

MARK PLAN AND EXAMINER'S COMMENTARY

This report includes:

- a summary of the scenario and requirements for each question
- the technical and skills marks available for each part of the requirement
- a description of how skills should be demonstrated
- detailed points for a full answer
- examiner's commentary on candidates' performance

The information set out below was that used to mark the questions. Markers were encouraged to use discretion and to award partial marks where a point was either not explained fully or made by implication.

Question 1 – Bristol Batteries plc (BB)

Scenario

The scenario is a company (BB) which manufactures lithium-ion batteries for electric vehicles. The candidate recently joined BB's planning and development department.

There are a number of issues for BB:

- There are concerns about the continuing availability of the natural resources used in lithium-ion battery production. This also raises sustainability and environmental impact issues.
- The long-term success of BB depends largely on a major R&D project for developing an alternative, innovative, solid-state battery technology. Significant costs are being incurred on this R&D project. There are uncertainties over the eventual outcome and three alternative outcomes are presented.
- BB does not have sufficient funds to complete the R&D project and therefore faces three separate financing choices, which impact on the gearing and governance of BB but also present sales opportunities.
- The board is concerned about how these matters will impact on the company's annual report and financial statements in respect of going concern and environmental and sustainability disclosures.

Candidates are required to do the following:

- (1) Using Exhibit 2 and the other information provided:
 - (a) analyse and evaluate the risks relating to future revenues from sales of lithium-ion batteries. Explain how these risks can be mitigated.
Ignore future sales of solid-state batteries.
 - (b) explain and evaluate the risks relating to the price paid for lithium and the security of supply of lithium. Recommend, with reasons, which of the two alternatives for mitigating these risks should be selected.
- (2) Evaluate the benefits and risks of the R&D project for solid-state battery technology. Provide a balanced appraisal and a recommendation of whether BB should continue with the R&D project beyond 2020. Use Exhibit 3 and other information provided.

Show supporting calculations using the working assumptions (Exhibit 3). Assume that sufficient finance is available to complete the R&D project. Ignore any potential sales to Pleuron (Exhibit 4).

- (3) Assuming that BB decides to continue with the R&D project, explain and evaluate the factors it should consider in choosing between the three offers of finance (Exhibit 4). Provide a reasoned recommendation.
- (4) Using all the information provided, explain the treatment in the annual report and financial statements of BB for the year ended 30 June 2020 in respect of:
- Going concern.
 - Environmental impact and sustainability disclosures.

Mark Grid

Requirements	Technical & Skills	Skills assessed
(1.1)a Analyse and evaluate the risks relating to future revenues from sales of lithium-ion batteries. Explain how these risks can be mitigated.	10	<ul style="list-style-type: none"> • Analyse and assimilate the data provided in a structured manner (eg a table) • Carry out data analysis to identify key risks relating to the three customers • Analyse key issues relating to different contract periods • Evaluate long term effects, beyond the minimum contract period • Use judgement to identify and select key issues impacting revenue • Identify and evaluate foreign currency issues • Identify and explain relevant business risks • Provide reasoned recommendations
(1.1)b Explain and evaluate the risks relating to the price paid for lithium and the security of supply of lithium. Recommend, with reasons, which of the two alternatives for mitigating these risks should be selected.	11	<ul style="list-style-type: none"> • Demonstrate a clear understanding of key issues of supply chain management • Identify the issues supplier dependence and sustainability of supply • Evaluate the two alternatives for mitigating risk using judgement to assess their effectiveness • Provide a reasoned recommendation

<p>(1.2) Evaluate the benefits and risks of the R&D project for solid-state battery technology. Provide a balanced appraisal and a recommendation of whether BB should continue with the R&D project beyond 2020. Show supporting calculations using the working assumptions (Exhibit 3).</p>	13	<ul style="list-style-type: none"> • Demonstrate an understanding of the R&D strategy and related issues. • Analyse the data for each of the three outcomes • Carry out data analysis to evaluate each of the three outcomes • Assimilate the data and expected values given the probabilities. • Demonstrate a clear understanding of key issues relating to risk for probabilistic outcomes. • Assimilate qualitative and quantitative data provided • Identify and explain relevant benefits • Identify and explain relevant risks • Provide a reasoned and balanced conclusion.
<p>(1.3) Assuming that BB decides to continue with the R&D project, explain and evaluate the factors it should consider in choosing between the three offers of finance (Exhibit 4). Provide a reasoned recommendation.</p>	11	<ul style="list-style-type: none"> • Analyse and assimilate the data provided in a structured manner (eg a table) • Carry out structured and logical analysis to identify the key issues relating to governance, return and financial risk. • Carry out calculations to evaluate each of the three finance choices • Set out and explain relevant factors to be considered other than the calculations, taking account of key risks • Use judgement to provide a comparative assessment of the key factors for each finance method • Provide a reasoned recommendation
<p>(1.4) Using all the information provided, explain the treatment in the annual report and financial statements of BB for the year ended 30 June 2020 in respect of:</p> <ul style="list-style-type: none"> • Going concern. • Environmental impact and sustainability disclosures 	11	<ul style="list-style-type: none"> • Use judgement to identify key aspects of BB's current financial position • Evaluate the key factors to determine the viability of BB as a going concern given the probabilities of the outcomes • Structure the going concern disclosures in compliance with relevant regulations • Structure the environmental disclosures in compliance with relevant regulations, recognised international codes of practice and commercial best practice.
Maximum marks	56	

To: Narish Lal
 From: Jenny Dean
 Date: 25 August 2020
 Subject: Planning and development issues

Requirement 1.1a – Risks relating to future revenues (lithium-ion batteries)

Customer (location)	Revenue per unit (year to 30 June 2020)	% of total revenue	Proportion of purchases from BB	Remaining period of current contract
Bluchi (Italy)	£2,100	61.4% (126m/205m)	30% (60,000/200,000)	3 years
Eastern (US)	£2,000	29.3% (60m/205m)	50% (30,000/60,000)	2 years
Whiston (UK)	£1,900	9.3% (19m/205m)	100%	1 years

Business risk

The EC battery industry is still evolving and there are significant uncertainties regarding changing technologies and competition. Future sustainability and expansion of revenues are therefore subject to significant, market-wide uncertainties beyond the contractually protected period of the three existing contracts. Successful R&D may provide some mitigation of these uncertainties, but that success is itself uncertain.

Possible loss of customer

BB is dependent on only three customers to generate revenues. Bluchi alone generates 60% of all sales by volume and 61.4% of all sales by value. Loss of any one customer could impact on BB's going concern.

Bluchi and Whiston are new to electric vehicles (EV), so this product line may not become established, despite predictions of high growth.

There is some protection from losing a customer as there are contracts in place with minimum order numbers. However, the period to expiry is a maximum of only three years, with the other two customers only one year and two years.

There is no information regarding replacement of a lost customer with a new customer. This may be because contracts are tying in other motor manufacturers.

Revenue growth or decline

Bluchi and Eastern plan to increase the number of EV produced in future years. However, BB is not the sole supplier to either and so while total EV output (and therefore requirements for EV batteries) increases, this does not mean that BB will necessarily share in this average rate of growth, which may go disproportionately to other suppliers.

BB is a sole supplier to Whiston, but future demand for EV cars produced by Whiston is uncertain. There is no planned growth and the Whiston contract expires next year.

Price

There may seem some risk mitigation in fixed prices, but there is a risk if costs rise in the contract period that revenues will not cover costs. Moreover, if new alternative suppliers offer lower prices (eg due to improved lithium-ion technology) then BB may be restricted to minimum volumes whilst lower priced rivals pick up the benefits of expansion of output.

Foreign currency

While prices are fixed in local currencies (Euro/US\$) there is a currency risk in that any depreciation in these currencies against the £ will reduce the sterling equivalent value of the revenues.

Production closure – loss of access to raw materials

Production may need to be closed down temporarily or permanently if access to scarce raw materials, such as lithium or cobalt, is interrupted. This may damage short-term revenue streams and longer-term reputation with customers.

Mitigation of risks

The underlying growth in the EV market is a favourable factor for BB as EV car manufacturers wish to have security of supply for their batteries by securing new contracts. The possibility of rolling over the contracts with existing customers at their expiry on appropriate terms may therefore be a reasonable risk mitigation.

Widening the customer base with new customers would mitigate the current dependence risk on only three customers, but this may be difficult to achieve in a competitive market and on reasonable commercial terms.

The risk of production closure through limited access to scarce raw materials may be mitigated by longer term supply contracts (this is discussed further in section 1.1(b) below).

Although the Eastern contract is in US\$, there may be a natural hedge with lithium being a commodity cost which is priced in US\$.

Currency hedging can take place to mitigate risks for euro denominated sales.

Requirement 1.1b – Risks relating to acquiring lithium

Dependence on one supplier, Lilley, may cause a supply chain security issue. Rivals may contract with Lilley for its available future supplies or Lilley's natural resources may run out. Also, continued scarcity may increase supplier power for Lilley, enabling it to impose increased prices or impose other supply conditions.

BB is particularly vulnerable due to its short-term monthly contracts. This means there is no security of supply and the price is, in effect, the spot price which is rising and volatile. BB has fixed prices with car manufacturer customers, so profit is particularly volatile to raw material price volatility.

Also, the Lilley contract is in A\$, and there will therefore be currency risk on top of commodity price risk.

Scarcity of supply globally, and supply chain concentration in few countries, are further market-wide supply risks in obtaining alternative sources of lithium. For example, rivals may lock-in available lithium supplies with long-term contracts, leaving little residual supply available in open markets.

Further scarcity of supply may lead to more price increases and price volatility over time as natural resources diminish further.

EV production globally is increasing rapidly. If it expands more quickly than expected then, with this additional demand, available lithium supply may run out sooner than expected.

Non-market factors present additional risks, with the possibility of governmental and inter-governmental regulations limiting supply chains and distribution channels (eg to protect natural resources).

Overall, the sustainability of the long-term supply of raw materials is a major risk which threatens the continued viability and sustainability of BB if it is restricted to lithium-ion battery production only.

In terms of consequences, lithium-ion batteries cannot be made if no lithium is available for BB. This may mean factory shut-downs, perhaps for significant periods, and then the minimum contractual requirements for customers may not be met. This could risk loss of reputation and litigation.

Mitigation

Lilley contract

A long-term contract with Lilley would fix the price over the contract term and provide assurance, as far as possible, over security of supply.

However, there are a number of downside factors:

- Four years is a long horizon and beyond that of the current customer contracts. Predicting required amounts (maxima and minima) may be difficult. There is a possible exposure of having an excess of lithium if supply is greater than demand. Storage may be costly or impractical and resale may be difficult.
- While the lithium price is fixed, it is at a much higher level than the current price. As prices rise over time this may be of future benefit, but there is a short-term cost.
- The contracts are in Australian \$ and there is therefore a currency risk, even though prices are fixed in the local currency.

In addition to the Lilley contract, further contracts with multiple suppliers, if attainable, might go some way towards mitigating the risk of reliance on one supplier.

Commodity forward contract

A commodity forward contract is a binding agreement to acquire a set amount of a commodity at a future date at a price agreed today.

A forward contract fixes the rate for a transaction, and these contracts must be settled regardless of whether or not the lithium price at the settlement date is more or less favourable than the agreed forward price.

While BB uses lithium, it does not need to take physical delivery of the product based on the forward contract. Instead, it could use changes in the price of the forward contracts whereby the gains and losses would offset the movements in the monthly lithium purchase prices which are entirely separate contracts.

Thus, for example, BB may arrange a forward contract with its bank. Subsequently, when it needs to purchase the lithium, the bank will close out the original forward contract, in effect by arranging another forward contract for the same settlement date, to cancel out the original contract. The close-out is then settled with a cash payment by one party to the other, depending on the difference between the forward prices in the contract and market prices. This would offset changes in prices paid by BB for lithium.

A disadvantage of a 6-month forward contract is that it only locks in prices for the next six months. Unlike the 4-year contract with the supplier, Lilley, BB remains exposed to long term shifts in the price of lithium beyond the 6-month horizon.

The forward contracts are in US\$ and there may be a currency risk. However, as already noted, there is a natural hedge against Eastern sales in US\$.

Recommendation

The contract with the supplier seems a better choice as it gives security of supply as well as price protection and over a much longer period.

Requirement 1.2: Benefits and risks of the R&D project (solid state batteries)

The R&D project has had some early success with a number of process innovations. However, there remain significant uncertainties over the outcomes.

Moreover, the scale of the R&D project is sufficient to impact materially the company as a whole if the project fails.

Immediate withdrawal from the R&D project is one possibility to be considered. This would save the loss of further R&D investment if the project fails but there is then dependency on the current technology of lithium-ion production which is at risk for BB and globally in decline.

The three possible outcomes are:

(1) R&D project fails – Outcome 1

The R&D continues with up to £200m of new investment then ultimately fails. This is the worst-case scenario as failure of the R&D may be identified before all the additional £200m costs are spent.

Fixed costs of production, of £150m, are avoided if production does not take place.

(2) Moderately successful - Outcome 2

Annual growth in revenue is $(1.04)(1.125) = 1.17$

The annual money discount rate is 17%.

So, the effective discount rate is zero $((1.17/1.17) - 1)$

However, sales in the year end 30 June 2025 are already inflated by 12.5% and therefore needs to be deflated by 12.5% for the effective rate to apply.

There is therefore a base year figure of $180,000/1.125 = 160,000$ units.

The PV over 8 years is therefore: $(160,000 \times £780 \times 8 \text{ years}) - £200\text{m} - £150\text{m} = £648.4\text{m}$

Tutorial note - Alternative approach

An alternative, but much longer, approach is to use the spreadsheet to discount the annual cash flows, as follows:

Annual increase	12.5%	4%	17%		
	Quantity	Contribution	Revenue	DF	PV
2024 base year	160,000	780.0			
2025	180,000	811	146,016,000	0.854701	124,800,000
2026	202,500	844	170,838,720	0.730514	124,800,000
2027	227,813	877	199,881,302	0.624371	124,800,000
2028	256,289	912	233,861,124	0.53365	124,800,000
2029	288,325	949	273,617,515	0.456111	124,800,000
2030	324,366	987	320,132,492	0.389839	124,800,000
2031	364,912	1,026	374,555,016	0.333195	124,800,000
2032	410,526	1,067	438,229,369	0.284782	124,800,000
					998,400,000
				Fixed costs	350,000,000
				NPV	648,400,000

(3) Highly successful - Outcome 3

On the same basis as the moderately successful Outcome 2:

$$270,000/1.125 = 240,000 \text{ units.}$$

The PV over 8 years is: $(240,000 \times £780 \times 8 \text{ years}) - £200\text{m} - £150\text{m} = £1,147.6\text{m}$

Tutorial note - Alternative approach

There is only one variable that is different between the moderately successful Outcome 2, and the highly successful Outcome 3 (ie volumes sold). The NPVs therefore are proportional. Thus, once the moderately successful Outcome 2's NPV has been determined, it is not necessary to use the long spreadsheet approach and perform detailed discount calculations to obtain the highly successful Outcome 3's NPV.

An alternative quick calculation of the NPV for the highly successful Outcome 3 is as a multiple of the NPV of the moderately successful Outcome 2. ie

$$£998.4\text{m} \times (270/180) - £350\text{m} = £1.147.6\text{m}$$

or

$$£998.4\text{m} \times (240/160) - £350\text{m} = £1.147.6\text{m}.$$

Overall expected NPV

The expected NPV at 1 July 2024 of the three outcomes is therefore:

$$(25\% \times -200) + (60\% \times 648.4\text{m}) + (15\% \times 1,147.6\text{m}) = \mathbf{£511.18\text{m}}$$

Earlier costs incurred on the R&D project are sunk costs and so are not relevant to the decision to continue.

Discussion

The R&D project gives an expected positive NPV of £511.18m. This would suggest that BB should continue with the R&D project in pure financial terms.

There are however a number of risks and possible hidden costs.

If failure of the R&D project means failure of the BB company, then there may be significant additional costs from the liquidation, eg the distressed sale of assets and foregoing of existing revenue streams from lithium-ion battery sales.

Delay in R&D is an additional risk to failure. Even if the R&D project succeeds, BB may be only the second fastest to market (or even later) and the projected benefits to BB may then be much smaller. Worse still, if the company which is first to market also has a first patent over the technology, then BB may now be legally unable to exploit its own development work on a commercial basis. Legal advice would be needed on the restrictions over BB of any prior patent by another company in the industry.

There may also be a financial risk to delay. The funds raised may be insufficient to finance an extended delay in R&D activities. Also, with a high discount rate of 17% pa, a significant delay will cause the NPV of revenues to be reduced substantially.

Expected values suggest a risk neutral approach. This is unlikely to be the case. Some of the shareholders, such as the private equity holders, may hold diversified portfolios but are nevertheless likely to be risk averse. More particularly, the shareholder/directors and individual shareholders are less likely to be diversified and may therefore be very risk averse, weighting possible downside losses much more than equivalent potential gains.

The high discount rate of 17% per annum does contain a risk weighting to compensate for risk aversion but it may not be the same for all shareholders and may not consider going concern risks.

A further risk is that the board's estimates of outcomes are too optimistic and, in reality, the cash flows and probable outcomes may be optimistic and not the best estimates currently available. Significant estimation uncertainties are not just in the development of the technology but also the forecast costs and revenues and the speed to market, not just of BB, but also of rival companies. The time horizon is up to 12 years into the future, which is a substantial period in any industry, but more so in a rapidly changing and developing industry like EV batteries.

Recommendation

There are significant risks in continuing with the solid-state battery R&D project. However, there are also significant risks with discontinuing solid-state R&D and leaving sole dependence on lithium-ion battery production. The current business model, comprising only lithium-ion battery production, appears to be

unsustainable. This is partly because of the global scarcity of natural resources required to build lithium-ion EV batteries: and partly because the development of a solid state battery by some company globally, is likely to make the lithium-ion battery largely obsolete for EV once solid-state batteries become established as the industry norm.

The fact that BB made significant progress last year and has patented a number of process innovations encourages continuation with the R&D project. This does not however necessarily mean continuation to become ultimately an independent solid-state battery producer (although this is possible). Alternatives exist over the next few years whereby, optimistically, BB could merge or be acquired by a larger EV producer or EV battery producer, perhaps with a wish to acquire the BB patents gained to date and any future BB patents as the R&D continues. This may give significant gains to BB shareholders. More pessimistically, the R&D project could be subject to continual periodic review and if success becomes unlikely, then withdrawal from the project may be possible before the £200m funding has all been spent.

A recommendation is therefore to continue with the R&D project, but subject to regular monitoring and review based on key time-based KPIs and assessment of competitor's projects (eg monitoring their filed patents).

Requirement 1.3: Offers of finance

Provider (status)	Type of finance	Price per share	Equity holding
PrivEqu (private equity)	Equity	£40 (£200m/5m)	33.3% (5m/15m)
Pleuron (car manufacturer – potential customer)	Equity (plus customer contract)	£42.11 (£200m/4.75m)	32.2% (4.75m/14.75m)
Lith-Ox (Mining company - potential supplier)	<ul style="list-style-type: none"> • Equity • Options • Debt 	£44.44 (£100m/2.25m)	18.4% (2.25m/12.25m)

All three providers are offering the £200m needed to finance the remainder of the R&D project.

PrivEqu

The full amount of finance of £200m is provided but, at £40, this is the lowest price per share of the three offers, as 5 million new shares are required. This is a substantial increase in share capital, adding 50% to the 10 million ordinary shares already in issue.

It would also be another private equity investor (in addition to TechInvest) in the corporate governance structure so there may be common interests and common voting. They would have a combined shareholding of 8 million ordinary shares, which is 53.33% of shareholder votes. Their interests (eg in an early exit route) may not be consistent with the interests of the other shareholders. A shareholder agreement may control their ability to take certain decisions (eg removal of directors).

In only asking for one director, PrivEqu and TechInvest would not control the board, but the new director may bring some new expertise.

Pleuron

Pleuron is asking for less shares than PrivEqu and is providing the same amount of finance. So, at £42.11, the price per share is higher.

The deal however has a key impact on corporate governance as four new directors are required, giving half the votes in board meetings. It is not clear why this is required, but retaining a casting vote for the CEO would retain board control for the existing shareholders, but only if they act together.

The four new directors may bring a range of new types of expertise.

In the year ending 30 June 2025, it is requiring supplies of solid-state batteries at a zero contribution. There may be some uncertainty as to how the contribution is calculated, but it could be that there is no loss no gain from this one-year arrangement. However, if BB is at, or near, full capacity for solid-state battery production in the year ending 30 June 2025, then there may be an opportunity cost from lost sales to other customers. This may mean not obtaining a foothold in the wider solid-state market.

In the long term, however, this arrangement may generate additional sales and contribution which might not be attained with the other two finance providers. Pleuron is incentivised to buy from BB as it benefits the value of its shareholding. Further sales seem probable as the investment by Pleuron in BB is likely to be strategic, rather than just financial.

Lith-Ox

Lith-Ox is offering the highest price per share, at £44.44, and the lowest shareholding. However, the value of this deal depends on whether the options will be exercised.

More information is needed to evaluate the consequences of the £100 million loan, particularly the interest rate that would apply.

The options are currently out-of-the-money, but the long vesting period up to 2030 means that if the R&D and subsequent production are successful, the options are likely to become in-the-money and exercised. There would then be further dilution of equity. On exercise, Lith-Ox's shareholding would increase by 250,000 shares, to 2.5 million, although an additional £12.5 million (250,000 x £50) would be raised.

Valuing the options at their fair value (eg using Black Scholes Merton model) would give a better idea of the Lith-Ox proposition.

Overall, this proposition protects Lith-Ox from downside risk by using debt, whilst enabling it to benefit from upside potential with the options.

BB's operational risk is lowered by giving it access to a new supplier of Lithium.

Recommendation

The Lith-Ox proposition seems favourable as: it is least threatening to corporate governance with the lowest shareholding, it provides the required finance and opens up a new source of supply for lithium.

Requirement 1.4: Financial reporting disclosures

Going concern disclosures

Tutorial Note - The new going concern standard, ISA (UK) 570, is not applicable for 2020 exams.

BB is a listed company and thus a PIE (Public Interest Entity) and it therefore needs to comply with the UK Corporate Governance Code and the regulations on going concern disclosure.

The 2018 UK Corporate Governance Code contains a provision requiring a 'viability statement'. The BB directors should explain in the annual report how they have assessed the prospects of the company, over what period they have done so and why they consider that period to be appropriate. The directors should state whether they have a reasonable expectation that the company will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, drawing attention to any qualifications or assumptions as necessary.

The period covered should be significantly longer than twelve months. The length of this period will be for the directors to decide, but it is likely to correlate with the time period of any budgets or financial forecasts that the company has prepared. The guidance emphasises the importance of identifying those risks that might threaten business sustainability.

Overall, the BB directors would consider the risk of failure of the solid-state R&D project as a material uncertainty as there is an estimated probability of 25% of the project failing which is significant and that this may directly impact going concern.

The length of period of the assessment will be for the BB board to decide, but it is likely to correlate with any budgets or financial forecasts that the company has prepared. BB's solid-state R&D planning horizon is clearly longer than 12 months and extends to the time when the success or failure of the solid-state R&D project can be determined.

Disclosure should therefore be made by BB in its annual report about the nature and impact of this solid-state R&D uncertainty relating and its impact on BB's ability to continue in operation.

IAS 10 also requires management to make an explicit assessment of the entity's ability to continue as a going concern by considering a number of financial, operating and other indicators.

In accordance with IAS 1, going concern should be disclosed as the basis for preparation. IAS 1 also requires that any material uncertainties with respect to going concern should be disclosed. For BB, this would include the nature, risks and progress of the R&D project and wider market and technological uncertainties.

Environmental impact and sustainability disclosures

Tutorial Note - The answer below is more detailed than necessary for full marks. A selection, for discussion, of the issues and sources of regulation and best practice would be sufficient for full marks.

Legal requirements and the Strategic Report

In the UK, the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013 require listed companies, such as BB, to report on environmental matters within the Strategic Report section of their Annual Report, to the extent that this environmental information is necessary for an understanding of the development, performance or position of the company's business.

The Report should include:

- The main trends and factors likely to affect the future development, performance and position of the company's business

- Information about environmental matters including the impact of the company's business on the environment.

The Report should also include information about BB's policies in relation to those matters and the effectiveness of those policies.

To help readers to understand the company's business, the Report should contain financial KPIs and, where appropriate, analysis using other KPIs including information relating to environmental matters. For BB, this might include the environmental benefits arising from the use of EV, but also those environmental impact issues arising from the manufacture of EV batteries and the use of scarce natural resources.

Greenhouse gas emissions disclosures

In conjunction with the general requirement for listed companies to include information about environmental matters in their business reviews, the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013 require that listed companies, such as BB, to report their annual greenhouse gas emissions in the directors' report.

This mandatory reporting requirement is important in the EV industry as a key factor for EV is zero emissions. However, the production of EV batteries leaves its own carbon footprint which needs to be measured and compared against the longer-term emissions saving from use of the batteries in EV. Such disclosures are therefore key evidence in justifying the business model and the existence of the industry.

Environmental issues are not confined within the normal financial reporting boundaries of an organisation or just to BB's UK production activity. For example, the impact of supply chain operations on the environment needs to be considered even if outside the UK. For BB, this includes sourcing, for example lithium and cobalt, in the most sustainable way which minimises harm to the environment.

Stakeholder pressure for environmental disclosures

In addition to legal requirements there is commonly pressure, particularly for listed companies as public interest entities such as BB, to become more socially responsible. This has come from stakeholder expectations including investors and the media who are paying closer attention to companies' social and environmental performance.

In the EV industry, where environmental responsibility is a key factor, there is also likely to be significant pressure for environmental disclosures from BB's customers.

Integrated reporting – sustainability and the six capitals

A key element of integrated reporting (IR) is its focus on business sustainability and the long-term success of businesses. By encouraging organisations to focus on their ability to create and sustain value over the longer term, IR should help the BB board take decisions which are sustainable and which ensure a more effective allocation of scarce resources.

IR requires an organisation to explain the outcomes of its performance in terms of six categories of capital: financial; manufactured; intellectual; human; social and relationship; and natural.

Using these six categories could provide BB with a more comprehensive framework for analysing its performance which includes environmental impact, than its current approach, which appears to focus predominantly on financial performance.

Natural capitals

The element of natural capitals is relevant to BB in its use of scarce natural resources of lithium and cobalt.

In incorporating the use of natural capitals into its business model BB should use and disclose the following key steps in the valuation process:

- Quantify resource use
- Understand how the resource use causes changes in the natural environment
- Value the impacts on people associated with these changes in the natural environment

UN Sustainable development goals

UN Sustainable Development Goals (SDGs) have become important in measuring the wider performance of businesses. Disclosing timely, reliable and relevant information will be central for achieving sustainable development goals.

For BB, the key disclosures will relate to the following SDGs:

7. Affordable and clean energy – Ensure access to affordable, reliable, sustainable and modern energy for all. Ensure there is heat, light and power for the whole planet, without destroying the planet. (BB is a key producer of clean power)

11. Sustainable cities and communities – Make cities and human settlements inclusive, safe, resilient and sustainable (reduction of admissions and reduction of the use of lithium-ion if the R&D solid state project is successful).

13. Climate action – Take urgent action to tackle climate change and its impacts (BB contributes to the production of zero emission vehicles).

The SDGs enable companies to report information on sustainable development performance using common indicators and shared sets of priorities.

The Global Reporting Initiative

The Global Reporting Initiative (GRI) is a reporting framework that aims to develop transparency, accountability, reporting and sustainable development. Its vision is that reporting on economic, environmental and social impact should become as routine and comparable as financial reporting. It also seeks to achieve as much standardisation as is possible in sustainability reporting by organisations. The GRI's G4 Sustainability Reporting Standards, published in 2016, emphasise the need for organisations to disclose their most critical impact on the environment, society and the economy.

For BB this is likely to mean disclosures relating to the risks of raw material usage (lithium and cobalt) but also the opportunities to reduce CO₂ emissions by being an effective element of the supply chain of its customers who produce zero emission EV.

Examiner's comments

Requirement 1a – Risks to future revenues

Answers were generally of a good standard with many candidates correctly evaluating the risks relating to future sales of lithium-ion batteries.

A significant minority of candidates did not use calculations to support their discussion on risks (either in a table or integrated within their narrative), when there was an obvious opportunity to include at least a few basic calculations, especially regarding the three main customers. As general advice, where there are numbers in the question, there should be numbers in candidates' answers. Most candidates who did include numbers, just tended to identify the percentage of total revenue contributed by each customer.

Weaker answers presented very generic, pre-prepared lists of risks, and did not discuss the specific information provided in the scenario, such as the small number of customers, the limited timescale of the contracts or the different risks each customer presented.

Weaker answers also strayed from the question in 1(a) and moved into supply chain issues. As a result, they were answering requirement 1(b) in 1(a), and then repeating the same points in 1(b). Alternatively, weaker answers tended to be very generic, by just identifying risks for BB as a whole, rather than focusing on the risks relating to the revenue of BB.

Most candidates suggested reasonable risk mitigants but, for weaker candidates, the mitigation factors were vague, such as "find more customers" or "hedge risk", without specifically stating how this could be achieved or recognising the problems in achieving these types of risk mitigation.

Requirement 1b – Risks relating to price and supply security for lithium

The first part of this requirement was generally answered well. Candidates used the facts in the scenario to highlight the risks of using a single supplier and considered the overall scarcity of supply. Answers were often detailed and displayed good application skills. Many noted the impact on the sustainability of business, given the limited supply.

Weaker candidates provided very short answers without describing the nature of the risk – e.g. 'they have monthly contracts' – without then going on to explain what the risk is or why this is a risk.

Another feature of weaker answers was the tendency to focus on foreign exchange risk without much consideration of the other risks such as a commodity price risk. Better answers considered a range of risks and how they interacted with each other.

Answers to the mitigation section showed some knowledge, but sometimes lacked application. The main approach was just to explain the difference between a long-term supply contract and a commodity forward contract, without then explaining the implications for the BB business. The higher scoring answers highlighted the certainty from the Lilley contract in contrast to the short time period of the commodity forward. The answers that considered the time horizons and the related currency risks demonstrated the higher-level skills expected. A feature of weaker answers was a failure to consider the relative time horizons of the two risk mitigation strategies.

Most, but far from all, candidates provided a justified recommendation.

Requirement 2 – R&D project

The calculation elements of this requirement were poorest answered parts of the exam. There were many errors, including;

- Ignoring the further costs associated with an outcome of R&D failure.

- Including the fixed costs of production, even where there would be no production.
- Failing to notice that the annual growth in revenue and money discount rate are equal, thereby avoiding the need for extended discounting calculations.
- Not producing an ENPV calculation.
- Ignoring the R&D failure in the ENPV calculation.
- Deducting the £200,000 R&D and £150,000 fixed production costs off the expected NPV calculation as well as deducting from the individual calculations.

In weaker answers, many calculations were disorganised, incorrect or incomplete.

The discussion of the benefits and risks of the R&D project was often good and many candidates scored well here. Weaker candidates made limited points, and sometimes the conclusion was limited to an assertion that 'NPV is positive so accept the project'. The weakest candidates omitted discussion altogether, providing only calculations.

Requirement 3 – Three finance offers

This requirement generated the highest standard of answers in this question. Some very good answers were produced with candidates discussing the price offered for shares, dilution of control and reference to models such as Black Scholes.

Weaker answers did not offer the depth of explanation expected and instead relied on very brief statements on share price, number of shares and thin discussions on debt v equity.

Weaker answers also did not consider the impact on corporate governance and this was a significant distinguishing feature between the three finance offers.

Another feature of weak answers was not to use, or even refer to, the numbers provided in the scenario (eg to determine the price being offered per share, or the percentage shareholdings). There were only limited numbers provided for this requirement, but they could have been used as pegs on which to hang the discussion.

Some answers were poorly structured and jumped between each of the three finance choices.

The best candidates were able to make judgements on, and draw comparisons between, the relative merits of the three offers and provided calculations as evidence, rather than just discussing and describing each finance method in isolation.

Requirement 4 – Going concern and environmental impact disclosures

Most candidates produced weak answers to this requirement.

One major issue seemed to be candidates not reading the question, or not answering the question. The question clearly asked candidates to 'explain the treatment in the annual report and financial statements....'. However, many chose to describe going concern in general terms and focus just on whether or not going concern was applicable. Whilst this was relevant, it was not sufficient.

Further weakness on going concern were:

- Undue emphasis on the auditing aspects of going concern, to the exclusion of management disclosures in the annual report.
- Failure to acknowledge that BB is a listed company and is therefore bound by the UK Corporate Governance Code and the additional going concern disclosure requirements for listed companies.

- Restriction of the going concern horizon to the next 12 months.
- Failure to link going concern issues with the scenario and particularly the R&D planning horizon.
- Generalised observations such as: “we need to see if the company will still be in business in 12 months’ time and if not, the accounts should be prepared on a break-up basis.’

Regarding sustainability, many answers were poor and failed to address the question. Frequently, candidates addressed environmental/sustainability policy; rather than environmental/sustainability disclosures in the annual report.

In an area of few detailed mandatory disclosure regulations, there was much that could be said on sources of guidance and best practice for environmental and sustainability disclosures. Coverage is provided in the learning materials, but only a minority of candidates cited more than one such source of guidance.

Better candidates referred to the ICAEW’s own reports on sustainability and environmental issues. It was good to see these trainee ACAs engaging with the ICAEW’s published materials on these important issues.

Question 2 – International Leisure Attractions plc (ILA)

Scenario

The scenario is a company which operates three large leisure parks, located in the UK, the US and India. The candidate works for a firm of ICAEW business advisors and assurance providers. The Indian park is small and fairly new, but the UK and US leisure parks are larger and well established.

ILA has performed poorly recently with a fall in visitor numbers and a decline in share price. Management accounts extracts and operating data are provided.

As part of the plan for recovery, a proposal is to open a new leisure park in Japan. To be able to do this, ILA needs a bank loan. Yokosata Bank has agreed to consider a loan application, but it requires cash flow forecasts, together with an assurance report. There are particular concerns over foreign currency risk for the Japanese project.

There are ethical concerns over the assurance report partly because the CEO is applying pressure for a favourable report.

Candidates are required to:

- (1) Analyse the financial performance and position of ILA and each of its three leisure parks, using the information provided.
- (2) Evaluate the proposal to open a new leisure park in Japan, including its financing. Include supporting calculations and reasoned advice.
- (3) Set out the key assurance procedures to be carried out by Perkins when assessing the reasonableness of each of the forecast cash receipts and payments and the underlying assumptions. Ignore ethical issues.
- (4) In respect of the proposed assurance engagement, including the comments by the chief executive, Harold (Exhibit 4):
 - Set out any ethical implications for Perkins and Harold.
 - Recommend actions that Perkins should take.
- (5) With respect to the proposed yen loan and currency forward contract (Exhibit 5):
 - Explain the foreign currency risk on the ¥32,000 million loan. Evaluate the extent to which the forward contract hedges the risk and respond to the comments of the production director.
 - Using the illustrative data, set out and explain the financial reporting treatment of these transactions in the financial statements of ILA for the year ending 30 June 2021.

Mark Grid

Requirements	Technical & Skills	Skills assessed
<p>(2.1) Analyse the financial performance and position of ILA and each of its three leisure parks, using the information provided.</p>	13	<ul style="list-style-type: none"> • Analyse and assimilate the data (eg a table) • Structure the data for each leisure park • Carry out data analysis to identify relevant key performance figures • Use judgement to identify key qualitative and quantitative issues in evaluating performance • Structure according to strategic, operating and financial issues • Demonstrate a clear understanding of key issues of the industry and the company and how they interrelate • Demonstrate a clear understanding of the impact of causal factors • Identify and explain relevant risks • Recognise constraint issues • Evaluate the differing nature and issues of each of the three leisure parks, identifying India as different • Provide reasoned recommendations
<p>(2.2) Evaluate the proposal to open a new leisure park in Japan, including its financing. Include supporting calculations and reasoned advice.</p>	8	<ul style="list-style-type: none"> • Analyse and assimilate the data performing NPV calculations • Analyse and assimilate the data to assess risk using sensitivity calculations • Use judgement to assess the significance of each of the risks • Assimilate information to explain the nature and consequences of the borrowing and liquidity issues • Evaluate financial and non-financial aspects of the loan agreement • Critically appraise the foreign currency issues relating to the loan • Provide reasoned recommendations on the continuation decision.

<p>(2.3) Set out the key assurance procedures to be carried out by Perkins when assessing the reasonableness of each of the forecast cash receipts and payments and the underlying assumptions. Ignore ethical issues.</p>	8	<ul style="list-style-type: none"> • Structure the response in a table identify the relevant assurance procedures for each cash flow (eg. a two-column approach) • Identify each of the revenue streams which will generate cash flows for which assurance is required. • Assimilate data to identify a wide scoping of future cash outflows relating to costs • Use judgement to identify assurance procedures appropriate to prospective information • Use judgement to identify assurance procedures appropriate to cash flows
<p>(2.4) In respect of the proposed assurance engagement, including the comments by the chief executive, Harold (Exhibit 4):</p> <ul style="list-style-type: none"> • Set out any ethical implications for Perkins and Harold. • Recommend actions that Perkins should take. 	7	<ul style="list-style-type: none"> • Use ethical language and principles • Identify intimidation, conflict of interest and self-interest as key ethical threats • Identify key ethical issues presenting a balanced approach to interpreting the facts and incentives • Identify issues for each party separately Set out the actions to be taken by relevant party
<p>(2.5) With respect to the proposed yen loan and currency forward contract (Exhibit 5):</p> <ul style="list-style-type: none"> • Explain the foreign currency risk on the ¥32,000 million loan. Evaluate the extent to which the forward contract hedges the risk and respond to the comments of the production director. • Using the illustrative data, set out and explain the financial reporting treatment of these transactions in the financial statements of ILA for the year ending 30 June 2021. 	8	<ul style="list-style-type: none"> • Assimilate information to explain the nature and consequences of the series of transactions • Assimilate data and provide calculations of the impact of the transactions • Critically appraise the working assumption • Demonstrate an understanding of the financial risks to which Contacta is exposed • Determine the most appropriate method of hedging • Identify and explain issues relating to foreign currency risk, including implications for operating cash flows • Explain the fair value movements under normal IFRS 9 rules do not result in a currency mismatch.
Maximum marks	44	

Requirement (2.1) – Performance and position**Visitor numbers**

Year	UK	US	India	Total	Change
2020	2,000,000	1,800,000	800,000	4,600,000	-4.76%
2019	2,120,000	1,830,000	880,000	4,830,000	3.65%
2018	2,150,000	1,810,000	700,000	4,660,000	1.75%
2017	2,200,000	1,780,000	600,000	4,580,000	

	UK	US	India	Total
Price	30	35	20	
Visitors	2,000,000	1,800,000	800,000	4,600,000
Attractions	100	80	50	
Revenue - attractions	60,000,000	63,000,000	16,000,000	139,000,000
Revenue - other	<u>24,000,000</u>	<u>25,200,000</u>	<u>6,400,000</u>	<u>55,600,000</u>
Total revenue	84,000,000	88,200,000	22,400,000	194,600,000
Annual fixed costs	65,000,000	66,000,000	22,000,000	153,000,000
Annual variable cost	7,200,000	7,560,000	1,920,000	16,680,000
Operating profit/(loss)	11,800,000	14,640,000	(1,520,000)	24,920,000
Fair value of PPE	220,000,000	250,000,000	140,000,000	610,000,000
Operating margin	14%	17%	-7%	13%
Revenue per visitor	42	49	28	42
Revenue per attraction	840,000	1,102,500	448,000	
ROCE	5.4%	5.9%	-1.1%	4.1%
Contribution	76,800,000	80,640,000	20,480,000	177,920,000

Strategic and operating performance

There has been a decline in visitor numbers at all three parks in 2020. This resulted in an overall decline in visitor numbers of 4.76% in 2020 compared with 2019. The decline in revenue from admissions to parks is 4.3%. Although prices were constant, the decline in revenue is not linear with visitor numbers as the ticket prices differ between the leisure parks and the extent of the reduction in visitor numbers also varied between the parks.

'Other revenue' streams (food and drink, retail and hotels) are highly correlated to the number of visitors and so the risk of all revenue streams is a function of the decline in visitor numbers.

The high fixed costs and low variable costs cause high operating gearing. This means there is increased risk in terms of high volatility of profits in response to changes in revenue. This is illustrated by the fact that operating profits have decreased by 24.3% ($1 - (24.92m/32.92m)$), even though sales revenues only decreased by 4.3%.

Overall, visitors for ILA rose by 3.65% in 2019 and by 1.75% in 2018. However, there was a decrease in visitor numbers in 2020. Whilst the fall in visitor numbers in 2020 affects all 3 parks and is therefore concerning, the longer-term pattern is less clear.

The largest fall is the **Indian park** which had a 9.1% reduction, but visitor numbers have risen in all previous years and the 2020 total is the second highest since it opened in 2017. The Indian park is the only park to generate an operating loss and it generates the lowest revenue per visitor and per attraction. There are therefore some serious current performance weaknesses and concerning future trends for the Indian park.

The **US park** shows no clear trend over the past four years, with small rises and falls, so the pattern and risks are less clear, unless 2020 is the start of a trend. In terms of 2020 performance, however, the US park generated the highest operating profit of £14.64m and also the highest operating margin of any park at 17%. In 2020, the US park also generated the highest revenue per visitor and per attraction.

The **UK park** has experienced a decline in visitor numbers over the four years of available data. This continued trend is a significant risk, as the UK is one of the two larger parks, and it therefore impacts significantly on the company as a whole. There is a risk that managed decline is the best that can be achieved for the UK park. However, whilst not matching the US park for performance in 2020, the UK park still has the highest visitor numbers. The UK park has a smaller asset base at £220m compared with £250m for the US park. Nevertheless, the US park had a better ROCE than the UK park, which allows for the different value of the asset base.

More needs to be known about pricing in previous years. Flexible pricing may be one response to falling demand.

In order to avoid managed decline, it appears from visitor surveys that more investment is needed in new attractions. This however brings its own risks in increased borrowing and more fixed costs.

A particular target for new investment is India which made operating losses in 2020. However, if the Indian venture fails, then this would put increased pressure on the other two sites, as there would be even less diversification. If some of the fixed costs for India are centrally allocated, then these may need to be covered in future by the UK and US parks. Overall, the risk of failure of the Indian park could be a risk to the whole company. On a positive note, the Indian venture is making a significant positive contribution, before fixed costs, which would mitigate against closure.

Overall, a clearer idea of why sales have fallen at all three locations in 2020 is key to understanding the risks and reversing the decline.

Industry factors

There are external risks to performance from the industry. This could be from a decline in the industry in terms of social tastes, in favour of spending on other types of leisure activity. There is some diversification of tastes across several different cultures but there remains risk, even from a decline in one major park. Also, some culture changes may be international.

Conversely industry factors may come from increased competitiveness within the industry. This could be new entrants who may draw demand away from ILA.

Other factors could be increased costs, for example from health and safety regulations for the industry.

Financial position

ILA has high borrowing and therefore high financial gearing in relation to PPE (debt/PPE) at 54% (£330m/£610m) in 2020 and 52% (£330m/£630m) in 2019.

Gearing could also be calculated in market value terms at the debt/equity at 183% (£330m/(80m x £2.25)) in 2020.

Alternatively expressed as debt/(debt + equity) at 64.7% (£330m/((80m x £2.25) + £330m)).

If share price falls further when earnings are announced, then market value based gearing will increase to an even higher level.

Interest cover is 2.7 times (£24.92m/(£330m x 2.8%)) which appears reasonable based on existing debt levels and interest payments.

The high financial gearing makes profit after interest more volatile and risky. In combination with high operating gearing, profit is very sensitive to changes in revenues, which themselves are becoming more volatile.

High borrowing also reduces debt capacity for further borrowing. This has already been demonstrated by ILA's inability to raise new debt on reasonable terms in the UK and the US.

The inability to borrow puts a strain on liquidity with the reduction in operating cash flows and the need for new investment. This reduces financial flexibility.

This may also create insolvency risk if sales continue to decline.

Other concerns include covenants on existing loans, which may restrict new borrowing but also, if breached, may require immediate payment out of cash that ILA does not have and may not be able to access.

Even if covenants are not breached, the existing loans become repayable in 2028, so a clear financial plan is needed if the bank will not roll over these loans.

Foreign exchange movements create a further source of volatility as, even if underlying prices and visitor volumes in the US and Indian parks remain constant, there may still be volatility in £ sterling values.

Requirement (2.2) – New Japanese leisure park

Strategy

Based on the forecasts provided, the annual operating cash flows will be:

$$(\text{¥}10,000\text{m} + \text{¥}4,000\text{m} - \text{¥}1,200\text{m} - \text{¥}8,450\text{m}) = \text{¥}4,350\text{m}$$

At a 10% discount rate, the NPV at 30 June 2021 (with year-end cash flows) would be:

$$(\text{¥}4,350\text{m}/0.1)/1.1 - \text{¥}26,000\text{m} = \text{¥}13,545\text{m}$$

Note: strictly the cash inflows need to be discounted a further 3 months (from 30 June 2021 to 1 April 2021) so:

$$\{(\text{¥}4,350\text{m}/0.1)/1.1\}/(1.10^{1/4}) - \text{¥}26,000\text{m} = \text{¥}12,614\text{m}$$

This is a significant positive NPV, but the CEO admits that the forecasts are optimistic rather than neutral.

While the NPVs are positive using the management forecasts, there remain a number of concerns and risks with the Japanese project.

This is a new venture in an unknown geographical market. As such, the risks and uncertainties relating to the forecasts are high. In this respect, the key risk appears to be the visitor numbers, as this is the main revenue stream and other revenue streams are dependent on this.

While there is a working assumption that visitor numbers remain constant after the first three years, this does not mean that ticket prices or costs will remain the same. Both are likely to rise.

Particular risk issues are:

- Validity of market research
- Competitor analysis, including response of competitors to the ILA new market entrant
- Human resources - new language and culture than existing parks mean may not be able to replicate existing business model. Significant local recruitment is needed.

Cost estimates are also at risk eg cost and/or time over-runs on initial building and FOREX risks.

Borrowing and liquidity risks

The Japanese project is entirely debt finance, with no input of cash from equity or from existing cash balances. The amount borrowed is significant for the scale of the company.

The additional borrowing required for the Japan leisure park increases overall debt and therefore reduces further ILA's already constrained debt capacity. The ability to borrow additional funds in the foreseeable future seems remote.

Also, the additional debt is borrowings of the company, not of the project, so ILA's financial gearing and financial risk increases significantly given the scale of the project.

In addition to the amount of new debt, the required interest payments will further affect liquidity as a draw on cash flows. At the assumed exchange rate, the annual interest payments on the Japanese

leisure park element of the loan are: £5m (¥26,000m x 2.5% /130). This is a significant proportion of operating profit.

The loan is in yen and so is matched against yen receipts. It therefore reduces foreign currency risk but only after the park opens and revenues commence.

Non-financial terms of the loan are likely to create further risks. They will include covenants which may be restrictive and reduce financial flexibility.

The security on the loan does not just relate to assets located in Japan (with a fixed charge) but also ILA's assets elsewhere (with a floating charge). A third strand of security is securitisation over ILA's future Japanese revenues. This gives Yokosata rights over the future revenue streams from the Japanese leisure park for ten years to repay the loan interest and principal.

Conclusion

There is a high positive NPV for the project which suggests acceptance on financial grounds. However, this conclusion is based on the working assumptions which have short-term uncertainty relating to construction costs, medium-term uncertainty over the first three years' revenues and even greater uncertainty in terms of longer-term projections and business sustainability.

Wider considerations such as liquidity and risk also need to be considered given the inability of ILA to access finance. This is particularly the case if costs overrun on the construction project.

To reduce uncertainty, the robustness of the assumptions need to be stress tested with sensitivity analysis and more market research. Liquidity risk could also be reduced by leaving the excess ¥6,000m borrowing on deposit until the Japanese park construction is completed in case there are over-runs. Only once construction is complete, should it be considered spending the money on developing the Indian park.

Assuming further marketing research results giving assurance over the working assumptions, the recommendation is to accept the project.

Requirement (2.3) - Assurance

Cash flow	Assurance procedures
Loan from bank	<ul style="list-style-type: none"> • Review documentation from the bank and legal documentation to determine the terms of the loan and the future cash flow interest and principal repayments. • Evaluate whether the amount of the loan should be sufficient to fund the expansion and permit ILA to pay its other debts as they fall due.
Initial cost of project	<ul style="list-style-type: none"> • Assess estimates from builders and other suppliers. • Consider documentation from land and property valuers as to likely costs. • Examine draft contracts in place (assess if a fixed price contract). • Examine costs against recent costs incurred at other parks to the extent they are similar (eg common global supplier of rides).

	<ul style="list-style-type: none"> Review professional fees for reasonableness such as architects, lawyers and accountants.
Receipts from visitor tickets	<ul style="list-style-type: none"> Appraise market research undertaken. Compare initial attendance at other parks. Review pricing policy against competitors. Assess feasibility of future growth against experience elsewhere in other parks (ILA and other external Japanese parks). Consider potential for any advanced sales of tickets. Consider the impact of seasonality. Review daily projections of visitors against park's capacity.
Staffing costs	<ul style="list-style-type: none"> Review staffing cost forecasts for consistency with projected number of visitors and staffing requirements at other parks. Review salary increases expected over time based on assumptions of wage increases and staffing numbers. Other parks may provide a benchmark. Evaluate assumptions by comparing with local employment law, including minimum wage requirements.
Food costs and prices	<ul style="list-style-type: none"> Review food cost and price forecasts for consistency with projected number of visitors, prices in Japan and experience at other parks. Evaluate assumptions for food and other wastage and ensure that these are reasonable and in line with other parks, taking into account any Japanese regulations about food storage.
Hotel costs and prices	<ul style="list-style-type: none"> Review revenue and cost forecasts for consistency with projected number of visitors. Compare occupancy projections with experience at other parks and normal levels in Japan. Compare prices with local hotels just outside leisure park. Review land availability and planning permission for building more hotels just outside leisure park. Review for consistency with hotel costs and revenues at other similar parks (ILA's parks and externally owned parks in Japan).
Other costs	<ul style="list-style-type: none"> Review whether all other cash costs have been included at reasonable amounts (eg maintenance, asset replacements, asset disposals, utilities, training, health and safety, administration, incremental central costs).
Tax	<ul style="list-style-type: none"> Review for consistency with forecast taxable profit and Japanese corporate tax rates.
Sensitivity analysis	<ul style="list-style-type: none"> Review forecast revenues and costs for sensitivity to changes in key assumptions.

Analytical procedures	<ul style="list-style-type: none"> • Review key margins and ratios for reasonableness. • Review daily, weekly, monthly patterns of forecast visitor numbers against experience and benchmarks elsewhere (internal and external).
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Requirement (2.4) Ethics

Assurance and non-assurance work

Perkins is being asked to carry out two elements in the engagement: (i) advisory work (ii) assurance work.

There are potential threats to our independence in the assurance engagement arising from the advisory work. These are a self-interest threat and a self-review threat.

A self-interest threat may arise if the fees from the non-audit element of the ILA engagement is substantial and likely to occur on a regular basis as this could lead to a perceived or actual loss of independence/objectivity.

There is also a self-review threat in that the work advising on risks, the Japanese project and the currency forward hedging may then be reviewed as part of the assurance report on the cash flow forecasts.

Actions

Those charged with governance should be kept informed of the position regarding fees and Perkins' independence particularly as ILA is a listed company.

Use different teams for assurance engagement and advisory work.

Seek input from Yokosata bank about whether it is happy for Perkins to perform the work in full knowledge of other work being carried out.

Seek advice from the ethics partner.

Consider rejecting the assurance work if Perkins' ethics partner and those charged with governance are not satisfied that the safeguards are sufficient.

Comments of chief executive

There is a possible intimidation threat by the CEO in exerting pressure on Perkins to provide a favourable assurance opinion. The 'threat' is implied rather than direct. It does not seek directly to suggest adverse consequences or benefits for Perkins. Rather, it is seeking to pressurise Perkins using the possible adverse social consequences to others (eg low income employees in India) which may arise from an unfavourable report. To the extent that it is implied that ILA may fail ('serious financial distress') there is an implied threat that Perkins would not be able to benefit from future fees if ILA fails.

Objectivity is a key ethical principle that applies to assurance engagements as much as to statutory audit. The pressure in this case for a favourable assurance report is particularly inappropriate as the CEO has admitted that 'the three-year forecasts are at the high end of the acceptable range' and therefore have inbuilt bias. The further assertion that the forecasts are within the acceptable range needs to be treated

with professional scepticism given the benefits, and therefore self-interest to ILA and the CEO, that could arise from a favourable report. Evidence from the assurance engagement needs to test the reasonableness of the assumptions and forecasts.

The assurance report may be able to support an acceptable range of forecasts and comment on where the management's estimates sit within that range. Perkins may be able to highlight to Yokosata bank that the estimates are towards the top of an acceptable range (if that is their opinion based on the evidence gathered).

The fact that Perkins has been asked to produce a 'favourable' report may lead to questioning management integrity and whether we wish to act for this client.

It is not the purpose of the assurance report to provide: "support for the full ¥32,000 million loan". It is to provide assurance over the reasonableness of the assumptions underlying the forecasts. It is for the Yokosata Bank to determine the appropriate amount of the loan.

Only limited assurance can ever be provided for prospective financial information in accordance with ISAE 3400. Reasonable assurance can never be given for forecast information.

Actions

The assurance engagement should only be accepted on the basis that an objective conclusion will be given based on appropriate evidence gathered from the assurance procedures. This should be transparent to all concerned prior to acceptance of the engagement.

An engagement letter should be agreed with those charged with governance, if it is decided to continue with this engagement on reasonable ethical grounds. This should make clear the nature of the assurance processes, the limitations of the procedures and the form of the conclusion. It should be made clear that only limited assurance can be provided in the form of a negatively expressed opinion in accordance with ISAE 3400.

Requirement (2.5) – Currency forward

Hedging effectiveness

The currency forward hedge attempts to reduce foreign currency risk arising from ¥6,000m of the yen loan in relation to the £ which is the functional currency. In hedging this relationship, it would be largely effective based on the illustrative data. The yen has strengthened, increasing the ¥6,000m element of loan liability by £3.85m (see below) but there has been a corresponding increase in the fair value of the forward contract which has become a financial asset with a fair value of £3.73m, creating a gain of the same amount. There is an ineffective element of £0.12m, but this is small.

The question arises as to whether the correct currency relationship has been hedged. The ¥6,000m excess element of the loan is being invested in India, not in the UK, so the production director is arguing that this should be the hedge (yen/rupee). This argument has some merit if we are matching currencies on a transaction by transaction basis (see below).

However, a weakness of the above analysis is that it attempts to hedge individual transactions. A better approach would be to consider the net movements and balances on all ILA's foreign currency activities and then attempt to hedge these. Given that no previous activities have been in Japan, a no hedging

policy would leave open the yen exposure for the full ¥32,000m from the date of receiving the loan, up to the commencement of expenditure on construction or receipts from revenues.

Production director comment

The argument that a currency forward for ¥6,000m is not necessary has been put forward by the production director

It is reasonable that the currency forward contract is unnecessary as there is a much simpler solution. All that is needed on receipt of the ¥6,000m cash from the loan is to convert to £s (or to rupee) immediately on receipt.

The production director may also have made the argument on the basis that the expected revenues to be generated in yen would exceed interest costs and so there is natural hedging. This argument has merit once the park is open and generating revenues, but there is a time gap between taking out the loan and when the park opens, or construction expenditure begins, during which there is a potential yen exposure on the full ¥32,000m and interest payments without matching yen revenues.

Financial reporting treatment

The loan is denominated in yen and is a monetary financial liability that will be retranslated in accordance with IAS 21 at each reporting date using the £/¥ closing exchange rate as follows:

	1 April 2021	30 June 2021
Fair value of loan (in ¥)	¥32,000m	¥32,000m
Fair value of ¥6,000m element of loan (in £)	£46.15m	£50.0m
Fair value of forward (on ¥6,000m)	0	£3.73m
£/¥ exchange rate	£1 = ¥130	£1 = ¥120

As the £ is assumed to have depreciated against the yen during the 3-month period 1 April 2021 to 30 June 2021, the fair value of the ¥6,000m element of the loan being hedged (expressed in £s) increased, resulting in a foreign exchange loss of **£3.85m**.

Workings

$$(\text{¥}6,000\text{m}/130) - (\text{¥}6,000\text{m}/120) = (\text{£}46.15\text{m} - \text{£}50\text{m}) = \text{£}3.85\text{m (loss)}$$

The fair value of the currency forward contract has increased from nil at inception to an asset of £3.73m (gain)

ILA has constructed a currency hedge by entering into the currency forward agreement and the gains/losses on the forward should offset the majority of any future losses/gains on the loan from movements in the £/yen foreign exchange rate.

ILA measures its loan liability using the closing exchange rate and the currency forward is a derivative measured at fair value through profit or loss (FVTPL). As a result, the fair value movement match under normal IFRS 9 measurement rule and there is no accounting mismatch. Hedge accounting is not

therefore required for the gains and losses on the hedged item and hedged instrument to be reflected in the statement of profit or loss in the same period.

The journal entries to recognise the currency forward are:

Dr	Financial asset	£3.73m
Cr	Profit or loss – gain in fair value of derivative	£3.73m

The hedge is clearly, but not perfectly, effective.

¥26,000m element of the loan

Additionally, there will be a further unhedged foreign currency exchange loss of £16.667m $[(¥26,000m)/130) - (¥26,000m/120)]$. This will be a foreign exchange loss on monetary liabilities recognised through profit or loss.

Examiner's comments

Requirement 1 – Performance and position

Most candidates provided a good analysis of performance to calculate key ratios using the data provided in the question.

The discussion was generally of a good standard. Many candidates were able to identify some causal links and identify the interrelationships between the various income streams and their mutual dependence on visitor numbers.

Most candidates offered explanations on how fixed costs had affected profits and related this to the overall decline in visitor numbers. There was however very little discussion of wider factors such as industry and market trends.

The financial position discussion was less detailed than financial performance and, in many cases, amounted to little more than a comment on gearing and concern over ILA's ability to borrow.

The weakest answers attempted to address this requirement using only calculations, with little or no discussion. Conversely, other weak answers presented only discussion with few, if any, numbers.

Requirement 2 – Japanese project

Many candidates made this requirement more difficult than it needed to be by spending time discounting full cash inflows and outflows. Using a perpetuity and making adjustments would have been a much quicker and more reliable approach, than extended annual discount calculations.

A reasonable number of candidates were able to calculate the ¥4,350m annual cash flow, but then failed to discount correctly and/or deduct the ¥26,000m. The most common error was to translate all of the figures before calculating the NPV which then caused errors.

The narrative evaluation of the proposal received a mixed response. Strong candidates made insightful comments on both the strategic and financing issues. Weaker candidates did not make any comments on the financing arrangement. The very weakest answers presented no discussion at all.

Requirement 3 – Assurance

Answers to this requirement were generally disappointing. Unfortunately, a large number of candidates did not answer the question set. The question clearly asks for key audit procedures. Instead, many candidates spent a long time discussing the risks faced by ILA without giving any audit procedures, or generally discussed the objectives of the audit work with such phrases as “make sure that...”, without stating the audit procedures by which this objective would be achieved. Some candidates who did present audit procedures presented a pre-prepared list of general due diligence work, rather than discussing key audit procedures for the engagement in this scenario.

Requirement 4 – Ethics

There were some good answers to this requirement, many linked to ISAE 3400.

The poorer answers adopted a transparency, fairness and effect approach which did not go into the detail of: other ethical principles, such as self-interest; the comments of the CEO; or the subsequent actions.

A majority of candidates raised issues of intimidation and objectivity and provided sensible actions to address these issues.

Few candidates identified the issue of a potential conflict of interest related to providing both assurance and advisory work.

Requirement 5 – Currency forward

This requirement was the weakest answer for this question.

Only some candidates discussed the ¥6,000m and ¥26,000m elements of the loan – most only discussed the ¥6,000m.

Only a minority of candidates discussed the comments of the production director, even though they were explicitly asked for in the requirement.

With regards to risk, a lot of answers were generic in nature and discussed the general FOREX risks of transaction, translation and economic. More specific answers to the risks in this scenario were needed.

With regards to the financial reporting treatment, only a small number mentioned translation of monetary items. The vast majority spent a lot of time discussing hedge accounting even though this was not relevant, as there was no accounting mismatch. Some wasted time on unnecessarily discussing differentiating between a cash flow hedge and fair value hedge.