TPE 2023 – Guide to Answer

Schuyler

The Test of Professional Expertise multi-discipline case study is designed to encourage students to provide alternative creative answers and there is no “right answer” at TPE level. This Guide to Answer illustrates the structure and the depth of analysis and explanation the examiners are seeking.

In assessing candidates’ scripts, credit is always given for appropriate answers even if not contained in this published guide.

ICAS is providing this Guide to Answer to provide direction for your own learning. Do not use this example for any other purposes.

Morning Paper

Briefing note to the directors

I've prepared this briefing note as requested, covering:

- An evaluation and comparison of the two potential windfarm sites; and
- Advice on the allegations that have been made about the community grant awarded.

If you have any further questions, please let me know.

1. Evaluation and comparison of the two potential windfarm sites

The following analysis compares the two sites:

- Martha: 3 x 2.2MW turbines in rural Devon
- Philips: 5 x 1MW turbines near Norwich

All calculations can be found in Appendix A.

1.1 Non-financial analysis

Martha

The Martha site would be Schuyler's first site in the south-west of England.

It is a rural site, and therefore there would be minimal human disruption but there are two dairy farms bordering the site. Once the site is operational it is unlikely to cause any issues, but the construction period may impact on the welfare of the animals, and this should be carefully considered and minimised.

The site is accessed by a single-track road and is three miles from the national grid connection point. Due to this distance, Schuyler will have to lay high voltage cabling to connect the site to the grid at an additional cost of £140,000.

The company will have ongoing responsibility for the maintenance and safety of this cabling, which would cause significant injury if not properly secured.

The 2.2MW turbines have turbine blades are 52m long, and the site access would have to be carefully checked to ensure that both the blades and any cranes needed to erect the turbines are able to safely access the site.

There could be considerable extra cost to Schuyler if new access roads are required to get the equipment on site and this could also lead to complaints from the local community.

However, there is a possibility that any access road could be laid in conjunction with the cables connecting the site to the National Grid.

One of the benefits of the south-west England location is that wind speeds are generally higher than the east. The prevailing winds also come from the south-west, and the rural area, free from obstruction, will also likely lead to overall higher wind speeds, and therefore higher electricity generation which is reflected in the load factor of 34%.

The area is a nesting site for endangered sea birds. Despite this, the local council seem likely to grant planning permission to build the windfarm. There is however a potential reputational issue if the local conservation groups mount a campaign about the nesting sites.

Advice should be taken on the impact of the site on the endangered birds and what other options there are to provide suitable nesting sites.

The rural nature of this site means that there may be less opportunities to award community grants.

Philips

The Philips site is on the east coast of England like many of the existing sites. It would be the first site to use the smaller 1MW turbines.

The load factor of these turbines is 27.4% which is lower than the average load factor for wind turbines of 28.1% and significantly lower than the load factor of the turbines at the Martha site.

Some further work should be done to determine whether this reduction in load factor is just down to the location (lower wind speeds, close to woodland) or whether there are other factors, such as the type of turbine being considered.

To date, Schuyler has always used an established turbine manufacturer, Layfayette SA. The proposed 1MW turbines are manufactured by a new local supplier. While there are positive environmental aspects to purchasing from a local business, this business is newly established and the durability and safety record of its products are unknown.

There may be more efficient, small turbines from other manufacturers, such as Layfayette that could be considered to increase the load speed, and potential revenue.

The useful life of the 1MW turbines is only 20 years, compared to the 25-year useful life of the larger, 2.2MW turbines. This may be due to prudence by the manufacturer but could also indicate a lower quality product than the turbines produced by Layfayette.

The Philips site is close to a residential housing estate. Site construction is likely to impact these properties, and the noise pollution from the turbines should be assessed prior to construction to ensure that this is within the allowed limits.

Planning permission discussions are at an early stage and are not certain, particularly as there are some local councillors who are against the development. Schuyler should work with the local community to raise awareness of measures taken to limit any impact on the local community, as well as promoting the benefits of renewable energy.

1.2 Financial analysis

I've performed a high-level financial analysis of the two sites, looking at initial costs, expected net cash flow and site restoration costs. A net present value ('NPV') is the total of the future expected cashflows from a project, discounted to present value using the cost of capital of the business.

Martha	Philips
• NPV £915,000 • Annual cash inflow of £941,000 • Expected annual production 19.7 million kWh	• NPV £2,000 • Annual cash inflow of £534,000 • Expected annual production 12.0 million kWh

NPV calculations

Both sites have a positive NPV. The NPV from the Martha site is £915,000 but from the Philips site is only £2,000. Based on this provisional financial analysis, the Martha side is the more attractive option. However, it should be noted that the NPV calculations are based on a number of variables which might increase or decrease the overall return to Schuyler.

Turbine costs and cabling

Although there are only three turbines proposed at the Martha site, these larger turbines are significantly more expensive, and the initial cash outlay is £6,440,000 compared to £3,975,000 for the Philips site.

If there is insufficient cash available in the business, then the additional financing cost would need to be considered.

There are also extra site costs associated with Martha due to the cabling that is required to connect the site to the National Grid. No equivalent cost has been included in the Philips calculation as the site location is close to a National Grid connection point.

PPA income

A PPA of 7p per kWh has been negotiated relating the Philips site compared to 6.9p from the Martha site. As Schuyler earns an average of 6.5p per kWh from existing sites, both of these rates reflect the increasing prices for electricity.

It is unclear why there is a difference between the rates. Perhaps the utility supplier who the 7p rate has been agreed with may also be interested in purchasing from the Martha site which would enable Schuyler to generate an even higher level of income from the Martha site.

Operational and maintenance costs

Operational and maintenance costs have been based on the existing 1.5p per kWh that Schuyler incurs on the other sites. This figure should be checked to ensure that it does reflect current costs. A 30% discount has been applied for the smaller turbines which would be used at the Philips site, but again, this discount and the resulting costs should be checked for accuracy.

Lease costs

The lease cost per turbine is similar for each site (£40k per annum for Martha, £36k per annum for Philips). As five turbines are proposed at the Philips site, the annual lease costs of £180,000 are higher for Philips compared to £120,000 for Martha as well as PPA revenue being lower due to the lower overall capacity and load factor at this site (£1,356k per annum for Martha compared to £840k per annum for Philips).

Site restoration costs

The Martha site needs to be fully restored at the end of the lease term, which will include removing the turbines and cabling, and landscaping the grounds accordingly. The estimated cost is £140,000 per turbine. The only costs at the end of the Philips lease are the removal of the turbines at £22,000 per turbine, £110k in total.

Further investigation should be done to ensure that these estimated figures are realistic and the potential lease agreement for Philips should be checked to ensure that there is no obligation to restore the site.

Sensitivity analysis

As mentioned above, there are a number of variables in the calculation that are subject to change such as the load factor, ongoing maintenance costs, site restoration costs. Prior to a final decision being made, it is important that some sensitivity analysis is undertaken to understand the impact of changes to these variables.

For example, a 5% reduction in the load factor would result in negative NPV for both sites.

	Martha NPV	Philips NPV
	£'000	£'000
As calculated above	915	2
5% reduction in load factor	(300)	(969

The amount of wind generated will vary from year to year so there will be variations in the amount of income generated from each site.

1.3 Recommendation

I recommend that you proceed with the Martha site. It has the higher NPV than the Philips site which means that small variations in cost can be absorbed without the project becoming loss making. Despite the much higher initial costs, the better geographical position gives better wind speeds and a significantly better load factor. It also extends the geographical reach of Schuyler by investing on the west coast of England and the useful life of the turbines is 25 years, generating an extra 5 years of revenue.

Site access is an area of concern as both the turbine parts and machinery might not be able to be transported to the site. The impact on the endangered sea birds should also be carefully considered, as this is an issue that could result in significant negative publicity if not dealt with sensitively.

2. Community grant fraud

The external relations manager has received an email alleging fraud. Initial investigations indicate that fraud is likely to have taken place.

2.1 Immediate actions to take

This is a serious matter which must be investigated urgently. A senior independent member of staff should conduct an investigation reviewing all grants that have been issued to establish whether they were made to legitimate projects.

This review should focus on all the grants that were awarded by Joseph Brooklyn.

There is a real reputational risk to Schuyler if these allegations are true and are made public.

Although £50,000 is likely not material to the business, this situation is likely to have an impact on future planning applications and would be used by community campaigners who were against future windfarm site proposals.

You should ensure that you work with your lawyers and perhaps a public relations team to minimise the impact of this situation on Schuyler. It does appear likely that fraud has occurred and legal action may need to be taken against Joseph Brooklyn and possibly Mia Harlem to reclaim the grant funding.

2.2 Improvements to the grant awarding process

Segregation of duties

There appears to be a lack of oversight and control over the grant application process. Although the staff team at Schuyler is relatively small, there are sufficient staff number to have some segregation of duties over a process such as this.

Segregation of duties means that one team member is not responsible for a process from start to finish, as by doing so, they could commit an act of fraud that wouldn't be detected.

In this case, the whole grant awarding process including payment of the grant itself was made by one person. At this stage it is not possible to say whether Joseph personally benefitted financially from the grant but it seems to be a distinct possibility that fraud has taken place.

Information for grant applicants

The grant application process should be clear and transparent for the applicants. Schuyler should make it clear exactly how much is available in total each year and how much of the fund for each site is available

The criteria for evaluating the applications should also be clearly stated including any conditions for reporting after the grant has been awarded (see below).

Assessment of applications and awarding of grants

A record of all grant applications submitted via the website should be kept so that no application is missed.

There should be clear, measurable criteria for awarding the grant and each application should be measured against these criteria.

If this is done by a single member of staff, then there should be a check of a sample of applications by another member of staff to ensure it has been done fairly and rigorously. The sample should contain both successful and unsuccessful applications.

It is likely that there will be more grant applications than there are funds available, so it is important that the awards that are made can be justified.

Payment of grants

Grant payments should only be made to the bank account of the project, not to an individual. Details should be obtained to confirm the bank account for each project such as a copy of a bank statement.

Payments should only be made following authorisation from a senior manager who has checked the relevant paperwork and bank account details.

Terms of the grant and follow up procedures

Successful grant recipients should be asked to provide a short follow up report each year to ensure the grant funding has been used appropriately.

When a grant is awarded, the award letter should contain the terms and conditions of the grant.

The grant manager should be responsible to ensuring that these project updates are received according to the terms of the grant.

Grant terms should state that if the regular project updates are not received, then the grant is repayable, and this should be legally enforceable.

By doing so, this reduces the risk to Schuyler of grant funding being used inappropriately.

Record keeping and reporting

Proper records should be kept of each application, the assessment of the application, the awarding (or not) of grants, payments made and the terms of the grant.

The manager responsible for the grants each year should prepare the report to the board, but this should be checked by the senior manager who authorised the grant payments to ensure the details are correct.

APPENDIX A - analysis of windfarm sites

	Martha	Philips	
Discount rate	12%	12%	
Load factor	34.0%	27.4%	
Turbine generation	2,200	1,000	kW
Hours per year (365 days x 24 hours)	8,760	8,760	hours
PPA agreement income	£0.069	£0.070	per kWh
O&M costs[1]	£0.015	£0.0105	per kWh
Number of turbines	3	5	
Expected electricity production[2]	19,657,440	12,001,200	kWh

Martha Site NPV

	Year 0	*Years 1-25*	*Year 25*	*Total*
	£'000	*£'000*	*£'000*	*£'000*
Cost of turbines + cabling[3]	(6,440)			
PPA income[4]		1,356		
Operational and maintenance costs[5]		(295)		
Lease costs (3 x £40k)		(120)		
Site restoration			(420)	
	(6,440)	941	(420)	
Discount rate	1	7.843	0.059	
NPV	(6,440)	7,380	(25)	**915**

Philips Site NPV

	Year 0	*Years 1-20*	*Year 20*	*Total*
	£'000	*£'000*	*£'000*	*£'000*
Cost of turbines + cabling[6]	(3,975)			
PPA income		840		
Operational and maintenance costs		(126)		
Lease costs (5 x £36k)		(180)		
Site restoration			(110)	
	(3,975)	534	(110)	
Discount rate	1	7.469	0.104	
NPV	(3,975)	3,988	(11)	**2**

[1] 15p per kWh for the 2.2MW turbines, 70% of this, or 10.5p for the 1MW turbines
[2] load factor x capacity (turbine generation x no. of turbines) x hours per year
[3] (3 x £2.1m) + £140k
[4] Expected electricity production x PPA agreement income
[5] Expected electricity production x O&M costs
[6] £795k x 5 turbines

5% Reduction in load factor

	Martha	**Philips**	
Load factor	29.0%	22.4%	
Revised electricity production[7]	16,766,640	9,811,200	kWh

Revised Martha NPV

	Year 0	*Years 1-25*	*Year 25*	*Total*
	£'000	*£'000*	*£'000*	*£'000*
Cost of turbines + cabling	(6,440)			
PPA income[8]		1,157		
Operational and maintenance costs[9]		(251)		
Lease costs (3 x £40k)		(120)		
Site restoration			(420)	
	(6,440)	786	(420)	
Discount rate	1	7.843	0.059	
NPV	(6,440)	6,165	(25)	**(300)**

Revised Philips NPV

	Year 0	*Years 1-20*	*Year 20*	*Total*
	£'000	*£'000*	*£'000*	*£'000*
Cost of turbines + cabling	(3,975)			
PPA income		687		
Operational and maintenance costs		(103)		
Lease costs (5 x £36k)		(180)		
Site restoration			(110)	
	(3,975)	404	(110)	
Discount rate	1	7.469	0.104	
NPV	(3,975)	3,017	(11)	**(969)**

[7] load factor x capacity (turbine generation x no. of turbines) x hours per year
[8] Expected electricity production x PPA agreement income
[9] Expected electricity production x O&M costs

Report to the Schuyler board of directors - Joint venture with Laurens Petroleum Inc and other matters

Prepared by: Alex Accountant, May 2023

Contents

Introduction

This report has been prepared for the board as requested by Jay Reynolds based on information provided by Laurens Petroleum Inc and by Jay.

Executive summary

- Based on the current joint venture proposal, I do not recommend that you proceed at this time. There is no guarantee that the bid process will be successful and the process with result in a loss in excess of £200,000 for Schuyler. Schuyler would also be liable for all of the operating costs but only 50% of the revenue over the life of the contract, if the bid was successful.

- The current proposal could possibly be negotiated with Laurens; however, this would need to be done as a matter of urgency as the complex bid process concludes in less than four months.

- Diversifying into offshore wind is an obvious choice for the business, and other opportunities should be investigated, particularly as the subsidies for offshore wind may be more beneficial.

- I recommend that you consider using project finance for the Martha site. You should approach some lenders to get more information about costs, interest rates and potential covenants and ensure that detailed cash flow projections are prepared to help reach a final decision.

- Adopting some of the measures included in the Sustainability Accounting Standards Board standards would be a positive move for a company like Schuyler with a strong focus on sustainability. The current KPIs should be amended.

2. **Joint venture with Laurens**

Jay Reynolds has been approached with a proposal to partner with Laurens Petroleum to bid in the next Contract for Difference auction for a 700 MW offshore windfarm off the south-east coast of England.

This is a potentially significant expansion to the Schuyler business, and I have set out what I consider to be the main risks and benefits below.

2.1 Risks of the joint venture

Risk area	Detail
Lack of offshore wind experience	Neither Laurens nor Schuyler has any experience in offshore wind. While Schuyler operates onshore windfarms, the comparative size of this projects (100 turbines / 700MW) is far in excess of the 22 turbines that Schuyler presently has over its six operational sites generating 45MW. Neither party in the JV has experience in offshore wind and it would be a significant risk for Schuyler, as the smaller of the two venturers. Offshore wind has added complexities transferring the electricity generated between the turbines and the floating substation and then onshore. Schuyler doesn't appear to have the operational or maintenance knowledge within the current workforce. Staff with experience of offshore windfarms would have to be recruited to run the windfarm once constructed. This would need to be factored into the legal agreement.
Contract benefits Laurens	Laurens has veto over operation decisions despite Schuyler having responsibility for operations and maintenance and responsibility for the operations and maintenance costs. Laurens has power over operational matters with none of the risk. There is a possible financial risk to Schuyler. Schuyler may be subject to penalties from Laurens if they fail to meet construction targets. However, delays may be beyond the control of Schuyler, for example the continuing construction material delays as a result of the COVID-19 pandemic. The joint venture arrangement should be reviewed by the legal team and negotiated to ensure that the deal is in the best possible interests of Schuyler as it currently appears to favour Laurens.
Short time frame to prepare bid	The bid needs to be submitted in less than 4 months which is around only 80 working days. It is a very short timescale for a complex process and will require reallocation of staffing resource which might well impact on the existing business, particularly as there are already some staffing shortages, such as in the finance team.
Disproportionate workload for bid	Schuyler has been assigned responsibility for the bid process with little input from Laurens. The bid process should be a joint effort between the parties and

Risk area	Detail
process	the roles and responsibilities should be shared out and agreed promptly to allow the process to begin.
Complexity of bid process	The bid process is complex. There are different stages that must be achieved before the final bid is submitted. It is possible that either the operational supply chain proposal or the project plan may be rejected before the bid can even be submitted. Expert knowledge would be required during the bid process and given the short timescales this would probably require the use of external specialist consultants.
Supplier risk	The proposed floating substation supplier doesn't have experience of constructing substations for offshore wind. There is a risk that the substation might not work, or that the lack of supplier experience might impact negatively on the bid. Other suppliers who have experience in manufacturing these substations should be identified and an analysis completed to ensure the most appropriate substation is identified, which might not be from the Laurens supplier. Layfayette SA, the supplier currently used by Schuyler provides offshore turbines and may also be able to provide substations. As an established and reliable supplier already known by Schuyler, Layfayette could also be used to supply the turbines themselves.
Reputational risk partnering with Laurens	Laurens is a fossil fuel business and does not have the same sustainability credentials as Schuyler. There have been recent press reports about the poor environmental standards. Partnering with Laurens is a reputational risk for a business with a strong sustainability focus like Schuyler.

2.2 Benefits of the joint venture

Benefit area	Detail
Significant growth for Schuyler business	Offshore wind is a new market for Schuyler and the majority of the Contract for Difference subsidies that are available are for offshore wind. The Contract for Difference results in a known, fixed amount of income over the life of the contract, reducing the financial risk. The current installed capacity of Schuyler is 44.85MW. A 50% share of this windfarm would give Schuyler an additional 350MW of potential electricity generation which would result in a massive boost in revenue, although there would be significant additional costs as well.
Future ventures	Forming a close working relationship with Laurens might lead to other joint ventures with Laurens going forward. Having gone through the process of making a CfD bid, Schuyler would also have the experience to perhaps lead a bid themselves in the future, or partner with other

Benefit area	Detail
	companies.
Relationships with existing suppliers	Lafayette SA, the existing turbine supplier used by Schuyler produces offshore as well as onshore turbines. As well as being able to partner with a familiar supplier, this may lead to financial benefits using Lafayette for future onshore windfarms. As an oil and gas company, Laurens is likely to construct oil rigs, which are likely to use foundations laid into the seabed similar to the jacket foundations used to secure the offshore wind turbines. One or more of Laurens suppliers may be able to tender for the jacket foundation supply.
Access to debt finance	Laurens is a well-known global business with significant connections. This could provide the joint venture with access to other markets and suppliers which may have an impact on the existing business. In addition, Laurens have good relationships with a number of lenders who could be approached to provide the debt finance for the construction of the offshore windfarm.

2.3 Financial analysis of the joint venture

Bid process

An average bid process takes 9,000 hours, or 1,200 working days (based on a 7.5hr day). This is equivalent to 15[10] full time staff members working on the bid for 80 days until the submission date.

Schuyler only has 21 staff working in head office, excluding directors - two in site development, 14 in finance, legal and HR and five in marketing and governance. As all of these staff already have roles to carry out, there is not capacity within the existing workforce to complete the bid process.

Most of the staff needed for the bid process will be professional finance and legal staff with an average salary of £42,000. Assuming this will be a cost of £50,000 including national insurance and pension costs, the basic staff cost of submitting the bid would be around £250,000[11]. The actual cost may well be higher if Schuyler need to use professional advisors to complete the bid or hire specialised staff on short term contracts. This is also before additional costs such as surveyors, consultants, architects etc who would be needed to complete the information required for the bid process.

The £50,000 contribution to Schuyler is not an equal share of the bid costs. There is no guarantee that the bid would be successful, and Schuyler would lose at least £200,000 on the bid process as it stands.

Construction and operation costs

If the bid was successful, then Laurens has indicated that they would contribute £50 million towards the start-up costs. The cost of a 2.2MW onshore turbine is £2.1m. Therefore, the cost of 100 7MW offshore turbines is likely to be well in excess of £200 million. A significant amount of finance would be required for the project, and this would incur a significant annual interest cost. The split of the annual interest costs should be negotiated with Laurens.

The terms of the proposal are that Schuyler would bear all of the operational and maintenance costs of the windfarm over its 30-year useful life but only receive 50% of revenue earned. Assuming costs of 1.5p per kWh similar to onshore wind, that would result in annual operational and maintenance costs of £37.7 million [12] which would be a considerable annual cost for Schuyler**.** The staff cost of the operating and maintenance each year is likely much higher than the back-office support provided by Laurens and so a more even split of operating costs would be reasonable.

The potential revenue earned is £163.4 million[13] per year. The proposal states that Schuyler would be entitled to 50%, or £81.7 million. However, the overall net profit each year would depend on the split of the other costs as discussed above.

2.4 Financial reporting and tax implications

There would be financial reporting implications of entering into a joint venture. IAS 27 *Separate Financial Statements* permits a joint venture to be accounted for at cost, as an investment at fair value, or using the equity method. These methods would result in quite different presentation in your financial statements, and the finance team would need to consider which would be the most appropriate for your business.

[10] 1,200 working days / 80 days = 15 staff members
[11] £50,000 x 4/12 months x 15 staff
[12] 41% load factor x 700,000kW capacity x 365 days x 24 hours x £0.015
[13] 7,000kW x 41% load factor x 365 days x 24 hours x 100 turbines x 6.5p per kWh = £163.4 million

The joint venture does not involve a new company being set up. The joint venture agreement will need to be considered and structured carefully. Schuyler and Laurens might be considered to be acting in partnership for tax purposes. Or they may just be subject to the tax on the profits they make. Tax advice should be sought prior to signing any agreement.

2.5 Recommendation

As it stands, the joint venture proposal is not beneficial to Schuyler, and I cannot recommend that you proceed.

Schuyler would face a significant financial risk at the bid process, as you would bear most of the bid costs. Even if the bid was successful, the proposal is that Schuyler would incur all of the annual operating and maintenance costs, but only receive 50% of the revenue generated. Unless the proposal can be negotiated to benefit Schuyler more fairly it should not be considered.

Diversification into offshore wind is an exciting potential area of growth for Schuyler, but the short time scales before the bid needs to be submitted and the potential financial losses do not appear to make this the right opportunity.

3 Financing the Martha site

Funding of £7.5 million is needed for construction of the Martha site to proceed although there is some available cash within the business. Jay Reynolds asked me to evaluate using either project finance or issuing new shares.

3.1 Project finance

Project finance may well be a good option for the new windfarm. Project finance works by setting up a new investment company. Schuyler would put some cash (usually 20%) into this investment company as an equity investment. A funder then provides debt finance to the investment company. The total initial cost of the project is £7.5m so Schuyler, would be required to invest £1.5m as equity funding in the new investment company Schuyler currently has cash of £1.2m available, so the additional £300,000 would need to be found. You also need to consider the cashflow forecast of Schuyler, and whether a cash outflow of £1.5 million to create the investment company would impact the remainder of the Schuyler business.

There are a number of different lenders who might be prepared to lend to a project such as the Martha site. As this would be your first time entering into this sort of finance deal, you would likely want to have preliminary discussions with a number of different lenders to understand their different specific requirements and the costs involved.

It is unlikely that using an investment company would impact the planning permission that has been granted, but it might impact the power purchase agreement, as that is currently being negotiated between Schuyler and the utility company, rather than the investment company and the utility company. You should check with the utility company urgently to ensure there are no issues.

Because you are having to use external funding to finance this windfarm, you need to be sure that you are able to meet the associated interest and capital repayment costs, as well as comply with any covenants that the lender puts in place. Cashflow projections should be done, factoring in the interest and repayment cashflows. These cashflows should be flexed based on different levels of electricity generation and maintenance costs.

Jay Reynolds has suggested that the average interest rate associated with project finance is 8%. Your current bank loans have an average interest rate of 5%. The higher level of interest is likely due to the loan being secured over future cashflows rather than being secured on assets and the greater risk by lending to a single project rather than the company as a whole. Although your existing bank has suggested that they wouldn't want to increase the bank loan, you may want to approach other banks to see if they would be prepared to lend to Schuyler, rather than set up the investment company if funds could be raised with a lower interest rate. Schuyler is already quite highly geared at 62%[14] based on the book values at 31 December 2022 so the interest rate is likely to be higher than your existing bank loans due to the additional risk to the lender.

The investment company would need to be consolidated into the Schuyler financial statements as it would be controlled by Schuyler, and therefore the finance would impact on the overall gearing ratio of the Schuyler group. Preparing consolidated financial statements is an additional burden for the finance department at the year end. There would also be a need for the finance department to monitor the

[14] debt / (debt + equity) = 73.356 / (44.96 + 73.356) = 62%

cashflow of the investment company and the covenants imposed by the lender to ensure that these are not breached. They would also need to prepare any financial updates required by the lender.

From a tax perspective, setting up the investment company would open up the possibility of group relief, as Schuyler would own 100% of the investment company. If the investment company initially made losses these could be used to offset taxable profits made by Schuyler.

3.2 Share issue

As none of the existing shareholders are able to increase their current shareholdings, increasing the share capital of Schuyler would dilute the existing shareholdings. The three executive directors currently hold 60% of the share capital, but depending on how many shares were issued, this could decrease below 50% and the executive directors would no longer have overall control.

Finding a willing investor would be key. A venture capitalist might be interested, particularly since you are a growing business in an industry with huge potential. A venture capitalist or other equity investor would want to make a good level of return on their investment, through capital growth. They would also want a defined exit route, to be able to realise their investment in the future. This could be achieved through listing on a stock exchange, such as AIM, the Alternative Investment Market.

Alternatively, the three executive directors could plan to purchase those shares to reinstate their 20% shareholding.

With any share issue, there would also be share issue fees to consider.

3.3 Recommendation

Issuing more equity will dilute the shareholdings of the executive directors so that they no longer have overall control of the company. Project finance may well be a good option for the new windfarm, but interest rates are likely to be higher than the existing bank loan interest rates and there may be an impact on the power purchasing agreement. However, given the widespread use of project finance in the renewables sector, I would recommend that this option should be explored, as it would be a model that could also be used for future projects.

4 Assessment of the non-financial key performance indicators for sustainability

Non-executive director Thomas Washington has proposed that the non-financial key performance indicators (‘KPIs’) are evaluated against those used by competitor companies.

4.1 Sustainability standards

Sustainability standards, such as those published by the International Sustainability Standards Board (‘ISSB’) are designed to provide transparent and reliable sustainability reporting to stakeholders. The

standards contain guidance on measurement of the metrics, as well as the form and content of the disclosures themselves, to allow the comparability of different companies.

For a company like Schuyler, which states that sustainability is key to all that it does (Schuyler strategy). then it would be best practice to use the ISSB standards to help identify the most important KPIs that the board should be monitoring.

4.2 Comparison to existing KPIs

There are some similarities between the existing Schuyler KPIs and those used by competitors:

Existing Schuyler KPI	**Comparable competitor KPI**
Reportable health and safety incidents	Total recordable incident rate and fatality rate for direct employees and contract employees
Annual electricity generation - average UK homes equivalent	
Installed capacity in MW	Aggregate capacity of wind turbines, by wind turbine class in MW
	Average noise level of wind turbines, by wind turbine class in decibels ('dB')

Health & safety reporting

The proposed KPI is wider than the existing KPI on reporting health & safety incidents. Currently, Schuyler only report incidents involving Schuyler employees which are reported to the Health & Safety Executive. Schuyler's windfarms are installed by external contractors and any health & safety incidents relating to contractors would not be recorded.

The proposed KPI would note "recordable" incident, which would have to be clearly defined as well as any fatalities for employees and contractors. This would give users of the financial statements a more comprehensive view of the safety of the Schuyler operations.

Electricity generation

Schuyler includes a KPI showing how many homes could have been powered by the electricity generated by Schuyler in a year. It this metric is considered useful by the board, then it could continue to be used. If may be that it is interesting information that could be included on the website rather than a KPI which would be used throughout the year to help the board make strategic decisions.

Capacity of wind turbines

The existing KPI presents the installed capacity in MW. The proposed KPI does the same thing but breaks it down by wind turbine class. All the turbines currently installed are Class 2 turbines, so this KPI would remain the same.

Noise levels

Schuyler does not currently report the noise levels of its installed turbines. Again, all of the turbines are Class 2, so the figure that could be reported would be the average noise level. Readings of noise levels would need to be obtained from all, or a suitable sample of turbines to allow this figure to be calculated and these readings would need to be taken and recorded on a regular basis. One of the main concerns about wind farms is usually noise pollution, so including this KPI would give the board good information

and could be used to compare the various existing sites, as well as being something to consider for future sites.

4.3 Verification over KPIs

The assurance department of an accounting firm could be used to provide a level of assurance over the reported KPIs. In this case you would engage the firm to perform a review engagement to specifically review the accuracy and completeness of the KPI data that is being reported. Terms of engagement would need to be agreed and an engagement letter would be signed by both parties.

This would be a limited assurance engagement, in that the final report would only state that nothing had been found to suggest the KPIs were not correct. This is different from something like an audit of financial statements which is a reasonable assurance engagement where the auditor gathers more evidence and is able to state an opinion.

Email to the ethics partner

To: ethicspartner@mjllp.com
From: alexaccountant@mjllp.com
Date: May 2023
Subject: Secondment at Schuyler Renewables plc

I am currently on secondment to Schuyler Renewables plc and there are a number of matters that have come to my attention that I feel I have to report.

I have several concerns about the behaviour of one of the founders and executive directors of Schuyler, Jay Reynolds.

Undue pressure from the directors of Schuyler (objectivity and professional competence of Alex)

Jay has received a significant financial proposal from an old university friend which he wanted me to analyse and report to the board. The proposal was not good for Schuyler, but Jay put me under pressure to frame the proposal in a positive light to the board. This was a threat to my objectivity. I gave a fair and balanced appraisal of the deal as is required by an ICAS accounting applying professional competence and due care. Jay is likely to be quite unhappy with my actions, but I felt it was the only thing that I could do.

Both Xinyi Zhao and Jay have made comments about the cost of my secondment and suggested that I will do whatever they want as the company is paying such a high fee. This has made me feel quite uncomfortable as I feel like they are intimidating me to do what they say, rather than to follow my professional and ethical responsibilities.

If I am to continue with the secondment, I think it is important that the directors are reminded that I have a professional responsibility to be objective and to act with professional competence and due care at all times.

However, given the issues that I've raised, the firm my choose to terminate my secondment due to the reputational risk of continuing to be involved with Schuyler.

Integrity of Schuyler directors

Jay specially asked me not to mention that the proposal had come from his friend, which suggests that he is perhaps not being truthful with the other board members, even on matters of strategic importance. This brings Jay's integrity into question. I did not feel that I had to raise this in the report, particularly as I have recommended that they do not proceed with the deal.

Perhaps you could advise if I should approach one of the other executive directors to make them aware of this personal relationship?

Jay also mentioned that some workplace incidents have not been reported to the Health & Safety Executive as the employees involved had been financially compensated and signed non-disclosure agreements. Despite the compensation, I think the accident should still have been reported and I am worried that there might be more health & safety issues that have been covered up and not recorded in the key-performance indicators. I am concerned that Jay and perhaps others within Schuyler are not complying with the applicable laws and regulations. This again raises questions about Jay's integrity.

I think that this issue should be highlighted to the other directors of Schuyler with a reminder of their legal requirements.

Xinyi Zhao has suggested that Schuyler could give funding to local councillors to encourage them to grant planning permission. Although this is just a suggestion, it would be bribery to offer a financial incentive. No offence has taken place so far, but this does raise concern about the integrity of another one of the Schuyler executive directors.

No offence has taken place, but I think it is important that it is communicated to Xinyi that she must not incentivise the local councillors in this way.

Community grant fraud (misappropriation of Schuyler assets, professional behaviour of finance manager)

A finance manager, who has recently left the company, appears to have committed fraud by awarding a grant to a library managed by someone who is most likely his sister. The grant money was paid into a personal bank account and the grant has not been used for the purpose that it was awarded. This individual has behaved in an illegal manner by stealing funds from the company.

Controls over the awarding of grants are very weak, and there are possibly other fraudulent grants. The management at Schuyler do not appear to have had any real control or oversight over the grant awarding process. A member of the public, who was denied a grant, has raised this issue with the company and is threatening to take the story to the media. There could be significant reputational damage to Schuyler. Again, it suggests that the directors of Schuyler do not have adequate controls in place to safeguard the assets of the company, which is a breach of their legal responsibilities and professional behaviour.

Please let me know if you'd like to discuss any of these further.

Alex Accountant