Phoslock Environmental Technologies Ltd (ASX:PET)

Listed shares:	*564.4 million ord fp*
Perf options:	*18.1 million are included based on my revenue forecasts*
Total securities:	*582.5 million*
Share price:	*82.5¢ as at 4 December 2019*
Market cap:	*$466m on listed shares, $481m fully diluted*

Guidance issued for 2020

- PET has provided inaugural guidance for 2020 sales of $50-70m, being a 100% increase on the $27-30m guidance long maintained for 2019. One would assume the guidance for 2020 is conservatively stated given that over the course of the next 12 months the company would prefer to be able to increase the guidance rather than decrease it.

- The guidance has come as a relief to me because prior to this I had been flying in the dark with my 2020 estimate of $80m, so I was pleased to adopt a new estimate of $70m. I have also taken the opportunity to revise down my projections in later years. These still provide for excellent growth. The figures are shown in the table on page 2.

- My valuation now stands at $2.30 per share, down from the previous estimate of $2.88 but an attractive 2.8 times the current depressed share price.

- It puzzles me that the share price has fallen so far, but of course my forecasts (and those of others) are by no means set in stone and it appears that investors would prefer to see more proof of their veracity. Quite understandable. The future is always somewhat of an unknown quantity.

- What is known with more certainty (and here I repeat comments made in some earlier reports) is that the company: has a proprietary product which efficiently solves a pressing environmental problem affecting many waterbodies globally, without collateral damage; in other words, has a very wide moat with a potentially trillion dollar market all to itself; is run by a demonstrably competent board and management; is still owned 25% by said individuals after recent sales; has key Chinese board members, managers and shareholders; has a strong connection with the largest water company in China; is financially strong with no debt; has a high profit margin and a very high return on equity; could continue to grow strongly for decades to come; has a profile of increasingly recurring revenues; ticks all the boxes as an ethical investment.

Phoslock Environmental Technologies Ltd (PET)

Share price $0.825, current issued shares 564.4 mill, mkt cap $466m

December yrs	18a	19e	20e	21e	22e	23e
Profitability ($m)						
Sales revenue	18.7	29.0	70.0	120.0	170.0	220.0
Cost of sales	9.2	11.6	31.5	54.0	76.5	99.0
Gross profit	9.5	17.4	38.5	66.0	93.5	121.0
Margin	51%	60%	55%	55%	55%	55%
Interest income	0.0	0.1	0.2	0.4	0.5	0.7
Other income	0.7	0.4	0.4	0.4	0.4	0.4
General expenses	6.6	10.0	15.8	21.4	25.9	29.7
EBITDA	3.6	7.9	23.3	45.3	68.4	92.3
Cost finance/opts	3.5	0.0	0.0	0.0	0.0	0.0
Depn/Impairmt	0.2	0.3	0.4	0.8	1.1	1.4
Pretax profit	-0.1	7.5	22.8	44.5	67.3	90.9
Income tax	1.0	1.1	3.2	6.3	13.5	22.2
Net profit	-1.2	6.4	19.6	38.2	53.9	68.6
EPS (¢)		1.2	3.5	6.6	9.3	11.9
EPS (¢) fully diluted		1.1	3.4	6.6	9.3	11.8
PE		73.4	24.1	12.5	8.9	7.0
Growth in dil EPS		221%	205%	93%	41%	27%
DPS(¢) declared for year		0.0	0.0	3.3	4.7	5.9
Return on equity		20%	30%	43%	46%	45%
Cash flow ($m)						
From operating activities						
Sales receipts	7.7	32.4	53.4	103.9	150	200
Paid to suppliers	-17.6	-20.1	-45.9	-75.8	-103	-130
Other	-0.3	-1.0	-2.0	-4.4	-9	-17
Total	-10.1	11.3	5.4	23.6	38	53
From investing activities						
Capex	-0.4	-1.5	-5.0	-4.5	-4.6	-4.7
Other	-0.2	-0.1	0.0	0.0	0.0	0.0
Total	-0.6	-1.6	-5.0	-4.5	-4.6	-4.7
From funding activities						
Debt & leases	-0.3	-0.1	0.0	0.0	0.0	0.0
Equity	8.8	3.5	13.5	4.5	1.9	2.0
Divs/Cap return	0.0	0.0	0.0	-9.5	-23.0	-30.6
Total	8.5	3.4	13.5	-5.0	-21.1	-28.6
Cash position						
Change from abov	-2.3	13.1	13.9	14.1	12.1	19.5
Forex movements	0.1	0.0	0.0	0.0	0.0	0.0
Closing	4.9	17.9	31.9	45.9	58.1	77.6
Balance sheet ($m						
Current assets						
Cash	4.9	17.9	31.9	45.9	58.1	77.6
Receivables	17.8	14.7	31.7	48.2	68.2	88.2
Inventories	2.4	3.5	6.3	10.8	15.3	19.8
Other	0.4	0.6	0.7	0.7	0.8	0.8
Total	25.5	36.7	70.5	105.6	142.3	186.4
Non-current assets						
Plant & equipmer	1.5	2.8	7.4	11.1	14.6	18.0
Other	0.5	1.7	1.7	1.7	1.7	1.7
Total	2.0	4.5	9.1	12.8	16.3	19.7
Current liabilities						
Payables	2.1	4.6	8.8	13.0	16.8	19.8
Debt & leases	0.0	0.2	0.2	0.2	0.2	0.2
Provisions	0.4	0.8	1.2	11.2	15.4	19.4
Income tax	0.9	1.1	1.1	1.1	1.1	1.1
Total	3.5	6.8	11.4	25.5	33.6	40.6
Non-current liabilities						
Debt & leases	0.0	0.5	0.5	0.5	0.5	0.5
Provisions	0.0	0.1	0.1	0.2	0.2	0.2
Total	0.0	0.6	0.7	0.7	0.7	0.8
Equity						
Issued capital	59.9	63.4	76.9	81.4	83.3	85.3
Reserves	6.0	4.0	4.0	4.0	4.0	4.0
Retained earnings	-41.9	-35.4	-15.8	3.3	30.2	64.6
Shareholder equit	24.0	32.0	65.1	88.7	117.5	153.8

Valuation ($m) as at 31 December 2019			
Discount rate	*6%*	*9%*	*12%*
Operations	2,087	1,306	868
Future equity raisings net of buybacks	20	19	18
Cash 31 Dec 2018	18	18	18
Debt 31 Dec 2018	0	0	0
Total	2,124	1,342	904
$ per share fully diluted	3.65	2.30	1.55

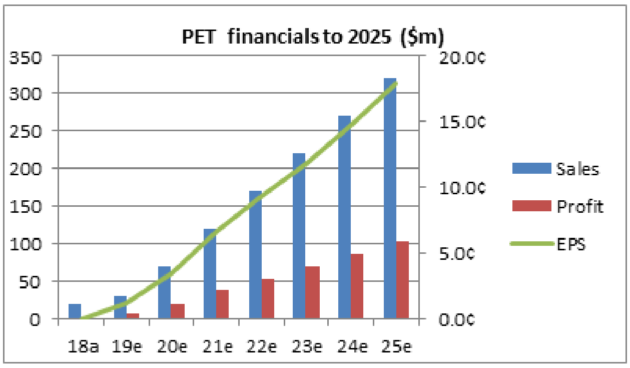
Valuation based on DCF of future cash flows.
Detailed model to 2026, revenues FY24/25/26 set at $270/320/370m.
NCF prior to dividend payments grows 7.5% pa beyond 2026.
Per share data based on 582.5 million shares after exercise of options.
Central valn of $2.30 equates to PEs of 67 and 35 on 2020 & 2021 eps.

Increase in valuation over time at a discount rate of 9.0% pa and growth in available cash flow of 7.5% pa beyond 2026

As at 31 Dec	*2019*	*2020*	*2021*	*2022*	*2023*
Operations	1,306	1,452	1,559	1,664	1,764
Future net equity raisings	19	7	3	2	0
Cash	18	32	46	58	78
Debt	0	0	0	0	0
Total	1,343	1,491	1,608	1,724	1,841
$ per share fully diluted	2.30	2.56	2.76	2.96	3.16

Valuation ($/share) as at 31 Dec 2018 at a range of discount rates and of growth rates beyond 2025

		Discount rates		
		6%	*9%*	*12%*
Growth rate 5.0% pa	*5.0%*	2.88	1.89	1.32
Growth rate 7.5% pa	*7.5%*	3.65	2.30	1.55
Growth rate 10.0% pa	*10%*	4.74	2.88	1.87



Company description

Phoslock is an environmental company specialising in engineering solutions and water treatment products to remediate impaired lakes, rivers, canals and drinking water reservoirs. Headquartered in Sydney, its key focus is in China where its factory and engineering staff are based.

Its main product is Phoslock™, a clay-based substance containing lanthanum which inhibits the formation of blue green algae by binding with phosphorus; if left unchecked, blue green algae will starve water of oxygen and thus kill acquatic life, and render water unsafe. Other products such as zeolites (to reduce nitrogen) and certain bacteria are important too. A newer product removes phosphorus from fast flowing water bodies.

Most revenue is derived in China which offers substantial growth potential given its severe water problems. But sales elsewhere are also growing rapidly. In all markets, an increasing proportion of revenue is recurring.

Revenue and projects

Guidance for 2019 revenue retained

Revenue guidance is maintained at $27-30m, unchanged (remarkable under the circumstances) since it was first issued in March. But there was a comment added that if unforeseen events (such as bad weather) occur then it could cause a carryover of some revenue into early 2020.

Accordingly I have adjusted my estimate of 2019 sales revenue from $30m to $29m

Guidance for 2020 sales implies 100% growth

The preliminary sales revenue guidance is $50-70m including 10,000-20,000t of phoslock product and $10-20m of engineering and maintenance work.

I have adjusted my estimate of 2020 sales revenue from $80m to $70m. A split between China and International was not provided in the guidance; I assume it will be China $52m and International $18m.

A couple of other points:

- Revenue from ongoing and new engineering and maintenance work is and will be higher than I had imagined.
- Allowing for $20m of engineering and maintenance work as suggested above, it would imply phoslock product sales of $50m, which if they amount to 20,000 tonnes implies an average price of $2,500/t. That price is lower than the $3,000 I had been using.

Sales revenue in outer years

My previous estimates were that sales revenues in the five years from 2021 through 2025 would be $150m, $220m, $300m, $380m and $450m.

My new estimates are for an increase of only $50m annually, which results in estimates of $120m, $170m, $220m, $270m and $320m. I have also extended the detailed section of my financial model to 2026 and have assumed sales of $370m in that year.

This profile is less ambitious. While my old forecasts may still be achieved, I feel more comfortable with the new figures. I have had no input from the company on these estimates; they are purely my own.

Incidentally, using a phoslock price of $2,500/t and allowing for an assumed increase in engineering and maintenance revenues, my forecast for product sales in the six years from and including 2001 (in 000t) is 38, 56, 74, 92, 110 and 128.

New performance options

The vesting conditions for the new $1 performance options relate to 2020 revenue achievements. Note that those for Chinese employees are stated before VAT and I am told that one should add 8% to derive sales revenue.

It would appear that no options would vest if sales were to be only $50m (i.e. the low of the guidance range). But if sales were to be $70m (i.e. the high of the guidance range and also my estimate) then 4.5 million options would vest. So in my financial model the issue of 4.5 million options is assumed. I allow for the exercise of these options (and indeed of all of the previously issued options) even though they are currently out of the money.

If revenue were to be $80m (my old forecast, being China $60m and International $20m) there would be a further 4.0 milliion options issued (to Chinese employees).

I suppose it is possible but it seems unlikely that all 25 million options will vest (that would require revenue of $111m) but it is certainly provides a good incentive.

Projects

Not a great deal of additional information was provided. A few things are worthy of note:

- Reading between the lines, it would appear that phoslock at the Xingyun project will after all be applied to the lake itself rather than first to rivers and canals feeding the lake.
- Within Hebei Province, there was no mention of Donghu Lake (AKA East Lake). The initial 500t application was to improve the water quality on part of the lake as a matter of urgency ahead of the 7th World Military Games at Wuhan City, centred on the lake and held in October). No doubt further applications will be made in due course.
- Nanhu Lake (AKA South Lake) on which the current effort near Wuhan is focussed, lies just to the south of Donghu Lake. Look at the region on Google Maps and you will see the enormous potential.
- The new projects pipeline to 2022 has not increased since the release of the quarterly report in October; it remains at $200m for China and $130m for International.
- PET drew our attention to other projects in China that are not sufficiently advanced to be on the new projects pipeline. I won't go through the detail here – you can read it in the announcement for yourself – but it is clear the potential is vast.

Financial projections

My earnings forecasts are shown on page 2. While lower than they were, earnings growth remains impressive.

The main impact was from using a lower growth profile for revenues. Other changes derived from updating the diluted capital base and lowering the tax rate in China for 2019 through 2021. Other points:

- I have maintained the gross profit margin at 55%.
- Growth in general expenses is still set at half the growth in revenues.
- The formulae for working capital requirements, related to revenues and costs, are maintained.
- Capital costs are adjusted downwards using the same formula, related to phoslock production.
- Dividends are still assumed from 2021 albeit at lower levels than previously.
- The financial position is forecast to remain strong throughout.

Valuation

My central valuation within a wide range of possibilities now stands at $2.30 per share, down from the $2.88 included my research note dated 16 October. The revised revenue and earnings profile was the main reason for the fall. Offsetting factors were:

- The inclusion of detailed forecasts for 2026, which increased growth in available cash flow from the assumed 7.5% used previously, to 25% (beyond that, I continue to assume 7.5%).
- Moving forward to 31 December 2019 the base point from which the valuation is calculated. Previously I had used 30 June 2019 as the base point, but the year is now almost over.

Appointment of senior executives

The appointment of Lachlan McKinnon as CEO was announced on 27 November. This is a vitally important role and one would presume that in due course, if all works out, he will be appointed to the board of directors. With this announcement it was also announced that Chris Hui, the group accountant and assistant company secretary since 2017, has been appointed company secretary.

These changes mean that managing director Robert Schuitema (and company secretary until now) will be freed up to concentrate on the wider strategic issues while Lachlan focuses on day to day management.

Lachlan's terms of employment were revealed in a subsequent ASX release. They included a base salary of $475,000, short term incentive of up to 30% of base salary depending on (undisclosed) key performance indicators determined by the board, and long term incentives in the form of 3.0 million performance options exercisable at $1.25 and $1.35.

The vesting conditions are not at all onerous, being cumulative sales 2020-2021 greater than $120m and cumulative sales 2020-2022 greater than $200m. This might be of concern to some investors but it should be remembered these are not the company's forecasts. Instead they resulted from negotiation between Lachlan and the board. In any case, if all the company can achieve is these revenues (say $50m in 2020, $70m in 2021 and $80m in 2022) then the options could expire worthless because the share price would be unlikely to exceed $1.25.

Disclosure
I have not received any remuneration from any person for this report.
Associated entities own 6.1 million shares in PET at the time of writing.

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