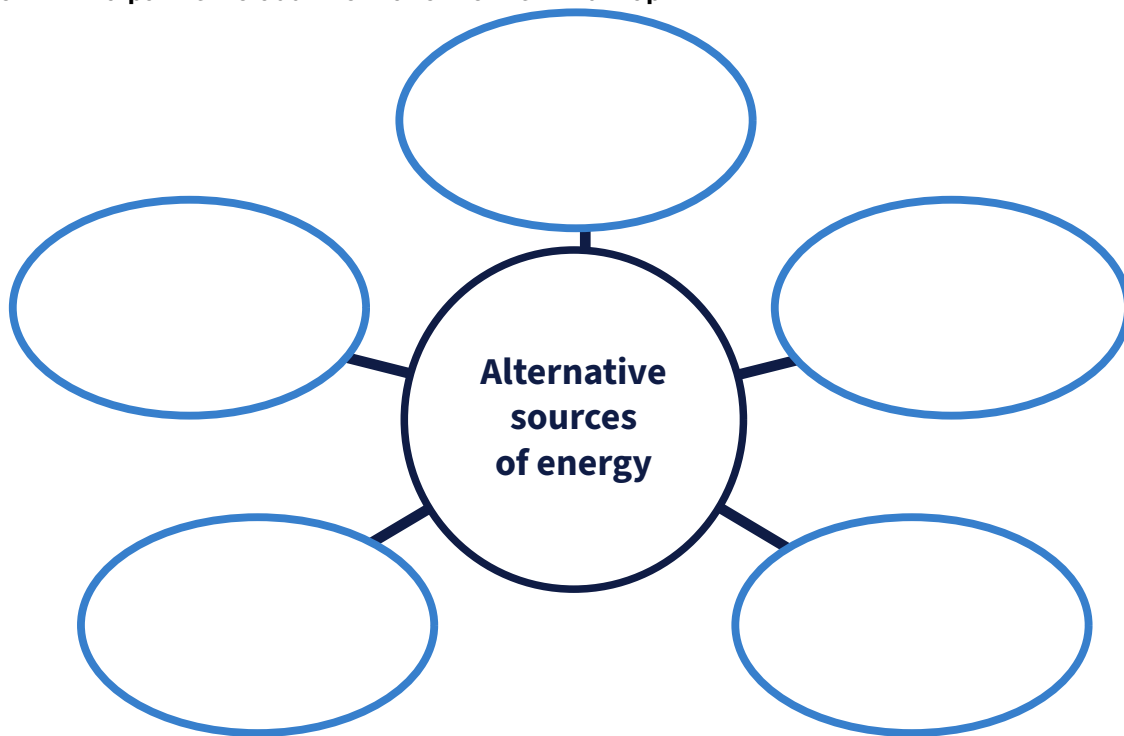


## How coconuts are starting to fuel parts of Papua New Guinea

Level 1: Elementary / Pre-Intermediate

### 1 Warmer

a. Work with a partner to add information to the mind map.



### 2 Key words

a. Fill the gaps in the sentences using these key words from the text. Then, find and highlight them to see them in context.

alternative

cargo

dependence

estate

investors

1. goods being transported from one place to another \_\_\_\_\_
2. a different option or possibility \_\_\_\_\_
3. a large piece of land in the countryside, usually owned by a person, family or organisation, and used to make money \_\_\_\_\_
4. needing something or someone for support or help \_\_\_\_\_
5. people who put money into something expecting to receive profits \_\_\_\_\_

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### Level 1: Elementary / Pre-Intermediate

profitable

renewable

shift

sustainable

widely

6. something that can be used a lot because it is always available \_\_\_\_\_
7. in many places or by a lot of people \_\_\_\_\_
8. something that makes money \_\_\_\_\_
9. something that can be maintained \_\_\_\_\_
10. change \_\_\_\_\_

**b. Complete the sentences with words from the previous activity. You might have to change the form of the word.**

1. They own a very \_\_\_\_\_ business, which operates in three countries.
2. Do you know of any sources of \_\_\_\_\_ energy we can use instead of diesel?
3. I don't like this idea. Can you think of an \_\_\_\_\_?
4. She doesn't have enough money to start a business, so she needs to find a couple of \_\_\_\_\_.
5. Many countries are trying to \_\_\_\_\_ to cleaner energy sources.

## How coconuts are starting to fuel parts of Papua New Guinea

### Level 1: Elementary / Pre-Intermediate

**Bethanie Harriman**  
**10 May, 2024**

- 1 There are hundreds of coconut trees on Karkar Island in Papua New Guinea.
- 2 Decades ago, the fruit was a profitable export, but it has become less valued in international markets over the years. Now, the small island is using coconuts for something else.
- 3 Coconut oil is now used to produce biodiesel, a renewable fuel from biological sources, such as vegetable oils or animal fats. On Karkar, that fuel helps power schools, hospitals, and cargo ships.
- 4 It is made at the Kulili Plantation, a large estate filled with coconut trees and cocoa plants. Derek Middleton, the Managing Director at Kulili, says the plant produces 600,000 litres of coconut-based biofuel each year.
- 5 The project began in 2007, when Kulili developed a small plant to produce coconut biodiesel. Over the years, it has become successful, and the operation has grown ever since. Middleton is now trying to expand the project and increase production.
- 6 Other countries in the Pacific have developed similar projects and done research into using coconut biodiesel as an alternative to traditional fuels.
- 7 Coconut biodiesel has often replaced diesel in Karkar, and it is cheap to buy.
- 8 Now, the country's leading science institute is researching how coconut biodiesel could be used more widely as an alternative fuel.
- 9 Middleton says expanding the local industry would reduce dependence on expensive fuel imports, but finding investors to grow the operation has been difficult.
- 10 Economist Maholopa Laveil says that if the investments are profitable and sustainable in Papua New Guinea, they will have a positive social impact.
- 11 Laveil says developing biofuels could benefit the region, including the potential to employ more people.
- 12 The Kulili project could be an example for the region, Laveil says, describing it as a "good example of the shift to green energy, and a locally driven alternative, and hopefully a successful business model".
- 13 He says getting enough volume and high enough quality to export could take years and significant investment, but local government support should be possible.

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### Level 1: Elementary / Pre-Intermediate

#### 3 Comprehension check

a. Are these sentences True (T) or False (F) according to the article? Correct any that are false.

1. Coconuts are more expensive now than in the past.
2. Coconut oil is an energy source in Papua New Guinea.
3. The production of coconut biodiesel is slower now.
4. Other countries have similar plans.
5. Biodiesel is less damaging to the environment.
6. Exporting biodiesel is not possible.

#### 4 Key language

a. Read the sentences from the text and answer the questions.

*Decades ago, the fruit **was** a profitable export, but it **has become** less valued in international markets over the years.*

*The project **began** in 2007, when Kulili **developed** a small plant to produce coconut biodiesel.*

*Over the years, it **has become** successful, and the operation **has grown** ever since.*

1. Which verb phrases in bold refer to actions and events that started and finished in the past? Which words or phrases helped you decide?
2. Which verb phrases in bold refer to actions and events that started in the past and continue up to the present? Which words or phrases helped you decide?

b. Complete the sentences with the correct verb form in brackets (past simple or present perfect). Pay attention to the words and phrases that help you.

1. They (**start**) \_\_\_\_\_ producing biodiesel in 2004.
2. I (**told**) \_\_\_\_\_ him this was a good idea many years ago.
3. She (**work**) \_\_\_\_\_ on this project for three years now.
4. We (**buy**) \_\_\_\_\_ this type of fuel since 2022.
5. I (**learn**) \_\_\_\_\_ about this new type of fuel at a conference last month.

## How coconuts are starting to fuel parts of Papua New Guinea

### Level 1: Elementary / Pre-Intermediate

#### 5 Discussion

**a. Discuss these statements.**

- 'Governments should spend more money finding new energy sources.'
- 'Alternative fuels will never fully replace oil as an energy source.'

#### 6 In your own words

**a. In pairs or small groups, do online research, find information about another renewable energy source, and prepare a presentation including its benefits and challenges.**

**b. Report your findings to the class.**