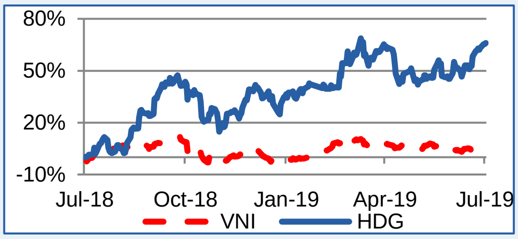
Ha Do Group (HDG)

Company Report

Report Date:	**July 10, 2019**		2018	2019F	2020F	2021F
Industry	**Diversified**	Rev Growth	40.3%	33.6%	63.7%	-37.1%
Current price:	VND35,000	EPS Growth	248%	2.6%	80.1%	-41.0%
Dividend yield	2.9%	GPM	38.6%	37.4%	39.3%	38.3%
		NPM	19.7%	15.6%	17.1%	16.1%
		EV/EBITDA	4.8x	6.1x	3.4x	4.1x
		P/E	6.0x	7.3x	4.2x	5.3x



			HDG	Peers	VNI
Market Cap:	$179mn	P/E (ttm)	5.0x	11.1x	16.9x
Foreign Room:	$59.3mn	P/B (curr)	2.5x	1.7x	2.5x
ADTV30D:	$0.52mn	Net D/E	144%	36.2%	N/A
State Ownership:	0%	ROE	50%	17.8%	14.8%
Outstanding Shares:	118.7 mn	ROA	7.7%	6.9%	2.5%

Company Overview

HDG was set up in 1992 as a construction firm under the Military Technical Institute of Defense before being privatized in 2004 and listed on HOSE in 2010. The company operates in three key segments: (1) real estate, (2) power and (3) construction.

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Transitioning to invest in power projects

- We provide an update on HDG, following on our November 2018 report, 'Reaping profits from first large residential project'. To recap, HDG offers exposure primarily to the real estate and power sectors, which comprise ~90% of its gross profit.
- The company has a proven track record as a mid-scale developer and has current backlog of VND5.8tn (USD249mn), which should underpin solid real estate earnings through 2020.
- HDG is also a capable player in hydropower with IRR of current projects ranging from 12%-20%. Its current portfolio yields GPM of over 70%, the highest among comparable listed firms.
- HDG is expanding its power portfolio extensively and plans to issue up to VND1.5tn (USD65mn) of bonds with warrants (with a minimum exercise price of VND44,000/share), per its latest AGM.
- Valuation looks relatively cheap, in our view, at 2019F P/B of 1.7x and 2020F P/B of 1.2x, based on our forecasts vs the local peer median at 1.7x.

Proven real estate track record based on market flexibility. HDG focuses on residential projects in Hanoi and Ho Chi Minh City (HCMC). Over the last ten years, HDG has shown its market flexibility by staying active with small-scale projects during market downturns while turning to larger projects when market conditions improve. The company has maintained CAGR for real estate revenue at 37.4% over 2013-2018, driving its total NPAT-MI to grow at CAGR of 31.5% over the same period.

Expanding power portfolio. Following the initial success of current power portfolio, HDG is aiming to scale up this segment as it could be a shield to its real estate business during downturns. HDG's current hydropower portfolio totals 119MW and can double to 265MW by 2021 thanks to two plants under construction. HDG also plans to get involved in renewable energy such as solar and wind power to take advantage of the current favorable price scheme (see page 11). We estimate earnings from power to increase by 60% by 2021 thanks to the new plants under construction.

Earnings to reach a record high in 2020 due to current backlog and launch of a new low-rise project. We estimate HDG's NPAT-MI in 2019 at VND653bn (USD28.4mn, +3% YoY) before surging to VND1.2tn (USD51.7mn, +82% YoY) in 2020, the highest number since the company's inception.

Valuation. Using the RNAV and P/B valuation methods, we arrive at estimated fair price range of VND45,000-VND49,000/share for HDG, implying 2020F forward P/B of 1.6x-1.7x, well in line with the local peer median at 1.7x (see page 25).

Risks: weather events such as El Niño or droughts that could dampen power segment earnings; a slowdown of the property market; low liquidity. Further details are on page 26.

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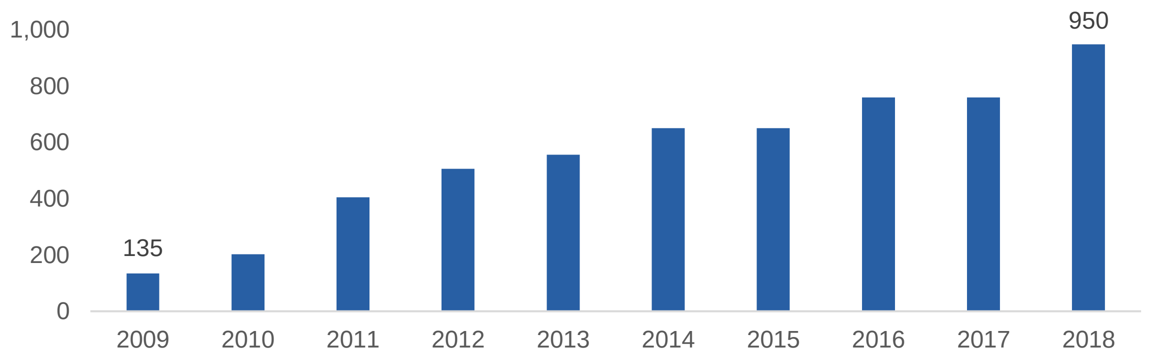
Company overview

History

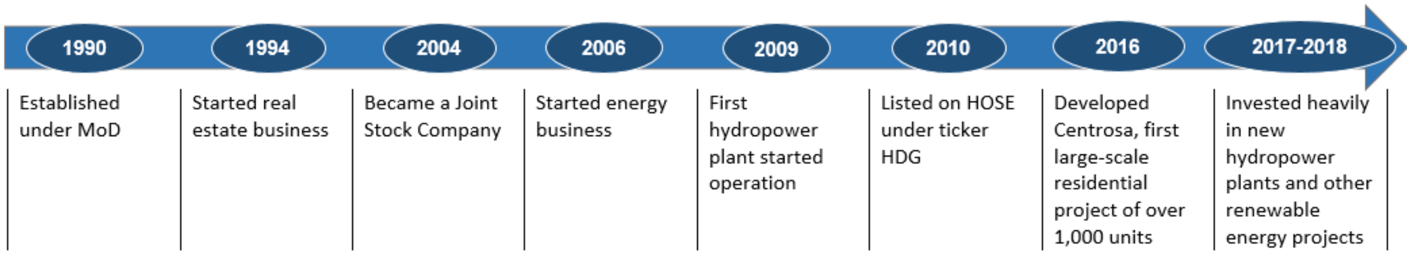
HDG was established in the early 1990s as a pure construction company under the Military Technical Institute of Ministry of Defense (MoD) before it later moved into the real estate and energy segments. It was equitized in 2004 and listed on HOSE in 2010. Over the last 10 years, HDG's charter capital has increased sevenfold, mostly via bonus shares and stock dividends.

Figure 1: HDG's charter capital growth (VND bn)



Source: HDG, VCSC

Figure 2: HDG's key milestones



Source: HDG, VCSC

Strategy

Figure 3: HDG revenue by segment in 2018

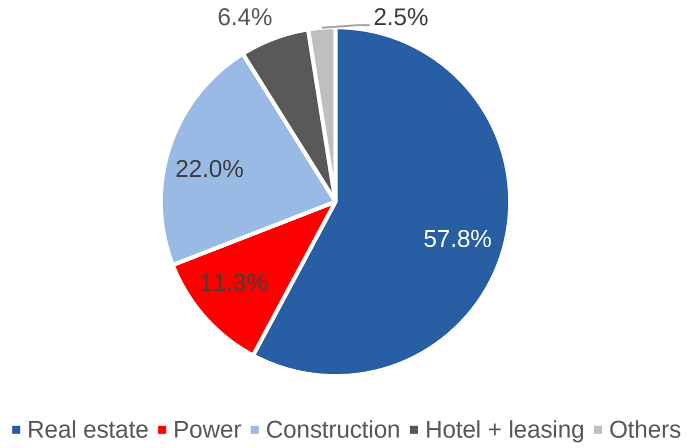
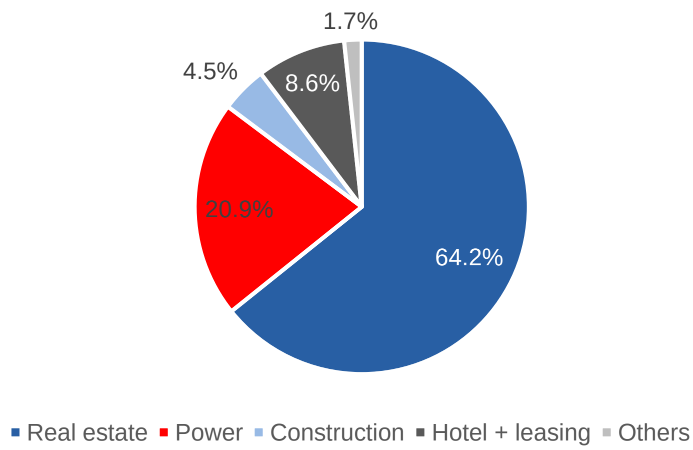


Figure 4: HDG gross profit by segment in 2018



Source: HDG, VCSC

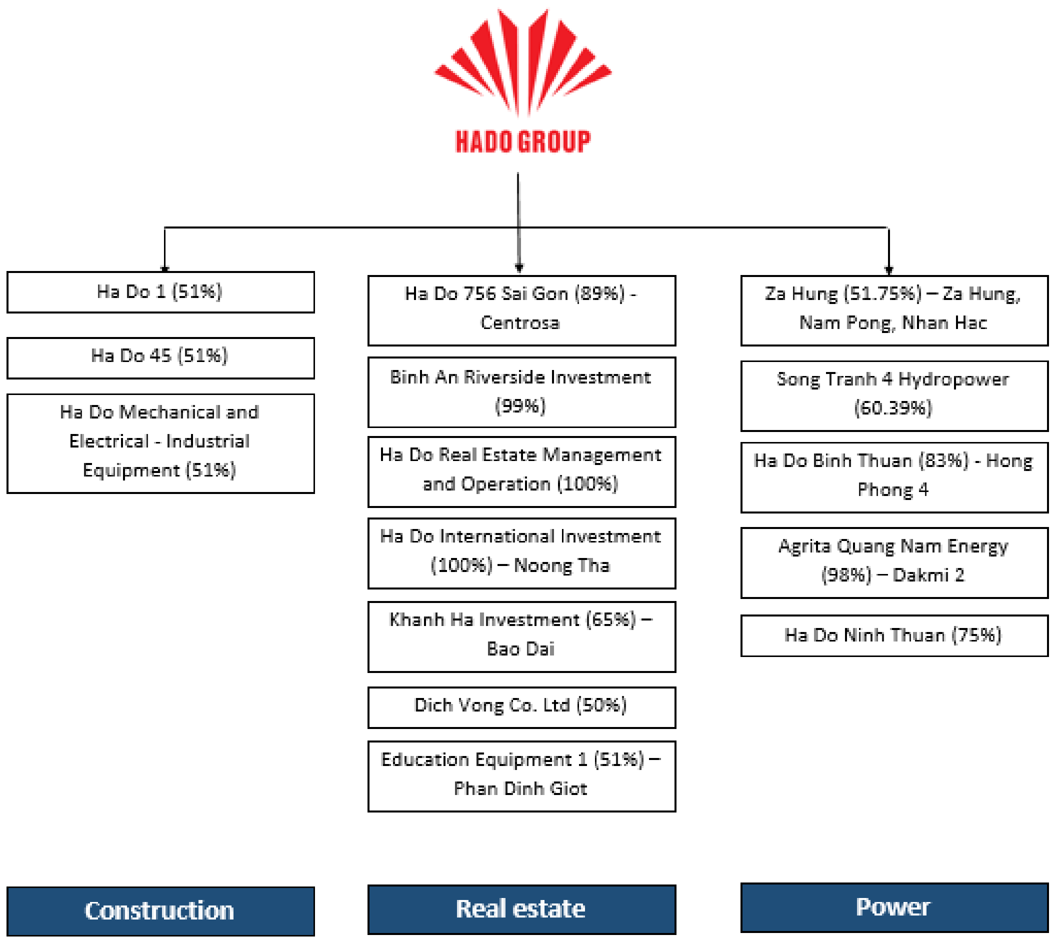
HDG focuses on three industries: (1) real estate, (2) power (renewable energy) and (3) construction. As of 2018, real estate accounts for about 60% of HDG's revenue and gross profit (GP), followed by energy with 11% of revenue and 21% of GP. A further breakdown beyond the GP level is not available.

Management expects real estate to remain as the key business, contributing ~60% to HDG's earnings at least over the next three years. At the same time, the company is pursuing extensive expansion in the power segment. Its hydropower portfolio can more than double its current capacity by 2021 thanks to new plants already under construction. Additionally, HDG is eyeing opportunities to expand to other types of renewable energy such as wind and solar power. Its first solar power is scheduled to go online in June 2019.

We think HDG's gradual move to power is well supported by several factors, including (1) the under supply of the industry, (2) the power sector being able to benefit from ongoing liberalization with hydro plants being the most cost competitive and (3) solar and wind power plants enjoying a favorable price scheme from the Government. In addition, a stable cash flow from the power segment could be an effective shield for HDG against any potential downturn in the property market. We will discuss some highlights of the power sector that are relevant to HDG's business in the next section.

Corporate structure

Figure 5: HDG corporate structure



Source: HDG, VCSC

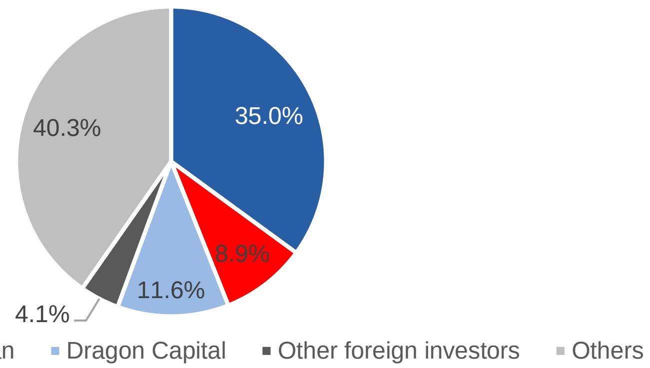
HDG has three subsidiaries in construction business. Ha Do 1 and Ha Do 45 focus on civil construction while Ha Do MEE is a mechanical and electrical contractor.

For real estate, HDG has seven subsidiaries and affiliates with each representing one of HDG's residential projects. For power, the company has five subsidiaries. Za Hung owns three power plants that are currently under operation: Za Hung, Nam Pong and Nhan Hac. The other four subsidiaries represent HDG's upcoming power projects.

Ownership and management

The MoD used to be a large shareholder of HDG with over 10% stake, but it fully divested from the company in 2017. Current State ownership at HDG is 0%. 'Insiders' (i.e., management and related people) hold more than 45% of the company. The most notable foreign shareholder is Dragon Capital with 11.6% stake as of April 2019.

Figure 6: HDG's ownership structure as of April 2019



Source: HDG, VCSC

The majority of HDG's management team has an engineering background with extensive experience in the construction and power industries. Most have been with the company for more than a decade.

Figure 7: HDG's key personnel

Name	Age	Title in BoD	Title in BoM	Experience	Expertise	Stake in HDG
Nguyen Trong Thong	66	Chairman		40 years 29 years at HDG	Construction engineer	35.04%
Nguyen Van To	64	Vice Chairman		40 years 29 years at HDG	N/A	8.94%
Nguyen Trong Minh	32	Member	Deputy CEO	11 years 4 years at HDG	Finance & Business Administration	0.02%
Chu Tuan Anh	41		Deputy CEO	19 years 19 years at HDG	Economics	0.02%
Dao Huu Khanh	63	Member		40 years 29 years at HDG	Construction engineer	0.69%
Le Xuan Long	49	Member		26 years of experience 14 years at Za Hung	Construction engineer	0.16%
Ngo Xuan Quyen	63	Member		40 years Recently joined HDG as an independent BOD member	Law Economics advisor	0%
Hoang Dinh Hung	55	Member		40 years of experience 10 years at HDG	Construction engineer	0%

Source: HDG, VCSC

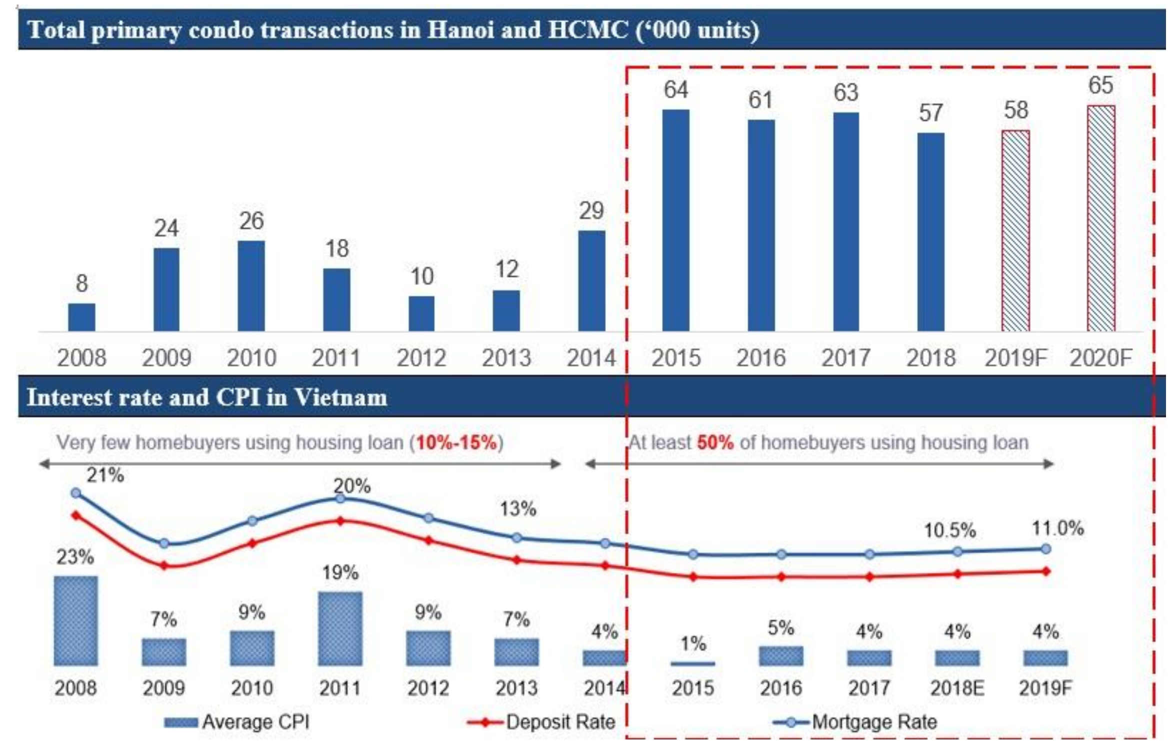
Industry highlights

Real estate - Demand to stay solid in Hanoi and HCMC

The recent real estate rebound in Vietnam coincides with the inflation rate being controlled at 4%-5% p.a. and mortgage rates stabilizing within the 10%-11% range since 2015. This is understandable as the property market is highly sensitive to interest rates. We expect the property market to remain well supported by these accommodative conditions for at least the next two years.

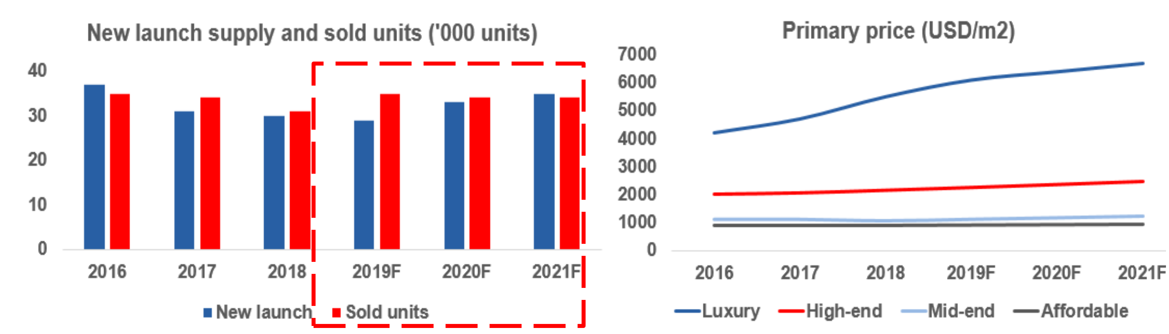
Our real estate team forecast new condo launches and transactions in both Hanoi and HCMC to stay flat in 2019, mostly due to short-term headwinds in the HCMC market, before rebounding in 2020. CBRE Vietnam, a commercial real estate services provider, shares this view and mentions in its Q1 2019 market outlook report that demand and supply for condos in both Hanoi and HCMC will stay solid until 2021. CBRE expects the absorption rate to remain stable vs previous years while it forecasts the primary selling price for mid-end projects to inch up by 1%-3%/year in HCMC.

Figure 8: Relation between interest rate and inflation vs property market



Source: GSO, SBV, CBRE historical data, VCSC forecast

Figure 9: CBRE forecast for condo market performance in HCMC

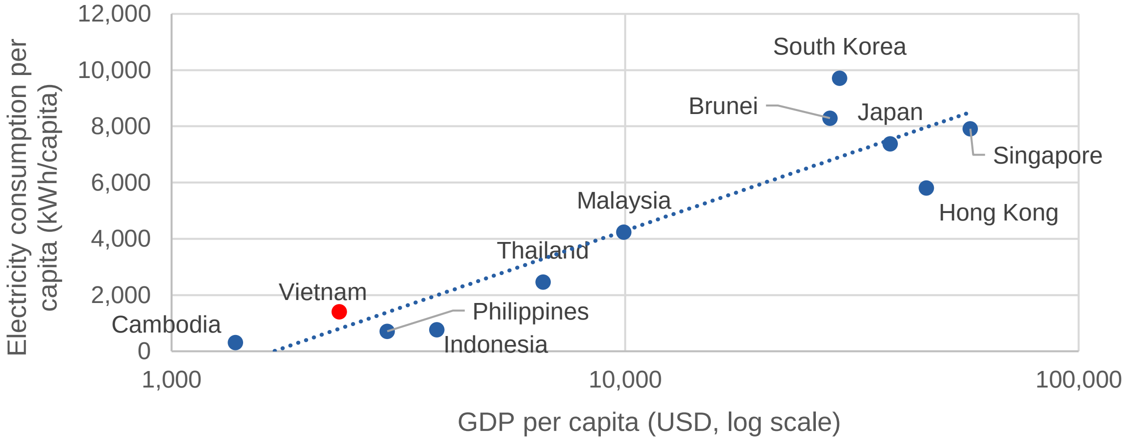


Source: CBRE, VCSC

Power – Favorable price scheme and industry liberalization to support expansion plan

Shortage of electricity

Figure 10: Electricity consumption per capita vs GDP per capita by regional countries

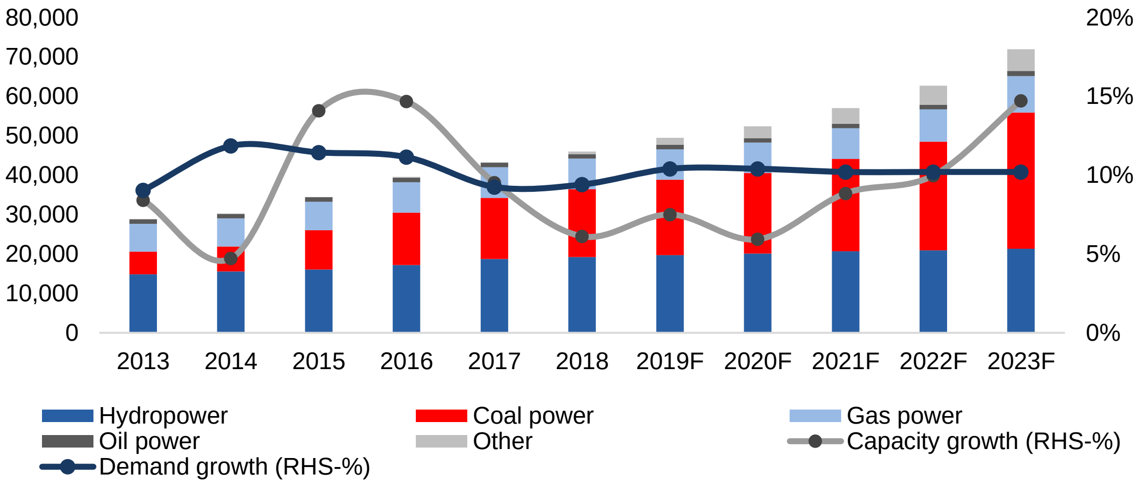


Source: World Bank, VCSC

Looking at GDP per capita and electricity consumption per capita of regional countries, Vietnam, Cambodia and the Philippines are currently at the low-end of the spectrum (i.e., low GDP per capita and low electricity per capita) while countries like South Korea, Japan, and Singapore are on the opposite end. As Vietnam's GDP per capita improves going forward, its electricity consumption per capita should have much more room for growth. According to the Revised National Power Development Master Plan VII (Revised PDP VII), in order to maintain an average GDP growth rate of 7% until 2030, Vietnam's electricity demand could continue to grow by ~11% per year over 2016-2020 before slowing down to 7.4 – 8.4% per year over 2021-2030.

However, Vietnam is facing an electricity shortage. The country has become a net importer of electricity since 2015 and will remain one going forward. According to the Revised PDP VII, imported electricity will account for 2.4% of total output by 2020 before coming down to 1.2% by 2030. Per estimates from our power team, domestic capacity is likely to lag behind demand growth over 2019-2021, worsening the electricity shortage.

Figure 11: Vietnam's electricity capacity outlook (MW)



Source: EVN, MOIT, VCSC forecast

Favorable scheme to promote new types of renewable energy

Hydropower, the primary source of renewable energy in Vietnam, has reached a critical point. According to the MOIT, nearly all rivers have been surveyed for hydropower development with total capacity of over 23,000 MW, or 85% of the country's technical potential. Of these, more than 19,000 MW has been exploited while about 4,600 MW is either under construction or in a feasibility study.

As such, there is an urgent need to diversify energy sources to other types of renewable energy such as wind or solar power. The Prime Minister has issued Decision No.11/2017/QĐ-TTg and No.39/2018/QĐ-TTg regarding mechanisms to promote the development of wind and solar power plants in Vietnam.

Solar projects that are commercially operational before the end of June 2019 will enjoy a selling price of VND2,086/kWh (USD9.35 cents/kWh) over 20 years. For wind power projects, the cut-off date is November 1, 2021, and the selling price is VND1,928/kWh (USD8.5 cents/kWh) to VND2,223/kWh (USD9.8 cents), which is very lucrative compared to EVN's average purchasing price of VND1,305/kWh (as of 10M 2018). Please see the table below for further details.

Figure 12: Favorable pricing scheme for solar and wind power plants

Type	Price	Cut-off date
Solar power plants	VND2,086/kWh (USD9.35 cents/kWh fixed over 20 years, adjustable monthly based on USD/VND rate)	June 2019 for projects outside Ninh Thuan Province December 2020 for projects in Ninh Thuan Province
Wind power plants		
On-shore	VND1,928/kWh (USD8.5 cents/kWh fixed over 20 years, adjustable monthly based on USD/VND rate)	November 1, 2021
Off-shore	VND2,223/kWh (USD9.8 cents/kWh fixed over 20 years, adjustable monthly based on USD/VND rate)	November 1, 2021
EVN's average purchase price (as of 10M 2018)	VND1,305/kWh	
CGM price cap for 2019	VND1,319/kWh	

Source: EVN, VCSC

On-going power sector liberalization and rising CGM priceFigure 13: Power sector liberalization by stage

Source: EVN, MOIT, VCSC

Vietnam's power sector is under liberalization. This involves three phases as detailed below.

(1) Competitive generation market (CGM) - where about half of the total power plants in the system bid with each other to sell to EVN at the CGM price,

(2) Wholesale competitive market (WCM) - where there will be at least six wholesale buyers buying directly from power plants instead of the current single buyer that is Electricity Power Trading Company (EPTC).

(3) Retail competitive market (RCM) - where private wholesale buyers can buy electricity directly from power plants.

Power plants that join CGM will sell a fixed amount of volume (contracted volume Qc) to EVN at a predetermined price (PPA price) that is fixed over the project's life. Qc for both hydropower and thermal power plants is currently at 80% of the plant's average volume over its life cycle.

To sell the remaining volume, CGM plants will have to join an "auction" in which everyday power plants would submit their offering price and volume they are willing to sell for the next 24 hours to the National Load & Dispatch Center (NLDC). The NLDC would then mobilize from plants that offer the lowest price to higher ones until it can balance demand. The cut-off price or CGM price (no higher than a certain cap) would then be applied to all successful bidders.

Under such scheme, hydro plants are most likely to be mobilized thanks to their lower production costs compared to thermal plants. The CGM price is normally higher than the PPA price for hydro plants and has been increasing over years, while Qc is guided to gradually fall from the current 80% to likely 50% for hydro plants. The average selling price of hydro plants will also likely increase going forward.

Figure 14: CGM price cap over 2012-2019 (VND/kWh)

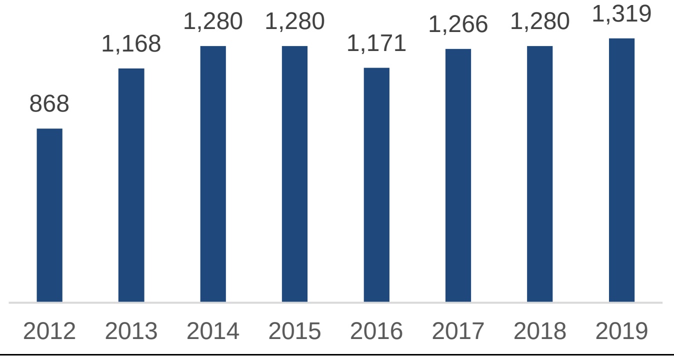
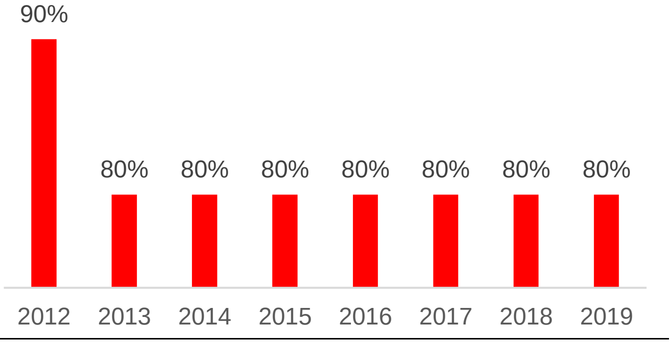


Figure 15: Qc amount for hydro plants from 2012-2019



Source: EVN

Regarding the liberalization of the power segment, we are currently at the beginning of Phase 2 with only nine plants joining CWM in 2019. Under CWM, electricity is still traded via the PPA contract and spot market; however, there will be more buyers joining the market, which will remove the sole buyer role that EVN currently has. We expect further liberalization to give sellers more bargaining power, which should translate into a higher selling price.

Business activities

Real estate – Proven developer

Proven market flexibility

HDG has been quite successful with mid to small-scale condos with eight projects delivered over 2007-2016. During the property downturn of 2009-2012, the company focused on several small-scale projects, with most of them conveniently located in high density areas such as Cau Giay and Thanh Xuan Districts in Hanoi or Go Vap District and District 10 in HCMC. These projects targeted real demand and allowed HDG to maintain earnings from the real estate segment during the downturn.

As market conditions improved, the HDG turned to larger-scale projects by launching its flagship Centrosa Garden in 2016. This is the largest condo project HDG has ever taken on as it has more than 2,000 apartments and a total investment of ~VND6tn (USD260mn). Similar to past projects, this one has a convenient location in District 10, HCMC, which is only a 10-minute drive to the city's central business district (CBD). The project's huge success can be explained by its strategic time timing coupled with its convenient location.

Figure 16: HDG's previous projects

Project	Location	Land area (sqm)	Product types and number of units	Timeline
CC1	Cau Giay, Hanoi	2,206	135 apartments	2014-2016
Ha Do Park View	Cau Giay, Hanoi	5,262	341 apartments	2011-2014
Nguyen Van Cong	Go Vap, HCMC	8,906	431 apartments	2010-2014
Ha Do Garden Villas	District 10, HCMC	7,103	19 villas	2010-2012
Ha Do South Building	Tan Binh, HCMC	1,300	17,000 sqm GFA for office leasing	2010-2012
183 Hoang Van Thai	Thanh Xuan, Hanoi	21,136	504 apartments and 66 townhouses	2009-2011
Z751	Go Vap, HCMC	4,211	203 apartments	2007-2009
Hoang Sam	Cau Giay, Hanoi	1,000	64 apartments	2007-2009

Source: HDG, VCSC

Most of HDG's projects sold out within a year after launching (for Centrosa Garden, it was two years and a half due to the much larger scale), allowing the company to take advantage of home buyers' prepayments and limiting the use of bank loans. Previous condos were well-executed and delivered to buyers within the quite reasonable time of 2-3 years.

Figure 17: Garden Villas, District 10, HCMC

Figure 18: Ha Do Parkview, Cau Giay, Hanoi

Figure 19: Z751B Go Vap, HCMC

Figure 20: Nguyen Van Cong, Go Vap, HCMC

Source: HDG

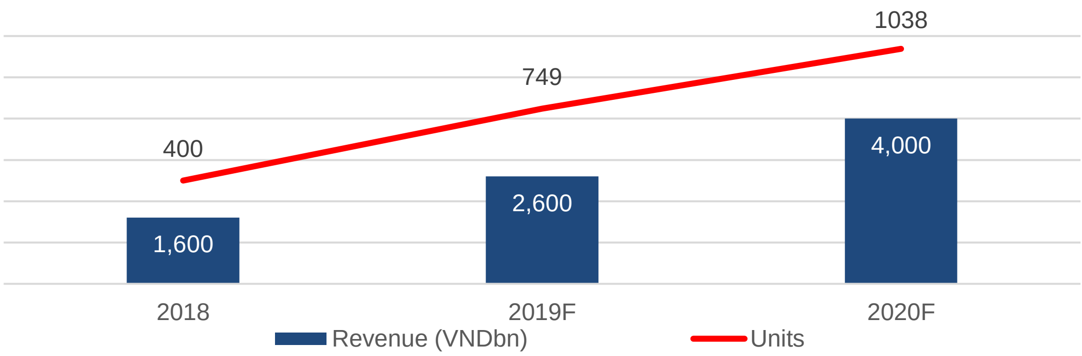
In addition to condos, HDG has attempted large townships such as Dragon City in Hanoi (30 ha) or Noongtha Central Park in Vientiane, Laos (70 ha). These two projects are also characterized by very convenient locations, with Dragon City alongside the Thang Long Highway, Hanoi and Noongtha Central Park in the center of the Laotian capital. However, these have been dragging on for several years due to unfavorable market situations and/or legal issues. Yet, HDG has managed to make the projects self-balanced by selling a part of both, which is enough to cover its land acquisition cost.

Backlog from Centrosa Garden ensures solid 2019-2020 earnings

Centrosa Garden has 115 townhouses and eight blocks of condos with more than 2,000 apartments. The selling price averaged VND148mn/m2 (USD6,400m2) for low-rise portions and VND49mn/m2 (USD2,100/m2) for apartments. The project sold out within the first half of 2018 with a total revenue of ~VND10tn (USD429mn) and estimated GPM at ~37%.

The low-rise portion was delivered to buyers in 2017, and the first two condo blocks were delivered in 2018 and Q1 2019. The remaining six blocks are scheduled for delivery later in 2019 and early 2020. We estimate HDG still has approximately VND5.8tn (USD249mn) of revenue from Centrosa Garden to be recorded in 2019-2020.

Figure 21: Number of units and revenue to be recorded from Centrosa Garden



Source: HDG, VCSC

Pre-sales for Dragon City, Hanoi and construction for Greenlane, HCMC to started in 2019

In 2019, HDG will launch pre-sales for the remaining of Dragon City, a township of 30 ha in western Hanoi in addition to starting construction for Green Lane, which is a condo project in District 8, HCMC. Like all previous projects, these new ones are conveniently located. Dragon City is located on the Thang Long Highway and next to Vinhomes Thang Long. Green Lane is on Pham The Hien

Street, one of the backbone roads in District 8 with three sides overlooking rivers. Earnings are likely to be recorded over 2019-2021 for Dragon City and 2021-2022 for Greenlane.

Figure 22: Details of HDG's two upcoming projects

Project	Location	Area (sqm)	Product types and number of units	Est. revenue (VND bn)	Timeline
Dragon City	Hoai Duc, Hanoi	302,000	376 villas	2,700	2019-2021
Green Lane	District 8, HCMC	6,500	1,231 apartments	1,950	2019-2022

Source: HDG, VCSC

More coming M&A to expand land bank

Apart from Dragon City and Greenlane, HDG still owns about 80 ha of land, of which 75 ha is from its township in the center of Vientiane, Laos. The rest is located in Hanoi, HCMC and Nha Trang. Again, these parcels of land are characterized by their convenient locations. Among these, only Noongtha Central Park is ready for sale. For the other land pieces, it will take HDG at least one to two years to go through all of the necessary legal procedures before being able to turn the land into final products. HDG is open to acquire projects outside Hanoi and HCMC in the future.

Figure 23: HDG's land bank

Project	Location	Area	Status
Dragon City	Hoai Duc, Hanoi	25ha	Utility infrastructure completed; sales to be launched in 2019
Green Lane	District 8, HCMC	0.65ha	Seeking construction license; construction to be launched in 2019
Noongtha Central Park	Vientiane, Laos	70ha	Infrastructure for Phase 1 completed; sales launched by the end of 2019
Bao Dai Villa	Nha Trang, Khanh Hoa	8.9ha	1/500 map completed; awaiting design approval
CC3	Cau Giay, Hanoi	4,506m2	Seeking license
Dich Vong Complex	Cau Giay, Hanoi	0.98ha	Seeking license
Kha Van Can	Thu Duc, HCMC	2.7ha	Seeking license
30 Ta Quang Buu	Hai Ba Trung, Hanoi	1,036m2	Seeking approval on change of land use purpose
62 Phan Dinh Giot	Ba Dinh, Hanoi	2.2ha	Seeking approval on change of land use purpose

Source: HDG, VCSC

Stable earnings from leasing and hotel

Figure 24: HDG's leasing and hotel projects

Project	Location	Number of rooms/GFA	Operator	Occupancy rate	Room rate/ lease rate
IBIS Saigon Airport	Tan Binh District, HCMC	217 hotel rooms and 65 serviced apartments	Accor	70-80%	USD70-USD90/night
Ha Do South Building	Tan Binh District, HCMC	17,000 sqm	N/A	100%	From USD12.5/m2
Commercial floors of other buildings	N/A	40,000 sqm	N/A	100%	N/A

Source: HDG, VCSC

Apart from residential projects, HDG also has stable revenue from commercial floors, office leasing and a hotel which started operations in 2017 that is very close to Tan Son Nhat Airport. The occupancy rate is 100% for leasing and 79% for the hotel as of 2018.

Once Centrosa Garden is fully delivered, HDG will have an additional 9,000m2 of commercial floors. Taking this into account, the leasing and hotel business could bring HDG stable revenue of VND250bn per year (USD10.8mn/year) while offering GPM of 45%.

Energy – Bond issuance planned to accelerate expansion

Favorable "avoidable tariff" scheme and superior GPM from current portfolio

HDG has three small hydropower plants that are in operation. Two of these are located in Quang Nam, a central province with an average annual rainfall of 2,000-2,500 mm (Vietnam's average is 1,500-2,000 mm/year).

Figure 25: HDG's current power portfolio

Project	Type	Location	Capacity	Total investment (VND bn)	IRR	Output (mn KWh/year)	Year starting operation
Za Hung	Hydropower	Quang Nam	30 MW	505	20%	122.7	July 2009
Nam Pong	Hydropower	Quang Nam	30 MW	800	12%	123	Dec. 2013
Nhan Hac	Hydropower	Nghe An	59 MW	1,881	15%	206	Q3 2018

Source: HDG, VCSC

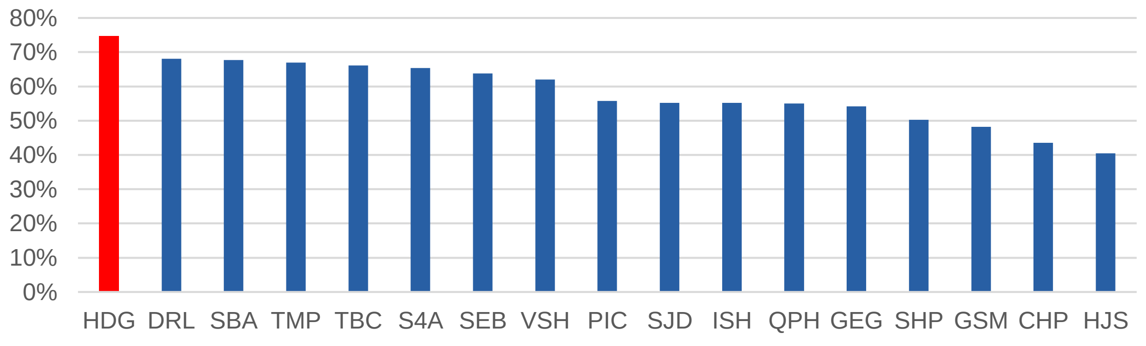
All three of HDG's hydropower plants are entitled to the "avoidable tariff" scheme[1], a special selling price applied to small hydropower plants (details in Figure 27) that fall under the following categories:

(1) A hydropower plant with capacity less than or equal to 30 MW.

(2) A seller that has multiple terraced hydropower plants on the same river with a total installed capacity less than or equal 60 MW.

The "avoidable tariff" scheme allows HDG to enjoy more stable and higher selling prices than what larger hydropower plants get on average (as much as 15%-20% more; large plants have to join CGM with a different pricing scheme as detailed on pages 10-11). In 2018, HDG's hydropower segment yielded GPM of over 70%, the highest rate among listed players. Efficiency is also shown by a very attractive IRR of HDG's current plants, ranging from 12%-20%.

Figure 26: HDG's GPM compared to other local listed hydropower peers in 2018



Source: Company data, VCSC

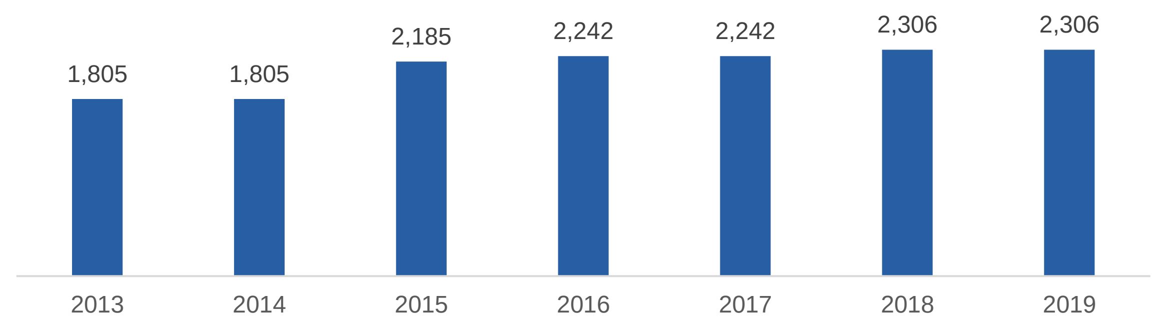
[1] *Vietnam Electricity Group encourages small hydropower plants (those which fall under the above categories) to run during peak hours to save the cost of using fuel-oil thermal plants (which are much more expensive) by giving them a special selling rate called "avoidable tariff". This special rate includes an electricity selling price by season plus a capacity-add-on price, which is an extra rate small hydropower plants get during peak hours. Details are in Figure 27.*

Figure 27: 2019 avoidable tariff (VND/kWh)

	Dry season (Q1, Q2, Q4)			Rainy season (Q3)			
	Peak	Normal	Low	Peak	Normal	Low	Excess capacity
North	663	664	671	620	619	623	311
Central	663	664	671	620	619	622	311
South	682	684	691	639	638	642	321
Capacity-add-on price	2,306						

Source: MOIT

Figure 28: Capacity-add-on price over 2013-2019



Source: MOIT

Reasonable CAPEX and well-managed financial plan

Below is the total investment cost and investment cost per MW of some hydro plants that share similar size with HDG's. We divided those into three groups based on the year in which they started operation to match with that of HDG's plants.

Figure 29: HDG's CAPEX vs other plants

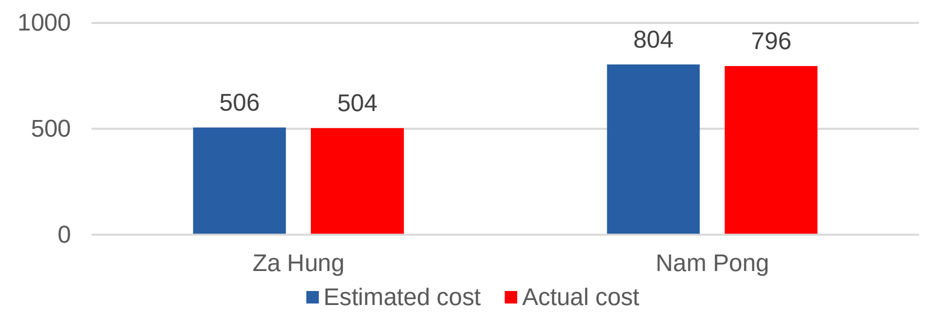
Power plant	Capacity (MW)	Total investment (VND bn)	CAPEX/MW (VND bn)	Year of operation	Investor
Đăk Pone	15.6	269.2	17.3	2010	PIC
Ban Coc	18.0	524.0	29.1	2010	QPH
Eakrông Rou	28.0	339.0	12.1	2010	SEB
Dđasiat	13.5	339.0	25.1	2010	SHP
Average			20.9		
Za Hung	**30.0**	**503.8**	**16.8**	**2009**	**HDG**
Nam Khoa 3	18	500	27.8	2013	Linh Linh JSC
Nam Ban 3	22	635	28.9	2014	Nam Ban 2
Ban Ang	17	550	32.4	2015	Nam Mo Hydro JSC
Trung Thu	30	899	30.0	2016	PC1
Bao Lam 1	30	915	30.5	2016	PC1
Average			29.9		
Nam Pong	**30**	**804**	**26.8**	**2014**	**HDG**
Bao Lam 3	46	1,394	30.3	2017	PC1
Bao Lam 4	30	922	30.7	2019	PC1
Son Tra 1A+1B	60	2,145	35.8	2019	DPG
Average			32.3		
Nhan Hac	**58**	**1,881**	**32.4**	**2018**	**HDG**

Source: Company data, VCSC

The Nam Pong and Nhan Hac plants have a reasonable investment cost of VND27bn/MW (USD1.15mn/MW) and VND32bn/MW (USD1.4mn/MW), respectively, in line with other recently built hydro plants of similar size. Za Hung was built 10 years ago, hence the lower investment cost of VND17bn/MW (USD0.74mn/MW), but still in line with other small plants built over the same period. All three plants were funded by commercial banks and constructed in approximately three years, which is fair for their size.

The track record for Za Hung and Nam Pong also show solid financial planning and cost management as the estimated numbers match almost perfectly with the actual cost.

Figure 30: HDG's power plants estimated cost vs actual cost (value in VND bn)



Source: HDG, VCSC

Accelerated expansion to larger hydro plants and other types of renewable energy

Figure 31: HDG's upcoming power plants

Project	Type	Location	Design capacity	Total investment (VND bn)	Output (mn KWh/year)	Year starting operation (planned)
Hong Phong 4	Solar power	Binh Thuan	48 MWp	999	92	June 2019
Song Tranh 4	Hydropower	Quang Nam	48 MW	1,475	178.2	H2 2020
Dakmi 2	Hydropower	Quang Nam	98 MW	2,674	396.4	2021

Source: HDG, VCSC

First solar power plant went online in June 2019. HDG's first solar plant, Hong Phong 4, went online in June and benefitted from the Government's favorable pricing scheme. For this first solar plant, HDG has chosen SunPower, one of the world top solar panel producers, to be its supplier.

Figure 32: Construction progress at Hong Phong 4 as of early May, 2019

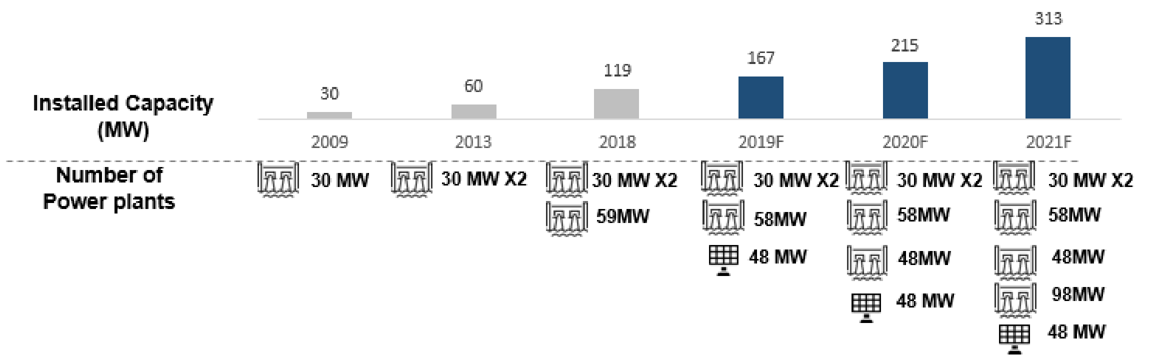
Source: HDG

We estimate that under full operation it would bring HDG ~VND190bn/year (USD8.3mn/year), or a 40% addition to the current revenue scale of power segment. Assuming depreciation over 20 years, we estimate the plant's GPM at ~65%, while it would contribute VND33bn (USD1.4mn) in NPAT in 2019 if it becomes operational by June.

Two large hydro plants under construction. HDG has started construction on two new large hydro plants, Song Tranh 4 and Dakmi 2. As they are classified as large plants, they will not be eligible for the “avoidable tariff” scheme and will instead have to join CGM. Per management, PPA price for these two plants could reach the PPA cap for hydro plants at VND1,100/kWh.

Song Tranh 4 and Dakmi 2 are planned to go online in the second half of 2020 and second quarter of 2021, respectively. Once operational, these two plant would more than double the capacity of HDG’s hydropower portfolio.

Figure 33: HDG’s future power portfolio



Source: HDG, VCSC

Bond issuance planned for further expansion to solar and wind power. HDG is considering to investment more in renewable power by additional solar and wind plants to benefit from the Government’s favorable pricing scheme. The next project could be either a solar plant in Ninh Thuan Province or a wind power plant in Binh Thuan Province.

To fund such a plan, HDG plans to issue a maximum of VND1.5tn (USD65.2mn) worth of three-year-bond with warrants. The minimum exercise price is VND44,000/share, a 37.5% premium vs current market price. The warrant can be exercised one year after issuance. In absolute value, this amount equals roughly 35% of HDG’s total debt as of Q1 2019. If successful, this would raise HDG’s 2019 D/E ratio from 1.55x to 1.99x, per our estimates. Assuming the maximum bond with a warrant issuance of VND1.5tn (USD65.2mn) in 2019 and all warrants being exercised at VND44,000/share, HDG’s 2020 BVPS will jump from VND28,800/share to VND32,200/share, per our estimates.

Construction – A stable business

Figure 34: Multi-purpose hall of Bac Giang Province

Figure 35: Sports facility in Bac Giang Province

Figure 36: Agribank Phuoc Long

Figure 37: National Academy of Public Administration HCMC

Source: HDG, VCSC

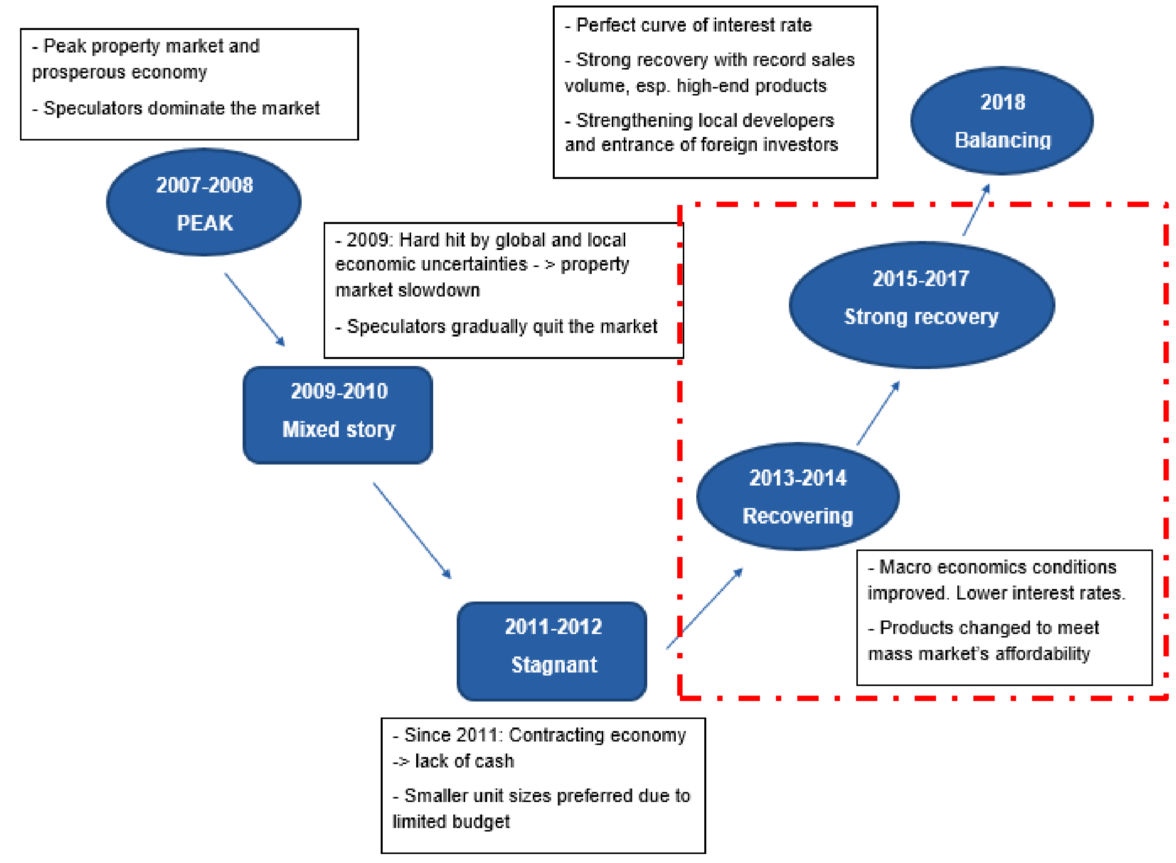
HDG’s construction contracts have come mostly from State projects. This segment, however, offers GPM of less than 10%. Its contribution to HDG’s GP was also less than 10% in the last three years. We expect revenue from this segment to remain in the absolute range of VND600bn-VND800bn (USD26mn-USD35mn) going forward, as it did over the last five years.

Business review

Riding the property market rebound

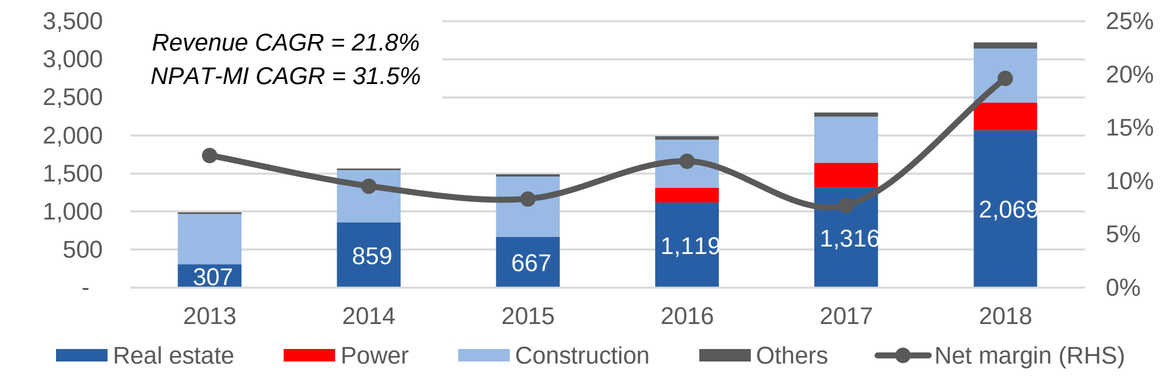
The property market in Vietnam has had a strong rebound since 2013. HDG has capitalized on this trend quite well, as evidenced by constantly increasing earnings from its real estate segment since 2013. Real estate revenue CAGR over 2013-2018 reached 37.4%, being the key contributor to the group's revenue CAGR of 21.8% and NPAT-MI CAGR of 31.5% over the same period.

Figure 38: Recent cycle of Vietnam's property market



Source: CBRE, VCSC

Figure 39: Business performance from 2013-2018 (value in VND bn)



Source: HDG, VCSC

Expansion to power from 2016

HDG's earnings growth during this period also came from additions to power segment. HDG has acquired two power plants, Za Hung and Nam Pong, by raising its stake in Za Hung JSC from 37% to over 51% in 2016. Ever since this investment, the power segment's revenue has been stable around VND320-350bn/year (USD14mn-USD15mn/year), contributing 20-30% of HDG's GP.

Improving profitability and low leverage

Figure 40: HDG's profitability ratios

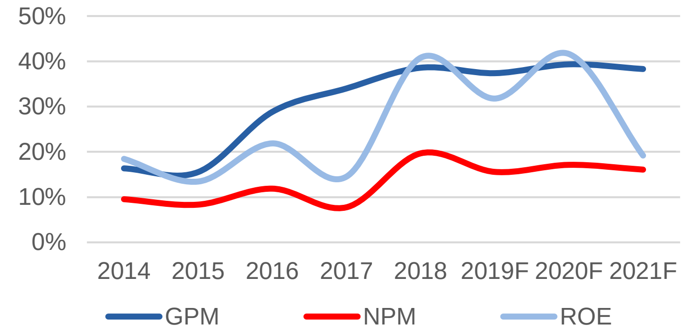
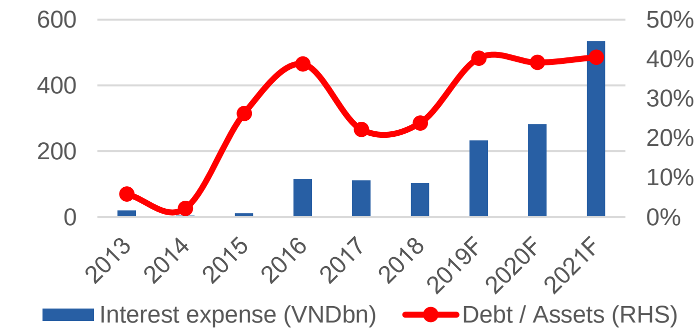


Figure 41: Interest expense and leverage



Source: HDG, VCSC

Thanks to the expanding real estate segment, HDG's profitability has improved, as evidenced by its widening GPM, NPM and ROE over the last five years. NPM and ROE in 2017 fell from previous years was due to a series of one-off events that dampened the company's NPAT-MI. These events included: (1) HDG booked 80% of its selling expense for Centrosa Garden in 2017, causing selling expense/revenue to rise from 7.3% in 2016 to 10.2%; (2) no one-off financial income, such as the VND51bn (USD2.2mn) gain from the acquisition of a subsidiary below book value in 2017.

As for debts, HDG's interest expense and debt/asset ratios jumped in 2016 following its acquisition of the power company, which is normal given the high debt structure of power companies. By the end of 2018, HDG's D/A ratio stood at 23.8% or VND2.6tn (USD113mn) in absolute value, of which about 20% is from the real estate segment and is mostly short-term debt to finance Centrosa Garden.

Of HDG's power plants, Za Hung is free of debt while Nam Pong will be in the next five years. However, as the company is pouring money into new projects, its leverage and interest expense will build up in coming years. We are not concerned about this because power projects normally balance themselves.

Going forward, we expect HDG's GPM and NPM to stay relatively flat until 2021 thanks to the continued delivery of new real estate projects. ROE, however, should not maintain 2018-2020 levels after Centrosa Garden is fully delivered. As for debts, D/A would jump from 23% in 2018 to more than 40% in 2019 onwards based on due to funding of three new power plants, based on our projections. Interest expense would double in 2019 vs 2018 due to the full-year operation of the Nhan Hac plant and Hong Phong 4 going online in June 2019, which means no more capitalized interest. Song Tranh 4 and Dakmi 2 are scheduled for operation in 2020 and 2021, respectively, hence a rising interest rate in the next three years.

2019-2020 Outlook

Figure 42: VCSC's 2019-2021 income statement projection for HDG (in VND bn)

Income statement	FY2018	FY2019F	% YoY	FY2020F	% YoY	FY2021F	% YoY
Revenue	**3,222**	**4,262**	**32.3%**	**7,002**	**64.3%**	**4,429**	**-37.1%**
Real estate	1,863	2,825	51.6%	5,339	89.0%	2,253	-57.8%
Power	363	559	54.0%	769	37.5%	1,252	53.9%
Construction	709	681	-3.9%	685	0.5%	685	0.0%
IBIS + leasing	206	197	-4.7%	209	6.1%	239	14.6%
Others	81	60	-25.5%	65	8.0%	69	5.6%
Gross Profit	**1,243**	**1,570**	**26.3%**	**2,731**	**74.0%**	**1,696**	**-38.8%**
Real estate	799	1,038	30.0%	2,069	99.3%	712	-65.6%
Power	261	410	42.0%	534	33.5%	806	51.0%
Construction	55	59	7.0%	60	1.0%	56	-7.3%
IBIS + leasing	108	102	-5.1%	108	5.8%	122	13.2%
Others	45	36	-19.3%	41	12.0%	53	31.1%
SG&A	(265)	(390)	47.0%	(751)	92.6%	(223)	-70.3%
Other non-operating items	38	-		-		-	
EBIT	**1,016**	**1,180**	**16.1%**	**1,981**	**67.9%**	**1,473**	**-27.0%**
Financial income	55	38	-30.8%	44	16.6%	46	3.2%
Financial expenses	(116)	(233)	100.1%	(283)	21.5%	(535)	89.1%
Profit before Tax	**955**	**985**	**3.2%**	**1,742**	**76.9%**	**984**	**-44.7%**
Income Tax	(167)	(175)	4.9%	(327)	86.6%	(153)	-53.5%
NPAT before MI	**788**	**810**	**2.8%**	**1,415**	**74.8%**	**831**	**-42.8%**
Minority Interest	154	157	1.9%	226	44.1%	119	-51.4%
NPAT-MI	**634**	**653**	**3.1%**	**1,189**	**82.1%**	**712**	**-41.0%**
GPM	**38.6%**	**36.8%**		**39.0%**		**38.3%**	
Real estate	42.9%	36.8%		38.8%		31.6%	
Power	71.8%	66.2%		64.3%		64.4%	
Construction	7.8%	8.7%		8.7%		8.1%	
IBIS + leasing	52.2%	51.9%		51.8%		51.2%	
SG&A/revenue	8.2%	9.1%		10.7%		5.0%	
EBIT margin (%)	31.5%	27.7%		28.3%		33.3%	
NPAT-MI margin (%)	**19.7%**	**15.3%**		**17.0%**		**16.1%**	

Source: VCSC

Figure 43: HDG's delivery schedule for key projects over 2019-2022F

	Remaining rev. (VNDbn)	Product type	2019F	2020F	2021F	2022F
Centrosa Garden	6,582	Apartment				
Dragon City*	2,349	Villa				
Green Lane*	1,960	Apartment				

Source: HDG, VCSC

** Based on our assumptions*

Real estate and power remain key earnings contributors and growth engines in 2019-2020. Real estate should account for ~70% of projected revenue and GP in the next two years. The focus remains on the continued delivery of Centrosa Garden and launch of Dragon City. For the power segment, the full-year operation of Nhan Hac and introduction of Hong Phong 4 in 2019 and Song Tranh 4 in 2020 will allow this segment to record GP growth of 30%-40% over 2019-2020, contributing ~20% to HDG's total GP, per our forecast.

Earnings to reach record high in 2020. HDG will deliver the last four blocks (out of eight blocks) of Centrosa Garden in 2020, which is quite certain given that the project is sold out and construction is already in its final stage. Also, we are projecting about half of Dragon City's earnings to be recorded in 2020. Both projects have very attractive GPM, hence a spike of NPAT-MI to nearly VND1.2tn (USD52mn) in 2020. This will be HDG's highest ever earnings.

Valuation

We employ RNAV and P/B valuation methods to arrive at an estimated fair value range for HDG from VND45,000-VND49,000. Details are below.

Figure 44: RNAV valuation summary

Project	Effective ownership	Valuation method	RNAV (VND bn)	Status/comments
Real estate			**3,874**	
Centrosa	89%	DCF	794	Under construction; sold out and to be delivered in 2019-2020
Dragon City	100%	DCF	746	Sales to be launched in H2 2019
Green Lane	99%	DCF	290	To start construction in H2 2019
CC3	100%	MV	103	Valued at market price assuming the plot is transferred; discounted by 50%
Noongtha Central Park	100%	BV	243	Sales launched at the end of 2018
Garden Villa	100%	BV	36	Construction finished; 7/20 units unsold
Parkside CC1	100%	BV	69	Construction finished; 29/120 units unsold
D12	100%	BV	40	20/124 townhouses and 9/9 shophouses unsold
Bao Dai	65%	BV	166	Waiting for design approval
Others		BV	348	Deposit made for land acquisition
IBIS	100%	DCF	468	Hotel near Tan Son Nhat Airport with 274 rooms
Leasing	100%	DCF	573	49,000m2 of commercial/office floors
Power			**3,740**	
Za Hung/Nam Pong/Nhan Hac	51.75%	DCF	2,266	Under operation
Hong Phong 4	83%	DCF	714	Operation started in June 2019
Dakmi	98%	BV	680	Under construction; operation planned in H2 2021 Valued at HDG's payment to acquire 98% stake in Agrita Quang Nam
Song Tranh	60.4%	BV	184	Under construction, operation planned in H2 2020 Valued at construction under progress
Construction			**64**	
Hado 1, Hado 45 & Hado MEE	51%	P/E	64	Assuming flat NPAT at VND25bn/year and target P/E of 5.0x
Total			**7,432**	
Add cash, cash equivalents & deposits			204	
Minus total debt			2,642	
NAV			**5,342**	
Shares outstanding (mn)			**118.7**	
Estimated fair value			**45,000**	
Current price			**35,000**	
2019 PB @ est. fair value *			**2.2x**	
2020 PB @ est. fair value *			**1.6x**	

Source: VCSC

** Based on current number of shares outstanding*

For the real estate segment, we use the DCF method, which discounts estimated FCF to the end of 2018 for HDG's key projects that are either under construction or ready to be launched, including Centrosa Garden, Dragon City and Green Lane. We also apply the same method for HDG's leasing and hotel business. For CC3, we valued the project at market price, discounted by 50%. Other projects are set at their book value. Noongtha Central Park is a large project that is ready for sale, but due to the lack of information for Vientiane property market, we decided to use its book value.

For the power segment, we use DCF for operational projects and book value for the ones under construction. We estimate fair value of HDG's three subsidiaries by assuming flat earnings of VND25bn/annual (USD1.1mn/annual) and target P/E of 5.0x, adjusted by HDG's ownership, to evaluate the construction segment. Please see below for further details of our RNAV assumptions.

Our RNAV valuation comes up with fairly equal contributions from the real estate and power segments, but please note that this includes debt. Per our estimates, debts for the power segment account for ~70% of HDG's total debt. Adjusting for this, real estate should still be the major contributor to HDG's total NAV.

Figure 45: WACC estimation

	2019F	2020F	2021F onwards
% Equity	40%	40%	40%
Beta	0.87	0.87	0.87
Risk free	4.8%	4.8%	4.8%
Risk premium	8.4%	8.4%	8.4%
Ke	11.8%	12.3%	12.8%
% Debt	60.0%	60.0%	60.0%
Kd	11%	11%	12%
Tax rate	18%	18%	18%
WACC	**10.2%**	**10.2%**	**10.7%**

Source: VCSC

Figure 46: Real estate sales recognition assumptions for key projects

	2019F	2020F	2021F	2022F	Remaining revenue (VND bn)
Centrosa Garden	39%	61%	0%	0%	6,582
Dragon City	7%	49%	44%	0%	2,349
Greenlane	0%	0%	57%	43%	1,960

Source: VCSC

Figure 47: Hotel & leasing assumptions

	Hotel	Leasing
Occupancy rate	75%	100% in 2019 80% from 2020 onwards
Leasing/room rate	VND1.2mn/room/night (USD52/night)	VND100,000-VND600,000/m2/month (USD4.3-USD26/m2/month)
Increase of leasing, room rate/year	2%	2%
Permanent growth rate	1%	1%

Source: VCSC

Figure 48: Power assumptions

	Under operation hydro plants	Solar plant
Selling price	VND1,200-VND1,400/kWh	USD9.35 cents/kWh (USD/VND=23,200)
Annual increase of selling price	2%	2%
Depreciation years	20 years	20 years
Permanent growth rate	1%	1%

Source: VCSC

Regarding the P/B valuation method, we use HDG's 2020 forecast BVPS and target P/B of 1.7x (details in peer multiples section below) to come up with the estimated fair price of VND49,000/share. We employ 2020 BVPS instead of 2019's to fully reflect the value of Centrosa Garden, whose earnings should be fully booked by 2020.

Figure 49: P/B valuation

2020 BVPS	VND28,800
Target P/B	1.7x
Estimated fair price	VND49,000

Source: VCSC

Peer multiples

Comparison with local peers (TTM data unless otherwise stated)

	Current market cap (USD mn)	GPM (%)	NPM (%)	Rev growth (% YoY)	EPS growth (% YoY)	Net D/E (%)	ROE	P/E	P/B (current)
Real estate									
KDH	548.7	42.5	27.6	-4.5	20.1	-12.6	12.2	15.6	1.8
DXG	278.4	56.3	22.9	61.3	56.3	21.4	25.2	5.5	1.2
NLG	298.3	43.2	20.8	10.1	25.3	-20.7	21.6	6.9	1.4
PDR	369.3	31.7	28.4	61.9	46.5	-5.4	19.7	13.6	2.4
SCR	104.6	21.8	7.2	60.5	-21.8	46.6	7.8	7.9	0.6
DIG	170.3	24.1	9.1	47.1	65.1	27.4	7.6	10.9	1.2
VPI	289.1	170.6	163.3	-70.5	-38.8	85.7	20.6	15.9	3.0
VCG	505.4	12.4	5.2	-10.3	-61.2	8.0	8.5	24.1	1.8
HPX	228.8	24.5	21.4	86.9	-25.8	70.4	18.7	11.9	2.1
Median	**548.7**	**42.5**	**27.6**	**-4.5**	**20.1**	**-12.6**	**12.2**	**15.6**	**1.8**
Hydropower									
S4A	50.8	65.3	42.6	7.5	-2.2	124.4	25.1	10.0	2.6
VSH	165.9	62.0	52.9	7.0	6.3	147.5	7.4	17.3	1.3
CHP	132.4	43.6	20.4	-45.4	-76.6	55.2	13.2	13.4	1.7
SJD	61.4	55.2	38.4	0.3	-11.6	9.5	16.8	8.1	1.5
TBC	68.3	66.2	51.9	15.5	23.5	-55.1	19.6	9.2	1.8
SHP	92.9	50.1	28.5	0.4	0.3	72.1	15.8	11.3	1.8
SEB	43.4	63.8	41.6	-23.6	-32.2	49.9	19.3	13.1	2.6
Median	**68.3**	**62.0**	**41.6**	**0.4**	**-2.2**	**55.2**	**16.8**	**11.3**	**1.8**
Construction									
VNE	15.6	6.9	-6.8	-18.4	53.7	3.3	-6.6	5.0	0.4
LGC	261.7	67.9	30.7	11.1	14.4	144.9	7.9	29.9	2.2
CTD	352.9	6.4	5.0	5.1	-10.2	-56.0	16.8	6.3	1.0
HBC	153.4	9.2	3.0	14.1	-28.1	134.1	21.8	5.5	1.1
PHC	13.3	7.6	1.8	49.6	64.6	308.3	17.1	5.4	1.0
LCG	43.2	13.0	5.9	65.1	65.2	36.9	12.5	5.4	0.7
HVH	23.1	17.8	10.4	102.6	134.0	-18.7	21.2	10.5	2.0
SRF	16.6	8.5	3.4	19.6	3.0	70.2	17.0	4.8	0.9
Median	**33.2**	**8.9**	**4.2**	**16.8**	**34.1**	**53.6**	**16.9**	**5.5**	**1.0**
Blended *	**197.2**	**38.5**	**25.8**	**30.1**	**14.8**	**34.7**	**18.0**	**11.1**	**1.7**
DPG	71.1	22.4	8.5	11.5	-15.0	190.8	19.6	12.3	2.3
PC1	126.2	17.0	9.2	60.9	72.6	35.9	16.5	6.0	0.9
REE	455.9	24.1	33.1	2.1	29.6	1.8	18.7	6.0	1.2
HDG	**178.8**	**38.6**	**19.4**	**40.2**	**266.5**	**79.6**	**49.6**	**5.0**	**2.0**

Source: Bloomberg. Data as of July 10, 2019

** Weighted average by each segment's contribution to HDG's total GP*

We use a list of local pure players in the real estate, hydropower and construction business and three other companies (DPG, PC1 and REE) that share similar businesses with HDG to make comparison.

For real estate, all companies in the list have exposure to either the Hanoi or HCMC market, which is HDG's focus. GPM of HDG's real estate business ranges from 33%-43% over the last three years, on par with the peer median. For the hydropower segment, as mentioned earlier, HDG's current portfolio yields GPM of over 70%, which is the highest among all listed firms. The company's GPM for construction tends to vary between 6%-10%, on par with local peers. We do not have a ROE breakdown for each of HDG's segments, but looking at the company as a whole, the ratio in 2018 seems to be impressive. HDG should maintain superior ROE to peers until 2020 thanks to strong earnings from its real estate segment. We expect the company to retain most of its 2019-2020 earnings for new power projects rather than paying out a cash dividend, which can put pressure on ROE from 2021 onwards. Per our estimates, in 2021 HDG's ROE should come to ~19%, which is still slightly higher than the peer median. The company has managed to keep its ROE at around 17% over 2013-2017, but whether it can maintain this rate beyond 2021 will very much depend on the efficiency of its new power projects; however, we do not have enough information to assess this at the moment.

HDG's 2020 forward P/B at 1.6x as implied by our RNAV estimated fair value is well in line with its peers. Among DPG, PC1 and REE, the business of DPG is skewed towards real estate, while PC1 and REE focus more on construction and power. Therefore, there is a difference in P/B.

Risks

Weather: HDG's power portfolio consists of mostly hydropower plants whose earnings are highly dependent on weather conditions and rainfall. HDG's power earnings should be lower in El Niño years and higher in La Niña years.

Low liquidity: HDG's current ADTV is ~USD500,000, mostly due to a large number of buy-and-hold insiders and investors.

Real estate slowdown: Real estate remains HDG's key earnings contributor, so any slowdown in the market would dampen the company's performance, especially after 2021.

Valuation risk: We currently project the selling price of Dragon City at VND30mn-VND41mn/m2 (exclusive of VAT and inclusive of construction cost) in accordance with the company's guidance. The actual selling price could be higher than this, which poses upside risk to our valuation. Dragon City accounts for ~13% of HDG's NAV, per our projection.

Financial Statements

P&L (VND bn)	2018	2019F	2020F	2021F
Revenue	**3,222**	**4,306**	**7,047**	**4,429**
COGS	(1,979)	(2,697)	(4,275)	(2,733)
Gross Profit	**1,243**	**1,609**	**2,772**	**1,696**
Sales & Marketing exp.	(68)	(127)	(286)	(10)
General & Admin exp.	(197)	(266)	(467)	(213)
Operating Profit	**978**	**1,217**	**2,019**	**1,473**
Associates	-	0	0	0
Net other income/(loss)	38	0	0	0
EBIT	**1,016**	**1,217**	**2,019**	**1,473**
Financial income	55	38	44	46
Financial expenses	(116)	(233)	(283)	(535)
o/w interest expense	(104)	(233)	(283)	(535)
Profit before Tax	**955**	**1,022**	**1,780**	**984**
Income Tax	(167)	(177)	(329)	(153)
NPAT before MI	**788**	**845**	**1,452**	**831**
Minority Interest	154	175	245	119
NPAT less MI, reported	**634**	**670**	**1,207**	**712**
NPAT less MI, adj	634	650	1,171	690
EBITDA	1,205	1,406	2,262	1,798
EPS adj, VND	5,338	5,478	9,865	5,817
Wtd avg shares O/S (m)	115.7	118.7	118.7	118.7
BVPS (VND)	15,500	20,100	28,800	33,800

RATIOS	2018	2019F	2020F	2021F
Growth				
Revenue growth %	40.3%	33.6%	63.7%	-37.1%
Op profit (EBIT) growth %	150.3%	19.8%	65.9%	-27.0%
EPS growth %, adjusted	247.6%	2.6%	80.1%	-41.0%
Profitability				
Op profit (EBIT) Margin %	31.5%	28.3%	28.6%	33.3%
EBITDA Margin %	37.4%	32.6%	32.1%	40.6%
NPAT-MI Margin, adj. %	19.7%	15.6%	17.1%	16.1%
ROE %	40.8%	31.8%	41.6%	19.2%
ROA %	6.5%	5.5%	9.1%	5.5%
Efficiency				
Days Inventory On Hand	632	490	210	161
Days Accts. Receivable	261	110	83	126
Days Accts. Payable	595	594	289	255
Cash Conversion Days	298	6	4	33
Liquidity				
Current Ratio x	1.76	1.13	1.23	1.72
Quick Ratio x	0.76	0.40	0.82	1.32
Cash Ratio x	0.10	0.07	0.30	0.52
Debt / Assets %	0.24	0.40	0.39	0.41
Debt / Capital %	0.50	0.61	0.53	0.48
Interest Coverage	9.82	5.23	7.13	2.75

B/S (VND bn)	2018	2019F	2020F	2021F
Cash & cash equivalents	388	306	1,101	1,160
Short term investment	111	111	111	111
Accounts receivables	2,300	1,303	1,594	1,533
Inventories	3,835	3,409	1,516	900
Other current assets	110	147	241	151
Total Current assets	**6,744**	**5,277**	**4,562**	**3,856**
LT receivables	222	222	122	122
Fix assets, gross	3,037	4,036	5,512	8,188
- Depreciation	(747)	(893)	(1,092)	(1,371)
Fix assets, net	2,290	3,143	4,421	6,817
Investment asset (net)	707	1,222	1,235	1,196
In construction	659	3,120	2,767	226
LT investment	337	38	38	38
LT assets other	128	212	293	203
Total LT assets	**4,343**	**7,957**	**8,874**	**8,601**
Total Assets	**11,087**	**13,234**	**13,436**	**12,456**
Accounts payable	3,226	4,391	3,387	1,908
Short-term debt	583	272	297	317
Other ST liabilities	13	13	13	13
Total current liabilities	**3,822**	**4,676**	**3,696**	**2,238**
Long term debt	2,059	5,055	4,963	4,729
Other LT liabilities	2,515	69	69	69
Total long-term liabilities	**4,574**	**5,124**	**5,032**	**4,798**
Preferred Equity	-	-	-	-
Paid in capital	950	1,187	1,187	1,187
Share premium	-	-	-	-
Retained earnings	821	1,115	2,108	2,680
Other equity	63	84	120	141
Minority interest	857	1,048	1,293	1,412
Total equity	**2,691**	**3,434**	**4,707**	**5,419**
Liabilities & equity	**11,087**	**13,233**	**13,436**	**12,455**

CASH FLOW (VND bn)	2018	2019F	2020F	2021F
Beginning Cash Balance	**707**	**388**	**306**	**1,101**
NPAT	634	650	1,171	690
Dep. & amortization	129	188	243	325
Change in Working Capital	-550	107	611	-718
Other adjustments	183	-37	-93	89
Cash from Operations	**396**	**909**	**1,931**	**386**
Capital Expenditures, net	-953	-2,273	-1,172	-135
Other	-490	-285	0	0
Cash from Investments	**-1,442**	**-2,558**	**-1,172**	**-135**
Dividends Paid	-123	-119	-178	-119
∆ in Share Capital	0	0	0	0
∆ in borrowings	681	1,475	-67	-214
Other financing cash flows	173	211	281	140
Cash from Financing	**731**	**1,567**	**36**	**-192**
Net Change in Cash	**-316**	**-82**	**794**	**60**
Ending Cash Balance	**388**	**306**	**1,101**	**1,160**

Source: Company financial statements, VCSC

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