD	16,635	11.4	9.7	2.0	1.7	7.9	6.8	2.2	2.9	17.5	18.1	n.a.	n.a.
RELIANCE POWER LTD	1,764	8.2	7.8	0.5	0.5	7.9	8.0	1.7	2.7	6.1	6.2	0.08	0.07
India		11.1	9.6	1.3	1.2	8.1	7.3	2.2	2.7	11.5	12.1	0.11	0.10
MANILA ELECTRIC COMPANY	6,154	15.9	16.6	4.1	4.1	8.7	8.5	5.7	5.7	25.9	24.8	0.16	0.17
Philippines		15.9	16.6	4.1	4.1	8.7	8.5	5.7	5.7	25.9	24.8	0.16	0.17
ELECTRICITY GENERATING PCL	3,222	11.4	11.2	1.2	1.2	17.9	15.7	3.1	3.1	11.3	10.7	0.11	0.11
RATCHABURI ELEC GEN HODG PUB	2,154	12.5	11.8	1.1	1.1	14.9	14.4	4.4	4.7	9.2	9.4	0.12	0.12
GLOW ENERGY PCL	3,357	14.2	15.0	2.3	2.2	7.7	7.7	4.9	5.2	16.2	14.8	0.14	0.15
CK POWER PCL	698	94.9	62.6	1.4	1.3	12.5	10.4	0.9	1.4	1.4	2.2	0.96	0.62
GLOBAL POWER SYNERGY PCL	1,510	17.0	15.3	1.3	1.3	13.1	11.6	3.5	3.9	8.0	8.6	0.17	0.15
BANPU POWER PCL	2,307	17.0	14.0	1.9	1.7	27.9	25.8	2.9	3.6	11.7	12.8	0.16	0.14
BCPG PCL	861	14.2	11.9	2.0	1.9	13.1	10.0	4.2	5.0	14.8	16.6	0.14	0.12
Thailand		14.4	13.2	1.6	1.5	15.3	13.7	3.4	3.8	10.4	10.7	0.14	0.13
EDL-GENERATION PCL	1,033	21.1	11.9	0.9	0.9	12.3	8.3	4.0	5.1	4.3	7.6	0.21	0.12
Lao PDR		21.1	11.9	0.9	0.9	12.3	8.3	4.0	5.1	4.3	7.6	0.21	0.12
AVERAGE		14.0	11.6	1.6	1.5	9.7	8.5	3.8	4.3	11.1	12.0	0.14	0.11

Source: KT ZMICO Research, Bloomberg

Financial tables

Financial Summary unit : mnkip	2015	2016	2017E	2018E	2019E	2020E	2021E
Consolidated Income Statement							
Electricity sales	847,759	1,241,181	1,344,363	1,637,057	2,106,281	2,299,116	2,324,198
Cost of sales	(276,443)	(486,391)	(519,324)	(604,743)	(773,520)	(840,600)	(846,942)
Gross profit	571,316	754,790	825,039	1,032,314	1,332,760	1,458,516	1,477,256
Profit from associates and JV	286,218	178,051	235,664	398,233	525,988	556,608	583,986
Other income	16,198	11,065	11,223	11,223	11,223	11,223	11,223
Currency exchange gains (losses)	(9,975)	(64,800)	(26,253)	0	0	0	0
Total revenue	1,140,200	1,365,497	1,564,997	2,046,513	2,643,492	2,866,948	2,919,408
Gain before expenses	863,757	879,106	1,045,673	1,441,770	1,869,971	2,026,348	2,072,466
Administrative expenses	(121,027)	(120,729)	(146,793)	(162,916)	(195,272)	(211,652)	(217,766)
Profit before financial costs and tax	742,730	758,377	898,880	1,278,854	1,674,699	1,814,696	1,854,699
Finance costs	(61,937)	(154,918)	(450,487)	(506,217)	(651,940)	(662,671)	(636,111)
Income tax	(39,954)	(49,110)	(46,258)	(53,046)	(64,905)	(72,933)	(79,036)
Net profit	640,839	554,349	401,028	715,163	953,426	1,074,664	1,135,125
Core profit	650,814	619,149	427,282	715,163	953,426	1,074,664	1,135,125
EPS (weighted)	456.44	330.11	238.81	425.87	567.75	639.95	675.95
EPS (FD)	381.61	330.11	238.81	425.87	567.75	639.95	675.95
Consolidated Balance Sheets							
Cash and cash equivalents	1,213,770	2,235,280	2,112,935	3,794,977	800,179	3,215,614	3,581,015
Current assets	1,549,030	3,658,943	3,394,521	5,045,499	2,119,520	4,517,055	4,816,476
Advance payment for investments	3,690,647	3,133,596	2,349,545	406,848	2,759,532	23,752	397,180
Property, plant and equipment-Net	4,343,130	9,412,504	11,562,999	11,480,522	16,308,524	15,585,148	15,322,745
Investment in subsidiaries	0	81,260	0	0	0	0	0
Investment in JV and affiliates	2,268,922	2,297,166	2,406,645	3,151,277	3,624,370	3,929,740	4,164,564
Non-current assets	116,643	153,707	161,392	169,462	177,935	186,832	196,173
Total assets	11,968,372	18,737,176	19,875,102	20,253,607	24,989,881	24,242,527	24,897,139
Pyables for assets under concession		3,957,400	0	0	0	0	0
Total current liabilities	409,127	4,572,115	597,498	716,617	1,238,803	1,153,714	1,592,914
Long term loans	2,293,620	4,830,235	10,028,300	10,001,621	13,834,338	12,742,208	12,503,569
Non-current liabilities	161,397	145,676	0	0	0	0	0
Total liabilities	2,864,144	9,548,026	10,625,798	10,718,238	15,073,141	13,895,922	14,096,483
Paid up capital	6,717,215	6,717,215	6,717,215	6,717,215	6,717,215	6,717,215	6,717,215
Retained earnings	1,042,217	1,070,927	1,131,081	1,345,630	1,631,658	1,954,057	2,294,595
Total equities	9,104,228	9,189,150	9,249,304	9,535,369	9,916,740	10,346,605	10,800,656
Consolidated Cash flow							
Net earnings	640,839	554,349	401,028	715,163	953,426	1,074,664	1,135,125
DD&A	225,442	434,047	460,111	534,529	691,063	753,066	758,877
Unrealize FX Gain (Loss)	9,975	64,800	26,253	0	0	0	0
Change in working capital	116,009	(919,292)	23,050	71,196	12,063	49,993	68,947
Capex	(422,721)	(5,503,421)	(2,610,605)	(452,053)	(5,519,065)	(29,690)	(496,475)
Investments in affiliates	(85,755)	35,281	(15,082)	(575,966)	(236,855)	(48,347)	39,283
Free cash flows	(2,616,812)	(4,959,034)	(952,017)	2,058,832	(6,696,764)	4,269,546	848,881
Debt Financing	287,008	2,508,292	5,273,622	52,308	4,274,021	(1,209,313)	197,595
Dividend paid	(436,619)	(486,998)	(340,874)	(429,098)	(572,056)	(644,798)	(681,075)
Capital increase	2,655,740	0	0	0	0	0	0
Others	0	0	0	0	0	0	0
Net cash flows	(110,683)	(2,937,740)	3,980,731	1,682,042	(2,994,799)	2,415,435	365,401
Cash equivalents -beginning	1,251,534	1,213,770	2,235,280	2,112,935	3,794,977	800,179	3,215,614
Cash equivalents -ending	1,213,770	2,235,280	2,112,935	3,794,977	800,179	3,215,614	3,581,015

Financial Summary							
	2015	2016	2017E	2018E	2019E	2020E	2021E
Per share data and financial ratio							
EV - fully diluted	5,799.0	6,723.0	9,951.8	8,981.3	13,309.8	11,151.3	11,051.4
EPS - fully diluted	381.6	330.1	238.8	425.9	567.8	639.9	675.9
EPS - weighted	456.4	330.1	238.8	425.9	567.8	639.9	675.9
DPS	260.0	290.0	203.0	255.5	340.7	384.0	405.6
BV	5,421.4	5,472.0	5,507.8	5,678.2	5,905.3	6,161.2	6,431.6
PER (x)	13.2	15.3	21.1	11.9	8.9	7.9	7.5
PBV (x)	0.9	0.9	0.9	0.9	0.9	0.8	0.8
EV/EBITDA (x)	10.1	9.5	12.3	8.3	9.5	7.3	7.1
Div. yield (%)	5.1	5.7	4.0	5.1	6.7	7.6	8.0
Div. payout ratio (%)	57.0	87.9	85.0	60.0	60.0	60.0	60.0
Percentage Growth (%)							
Sales Growth	1.0	46.4	8.3	21.8	28.7	9.2	1.1
Core Profit Growth	(29.7)	(4.9)	(31.0)	67.4	33.3	12.7	5.6
Net Profit Growth	(29.4)	(13.5)	(27.7)	78.3	33.3	12.7	5.6
EPS growth - FD (%)	(48.4)	(13.5)	(27.7)	78.3	33.3	12.7	5.6
EBITDA Growth	(15.3)	23.2	13.9	33.2	30.5	8.6	1.8
Profitability Ratio (%)							
Gross profit margin	67.4	60.8	61.4	63.1	63.3	63.4	63.6
EBIT margin	65.1	55.5	57.4	62.3	63.2	63.1	63.4
EBITDA margin	84.9	87.3	86.8	88.4	89.3	89.4	89.4
Depreciation expense							
Net profit margin	56.2	40.6	25.6	34.9	36.1	37.5	38.9
ROE	8.3	6.1	4.3	7.6	9.8	10.6	10.7
ROA	6.2	3.6	2.1	3.6	4.2	4.4	4.6
ROCE	6.4	4.3	2.4	3.7	4.4	4.6	4.9
LIQUIDITY RATIOS							
Current ratio	3.8	0.8	5.7	7.0	1.7	3.9	3.0
Quick ratio	3.8	0.8	5.7	7.0	1.7	3.9	3.0
Cash ratio	3.0	0.5	3.5	5.3	0.6	2.8	2.2
Net working capital to total assets	0.1	(0.05)	0.1	0.2	0.0	0.1	0.1
FINANCIAL LEVERAGE RATIOS							
Total debt/Equity ratio	0.3	1.0	1.1	1.1	1.5	1.3	1.3
Interest bearing debt/Equity ratio	0.3	1.0	1.1	1.1	1.5	1.3	1.3
Interest coverage ratio	12.0	4.9	2.0	2.5	2.6	2.7	2.9
Debt service coverage ratio	4.0	3.2	1.8	2.0	1.6	1.9	1.5
Asset/Equity (Equity multiplier)	1.3	2.0	2.1	2.1	2.5	2.3	2.3
Net debt/Equity	0.1	0.3	0.9	0.7	1.4	1.0	0.9
Net debt/EBITDA	1.3	2.4	6.1	3.6	5.9	4.0	3.9

Note:

KT ZMICO has two major shareholders, Krungthai Bank PLC (KTB) and Seamico Securities PLC (ZMICO). Therefore, prior to making investments in the securities of KTB and ZMICO, investors should consider the risk factors carefully.

An executive of KT ZMICO Securities is also a board member of BCP, BTC, CI, CPI, KBS, MAJOR, MK, PACE, PSL, SVH, VNG, ZMICO, SAWAD, TFG.

A management member of KT ZMICO Securities is also a board member of BTC and NFC.

KT ZMICO is a financial advisor for U, LOXLEY, ZMICO, MAKRO, CPALL, SAFARI, M-CHAI, POMPUI, TFD, TTL, NMG, SAWAD, NUSA.

Corporate Governance Report (CGR)		Source: Sec, Thai Institute of Directors Association (IOD)	
	Excellent (scores: 90 - 100)		Satisfactory (scores: 60 – 69)
	Very Good (scores: 80 – 89)		Pass (scores: 50 – 59)
	Good (scores: 70 – 79)	No Logo	N/A (scores: below 50)

Anti-corruption Progress Indicator

Source: Sec, Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC)

- **Level 1 (Committed)** : Organization's statement or board's resolution to work against corruption and to be in compliance with all relevant laws.
- **Level 2 (Declared)** : Public declaration statement to participate in Thailand's private sector Collective Action Coalition Against Corruption (CAC) or equivalent initiatives
- **Level 3 (Established)** : Public out preventive measures, risk assessment, communication and training for all employees, including consistent monitoring and review processes
- **Level 4 (Certified)** : Audit engagement by audit committee or auditors approved by the office of SEC, and receiving certification or assurance by independent external assurance providers (CAC etc.)
- **Level 5 (Extended)** : Extension of the anti-corruption policy to business partners in the supply chain, and disclosure of any current investigations, prosecutions or closed cases
- **Insufficient or not clearly defined policy**
- **Data not available / no policy**

DISCLAIMER

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KT ZMICO RESEARCH – RECOMMENDATION DEFINITIONS

STOCK RECOMMENDATIONS

BUY: Expecting positive total returns of 15% or more over the next 12 months

OUTPERFORM: Expecting total returns between -10% to +15%; returns expected to exceed market returns over a six-month period due to specific catalysts

UNDERPERFORM: Expecting total returns between -10% to +15%; returns expected to be below market returns over a six-month period due to specific catalysts

SELL: Expecting negative total returns of 10% or more over the next 12 months

SECTOR RECOMMENDATIONS

OVERWEIGHT: The industry, as defined by the analyst's coverage universe, is expected to outperform the relevant primary market index by at least 10% over the next 12 months.

NEUTRAL: The industry, as defined by the analyst's coverage universe, is expected to perform in line with the relevant primary market index over the next 12 months.

UNDERWEIGHT: The industry, as defined by the analyst's coverage universe, is expected to underperform the relevant primary market index by 10% over the next 12 months.