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**ENTERPRISE** **0454/13**

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INSERT **1 hour 30 minutes**

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**INFORMATION**

- This insert contains the case study.
- You may annotate this insert and use the blank spaces for planning. **Do not write your answers** on the insert.

This document has **4** pages. Any blank pages are indicated.

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## Luna's Environmentally Friendly Paving Stones (EFPS) Enterprise

### The background

Eustace works in a local government department that is responsible for building and maintaining roads. He is very aware of the financial limits on each of his department's projects. Eustace is always looking for ways to reduce his department's costs. A recent change in national government policy has meant that every department must reduce the amount of plastic pollution they create. Eustace has been told to research ways that his department could deal with this problem.

### The idea

Watching television one evening, Eustace was fascinated by a programme about new entrepreneurs. One of the entrepreneurs focused on finding a solution to the problem of plastic waste. This entrepreneur, Luna, had developed a machine which recycles waste plastic into strong, high-quality building materials. She calls this product 'Environmentally Friendly Paving Stones' (EFPS). Luna intends to operate her enterprise as a social enterprise.

Luna has used all her personal savings when developing the prototype of the machine. She does not have any funds to build a bigger machine to make EFPS on a larger scale. Luna is trying to find suitable sources of funding to build this bigger machine.

Each year Eustace buys a large quantity of traditional paving stones to be used to build pavements in the city. He thinks Luna's machine could provide an alternative to traditional paving stones and be a creative solution to the problem of plastic pollution. He contacted Luna to arrange a meeting.

At the meeting, Luna showed Eustace the EFPS she had produced. It was both lighter and stronger than a traditional brick. Eustace was impressed. He believed that using Luna's product to build pavements would help to reduce his department's costs and the paving stones would need to be replaced less often.

Eustace needed evidence of the benefits of this idea before he could present it as a proposal. He decided to complete some research.

### The research

First, Eustace compared the costs of the EFPS with traditional paving stones. This information is shown in Table 1.

**Table 1**

| **Traditional paving stones** | | **Environmentally Friendly Paving Stones (EFPS)** | |
|---|---|---|---|
| Cost per square metre US$ | 12.50 | Cost per square metre US$ | 7.70 |
| Total cost of 1000 square metres US$ | | Total cost of 1000 square metres US$ | |

Luna believed that with a bigger machine, she would be able to reduce the cost of the EFPS.

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**The proposal**

Eustace thought that he was ready to present his proposed idea to his manager, but before he did this, he showed his proposal to Luna.

Luna identified one serious problem with Eustace's proposal. Eustace's department would require a large quantity of EFPS. Luna cannot supply a large enough quantity until she obtains the finance necessary to build a bigger machine. Eustace agreed that this is a problem. His proposal is unlikely to be accepted unless he can demonstrate that Luna is able to produce all of the paving stones needed.

**The plan**

As a potential stakeholder in this enterprise, Eustace has a partial solution. He believes that as Luna is operating a social enterprise, she may be able to obtain a grant. However, he knows that this grant will not cover all of the machine costs, and therefore Luna will need to search for other sources of finance.

Eustace has suggested that he helps Luna produce a business plan, which will be used to support her applications for finance. He explained that she would need to include some financial records and he has suggested a SWOT analysis for her enterprise would be helpful. Luna has already started to produce some of these documents but would like Eustace's assistance to complete them.

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