

November 2022 and February 2023

Strategic Case Study

CGMA Professional Qualification

Full post exam support materials

Below is the full post-exam supporting material for the strategic case study exam.

Pre-seen material

November 2022 and February 2023 Strategic Case Study pre-seen can be found [here](#)

Examiner's report

The November 2022 and February 2023 examiner's report can be found [here](#)

Exam variants

- Variant 1 can be accessed [here](#)
- Variant 2 can be accessed [here](#)
- Variant 3 can be accessed [here](#)
- Variant 4 can be accessed [here](#)
- Variant 5 can be accessed [here](#)
- Variant 6 can be accessed [here](#)

Suggested solutions

- Suggested solutions for variant 1 can be accessed [here](#)
- Suggested solutions for variant 2 can be accessed [here](#)
- Suggested solutions for variant 3 can be accessed [here](#)
- Suggested solutions for variant 4 can be accessed [here](#)
- Suggested solutions for variant 5 can be accessed [here](#)
- Suggested solutions for variant 6 can be accessed [here](#)

Marking Guidance

- Marking guidance for variant 1 can be accessed [here](#)
- Marking guidance for variant 2 can be accessed [here](#)
- Marking guidance for variant 3 can be accessed [here](#)
- Marking guidance for variant 4 can be accessed [here](#)
- Marking guidance for variant 5 can be accessed [here](#)
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If you need any further information please contact us [here](#)

Strategic Case Study Examination
November 2022 – February 2023
Pre-seen material



Context Statement

We are aware that there has been, and remains, a significant amount of change globally. To assist with clarity and fairness, we do not expect students to factor these changes in when responding to, or preparing for, case studies. This pre-seen, and its associated exams (while aiming to reflect real life), are set in a context where current and on-going global issues have not had an impact.

Remember, marks in the exam will be awarded for valid arguments that are relevant to the question asked. Answers that make relevant references to current affairs will, of course, be marked on their merits.

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Introduction

Hottayr is a quoted company that manufactures domestic heating products, mainly gas boilers and air source heat pumps.

You are a senior manager in Hottayr's finance function. You report directly to the Board and advise on special projects and strategic matters.

Hottayr is based in Norland, a developed country that has an active and well-regulated stock exchange. Norland's currency is the N\$. Norland requires companies to prepare their financial statements in accordance with International Financial Reporting Standards (IFRS).

Domestic central heating systems

Heating systems are necessary to keep rooms at comfortable temperatures and to prevent dampness caused by condensation.

Most dwellings in countries that have cold weather for a significant part of the year have central heating systems. These use a central heat source, such as a boiler or heat pump, to heat water that is then pumped round the dwelling in order to heat each room.

Traditional combustion-based boilers



Gas boilers are popular in countries that have mains gas, usually natural gas, piped to individual dwellings. Gas is an efficient fuel that is used to power central heating boilers, for cooking and to heat water for bathing and cleaning.

A gas-powered boiler is connected to the dwelling's gas and cold-water supplies. The boiler heats water by burning gas. The hot water is then either pumped round the dwelling to heat radiators or it can be used as hot water for baths, showers and washing.

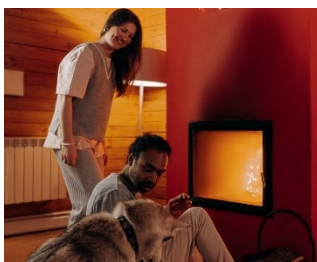
Most countries impose strict regulations to ensure the safety of gas boilers. The boilers themselves must meet safety standards, and they must be installed and maintained by qualified plumbers to ensure that there can be no gas leaks.

Domestic gas boilers are generally designed to have relatively little need for controls that require users to make any adjustments once they have been installed and switched on. Consumers must buy separate controllers that combine thermostats and clocks to manage heat output and the availability of hot water. Thermostats can vary in sophistication from basic mechanical devices to electronic devices that can be operated by smartphones.



Gas boilers can be powered using liquid petroleum gas (LPG) that is stored outdoors in a tank and piped into the dwelling as required. The tank is replenished by a tanker vehicle.

Some dwellings use oil-fired boilers. Those require a similar arrangement to LPG systems, with a tank containing heating oil located in the garden and an oil burning boiler used to heat water in the home.



Woodburning stoves can be used as a heat source for central heating systems. Householders burn logs that provide radiant heat within the room. Pipes at the back of the stove heat water that is then used to heat other rooms in the same manner as for gas and oil burning boilers.

The wood that is burned in woodburning stoves is a renewable energy source, making them more environmentally friendly than gas or oil powered boilers. Nevertheless, all heat sources that rely on combustion release carbon into the atmosphere.

Distributing heat around the home

A network of pipes, made from either copper or plastic, carries hot water from the boiler to each room in the dwelling that is to be heated.

The most popular method of heating a room is to install one or more radiators. Radiators are metal pipes that are designed to transfer heat from the hot water that flows through them into the surrounding air. That release of heat energy warms the room, cooling the hot water in the process. The water carries on through the pipes to the next radiator, where further heat is released.



Central heating systems are designed to ensure that every room is heated to a satisfactory extent. Boilers come in different capacities, with more powerful boilers producing more hot water, which enables them to provide heat across larger houses. Larger radiators release more heat energy and so can heat a larger volume of air. Larger rooms require larger radiators, or perhaps multiple radiators.

Radiators are usually fitted with thermostats. Those can be used to regulate the amount of heat that is released into any given room and so prevents uncomfortably high temperatures.



Underfloor heating is an alternative to radiators. Hot water from the boiler is piped from room to room. Plastic pipes are set into the concrete floor in a zigzag design that enables heat to be released, creating an even heat across the whole room and avoiding the need to install radiators on the walls of the room.

The pipes are embedded in the floor and so they cannot be seen, and they can be walked across without causing any damage. The floor can be covered with any conventional floor covering, although carpets tend to act as insulators and so reduce the effect of the heat flow.

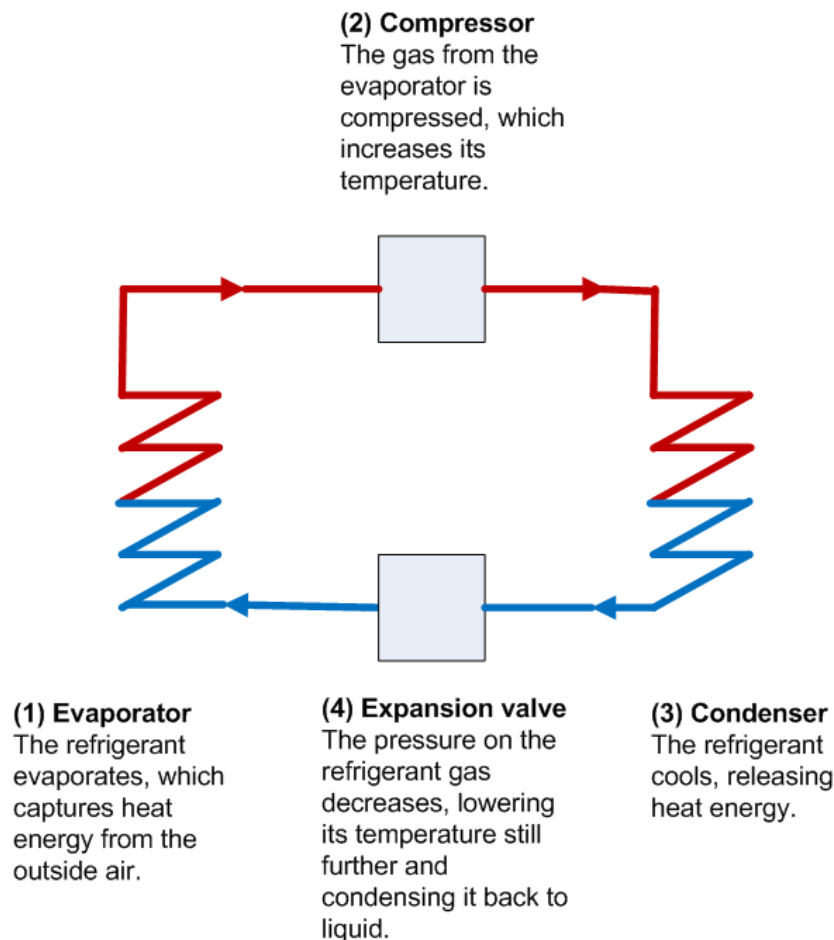
Heat pumps

Heat pumps capture heat energy from a source and release it elsewhere. The source may be cooler than the destination. There are several different applications of this technology:

- Refrigerators and freezers use heat pumps to capture heat energy from the interior of the appliance and move it to the exterior. Doing so reduces the temperature inside the appliance and so helps to keep food fresh or to chill drinks. If the heat pump was switched off, then the higher temperature in the room would lead to heat energy flowing back into the cooler interior of the refrigerator or freezer until it reached room temperature.
- Air conditioners use the same principle to take heat energy from a room that is uncomfortably warm and then release that energy outside. The room becomes cooler and more comfortable while the device is in operation.
- Heat pumps can be used to capture heat energy that can be used in central heating systems. Heat energy is captured from outside a building and is released inside to make the interior warmer.

Heat pumps do not create heat energy, they simply move it from one place to another.

The technology required to create an effective heat pump relies on a number of physical laws. These are illustrated in the following diagram.



Heat pumps rely on a volatile liquid called a “refrigerant”, which is trapped inside a pipe. The refrigerant is pumped round the pipe in a continuous cycle:

- (1) The evaporator is a section of pipe that has been twisted into a coil or a zigzag shape to increase its area. It is used to capture heat energy.

Heat pumps generally use Hydrofluorocarbons (HFCs) as refrigerants. These boil at very low temperatures, sometimes as low as minus 20 degrees Celsius. When liquids boil, they evaporate into gas, which captures heat. The refrigerant is warmer when it leaves the evaporator than it was when it entered.

- (2) The compressor increases the pressure of the gas, which further increases its temperature. The refrigerant is now hot enough to be useful as a heat source.
- (3) The condenser is a further coil or zigzag of piping that allows the refrigerant gas to cool and so release its heat energy. In central heating systems, the condenser is used to heat water that can then be pumped to a hot water tank for washing or to radiators or underfloor heating pipes.
- (4) The expansion valve reduces the pressure on the refrigerant gas. Decreasing pressure cools the gas, which releases still more heat. The refrigerant can then be returned to the evaporator.

There is a constant flow of refrigerant through the heat pump, so there is a constant cycle of heat being captured and released. The flow is driven by electrical pumps.

Heat pumps also contain a variety of sensors that can be used to optimise the operation of the device. Valves and other components within the heat pumps can be controlled by

electronics connected to those sensors to improve heat output or reduce electricity consumption.

Heat pumps in central heating systems

Heat pumps are alternatives to boilers as heat sources for central heating systems. A heat pump's evaporator can be located outside of a building, where it will capture heat energy even during cold weather.

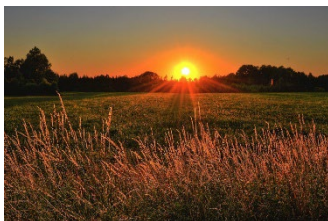


The condenser and expansion valve are located inside the home, with pipes installed through the wall to carry the refrigerant around the system.

Some heat pumps can reverse the flow of heat, which means that they can be used to heat a building during winter and cool it down in summer. That is potentially attractive to consumers in countries that have wide temperature variations between seasons.

Heat pumps do not need electricity to create heat energy, but they depend on a number of electrical components in their operation. These include the compressor, the circulator pump used to maintain the flow of refrigerant and fans or pumps that help with the circulation of air or water round the evaporator and condenser. In cold climates, it may also be necessary to use electricity to heat mechanisms located outdoors to prevent them from icing up.

Heat pumps cost less to run than traditional boilers, despite their need to consume electrical power. Typically, a heat pump can deliver 3 kilowatts of heat energy for every kilowatt of electricity consumed. Unfortunately, heat pumps cost more to buy and install. An air source heat pump will cost roughly five times more than an equivalent gas boiler and a ground source heat pump can be even more expensive.



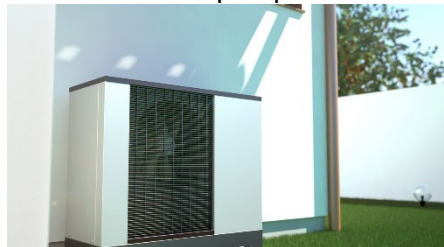
Heat pumps capture heat energy from the environment that is supplied by the sun. There is no combustion and so no carbon emission.

Care must be taken in the installation, maintenance and replacement of heat pumps to ensure that the refrigerant is not accidentally released. Refrigerants harm the environment by causing global warming if they are allowed to escape into the

atmosphere. It is, however, possible to drain the refrigerant from old heat pumps into sealed tanks for reuse or safe disposal.

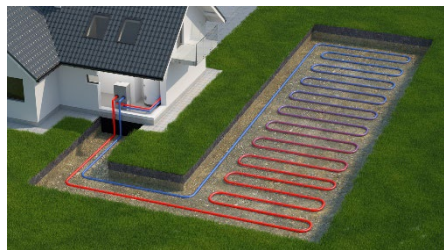
Heat pumps can capture energy from outside in almost any weather, although they become less efficient at lower temperatures. In practice, a heat pump can supply a central heating system with sufficient heat energy when outside temperatures are as low as minus 15 degrees Celsius. That is rarely a problem in many countries, including Norland, because it is seldom that cold.

Air source heat pumps collect heat energy from air as it passes over the evaporator. This is the simplest type of heat pump for use in heating systems, and it is the most popular. The evaporator is enclosed in a housing, along with a fan that draws air into the apparatus. The condenser and the other components are enclosed in another housing that is inside the house and is connected to the central heating and hot water systems. Refrigerant flows between the interior and exterior housings using pipes that run through the wall.



Air source heat pumps have the drawback of being exposed to variable air temperatures, which change with the weather and so affects their efficiency. They are, however, relatively easy to install. The interior workings of a heat pump that is being installed in place of a gas boiler can be fitted in place of the boiler that is to be removed. The exterior housing also remains accessible for any repairs in the event of a breakdown or leak.

Ground source heat pumps are an alternative to air source. Those use the same principle as air source pumps, except that the evaporator is placed underground or is submerged in a body of water. The evaporator then captures heat energy from the surrounding earth or liquid in the same way as an air source device. The temperature around the evaporator is less severely affected by changing weather conditions, and so it is more efficient than the air source equivalent.



The need to bury the evaporator can complicate the installation of a ground source heat pump compared to an air source pump. The evaporator must be several feet below ground in order to capture heat energy efficiently and also to be protected from damage. Not all homes will have a suitable outdoor space in which to install the evaporator. Ground source heat pumps require the same equipment to be installed inside the house as air source pumps, so there is no difference to the installation inside the house.



One disadvantage of all heat pumps, both air source and ground source, is that they produce hot water that is cooler than the water from a boiler. The difference is roughly 10 degrees for air source heat pumps and a little less for ground source. In either case, that can mean that a central heating system based on a heat pump will struggle to raise the room temperature to a comfortable level. That problem can be solved by using larger radiators than for a traditional boiler-based system or by installing underfloor heating when installing a heat pump. Either option will provide a larger surface area for the transfer of heat, although the cost of doing so could discourage many homeowners from replacing their gas boilers with heat pumps. It is easier to install heating systems based on heat

pumps in new homes because they can be built with larger radiators or underfloor heating pipes in place.

Alternative heating systems

There are alternatives to boilers and heat pumps when powering central heating systems.



Solar thermal panels can be used to capture heat from sunlight to heat water. The panels contain pipes filled with water. The glass helps to focus the sunlight on the pipes and the water heats up before being piped to a hot water tank.

Solar panels are simpler than heat pumps, but they rely on sunlight to heat water. No energy can be collected during hours of darkness and the panels will be less effective when skies are cloudy.

Photovoltaic solar panels use a different technology to convert sunlight into electricity.

Both types of solar panel require homeowners to have a suitable location for an array of panels. They are usually mounted on a rooftop. In the northern hemisphere, it would be ideal if that rooftop was facing south in order to maximise exposure to sunlight throughout the day.

District heat is a communal heating system that is usually provided by city governments that have access to biomass fuel than can be burned to create heat. Biomass takes a variety of forms, including waste forestry wood, agricultural residue such as wheat stalks and even household waste. A large biomass boiler heats water that is pumped to individual homes in surrounding buildings.

District heat systems involve combustion, so they cause carbon emissions. They are, however, generally more efficient than having separate heat sources in individual dwellings. This technology tends to be popular in locations that can offer cheap fuel from nearby sources. For example, a city with a large commercial forestry on its outskirts will have a ready supply of combustible material that would otherwise be dumped.



Electric heaters can be freestanding or wall-mounted. In either case, they are connected to the household electricity supply. The flow of electricity through wiring that has a high resistance creates heat.

Electric heaters were popular before central heating became popular. They are easy to install in any room. They are also flexible because heaters can be switched on and off in different rooms, in line with occupants' needs.

These heaters offer convenience but are relatively expensive to operate.

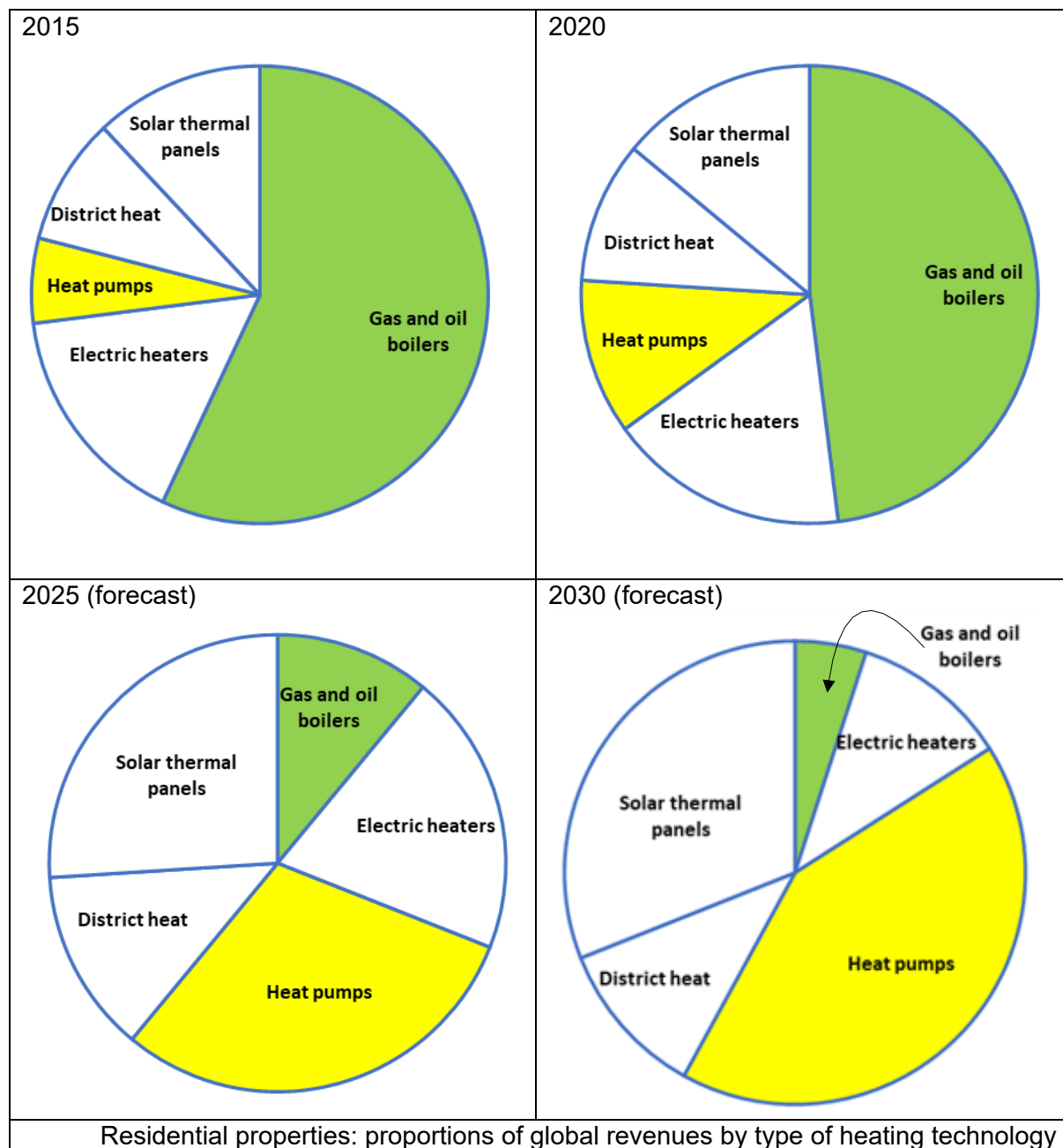
Global sales of domestic heating technologies

Boilers are slowly declining in popularity because of environmental concerns about carbon emissions. Consumers are, however, often reluctant to switch to heat pumps because of the cost of doing so. Heat pumps cost more than boilers, and they usually require a significant investment in new radiators or underfloor heating. Consumers often replace old boilers with newer models that are more efficient and more reliable than their existing models.

Demand for boilers is expected to decline more rapidly within the next few years because many governments have committed themselves to achieving a target of zero net carbon emissions. Governments will make increasing use of a combination of incentives to install heat pumps and legislation to discourage the manufacture and sale of boilers. It is anticipated that this will leave a small residual demand for boilers from consumers whose properties are unsuitable for heat pumps.

Electric heaters and solar thermal panels will continue to be used alongside other heating technologies. Mains electricity can be generated from renewable energy sources, which means that electric heaters need not cause emissions in operation.

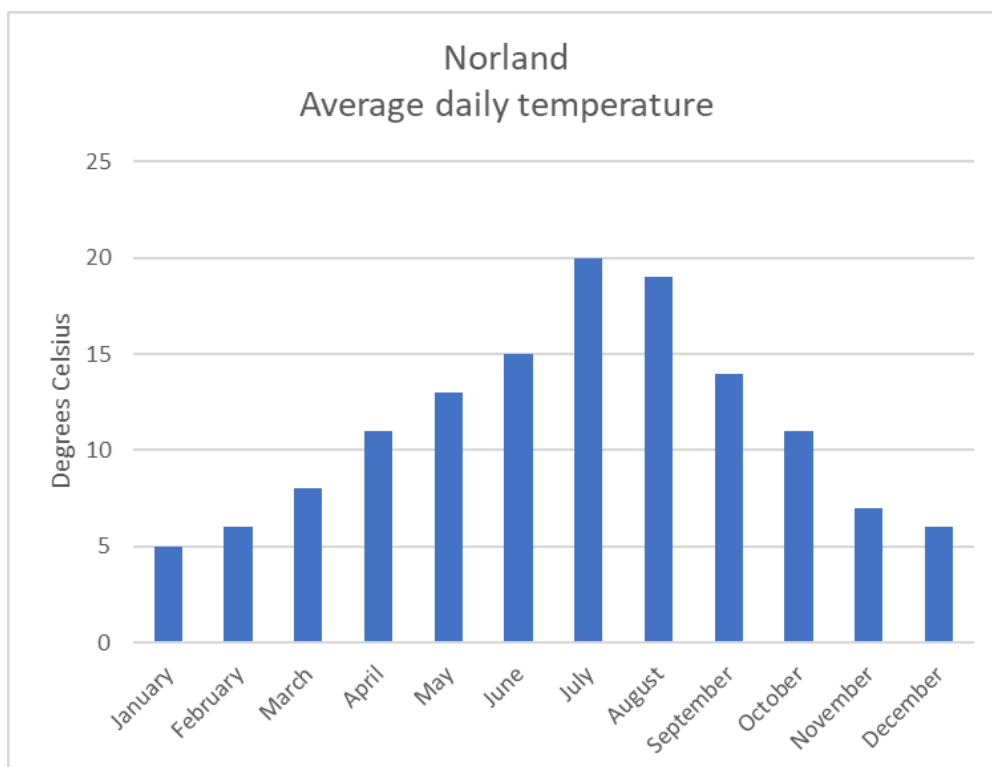
GLOBAL SALES OF DOMESTIC HEATING TECHNOLOGIES 2015 -2030



The promotion of renewable energy sources is expected to boost the unit sales of heat pumps more than other sustainable heat sources. Solar thermal panels are not suitable for every location and are not always capable of meeting a household's entire need for heating and hot water. District heat requires a major investment in infrastructure and so tends to rely on government support, generally in areas that are being redeveloped.

Norland's residential central heating market

Norland has a temperate climate, with a significant variation in temperature from season to season throughout the year.



Temperatures vary significantly during the day, with cooler temperatures during the hours of darkness and higher temperatures during the daylight hours. Winter night-time temperatures are often below 0 degrees Celsius.

There is also significant seasonal variations around the average daily temperatures. It is not unusual for cold periods in winter when the temperature remains below 0 degrees Celsius for a week or more. Similarly, there can be hot spells during the summer when the temperature reaches 30 degrees Celsius.

Most householders heat their homes from mid-autumn until early spring. Heating costs can be a significant part of a typical Norlandian family's budget.

Norland's government is committed to reducing carbon emissions to zero. Heat pumps are promoted as offering a contribution towards meeting that target. It has been estimated that 20% of Norland's carbon emissions are attributable to domestic heating.

Norlandian homeowners collectively spend an average of N\$1.6 billion each year on the purchase of central heating systems. That includes the installation of central heating in new homes and also the replacement of existing systems that are deemed unsafe, unreliable or inefficient.

Replacements for existing systems	<p>Gas boilers can become unreliable over time, leaving homes without heating when a component fails. Older designs are also less efficient than current models, meaning that they use more gas in order to maintain a comfortable temperature.</p> <p>At present, most homeowners replace defective gas boilers with newer models but keep their existing radiators.</p> <p>Demand for heat pumps is growing slowly in this market because the pumps themselves are more expensive than gas boilers, and there is likely to be a further cost due to the need for upgraded radiators or underfloor heating.</p>
Newbuild homes	Housebuilders often install heat pumps in newbuild houses because they are an attractive selling feature for potential buyers. The

	additional cost is not a significant factor in relation to the total cost of a new house. Radiators or underfloor heating pipes can be installed during the house's construction for about the same cost as for traditional radiators for gas boilers.
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Hottayr

Hottayr was established in 1952. It was quoted on Norland's stock exchange in 1967.

Hottayr was one of the first companies to specialise in boilers for domestic heating systems. Very few homes had central heating systems when Hottayr was first established, and so the company was one of the first to enter the market for domestic gas boilers.

Demand for central heating grew over time, although it was not common for central heating to be installed in new houses until the 1970s. By that time, Hottayr was one of the largest manufacturers of gas boilers in the country and had expanded into several export markets. Hottayr continues to manufacture domestic gas central heating boilers.

Hottayr has always been heavily involved in product development:

- **Safety** – Hottayr was the first domestic boiler manufacturer to receive a safety award from Norland Gas. There are very strict standards governing the safety of gas boilers and Hottayr's policy has always been to exceed those standards.
- **Reliability** – Hottayr was the first domestic boiler manufacturer to offer a 10-year guarantee for its boilers. The company's boilers rarely break down provided they are properly maintained and serviced. All boilers have limited useful lives because of deterioration caused by heat, moisture and blockages caused by soot, but Hottayr's boilers last for an average of 15 years. Most competitors' boilers require replacement after an average of 12 years.
- **Efficiency** – Hottayr's boiler designs have constantly evolved to use less gas, making them cheaper to run and more environmentally friendly. Hottayr patented several features that enable its boilers to create more heat energy from burning a given volume of gas and also waste less heat in bringing water up to the desired temperature.

Hottayr's gas boiler factory is located on the outskirts of Norland's Central City. The factory employs 3,800 staff. Many production processes are automated. A large proportion of the factory staff are engaged in quality control activities arising from the need to prevent gas leaks in consumers' homes.

Hottayr commenced production of heat pumps for domestic heating systems in 1997. This was regarded as a risky venture at the time because demand was very limited. However, growing concerns about emissions and the need to protect the environment created interest. Some "early adopter" consumers have replaced their gas boilers with heat pumps, despite the significant cost of doing so. Hottayr's main market for heat pumps has been housebuilders who often install heat pumps in new homes under construction. Consumers regard this as an attractive feature when buying new build houses because they offer lower running costs.

All of Hottayr's heat pumps are air source. There is insufficient demand for ground source heat pumps to justify the investment that would be required for their development and manufacture.

Hottayr's heat pumps are subject to the same attention to development and improvement as its gas boilers:

- **Consumer feedback** – Hottayr pays close attention to feedback from consumers, particularly with regards to whether their heat pumps are providing sufficient hot water and

maintaining their homes at a comfortable temperature. This feedback is an important element of ongoing product development.

- **Product features** – Hottayr was one of the first domestic heat pump manufacturers to offer the option of reversing the heat flow so that homes could be cooled during the summer months and heated in winter.

Hottayr's heat pumps can connect to consumers' home Wi-Fi, enabling them to use an app on their smart phones to track the heat energy captured by their heat pumps. That data is also automatically uploaded to Hottayr, who uses it to monitor the use of and performance of its heat pumps. Hottayr also uses this Wi-Fi connection to upgrade and update the operating software in heat pumps in order to improve their efficiency. Consumers must decide whether or not to activate this connection after their heat pumps have been installed, but most choose to do so. Activation is a simple process using a smartphone to enter a valid Wi-Fi username and password. All upgrades are then loaded automatically.

Hottayr's heat pump factory is located in Norland's Maxtown. It employs 2,400 staff.

Hottayr also maintains a head office that employs 2,600 administrative and management staff who are responsible for a range of functions that include accounting, purchasing, sales, human resources, information technology and research and development. The head office is located in the business district of Central City.

The Information Technology (IT) Department is nominally under the control of Hottayr's Chief Finance Officer. There is a data centre within the head office, supported by a remote backup site at a separate location. IT staff provide programming and data management support for the whole of Hottayr.

Hottayr has three main categories of customers:

- Energy providers, such as Norland Gas, which supply and install central heating systems for homeowners.
- Large housebuilding companies which build housing estates that may have hundreds of homes, each of which requires a central heating system.
- Builders' merchants who provide a wholesale service for smaller businesses, such as plumbers, heating engineers and small housebuilders who do not order in bulk.

Homeowners rarely express any interest in the brand of boiler or heat pump in their central heating system. New homes come equipped with heating systems. Owners who are replacing existing heating systems will usually rely on their installers to recommend the most suitable heat source. Installers often recommend Hottayr's boilers because they have an excellent reputation for quality and efficiency.

Hottayr's heat pumps are also regarded as offering excellent quality and efficiency. They are quieter in operation than most competing brands. That is an important consideration because the electric pump used to drive the flow of refrigerant must be running whenever the heating is switched on.

Hottayr exports its boilers to several countries, all of which are in the same geographical region as Norland. Export sales are limited by the fact that many countries have warmer climates, and so there is little or no demand for central heating systems in many parts of the world.

Hottayr has two main rivals, both in Norland and in its export markets:

- Thermwyk is also based in Norland. It sells boilers and heat pumps that are slightly cheaper and slightly less efficient than Hottayr's.
- Flownyse is based in Eastland, a temperate country with a climate that is colder than Norland's. Eastland's currency is the E\$. Flownyse is the largest manufacturer of boilers

and heat pumps in its home country, although Hottayr also makes some sales in that market. Flownyse also exports its boilers to the countries in which Hottayr makes sales, including Norland. Flownyse's products are comparable in terms of quality to Hottayr's.

Thermwyk and Flownyse are both more heavily focussed on boilers than Hottayr, although each sells its own range of air source heat pumps.

Extracts from Hottayr's annual report

Hottayr's mission and values

Our mission

Hottayr's mission is to establish itself as a trustworthy supplier of excellent heating products.

Our vision

Hottayr's vision is to lead the move towards a zero-carbon world.

Our core values

- Hottayr keeps its promises.
- Hottayr ensures that it understands the needs of its customers and that it is responsive to those needs.
- Hottayr is constantly striving to enhance its products, making them safe, efficient and economical to operate.
- Hottayr people trust and respect one another.
- Hottayr is a safe and healthy place to work.

Hottayr's Board of directors

Martin Gregory, Non-Executive Chair

Martin was a leading commercial lawyer. He spent most of his career with a major law firm, rising to the rank of partner. He was partner in charge of the firm for 5 years before he retired. In addition to his role with Hottayr, Martin chairs the Board of Norland Opera.

Martin joined Hottayr's Board in 2019.

Dr Eva De Volder, Chief Executive Officer (CEO)

Eva is an engineer by profession. She has a doctorate in mechanical engineering from Norland's Capital City University.

Eva joined Hottayr as a design engineer in 1998. She played a significant role in the design of Hottayr's heat pumps. She spent several years as Hottayr's Head of Research before being promoted to Chief Operating Officer in 2012. She was further promoted to Chief Executive Officer in 2020.

Bogdan Amuzescu, Chief Operating Officer (COO)

Bogdan joined Hottayr as a management trainee straight after graduating from university. He has held a number of management roles in Hottayr's factories. He had risen to General Manager of the boiler factory before he joined Hottayr's Board as Chief Operating Officer in 2020

Elaine Barros, Chief Finance Officer (CFO)

Elaine is a qualified accountant. She passed her professional examinations while working as a trainee accountant with Norland Steel. She has since held several senior roles in a variety of manufacturing companies. Elaine joined Hottayr's Board as Chief Finance Officer in 2019.

Emmanuel Maravanyika, Marketing Director

Emmanuel studied marketing at Norland's Central City University. Since then, he has worked for a number of major manufacturing companies. He took a career break in 2011 to complete an MBA degree at Capital City University, passing with a distinction. Emmanuel worked as a Senior Marketing Manager with Hottayr from 2014 to 2020, at which time he was promoted to the Board as Marketing Director.

Professor Amina Rajab, Research Director

Amina studied mechanical engineering at Central City University. She graduated with honours and was offered a place on the University's PhD programme. Her doctoral thesis was on the optimisation of heat output from heat pumps in cold climates. She remained at the University, being promoted to Professor of Engineering in 2012. She was appointed to Hottayr's Board in 2018. She remains a visiting professor at Central City University.

Akira Akiyama, Senior Independent Director

Akira spent his career in corporate finance, working in senior roles with major investment banks. He developed an interest in funding wind farms and other enterprises that aimed to reduce energy emissions. He retired in 2019 and was appointed as Hottayr's Senior Independent Director at that time. He is also a non-executive director at the Central City Children's Hospital.

Patricia Angopa, Independent Non-Executive Director

Patricia had a career in politics. She was the member of parliament for Hightown, an industrial town in Norland, for 17 years. During that time, she served as a junior minister for business. She retired from politics in 2020 and was appointed as a Non-Executive Director by Hottayr. She is also a Non-Executive Director for a television documentary maker.

Ye Haitao, Independent Non-Executive Director

Ye has held a number of posts with Norland's government. He has served in a variety of senior roles, assisting in drafting legislation on a diverse range of areas including transport and pensions. Ye was appointed to Hottayr's Board when he retired from full-time employment in 2021.

Dr Eva De Volder Chief Executive Officer			
Bogdan Amuzescu, Chief Operating Officer	Elaine Barros, Chief Finance Officer	Emmanuel Maravanyika, Marketing Director	Professor Amina Rajab, Research Director
<ul style="list-style-type: none"> • Manufacturing • Human resources 	<ul style="list-style-type: none"> • Financial reporting • Management accounting • Treasury • Information technology 	<ul style="list-style-type: none"> • Promotion and advertising • Customer relations 	<ul style="list-style-type: none"> • Product development • Certification of new products

	Board committees			
	Audit	Risk	Remuneration	Nomination
Martin Gregory Non-Executive Chair	♦	♦		♦
Akira Akiyama Senior Independent Director	♦		♦	♦
Patricia Angopa Independent Non-Executive Director	♦	♦	♦	
Ye Haitao Independent Non-Executive Director		♦	♦	♦

Hottayr's Chief Internal Auditor reports to the convener of the Audit Committee.

Hottayr's Principal Risks

Risk impact	Risk mitigation
Central heating systems are expensive, and so Hottayr's product sales are affected by economic cycles and by consumer confidence.	Hottayr's Board aims to diversify by selling to as many different countries as possible.
The company is vulnerable to credit risk, arising from the fact that customers are themselves exposed to fluctuations in the economy and in consumer confidence.	Hottayr aims to mitigate this risk through diversification across different markets, as well as setting credit limits for existing customers and conducting credit checks on new customers.
Cash flows can be volatile because of fluctuations in revenues and also because of the company's exposure to currency movements.	Hottayr's Treasury monitors and manages cash flows and currency exposures, taking appropriate measures to prevent cash deficits and significant currency losses.
The company's employees make a vital contribution to its success. The manufacture and quality control of boilers and heat pumps requires care and precision.	<p>Hottayr's Human Resources Department conducts monthly meetings with employees' representatives.</p> <p>Hottayr provides excellent training and funding for part-time study to enable employees to develop skills in order to seek promotion.</p>
The company's products require a steady supply of materials, particularly steel, copper and aluminium. We also make heavy use of semiconductors and other electronic components. These create vulnerabilities, both in terms of availability and in pricing.	Hottayr pays close attention to the markets for these commodities. The company has developed strong relationships with key suppliers.
The company is vulnerable to changes in legislation relating to emissions and the safety of gas appliances.	<p>Hottayr more than fulfils all applicable legal requirements for emissions and safety in the countries to which it makes sales.</p> <p>Hottayr pays close attention to any proposed changes in the law, working with government agencies around the world to ensure that any proposals are realistic and proportionate.</p> <p>Where necessary, Hottayr alters the design of its products to ensure that their performance exceeds forthcoming changes in the law.</p>
Consumer demand for central heating systems is affected by environmental concerns.	<p>Hottayr's products are designed to be at the forefront of efficiency, aiming to minimise the emissions of carbon and of harmful refrigerants in their operation.</p> <p>Hottayr aims to educate consumers about the environmental benefits of replacing outdated gas boilers with newer models and with heat pumps.</p>

Hottayr Group

**Consolidated statement of profit or loss
for the year ended 31 December**

	2021	2020
	N\$ million	N\$ million
Revenue	756	699
Operating costs	(628)	(578)
Operating profit	128	121
Finance costs	(15)	(15)
	113	106
Tax expense	(16)	(15)
Profit for the year	97	91

Hottayr Group

**Consolidated statement of changes in equity
for the year ended 31 December 2021**

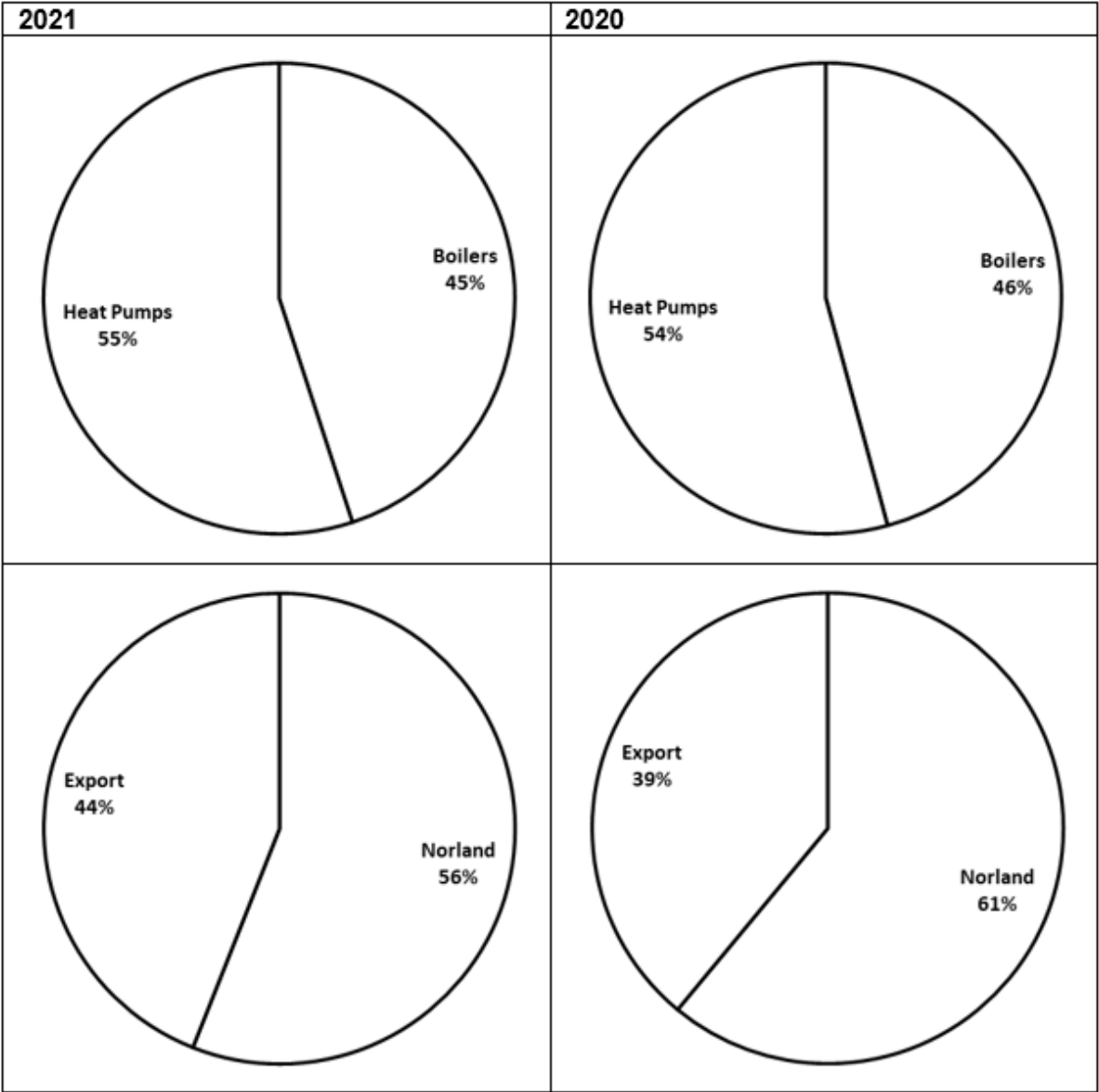
	Share capital	Retained earnings	Total
	N\$ million	N\$ million	N\$ million
Opening balance	250	103	353
Profit for year		97	97
Dividend		(42)	(42)
Closing balance	250	158	408

Hottayr Group

**Consolidated statement of financial position
as at 31 December**

	2021	2020
	N\$ million	N\$ million
Assets		
Non-current assets		
Property, plant and equipment	358	330
Goodwill	123	123
Development costs	85	69
	<u>566</u>	<u>522</u>
Current assets		
Trade receivables	70	63
Bank	38	32
	<u>108</u>	<u>95</u>
Total assets	<u><u>674</u></u>	<u><u>617</u></u>
Equity		
Share capital	250	250
Retained earnings	158	103
	<u>408</u>	<u>353</u>
Liabilities		
Non-current liabilities		
Borrowings	200	200
Current liabilities		
Trade payables	52	48
Tax liability	14	16
	<u>66</u>	<u>64</u>
Total equity and liabilities	<u><u>674</u></u>	<u><u>617</u></u>

Hottayr Group
Analysis of revenues



Extract from competitor's financial statements

Thermwyk Group

**Consolidated statement of profit or loss
for the year ended 31 December**

	2021	2020
	N\$ million	N\$ million
Revenue	801	790
Operating costs	(641)	(653)
Operating profit	160	137
Finance costs	(9)	(10)
	151	127
Tax expense	(21)	(18)
Profit for the year	130	109

Thermwyk Group

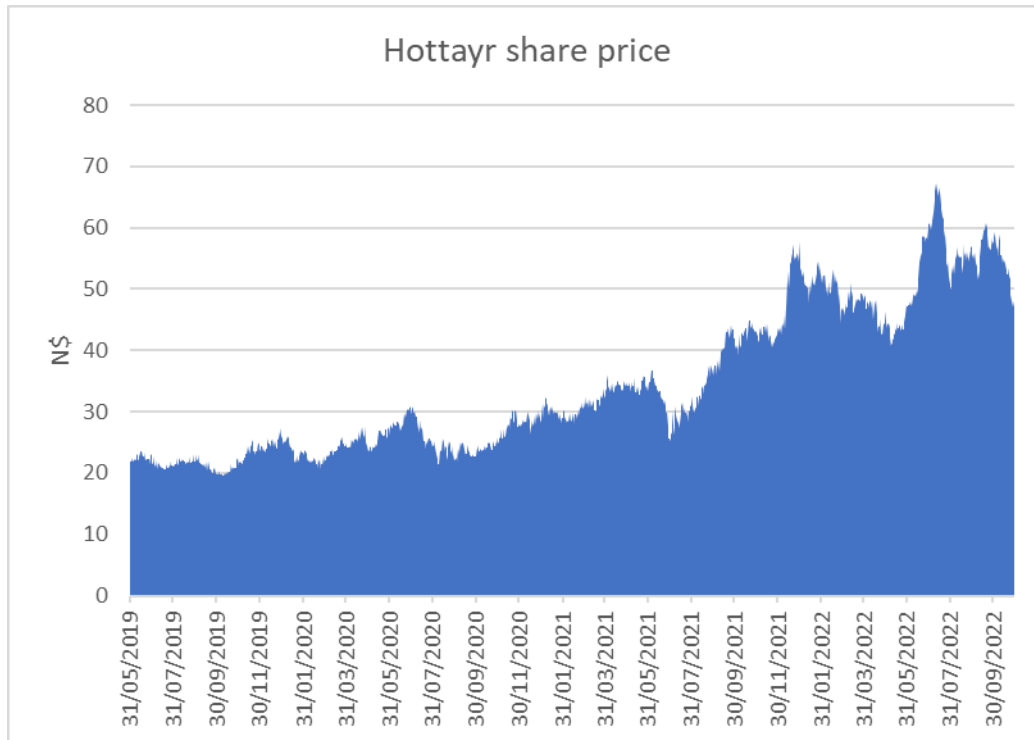
**Consolidated statement of changes in equity
for the year ended 31 December 2021**

	Share capital	Retained earnings	Total
	N\$ million	N\$ million	N\$ million
Opening balance	260	98	358
Profit for year		130	130
Dividend		(82)	(82)
Closing balance	260	146	406

Thermwyk Group
Consolidated statement of financial position
as at 31 December

	2021	2020
	N\$ million	N\$ million
Assets		
Non-current assets		
Property, plant and equipment	326	290
Goodwill	82	82
Development costs	68	56
	<u>476</u>	<u>428</u>
Current assets		
Trade receivables	96	111
Bank	32	28
	<u>128</u>	<u>139</u>
Total assets	<u><u>604</u></u>	<u><u>567</u></u>
Equity		
Share capital	260	260
Retained earnings	146	98
	<u>406</u>	<u>358</u>
Liabilities		
Non-current liabilities		
Borrowings	90	90
Current liabilities		
Trade payables	88	103
Tax liability	20	16
	<u>108</u>	<u>119</u>
Total equity and liabilities	<u><u>604</u></u>	<u><u>567</u></u>

Share price history



Hottayr's beta is 1.12.

News stories

Happy Comic

Readers' questions



Question: I am worried about the environment and have been asking my parents to replace our gas boiler with solar panels. They say that solar panels would not heat our house properly. Is that true?

Amos, age 12

Answer: It is good that you are taking climate change seriously, but it is true that solar panels cannot completely replace gas boilers in Norland.

Solar panels rely on having plenty of direct sunlight to heat the water that runs through them. There is no sunlight at night and sometimes very little during the day, for example, when it is cloudy. In countries like Norland, solar panels only work as a supplement to other heat sources, such as boilers. They can provide all the hot water needed for baths, showers and cleaning during summer, but you would still need an additional heat source in winter, especially if you planned to have central heating.

There are also practical issues, such as whether your house has a large enough roof to attach solar panels to.

You could consider asking your parents to install a heat pump. That would cost more than solar panels, but a heat pump can gather heat from outdoors on the coldest and darkest of days and would completely replace your gas boiler.

Happy Comic

Readers' questions



Question: My parents had a heat pump installed in our house. So far, it has worked really well. The house is almost as warm inside as it was when we used a gas boiler, and there is always plenty of hot water for showers and washing up.

The weather has been very cold recently, and I am worried that there won't be any heat outside for the heat pump to capture and keep our house warm.

Alexandra, age 13

Answer: You should be ok, even on the coldest of days. Heat energy makes particles of gas, liquid and solid material vibrate. The hotter they are the more they vibrate. The vibration slows as things get colder, but it only stops completely when they reach absolute zero, equal to minus 273 degrees Celsius.

In theory, there is heat energy that can be captured all the way down to absolute zero. In practice, heat pumps run into mechanical difficulties if the temperature falls below minus 15 degrees Celsius, but it is never quite that cold in Norland.

Your new heat pump will reduce your family's carbon footprint and is capable of keeping you warm right through the winter.

Happy Comic

Readers' questions



Question: My parents bought a new freezer recently, and the shop asked if they wanted to pay extra to have the refrigerant from their old one removed and recycled. They agreed, even though the recycling was expensive, because the people in the shop that sold the freezer said that letting the refrigerant escape is extremely harmful to the environment in terms of global warming.

My question is, why don't we use something else that would be less damaging to the environment?

Netta, age 12

Answer: It is true that the Hydrofluorocarbons (HFCs) that are released when old fridges and freezers are scrapped carelessly are amongst the most damaging of greenhouse gases. They do a great deal of harm when they are released into the atmosphere, and so the advice that your parents received was correct.

There are alternatives to HFCs that are less harmful to the environment. Unfortunately, they usually have other drawbacks. For example, propane is an effective refrigerant, but it is highly flammable if it escapes. Ammonia is another alternative that works well, but it can be poisonous in high concentrations.

Norland Telegraph

Norlandian government commits to “net-zero” by 2040



Norland's Government has announced an ambitious plan to reduce the country's greenhouse gas emissions to “net-zero” by 2040. Greenhouse gases, such as carbon dioxide and the hydrofluorocarbons (HFCs) that are used as refrigerants, have been blamed for the phenomenon of global warming. The release of those gases into the atmosphere affects the Earth's temperature by absorbing more heat energy from sunlight.

The Government's net-zero commitment requires a massive reduction in emission levels. The remaining emissions will then be offset by initiatives such as planting trees, which capture carbon from the atmosphere while they are growing.

This legislation will have a huge impact on many aspects of daily life. For example, the Government will ban the sale of new petrol- and diesel-powered cars by 2035 as one step towards meeting the net-zero target.



Strategic Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.





This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	60	1	2	(a) 60% (b) 40%
2	60	1	2	(a) 50% (b) 50%
3	60	1	2	(a) 40% (b) 60%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

 Reference Material Pre-seen

Elaine Barros, Chief Finance Officer, asks you to meet with her.

"I have brought you an extract from a Board minute.

I will be meeting with the Chief Executive Officer to discuss this proposal further, and I require the following from you:

- First, evaluate Hoddlift's proposal for Hottayr using the suitability, feasibility and acceptability criteria.

[sub-task (a) = 60%]

- Second, discuss whether Hottayr would be able to report this collaboration with Hoddlift as enhancing social and relationship capital and natural capital in its Integrated Framework (<IR>) report."

[sub-task (b) = 40%]

The Board minute extract referred to by Elaine can be viewed by clicking on the Reference Material button above.

Board minute extract: Hoddlift Builders

Emmanuel Maravanyika, Marketing Director, reported on a meeting with the Sales Director at Hoddlift Builders, Norland's largest housebuilder, building 35% of Norland's new build houses. Hoddlift built 30,000 houses during the year ended 31 December 2021. It purchased all of its gas boilers and heat pumps from Hottayr:

- 24,000 gas boilers at a unit price of N\$2,000
- 6,000 air source heat pumps at a unit price of N\$10,000



Hoddlift plans to install ground source heat pumps in all of its new houses, but cannot identify a suitable product. Its main concerns are efficiency and long-term reliability.

Hoddlift's proposal is as follows:










- Hottayr will bear the cost of developing a suitable ground source heat pump. Hoddlift will build houses in which Hottayr's ground source heat pumps can be installed easily.
- Once Hoddlift approves the new design, it will install it in all of its new houses for the next 2 years, with a possible extension if both parties agree. Hottayr does not presently have a contract to protect its sole supplier status.
- Hoddlift will pay N\$10,000 per unit for the ground source heat pump, the same as it currently pays for air source heat pumps.
- Hottayr will not sell ground source heat pumps to any other Norlandian house builders.











Amina Rajab, Hottayr's Research Director, responded to concerns expressed by the Board that Hottayr has never made ground source heat pumps. She believes that it will be possible to adapt one of Hottayr's existing designs. She estimated development costs at N\$11 million.



Bogdan Amuzescu, Hottayr's Chief Operating Officer, said that the company's heat pump factory currently produces 42,000 units each year, with a maximum capacity of 50,000 units. It would be possible to double the factory's capacity by investing in additional manufacturing equipment. It would cost at least N\$40 million to increase capacity by enough to fulfil Hoddlift's orders.

 Reference Material Pre-seen

Write your response to Elaine's requests in the box below.

       **B** *I* U  x_2 x^2 

Paragraph          

 Reference Material Pre-seen

A month later, you receive the following email:

From: Elaine Barros, Chief Finance Officer
To: Senior Finance Manager
Subject: FWD: Ground source heat pump

Hello,

I have forwarded an email that I received from Eva De Volder, our Chief Executive Officer (CEO).

I need your help with two matters:

- First, recommend with reasons the manner in which the rights issue to fund this proposal should be managed.
- Second, evaluate the impact of each of the two scenarios identified by Eva and recommend possible courses of action.

[sub-task (a) = 50%]

[sub-task (b) = 50%]

Elaine

The email referred to by Elaine can be viewed by clicking on the Reference Material button above.

From: Dr Eva De Volder, Chief Executive Officer
To: Elaine Barros, Chief Finance Officer
Subject: Ground source heat pump



Dear Elaine,

It will cost Hottayr N\$50 million to develop a ground source heat pump for sale to Hoddlift and to equip our factory to make this product. I have spoken to some of our largest shareholders in strict confidence, and they are slightly nervous about this proposal. Despite this, I believe that we should use a rights issue to raise the N\$50 million if we decide to proceed.

We also need to consider some scenarios before we commit to this project:

- What will happen if Hoddlift goes out of business after we have invested this money?
- What will happen if there are refrigerant leaks in the underground components after Hoddlift sells houses equipped with our ground source heat pumps?

Eva

 Reference Material Pre-seen



Write your response to Elaine's requests in the box below.

From: Senior Finance Manager

To: Elaine Barros, Chief Finance Officer

Subject: RE: FWD: Ground source heat pump



 Reference Material Pre-seen

A year later, the ground source heat pump has been successfully developed and is now being sold to Hoddlift under the trademark, “Breeth”.

Elaine Barros, Chief Finance Officer, invites you into her office:

“I have brought you a copy of a news article that has just gone online. As you can see, Breeth has exceeded all expectations, both in terms of its efficiency at saving energy and in terms of consumer demand.

Breeth's success has also been hugely beneficial for Hottayr. This year's profit will be huge and next year's will be even better. The Board is happy because our profit-related bonuses will also receive a big boost.

The only problem is that Hottayr is coming under pressure to sell Breeth to other housebuilding companies, not just to Hoddlift. Our lawyers have advised us that we could probably do so, but there will be significant legal costs if Hoddlift takes action against us for breaching our contract.

I need your advice on two matters:

- First, evaluate the argument that it is unethical for Hottayr to withhold Breeth from other housebuilders, given that it offers such substantial energy savings.

[sub-task (a) = 40%]

- Second, recommend whether Hottayr's Board should refrain from taking their full profit-related bonuses, on the grounds that Hottayr's increased profits resulted from the creation of a product at the request of Hoddlift.”

[sub-task (b) = 60%]

The news article referred to by Elaine can be viewed by clicking on the Reference Material button above.

Norland Telegraph



Hoddlift's green homes break all records












Hoddlift, Norland's largest housebuilder, has broken all sales records for house sales. This is largely due to the company's adoption of Breeth, the ground source heat pump, to provide heating and hot water in all of its homes.










Hoddlift has worked closely with Hottayr, the manufacturer of boilers and heat pumps, to develop Breeth. It has been established that Breeth can reduce heating costs by 80% compared to boilers and 50% compared to air source heat pumps. The potential saving in heating costs has become a major sales feature for Hoddlift. The company has signed contracts for 40,000 new homes over the past year, many of which are still under construction.

Environmental campaigners have criticised Hottayr for granting Hoddlift an exclusive licence to purchase its ground source heat pump. The only way to obtain this device is to buy a new house built by Hoddlift.

 Reference Material Pre-seen

Write your response to Elaine's requests in the box below.

       **B** *I* U  x_2 x^2 

Paragraph         



Thank you for completing the Strategic Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.



Strategic Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.





This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	60	1	2	(a) 60% (b) 40%
2	60	1	2	(a) 50% (b) 50%
3	60	1	2	(a) 40% (b) 60%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

 Reference Material Pre-seen

Elaine Barros, Chief Finance Officer, asks you to meet with her.

"I have printed a news article that has just gone online.

I need to be ready to discuss this development with the Board. If the grant is withdrawn, then it could seriously affect demand for our heat pumps. I require you to do the following:

- First, explain with reasons how Hottayr might understand the macro environmental factors associated with this grant and help plan for its possible loss by undertaking a PESTEL analysis.
[sub-task (a) = 60%]
- Second, explain whether it would be unethical for Hottayr to lobby the Norlandian Government in the hope of retaining the grant."
[sub-task (b) = 40%]

The news article referred to by Elaine can be viewed by clicking on the Reference Material button above.

Norland Daily News


Minister hints at end of grant












Norland's Minister of the Environment announced that the Government is considering withdrawing the grant that is available to homeowners who replace their gas boilers with heat pumps, thereby reducing carbon emissions associated with central heating.










Eligible homeowners can reclaim up to 50% of the cost of buying and installing a heat pump provided they are replacing a gas boiler that is more than seven years old.



The Minister claimed that the grant scheme had been a major success, drawing homeowners' attention to the fact that heat pumps are good for the environment and are cheaper to operate than boilers.

 Reference Material Pre-seen

Write your response to Elaine's requests in the box below.

       **B** *I* U  x_2 x^2 

Paragraph         

 Reference Material Pre-seen

A month later, you receive the following email:

From: Elaine Barros, Chief Finance Officer

To: Senior Finance Manager

Subject: FWD: Government proposal

Hello,

I have forwarded an email that I received from Eva De Volder, our Chief Executive Officer (CEO).

I need your help with two matters:

- First, evaluate the strengths and weaknesses of the proposal to attempt to predict the Government's decision by asking political journalists.

[sub-task (a) = 50%]

- Second, discuss the advantages and disadvantages of informing the shareholders that the possible reduction in revenues and profits might lead to a reduced dividend payment.

[sub-task (b) = 50%]

Elaine

The email referred to by Elaine can be viewed by clicking on the Reference Material button above.

From: Dr Eva De Volder, Chief Executive Officer
To: Elaine Barros, Chief Finance Officer
Subject: Government proposal



Dear Elaine,

Nothing further has been announced concerning the possible withdrawal of the Government grant that encourages homeowners to buy heat pumps. If the grant is withdrawn, then Hottayr could face a significant downturn in profits.

I have discussed the matter with Martin Gregory, our Non-Executive Chair. He believes that it would be valuable to use a polling company to seek the opinions of as many political journalists as possible concerning the Government's intentions to withdraw the grant. Martin believes that this will help us to predict the Government's decision.

The shareholders will be expecting an announcement concerning this year's dividend soon.

Eva

 Reference Material Pre-seen



Write your response to Elaine's requests in the box below.

From: Senior Finance Manager

To: Elaine Barros, Chief Finance Officer

Subject: RE: FWD: Government proposal



 Reference Material Pre-seen

Elaine Barros, Chief Finance Officer, stops by your workspace:

"I have brought you a copy of a diagram that will be included in the sustainability section of this year's annual report, once the figures have been finalised. We have published similar diagrams in previous annual reports, and they have caused some controversy. Some environmental campaigners claim that the historical data is presented in a manner that overstates Hottayr's care for the environment.

I need your advice on two matters:

- First, recommend with reasons improvements to the emissions diagram that would improve the clarity and relevance of the information provided by Hottayr.

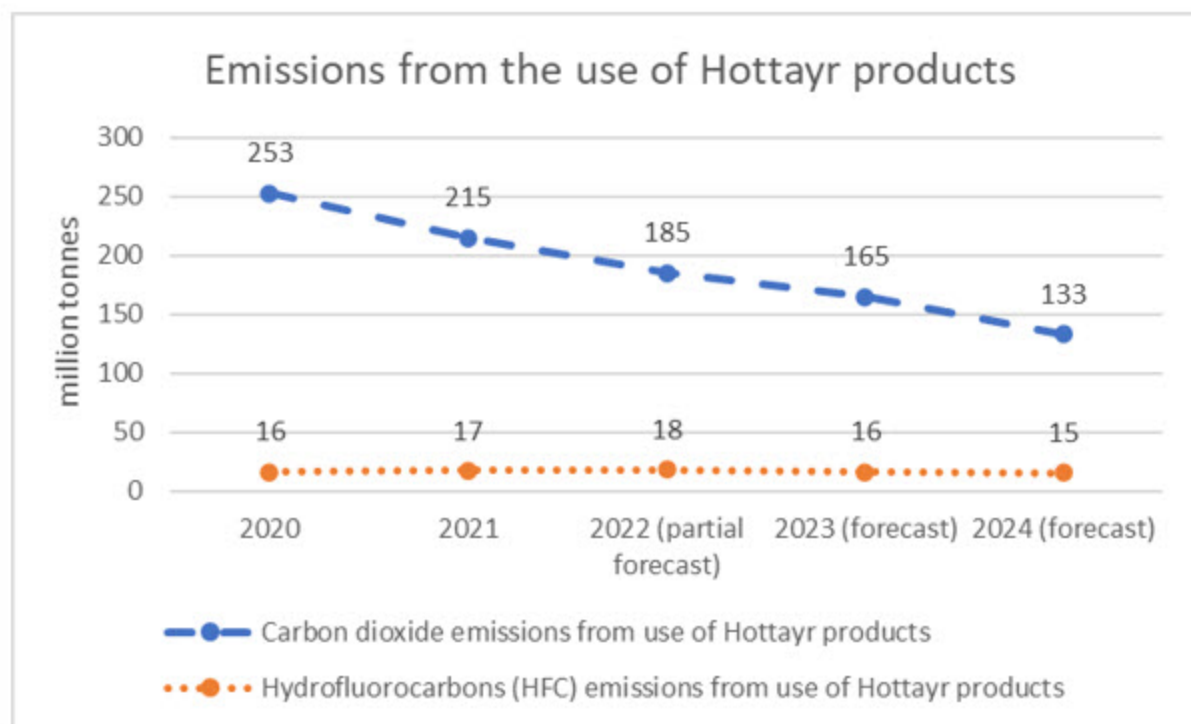
[sub-task (a) = 40%]

- Second, evaluate the arguments for and against having Hottayr's Internal Audit Department review the sustainability report and summarise the results of that review in an appendix to the report."

[sub-task (b) = 60%]



The diagram referred to by Elaine can be viewed by clicking on the Reference Material button above.

Draft extract from Hottayr Group sustainability report





















Notes on draft for review by Elaine Barros

1. These figures are based on estimates, based on the operating characteristics of Hottayr products sold during the previous 6 years. It is assumed that boilers and heat pumps are taken out of service after 6 years.
2. Hottayr has been criticised in the past for publishing misleading data:
 - The downward trend in carbon dioxide emissions looks like progress, but it is largely due to two facts:
 - Changes in market demand mean that Hottayr is selling fewer boilers and more heat pumps.
 - Hottayr assumes that the electricity used to power its heat pumps comes from sustainable sources, such as wind farms, that have no carbon emissions.
 - HFC emissions look small when compared to carbon dioxide emissions, but each tonne of HFC that is released makes a much greater contribution to global warming than each tonne of carbon dioxide.
3. It should also be noted that the expected decrease in HFC emissions in 2023 and 2024 is due to an expected decrease in demand for heat pumps arising from the withdrawal of the Government grant.

 Reference Material Pre-seen

Write your response to Elaine's requests in the box below.

       **B** *I* U  x_2 x^2 

Paragraph ▾  ▾        



Thank you for completing the Strategic Case Study Exam.

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Please click the End Exam (E) button before leaving the testing room quietly.





Strategic Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

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Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	60	1	2	(a) 40% (b) 60%
2	60	1	2	(a) 40% (b) 60%
3	60	1	2	(a) 50% (b) 50%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

 Reference Material Pre-seen

Elaine Barros, Chief Finance Officer, asks you to meet with her.

"I have brought you an extract from a Board minute.

Please advise me on the following:

- First, discuss the challenges associated with structuring the gas boiler factory and its associated administrative support, as presently provided by Hottayr's Head Office, to create a viable and self-contained business entity that can be sold to Gassmyne.

[sub-task (a) = 40%]

- Secondly, discuss the implications of the reduction in the share prices of both Hottayr and Gassmyne following the newspaper stories about Gassmyne's intention to purchase Hottayr's gas boiler business."

[sub-task (b) = 60%]

The Board minute extract referred to by Elaine can be viewed by clicking on the Reference Material button above.

Board minute extract: divestment of gas boiler manufacturing



Dr Eva De Volder, Chief Executive Officer (CEO), briefed the Board on a meeting with the CEO of Gassmyne, a quoted company that has significant interests in the extraction of oil and gas. Gassmyne wishes to purchase Hottayr's gas boiler business. It believes that this will enable Gassmyne to ensure that there is a continuing supply of domestic gas boilers, which will help Gassmyne to ensure the sale of its natural gas into the long-term future.

Hottayr's Board is interested in this proposal, provided an acceptable cash price can be negotiated.










One concern is that Gassmyne insists on buying the gas boiler business as a viable, self-contained business entity. At present, Hottayr's gas boilers are manufactured at a factory outside of Norland's Central City. The factory is fully equipped and employs 3,800 production staff. Heat pumps are manufactured at a different factory in Maxtown. Both factories are supported by 2,600 administrative and management staff who are based at Hottayr's head office in Central City. The head office staff are organised by function, including accounting, purchasing, sales, human resources and research and development. Head office staff are not subdivided between boilers and heat pumps.










Martin Gregory, Hottayr's Non-Executive Chair, expressed concern that Gassmyne's Board appears to have informed journalists about the intention to acquire Hottayr's boiler business. Stories about the acquisition are starting to appear in the business press. The share prices of both Hottayr and Gassmyne have fallen since those stories were published.





 Reference Material Pre-seen

Write your response to Elaine's requests in the box below.

       **B** *I* U  x_2 x^2 

Paragraph ▾  ▾        

 Reference Material Pre-seen

Nine months have passed. Hottayr sold its gas boiler business to Gassmyne six months ago.

You receive the following email:

From: Elaine Barros, Chief Finance Officer

To: Senior Finance Manager

Subject: Former gas boiler business

Hello,

I have forwarded a news article that has just gone online. As you can see, it looks as if Gassmyne is struggling to obtain the expected synergies between its existing gas extraction activities and the manufacture of gas boilers.

I am about to brief Hottayr's CEO, and I need your help with two matters:

- First, explain the issues that Gassmyne's Board should have managed more effectively when planning the transition of the gas boiler business's ownership from Hottayr to Gassmyne.

[sub-task (a) = 40%]

- Second, recommend suitable responses, stating reasons, to any accusations that Hottayr's Board should have supported Gassmyne in the period immediately after the acquisition.

[sub-task (b) = 60%]

Elaine

The news article referred to by Elaine can be viewed by clicking on the Reference Material button above.

Norland Telegraph

Gassmyne's manufacturing venture flops





Gassmyne's recent attempt to diversify into the manufacture of gas boilers has run into serious difficulty. It recently purchased Hottayr's gas boiler factory. The change in ownership required Gassmyne to submit its factory and production processes to a detailed safety inspection by the Norlandian government. Gassmyne failed this inspection after it was discovered that weaknesses in quality control procedures could lead to gas leaks from boilers after their installation. This was despite Gassmyne using product designs that it had purchased from Hottayr, whose products and production processes have always met all applicable safety requirements.

Consumers were assured that Gassmyne had not sold any boilers, pending the outcome of the compulsory safety inspection.

The factory has lost a large number of experienced production staff since it was taken over by Gassmyne. It was rumoured that Gassmyne planned to close down the factory and ship its equipment to a low-wage country in order to reduce production costs. Gassmyne denies that it ever intended to do so. The loss of key staff and generally poor morale have had an impact on product quality, which has led to the failed safety inspection.

Gassmyne is a major producer of natural gas. It acquired the gas boiler factory in order to ensure that there is a continuing supply of domestic gas boilers.

Hottayr's Board has issued a statement reassuring consumers that all Hottayr-branded gas boilers have been certified as safe to use.

 Reference Material Pre-seen



Write your response to Elaine's requests in the box below.

From: Senior Finance Manager

To: Elaine Barros, Chief Finance Officer

Subject: RE: Former gas boiler business



 Reference Material Pre-seen

A month has passed. Elaine Barros, Chief Finance Officer, invites you into her office.

"I have brought you the executive summary of a report that Gassmyne's Board commissioned after they purchased Hottayr's gas boiler business and encountered problems. We believe that Gassmyne plans to seek compensation from Hottayr on the grounds that we overcharged them for our former gas boiler business.

As you can see, Gassmyne's consultants have focussed on our mission and vision statements, and they have drawn conclusions that Hottayr was not managing its gas boiler business in accordance with those documents during the 2 years immediately leading up to the sale.

I need your advice on two matters:

- First, evaluate the arguments both for and against the presumption that Hottayr's strategic management of its gas boiler business should have complied with its mission and vision statements.
[sub-task (a) = 50%]
- Second, recommend with reasons how Hottayr's non-executive directors could attempt to ensure that Hottayr is managed in accordance with its mission and vision statements."
[sub-task (b) = 50%]

The executive summary referred to by Elaine can be viewed by clicking on the Reference Material button above.



Executive summary of report on customers' perceptions of gas boiler business

Gassmyne's Board commissioned Ropampa Consulting to investigate the management of the gas boiler business that Gassmyne purchased from Hottayr. Our instruction was to focus on customers' perceptions of the business during the final 2 years of Hottayr's ownership.



Our consultants carried out interviews with four energy providers and three housebuilders, all of whom have purchased Hottayr's gas boilers for many years. We asked those customers to reflect on Hottayr's published mission and vision and to consider whether those were reflected in Hottayr's approach to the manufacture and sale of gas boilers when it owned that business:

Hottayr's mission is to establish itself as a trustworthy supplier of excellent heating products.










Hottayr's vision is to lead the move towards a zero-carbon world.










Our interviews revealed the following general impressions about Hottayr's management of the gas boiler business:

- Hottayr had not produced a completely new model of gas boiler for 5 years before its sale of the business. There had been some minor changes to existing models, all of which appeared to be intended to reduce production costs.
- Hottayr had been unresponsive to customer requests for more efficient gas boilers. It tended to argue that its gas boilers were more efficient than most competing brands.
- Hottayr's quality control was deemed acceptable, but causing breakdowns that sometimes meant that agreed delivery dates were not being met.

 Reference Material Pre-seen

Write your response to Elaine's requests in the box below.

       **B** *I* U  x_2 x^2 

Paragraph ▾  ▾        



Thank you for completing the Strategic Case Study Exam.

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Strategic Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	60	1	2	(a) 60% (b) 40%
2	60	1	2	(a) 50% (b) 50%
3	60	1	2	(a) 60% (b) 40%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

Reference Material

Pre-seen

Elaine Barros, Chief Finance Officer, asks you to meet with her.

"I have printed out a news report that has only just gone online. These events happened yesterday. We discovered the vulnerability very quickly because we monitor all social media posts concerning Hottayr. Our correction was uploaded within 4 hours of our discovery.

The software in our heat pumps is complicated. Our programmers are constantly under pressure to add new features that will improve the efficiency of our heat pumps or to add features that users will enjoy. For example, one recent upgrade enabled our heat pumps to make better use of the data collected by their temperature sensors to reduce the electricity consumed by 0.6%. Another upgrade uses data collected by the user's smartphone app to display the financial savings associated with using a heat pump compared to a gas boiler.

I need your advice on two matters before I meet with the Chief Executive Officer:

- First, evaluate the argument that Hottayr should use customer analysis to determine the need for future software upgrades. Please provide examples of the issues that a customer analysis could reveal.
[sub task (a) = 60%]
- Second, recommend with reasons whether the statement of principal risks in Hottayr's annual report should refer to software errors."
[sub task (b) = 40%]

The news report referred to by Elaine can be viewed by clicking the Reference Material button above.

Norland Telegraph

Hottayr users told to check their Wi-Fi security



Users of Hottayr heat pumps have been warned to check the security of their home Wi-Fi networks after a programming error in a recent software update created a serious vulnerability. The heat pumps connect to household Wi-Fi routers so users can monitor their operation and also so that the manufacturer can update the operating software to improve their products' efficiency.

An error in a recent software update from Hottayr compromised the security settings in the company's heat pumps. Anyone within range of a heat pump's wireless connection could read the name and the password of the Wi-Fi router that the heat pump was connected to. That enabled unauthorised users to log onto the router and possibly to access files and data on devices such as smartphones and laptops that are also connected to the network. Social media posts described this vulnerability and gave instructions on how to exploit it within hours of the update's issue.

Victims of this error have complained that their home internet connections have slowed down because their neighbours are connected to their networks. One victim complained that her internet connection was being used by customers of a coffee shop located downstairs from her flat.

Hottayr has issued a further update that corrects this vulnerability but advises all of its users to change the passwords on their home Wi-Fi routers.

Reference Material

Pre-seen

Draft your response to Elaine's requests in the box below.

Rich text editor toolbar with the following icons:

- Document icon
- Cut icon
- Copy icon
- Paste icon
- Undo icon
- Redo icon
- Table icon
- Bold (B) icon
- Italic (I) icon
- Underline (U) icon
- Strikethrough icon
- Subscript (x_2) icon
- Superscript (x^2) icon
- Equation Editor (I_x) icon

Formatting options:

- Paragraph dropdown menu
- Table icon
- Left align icon
- Center align icon
- Right align icon
- Justify icon
- Bulleted list icon
- Numbered list icon
- Decrease indent icon
- Increase indent icon

Reference Material

Pre-seen

A month later, you receive the following email:

From: Elaine Barros, Chief Finance Officer

To: Senior Finance Manager

Subject: Data theft

Hello,

I have forwarded a news article that went online early this morning. Our Information Technology (IT) Department discovered the breach last night and issued a warning to consumers.

The drop in share price is disturbing, but the Board believes that it is an overreaction by the markets.

I need your help with two matters:

- First, recommend with reasons the approach that the Board should take to dealing with the capital market reaction resulting in the drop in Hottayr's share price.

[sub task (a) = 50%]

- Second, recommend with reasons the approach that Hottayr should take to repairing the damage to human capital, intellectual capital and social and relational capital.

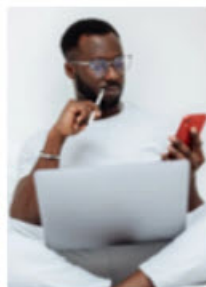
[sub task (b) = 50%]

Elaine

The news article referred to by Elaine can be viewed by clicking the Reference Material button above.

Norland Telegraph

Hottayr users hacked again



Users of Hottayr heat pumps are being asked to check their online security again, just a month since they were warned that strangers could access their home Wi-Fi networks. This time, the programming error is far more serious.

Hottayr has announced that cyber criminals have copied files containing the email addresses and the passwords used by heat pump users to access their Hottayr accounts. Email addresses are commonly used by default as usernames for many online accounts, and many individuals use just one password for every account that they have. The cyber criminals could use the files that they have stolen to access online banking and other sensitive accounts for a proportion of the users of Hottayr heat pumps.

Hottayr has recommended that Hottayr account holders should change their online passwords immediately. It remains unclear whether Hottayr will be liable for any losses incurred. Social media has been flooded with posts criticising Hottayr for permitting such sensitive details to be stolen.

Hottayr's share price fell by 15% when news of the security breach was announced, with no sign of recovery by the end of the day's trading.

Reference Material

Pre-seen

Write your reply to Elaine's requests in the box below.

From: Senior Finance Manager



To: Elaine Barros, Chief Finance Officer

Subject: RE: Data theft



Paragraph



 Reference Material Pre-seen

A month has passed. There have been no further IT problems.

Elaine Barros, Chief Finance Officer, invites you into her office:

"I have brought you an extract from this morning's Board meeting.

I need your advice on two matters:

- First, evaluate the advantages and disadvantages of using Hottayr's Internal Audit Department to investigate the events described in the extract.

[sub task (a) = 60%]

- Second, recommend with reasons the manner in which Hottayr's Board might resolve cyber risks at the strategic level. Your recommendation should not involve the use of internal audit."

[sub task (b) = 40%]

The extract referred to by Elaine can be viewed by clicking the Reference Material button above.

Board minute extract: IT issues

Emmanuel Maravanyika, Marketing Director, expressed concern about two recent events that were impacting negatively on customers' satisfaction and were affecting sales. Both events affected users of Hottayr heat pumps. He expressed further concern that the Board had not received a detailed briefing on the causes of these events:

- In the first case, an error in a software update had been blamed on programmers being under pressure, but no evidence has been offered to support that claim.
- In the second case, details of users' Hottayr accounts had been downloaded, but the circumstances that had made the download possible had not yet been investigated. When asked why, senior managers in the IT Department said that they were too busy checking that the next major software update was error free.

The Board agreed to hold a special meeting to discuss the matters raised by Emmanuel.

Reference Material

Pre-seen

Write your responses to Elaine's requests in the box below.

Rich text editor toolbar with the following icons:

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- Redo icon
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- Underline (U)
- Strikethrough (ABC)
- x_2
- x^2
- I_x

Formatting options:

- Paragraph dropdown
- Table dropdown
- Text alignment: Left, Center, Right, Justify
- Bulleted list
- Numbered list
- Decrease indent
- Increase indent



Thank you for completing the Strategic Case Study Exam.

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Please click the End Exam (E) button before leaving the testing room quietly.



Strategic Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.



Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	60	1	2	(a) 60% (b) 40%
2	60	1	2	(a) 50% (b) 50%
3	60	1	2	(a) 40% (b) 60%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

 Reference Material Pre-seen

Elaine Barros, Chief Finance Officer, asks you to meet with her.

"I have brought you an extract from a Board minute.

I need your advice on the following matters:

- First, evaluate the arguments for and against the proposition that accepting and enforcing the 6-year exclusivity period offered by the University would be inconsistent with Hottayr's commitment to 'support the move towards a zero-carbon world'.

[sub task (a) = 60%]

- Second, explain how Hottayr could employ stress testing to understand the specific factors that might threaten the successful development of a process to manufacture Saphgas in industrial quantities."

[sub task (b) = 40%]



The Board minute extract referred to by Elaine can be viewed by clicking the Reference Material button above.

Board minute extract: Climate-friendly refrigerant















Professor Amina Rajab, Research Director, briefed the Board on a meeting that she had held with the Head of Chemistry at Central City University. The University's Chemistry Department has created and patented Saphgas, a refrigerant that can be used in the heat pumps in fridges, freezers, air conditioners and central heating systems. Saphgas offers the following advantages over the HFCs that are presently used and their alternatives:

- It is climate friendly. It does not contribute to global warming, even if it is released directly into the atmosphere due to leakage or the dismantling of old equipment.
- It is more efficient than HFCs. A domestic heat pump using Saphgas will require a smaller pump that will consume less electricity than an equivalent heat pump that uses HFC-based refrigerants.
- Unlike most alternatives to HFCs, Saphgas is non-flammable and non-toxic. It can be used safely in any domestic setting.

The University wishes to recruit Hottayr as a business partner. Significant funding is required to develop a process for the manufacture of Saphgas in industrial quantities. If we provide that funding, then the University will grant us exclusive rights to buy the gas for a period of 6 years, after which it will be made generally available to all manufacturers.









 Reference Material Pre-seen

Draft your response to Elaine's requests in the box below.



Paragraph ▾

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Reference Material

Pre-seen

A month later, you receive the following email:

From: Elaine Barros, Chief Finance Officer

To: Senior Finance Manager

Subject: FWD: Saphgas update

Hello,

I have forwarded an email that I received from Professor Amina Rajab, our Research Director.

I need your help with two matters:

- First, recommend with reasons the approach that we should take to finance the N\$90 million payment to the University and the N\$110 million to modify our product designs and to adapt Hottayr's factory.
[sub task (a) = 50%]
- Second, recommend with reasons the approach that we should take to managing the currency risks associated with purchasing Saphgas from Tropicland.
[sub task (b) = 50%]

Elaine

The email referred to by Elaine can be viewed by clicking the Reference Material button above.

From: Professor Amina Rajab, Research Director
To: Elaine Barros, Chief Finance Officer
Subject: Saphgas update

Dear Elaine,

I have reached an agreement with Central City University concerning our exclusive use of Saphgas as the refrigerant in our heat pumps. If we are to proceed, then the University will require an immediate and non-refundable payment of N\$90 million to develop the industrial process required to manufacture gas in quantities that can be used for commercial purposes. That process is expected to take up to a year.

The University has already reached an agreement with Tropicland Chemicals, a chemical manufacturer based in Tropicland, a tropical country that has plentiful deposits of the minerals required to manufacture Saphgas. Tropicland Chemicals will manufacture Saphgas under licence and will sell exclusively to Hottayr for the first 6 years. Production will commence immediately after the process has been developed.

Tropicland Chemicals will invoice all sales in its home currency, the T\$, which is a volatile currency in relation to the N\$. At present exchange rates and production levels, we will spend N\$80 million each year on Saphgas, which is 10% less than we currently spend on the less efficient HFC refrigerant that we use at present.

Once Saphgas goes into production, it will cost a further N\$110 million to adapt Hottayr's heat pump factory and to modify our product designs so that we can replace HFC refrigerant with Saphgas in all of our heat pumps.

Amina

Reference Material

Pre-seen

Write your reply to Elaine's requests in the box below.

From: Senior Finance Manager



To: Elaine Barros, Chief Finance Officer

Subject: RE: FWD: Saphgas update

**B***I*U x_2 x^2 I_x

Paragraph



 Reference Material Pre-seen

A year has passed. Hottayr has been selling heat pumps based on Saphgas refrigerant for 6 months. Demand for the new heat pumps has been high.

Elaine Barros, Chief Finance Officer, invites you into her office:

"I have brought you a copy of a news article that has just gone online. The article summarises the impact that our introduction of Saphgas has had on our market.

I need your advice on two matters before tomorrow's Board meeting:

- First, explain the possible impacts of the recent changes in Hottayr's market, specifically in terms of unpredictable demand, customer empowerment at the homeowner level and social change.
- Second, evaluate the arguments both for and against the appointment to Hottayr's Board of an executive director who would be responsible for sustainability and environmental matters."

[sub task (a) = 40%]

[sub task (b) = 60%]

The news article referred to by Elaine can be viewed by clicking the Reference Material button above.

Norland Telegraph

Hottayr's sales exceed all expectations



Hottayr, the manufacturer of gas boilers and heat pumps, has enjoyed unexpected success following its replacement of conventional HFC as the refrigerant in its range of heat pumps with Saphgas, which has been described as a "climate friendly" refrigerant.

Switching to Saphgas generated a lot of positive publicity, after Hottayr paid N\$90 million to Central City University to complete the final development of the new refrigerant. Hottayr's sales of heat pumps have increased by 30% since the launch of products containing Saphgas.

Emmanuel Maravanyika, Hottayr's Marketing Director, commented that the upsurge in demand could be attributed to the genuine desire by users to heat their homes in a sustainable and responsible manner. Feedback from homeowners who have purchased heat pumps containing the new refrigerant indicates that demand has been driven both by the fact Saphgas has been shown to cause little or no damage to the environment and also that the manufacture of Saphgas has created wealth and employment opportunities in Tropicland, in mining the materials and in making the end product.

Reference Material

Pre-seen

Write your responses to Elaine's requests in the box below.

Rich text editor toolbar with the following icons:

- Document icon
- Cut icon
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- Undo icon
- Redo icon
- Table icon
- Bold (B)
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- Strikethrough (ABC)
- Subscript (x_2)
- Superscript (x^2)
- Text color (I_x)

Formatting options:

- Paragraph dropdown
- Table icon dropdown
- Text alignment: Left, Center, Right, Justify
- Bulleted list, Numbered list
- Decrease indent, Increase indent



Thank you for completing the Strategic Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

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Strategic Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.



Click **Next** to start the test.

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1	60	1	2	(a) 60% (b) 40%
2	60	1	2	(a) 50% (b) 50%
3	60	1	2	(a) 40% (b) 60%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the Pre-seen button.

 Reference Material Pre-seen

Elaine Barros, Chief Finance Officer, asks you to meet with her.

"I have brought you an extract from a Board minute.

I need your advice on the following:

- First, recommend with reasons the issues that Hottayr's Board should consider in deciding whether Vanheaters will be a suitable acquisition for Hottayr.

[sub task (a) = 60%]

- Second, recommend with reasons ways that Hottayr could manage the reputational risks arising from acquiring Vanheaters to design and install central heating systems as a member of the Hottayr Group."

[sub task (b) = 40%]

The Board minute extract referred to by Elaine can be viewed by clicking the Reference Material button above.

Board minute extract: Vanheaters

Professor Amina Rajab, Research Director, told the Board that she had met with the CEO of Vanheaters, a quoted company that offers a unique service throughout Norland. Vanheaters has a national network of heating engineers who specialise in the installation of heat pumps and underfloor heating systems in existing homes. Heat pumps are more efficient when combined with underfloor heating, and Vanheaters has a patented system for installing underfloor heating in existing homes that is less disruptive than traditional plumbing methods. This is attractive to homeowners.

Amina believes that purchasing Vanheaters would enable Hottayr to sell more heat pumps as replacements for gas boilers in existing homes. Hottayr will continue to make and sell boilers and heat pumps to its existing customers as before, even after the acquisition of Vanheaters.

Vanheaters is a franchised operation. Its engineers are all self-employed, but they are required to wear branded Vanheaters overalls and drive vans painted in the company colour scheme and branded with the Vanheaters logo. They provide their own vans and equipment. Engineers pay Vanheaters an initial franchise fee and a commission on each contract. Vanheaters provides marketing and administrative support. Engineers who join Vanheaters are required to work exclusively for the company.

Vanheaters has suffered some problems caused by its engineers specifying different brands of heat pumps in their designs for central heating systems. There have been complaints about the quality and reliability of heat pumps purchased from Hottayr's rival heat pump manufacturers, including Thermwyk, which has led to bad customer reviews on social media. Hottayr will become Vanheaters' sole supplier of heat pumps if the acquisition goes ahead. Engineers will be informed that they must use Hottayr's heat pumps.

Reference Material

Pre-seen

Draft your response to Elaine's requests in the box below.

Rich text editor toolbar with the following icons:

- Document icon
- Cut icon
- Copy icon
- Paste icon
- Undo icon
- Redo icon
- Table icon
- Bold (B) icon
- Italic (I) icon
- Underline (U) icon
- Strikethrough icon
- Subscript (x_2) icon
- Superscript (x^2) icon
- Equation Editor (I_x) icon

Formatting options:

- Paragraph dropdown menu
- Table icon
- Left align icon
- Center align icon
- Right align icon
- Justify icon
- Bulleted list icon
- Numbered list icon
- Decrease indent icon
- Increase indent icon

Reference Material

Pre-seen

A month later, the acquisition of Vanheaters is still under discussion, although nothing has been announced publicly. You receive the following email:

From: Elaine Barros, Chief Finance Officer

To: Senior Finance Manager

Subject: Ground source heat pump

Hello,

I have attached a news article that has just gone online. It could have implications for our willingness to acquire Vanheaters.

If Hottayr decides to acquire control of Vanheaters, then we will do so by means of a share for share exchange. Our share price is currently N\$50 per share. Vanheaters' share price is N\$40, with 15 million shares in issue to give a market capitalisation of N\$600 million. These share prices allow for all publicly available information, including the latest news concerning currency and interest rates. Our discussions with the Vanheaters Board have been held in secret, so the markets are unaware of our interest.

I need your help with two matters:

- First, discuss the possible impacts of interest and currency risks on Vanheaters if Norlandian interest rates increase and the N\$ strengthens.

[sub task (a) = 50%]

- Second, recommend with reasons how Hottayr should manage the share exchange if it decides to go ahead with the acquisition of Vanheaters.

[sub task (b) = 50%]

Elaine

The news article referred to by Elaine can be viewed by clicking the Reference Material button above.

Norland Telegraph

Norlandian Central Bank threatens interest rate rise



The Governor of Norland's Central Bank has issued a statement that continuing weakness in the N\$ against other key currencies was becoming a matter of some concern. She warned that it could be necessary to increase interest rates by as much as 0.5% in order to strengthen the currency.

The N\$ has been weak in comparison with other major currencies such as Eastland's E\$ for several weeks, leading to claims that the Norlandian Government has failed to manage the economy effectively.

Reference Material

Pre-seen

Write your reply to Elaine's requests in the box below.

From: Senior Finance Manager



To: Elaine Barros, Chief Finance Officer

Subject: RE: Ground source heat pump

**B***I*U x_2 x^2 I_x

Paragraph



 Reference Material Pre-seen

Six months later, Hottayr has just completed its acquisition of 100% of Vanheaters.

Elaine Barros, Chief Finance Officer, invites you into her office:

"I have brought you an extract from the minutes of this morning's Board meeting.

I need your advice on two matters:

- First, discuss the issues that should be considered when designing a training programme to ensure that Vanheaters' staff are aware of Hottayr's expectations relating to its core values and their impact on staff behaviour and corporate culture.

[sub task (a) = 40%]

- Second, recommend with reasons how Hottayr's Internal Audit Department could ensure that the Board's objectives for the training programme will be met. Please ensure you consider issues at the design and operational stages."

[sub task (b) = 60%]

The extract from the Board minutes referred to by Elaine can be viewed by clicking the Reference Material button above.

Board minute extract: Vanheaters

Dr Eva De Volder, Chief Executive Officer (CEO), updated the Board on the successful completion of Hottayr's acquisition of Vanheaters. This was a significant transaction that had increased the market capitalisation of the Hottayr Group by 20%.

The Board discussed the importance of integrating Vanheaters into the Hottayr Group as quickly and effectively as possible. Martin Gregory, Non-Executive Chair, suggested that all of Vanheaters' staff should be required to complete an online training programme so that they understand Hottayr's expectations concerning staff behaviour and corporate culture. He suggested that the course could focus on Hottayr's core values:

- Hottayr keeps its promises.
- Hottayr ensures that it understands the needs of its customers and that it is responsive to those needs.
- Hottayr is constantly striving to enhance its products, making them safe, efficient and economical to operate.
- Hottayr people trust and respect one another.
- Hottayr is a safe and healthy place to work.

Reference Material

Pre-seen

Write your responses to Elaine's requests in the box below.

Rich text editor toolbar with the following icons:

- Document icon
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- Redo icon
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- Bold (B) icon
- Italic (I) icon
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- Strikethrough icon
- Subscript (x_2) icon
- Superscript (x^2) icon
- Text color icon

Formatting options:

- Paragraph dropdown menu
- Table grid icon
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- Center align icon
- Right align icon
- Justify icon
- Bulleted list icon
- Numbered list icon
- Decrease indent icon
- Increase indent icon



Thank you for completing the Strategic Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.

STRATEGIC CASE STUDY

November 2022 & February 2023

EXAM ANSWERS

Variant 1

These answers have been provided by CIMA for information purposes only. The answers created are indicative of a response that could be given by a good candidate. They are not to be considered exhaustive, and other appropriate relevant responses would receive credit.

CIMA will not accept challenges to these answers on the basis of academic judgement.

SECTION 1

Requirement 1 – evaluate the proposal

The suitability of this proposal depends on its strategic fit with Hottayr's overall strategy. In this case, that strategy is basically to sell good quality boilers and heat pumps to large business customers. Large housebuilding companies are already one of Hottayr's three main categories of customers because they place bulk orders to enable them to install boilers or heat pumps in each property in a housing development. This proposal could encourage the move away from gas boilers, in favour of heat pumps. That could accelerate Hottayr's move towards heat pumps. Hottayr's vision is to move towards a zero-carbon world, which would be consistent with the development of a ground source heat pump for sale in large quantities. Ground source heat pumps are superior to the air source pumps that Hottayr currently sells because they are less exposed to changes in the weather, such as decreases in temperature. This proposal might give Hottayr a boost in that market. The association with Hoddlift would be potentially beneficial to Hottayr because it is reasonable to assume that the inclusion of these new heat pumps in Hoddlift's homes would be promoted as a marketing feature. Hottayr would be promoted as a "preferred" supplier, and so its reputation would be enhanced in a market sector that is clearly important to Hottayr.

The feasibility of this proposal depends on Hottayr's ability to develop this new product. It seems likely that the modifications to Hottayr's existing heat pumps would be relatively minor. The principle is the same, but the evaporator would have to be designed to be buried underground instead of being exposed to the

open air. That is unlikely to require a massive change to existing designs. Ground source heat pumps are, in any case, already on sale. They are only less popular because they are difficult to install in houses that have already been built. Hottayr will be able to work closely with Hoddlift to ensure that the evaporator on the new pump is optimised to fit with Hoddlift's house designs and approach to building foundation. That could be supplemented by obtaining copies of ground source heat pumps that are already on the market and reverse engineering them to learn about practical aspects of existing successful designs. Hopefully, Hoddlift's interest will also involve the provision of financial support in the development and testing of new designs, thereby increasing the likelihood that this is a positive NPV project. The one concern may be that working with Hoddlift will result in ground source heat pumps that are optimised for Northland's climate, and so export sales will be restricted unless further modifications can be made.

The acceptability of this proposal depends on the attitudes of the various stakeholders who will have to be satisfied. The most immediate concern would be the expectations of Hoddlift concerning exclusivity. Hoddlift may be reluctant to work closely with Hottayr and to support the development of a new product if Hottayr plans to sell ground source heat pumps to rival housebuilders. Hottayr must be careful not to restrict potentially successful products to a single customer who is unlikely to order more than 30,000 units each year. It may be preferable for Hottayr to bear all of the risks and costs associated with this new product so that it can then sell them to all potential customers, including Hoddlift. Hottayr should consider approaching other major customers for existing products to determine whether there would be a demand for ground source heat pumps. Most demand will likely come from housebuilders because they are in a better position to install the devices in the foundations of houses that are under construction. Hottayr will also have to consider the response of shareholders to embarking on a project with Hoddlift, taking account of the costs and the associated risks. The fact that there has been insufficient demand to prompt the development of this product suggests that shareholders might be rather nervous about Hottayr entering into this arrangement.

Requirement 2 – <IR> report

Social and relationship capital reflects relationships with stakeholders that enable the sharing of information and the ability to enhance wellbeing. In this case, the proposal seems to be that Hoddlift wishes to collaborate with Hottayr to change and develop existing products to enhance their overall efficiency. Hoddlift will provide information about its approach to housebuilding that should enable Hottayr to develop a new product line that is suitable for heating those houses. This collaboration should create a mutual dependence that will benefit both companies. Hoddlift will have a central heating system that has been optimised for its house designs and Hottayr will have a guaranteed customer for an important new product. The fact that Hoddlift is already one of Hottayr's biggest customers suggests that there is already a mutually beneficial and trusting relationship, and so there is a sound basis for the two companies to

support one another. The development of the new ground source heat pump is likely to be an opportunity to further develop that spirit of mutual support.

The development of an effective ground source heat pump should benefit natural capital because it will enable Hoddgkiss to build homes that are heated in a manner that is less harmful to the environment. Ground source heat pumps draw heat energy from a source that is less badly affected by the weather, and so they should be more attractive to potential customers. Air source pumps are more susceptible to cold weather, which is the time that customers will be most dependent on them. Customers may be more willing to trust their comfort with a ground source heat pump rather than insisting on a gas boiler. The greater efficiency of ground source pumps should also mean that they will consume less electricity in their operation than existing air source products, and so they will cause less damage to the environment even if they displace demand for existing heat pumps rather than gas boilers. There could be concerns about the manufacture of ground source pumps because they will be less accessible and so more difficult to maintain. That could lead to the use of more robust materials, which could offset some of the benefits of the lower operating costs.

SECTION 2

Requirement 1 – rights issue

Hottayr will have to ensure that the shareholders are suitably informed about the need for this additional equity. This is a significant transaction because it will increase the book value of share capital by 20%. The shareholders are likely to have two main concerns. The first is whether this investment is sound from a strategic point of view. The Board will have to reassure the shareholders that their plans are sound, without giving competitors sufficient information to enable them to launch their own competing ground source heat pumps in competition. It should be sufficient to inform the markets that Hottayr plans to invest in new product development that will speed up the transition from a mix of gas boilers and heat pumps to heat pumps alone. The second issue is why the funds have to be raised through equity rather than debt, which is generally cheaper. The gearing ratio is presently $200/(200+408) = 33\%$, which is not particularly high. Borrowing N\$50 million would increase it to $250/(250+408) = 38\%$, which is starting to seem high. It should be relatively easy to convince the shareholders that raising funds through equity will lower gearing, thereby creating greater flexibility in future funding decisions.

Hottayr's Board will have to settle on an issue price for the issue. That will determine the number of shares that the company plans to issue. Shares cannot be issued at a discount to the par value, which means that the par value is the absolute minimum issue price. The issue price cannot exceed the market price as it will stand as at the issue date, otherwise the shareholders could buy additional shares more cheaply on the open market than by taking up their rights. In theory, the issue price should not affect shareholder wealth regardless of where it is set between those two amounts. Shareholders who do not wish to take up their rights will sell them on the open market. The value of the rights will be equal to the difference between the issue price and the market price. The shareholders could, however, be concerned if the discount implied by the issue price is excessive. A discount in the region of 20% might be regarded as a reassuring amount.

The Board will also have to consider whether to have the issue underwritten, which would ensure that the N\$50 million would be raised even if the rights are not all taken up. If the issue fails, then the Board's credibility will be severely undermined. There is, however, a cost to underwriting any share issue because the underwriter is exposed to the risk of failure. The Board must decide whether the risks justify the cost of underwriting.

Requirement 2 – scenarios

There could be an immediate impact on Hottayr's cash flows if the new heat pump has been developed and is in production. Any receivables due from Hoddlift may have to be written off as uncollectable. There is also a longer-term concern that Hottayr will have lost its primary customer for its ground source heat pump. It may have inventories of this product that will be difficult to sell unless they are sold at a discounted price, possibly even at a loss. Hoddlift is a major housebuilder, and so its collapse could imply that the entire housebuilding

industry is in difficulty, which is a problem for Hottayr due to the fact that ground source heat pumps are difficult to install after a house has been built. A major disruption to the building industry could leave the company with no customers for this product.

Hottayr might mitigate the possible closure of Hoddlift by insisting that it will sell the ground source heat pumps to all customers, including Hoddlift's competitors. That will ensure that it can continue to sell the product in the aftermath of Hoddlift's closure, provided the industry as a whole survives. Hottayr might also aim to schedule production to articulate the needs of the housebuilders. The companies will plan their new developments well in advance and should be able to predict when they will need to install heat pumps. If Hottayr aims to deliver these heat pumps immediately before they are needed on site, then credit risks and the risk of excess inventories will be minimised.

Refrigerant leaks will cause significant environmental damage because the escape of these gases will cause global warming. It is unlikely that the impact will be measurable, but the point is that customers who care about the environment may not trust Hottayr's heat pumps and might start to insist on a different manufacturer's products for any upgrades or replacements to their heating systems. Hottayr may also be liable for costly repairs, which could be difficult and expensive if the leaks are occurring underground. There could be significant adverse publicity if homeowners are left without heating for the duration of those repairs.

The most logical mitigation would be to avoid the scenario by designing and testing the design to minimise the likelihood of any leaks. Hottayr should also develop detailed handling and installation instructions so that Hoddlift's builders know how to work with the product and minimise the risk of damage and leaks. Ideally, the design should also allow for access to the joints and other parts of the product that are potentially susceptible to leaks, even after the pumps have been installed. It would be even better if some provision could be made for access to the underground components in the event of problems. It would be preferable to avoid building the evaporator into the foundations of the house if that would require major demolition and rebuilding if repair is required.

SECTION 3

Requirement 1 – ethics of restricting sales

The most relevant issue is the principle of professional behaviour, which requires Hottayr to comply with relevant laws. The fact that Hottayr has made a formal promise not to sell its new pump to any other customer means that it would be in breach of this principle if it decides to sell to other customers anyway. The fact that the contract might be open to interpretation and could be broken is not really an excuse for doing so. Hottayr made a binding commitment to Hoddlift and should respect it. Any breach of a material contract will undermine the credibility of Hottayr and its Board.

Integrity requires Hottayr to be straightforward and honest in all of its business dealings. It appears that it permitted Hoddlift to participate in the development of an important new product and now it is considering giving away the resulting intellectual property. It is unlikely that Hoddlift would have gone ahead with the development of a new heat pump if its competitors were to benefit fully from the cost of that development. Hottayr could be accused of lacking integrity because it would clearly benefit from selling this pump to as many housebuilders as possible. It will appear that the company never intended to honour its promise to Hoddlift.

Objectivity requires Hottayr to refrain from allowing bias or influence from other people to influence its decisions. In this case, the pressure to expand sales appears to be due to an ill-informed argument that Hottayr could improve the environment by selling more ground source heat pumps. Hottayr is not the only possible manufacturer of such devices, and so it is now withholding them from the market as a whole. Any other manufacturer could quickly and easily develop their own competing devices, particularly now that Hottayr and Hoddlift have demonstrated that there is a demand for them.

Requirement 2 – bonuses

Directors' remuneration raises two key issues. The first is that remuneration schemes should align the interests of directors and shareholders so that the shareholders can feel confident that the directors are aiming to maximise their wealth. Shareholders are reluctant to trust their directors to work hard and to tolerate acceptable risks unless there is a mechanism in place to expose the directors to the consequences of their decisions. The second issue is that the remuneration scheme should result in realistic and fair rewards that motivate and encourage directors, but without resulting in excessive payments. Those issues can lead to conflicted feelings amongst shareholders because performance-related elements, such as bonuses that are linked to profits, can result in remuneration that seems excessive. Scandals relating to executive compensation frequently focus on the absolute amounts paid to directors, with shareholders feeling that the amounts being taken are excessive. That can lead to an asymmetrical attitude towards executive remuneration schemes, with shareholders arguing that the Board should accept reduced rewards when the company's profits are poor and complaining that generous rewards are excessive when profits are high. Shareholders tend to look backward at the

outcomes of remuneration schemes and overlook the personal risks accepted by their directors in the course of the year in order to enjoy those rewards.

Hottayr's directors could argue that they are entitled to take the large bonuses because they were determined in accordance with contracts between themselves and the company. The shareholders were aware of the terms of those agreements because quoted companies make detailed disclosures of directors' remuneration schemes in their annual reports. Arguably, it would be unfair for the shareholders to offer substantial rewards in return for future high profits and then to complain if those rewards became payable. It could also be argued that it would be dysfunctional for the shareholders to take such an approach because the directors would face only downside risk from their remuneration scheme, with little or no bonus in a poor year and a capped bonus if profits are good. Such a situation would motivate the directors to be very risk averse because there would be little incentive for them to take risks that offer a strong upside because they would get no benefit if the risk paid off and they would suffer if there was a loss. The shareholders should also consider the possibility that it will be demotivating for the directors to deliver a strong profit for the year and then to be criticised for accepting a percentage of that profit. The shareholders should be grateful for the fact that the large payments to the directors provide evidence that the company has had a successful and profitable year and that aligning interests is more important than capping remuneration.

The fact that the increased profit has arisen from accepting a proposal put forward by Hoddlift does not make the directors any less deserving of their increased bonus. In the first instance, Hoddlift made the proposal on the basis of an existing business relationship between the two companies. Hoddlift chose to approach Hottayr rather than a competing manufacturer. That suggests that Hottayr has been sufficiently well managed to be regarded as a trusted supplier. The fact that the proposal originated from Hoddlift does not diminish the role played by Hottayr's Board. It was necessary to decide whether the proposal was consistent with Hottayr's strategy and whether the investment offered a satisfactory outcome. There were also significant internal management issues that required strategic oversight, such as the development of the ground source heat pump and the associated adaptation of the factory. Hottayr's directors have had to accept responsibility for the risks associated with this project. If the project had failed, then they would not only have lost some of their bonus, but they would also have damaged their reputations, which could have affected their future careers. The development of a new product and the associated collaboration with the primary customer would also have added to the directors' workload. It is perfectly acceptable for the directors to accept the higher remuneration that can be attributed to the collaboration with Hoddlift.

STRATEGIC CASE STUDY

November 2022 & February 2023

EXAM ANSWERS

Variant 2

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SECTION 1

Requirement 1 – PESTEL

A comprehensive PESTEL analysis will help Hottayr's Board to obtain a better understanding of the ecosystem in which the company operates. The six headings provide a logical and consistent framework that will enable the Board to conclude the commercial impact of the grant's withdrawal and the likelihood that the grant will be withdrawn. While it is impossible to predict the future, carrying out a detailed analysis of those possibilities will help the Board to demonstrate that it took prompt and effective action to deal with the possibility. The output from the analysis will also assist the Board to plan for contingencies that might emerge from the report.

Political and economic factors are arguably the most important matters for the Board to understand. Hottayr's Board should review the government's record on the environment and on addressing global warming. If the government has a strong reputation in that area, then it might be more difficult to justify withdrawing the grant because opposition parties might then criticise its stance. The state of the economy could also have an impact on the government's position because it may not be feasible to continue to subsidise home improvements without increasing taxes.

Political and economic factors might also affect the impact of the withdrawal of the grant on demand for Hottayr's heat pumps. If the government is committed to protecting the environment, then it might introduce legislation that encourages homeowners to install heat pumps. In that case, the loss of the grant might have minimal impact on demand. The cost of gas will also affect the willingness of consumers to invest in a heat pump for their homes. If gas prices increase, then

it will enhance the savings associated with heat pumps. Economic factors will also affect consumers' willingness to invest in home improvements. If interest rates are high or consumers are nervous about job security, then they will be less willing to take out loans for discretionary expenditure on heat pumps.

Social and technological issues will also have a significant impact on the amount that consumers are willing to pay for a heat pump. Improvements in the design of heat pumps make them more desirable to consumers because they will ensure that their homes are heated properly. Paradoxically, the possibility that heat pumps might improve still further could have the effect of delaying buying decisions in the absence of a grant to make them more attractive. Consumers might decide to wait for even better models. Social attitudes will also play a part in this decision. The loss of the grant will be less of a problem if consumers feel a certain degree of social pressure to install a heat pump in place of their gas boiler.

Hottayr will also benefit from a better understanding of the technology that is used to model and evaluate trends in global warming and the risks of irreversible harm. The credibility of such evidence gathering could have a marked effect on the willingness of consumers to switch to heat pumps, especially if the grant is withdrawn and so the costs of switching increase. Hottayr should not simply take it for granted that society's understanding of the need to switch away from fossil fuels will remain constant and unchanged.

Environmental and legal issues affect the pressures and motives affecting the government, which could enable Hottayr to enhance its understanding of the likelihood that the grant will be withdrawn. Norland's economy could be affected by concerns that its government is failing to address concerns over global warming. In particular, it could have an impact on exports. The withdrawal of the grant could have a wider impact on Norland's trading position with respect to the rest of the world.

The pressures on the Norlandian government could also be affected by international treaties and other commitments that have been made at an inter-governmental level. The government will lose credibility at a global level if it does not maintain the agreed pace of progress towards achieving targets for the reduction in emissions. Again, those factors may result in legislation that is designed to encourage the adoption of heat pumps, without necessarily offering grants or other financial support. For example, a ban on gas boilers in new homes would reduce the impact of the withdrawal of the grant.

Requirement 2 – lobbying

The principle of integrity requires Hottayr to be straightforward, honest and truthful in its relationships. Lobbying is essentially about persuading the government to behave in a manner that suits the lobbyist's interests. The question of whether lobbying is unethical really depends on the extent to which Hottayr is open and transparent about its interests. It is legitimate for Hottayr to lobby for the continuation of the grant by advising the government about the potential reduction in the consumption of gas for heating purposes, provided the arguments are based on accurate information about the social and

environmental consequences of withdrawing the grant. Hottayr should acknowledge its interest in having the grants continue in the event that it is challenged, although that should be clear provided the company lobbies directly and in its own name.

The principle of objectivity requires Hottayr to apply professional judgement without influence from third parties. It is legitimate for Hottayr to pursue its own commercial interests, which could include lobbying for the continuation of the grant. The fact that members of Norland's government believe that the grant is no longer needed should not prevent Hottayr from arguing for its retention, even if its motivation is largely concerned with furthering its commercial interests. Hottayr's Board has a clear duty to maximise shareholder wealth, and so it should resist political changes that would harm the company's cash flows. Hottayr should, however, respect the fact that the government is also bound by the principle of objectivity. That would not prevent it from taking into account of valid arguments concerning the possibility that continuing the grant will be beneficial for Norland's citizens.

The principle of professional behaviour would prevent Hottayr from action that would negatively affect the reputation of companies that promote the reduction in carbon emissions. Compliance with that principle is complicated by the fact that any lobbying by Hottayr could discredit arguments for replacing gas boilers with heat pumps. Any public statement by Hottayr concerning the grant will appear to be an attempt to redirect government spending in a manner that benefits the company. Taxpayers may find that disturbing if they believe that there are more important priorities than reducing carbon emissions. Hottayr could provoke a debate that discourages the government from spending on reducing carbon emissions because other forms of government activity are presented as being more important. Opposition parties could use Hottayr's lobbying activities as a justification for arguing against any attempt by the government to act in defence of the environment.

SECTION 2

Requirement 1 – predicting decision

One strength of this approach is that the journalists are in constant touch with politicians, and so they are aware of the political pressures that they must balance. The journalists can take a detached view of the position that Norland's Government finds itself in with regard to the continuation or cessation of the grant, and so their expectations will be well informed. The journalists must take an objective view of the possibilities open to the Government because their role is to observe and comment. They will develop an understanding of the pressures and conflicts that affect political decisions. Polling several politicians will reduce the risk of an exaggerated view arising from political bias or misunderstanding, and so a collective view based on a poll will be more likely to prove accurate than the views of any given journalist. This will be a relatively inexpensive way to develop an informed forecast, provided the cooperation of the journalists can be obtained.

There may be very few viable alternatives to approaching journalists. Speeches and statements issued by politicians may be misleading because they may reflect the wishes of the various political parties who have an interest in this matter. The fact that the Government wishes to change a policy, such as withdrawing the grant, does not necessarily mean that it will be able to. Political and economic constraints may make it difficult to implement a desired course of action. The information that is available in the public domain concerning politicians' priorities may be misleading. At best, Hottayr will be able to establish that the grant may be discontinued, but not necessarily that it will. Approaching individual politicians directly could provide a deeper insight, but it is unlikely that any politician would be willing to discuss policy matters directly with a company that is attempting to influence policy.

One disadvantage of this approach is that Hottayr is seeking a prediction about whether the grant will be discontinued or not. Clearly, that prediction will be either correct or incorrect. Evaluating the reliability of the prediction will be complicated because there can be no guarantee that the result will prove accurate. A statistical analysis based on factors such as the degree of consensus between respondents might help, although there will always be the possibility that some journalists have better insights than others and those could be the ones who expressed the minority view. There could also be issues with response bias because the journalists with the best links to the Government could be unwilling to participate in the poll because they do not wish to compromise their contacts.

Approaching journalists in this way could also complicate the forecast because Hottayr's interest could become a news story in itself and that could affect the final decision over the grant. Journalists who speculate on Hottayr's interest in this matter or the outcome of the poll in their news coverage could influence the Government's final decision on the grant. The journalists would not necessarily have predicted any such press interest when they were polled, and so their responses would have been based on the information that they had at that time. The biggest concern, in this case, is that the coverage could imply that Hottayr was attempting to interfere with politics in order to increase its profits, and so

politicians might feel it necessary to withdraw the grant in order to avoid the appearance of collusion with Hottayr.

Requirement 2 – informing shareholders

One advantage of informing the shareholders is that it will reduce the risk of an overreaction by the market if the grant is withdrawn and the dividend is reduced. The share price is essentially the present value of expected future dividends. If expectations of future dividends are revised downwards, then the market price will fall. If the decrease is unexpected, then the market may be concerned that Hottayr is in serious difficulty and the share price could fall dramatically, leaving the directors vulnerable to shareholder criticism. Announcing the possibility of a setback in the form of reduced revenues if the grant is withdrawn will enable the market to digest that information before the dividend is announced. The market will be aware of the possibility of disappointing news and will factor that into the share price in a realistic manner. The fact that the directors are being open and transparent about the possible setback will also reassure the shareholders in the event that the grant is withdrawn and a reduced dividend is announced.

The announcement that the dividend might decrease will also draw attention to the wider impact that the withdrawal of the grant might have for shareholders. That could draw attention to the Government's intentions and could lead to the publicity that will encourage the Government to continue paying the grant. The loss of revenue could have implications for other stakeholders, including Hottayr's employees and environmental campaigners who may be concerned about any action that could reduce the uptake of heat pumps. The announcement might not strengthen the case for retaining the grant by much, but if Hottayr decides to announce in order to keep the market informed then the impact on the Government will still be a marginal gain.

One disadvantage to making the announcement is that it could cause some unnecessary volatility in the share price, which could make Hottayr appear to be a riskier investment. If Hottayr's Board informs the shareholders of its concerns, and the grant subsequently continues beyond the dividend announcement, then the shareholders will have been concerned for no reason and the reduction in share price may have been unnecessary. That may not be a serious disadvantage though, partly because the markets should already have taken account of the risk that the grant may be withdrawn. The fact that the Government might withdraw the grant is public knowledge. In an efficient market, the share price will already have made some allowance for the possibility that Hottayr's future revenues and profits could be affected by the withdrawal of the grant.

The market could read too much into any announcement made by Hottayr's Board concerning the grant. That could result in the overreaction that the Board wishes to avoid. The shareholders could, for example, assume that any announcement was informed by information gathered by the company, and so the likelihood of the grant's withdrawal or the impact on profits could be exaggerated. The impact of the lost business could also be overstated following an announcement, if the market believes that the Board expects revenues to be

highly elastic with respect to the cost of switching to heat pumps. The announcement could also be misinterpreted as a willingness on the part of Hottayr's Board to accept the Government's decision without attempting to press for a continuation of the grant.

SECTION 3

Requirement 1 – diagrams

Hottayr's diagram is potentially misleading because it confuses several different factors in order to arrive at a downward slope in carbon dioxide emissions. The trend arises because estimates of the number of gas boilers that have reached the ends of their useful lives exceed the number of new boilers that Hottayr is selling. It would be far more relevant to offer a transparent statement showing a timeline of the different models of gas boilers that Hottayr has sold year by year, with a description of their efficiency and their emissions performance. That would reflect Hottayr's commitment to managing the environment and would also enable stakeholders to get a better understanding of whether the company's products are sustainable. It would also eliminate the need for assumptions that could prove to be invalid. Hottayr cannot actually tell when consumers replace their boilers or how many boilers that were sold in the past are still in operation.

Hottayr should extend the report to allow for the manufacture, distribution and installation of its products. The diagram that is currently published will appear to support the view that Hottayr is sustainable if its products have short useful lives because they will be taken out of service and their emissions will cease. Incorporating the environmental impact of creating replacement units and getting them into service will give a clearer understanding of the overall effect of Hottayr's products. Even the most efficient heat pumps will have to be transported and stored in inventory before being delivered and installed by an engineer. Taking account of the emissions associated with those activities will allow for a wider understanding of the lifecycle of a boiler or heat pump.

Hottayr should offer a much clearer statement of the assumptions that it is making and the basis on which they have been determined so that stakeholders can form a clearer understanding of their validity. For example, the emissions from the operation of gas boilers of different ages also require assumptions about how consumers heat their homes. Hottayr should clarify how it believes that consumers behave. Hottayr should disclose the amount of electrical power that its heat pumps require and leave stakeholders to decide whether they believe that consuming electricity causes emissions. That disclosure could be supported by Hottayr's assumptions. The fact that the diagram covers a 4-year period, with more than two of those years reflecting forecast figures also requires a clear statement of the assumptions made in extrapolating past trends. That is particularly clear in the case of HFC emissions which are only declining because of an expected drop in demand.

Requirement 2 – internal audit

Involving an internal audit will reassure the Board that the report is complete and accurate, and so they should not be at risk of criticism from stakeholders who believe that the report is misleading. The report will be studied closely by stakeholders who have an active interest in environmental matters, and so any apparent errors or inconsistencies will be highlighted and commented on. Internal audit staff is well qualified to read the information that is provided for the report closely and to request clarification. The fact that an internal audit has

certified the report in this way will reassure the Board before they commit to publishing the report. In the event that an error does slip through, the fact that an internal audit had been involved will help the Board to argue that they took all reasonable precautions with the accuracy of the document.

Involving internal audit in this manner will send a clear message to Hottayr's management team that the Board is taking the sustainability report seriously, and so managers responsible for their departments' submissions will be encouraged to take particular care. The Internal Audit Department can engage with managers who are involved with the report to seek confirmation that all relevant standards are being complied with, both in terms of the validity of the figures and their disclosure. Departmental managers may regard the disclosures in the report as reflecting on their departments and on their reputations as managers, so they may be tempted to manipulate their submissions.

Internal audit staff may not necessarily have any particular expertise with regard to social and environmental reporting, so there can be no guarantee that they will detect any misrepresentation. There could be a risk that the Board has a false sense of security because of internal audit's involvement.

The inclusion of a separate internal audit review in the sustainability report will help stakeholders to appreciate the care that has been taken in the document's creation, which could make it more credible. The review should indicate, at least in outline, the work that the external auditor has undertaken in checking the report and readers should be prepared to accept that any such work has actually been undertaken. Internal auditors are often professionally qualified accountants, and so they are bound by codes of professional ethics. They are unlikely to make false claims in their review. The review will ensure that any claims concerning facts, such as statistics or cash flows, can be believed.

Internal audits may not add a great deal of credibility to the report because they cannot be independent of the company or the Board. A cynical stakeholder who wishes to argue against the credibility of the sustainability report can argue that the internal auditors report to the directors and that the directors could exert pressure on them to distort their report. It might even be argued that the internal auditor's review is an attempt to assist the Board to mislead readers, and so it might actually undermine the report. It could be preferable to pay an independent audit firm or consultant to provide a report on the document so that stakeholders will be more confident in their assurances.

There could also be concerns about the competence of the internal auditors with respect to this review because their skills lie primarily in checking compliance. That means that their role will be limited to checking the accuracy of facts, but they will not necessarily be skilled in determining whether the basis on which Hottayr's sustainability is being described is acceptable. It would be possible to provide the internal audit department with additional training to undertake this task, but that could make the cost of the review excessive in terms of financial cost and internal audit time. Realistically, an internal audit will only add value if it can check compliance with a credible external source, such as a set of sustainability reporting standards that provide detailed guidance on disclosure.

STRATEGIC CASE STUDY

NOVEMBER 2022 & FEBRUARY 2023

EXAM ANSWERS

Variant 3

These answers have been provided by CIMA for information purposes only. The answers created are indicative of a response that could be given by a good candidate. They are not to be considered exhaustive, and other appropriate relevant responses would receive credit.

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SECTION 1

Requirement 1 – creating subsidiary

Hottayr seems to have a single site that handles the management and administration of the Group as a whole. The staff responsible for those various functions are based at a Head Office building in Central City. The gas boiler factory appears to be self-contained with regard to production facilities, but it does not appear to have the necessary administrative staff to enable it to operate independently. Hottayr will have to reorganise the Head Office into two groups, one of which will relocate to service the gas boiler factory and the other to ensure that the heat pump factory continues to operate smoothly. There will be synergies in operating a single Head Office team to manage both factories, so Hottayr may find it difficult to create two viable administrative teams from the 2,600 staff presently at Head Office.

There could be problems with morale at Head Office because staff may be reluctant to move to Gassmyne. That could create practical problems if they have to commute to a different location and other concerns if Gassmyne might impose new terms and conditions. Staff who remain in Hottayr to manage heat pumps could also be concerned that the Head Office will be relocated to Maxtown, which would be closer to the remaining factory. It could be inefficient to continue to have the Head Office in Central City if Hottayr will no longer have a factory there. Staff will be unhappy about the possibility of having to choose between relocating to a new city and being made redundant, even if Hottayr has no specific intention of doing so at the moment.

Hottayr will have to transfer ownership of the factory's assets to the new subsidiary so that Gassmyne can be clear about the assets that it will take into its possession. That will require care with respect to tangible assets because they will have to be transferred at a price that is acceptable to tax authorities. The assets will have to be valued at their fair value, which may be difficult because of their specialised nature. Hottayr will also have to identify the intangible assets that Gassmyne will require in order to operate the factory, such as designs, technical drawings and patents. Care will have to be taken to ensure that Hottayr retains sufficient control over such intellectual property to enable it to manage warranties on gas boilers. It may be necessary to have the ability to manufacture spare parts for a time after the transfer.

Requirement 2 – share prices

Gas boilers contribute a significant proportion of Hottayr's revenues and, presumably, its profits and net cash flows. The loss of such a major part of the business will make the shareholders nervous. The selling price of the factory has not been announced, so one possibility is that the market believes that Hottayr will accept a selling price that is less than the present value that future sales of gas boilers had been expected to bring. Sales of gas boilers are declining slowly, but that does not necessarily suggest that it is a sound strategic decision to sell the factory. The fact that Gassmyne is keen to buy confirms that demand for gas boilers will continue for some time. The capital markets could have anticipated that the gas industry would sustain demand for gas boilers into the long-term future, even if Hottayr does not believe that to be the case. Hottayr is now reduced to a single product range, namely heat pumps. That could put Hottayr at additional risk if heat pumps do not prove sufficiently popular. Sales of heat pumps are growing, but there are limits to demand. For example, it is not necessarily possible for a homeowner to replace a gas boiler with a heat pump.

The capital markets will also have to form a view on the value of the cash raised from the sale to Gassmyne. The proceeds of the sale of the gas boiler business will create the opportunity for Hottayr to expand the heat pump business or to invest in one or more new ventures. The present value of investing the cash will offset the reduction in Hottayr's value due to the loss of the boiler factory. In the absence of a clear announcement from Hottayr's Board, there is nothing to inform the market about how the funds will be used, and so there will be a degree of caution associated with this evaluation. It could be that the market price is temporarily reduced until Hottayr's Board publishes some positive news. It will be difficult for Hottayr to address this without revealing commercially sensitive information about its plans.

The market may believe that Gassmyne will overpay for this line of business, which will effectively make it a negative NPV project. Hottayr will not sell the factory for less than its value to the Hottayr Group. It is unlikely to sell a major line of business at a discount. It may prove difficult for Gassmyne to run the factory more efficiently than its previous owners, particularly given that Gassmyne has no direct experience in manufacturing. Unexpected problems could disrupt production or affect product quality, which could lead to long-term difficulties with the implementation of this new strategy. It may be difficult for

Gassmyne to successfully manage the gas boiler factory in the event that Hottayr retains its full senior management team and forces Gassmyne to recruit replacements externally.

The markets may also have concerns about the proposed strategy for Gassmyne to continue to sell gas to consumers in Norland and other countries that have a suitable domestic infrastructure. The market could believe that demand for gas heating will decline, even if Gassmyne believes the opposite. It may be that the markets had hoped that Gassmyne had an alternative long-term strategy to counter declining demand for gas and oil in the face of increased demand for sustainable alternatives. The stated reason for buying the factory implies that Gassmyne's strategy is focussed on preserving and maintaining existing lines of business, which could prove disappointing to the market. Gassmyne's decision to acquire a gas boiler factory just in case supplies became scarce implies a lack of confidence in demand for gas heating and a very defensive approach to strategy.

SECTION 2

Requirement 1 – management of acquisition

Gassmyne should have been aware that factory staff would be nervous about their job security in the aftermath of the takeover. Acquisitions are frequently associated with rationalisation and redundancy. Factory staff were aware that sales of gas boilers were declining slowly under Hottayr's ownership and would have been concerned about the decision to sell that part of the business. Gassmyne should have made an immediate announcement to reassure stakeholders, including employees, that it had no intention of relocating production. That assurance should have been backed up by a sign that Gassmyne was committed to that site, such as an investment in the factory or the establishment of a research and development facility on the site.

Consumers will be reluctant to risk the purchase of unsafe gas boilers, so Gassmyne should have made the maintenance of product quality a priority. Rather than simply allowing the processes and standards that were effective under Hottayr's ownership to continue, Gassmyne should have enhanced the status of quality managers, perhaps by increasing their salaries. Gassmyne should have demonstrated its commitment to product quality by internal reporting on product quality to all production staff. Backing those reports up with a bonus payment to all staff if standards were maintained would have further confirmed that commitment and might have improved morale.

Given the importance of the safety inspection, Gassmyne should have taken precautions to reduce the risk of failure. One key starting point would have been to have engaged a consultant to conduct a safety inspection that would provide an early indication of what the government inspectors would discover. If the internal review suggested that Gassmyne would fail this inspection, then the company should have suspended production until matters could be rectified, perhaps by recruiting and training new staff. The fact that staff were being replaced, as well as the need to enhance quality, should have been communicated to the workforce to confirm that Gassmyne planned to put all matters right at the factory.

Requirement 2 – support from Hottayr

Hottayr should acknowledge that it would have been in its own interests to have supported Gassmyne through the factory's transition from one owner to the next. Hottayr will suffer reputational damage because of the problems at its former factory. It is important to minimise that damage, otherwise consumers who own gas boilers made by Hottayr might start to be concerned that they are at risk of gas leaks in their homes. Adverse publicity concerning quality at the gas boiler factory could also raise doubts about quality management at Hottayr's remaining heat pump factory. Admitting that Hottayr should have supported Gassmyne might help Hottayr to create the impression that quality problems arose because of Gassmyne's inability to manage the factory effectively. Hottayr should express regret that it did not make provisions in its contract to oversee operations and quality matters for a transitional period so that the factory could have survived

the transition in ownership. That would create a strong argument that the problems were due to Gassmyne's incompetence.

Hottayr should argue that the factory was a viable and self-contained entity when it was sold to Gassmyne. The factory staff were experienced and understood the importance of quality control. The factory was fully staffed, and Gassmyne should have been able to rely on its management team and quality staff to enable operations to continue as they were. Hottayr should express disappointment and surprise at the departure of so many key staff, otherwise it may appear that the company abandoned these employees when it sold the factory to Gassmyne. Hottayr also needs to pre-empt any accusation by Gassmyne that the problems at the factory could be attributed to mismanagement during the period leading up to the sale. Hottayr should be prepared to release statistics relating to factors such as staff turnover and quality control during, for example, the last year of its ownership of the factory.

Hottayr could argue that it would have responded to any reasonable request from Gassmyne for advice or assistance. It would not, however, have been appropriate for Hottayr to have been proactive in offering such support. Gassmyne should have considered the strategic risks associated with acquiring the factory and should have evaluated the skills that it needed to ensure that the acquisition was a success. If Hottayr had continued to involve itself in the oversight of the factory, then the factory staff would have been unclear about whether they worked for Hottayr or Gassmyne. They would have been more confused. They might also have seen the need for support from Hottayr, as confirmation that Gassmyne's Board was incapable of managing the business that provided their employment. It would also have been a major distraction for Hottayr's Board and senior management team to have made itself available to advise on the factory's operations.

Gassmyne's acquisition of the factory effectively made it Hottayr's competitor. Both companies make heat sources for domestic central heating systems, and some customers have a choice between boilers and heat pumps. Hottayr would not necessarily wish to see its former business fail, but it has a duty to its shareholders to avoid supporting Gassmyne in ways that might make this rival a more effective competitor. It would also be reasonable to expect that Gassmyne would have been reluctant to have opened up its intentions with regard to the factory because any insights that Hottayr obtained could have been used against it. Hottayr could argue that the problems are regrettable, but they have not put any consumers at risk. Failing the safety inspection means that Gassmyne has lost revenues. Also, the loss of staff appears to have been caused by former Hottayr employees resigning and, presumably, taking up alternative jobs. They have not become unemployed because of a lack of support.

SECTION 3

Requirement 1 – strategic management

It is reasonable to expect that a business will act in a manner that is consistent with both its mission and vision statement. Companies can choose whether or not to publish them, and they can phrase them in any manner that they deem suitable, so company directors are under an implicit obligation to reflect them in their decision making. Mission and vision statements tend to be communicated prominently, and so stakeholders are entitled to expect to see them reflected in corporate strategies. Directors are under no specific obligation to comply with these statements, but it would be dishonest to breach them deliberately in any decisions that they take.

Mission statements often set out very general objectives that could not be regarded as controversial or unacceptable. Hottayr's trustworthy supplier of excellent products is a realistic marketing objective for any business and one that should be followed in any case. It would be a major concern if there was evidence that Hottayr was choosing not to pursue this mission.

Vision statements have a similar status to mission statements, although they tend to focus more on the long term. In this case, Hottayr has committed itself to greater sustainability. Visions are often reflected in the manner in which products or services are used and employed, and so they imply a stability and consistency in corporate strategy, which is clearly something that stakeholders should be able to expect. The fact that the company is developing heat pumps as a viable replacement for gas boilers suggests that its actions are consistent with that vision.

It should be clear to anyone who reads a mission statement or vision statement that it cannot provide a comprehensive statement of a company's objectives and should not be read as if it implies that it does. Hottayr's mission statement does not include the key objective of the maximisation of shareholder wealth. That is not only an important objective, it could conflict with the mission of being trustworthy. Similarly, Hottayr's vision statement has a very narrow focus on an outcome that will not be possible for a single company to achieve in isolation and could not be regarded as its sole objective. It could be argued that the mission and vision statements both provide stakeholders with positive messages about the entity's objectives and should not be viewed as benchmarks against which to measure performance.

The mission and vision statements cannot be regarded as binding contracts that stakeholders can use to measure performance in the manner implied by Gassmyne. The fact that factory breakdowns have caused Hottayr to be late in shipping some orders does not mean that the company is neglecting the objective set out in its mission statement. Certainly, Gassmyne should have undertaken its own due diligence before it made the purchase and should have investigated past performance and reputational issues. Similarly, if it wished a specific assurance concerning the age and reliability of the factory equipment then it should have arranged its own inspection to ensure that the assets were of an acceptable standard.

Requirement 2 – non-executives

The non-executives should start by ensuring that they take an active interest in all Board meetings. They should study meeting agendas and read all Board papers. The non-executives should then provide the executive directors with feedback on any strategic decisions or proposed new strategies, stating whether or not the Board as a whole is managing the company in accordance with the mission and vision statements. Such feedback will encourage the executive directors to pay close attention to Hottayr's compliance with these objectives, and so they will be motivated to include those in their planning.

The non-executives should take care to apply these benchmarks to decisions that have been taken or proposals that have been made by the executive directors, otherwise they risk driving strategy, which would not be appropriate for the non-executives. Non-executives should provide oversight and supervision to the Board, and so they should not compromise their independence by setting strategy in any way. It is, however, perfectly acceptable for the non-executives to offer an opinion on the suitability of the Board's actions and to comment on whether the company's objectives are being met.

The non-executives should seek feedback from the executive directors as to whether the mission and vision statements remain suitable for Hottayr's needs and should agree to support and changes that are necessary to ensure that they still offer viable objectives. That should ensure an ongoing debate about the application of the mission and vision and should also prevent the executives from being disheartened in the event that they no longer support the statements. The Board should agree to spend time and money if need be on consultancy to explore alternative objectives that can take Hottayr forward.

The non-executives should establish performance indicators that might provide a more robust measure of whether the mission and vision statements are being pursued to an appropriate extent. It may be helpful to ask the executive directors to assist them in devising such performance indicators to ensure that there is clarity as to what is intended. The biggest advantage of setting specific performance measures is that they will prevent the executive directors from stating that they are pursuing the mission and vision without actually doing so. For example, relative sales of boilers versus heat pumps might offer a realistic measure of whether Hottayr really is supporting the move towards a zero-carbon world.

In a similar vein, the non-executives might seek the support of an internal audit to assist in the development of systems and measures to help track progress towards achieving an objective. That may require some planned audit investigations that would help inform the Board about the pursuit of mission and vision. For example, an audit of compliance with the quality procedures that are meant to be in place to ensure customer satisfaction will highlight whether Hottayr can claim to be a trustworthy supplier. The involvement of internal audits would reduce the pressure on the non-executives themselves and enable any concerns that are voiced to be better supported.

STRATEGIC CASE STUDY

November 2022 & February 2023

EXAM ANSWERS

Variant 4

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SECTION 1

Requirement 1 – customer analysis

Customer analysis will provide Hottayr with an understanding of consumers' needs and the manner in which they use their heat pumps. It is important for Hottayr to have that information because the prevalence of social media means that consumers can share any problems they have with their heat pumps. Any dissatisfaction could reach a large audience and so affect sales. Heat pumps are a relatively new product in terms of widespread application in domestic central heating systems, and so it would be natural for there to be a discussion online. The fact that the heat pumps are managed online through an app means that Hottayr can easily gather data on the operation of its heat pumps after they have been installed, and so the cost of collecting and analysing data should be relatively small. If consumers are constantly making adjustments to their heat pump settings, then an update can be developed and distributed quickly and easily to automate that adjustment, at a relatively minor cost to Hottayr. Hottayr can combine data fed back from consumer's apps to help with its interpretation of comments posted on social media.

There will always be a risk associated with adding new features to software for smart devices, and so it will always be beneficial to ensure that any upgrade is justified. Risks can include security flaws due to programming errors, such as the one introduced by this latest update. They can also be relatively minor risks, such as confusing consumers because the app's interface has changed. Customer analysis will enable Hottayr to conduct a better-informed evaluation of the costs and benefits that will be obtained from any given upgrade. That will be

advantageous because it will always be possible to add features and updates, and Hottayr's management might be tempted to make changes just because they are possible. Feedback can be gathered on reactions to previous upgrades to determine whether there have been any reactions and, if so, whether those reactions have been positive.

The customer analysis could be complicated by the fact that Hottayr's direct customers do not use the heat pumps that they buy. These devices are purchased by businesses that design and install central heating systems, and so they will not be immediately affected by the upgrades to the operating software. Many consumers will have little or no direct interest in the brand of heat pump supplied with their new house or upgraded heating system. They will only become concerned if they recognise the brand as one that has been associated with serious complaints. The businesses that buy and install Hottayr heat pumps might have a strong preference for software to be easy to install and intuitive to use, so that their customers do not encounter problems. The business customers might gladly forego potential upgrades that could lead to complaints from customers, who would be more likely to blame the supplier of their heat pump than to contact its manufacturer.

Hottayr could also find it difficult to collect a meaningful analysis of consumer needs and wishes because they are likely to have conflicting views and understandings of the implications of software changes. Consumers will undoubtedly be keen to have their devices kept as secure as possible, but there could be costs associated with that in terms of conveniences and ease of operation. Adding security features such as additional authentication might disturb consumers, even though they had expressed a request for greater security. Consumers might complete feedback while they are still confused and unhappy because of a change that requires them to understand new commands or a revised interface. Those same consumers might subsequently enjoy the fact that their heat pumps better suits their needs and may not associate those benefits with the software change that previously annoyed them.

Requirement 2 – principal risks

The purpose of the risk report is to provide stakeholders with a realistic understanding of the risks facing the company. The need to discuss software errors really depends on whether stakeholders require any information on that risk. Risks that are likely to occur and have a high impact are serious, so the shareholders will benefit from being warned of the possibility of their occurrence. Hottayr's directors might start by considering the risks that are studied and discussed during Board meetings. Anything that is frequently on the agenda is likely to be of interest to the shareholders and other readers of the risk report. If a risk could affect the status of Hottayr as a going concern, then it should certainly be disclosed.

The fact that a software error has occurred and has caused the company some problems does not, in itself, mean that the risk should have been covered in the risk report. If the likelihood of serious disruption was deemed to be remote, then the decision not to disclose the risks in previous reports was justifiable. It could,

however, be argued that Hottayr should offer information about this risk for the next year or two at least to reassure the shareholders and other stakeholders that there is no specific reason for concern about software errors. The lack of disclosure could be misinterpreted as an attempt to mislead the readers of the risk report.

It could be argued that the risk report should not include excessive disclosures about relatively minor matters, otherwise readers will be unable to identify the important risks that they need to be aware of. Most companies would be inconvenienced or would suffer reputational damage in the event of errors in their software, and so the readers of the risk report may not require a specific disclosure in respect of Hottayr's software. The Board should consider whether the risks are serious. For example, it may be that the risk of software errors is mitigated so that the net risk is remote. If Hottayr takes basic precautions, such as employing competent programmers and ensuring that software updates are checked thoroughly, then it may actually be misleading to disclose software errors as a source of risk.

SECTION 2

Requirement 1 – share price

Hottayr should start by reassuring the market that it is in control of this situation and that it is working towards a resolution. Communication is important. The market will be studying Hottayr's response, so it is important that the company should avoid making matters worse by releasing incomplete or inaccurate information. At the initial stage, Hottayr should explain that it is too early to offer a meaningful statement, but that a considered response is being developed and that the company plans to issue a detailed announcement soon. Hottayr's Board should offer as much reassurance as possible without making false or unrealistic commitments. For example, it should identify the resources that are being employed to assist customers and deal with any problems. Hottayr should not admit liability at this stage because that could create further uncertainty, but it should not deny its responsibility either because that could cost credibility. Initially, Hottayr should focus more on reassuring consumers because that will help reassure shareholders and the market in general. It might even be counterproductive to offer specific assurances to the capital markets because it might make the company appear to be more interested in protecting its shareholders than in addressing consumers' needs.

Once a response has been developed and initiated, Hottayr should brief key shareholders and market analysts on the likely commercial costs associated with the data breach, to resolve their uncertainties. The share price may remain depressed in the absence of any such communication because the market's uncertainty implies that the risks could be significant. The shareholders should be reminded that Hottayr is by no means the only company to have lost sensitive data in this way. While this remains a serious matter, many other businesses have survived the theft of customer data. Hottayr should research the impact that other companies have suffered on their sales in the aftermath of similar breaches. The results of such research will be a more realistic basis for addressing speculative concerns with regard to the share price. Hottayr should also be prepared to offer the shareholders a summary of the feedback that it has received from the business customers who sell its heat pumps. Those customers have a great deal of influence over Hottayr's sales because they promote the installation of heat pumps and make recommendations concerning them. Their intentions will have a role to play in resolving this problem. The shareholders will be keen to have that information.

Hottayr should bear in mind that the decrease could be due to speculation in the stock market, and so the share price may not remain depressed for long once Hottayr briefs investors and the market settle down. A significant reduction in share price was to be expected following the breach because it signalled some unexpected costs and loss of revenue. That decrease could have been reinforced by speculators who wished to sell short and push the share price down as far as possible in order to maximise the profits from their short sale. Any downward pressure should resolve itself once it becomes clear that all available information has been obtained and incorporated into the share price. Hottayr should focus on informing and reassuring stakeholders so that market

participants see a little remaining opportunity to benefit further from short selling. Offering a credible commitment to prevent a recurrence of the breach will remove some of the uncertainty that would otherwise have reduced the share price.

Requirement 2 – capitals

This breach may have affected the motivation and commitment of key members of Hottayr's staff. IT staff may be demotivated by the possibility that the breach occurred because of some error or oversight on their part. Similarly, they may be concerned that they will be blamed for the breach, even if it was not their fault. It is important that Hottayr's Board sets out to discover the weakness that caused the breach and conducts its investigation with an open mind as to its cause. Knowing how the cyber criminal accessed the data will establish whether the breach should have been prevented and, if so, who should have prevented it. If the cause was due to staff negligence, then the provision of feedback and additional training should ensure that all staff is more careful in the future. Approaching the investigation with an open mind will avoid the impression that the Board has prejudged the outcome of the investigation and taken it for granted that the staff was negligent. Such an attitude would damage morale. Lessons learned from this investigation will enable staff to be more confident that they can prevent further breaches in the future.

The cyber criminals could have damaged intellectual property, particularly with respect to Hottayr's software, if they uploaded a virus or some other malware onto the system. Hottayr should commission a detailed analysis of its software to check for any form of corruption or payload left behind by cyber criminals. There is a wider form of damage in the form of lost confidence in Hottayr's systems. Any lack of trust will inhibit both internal and external stakeholders from relying on the system for secure data storage and accurate output. Hottayr's Board should commission a detailed review of the system in order to identify weaknesses and should address those weaknesses by updating software and systems. Each weakness should then be reviewed to ensure that Hottayr has a proportionate response in place. It may be sensible to update or upgrade existing controls if they have been in place for some time. This review should cover the whole system, not just the narrow aspect that enabled the consumer files to be hacked.

There can be no doubt that the breach will have compromised relationship capital in the form of the lost trust from consumers. It will be difficult to restore that trust, even if Hottayr has gone to significant lengths to upgrade its system, because it may only be a matter of time before cyber criminals develop a new approach to circumventing the safeguards that are in place. The Board should consider educating consumers about how they can protect themselves against data theft and attempts to access their bank and other payment methods. The recent breach only put consumers at risk if they were careless enough to use the same password for their Hottayr accounts and sensitive sites such as online banking. Consumers should understand that all systems are vulnerable to a certain extent and that there is always a risk that data will be accessed. They can minimise the implications of any such losses through managing their online presence.

SECTION 3

Requirement 1 – internal audit

Internal auditors are experts at conducting compliance audits. That background offers significant advantages in their approach to the circumstances surrounding these events. The error with the software update has been blamed on “pressure”, but an internal audit would establish whether that pressure had led to shortcuts in terms of omitting procedures such as reviews of code and test runs. If there were such omissions, then Hottayr will have a better understanding of the cause of the incident and the programmers in the IT Department will be able to justify insisting on all checks when writing future updates. From a motivational point of view, Internal Audit is effectively being asked to undertake an objective review to establish whether staff has complied with Hottayr’s procedures and standards. That is less confrontational than an investigation into whether the programming error was due to incompetence or carelessness. The results of a compliance audit should be positive regardless of the outcome. If an error is discovered, then steps can be taken to prevent a recurrence. If not, then the IT staff will be reminded that controls must be applied even if deadlines are tight.

The skills used by Internal Audit will also provide a useful starting point for the investigation of the data breach in the second case. It seems that little is known about that, beyond the fact that cyber criminals were able to access confidential data, despite the controls that Hottayr has in place. Some IT controls are wholly software-dependent. For example, the ability to access data files should be restricted to staff with the necessary authorisation that is controlled by passwords and other forms of verification. Other controls rely on staff to implement checks, including physical security and the review of logs and other reports. Internal Audit staff will be better equipped to conduct an investigation of the manual aspects of the system, which are often the most vulnerable because people can be less consistent than software. An initial investigation of the human aspects of the system will also be less time-consuming and expensive than a thorough breakdown and analysis of the software code. If the Internal Audit investigation fails to uncover anything then the Board can still make an informed decision as to whether to request a detailed analysis of the software and the effectiveness of its controls.

It could be rather inefficient to use Internal Audit to formulate a response to these concerns. It could be argued that there is very little need to investigate whether Hottayr’s programmers perceived pressure to complete their assignments. It would be more constructive to create a working environment in which all staff was encouraged to report concerns to their superiors. It should be sufficient for the Board to request some justification from IT as to the reasons for blaming perceived pressure for the shortcomings of the revised system. Similarly, identifying the cause of the data breach will enable Hottayr to deal with that specific weakness, but it will not guarantee that all weaknesses have been dealt with. There could be wider issues associated with the design and operation of the IT system, and so the breach might only have been a symptom of those wider problems. A detailed investigation by Internal Audit could be too focussed on the software error and data breach and the collection of evidence relating to those events, which might offer very limited benefits.

The use of an Internal Audit could be perceived as an attempt by the Board to attribute blame for the two events. A month has passed since the data breach and the programming error was discovered before that. IT staff are unlikely to believe that the audit investigation is a constructive attempt to remedy problems with the system. It may be difficult for the Internal Audit staff to obtain the cooperation of the IT staff if they suspect that the audit report could be the basis of disciplinary action. The Board's decision to send in an Internal Audit in the aftermath of these events could demotivate Hottayr's IT staff, which could cause dysfunctional behaviour. The IT Department could, for example, become reluctant to accept responsibility for software updates that have not been tested extensively.

Requirement 2 – Board commitment

It is vitally important that any commitment to managing cyber risks is proportionate as well as effective. All companies are vulnerable to cybercrime, but some are more vulnerable than others. The nature of the information that Hottayr gathers from customers and consumers is not hugely appealing to cyber criminals. Companies such as banks are at greater risk. The Board should aim to identify IT risks and mitigate those to a realistic extent, investing in cost-effective controls that meet the company's needs. A useful starting point would be to establish a working party comprising senior managers from each main functional area, including the Head of IT, to report on the need for control.

The Board might demonstrate its commitment to an effective response to the recent events by engaging an IT security consultancy firm to review Hottayr's systems and to recommend any improvements that are deemed advisable. That would be a sensible response to recent events and could be used to reassure stakeholders that the Board is taking their concerns seriously. It would also be an opportunity to update and train Hottayr's IT staff in conjunction with any enhancements to the system's security. This would be a constructive way to assist the IT Department to deal with threats in the future, without risking demotivating staff.

The Board should request regular updates on the activities of the IT Department, with a proforma report that will enable the Board to track performance and also any concerns. This report could cover issues such as upgrades and updates to software and the results of any tests carried out on those, as well as statistics collected by the company's security software. Gathering this information will send a clear message to the IT Department that the Board takes an active interest in its activities and so will motivate them. If the report is prepared, for example, half-yearly, then it will prevent overload. This report could also enhance communication between the IT Department and the Board, which does not have a designated IT specialist. If the directors understand IT security and operations, then they will have a clearer understanding of any recommendations from IT.

STRATEGIC CASE STUDY

November 2022 & February 2023

EXAM ANSWERS

Variant 5

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CIMA will not accept challenges to these answers on the basis of academic judgement.

SECTION 1

Requirement 1 – exclusivity period

Hottayr's commitment was made in its vision statement, which implies that stakeholders have the right to expect that commitment to be taken seriously. This commitment appears in Hottayr's vision statement and is not qualified in any way, so it could be regarded as disappointing if the company restricts access to a refrigerant that will have a favourable impact on global warming. Rival manufacturers will have to continue to use traditional refrigerants, which are potentially harmful, for at least six years before they can switch to Saphgas. It could be argued that this is not a particularly serious criticism of Hottayr because a vision statement is generally regarded as a long-term aspiration, and so it could be argued that its intention to make Saphgas available to rival manufacturers in 6 years is consistent with its vision. It is also unrealistic to regard the company's vision as the sole criterion to be used in making decisions about operational matters, otherwise, the company could quickly run into serious difficulties. Hottayr must take other issues into account, particularly the need to make a profit in order to maximise shareholder wealth. It would be reasonable to expect such consideration to take precedence over sustainability in some cases.

Rival manufacturers will be forced to compete against Hottayr and its introduction of Saphgas for a significant length of time before they can switch to this environmentally-friendly refrigerant. They might attempt to discredit claims made by Hottayr for the superiority of this new refrigerant, which could reduce the social and environmental benefits that it might deliver. Adverse publicity could discourage consumers from agreeing to install heat pumps that use Saphgas,

given that there is a known and tested alternative in the form of HFCs. This could put Hottayr in a difficult position with regard to promoting sustainability because any retaliation against its rivals could undermine consumer confidence in heat pumps as opposed to boilers. It may be preferable to seek a compromise, such as a joint arrangement between heat pump manufacturers, to fund the University's development work and to share the benefits.

In Hottayr's defense, the University requires funding to develop the means to manufacture Saphgas in industrial quantities. By providing the funding, Hottayr is ensuring that the refrigerant can be brought to the market, otherwise, it will remain an interesting product but will not be available for use in domestic heating. Developing such a process will be expensive, and it is likely to be risky. Hottayr could invest heavily, only for the project to fail. Hottayr's shareholders could be aggrieved that the company is prepared to take such a risk unless there is a clear commercial benefit associated with a successful outcome. The period of exclusivity aligns the interests of the stakeholders, enabling Saphgas to be brought to market and so reducing the extent to which refrigerants contribute to global warming. There are very few realistic alternatives to this arrangement. The University is unlikely to be able to fund such an expensive project from its own resources, so it requires a commercial backer.

The exclusivity period is limited to only 6 years, so other manufacturers will be able to use the refrigerant after that period has elapsed. It could be argued that Hottayr is making a significant compromise in funding this development, while agreeing to open the resulting product up to the whole market in the medium-term future. In the meantime, they will be able to monitor Hottayr's revenues to establish whether there is a market for Saphgas. If there is, then they will be encouraged to design their own heat pumps to take advantage of it when it becomes available to them. Alternatively, any advantage enjoyed by Hottayr might encourage rival companies to develop their own alternatives to Saphgas, so the market as a whole might have a wider range of sustainable refrigerants to choose from. Paradoxically, refusing to share the rights to Saphgas could lead to the development of even better products that will further enhance sustainability.

Requirement 2 – stress testing

Hottayr's Board should start by obtaining an understanding of the steps that will be required to develop a satisfactory industrial process, so that the risks associated with this project can be identified and understood. This will start with the academic staff at the University, who understand how to make this product in a laboratory. They may require advice from industrial chemists who have a better understanding of the challenges of mass-producing volatile chemicals. Once the timeline for the project has been clarified, the factors that could cause the delay or even the outright failure of the project should be identified. For

example, gaps in scientific or engineering knowledge or the loss of support from key stakeholders could make it difficult to manufacture Saphgas.

Hottayr should then set out possible future events that might have an impact on the University's ability to complete the development work on time. These should be possibilities that could potentially have a significant impact. The outcome of those events for the success or failure of the project should be evaluated. For example, what would happen if one of the staff who invented Saphgas left the University? Would the remaining team members have sufficient knowledge to carry on? Would a laboratory accident, such as a fire or release of dangerous chemicals, lead to protests or legal action that would make it difficult to build or operate a Saphgas factory?

Once the scenarios have been determined and studied, Hottayr should develop contingency plans and should evaluate the net risk associated with each. The Board should then be better equipped to decide on whether or not to proceed with the project. The risk of loss of key personnel might be mitigated through promotion or a bonus scheme that encourages project staff to remain until the process has been successfully developed. An independent chemical engineer might be engaged to evaluate the implications of a fire or leak at any stage of the production process and to recommend suitable safety precautions to either prevent or contain the threat of injury or damage to property.

SECTION 2

Requirement 1 – funding

One suggestion would be to fund the N\$90 million required for the University by borrowing. One advantage of that is that taking out a loan would be quicker than issuing equity, and so the project will be started more quicker. Borrowing this sum will increase gearing from $200/(200+408) = 33\%$ to $290/(290+408) = 42\%$, which is a significant increase, but does not seem to be excessive. The main advantage of borrowing is that it is cheaper than equity, so Hottayr will benefit from a reduced weighted average cost of capital (WACC) if it raises the funds in this manner. Hottayr has plenty of operating profit from which to pay interest and that suggests that it will be capable of taking advantage of tax relief on the interest payable on the additional debt.

Debt offers a little more flexibility in the sense that it will not dilute equity and it can be repaid in the event that the University is unable to develop a viable industrial process. In that case, the University may return some of the investment, depending on the agreement with Hottayr and the stage reached in the development process. Ideally, the loan should be structured so that it can be repaid at Hottayr's discretion, even if a penalty is payable for early repayment.

Lenders will almost certainly seek security for a loan of this size, which could be complicated because the cash paid to the University will not result in an asset that would be satisfactory as security for any lender. It may be possible to pledge the balance of the Group's property, plant and equipment as security because it exceeds existing borrowings by N\$158 million.

It would be sensible to raise the N\$110 million required for the adaptation of Hottayr's factory by means of a rights issue. It might take a little longer than borrowing, but the adaptation does not have to be in place until Hottayr can be sure that it will receive sufficient quantities of Saphgas to make the modifications necessary. If the payment to the University is funded with debt, then the use of equity will reduce gearing from 42% to $290/(290+518) = 36\%$, as opposed to an increase to $400/(400+408) = 50\%$ if both amounts are funded by debt. The use of equity for this second amount would be more expensive, but it would reduce the risk that Hottayr will be in breach of any loan covenants. It may also allow a little more debt capacity, permitting additional flexibility in the future.

Equity will be more expensive, both in terms of returns paid to shareholders compared to loan interest and transaction costs associated with the rights issue. It will, however, be difficult to persuade lenders to finance the entire N\$90+110 = N\$200 million because there will be very little to secure that against. The N\$110 million will be spent on intellectual property and on changes to tangible assets whose value is unlikely to increase appreciably. None of that will be a suitable basis for securing loans totalling N\$200 million, given Hottayr's present position because Hottayr's investment is unlikely to add anything to the amount that any third party would pay if there was a foreclosure and the lenders were seeking a sale. Shareholders may see this as a risky investment, but they should also see this as a significant strategic investment by the Board. The new refrigerant will

create an additional competitive advantage in a market in which Hottayr has already had some success.

Requirement 2 – currency

This is a significant currency risk because Hottayr plans to spend $80/628 = 13\%$ of its annual operating costs with Tropicland Chemicals each year. Even a relatively minor movement between the two currencies could prove costly to Hottayr if the T\$ strengthens against the N\$. Hottayr will be competing against rival heat pump manufacturers whose products will not use Saphgas, and so they may not be exposed to movements in the T\$. That could enable competitors to undercut Hottayr on price when the N\$ is weak against the T\$, unless Hottayr is prepared to accept a reduction in the contribution to prevent that from happening. It may be that Hottayr should simply accept this risk on the basis that the volatility should work in the company's favour when the N\$ is strong against the T\$, meaning that the cost of Saphgas will fluctuate. One possibility would be to market Saphgas on the basis of its sustainability and to refrain from competing on price. If Hottayr chooses not to pass the 10% difference between Saphgas and traditional HFCs on to customers, then it should make a larger profit when the exchange rate is close to its mean or the N\$ is strong. It will still have some cushion if the T\$ rises, provided the rise is not too substantial.

Hottayr should attempt to seek some sort of agreement with Tropicland Chemicals, based on the fact that it will be a major customer for this new product and that the market for Saphgas might increase significantly in 6 years when the exclusivity clause expires. It may prove difficult to reach such an agreement because most of the costs of making Saphgas are fixed in T\$. Materials are purchased in Tropicland, and factory wages are also paid locally. Tropicland Chemicals may be reluctant to agree to invoice in N\$ unless it is earning a sufficiently high margin to enable it to tolerate the risk of invoicing in N\$, while its costs are incurred locally in T\$. Tropicland Chemicals may also be open to persuasion if there are alternative sources for Saphgas. Hottayr could seek an alternative manufacturer, ideally a chemical manufacturer based in Norland, who will be less exposed to fluctuations in the N\$.

Hottayr could consider investing in storage facilities for Saphgas, so that it can buy in bulk when the T\$ is weak, running down its inventory when the T\$ is strong. From a currency point of view, that would protect Hottayr while costing Tropicland Chemicals nothing. There could be some disruption to production scheduling at Tropicland Chemicals because it would have to be willing to manufacture in batches that could be unpredictable. As an alternative, Hottayr could place large orders for delivery over a prolonged period and could take advantage of any periods in which the N\$ is strong to prepay for some of those orders. There would be a cost to Hottayr in terms of funding those advance payments, but it might be cheaper than holding bulk supplies of inventory and should be more acceptable to Tropicland Chemicals.

Hottayr could make use of financial instruments to buy T\$ forward, or otherwise lock into agreed prices that will assist the company in planning its cash flows. It would be possible to enter into forwarding contracts or options that would either

fix a price or set a maximum price that Hottayr would pay for T\$ in order to settle payables balances. The downside is that the prices of those financial instruments will reflect the market's expectations concerning the exchange rate. If the T\$ is expected to strengthen, then it will cost more to fix rates when the T\$ is likely to strengthen, and so hedging in this way is unlikely to bring any savings. Hedging could still be worth considering because Hottayr will be protected from short-term currency movements. The overall cost of doing business with Tropicland Chemicals will increase, but the uncertainties will be reduced.

SECTION 3

Requirement 1 – drivers of change

The Board should regard the unexpected sales boost from switching to Saphgas as a warning that consumers can be attracted by new products that offer benefits in terms of sustainability. While that has proved beneficial to Hottayr in this case, there is obviously a risk that rivals might develop their own alternatives to HFCs that appear to offer even greater benefits, and so Hottayr's revenues could decline just as suddenly. From a strategic point of view, Hottayr should plan to ensure that it can make the best possible use of any increase in demand. Ideally, it should have the flexibility to increase production to avoid the loss of sales. It may also be desirable to organise production so that manufacturing costs can be scaled back in response to any decline in revenue. Ideally, fixed costs should be minimised, in case a rival manufacturer takes some of Hottayr's market.

Previously, Hottayr has regarded the businesses that sell and install its heat pumps as its customers. Those businesses recommended their heat pumps to the consumers who paid to have them in their homes. The news report suggests that consumers have driven the upsurge in sales because they believe that it is preferable to the other refrigerants on the market, which is a significant shift in terms of Hottayr's marketing strategy. Previously, Hottayr has sold primarily on a business-to-business basis. The installers who recommended Hottayr heat pumps would have been driven by commercial considerations such as price and the reliability of delivery times. Switching to a business-to-consumer model will require Hottayr to focus far more on the psychological aspects of product selection and reaching a purchasing decision.

Feedback from consumers suggests that Hottayr's new refrigerant is popular both because it causes less harm to the environment than existing products and also because it benefits the population of an emerging country. Hottayr has previously focussed on developing products that offered good value for money, reducing heating costs and complying with government policy to move towards a zero-carbon economy. The feedback from consumers in relation to Saphgas is a concern because the perceptions of consumers are not necessarily objective and they could be reversed very easily. For example, the positive impression created by the additional employment in Tropicland could be lost very quickly in the event of, say, a serious accident at the factory.

Requirement 2 – Board appointment

The strongest argument for this appointment is that it would send a very clear message that Hottayr is concerned with the environment in its strategic management and decision making. Having a director with this remit would imply that this individual would be responsible for identifying the implications of any Board decisions for the environment and would raise those as appropriate during any discussions. Stakeholders who wish to safeguard the environment will be reassured, and so Hottayr might be at a lower risk of criticism. That is particularly important for Hottayr because it sells both gas boilers that are associated with carbon emissions and heat pumps that are promoted on the basis of being

environmentally sustainable. Stakeholders could be concerned that the company is not entirely committed to sustainability because it still relies on boilers for 45% of its revenue. This appointment will reassure shareholders and other stakeholders that Hottayr intends to continue to phase out gas boilers and, in the meantime, will ensure that the boilers that it sells operate as economically as possible.

Third parties with an interest in Hottayr's environmental credentials might view the willingness to incur the significant cost associated with recruiting and remunerating a director as a very serious sign that the company is sincere in its commitment to sustainability. It is reasonable to expect that any appointee to this post will have conducted due diligence on Hottayr's environmental performance before accepting the role, which is reassuring in itself. The new Board member will also ensure that the directors are fully briefed on all relevant sustainability matters and that they are taken into account when a strategic decision has to be made. The Board as a whole would be unwilling to invite the disruption that would arise from making this appointment and then refusing to take the new director's advice seriously. The new director will not wish to risk his or her reputation by tolerating any dishonest or misleading reporting by the Board as a whole. Any such misbehaviour would be strong grounds for resignation, thereby bringing the problem to light.

This appointment could prove counterproductive in the sense that stakeholders might believe that all directors should take an active interest in sustainability and so a specific appointment should prove redundant. As it stands, the Board members have specific responsibilities that have social and environmental implications. Even if the directors are not experts in these matters themselves, they should be able to take advice from their managers. There could also be concerns that the new director will have a role that conflicts with that of the other Board members because they are concerned with the commercial impact of their decisions while the new role will focus more on the constraints arising from sustainability. The current directors can weigh up the impact of their decisions on shareholder wealth, while considering whether their plans would be unacceptable from the perspective of sustainability. The new appointment might have too narrow a focus on sustainability to assist the Board as a whole with decision making. That could lead to conflict that achieves very little in enhancing overall performance in terms of either profit or the environment.

It could be argued that the non-executive directors already exist to fulfil the planned remit of this proposed appointment. The non-executives should oversee the actions of the executive directors and should be identifying any social or environmental concerns that the proposed new director might be expected to identify. There could be a danger that a director who is responsible for sustainability will struggle to find sufficient work to remain fully occupied and will start to take an active interest in issues that should be addressed by lower-level managers. Any such interference could prove demotivating and could lead to problems with the smooth implementation of decisions that have already been taken by the Board.

STRATEGIC CASE STUDY

November 2022 & February 2023

EXAM ANSWERS

Variant 6

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SECTION 1

Requirement 1 – acquisition

Hottayr needs to establish the scale of Vanheaters's operations and its ability to serve the markets in which Hottayr wishes to sell heat pumps. Hottayr is keen to generate synergy by offering a full service to install underfloor heating systems based on Hottayr heat pumps. That synergy depends on Vanheaters having sufficient capacity and a wide geographical presence. Hottayr generates more than half of its revenue from sales to Norland, but it would still be desirable to extend any arrangement with Vanheaters into its foreign markets. It would be sufficient for Vanheaters to have a viable plan to expand into any areas in which it lacks capacity at present. The fact that it is a quoted company means that it is a large and well-established company. Hottayr's directors should conduct basic due diligence on factors such as the geographical spread of Vanheaters's present operations and the locations of its contractors. Vanheaters should be asked to furnish detailed plans for any gaps in coverage, and Hottayr's Board should review those for credibility.

The relationship between Vanheaters and its contractors is an important consideration because Hottayr must be clear about what it is actually acquiring from this purchase. The contractors are all self-employed, working for Vanheaters under what amounts to a franchise scheme. If the contractors decide to stop working for Vanheaters, then Hottayr will be left with little more than a brand name and a website. Hottayr should ask Vanheaters to provide detailed records of statistics relating to the recruitment and retention of engineers. A rapid turnover could lead to the loss of experienced engineers after the acquisition.

Vanheaters Board would also have to undertake to reassure engineers concerning Hottayr's intentions, so that they did not leave due to uncertainty about their future in the merged entity.

Hottayr will also have to establish whether the contract between Vanheaters and its contractors makes it possible to insist that the contractor's supply and fit only Hottayr heat pumps. At present, the contractors seem to be free to select whichever brand of heat pump they wish, which is clearly unacceptable. Hottayr competes with its rivals in terms of the quality and efficiency of its products. Rivals may be able to undercut Hottayr on price, while still permitting contractors to earn higher margins than on Hottayr products. Imposing a requirement to switch to Hottayr products could prove difficult because that would require a change to the terms and conditions of their agreements with Vanheaters. Hottayr would have to consider whether it would be cost-effective to offer financial compensation for any such change to the terms.

Vanheaters will have to demonstrate that its systems and procedures are compatible with Hottayr's. It would be ideal if Vanheaters's systems could be adapted so that contractors can place orders for heat pumps directly with Hottayr. If such an arrangement cannot be made, then it will be more difficult for Hottayr to ensure that the contractors are using its heat pumps in their central heating systems. It may also be difficult for Hottayr to process orders for small quantities of heat pumps, and so it would be convenient if orders could be integrated with Vanheaters's systems. Hottayr will also have to check for consistency between its heat pumps and the products used by the contractors for the underfloor heating part of the systems that they install. If the heat pumps cannot provide sufficient heat or cannot connect reliably with the pipework used by Vanheaters, then there will be complaints from customers, which will undermine Hottayr's reputation. Vanheaters will have to conduct a review of the instructions that it supplies to its engineers, adapted as necessary to ensure compatibility with Hottayr's heat pumps.

Requirement 2 – reputational risks

Hottayr could consider changing the brand name from Vanheaters to something more directly related to the Hottayr Group. That would have the advantage of distancing Hottayr's new design and installation service from the negative feedback that is presently on social media. In particular, it would mean that any searches for customer feedback will not find those negative posts. Hottayr will have to take care in relaunching the service under a new brand because it could attract unwelcome accusations that the change has been prompted by a desire to hide the truth. Ideally, the rebranding would be conducted in conjunction with an advertising campaign that focusses on the advantages of underfloor heating systems that use heat pumps to supply the heat.

Hottayr should review Vanheaters's files of customer feedback and should identify any contractors whose ratings have been consistently poor. It may be that the negative feedback is not entirely due to the use of poor-quality heat pumps supplied by rivals. Any contractors with poor average ratings should be required to complete additional training in order to reduce the risk that they will

continue to provide poor service. Contractors who continue to receive negative feedback after such training should have their agreements terminated, otherwise Hottayr will risk the loss of goodwill due to dissatisfied customers. Hottayr could warn all contractors that ongoing negative feedback could result in the loss of the association with the Hottayr Group.

Hottayr should seek to incentivise Vanheaters's Board to address quality issues and feedback during the negotiation phase of the acquisition. If Vanheaters's directors are unwilling to accept, for example, a performance-related element of their remuneration that is linked to quality, then Hottayr should consider whether they can deliver on quality. Hottayr should agree to support Vanheaters's Board by providing all the support that is necessary to monitor and manage customer satisfaction. For example, the creation of a Customer Relations Department that will stay in close contact with customers at all stages of the design and installation of their new central heating systems so that any problems can be rectified quickly and before customers become discontented.

SECTION 2

Requirement 1 – interest and currency risks

Interest risk is a serious concern for Vanheaters because it could have a significant impact on the ability of its customers to afford new central heating systems. Customers for domestic central heating systems are almost certainly homeowners, who may have mortgages. If interest rates increase, then the cost of mortgage interest will also rise. If customers are forced to spend more on mortgage interest, then they will be less able to afford home improvements. A new central heating system is a significant purchase, and many customers will have to borrow to pay for one. Higher interest rates will make home improvement loans more expensive, and so customers will be less able to afford to take out a loan. Lenders will also be more cautious because loan applicants will face the pressures associated with high interest rates, and so they may be less inclined to agree to a loan.

The nature of the product also affects interest risks. If a customer's existing central heating system has failed, then it is likely that the customer will order a replacement rather than live in a cold house. The higher interest rates may not be expected to persist, and customers might make savings in other areas, such as cutting back on entertainment. Customers may also be keen to install heat pumps because they are more sustainable, and so they may be prepared to buy a system even if it becomes more expensive or if their disposable income declines. Unfortunately for Vanheaters, many customers may decide to install a new gas boiler instead of a heat pump and underfloor heating because that will be the cheaper alternative.

Vanheaters could also be affected by currency movements. The most immediate risk arises from the fact that Hottayr's factory is located in Norland. If the government succeeds in strengthening the N\$, then it will become cheaper for rivals to import heat pumps from other countries, making Vanheaters less competitive. If Vanheaters has contractors in other countries, then any strengthening of the N\$ will also make it more difficult to compete overseas because customers based in other countries will have to pay more. The fact that the current increase is the result of government policy could mean that it will persist in the medium to long term, and so Vanheaters cannot expect it to reverse in the short term. One further concern is that the stronger N\$ could make it cheaper to import oil and gas and that could make it more attractive for customers to invest in new boilers rather than underfloor heating. Some customers will be attracted to heat pumps because of their lower running costs and the loss of that advantage could lead to a shift back towards boilers.

The currency risk could be mitigated to some extent by the fact that this is a significant purchase for most customers, and they may be prepared to pay a little more for a better-quality heat pump when they are specifying a new central heating system. The extra cost may not be all that marked because there are political pressures on the government to prevent a substantial increase in interest rates. Vanheaters may be able to persuade Hottayr to absorb some of the additional costs in order to maintain sales volume.

Requirement 2 – share exchange

The objective is to secure a controlling interest in Vanheaters in return for the least number of Hottayr shares. Hottayr will have to issue new shares, which it will exchange for Vanheaters's existing shares. The more shares that it issues, the greater the dilution of Hottayr's existing shareholders' investment. One concern is that speculators might take advantage of Hottayr if they become aware that it might be interested in Vanheaters by purchasing Vanheaters shares on the open market. The share price is likely to increase if Hottayr proceeds with its plan. Those shareholders would be able to exploit that still further by refusing to accept Hottayr's offer to exchange until they are convinced that they have the best possible deal. Hottayr should attempt to conceal its interest in Vanheaters for as long as possible to give these speculators the least possible interest. Any discussion with Vanheaters's Board should be kept confidential and subject to a non-disclosure agreement until the plans are ready for implementation. Once the bid is announced then Vanheaters's shareholders would be inclined to retain their shares in order to benefit from the increase in price that usually arises from a takeover bid.

Hottayr's Board should hold confidential discussions with Vanheaters's directors in order to persuade them to support the bid. Vanheaters's Board would have a duty to maximise its shareholders' wealth, and so it would be ideal if it could be persuaded that the acquisition would be in the shareholders' interests. Vanheaters's directors may also have a personal interest in this bid because they may lose their jobs if the company is acquired by Hottayr. If they remain in post, they will effectively be demoted from being directors of a quoted company to being in charge of a subsidiary, reporting to a parent company. For both of these reasons, Hottayr's Board should approach Vanheaters's Board in order to seek the support of its members in advance of making a formal approach to the shareholders. If Vanheaters's directors choose to recommend rejecting the offer, then it may create a costly and time-consuming takeover battle. Vanheaters's shareholders may decide to reject their directors' advice, but it may still be necessary for Hottayr to offer more to secure its controlling interest.

Hottayr's Board will have to persuade both groups of shareholders that they will benefit from this acquisition. Vanheaters's shareholders will have to receive compensation that exceeds their N\$600 million market capitalisation, otherwise there is no point in exchanging their shares and so the bid will fail. Hottayr's shareholders will be unwilling to accept a dilution in their shares that exceeds the value of the business that they are acquiring. If they think that too many shares are being exchanged, then they will lose confidence and so the share price will decline, making the offer less attractive to Vanheaters's shareholders in the process. The only viable response is for Hottayr's Board to convince both sets of shareholders that there is sufficient synergy between the two companies to enable all shareholders to benefit from the acquisition. The initial announcement will have to be persuasive so that the share prices of both companies increases and enables Hottayr to share the synergy benefits in a manner that benefits both sides. Hottayr should conduct market research that can be released in order to persuade the shareholders that there is consumer demand for the service that it proposes to provide.

SECTION 3

Requirement 1 – training in core values

It will be difficult for Hottayr to fully understand the differences between the cultures of the two companies. It will be difficult to decide what should be included in the course and how that content should be structured. The fact that the course is to be delivered online means that there will be no opportunity for a facilitator to engage with participants in order to properly understand the Vanheaters culture. Hottayr's core values are not controversial, but they could also be interpreted in several different ways. For example, keeping promises could mean anything from complying with contracts to exceeding expectations created by advertising and other forms of communication. It would be difficult to ensure that any such ambiguity was addressed in writing an online course.

Vanheaters's staff could be resistant to attempts to change their culture, and so they may not be receptive to the course. The fact that it is to be taken online would enable them to play the material without paying attention and to complete any assessments by clicking on choices without reflection. The fact that Hottayr is providing the training program will be delivered online suggests that it might not be taken seriously by Vanheaters's staff. They may believe that Hottayr simply wishes to claim that it has conducted this training. They will be even less inclined to pay attention and reflect on the content if they believe that Hottayr is cutting corners in order to offer training for its own sake.

It may be difficult to export Hottayr's culture to Vanheaters because of the nature of the two businesses. Hottayr is essentially a manufacturer that sells to other businesses, while Vanheaters is a franchise operation that sells to consumers. In very broad terms, it may be possible to apply each of Hottayr's core values to Vanheaters, but it may not be possible to take the further step of bringing the two cultures into line. For example, Hottayr's business model involves manufacturing for bulk sales to commercial customers. Those customers will have more clearly developed and articulated needs than the consumers who trade with Vanheaters. It could also be argued that Vanheaters's success to date is attributable to it having developed a successful culture that suits the needs of its market.

Requirement 2 – Internal Audit

Internal Audit should start by requesting a detailed briefing from Hottayr's Board concerning the objectives of the online course so that a compliance audit can be carried out. The purpose of the investigation is to ensure that the Board's wishes are being complied with in the design and delivery of the course, and so the Board must clarify that. Once the Internal Audit Department understands what the course is required to deliver, it should assign an audit team to review the course materials and check that they cover all the required topics. Internal Audit should also seek guidance from the Board concerning the need for assessment, including the need for participants to demonstrate their understanding through objective test questions at regular intervals. Ideally, this review should take place before the course has been coded into files for online delivery because any

changes will be more difficult and expensive to make after that stage. The Internal Audit team should focus on emphasis rather than simply ticking off the coverage of individual core values or other topics selected by the Board. Internal Audit should also insist on trying the course once it has been coded. Apart from the benefits of the check-in itself, it will motivate the course developers to know that a final review will be carried out. It will also enable Internal Audit to check on whether features such as course length and other aspects of the design are in accordance with the Board's intentions.

Hottayr's Board should introduce a system to ensure that all staff who are required to complete the course have actually done so. The course will not be effective unless the staff completes it. Internal Audit should build the ability to conduct checks on completion into the course software. For example, participants should be required to log in using their staff ID number, so that participation is recorded. Internal Audit should establish who is responsible for enforcing the completion of the course and should check that they have discharged their duties. There should be emails or memos to prove that staff members who have not completed the course by the initial deadline have been reminded that they need to do so. Ideally, the course software will track the time spent on the course by each participant, and the auditor should check that each has spent a realistic amount of time online. Short engagement periods suggest that individuals have simply flicked through the text without paying attention, while long periods would imply that they set the course running while they left it to do something else. Internal Audit should also check scores on any objective tests incorporated into the course to check that staff whose scores did not meet the required standard have been asked to take the course again.

Internal Audit could also conduct a follow-up investigation in support of the Board's expectations for this course by seeking feedback from Vanheaters staff after the course has been completed. It would be difficult to undertake a separate investigation into the impact of the course, but it would be possible to ask questions that would enable Internal Audit to report to the Board on Vanheaters's culture. It would be sensible for Internal Audit to undertake reviews of systems and procedures at Vanheaters, simply because it is a new member of the Group. Those reviews could provide Internal Audit with some wider insights that could be reported back to the Board. That might involve consideration of the implications of any compliance failures, such as concerns arising from an audit investigation of, for example, HR policies at Vanheaters. Internal Audit could consider whether those failures are indicative of a wider issue such as Vanheaters's management team having failed to adapt in terms of culture. All interactions with staff could include open-ended questions about changes since the acquisition in order to establish whether the culture has changed to come into line with Hottayr's. The focus of such an approach need not be on the course itself, but it would still be helpful to ask for feedback concerning opinions on the course and whether it had helped with the transition to membership of the Hottayr Group. Internal Audit could add a culture or values section to its reports on any investigations carried out at Vanheaters during, for example, the first year of ownership.

Strategic level case study – Examiner’s report

November 2022 – February 2023 exam session

This document should be read in conjunction with the examiner’s suggested answers and marking guidance.

General comments

The Strategic case study (SCS) examinations for November 2022 and February 2023 were based on a pre-seen scenario which described Hottayr, a quoted company that manufactures gas boilers and heat pumps.

The manufacture of domestic heating products is undergoing significant change, with a decline in demand for boilers and an increase in heat pumps, which offer lower carbon emissions.

A total of six variants were set on Hottayr. The focus for each variant was as follows:

- Variant 1: Hottayr has the opportunity to work with a major housebuilder that is keen to install a new design of heat pump in all of its new houses.
- Variant 2: The government of Hottayr’s home country is considering the withdrawal of a grant that subsidises the purchase of heat pumps.
- Variant 3: Hottayr’s Board is considering the divestment of the gas boiler side of the business.
- Variant 4: Hottayr’s heat pump app is insecure, causing security problems for homeowners.
- Variant 5: A foreign manufacturer has developed a new refrigerant that will enhance the efficiency of heat pumps.
- Variant 6: Hottayr is considering the acquisition of a company that designs and installs domestic heating systems.

All six variants complied with the published blueprint and covered the core activities in the prescribed weightings. Each variant consisted of three tasks, and each task was further subdivided into separate requirements. The weighting attached to each requirement was stated, and candidates were advised to allocate the time available for each requirement on the basis of those weightings. Markers were instructed to adopt a holistic approach to marking, which meant that the answer to each requirement was read and judged on its

merits. Markers were provided with specific guidance as to the characteristics of level 1, level 2 and level 3 answers for each separate requirement.

As always, the key to achieving a passing mark or better is to answer the question as set. This is one of the main reasons candidates fail the case study. Read the questions and the scene setting pages carefully before attempting the questions. It is also vital that the candidates understand the pre-seen material. Candidates should apply their judgement to answering the requirements as fully as possible. Scenario-based questions often allow scope for differences of opinion and markers are instructed to mark different approaches on their merits.

To achieve a level 3 in most traits, it was expected that a candidate would demonstrate good technical understanding of the topic being tested through clear and logical application to the circumstances described in the scenario. It may also help to develop an argument by offering justification for any recommendations made. One way to formulate an answer to a typical requirement would be to imagine it as a task that had been set by a director who was delegating an important task.

Level 1 answers generally demonstrate either poor exam technique or fail to offer a logical response to the circumstances in the scenario (or both). Poor exam technique is generally due to a failure to answer the question. Poor logic generally suggests that the candidate has misunderstood the scenario. For example, the specific issues arising in the case of Hottayr include:

- The domestic heating industry is undergoing significant change, with traditional products losing sales because of their carbon emissions.
- Hottayr's products are not sold to their ultimate consumers.
- Heat pumps require electrical power, which may create carbon emissions when generated. Also, the refrigerant used in heat pumps is a significant contributor to global warming if released.
- Hottayr's products are heavily reliant on IT systems for their efficient operation.

While each attribute may not necessarily inform every requirement, level 1 marks tended to be associated with a failure to appreciate the specifics of the business.

Variant 1 Comments on performance

Task 1

Candidates are presented with a Board extract outlining Hoddlift's existing business with Hottayr and detailing a proposal for co-developing a new ground source heat pump to be installed in all Hoddlift's new build houses. Candidates are asked to use SAF criteria to evaluate Hoddlift's proposal.

Level 3 responses were very well structured and took each element in turn and detailed all points for and against the proposal. Good candidates considered any drawbacks that might exist, particularly in the acceptability as the cost of the project is substantial. Level 3 candidates tied their responses into the scenario with detailed reference to the proposed agreement and paths for development.

Level 2 candidates tended to be slightly less structured or had some gaps in their response.

Level 1 responses tended to be rather brief and affirmative without explaining why they were in favour.

Task 1 progresses to request that candidates discuss whether Hottayr would be able to report this collaboration with Hoddlift as enhancing social and relationship capital and natural capital in its integrated framework report.

Level 3 candidates often outlined that there are 6 capitals for Integrated Framework reporting and then proceeded to discuss the two in question. Well-structured answers were drawn from several different areas expanding on environmental friendliness, sustainability, efficiency and the general greenness of the product. Level 2 responses tended to be similar but with less depth and explanation, often being rather unstructured and less aware of the overall situation. Level 1 responses were often rather scant and frequently simply used bullet points; this approach never receives a high mark as development of an argument is required.

Task 2

Task 2 moves the scenario forward a month and outlines a capital project costing \$50million to develop a new ground source heat pump. Candidates are asked to recommend, with reasons, the manner in which the rights issue to fund this proposal should be managed.

Level 3 responses were well structured and dealt directly with the facts present in the scenario. Shareholder communication, shareholder confidence and setting the right price are critical factors in rights issues and good candidates discussed these issues. The rights issue to existing shareholders appears the best option available and this option was usually discussed very well. Level 2

responses tended to focus purely on central issues, while Level 1 responses tended to give standard answers which did not tie into the scenario. These were often rather sparse and tended to be lists rather than recommend with reasons.

Task 2 progresses to ask candidates to evaluate the impact of each of two scenarios and recommend possible sources of action.

Level 3 responses gave very thorough and complete appraisals of the risks involved in both scenarios. These are real risks, and good candidates indulged in some scenario planning to consider alternatives if one or both should come to fruition. Structured answers took the situations one by one and demonstrated wide ranging thought to mitigate each of the scenarios. Level 2 responses gave good thought to the same areas of doubt but were less complete in considering options. Level 1 candidates tended to give rather sparse answers here, mainly short responses which were not well developed.

Task 3

Task 3 moves the scenario on a full year, and candidates are presented with a news article detailing outstanding success for the new product and collaboration between the parties but criticising the exclusivity of the product which could save other households substantial heating costs.

Candidates are asked to evaluate the ethics in withholding the product from other housebuilders.

Level 3 candidates gave a wide view of the conflict here between contractual business ethics; the 2-year agreement with Hoddlift, and the broader environmental concerns of the drive towards sustainability, carbon neutrality and generally allowing other householders to benefit from their jointly developed product. Good answers went through the list of principles and gave arguments both for the agreement and for the wider public good. Many but not all candidates concluded that the contractual position was not only legally binding but breaking it would cause significant reputational damage on professional behaviour, integrity and objectivity. The market is open for a competitor to invest and create a competitive product.

Level 2 answers were often quite confused with this question as the dilemma is not easily resolved. Many did not recommend one way or another and often the arguments were less complete. A disturbing number of candidates were unsure about most aspects of ethics.

Level 1 responses tended to be brief, with lists of very short points sometimes giving conflicting opinions without good reasoning. Again, some showed very little understanding of ethics.

The paper concludes with candidates being asked to recommend whether Hottayr's Board should refrain from taking their full profit-related bonuses on the grounds that Hottayr's increased profits resulted from the creation of a product at the request of Hoddlift.

Level 3 responses were well structured and integrated with the scenario. The position on remuneration being in line with shareholders' interests was often quoted as was the role of the remuneration committee and regular annual reviews which should take place. Good consideration was given of the roles of directors in considering strategic direction and the ongoing governance of the business through prosperous and lean times. Most level 3 responses argued in favour of taking the full bonus where the work had been done to review, drive and manage the changes required to bring the heat pump to reality.

Level 2 answers were also mostly supportive of the directors benefiting from the full remuneration of the bonus, although many gave much simpler reasoning. Level 1 responses tended to be brief and often considered that directors should not take the bonus, often suggesting that the bonus money should be shared amongst all employees, which was not actually in the question.

Variant 2 Comments on performance

Task 1

Candidates were informed that the Norland Government is considering withdrawing the grant currently available to homeowners who replace their gas boilers with heat pumps. This could reduce demand for Hottayr's products.

The first requirement was to explain how Hottayr might understand the macro environmental factors associated with the grant and plan for its possible loss by undertaking a PESTEL analysis.

Level 3 responses were often structured around the elements of the PESTEL analysis, exploring which factors were most important to Hottayr and how the analysis might be helpful. For example, social issues might include the possibility of social pressure to install heat pumps, and political factors might include legislation to encourage the installation of pumps which could reduce the impact of the grant loss. Level 2 answers often discussed all elements of the PESTEL analysis but in less detail and with less focus on planning for the potential loss of the grant. Level 1 answers described the elements of PESTEL but with little application to the scenario or only identified and explored some of the factors.

The second part of this task was to explain whether it would be unethical for Hottayr to lobby the government in the hope of retaining the grant.

Level 3 responses were often based on the CIMA code of ethics, identifying ethical principles such as integrity, objectivity and professional behaviour, applying those principles to the scenario and explaining whether or not lobbying would be inconsistent with compliance with them. Level 2 answers often applied principles but with less detailed discussion. Some talked in more general terms about issues such as fairness without specific reference to the CIMA code, which often lead to less clearly structured responses. Level 1 responses correctly identified some principles but lacked application and discussion.

Task 2

In the second task, the Non-Executive Chair has proposed that a polling company should be used to seek the opinions of political journalists in order to predict whether or not the Government will withdraw the grant.

Candidates were first asked to evaluate the strengths and weaknesses of this proposal.

Level 3 responses considered both strengths and weaknesses, identifying issues such as the journalists' objective views and access to politicians, as well as the difficulty in evaluating their opinions and the danger of adverse publicity arising from the consultation.

Candidates correctly identified issues and explored them in some detail. Level 2 responses also identified and explored issues but in less depth, and level 1 answers did not go beyond the identification of appropriate issues.

The second requirement was to discuss the advantages and disadvantages of informing shareholders that the possible reduction in revenues and profits could lead to a reduced dividend payment.

Level 3 answers identified and discussed both advantages and disadvantages, such as reducing the risk of overreaction by the market if the grant is withdrawn and the dividend falls, the reassurance given to shareholders that the directors are being open and transparent, balanced by the danger of introducing volatility in the share price and the possibility that the grant could continue past the dividend date, making the announcement unnecessary. Level 2 answers identified some advantages and disadvantages but did not discuss them in depth, sometimes focussing on market theory rather than the scenario presented. Level 1 answers often identified some relevant advantages and disadvantages but did not provide evaluation of them.

Task 3

In the final task, candidates were provided with a copy of a diagram intended to be included in the sustainability section of the annual report. Similar diagrams have been presented in the past, and environmental campaigners have commented that they overstate Hottayr's care for the environment.

Candidates were asked to recommend improvements to the diagram which would improve the clarity and relevance of the information provided.

Level 3 responses pointed out ways in which the diagram was potentially misleading, such as the confusion of several different factors causing a downward slope in carbon monoxide emissions. They also made helpful suggestions as to how to improve the presentation, such as clearly stating the assumptions it is based on and extending the report to allow for the manufacture, distribution and installation of its products. Level 2 answers often correctly identified problems with the diagram but were less focussed on the improvements which should be made. Level 1 answers described the diagram and identified some issues but did not provide well supported recommendations.

The final requirement was to evaluate the arguments for and against having Hottayr's Internal Audit Department review the sustainability report and summarise the results of that review in an appendix to the report.

Level 3 responses discussed both arguments for the Internal Audit Department carrying out the work, such as providing reassurance to the Board and signalling that the sustainability report is taken seriously, as well as arguments against such as potential lack of relevant expertise. They also discussed the inclusion of a separate internal audit review in the sustainability report, which might add credibility to stakeholders but could also not be seen as independent.

Level 2 answers identified some issues but did not fully justify the points made. They often covered the internal audit review well but omitted discussion of the summary report.

Level 1 responses identified issues for and against the internal audit review but again often omitted the suggestion that a separate report be included.

Variant 3 Comments on performance

Task 1

Section 1 introduced candidates to the proposal through a board minute extract, which highlighted details of the proposal and also mentioned the concern that Gassmyne's Board had informed the press about the intended acquisition which had resulted in a fall in share price for both Hottayr and Gassmyne.

The first task asked candidates to discuss the challenges associated with creating a separate gas boiler subsidiary that Hottayr can divest and sell to Gassmyne.

Many candidates presented level 3 and strong level 2 responses to this task, with many answers demonstrating a sound understanding of a range of potential challenges in successfully separating the gas boiler business from the heat pump business. Most candidates correctly recognised the challenges of separating the administrative functions at Head Office and the potential loss of synergies. Stronger answers also recognised the likely impact that this would have on morale. Level 3 answers also considered challenges such as asset valuations and the difficulties of data and information transfer to a separate business.

Weaker level 2 answers often presented brief answers which were limited to considering administrative staff separation issues only and some were confused as to the proposed location of staff in the new business, which was clearly set out in the exhibit information.

Very few candidates presented level 1 answers to this task, as most made a reasonable attempt.

The second task required candidates to discuss the implications of the reduction in the share prices of both Hottayr and Gassmyne following the newspaper stories about Gassmyne's intention to purchase Hottayr's gas boiler business.

Most candidates presented reasonable answers to this task, and there was evidence of sound understanding of the reasons for negative share price movements in this scenario.

Level 3 and strong level 2 responses to this task presented a full and well-balanced discussion of reasons for and impacts of a fall in share prices for both businesses. The strongest answers recognised that the loss of such a major part of Hottayr's business will make shareholders nervous, as Hottayr will be reduced to a single product range of heat pumps which could put it at additional risk if heat pumps are not sufficiently popular. The strongest answers also discussed the implications for Gassmyne, including concerns about this proposed strategy to continue to sell gas to consumers in Norland and other countries, believing that demand for gas heating will decline, and Gassmyne's lack of experience in gas boiler production.

Weaker level 2 and level 1 answers often failed to discuss the implications of Gassmyne's fall in share price, focussing their answers only on Hottayr. Few candidates presented level 1 answers, but those that did presented theoretical and unapplied responses to this task.

Task 2

Section 2 moved the scenario on by 9 months, and candidates were told that Gassmyne had purchased Hottayr's gas boiler business. Candidates were presented with a newspaper article which highlighted the difficulties that Gassmyne had faced since its acquisition of the gas boiler business.

The first task asked candidates to explain whether Gassmyne's Board could have managed the acquisition of the gas boiler business more effectively.

Overall, this task was answered well by most candidates, with the majority achieving a strong level 2 or above.

Level 3 and strong level 2 answers to this task were well applied to the case context and made full use of the reference material to generate a wide range of points on how Gassmyne could have managed the acquisition better. Strong level 2 answers recognised the weaknesses demonstrated by Gassmyne in managing and utilising the experienced staff transferred from Hottayr and the evident lack of appropriate communication, which impacted on morale.

Weaker level 2 responses mostly presented answers which were brief and, in many cases, failed to make adequate use of the reference material to support the points made. Most answers at this level only focussed on staff morale issues and therefore missed several other important issues that should have been addressed. Again, there were few level 1 responses to this task, but those that were merely identified a small range of issues with little or no attempt at discussing these in the case context.

The second task asked candidates to recommend a suitable response, stating reasons, to any accusation that Hottayr's Board should have supported Gassmyne more in the period immediately after the acquisition.

Level 3 and strong level 2 answers presented a range of arguments that Hottayr's Board could put forward to defend its position and actions in support of Gassmyne after the acquisition. Level 3 answers were well balanced and argued that it would have been in its own interests to have supported Gassmyne through the factory's transition, as Hottayr could suffer reputational damage because of the problems at its former factory. However, as Gassmyne is now a competitor, the level of support offered needed to be carefully considered. The strongest answers recognized that Hottayr could argue that it would have responded to any reasonable request from Gassmyne for advice or assistance but it would not have been appropriate to have been proactive in offering such support.

Weaker level 2 and level 1 answers often took the stance that Hottayr were to blame for the failures of Gassmyne and argued that it should have played an active and full role post acquisition. There was often a lack of recognition of the fact that this was several months after the acquisition, and some answers incorrectly focussed on actions that would have been appropriate prior to the

acquisition. Candidates are reminded to remain focussed on the question asked and to make sure that they read fully all of the information provided to them.

Task 3

In Section 3, candidates were presented with an executive summary of a consultant's report commissioned by Gassmyne's Board on customer perceptions of the gas boiler business. This report questioned Hottayr's customers on their perceptions of its achievement of the mission and vision statements, drawing conclusions that Hottayr had not been managing its business effectively in the 2 years up to the sale.

The first task asked candidates to evaluate the arguments both for and against the presumption that Hottayr's strategic management of its gas boiler business should have complied with the mission and vision statements.

Few candidates presented level 3 answers. Many candidates simply re-stated or described Hottayr's mission and vision statements, rather than how it should or could comply with these statements. Only a few level 3 candidates considered that vision and mission statements could be disregarded in certain circumstances and should not necessarily be rigidly adhered to if this would inhibit growth or further investment opportunities. However, many candidates did achieve higher level 2 scores in recognising that limitations of the consultant's arguments that Hottayr had not been managing its business effectively. Low level 2 and level 1 answers were often descriptive of the vision and mission statements and lacked any real or suitable challenge to the consultant's assertions.

The second task asked candidates to recommend how Hottayr's non-executive directors (NEDs) could ensure that Hottayr is managed in accordance with its mission and vision statements.

This task was answered reasonably well by most candidates, with many presenting high level 2 responses. The better responses mentioned the role of internal audit and setting appropriate KPI's and performance measures and how the NEDs could use these via the committees to inform and support the Board. Weak level 2 and level 1 answers tended to be generally descriptive of the role of NEDs, and some answers unnecessarily focussed on the overall skills of NEDs and the board balance, which was not asked for.

Candidates are reminded to make full use of the reference material presented to them to support the points that they make and to make sure that answers are fully and directly applied to the scenario context. It is important that candidates read ALL the information presented, both within the exhibits and within the requirement window itself, as often key information is missed.

Variant 4 Comments on performance

Task 1

Candidates were presented with a news article highlighting a weakness in the heat pump's wireless connection, enabling external users within range to connect and possibly access the home network and other devices connected to the router.

Candidates were asked to evaluate the argument that Hottayr should use customer analysis to determine the need for future software upgrades.

Level 3 responses tended to be very well structured and integrated their answers into the scenario. Good answers gave a concise view of several advantages both for Hottayr and the consumers who would benefit from sharing information, views, trends, needs and generally progressing the functionality and feedback about the systems, good answers also highlighted areas of concern and the best recognised ways to mitigate these. Level 2 responses tended not to evaluate in that they provided upside arguments only.

Level 1 responses were less structured, quite often just a list of points with no development.

Task 1 continued with a request that candidates recommend, with reasons, whether the statement of principle risks in Hottayr's annual report should refer to software errors.

This was answered quite well. Level 3 candidates again gave well-structured responses which took several points in turn and tied their answer back into the scenario. Good answers considered both sides of the argument and supported their opinions largely with discussions of materiality and severity of exposure. Many suggested that the Hottayr Board should have a robust process in place to deal with any eventuality and the specific risks encountered at this point are somewhat meaningless. Level 2 responses tended to be rather narrower in their consideration of the facts, often just considering one side or the other without thinking of wider issues. Level 1 responses were less well structured and often proposed extreme solutions without due consideration.

Task 2

Task 2 moves the scenario on a month and presents another news article, this time highlighting a data breach with potential risk exposure for many non-IT savvy households who use the same password for everything. Hottayr's share price has taken a hit of 15%, and candidates were asked to recommend, with reasons, the approach that the Board should take to dealing with the capital market reaction resulting in the drop in Hottayr's share price.

Level 3 responses were again well structured and dealt fully with the need for a combination of short, medium and long-term actions to address the market and stakeholders. Good answers gave advice on risk avoidance for consumers/customers. Medium-term communications again are key in keeping stakeholders adequately informed as to necessary actions and likely outcomes. There were a range of good answers given as to medium-term actions to be taken; these were often fairly standard but the best candidates wove their responses around the scenario presented, whereas Level 2 answers tended to be more generic and verging towards a list of possibilities rather than a set of considered responses. Level 1 responses again tended to be sparse, list oriented and without much by way of considered supporting evidence or argument.

Task 2 progressed to request recommendations, with reasons, the approach that Hottayr should take to repair the damage to human, intellectual, social and relationship capital.

Good, well-structured level 3 responses took each of these in turn and often presented several different aspects of each. Good answers reflected the benefits of awareness training, morale building and availability of support. Level 3 responses again highlighted that intellectual capital repair is heavily dependent on understanding the methods and purpose of attack so as to resolve and eradicate any existing malware or trojan elements.

Level 2 responses were often good but somewhat less thorough, and level 1 tended towards list of unsubstantiated actions.

Task 3

Task 3 presents an extract from a board meeting a month after the previous data breach; there is a suggestion of lack of investigation or action visible at Board level, and candidates are requested to evaluate the advantages and disadvantages of using Hottayr's IAD to investigate the events.

This, on the whole, was answered very well. Level 3 responses gave a good evaluation of both sides of the argument whether or not to deploy Internal Audit as an investigations team. These responses picked up on a wide range of factors. Good candidates highlighted benefits for internal IT training and self-examination, all of which is budget and resource hungry.

Level 2 responses were also quite wide ranging but generally less structured or details than the level 3, while level 1 responses again tended to be sparse and illustrated but lists of unsubstantiated bullet points.

The paper concluded by requesting candidates to recommend, with reasons, the manner in which Hottayr's Board might resolve cyber risks at the strategic level.

This was well received by level 3 candidates who integrated elements from their previous responses to provide a structured balanced report of actions with reasons and likely outcomes. Level 2 responses again made good attempt with somewhat less breadth or depth. Level 1 responses sometimes reverted to extreme, unsubstantiated points and were simply sparse and poorly developed.

Variant 5 Comments on performance

Task 1

Hottayr has been offered the opportunity to have the exclusive rights to use a new refrigerant for 6 years, after which time the refrigerant will be sold freely to any manufacturers who wish to buy it. The new refrigerant will offer a number of environmental benefits.

The first sub task asked for arguments relating to the consistency with accepting this 6-year exclusivity period with Hottayr's vision statement. There are potential arguments for and against this consistency and both were asked for. Level 1 answers tended to ignore the requirement and wrote extensively about commercial considerations, ignoring the question of consistency with the vision statement. Level 3 answers addressed the requirement and developed relevant arguments. Many good answers identified commercial considerations and addressed the matter of consistency by arguing that the refrigerant may never be brought to market unless there is a potential profit to be made by the company that is being asked to fund the final development work.

The second sub task asked about the use of stress testing to assist Hottayr in understanding the factors that might threaten the development of the new refrigerant in industrial quantities. This requirement was generally answered well, with most candidates managing to identify potentially relevant factors that should be understood. Level 1 answers generally lacked development, either by listing only one or two factors or by offering only a very limited discussion of the factors that were offered. Level 3 answers demonstrated some understanding of stress testing and applied that technique to the scenario in a relevant manner.

Task 2

Hottayr must make significant investments in the development of the new refrigerant and in adapting the company's factory to use the new product. It will also be necessary to import the refrigerant from a foreign supplier whose home currency is volatile in relation to that of Hottayr.

The first sub task asked for a recommendation concerning the funding of the investments. Answers to this requirement varied significantly. A substantial minority of candidates argued that Hottayr's retained earnings should be used to pay for these items, which is clearly a major misunderstanding of the basics of accounting and finance. Level 1 answers tended to list sources of finance and types of financial instrument with little real development of that list to indicate the potential advantages and disadvantages of each in the context of the scenario. Level 3 answers focussed on the nature of the investments that had to be made and the position that Hottayr is already in and made recommendations that were well justified. For example, many candidates argued that debt might be faster and more flexible in funding the N\$90 million payment that is due immediately.

The second sub task asked for recommendations relating to the currency risks arising from the need to buy the new product from a foreign supplier. Again, the quality of answers varied significantly. Level 1 answers often listed types of currency risk and offered little or no explanation as to how each risk might be addressed. Alternatively, level 1 answers often listed financial instruments, with little or

no explanation of how they might be useful to Hottayr. Level 3 answers offered clear recommendations and explained why they would reduce Hottayr's currency risks. Candidates demonstrated an understanding of the types of risk that would arise from regular purchases from an overseas supplier and incorporated that understanding into their arguments.

Task 3

Hottayr has launched heat pumps that use the new refrigerant. There has been a sudden and significant increase in demand following this launch.

The first sub task asked for an explanation of the impacts on Hottayr's market, specifically unpredictable demand, customer empowerment and social change. This requirement was generally answered well. Level 3 answers offered clear and logical explanations of the issues, reflecting the background to Hottayr's business. For example, candidates often reflected on the fact that homeowners had previously taken little interest in the choice of heat pump when having a new central heating system installed, but the new refrigerant had changed that. Level 1 answers made similar points but were generally less well developed.

The second sub task asked for an evaluation of the arguments for and against the appointment of an executive director to take responsibility for environmental matters. This requirement was generally answered well. Level 3 candidates offered logical arguments both for and against the proposal, with arguments being well justified in terms of governance and commercial implications. For example, many candidates expressed concern that the new appointment could distract the Board and disrupt the development of strategy. Level 1 answers often discussed only one side, either for or against the proposal, or gave a brief argument with limited justification.

Level 2 answers provided some evaluation but with less justification, and level 1 responses described the arguments but did not evaluate them.

Variant 6 Comments on performance

Task 1

Section 1 introduced candidates to the proposal through a board minute extract, which highlighted details of the proposal, including the fact that Vanheaters operates as a franchise with its heating engineers being self-employed. The reference material also highlighted some recent problems and complaints made about the services offered by Vanheaters.

The first task asked candidates to recommend, with reasons, the issues that Hottayr's Board should consider in deciding whether Vanheaters will be a suitable acquisition for Hottayr.

Many candidates presented level 3 and strong level 2 responses to this task, with many answers demonstrating a sound understanding of a wide range of issues both in favour and against the potential acquisition of Vanheaters. Level 3 answers were most often those that reflected on the challenges of integrating a franchise business into Hottayr's current structure. Stronger answers also considered the impact of this acquisition on Hottayr's vision and mission. Level 3 and stronger level 2 answers were well balanced and considered both arguments for and against the acquisition and made good use of the reference material to support their arguments.

Weaker level 2 candidates often presented brief answers which were limited to considering only the potential reputational issues that were referred to in the reference material. Therefore, these answers were limited, as they failed to make use of the wider case context. Weaker answers often failed to consider at all the challenges of integrating a franchise-based organisation. Very few candidates presented level 1 answers to this task, as most made a reasonable attempt. Those that did were brief and made little use of the reference material.

The second task required candidates to recommend, with reasons, ways that Hottayr could manage the reputational risks arising from acquiring Vanheaters to design and install central heating systems as a member of the Hottayr Group.

Most candidates presented reasonable answers to this task, and there was evidence of sound understanding of the potential consequences of reputational damage to Hottayr from acquiring Vanheaters.

Level 3 and strong level 2 responses to this task presented a good range of well-argued and well-applied actions to manage potential reputational risks, including changing the branding of Vanheaters to be more closely associated with Hottayr, and offering Vanheaters' contractors additional training. The strongest answers also fully considered the need for clear communication with customers in relation to the exclusive use of Hottayr's heat pumps in the future.

Weaker level 2 and level 1 answers often failed to adequately develop their answers, with some focussing more on describing the consequences of the reputational risk, rather than how to manage this risk. Few candidates presented level 1 answers, but those that did presented thin and unapplied answers which described reputational risk.

Task 2

Section 2 moved the scenario on by 1 month and the discussions about acquiring Vanheaters is still ongoing. Candidates were presented with a news article in which the Governor of Norland's central bank had issued a warning that interest rates could be increased in order to strengthen the weakening N\$. Information was also presented about the possibility of using a share exchange to acquire Vanheaters.

The first task asked candidates to discuss the possible impacts of interest and currency risks on Vanheaters if Norlandian interest rates increase and the N\$ strengthens.

Overall, this task was not answered well by most candidates, with few scoring a high level 2 or above.

Very few candidates presented level 3 or strong level 2 answers to this task. Those that did clearly recognised the impact that higher interest rates would have, both on Vanheaters itself, in terms of higher costs of servicing debt, and the impact of higher interest rates on its customers. They also recognised and discussed the fact that if the N\$ strengthens, then Vanheaters' services would become less competitive in Norland compared to cheaper imported heat pumps and would also be less competitive overseas, as its services would be more expensive.

Weaker level 2 responses tended to be quite unbalanced, demonstrating a competent discussion of the interest rate rise but little understanding of the impact of a strengthening currency. Some candidates failed to answer the question asked, focussing on the impact on Hottayr, instead of the impact on Vanheaters. Candidates are once again reminded to make sure that they read the question requirement carefully to ensure that they answer the question that has actually been asked.

Some candidates scored low level 2 marks because their answers were too theoretical with limited direct application to the case context, particularly when discussing the strengthening currency. Some candidates took this as an opportunity to demonstrate their knowledge of translation, transaction and economic currency risks, but with little relevant application to Vanheaters. Few marks are awarded at strategic level for basic knowledge demonstration. Level 1 responses to this task were often theoretical with little or no direct application to the case context and no development.

The second task asked candidates to recommend, with reasons, how Hottayr should manage the share exchange if it decides to go ahead with the acquisition of Vanheaters.

This question was not particularly well answered, with few candidates scoring a level 3 mark. However, there were some sound level 2 answers, which recognised the issue of diluting the shareholding of Hottayr's existing shareholders, but few adequately then went on to fully discuss how the process should be effectively managed from the perspective of Hottayr.

Strong level 2 answers recognized the need for Hottayr's Board to ensure that confidentiality is maintained during the negotiations between the two boards and the need to persuade Vanheaters' Board to support the acquisition. Weaker level 2 and level 1 answers most often presented answers which were descriptive of the share exchange process, with little or no direct application to the case context. Alternatively, weaker candidates presented alternatives to a share exchange, such as rights issues or debt financing. This was

clearly not asked for and candidates are reminded to remain fully focused on only answering the question that has been specifically asked.

Task 3

In Section 3, the scenario has moved on 6 months and the 100% acquisition of Vanheaters has just taken place. Candidates were presented with a board minutes extract in which Hottayr's Non-Executive Chair sets out a proposal for an online training programme for all of Vanheaters' staff so that they understand Hottayr's expectations regarding staff behaviour and culture.

The first task asked candidates to discuss the issues that should be considered when designing a training programme to ensure that Vanheaters' staff are aware of Hottayr's expectations relating to its core values and their impact on staff behaviour and corporate culture.

This task was answered reasonably well by many candidates, with most scoring a high level 2 mark. Most candidates recognised the potential limitations of an online training environment to deliver the necessary material and experience relating to Hottayr's culture and behavioural expectations. Low level 2 and level 1 answers were often more focussed on the delivery of a general training programme rather than specifically on core values that the training should cover and/or the issues relating to how the design of the training to be provided to Vanheaters' staff should be undertaken.

The second task asked candidates to recommend, with reasons, how Hottayr's Internal Audit Department could ensure that the Board's objectives for the training programme will be met (with specific focus on considering issues at the design and operational stages).

This task was answered reasonably well by most candidates, with many presenting high level 2 responses. The better responses made a reasonable attempt to discuss the involvement of Hottayr's Internal Audit Department in determining compliance with the Board's objectives for the training programme and many candidates demonstrated a sound knowledge of the role of Internal Audit and a good range of techniques that could be applied were considered.

Weak level 2 and level 1 answers tended to be generally descriptive of the role of Internal Audit, with little or no direct application to their role in auditing the training programme being considered by the Board.

Tips for future candidates

There are several key points to take into account when preparing for future Strategic level case study examinations. These points are the same as in previous reports and are:

- Key to achieving a score at level 2 and above is to ensure that:
 - You have the technical knowledge and understanding of all of topics included in each of the core activities. It is not sufficient to rely on the fact that you remember it from the OTQ exams, because the chances are you won't. You need to revise technical material: if you don't have the knowledge, you can't score well.
 - You are able to apply your technical knowledge and understanding within the case study context. Simply reproducing rote-learned answers or pure knowledge of a topic area will score very few, if any, marks. Similarly, taking a non-targeted approach to an issue and commenting on everything that you know about it from a theoretical point of view will score few marks.
 - You are able to explain with clarity and comprehensively, rather than making unsupported statements. Writing comments such as, "this improves decision making", "this graph is essential" or "planning is enhanced" is not enough to gain any marks. Candidates must explain "how" and "why" this is the case. Explanations can quite often be improved by adding "because of" at the end of a sentence. Explanations should also utilise the information given to you within the case study itself, especially financial information. For example, reasons for variances are often given to you in the unseen information, the skill is to pick this out and use it.
- To help you achieve this, you need to:
 - Study the pre-seen material in depth. Ensure that you are very familiar with the business, especially the financial information, before the exam, as this will help you with applying your knowledge and will save you time. Similarly, an awareness of the industry that the business is in will help you to think of the wider issues that might impact on decisions that you could be asked to comment on.
 - Practise, practise, practise past SCS exam tasks. Practising past tasks and then checking against the published answers will help you to understand what the examiner is looking for.
- On the day:
 - It is important to take time to plan your answer so that you are able to apply your knowledge to the specifics of the case. I suggest that for certain tasks you plan your answers in the answer screen itself. For example, if you are asked for the potential benefits and problems of activity based costing, I suggest that you first note down headings for benefits and

problems. Under each heading, list your benefits and problems; these will become your sub-headings. Then you can write a short paragraph under each sub-heading. This will allow you time to think about all of the points that you want to make and will help to give your answer a clear format. Ultimately, it should save you time.

- Please take care over how your answer looks. Some answers are very difficult to read because of poor spelling and grammar. Whilst this examination is not a test of English, it is important that answers are presented well so that markers can see that you have demonstrated clear understanding of the issues.

Strategic Level Case Study November 2022 - February 2023

Marking Guidance

Variant 1

About this marking scheme

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General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded, and full marks should be awarded when all level descriptor criteria are met.

- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

How to use this levels-based marking scheme

1. Read the candidate's response in full

2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.
- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level when it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

Summary of the core activities tested within each sub-task

Sub-Task	Core Activity		Sub-task weighting (% section time)
Section 1			
(a)	B	Evaluate business ecosystem and business environment	60 %
(b)	D	Evaluate and mitigate risk	40 %
Section 2			
(a)	C	Recommend financing strategies	50 %
(b)	A	Develop business strategy	50 %
Section 3			
(a)	D	Evaluate and mitigate risk	40%
(b)	E	Recommend and maintain a sound control environment	60%

SECTION 1			
Task (a) Evaluate Hoddlift's proposal for Hottayr using the suitability, feasibility and acceptability criteria			
Trait			
Suitability	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes criterion	1-2
	Level 2	Offers some discussion	3-5
	Level 3	Offers discussion with good justification	6-7
Feasibility	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes criterion	1-2
	Level 2	Offers some discussion	3-5
	Level 3	Offers discussion with good justification	6-7
Acceptability	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes criterion	1-2
	Level 2	Offers some discussion	3-5
	Level 3	Offers discussion with good justification	6-7
Task (b) Discuss whether Hottayr will be able to report this collaboration with Hoddlift as enhancing social and relationship capital and natural capital in its Integrated Framework (<IR>) report.			
Trait			
Social & relationship	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes capital	1-2
	Level 2	Discusses reporting	3-4
	Level 3	Discusses reporting with justification	5-6
Natural	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes capital	1-2
	Level 2	Discusses reporting	3-4
	Level 3	Discusses reporting with justification	5-6

SECTION 2			
Task (a) Recommend with reasons the approach we should take to managing the rights issue to fund this proposal.			
Trait			
Approach	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes steps in rights issue	1-3
	Level 2	Discusses approach	4-6
	Level 3	Discusses approach with good justification	7-9
Reasons	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Outlines issues to be considered	1-2
	Level 2	Offers reasons for recommendation	3-5
	Level 3	Offers reasons for recommendation with good justification	6-8
Task (b) Evaluate the impact of the two scenarios identified by Eva and recommend possible courses of action.			
Trait			
1st scenario	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes possible impact	1-3
	Level 2	Offers some evaluation of the impact	4-6
	Level 3	Offers some evaluation of impact with an explanation	7-9
2nd scenario	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes possible impact	1-2
	Level 2	Offers some evaluation of the impact	3-5
	Level 3	Offers some evaluation of impact with an explanation	6-8

SECTION 3			
Task (a) Evaluate the argument that it is unethical for Hottayr to withhold Breeth from other housebuilders, given that it offers such substantial energy savings.			
Trait			
1st principle	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies ethical principle	1
	Level 2	Applies principle	2-3
	Level 3	Applies principle with justification	4
2nd principle	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies ethical principle	1
	Level 2	Applies principle	2-3
	Level 3	Applies principle with justification	4
3rd principle	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies ethical principle	1
	Level 2	Applies principle	2-3
	Level 3	Applies principle with justification	4
Task (b) Recommend whether Hottayr's Board should refrain from taking their full profit-related bonuses, on the grounds that Hottayr's increased profits resulted from the creation of a product at the request of Hoddlift.			
Trait			
1st argument	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1-2
	Level 2	Discusses argument	3-5
	Level 3	Discusses argument with justification	6-7

2nd argument	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1-2
	Level 2	Discusses argument	3-5
	Level 3	Discusses argument with justification	6-7
3rd argument	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1-2
	Level 2	Discusses argument	3-5
	Level 3	Discusses argument with justification	6-7

Strategic Level Case Study November 2022 - February 2023

Marking Guidance

Variant 2

About this marking scheme

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How to use this levels-based marking scheme

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Summary of the core activities tested within each sub-task

Sub-Task	Core Activity		Sub-task weighting (% section time)
Section 1			
(a)	B	Evaluate business ecosystem and business environment	60 %
(b)	D	Evaluate and mitigate risk	40 %
Section 2			
(a)	A	Develop business strategy	50 %
(b)	C	Recommend financing strategies.	50 %
Section 3			
(a)	D	Evaluate and mitigate risk	40%
(b)	E	Recommend and maintain a sound control environment	60%

SECTION 1			
Task (a) Explain with reasons how a current PESTEL analysis of Hottayr might help plan for the possible loss of this grant.			
Trait			
Political & economic	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes factors	1-2
	Level 2	Discusses factors	3-5
	Level 3	Discusses factors with good justification	6-7
Social & technological	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes factors	1-2
	Level 2	Discusses factors	3-5
	Level 3	Discusses factors with good justification	6-7
Environmental & legal	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes factors	1-2
	Level 2	Discusses factors	3-5
	Level 3	Discusses factors with good justification	6-7
Task (b) Explain whether it would be unethical for Hottayr to lobby the Norlandian Government in the hope of retaining the grant.			
Trait			
1st principle	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies ethical principle	1
	Level 2	Applies principle	2-3
	Level 3	Applies principle with justification	4

2nd principle	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies ethical principle	1
	Level 2	Applies principle	2-3
	Level 3	Applies principle with justification	4
3rd principle	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies ethical principle	1
	Level 2	Applies principle	2-3
	Level 3	Applies principle with justification	4

SECTION 2			
Task (a) Evaluate the strengths and weaknesses of the proposal to attempt to predict the Government's decision by asking political journalists.			
Trait			
Strengths	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies strengths	1-3
	Level 2	Discusses strengths	4-6
	Level 3	Discusses strengths with good justification	7-9
Weaknesses	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies weaknesses	1-2
	Level 2	Discusses weaknesses	3-5
	Level 3	Discusses weaknesses with good justification	6-8
Task (b) Discuss the advantages and disadvantages of informing the shareholders that the possible reduction in revenues and profits might lead to a reduced dividend payment.			
Trait			
Advantages	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies advantages	1-3
	Level 2	Discusses advantages	4-6
	Level 3	Discusses advantages with justification	7-9
Disadvantages	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies disadvantages	1-2
	Level 2	Discusses disadvantages	3-5
	Level 3	Discusses disadvantages with justification	6-8

SECTION 3			
Task (a) Recommend with reasons improvements to the emissions diagram that would enhance the quality of the information provided by Hottayr.			
Trait			
Recommendation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes diagram	1-2
	Level 2	Offers some improvement	3-4
	Level 3	Makes detailed suggestion for improvement	5-6
Reasons	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues	1-2
	Level 2	Offers some justification for recommendations	3-4
	Level 3	Gives full justification for recommendations	5-6
Task (b) Evaluate the arguments for and against having Hottayr's internal audit department review the sustainability report and report on that review in an appendix to the report.			
Trait			
Review 1	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues for	1-2
	Level 2	Offers arguments in favour of review	3-4
	Level 3	Offers arguments in favour of review with justification	5-6

Review 2	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues against	1
	Level 2	Offers arguments against review	2-3
	Level 3	Offers arguments against review with justification	4-5
Report 1	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues for	1
	Level 2	Offers arguments in favour of report	2-3
	Level 3	Offers arguments in favour of report with justification	4-5
Report 2	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues against	1
	Level 2	Offers arguments against report	2-3
	Level 3	Offers arguments against report with justification	4-5

Strategic Level Case Study November 2022 - February 2023

Marking Guidance

Variant 3

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Summary of the core activities tested within each sub-task

Sub-Task	Core Activity		Sub-task weighting (% section time)
Section 1			
(a)	A	Develop business strategy	40 %
(b)	C	Recommend financing strategies.	60 %
Section 2			
(a)	A	Develop business strategy	40 %
(b)	B	Evaluate business ecosystem and business environment.	60 %
Section 3			
(a)	D	Evaluate and mitigate risk	50%
(b)	E	Recommend and maintain a sound control environment	50%

SECTION 1			
Task (a) Discuss the challenges associated with creating a separate gas boiler subsidiary that we can divest and sell to Gassmyne.			
Trait			
1st challenge	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies challenge	1
	Level 2	Discusses challenge	2-3
	Level 3	Discusses challenge with justification	4
2nd challenge	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies challenge	1
	Level 2	Discusses challenge	2-3
	Level 3	Discusses challenge with justification	4
3rd challenge	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies challenge	1
	Level 2	Discusses challenge	2-3
	Level 3	Discusses challenge with justification	4
Task (b) Discuss <i>the implications of the reduction in the share prices of both Hottayr and Gassmyne following the newspaper stories about Gassmyne's intention to purchase Hottayr's gas boiler business</i>			
Trait			
Hottayr	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies reasons for reduction	1-3
	Level 2	Discusses implications	4-7
	Level 3	Discusses implications with justification	8-11

Gassmyne	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies reasons for reduction	1-3
	Level 2	Discusses implications	4-7
	Level 3	Discusses implications with justification	8-10

SECTION 2			
Task (a) Explain whether Gassmyne's Board could have managed the acquisition of the gas boiler business more effectively.			
Trait			
Issues	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues for Board	1-2
	Level 2	Discusses issues for Board	3-4
	Level 3	Discusses issues for Board with good justification	5-6
Explanation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Outlines relevance of issues	1-2
	Level 2	Discusses relevance of issues	3-4
	Level 3	Discusses relevance of issues with good justification	5-6
Task (b) Recommend a suitable response, stating reasons, to any accusation that Hottayr's Board should have supported Gassmyne more in the period immediately after the acquisition.			
Trait			
Recommendation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Outlines response	1-3
	Level 2	Offers sensible response	4-8
	Level 3	Offers sensible response with explanation	9-11
Reasons	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes criteria for suitability	1-3
	Level 2	Discusses suitability	4-7
	Level 3	Discusses suitability with explanation	8-10

SECTION 3			
Task (a) Evaluate the arguments both for and against the presumption that Hottayr's strategic management of its gas boiler business should have complied with the mission and vision statements.			
Trait			
Arguments for	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies arguments for	1-3
	Level 2	Discusses arguments for	4-6
	Level 3	Discusses arguments for with justification	7-9
Arguments against	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies arguments against	1-2
	Level 2	Discusses arguments against	3-5
	Level 3	Discusses arguments against with justification	6-8
Task (b) Recommend with reasons an approach that Hottayr's non-executive directors could take to ensure that Hottayr is managed in accordance with its mission and vision statements.			
Trait			
Approach	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies approach	1-3
	Level 2	Offers explanation of approach	4-6
	Level 3	Offers detailed explanation of approach	7-9

Justification	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues in favour	1-2
	Level 2	Offers some justification	3-5
	Level 3	Offers detailed justification	6-8

Strategic Level Case Study November 2022–February 2023

Marking Guidance

Variant 4

About this marking scheme

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General marking guidance is given below, markers are subject to extensive training and standardisation activities and ongoing monitoring to ensure that judgements are being made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.

- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

How to use this levels-based marking scheme

1. Read the candidate's response in full

2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.
- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level when it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

Summary of the core activities tested within each sub-task

Sub-task	Core Activity		Sub-task weighting (% section time)
Section 1			
(a)	B	Evaluate business ecosystem and business environment	60%
(b)	D	Evaluate and mitigate risk	40%
Section 2			
(a)	C	Recommend financing strategies	50%
(b)	A	Develop business strategy	50%
Section 3			
(a)	E	Recommend and maintain a sound control environment	60%
(b)	D	Evaluate and mitigate risk	40%

SECTION 1			
Task (a) Evaluate the argument that Hottayr should use customer analysis to determine the need for frequent software upgrades. Please provide examples of the issues that a customer analysis could reveal.			
Trait			
1st Benefit	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies benefit	1-2
	Level 2	Discusses benefit	3-4
	Level 3	Discusses benefit with good justification	5-6
2nd Benefit	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies benefit	1
	Level 2	Discusses benefit	2-3
	Level 3	Discusses benefit with good justification	4-5
1st Limitation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies limitation	1
	Level 2	Discusses limitation	2-3
	Level 3	Discusses limitation with good justification	4-5
2nd Limitation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies limitation	1
	Level 2	Discusses limitation	2-3
	Level 3	Discusses limitation with good justification	4-5
Task (b) Recommend with reasons whether the statement of principal risks in Hottayr's annual report should refer to software errors			
Trait			
1st Argument	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issue	1
	Level 2	Discusses issue	2-3
	Level 3	Discusses issue with justification	4

2nd Argument	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issue	1
	Level 2	Discusses issue	2-3
	Level 3	Discusses issue with justification	4
3rd Argument	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issue	1
	Level 2	Discusses issue	2-3
	Level 3	Discusses issue with justification	4

SECTION 2			
Task (a) Recommend with reasons the approach that the Board should take to dealing with the capital market reaction resulting in the drop in Hottayr's share price.			
Trait			
Recommendation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues	1-3
	Level 2	Offers some recommendation	4-6
	Level 3	Offers full recommendation	7-9
Reasons	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Outlines criteria	1-2
	Level 2	Explains recommendation	3-5
	Level 3	Explains recommendation with good justification	6-8
Task (b) Recommend with reasons the approach that Hottayr should take to repairing the damage to human capital, intellectual capital and social and relational capital.			
Trait			
Human	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies capital	1-2
	Level 2	Offers recommendation	3-4
	Level 3	Offers recommendation with explanation	5-6
Intellectual	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies capital	1-2
	Level 2	Offers recommendation	3-4
	Level 3	Offers recommendation with explanation	5-6
Social & Relationship	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies capital	1
	Level 2	Offers recommendation	2-3
	Level 3	Offers recommendation with explanation	4-5

SECTION 3			
Task (a) Evaluate the advantages and disadvantages of using Hottayr's Internal Audit Department to investigate the events described in the extract.			
Trait			
1st argument for	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1-2
	Level 2	Discusses argument	3-4
	Level 3	Discusses argument with justification	5-6
2nd argument for	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1
	Level 2	Discusses argument	2-3
	Level 3	Discusses argument with justification	4-5
1st argument against	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1
	Level 2	Discusses argument	2-3
	Level 3	Discusses argument with justification	4-5
2nd argument against	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1
	Level 2	Discusses argument	2-3
	Level 3	Discusses argument with justification	4-5
Task (b) Recommend with reasons the manner in which Hottayr's Board might resolve cyber risks at the strategic level. Your recommendation should not involve the use of internal audit.			
Trait			
Commitment	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues	1-2
	Level 2	Offers recommendation	3-4

	Level 3	Offers detailed recommendation	5-6
Justification	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies criteria	1-2
	Level 2	Explains recommendation	3-4
	Level 3	Explains recommendation with justification	5-6

Strategic Level Case Study November 2022–February 2023

Marking Guidance

Variant 5

About this marking scheme

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General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.

- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

How to use this levels-based marking scheme

1. Read the candidate's response in full

2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.
- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level when it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

Summary of the core activities tested within each sub-task

Sub-task	Core Activity		Sub-task weighting (% section time)
Section 1			
(a)	D	Evaluate and mitigate risk	60%
(b)	A	Develop business strategy	40%
Section 2			
(a)	C	Recommend financing strategies	50%
(b)	B	Evaluate business ecosystem and business environment	50%
Section 3			
(a)	A	Develop business strategy	40%
(b)	E	Recommend and maintain a sound control environment	60%

SECTION 1			
Task (a) Evaluate the arguments for and against the proposition that accepting and enforcing the six-year exclusivity period offered by the University would be inconsistent with Hottayr's commitment to 'support the move towards a zero-carbon world'.			
Trait			
1st Argument for	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1-2
	Level 2	Discusses argument	3-4
	Level 3	Discusses argument with justification	5-6
2nd Argument for	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1
	Level 2	Discusses argument	2-3
	Level 3	Discusses argument with justification	4-5
1st Argument against	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1
	Level 2	Discusses argument	2-3
	Level 3	Discusses argument with justification	4-5
2nd Argument against	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1
	Level 2	Discusses argument	2-3
	Level 3	Discusses argument with justification	4-5

Task (b) Explain how Hottayr could employ stress testing to understand the specific factors that might threaten the successful development of a process to manufacture Saphgas in industrial quantities.			
Trait			
How	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes scenario planning	1-2
	Level 2	Explains approach	3-4
	Level 3	Explains approach with justification	5-6
Factor	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies factors	1-2
	Level 2	Discusses factors	3-4
	Level 3	Discusses factors with justification	5-6

SECTION 2			
Task (a) Recommend with reasons the approach that we should take to finance the N\$90 million payment to the University and the N\$110 million to modify our product designs and to adapt Hottayr's factory.			
Trait			
University	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues	1-3
	Level 2	Recommends funding approach	4-6
	Level 3	Recommends funding approach with justification	7-9
Modification	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues	1-2
	Level 2	Recommends funding approach	3-5
	Level 3	Recommends funding approach with justification	6-8
Task (b) Recommend with reasons the approach that we should take to managing the currency risks associated with purchasing Saphgas from Tropicland.			
Trait			
Recommendation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies risks	1-3
	Level 2	Offers recommendation	4-6
	Level 3	Offers detailed recommendation	7-9
Reasons	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Offers some explanation	1-2
	Level 2	Offers detailed explanation	3-5
	Level 3	Offers detailed explanation with good justification	6-8

SECTION 3			
Task (a) Explain the possible impacts of the recent changes in Hottayr's market, specifically in terms of unpredictable demand, customer empowerment at the homeowner level and social change.			
Trait			
Unpredictable demand	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues	1
	Level 2	Explains issues	2-3
	Level 3	Explains issues with justification	4
Customer empowerment	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues	1
	Level 2	Explains issues	2-3
	Level 3	Explains issues with justification	4
Social Change	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues	1
	Level 2	Explains issues	2-3
	Level 3	Explains issues with justification	4
Task (b) Evaluate the arguments both for and against the appointment to Hottayr's Board of an executive director who would be responsible for sustainability and environmental matters.			
Trait			
Argument 1 for	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1-2
	Level 2	Discusses argument	3-4
	Level 3	Discusses argument with justification	5-6

Argument 2 for	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1
	Level 2	Discusses argument	2-3
	Level 3	Discusses argument with justification	4-5
Argument 1 against	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1
	Level 2	Discusses argument	2-3
	Level 3	Discusses argument with justification	4-5
Argument 2 against	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies argument	1
	Level 2	Discusses argument	2-3
	Level 3	Discusses argument with justification	4-5

Strategic Level Case Study February 2023

Marking Guidance

Variant 6

About this marking scheme

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How to use this levels-based marking scheme

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2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.
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- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
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Summary of the core activities tested within each sub-task

Sub-Task	Core Activity		Sub-task weighting (% section time)
Section 1			
(a)	A	Develop business strategy	60 %
(b)	D	Evaluate and mitigate risk	40 %
Section 2			
(a)	B	Evaluate business ecosystem and business environment.	50 %
(b)	C	Recommend financing strategies.	50 %
Section 3			
(a)	D	Evaluate and mitigate risk	40%
(b)	E	Recommend and maintain a sound control environment	60%

SECTION 1			
Task (a) Recommend with reasons the issues that Hottayr's Board should consider in deciding whether Vanheaters will be a suitable acquisition for Hottayr.			
Trait			
1st recommendation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issue	1-2
	Level 2	Offers recommendation	3-4
	Level 3	Offers recommendation with good justification	5-6
2nd recommendation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issue	1
	Level 2	Offers recommendation	2-3
	Level 3	Offers recommendation with good justification	4-5
3rd recommendation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issue	1
	Level 2	Offers recommendation	2-3
	Level 3	Offers recommendation with good justification	4-5
4th recommendation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issue	1
	Level 2	Offers recommendation	2-3
	Level 3	Offers recommendation with good justification	4-5

Task (b) Recommend with reasons ways that Hottayr could manage the reputational risks arising from acquiring Vanheaters to design and install central heating systems as a member of the Hottayr Group.			
Trait			
Recommendation	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues	1-2
	Level 2	Offers recommendation	3-4
	Level 3	Offers full recommendation	5-6
Reasons	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Offers some explanation	1-2
	Level 2	Explains recommendations	3-4
	Level 3	Explains recommendations with justification	5-6

SECTION 2			
Task (a) Discuss the possible impacts of interest and currency risks on Vanheaters if Norlandian interest rates increase and the N\$ strengthens.			
Trait			
Interest	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes risk	1-3
	Level 2	Discusses risk approach	4-6
	Level 3	Discusses risk with good justification	7-9
Currency	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes risk	1-2
	Level 2	Discusses risk approach	3-5
	Level 3	Discusses risk with good justification	6-8
Task (b) Recommend with reasons how Hottayr should manage the share exchange if it decides to go ahead with the acquisition of Vanheaters.			
Trait			
Approach	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Outlines approach	1-3
	Level 2	Offers some explanation of approach	4-6
	Level 3	Offers detailed explanation of approach	7-9
Justification	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies criteria	1-2
	Level 2	Offers some explanation	3-5
	Level 3	Offers full explanation	6-8

SECTION 3			
Task (a) Discuss the issues that should be considered when designing a training programme to ensure that Vanheaters' staff are aware of Hottayr's expectations relating to its core values and their impact on staff behaviour and corporate culture.			
Trait			
1st challenge	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies challenge	1
	Level 2	Discusses challenge	2-3
	Level 3	Discusses challenge with justification	4
2nd challenge	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies challenge	1
	Level 2	Discusses challenge	2-3
	Level 3	Discusses challenge with justification	4
3rd challenge	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies challenge	1
	Level 2	Discusses challenge	2-3
	Level 3	Discusses challenge with justification	4
Task (b) Recommend with reasons how Hottayr's Internal Audit Department could ensure that the Board's objectives for the training programme will be met. Please ensure you consider issues at the design and operational stages.			
Trait			
1st step	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes audit approach	1-2
	Level 2	Discusses audit approach	3-5
	Level 3	Discusses audit approach with justification	6-7
2nd step	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes audit approach	1-2

3rd step	Level 2	Discusses audit approach	3-5
	Level 3	Discusses audit approach with justification	6-7
	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Describes audit approach	1-2
	Level 2	Discusses audit approach	3-5
	Level 3	Discusses audit approach with justification	6-7

2nd step	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues against	1
	Level 2	Offers arguments against review	2-3
	Level 3	Offers arguments against review with justification	4-5
3rd step	Level	Descriptor	Marks
		No rewardable material	0
	Level 1	Identifies issues for	1
	Level 2	Offers arguments in favour of report	2-3
	Level 3	Offers arguments in favour of report with justification	4-5