Reading
English for Academic Study
学术英语阅读

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SAMPLE

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John Slaght, April 2012

Introduction

Aims of the course

The purpose of this book is to help you develop the academic reading skills you need to deal effectively with the reading and research you will need to carry out during your academic study. This course will particularly focus on reading for a specific academic purpose, working on effective reading strategies, detailed comprehension of sentences and paragraphs, and text analysis.

Structure of the course

Unit structure: There are eight units in the book. Each unit explores a key aspect of reading, such as *Considering the title and abstract*, and teaches it in the context of a specific topic area, e.g., *Growing grey.* You will have the opportunity to read texts on these and other topics in the part of Reading texts. The reading tasks in any unit will be based on the unit topic.

Key reading skills: These are introduced where it is felt you need specific information on an area of reading. They usually appear at the end of a task and can be referred to either before you start the task, during the task, or when you have completed it.

Study tips: These are included for ease of reference when you are revising what you have studied. They either summarise the outcome of a series of activities or are a summary of other information contained in the unit.

Unit summary: Each unit is followed by a unit summary, giving you the opportunity to reflect on what you have learnt.

Additional material

Reading texts: Some texts related with the unit topics are provided for students to read and practise reading skills and strategies.

Glossary: Key words or phrases are explained in the glossary on pages 133–135.

Working with the course

When you are reading in another language, you not only need to deal with the vocabulary and grammatical aspects of the text, but also understand the writing

conventions associated with it. This can be particularly challenging with academic texts where the written conventions are even more important. The book will help you in two ways by:

- providing you with guided instruction on how to understand the structure of academic text
- giving you the opportunity to practise reading in a similar context to the one you will use in your future studies

What you put into the course will determine how much you get out of it. Obviously, if you want to improve your academic reading, it is essential to practise the skill. You should therefore prepare well for the sessions, as well as participating actively in them.

Course aims

1 Reading for a specific academic purpose

This will help you find the relevant information in written sources that will help you complete an academic task. For example, you may need to:

- **combine information from a variety of sources** in order to complete an assignment on a specific question
- **research a new topic for an introductory overview** in order to assist with listening to a series of lectures on that topic
- **add new knowledge to what you already know about a topic** in order to carry out a variety of functions; add to your general understanding of a topic, write about your specialist area of interest, take notes for future exam revision, etc.

2 Working on effective reading strategies

The main strategies you will be looking at are:

a. **Skimming**

This involves looking at a text *quickly* for one of the following purposes:

- identifying what the text is about (the topic)
- identifying the main idea of the text
- deciding how useful the text is for your purposes
- deciding how you will make use of the text

Skimming a text might involve looking at some or all of the following features of the text:

- title
- section headings
- abstract or summary provided by the writer
- first and last paragraphs

- first and last sentences of intervening paragraphs
- topic sentences in each paragraph

Another form of skimming is when you are previewing a book to decide how useful it is for your purposes. In this situation, you might also look at one or more of the following:

- information about the writer and/or publication details
- contents page
- foreword and/or introduction
- index

b. **Predicting**

This means using what you already know about the topic, what you want to learn about the topic from the text, and what you have learnt from your previewing, to guess what kind of information the text will contain and *how useful* it will be. You will be surprised how much you already know about a text before you even begin reading. Brainstorming your prior knowledge will help you to understand the text.

c. **Scanning**

This involves *finding words* (or other symbols, such as figures) that have particular importance for you. When you are scanning, you already know the form of the words or symbols you are looking for. When you scan, you normally focus on small parts of the text only.

d. **Search reading**

This involves quickly finding *ideas* that are important for you. This is different from scanning, because you don't know the exact words you are looking for in advance and cannot make a direct match.

e. **Identifying the main ideas**

This involves understanding the writer's *main points*. It may be possible to do this quite quickly after skimming the text. However, with more difficult texts, it may only be possible to identify the main ideas after more detailed reading.

f. **Careful reading**

This involves reading *slowly and carefully* so that you have a clear understanding of the text (or the part of the text that you are most interested in). You might do this in order to understand the *details* of the text or to *infer meaning* that is not directly stated (see g. below).

g. **Inferring**

This involves obtaining meaning from the text that the writer has *not explicitly stated*. Sometimes the writer expects you to fill gaps in the text for it to make sense. Sometimes

you may wish to infer *why the writer wrote the text*, i.e., the writer's purpose, and also the writer's attitude to what he/she is writing about.

h. **Dealing with unfamiliar words**

When you find a word you don't understand in a text, you first need to decide whether it is *necessary* to understand the word. Perhaps you can understand enough of the text without understanding the word – in which case you can ignore it. Alternatively, the context in which the word is located may allow you to guess the meaning of the word well enough to continue reading. If neither of these applies, you may have to look up the word in a dictionary. If you find you are using a dictionary so much that you cannot read the text at a reasonable speed, the text may be too specialised for you; in this case you should consider finding another one which deals with the same topic in a more generalised way.

An approach to dealing with new vocabulary is to decide whether you:

- need to know the word now to help you understand the text and use it later under different circumstances. In this case, you will need some way of recording the word, e.g., in a vocabulary notebook. You will also have to decide whether to rely on working out the meaning of the word from context, or whether you need to check in a dictionary.

- only need to know the word now to help you understand the text. This is often the case with technical words or low-frequency words; these are words that are not often used in English, even by native speakers of the language, except for specialist reasons. Of course, if you are reading a text in your academic area, you will need to know certain specialist vocabulary. You will need to record this vocabulary as well as use it so it becomes part of your active vocabulary, i.e., words that you use to communicate effectively.

- don't need to know this word either now or in the future. If the word does not prevent you from understanding the rest of the text, you probably do not need to worry about it. If the word occurs several times, however, you may feel it is necessary to work out its meaning or look it up and record it.

3 Detailed comprehension of sentences and paragraphs

In an academic context, much of your reading work will involve dealing with complete texts and extracting information from them in various ways, i.e., reading purposefully in order to make use of content. However, in order to fulfil your reading purpose, you may sometimes find it necessary to have a very precise understanding of specific sentences and paragraphs. There may be obstacles to your understanding in terms of grammar or ideas, or the text's organisation or a combination of these. This is one area the course will help you solve.

Detailed comprehension involves analysing the relationship between ideas within a specific sentence or between a sequence of sentences of up to paragraph length – or even beyond. This precise knowledge might be required, for example, to infer meaning, to view the content critically, to enhance overall understanding or to formulate precise understanding.

4 Text analysis

It is often helpful to understand the way a text is organised in order to make the best use of the information it contains. The organisation of a text can be considered at the global level; for example, the way that the text is organised into sections and paragraphs according to the purpose of the text and the type of text. In a report of an experiment, for example, it is very common to see the pattern of organisation:

- title
- abstract
- introduction/background
- methods
- results
- conclusions
- references/bibliography

Another aspect of organisation that can be useful to examine is how information is organised logically at the local level, i.e., within complex sentences or paragraphs.

As you have seen, there are many different aspects of academic reading that you will consider during the course. Although it is important to be aware of all these different aspects, it is also important to:

- **develop a flexible reading style**. Becoming a better academic reader is not just about mastering different aspects of reading. It is also important to decide which is the best way to read a text, depending on the particular academic purpose that you have for reading it.
- **remember that the more you read, the better you will read**. Regular independent reading outside the classroom is essential for any student wishing to develop reading abilities such as fluency, greater reading speed, vocabulary acquisition and the strategies associated with successful reading.

You can improve your academic reading level by making decisions about:

- **why** you are reading
- **what** you are reading
- **how** you are reading
- **how well** you are reading

Reading for academic purposes

In this unit you will:

1 practise and review the reading strategies outlined in the introduction

2 develop strategies for deciding whether a text is useful

3 build vocabulary through reading

4 identify the organisation of a text

Text Reading for academic purposes, Text 1a (Reading texts pp. 130–139)

Text 1a contains information on how to read for academic purposes more effectively.

Task 1   **Reading for general understanding**

The exercise below will give you practice in reading for general understanding. It is therefore important that you do not stop to look up any of the unknown words (you will get a fuller understanding of difficult vocabulary while completing some of the later tasks). The text in the part of Reading texts consists of six sections. The table on the next page contains seven headings that are possible summaries of the content for each section.
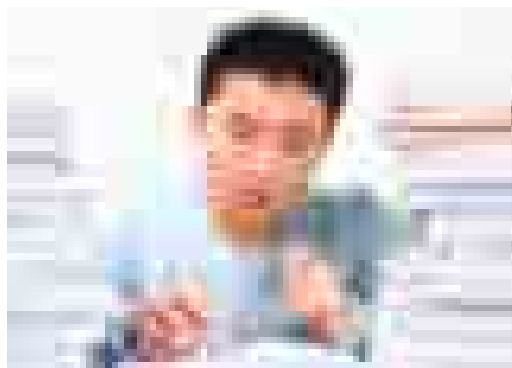
1.1   **Read the instructions below.**

a.   Read the summary headings and underline the most important word or words in each one. If necessary, your teacher will explain the meaning of the language used.

b.   Read Section 1 of the text and label the appropriate summary heading in the table.

c.   Discuss your answer with other students and/or your teacher.

Study tip

Reading for general meaning is a very important skill that will help you deal with the amount of reading at university. See **Skimming** in the Introduction on page IX.

Summary headings	Sections
Linking effective reading to vocabulary acquisition	
Reading widely and critically	
Good reasons for reading	
The difficulties of reading academic texts	
The motivation behind reading	
Acquiring good reading habits	
The EAP reading syllabus	

1.2   **Now read and match Sections 2–6 to the appropriate summary headings in the table.**

Note: One of the summary headings does not need to be used.

Task 2   **Reading for specific details**

2.1   **Read Text 1a again and find the answers to the following questions.**

You will use some of your answers to complete another task later in the unit.

> **Study tip**
>
> Being able to read for specific detail is another important skill. See **Scanning, Search reading** and **Careful reading** in the Introduction on page X.

1. What type of reading material is Bassett (2010) concerned with?

   _____

2. Bassett believes the key to the best understanding of a text is …

   _____

3. The greater the reader's reading ability, the greater their …

   _____
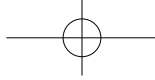
4. What are the two main criteria for text selection for an EAP course?

   _____

5. When are EAP students more likely to read subject-related material?

6. What does a critical reader use to assess the value of a text?

7. What is Kurland's main idea?

8. What helps to determine how a text should be read?

9. What reason for reading is suggested for students in higher education?

10. How much daily reading is recommended?

11. What are all the words that an individual knows in a language called?

12. What are postgraduates often given before starting their studies?

13. How much exposure to a word is needed before its use becomes automatic?

Task 3 **Paragraph reorganisation**

The second paragraph of Section 6 has been removed from the original text in Reading texts. The sentences from the removed paragraph are listed below, but they are in the wrong order.

3.1 **Read the sentences 1-6 and arrange them in the appropriate order to form a paragraph.**

a. Read sentences 2 and 3 that have been identified as the first and final sentences.
b. Read sentences 1, 4, 5 and 6 and identify the correct order.
c. Complete the remaining boxes with the appropriate number.

1. This is one of the reasons why most reached university level in their home countries. ☐

2. Fluency in both written and spoken language will only develop with practice. ☐1

3. Thus, the more students work on developing good reading habits, the more fluent they should become and the more successful they are likely to be in their academic studies. ☐6

4. Nonetheless, university students are expected to read a considerable amount during a typical week. ☐

5. In fact, international students studying through English are normally already fluent readers in their own languages. ☐

6. International academics, i.e., students, have to do this in a foreign language – English. ☐

Task 4   Inferring meaning from context

Not knowing the meaning of words is one of the main difficulties faced by language learners reading in a foreign language. When you come across a word which is unfamiliar, try to avoid automatically reaching for a dictionary or tapping the word into your electronic translator; develop the habit of reading on in the text to see if this helps your understanding. If, however this does not help, experiment with the following advice.

4.1   **Look at the sentence from Text 1a and discuss the meaning of the underlined word with another student. If this word was new to you, what helped you infer its meaning?**

> Bassett's focus is on graded readers, but <u>arguably</u> the type of text should suit the needs and interests of individuals.(Lines 15–16)

Key reading skills: Inferring meaning

One way of identifying the meaning of the word is to look at it in context – the way it is used within the sentence. For example, in the sentence above, the word *but* is used to indicate a contrast or difference. Thus, although Bassett is interested in graded readers, the writer is saying there is *arguably* more to reading than just readers. In other words, there is some sort of *argument* or *disagreement* involved.

Another way is to think of the "root" word, which in this case is *argue* – which means "to not agree about something".

You might also think about words with a similar sound or spelling which may help you. The key thing is that the more you think about a word, the more likely it is to become part of your active lexicon.

It is also useful to recognise and understand the way that language varies within a text. One way of varying language is through the use of *synonyms*.

A synonym is a word or phrase that has the same meaning, or almost the same meaning, as another word or phrase.

4.2 **Read Section 1 again from Text 1a and find synonyms for the words or expressions in the left-hand column.**

Defining words	Synonym	Line number
proof/confirmation	evidence	7
a wide range of		
closely connected/significant		
get something back		
help/make easier		
without being aware of or without thinking about something		
ability/skill		
something which is aimed at or is the main focus		

Task 5 **Identifying word class**

5.1 **Read the following definitions of word classes and match them to the correct words in the box.**

| conjunction | preposition | noun | adverb | verb | adjective | pronoun |

1. a word referring to a person, a place or a thing _____
2. an action or doing word _____
3. a word that describes what a person, a place or a thing is like
4. a word used to describe a verb, an adjective or another adverb _____
5. a word which comes before a noun or a pronoun and shows its relation to another part of the sentence _____
6. a word that is used to replace a person, a place or a thing _____
7. a word that is used to join other words, phrases, clauses or sentences _____

5.2 **Read Sections 2–5 again from Text 1a and find the words in the table. Complete the table by writing the line number where each word occurs in the text and the word class of each word.**

Word	Line number	Word class
topics	31	noun
typically		
this		
blends		
consideration		
simply		
through		
embark		
their		
only		

5.3 **Look at the words from Ex 5.2 and choose which ones you want to record.**

You should record words if:

- you don't know their meaning or how they are used, and/or
- you think they might be useful words to know either now or for future academic purposes

Key reading skills: Choosing and recording new words from a text

One way of deciding which words to record is to check how frequently the word is used by native speakers. You can do this by visiting the *Compleat Lexical Tutor*, which can be found at www.lextutor.ca/vp/bnc; here you will find that, for example, the adverb *arguably* is a K1 word – in other words, it is among the 1,000 most commonly used words. Considering this information, you may decide that it is a word you would want to use in future and, therefore, keep a record of.

> **Study tip**
>
> In your own language, you naturally make use of word classes to read effectively with speed and understanding. This will develop in English over time.

Task 6 **Reading for a purpose**

At various stages in Units 1–8, you will be given a Focus task. This is an essay question, or similar academic task, that is linked to a reading text or texts in Reading texts. The Focus task will help direct your reading and the use you make of the text(s) to synthesise ideas.

Focus task

Summarise the main points of the text "Reading for academic purposes".

6.1 **Re-read Text 1a and then write a short one-paragraph summary of the main ideas. You can use some of the answers in Task 2 to help you.**

Key reading skills: Reading selectively

At university level, you may be given extensive reading lists. It can be a daunting prospect to read all the texts and sources and to understand them at the same time. It is therefore important to read selectively. This means thinking carefully about your reading purpose and concentrating only – or mainly – on texts, or parts of texts, which are relevant to that reading purpose.

Task 7   Recalling information

Do you think reading is a very important language skill?

Even if you read selectively, you may still have a considerable amount of text to *read, understand* and *recall.* This has to be achieved as quickly and as effectively as possible. The following tasks aim to help you recall and use information from an academic text.

7.1   **Re-read Section 1 from Text 1a, straight through without stopping or checking for meaning in a dictionary. Then follow instructions a–c to find out how much information you can recall.**

     a.   Put the text away and write down in note form (words or phrases) anything you can remember about the information you have just read.

     b.   Compare your notes with another student to see to what extent you have "recalled" the same information. Decide whether there are any gaps in your notes.

     c.   Check the text and add any further notes you think are useful to summarise the main idea(s) in this section.

7.2   **Re-read Section 2. This time, underline or highlight main points as you read. Again, read without stopping or using a dictionary. Read only once.**

     a.   Put the text away and recall in note form (words or phrases) anything you can remember about the information you have just read.

     b.   Compare your notes with the original text. Have you "recalled" the text more effectively this time? If so, why do you think this is?

Now read through Sections 3 and 4 without stopping or using a dictionary. Recall these two sections in the same way.

7.3   **Decide whether you found underlining or highlighting more effective. Discuss your conclusions with another student.**

7.4   **Carefully consider the following question:**

> How can readers independently develop effective reading habits?

Tell another student what you think the answer is.

7.5 Re-read Sections 5 and 6, then follow steps a–d to find an answer to the question in Ex 7.4. You can underline or highlight key words or ideas in Sections 5 and 6 if you think this is useful.

    a. Copy down the question in Ex 7.4.

    b. Put away the text and from memory make notes that might help you answer the question.

    c. Check the text for accuracy and make any necessary amendments to your notes.

    d. Finally, using the notes for Sections 5 and 6, briefly summarise your answer to the question in Ex 7.4.

Task 8   Reflection

8.1 How did reading and making notes at the same time affect your reading? Choose one or more of the expressions below and/or write your own brief comment explaining your reaction to the exercises in Task 7.

It made reading and understanding:

    a. slower

        <u>I found reading and understanding slower because I had to decide which parts of the text were main ideas and make suitable notes.</u>

    b. quicker

    c. less laborious

    d. more purposeful

    e. less interesting

    f. annoying

    Add your own ideas:

Text 1b contains information on a particular study system you can use to improve academic reading.

Task 9 Reading and mind mapping

You are going to practise reading and recording information on a mind map. You will also check your reading speed; this is to encourage you to read *fast*, an essential first step to effective reading.

9.1   **Read Text 1b carefully, but as fast as you can.**

Before you start reading, note the time. When you finish reading, note the time again.

9.2   **Complete the mind map without referring back to the text.**

Complete as many of the circles as you can with the appropriate words and fill in the underlined gaps.

Mind map of SQ3R

title · images · graphs · style · source(s) · notes accurate? · when? · what? · all necessary information written down · why? · skim (gist) · points · intensive · answers to questions · essentials of the text · answers to _____ · highlight/underline margin notes
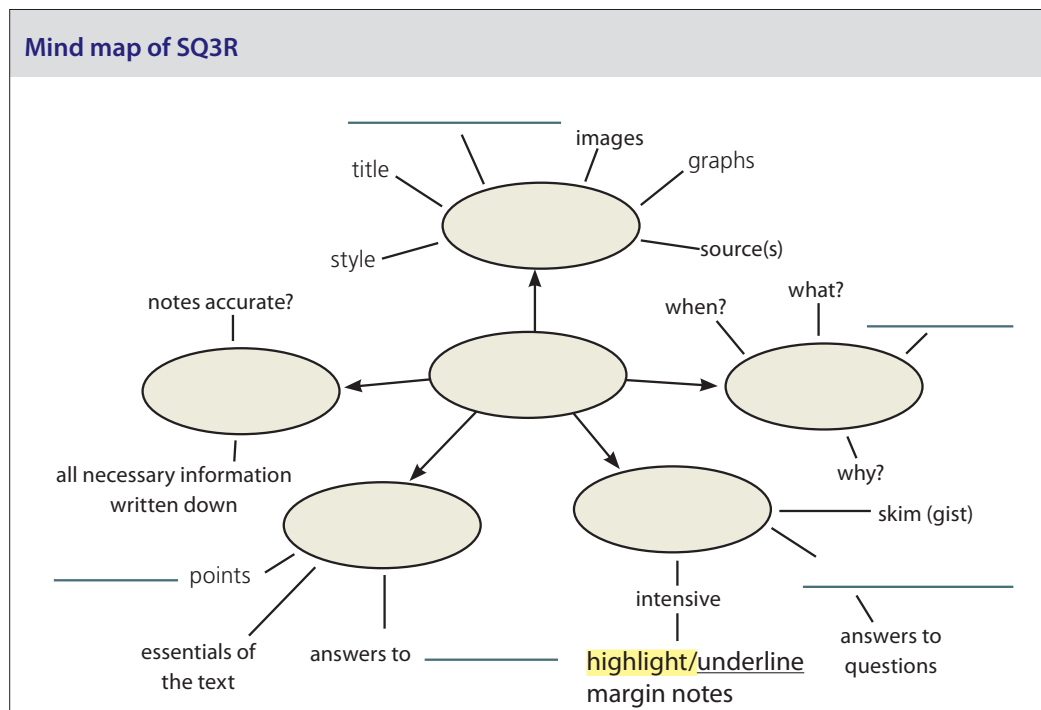
9.3   **Discuss your mind map with another student and amend or complete it as necessary.**

This is an important step in the process. You will find that when you discuss your understanding of the text you will remember more than you first thought.

9.4   **Check your mind map against the text for accuracy.**

Calculating your reading speed

The text has 621 words. Divide this number by the number of minutes it took you to read the text. This will give you your reading speed. Even though you have tried to read fast, you will probably discover that you have understood more of the text than you expected, especially after discussing with a partner. If this is not the case, your understanding will improve over time. Your target is at least 75% understanding.

> **Study tip**
>
> Mind maps are a very useful tool for organising your thoughts, especially for visual learners. You may find they do not suit your learning style, but it is a strategy worth trying.

The average native speaker of English can read between 200 and 250 words per minute when reading quickly.

Task 10 Summarising the SQ3R system

10.1   **Using your mind map, write a brief summary of the SQ3R system.**

10.2   **Compare your summary with that of another student and discuss any differences.**

SAMPLE

Unit summary

The checklists at the end of each unit are intended to help you reflect on the work you have covered. They will help you decide to what extent you feel you have progressed with the activities and skills covered. A number of activities have been introduced in the first unit of the book. These are listed below.

1   **Look back over the work you have done and think about how successfully you carried out the various tasks. As you check, tick (✔) the appropriate box in the table below.**

Skills and techniques	very well	quite well	need more work	not covered
Reading for general understanding				
Reading for specific details				
Identifying paragraph organisation				
Inferring meaning from context				
Identifying word classes				
Reading for a purpose				
Recalling and highlighting information				
Using a mind map and SQ3R				
Rapid and efficient reading				
Experimenting with reading strategies				

2   **Complete the following sentences.**

a.   "Word class" means _____

b.   Highlighting or underlining can be used to _____

c.   SQ3R stands for_____

d.   A mind map can be used for_____

For web resources relevant to this book, see:
www.englishforacademicstudy.com

These weblinks will provide you with comprehensive information on how to develop effective reading strategies and skills, and how to understand the differences between conventional and academic reading.

Sustainable energy

In this unit you will:

1 identify synonyms and word classes
2 differentiate between main ideas and supporting points

Text

Using waste, Swedish city cuts its fossil fuel use (1), Text 2a
(Source Book pp. 10–11)

Text 2a contains information about the Swedish city of Kristianstad, which uses waste for the purposes of heating. You will use the text to write a summary of the ways fossil fuel use has been reduced.

Task 1 Reading for specific information

1.1 **Read the instructions below.**

a. Study the questions for three minutes.

b. Close your Course Book. Read Text 2a carefully, but as fast as you can. Time yourself to see how long it takes you.

c. Close your Source Book and answer as many questions as you can.

1. From what source did Kristianstad get its heating 20 years ago?
   a. biomass
   b. solar panels
   c. fossil fuels
   d. wind turbines

2. What is Kristianstad's main industry?
   a. waste processing
   b. alcohol production
   c. food production
   d. alternative energy production

3. Which one of the following is <u>not</u> mentioned as ingredients for generating energy?
   a. used cooking oil
   b. rotting fruit
   c. potato peels
   d. manure

4. In which area of Kristianstad is the energy-generating plant situated?

_____

5. Which one of the following is used as a local source of power in Kristianstad?
   a. rivers
   b. landfill
   c. lakes
   d. alcohol

6. What energy source are most European countries investing in?

_____

7. What is a major source of renewable energy in agricultural areas?

_____

8. By what amount has Kristianstad reduced its fossil fuel use?
   a. a half
   b. a quarter
   c. three-quarters
   d. one-third

9. How many biomass digesters exist in the United States?
   a. 1,800
   b. 151
   c. 8,000
   d. 1,550

10. What are the two Southern California utility companies planning to do?
    a. buy up farmland
    b. build biogas plants
    c. take over another utility company
    d. open water treatment plants

1.2 **Check your answers with another student.**

This step has been included to encourage you to discover how much you understand even when reading fast. You will find you remember more than you think when you discuss your answers.

1.3 **Check your answers against Text 2a.**

Record the number of questions you answered correctly.

1.4　**Calculate your reading speed.**

Divide the number of words in the text (566) by the number of minutes it took you to read the text.

Key reading skills: Improving your reading speed

It can be hard to read academic texts quickly, but you can improve your reading speed with regular, timed reading practice. Make a mental note of what helps you to read quickly. This may include: the layout of the text, headings and visuals and even the time of day you read.

Task 2　Synonyms and word classes

In Unit 1, you looked at how to infer the meaning of new words in a text. In Text 2a there are a number of useful words and phrases that you may not be familiar with.

2.1　**Find words or phrases in the text with the same, or similar, meaning to the words or phrases in the left-hand column of the table below.**

Complete the table by adding the relevant word class and the synonym from the text.

Word or phrase	Line number	Synonym in text	Word class
detach from something	2	to wean from	verb
ambition/hope			
icy cold			
a turnaround/change			
replaced			
accumulation of rubbish			
exploiting/making use of			
extremely important			
to be in charge of something			
create/set up			
achieve what is necessary			

2.2 Use the synonyms you have found to complete the following sentences. You may need to change the form of the word.

1. The dramatic drop in temperature resulted in _____ conditions throughout the country.
2. Current research into animal behaviour is being _____ by an emeritus professor of zoology.
3. A new suite of PCs has been _____ in one of the seminar rooms at the university.
4. The identification of the parasite causing malaria was _____ in efforts to overcome this terrible disease.
5. The new prime minister's victory in the elections was a complete _____ of the defeat he suffered the previous time.

2.3 Now write sentences of your own to help you remember some of the other words in Ex 2.1.

2.4 Compare your sentences with those of another student.

Text
Using waste, Swedish city cuts its fossil fuel use (2), Text 2b
(Source Book pp. 12–13)

Text 2b contains information on how Kristianstad has managed to harness waste to heat the city.

Task 3 Reading for specific information

3.1 Read the instructions below.

a. Study the multiple-choice questions for three minutes.
b. Close your Course Book. Read Text 2b carefully, but as fast as you can. Time yourself as before.
c. Close your Source Book and answer the questions. You may wish to discuss your answers before checking them against the text.
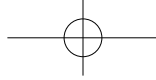
1. Biogas is essentially:
   a. natural gas   b. biological waste
   c. non-renewable   d. heat-trapping

2. The Bioenergy Initiative is based in:
   a. Wisconsin   b. Sweden
   c. California   d. Germany

3. From one greenhouse alone, how much CO_2 has been eliminated by the use of wood pellets?
   a. 24 tons   b. 64 tons
   c. 84 tons   d. 104 tons

4. Using biogas to heat municipal buildings saves Kristianstad:
   a. $3.2 million per year   b. $114 million per year
   c. $70 million per year   d. $3.8 million per year

5. The Kristianstad council makes money by:
   a. selling excess diesel   b. spending less on electricity
   c. charging money for waste disposal   d. reducing the heating level

6. When did Kristianstad start its energy conversion project?
   a. the 1960s   b. the 1970s
   c. the 1980s   d. the 1990s

7. Where is the "district heating system" located?
   a. under the ground   b. in hospitals
   c. in schools   d. around the city

8. What action was taken in Sweden in 1991?
   a. a switch to a new heating system   b. a tax on CO2 emissions
   c. the installation of a biogas plant   d. a ban on wood burning

9. What is the Swedish government doing to promote pellet-fuelled heating?
   a. selling it to farmers   b. exporting it to Europe
   c. building furnaces   d. providing it cheaply

10. By 2020, Kristianstad city planners hope to:
    a. build a new biogas plant   b. reduce fossil fuel emissions
    c. run municipal vehicles on biogas   d. have no polluting emissions

Key reading skills: Fast reading

Fast readers read in "chunks". This means you should try to read whole phrases, rather than looking at each word separately. This will take practice, as you first have to change a reading habit; in time, reading in chunks will become your new reading habit.

3.2 **Check your answers against the text.**

Record the number of questions you answered correctly. Did you score higher than in Task 1?

Task 4 Differentiating between main ideas and supporting details

In Unit 1, you were introduced to reading for a purpose, i.e., concentrating on the texts or parts of texts that are relevant to your reading purpose. Your reading purpose now is to identify main ideas.

4.1 **Re-read Text 2b, study the information in sentences 1–6 below, find the relevant sections of the text and select three pieces of information which are main ideas.**

1. Tanker trucks are now being used for delivering wood pellets.
2. Both old fossil fuel technologies and a modern biomass replacement exist in Kristianstad.
3. Natural gas and biogas are polluting when burnt, but much less than coal and oil.
4. The policy director of the Wisconsin group describes biomass as an "opportunity fuel".
5. Kristianstad no longer uses fossil fuels and is now making use of other sources of energy.
6. New York also uses a district heating system.

Key reading skills: Differentiating main ideas from supporting details

In an academic context, it is important to be able to extract the main ideas from a text, particularly if the text contains complex ideas and a lot of supporting points. A paragraph generally contains one main idea and may have several supporting details. You first need to identify the main points and extract the key information. You can then decide which of the supporting details are also relevant to your reading purpose.

> **Study tip**
>
> The key reading skills in this unit are particularly useful for increasing your reading speed and understanding.

Task 5　Ways of making notes

One effective way of making notes is to draw a mind map.

5.1　　Read paragraph 1 of Text 2b and complete the mind map below.
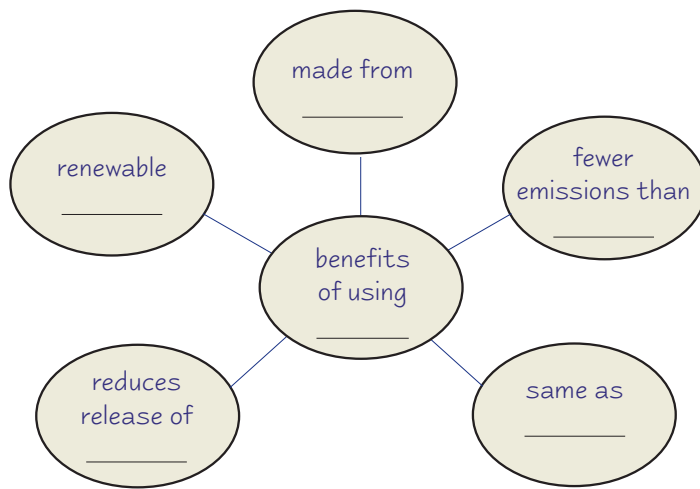
Task 6　Creating mind maps

6.1　　After reading the text and highlighting the main ideas, study the mind map on the next page and then complete the blanks.

6.2　　Identify which information in the mind map seems the most useful, and which seems irrelevant.

You may be able to use some of the information in the mind map to write the first draft of your summary.

6.3　　Check the text to identify any further information that could be added to the mind map.

less CO$_2$ and _____

save money

_____

of fossil fuel ──── problems

benefits

biogas in
Kristianstad

heat

_____

old landfill ──── sources

usage ──── electricity

sewage ponds

wood _____

_____
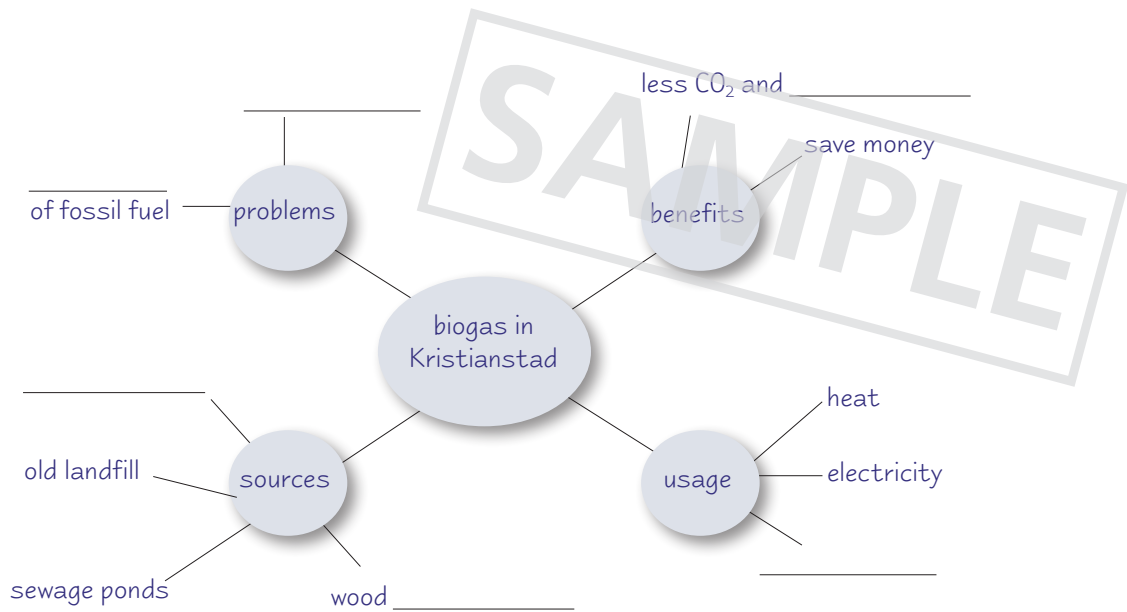
Summarising in note form

You are going to use both Texts 2a and 2b to write a brief summary.

Focus task ◕

How has Kristianstad cut its fossil fuel use?

7.1 **Re-read both texts once.**

　　a.　Put the texts away and write down in note form everything you can remember that is relevant to the Focus task question above.
　　b.　Compare your notes with another student's. Decide whether there are any gaps in your notes.
　　c.　Check the texts to add any further notes or to make any amendments.
　　d.　Draw your own mind map to display the key points of your notes.

7.2 **Using only your notes and mind map, write your summary. Your summary should be no more than 120 words.**

Unit summary

Some new activities have been introduced in this second unit. You have also had further practice in some activities that were introduced in Unit 1.

1   **Look back over the work you have done and think about how successfully you carried out the various tasks. As you check, tick (✔) the appropriate box in the table below.**

Skills and techniques	very well	quite well	need more work	not covered
Developing fast, efficient reading				
Identifying word classes				
Identifying and using synonyms				
Differentiating between main and supporting points				
Summarising in note form				

2   **Read the following definition of the word *synonym*. Then complete the following sentences containing the word *synonymous* with an appropriate association. You may find that your ideas differ from other students'.**

A *synonym* can be defined as a word or phrase that means exactly or nearly the same as another word or phrase in the same language, for example, "near" is a synonym of "close". It is also said that a synonym is a person or thing so closely associated with a particular quality or idea that the mention of their name calls it to mind; for example, the British royal family is synonymous with British tradition and culture.

Example: Examinations are synonymous with *hard work*, *worry and nerves*.
1. Soft toys are synonymous with _____.
2. Manufacturers hope that their products will become synonymous with _____.

3. Diamonds are synonymous with _____.

4. Punctuality is synonymous with _____.

5. Sports and games are synonymous with _____.

For web resources relevant to this book, see:
www.englishforacademicstudy.com

These weblinks will provide you with comprehensive information on how to develop effective reading strategies and skills, and how to understand the differences between conventional and academic reading.

Reading for academic purposes

1 Reading is a very important language skill for students to develop in order to study effectively, because during their academic courses they may be expected to read many pages in a week, possibly hundreds!

5 It seems fairly obvious that the more someone reads the better a reader he/she will become. Reading will also help in the reader's efforts to develop other language skills. According to Pulido (2003), "as you read you will develop a wider vocabulary". She goes on to provide statistical evidence to back up her claim. It is generally believed that good readers also make good writers. Reading can act as a model for writing as the reader is exposed to, and absorbs, ever-widening patterns of writing forms and

10 styles. Bassett (2010) expands on this theme below:

> Reading stories in an extensive reading programme will improve reading fluency by increasing automaticity in processing, and will also improve proficiency in writing, listening, and speaking – provided that the student really is reading extensively […] reading 40 or 50 graded readers in a year.

15 Bassett's focus is on graded readers, but arguably the type of text should suit the needs and interests of individuals. What is more relevant is the reference to "increasing automaticity in processing" and how this impacts on other areas of language learning and development. "Automaticity" can be defined as "fast, effortless and accurate word recognition that grows out of practice and instruction. Automaticity allows students to

20 retrieve words quickly from memory and concentrate on other aspects of reading, such as comprehension" (University of North Carolina, 2011).

It seems safe to assume as well that a wider vocabulary will facilitate reading. Developing vocabulary and grammar unconsciously through reading is often more effective than hours spent working through a vocabulary or grammar book

25 in an effort to memorise words or structures. With growing competence in the language, students should also gain more confidence. The more confident they are, the more they will be motivated to use the target language – to experiment with it and increasingly to improve their competence. All this applies equally to a student's efforts to learn a foreign language as it does to their own first language.

2 If the focus is English for academic purposes (EAP) then most of the materials used will normally be on academic topics, or at least topics which are thought to be interesting for "serious" readers. The topics are chosen because it is considered that they should be interesting for language learners to read no matter what they are going to study on their academic courses. Selected texts normally contain
35 examples of vocabulary which are typically academic and the types of language structures commonly found in academic texts. Students will be exposed to language which is directly relevant to their specific fields of study when their own academic programmes begin. The aim of EAP programmes is to help students develop effective reading skills before joining their academic departments. In
40 some cases they may have already begun their academic studies and are attending in-sessional courses; here, texts may be chosen which are more directly relevant to their area of study. This will particularly be the case if they have begun what is often referred to as a "dedicated" course which blends academic English language learning with a particular course such as English for Food Science.

3 In academic reading classes, students are often expected to read a selection of different texts on the same topic. To a greater or lesser extent this simulates what might be expected on their academic programmes, with each text containing different features. Different viewpoints may be expressed, or more detail may be given in one text than in another, or the focus may vary. Students are also often
50 expected to research the topic themselves and so need to develop the habit of reading around the subject. This is an important skill to work on.

Students also need to learn how to analyse what they are reading: for example, to read and think critically about content and style, and the argument put forward by the writer. Kurland (2000) differentiates between critical reading and critical
55 thinking. He describes the former as "careful, active, reflective, analytic reading", whereas critical thinking "involves reflecting on the validity of what you have read in the light of our prior knowledge and understanding of the world". The critical reader would never accept everything in a text being accurate or acceptable, or well written, without careful consideration; likewise, the reader would apply his/her
60 critical thinking powers in order to reach a conclusion about the contents. Some writers try to persuade readers to accept a point of view with which the readers may not agree, whilst some texts may be strongly biased, giving only one side of the

argument rather than a balanced view. Readers need to be critical, for example, when researching material on the Internet, as some sources may not be reliable – although
65   the same could be said about many text types and media sources.

4   Reading serves a purpose. For example, a novel may be read simply for entertainment, or because the reader has read something before by the same author and liked it; or a book may be picked up to fill the time on a flight or a train journey. Some people read merely because reading is a hobby. People read newspapers to
70   check on current events. The purpose for reading at university or school, however, is usually to learn something, to complete an assignment, to prepare for a lecture or tutorial, or to revise for an exam. For instance, students might be reading to find information that would help them complete the following assignment:

English is referred to as a global language. What are the advantages and
75   **disadvantages of global languages? Discuss.**

It is important to keep the reading purpose in mind while reading a text; this way, the reader can make decisions about the most effective way to read that text. By keeping the purpose in mind, the reader can decide whether to read quickly through a text, or skip some of the material and spend time reading carefully through the
80   parts that help achieve the task.

5   EAP courses provide the learner with an ideal opportunity to acquire good reading routines. When students embark on their academic programmes they are expected to read widely and independently. They should get into the habit of reading in English for at least 30 minutes each and every day of the week. The important
85   thing about reading on an EAP course, or reading in general at university, is not to be content with reading only what is supplied. Students must learn to read independently and regularly and to recognise that while this may benefit their academic work specifically, the act of reading is also a reward in itself. There are excellent publications to be found relating to every field of interest; many are now
90   available online. Students may decide that material they read independently should relate to their intended area of study. This is often the case for postgraduate students, especially if they have already been provided with a reading list by the department they are to join. However, in reality it does not matter what is read independently at this stage as long as good reading habits are being developed, and the reader learns

95 to enjoy reading and benefit from the experience. What students read, as well as where and how, relates back to the reading purpose and to the level of concentration required.

6 Ultimately, the more one reads, the better reader one should become as long as good reading habits are developed. There are some interesting statistics to consider in this
100 context. To take vocabulary acquisition as an example, research suggests that readers will need to be exposed to a new vocabulary item (a word or phrase) at least 12 times in different ways before that item becomes "active" in their lexicon (see Nation, 1990). An individal's lexicon consists of all the vocabulary items that are both passively and actively known. Vocabulary items are said to be "active" when they can
105 reliably and automatically be used – for example, to understand a reading text or to communicate information or ideas. Regular reading will help provide the necessary level of exposure. Further research by Nation (2001) has also shown that learners reading in a foreign language need to understand at least 80% of the words in a text before that text can be read with the same amount of understanding as an educated
110 native speaker. Nation (2001) claims that to read with "minimal disturbance from unknown vocabulary, language users probably need a vocabulary of 15,000 to 20,000 words". In sum, the more readers read, the quicker and better they should be able to read with understanding.

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University of North Carolina. (2011). *Learn NC* [website]. Chapel Hill, NC: School of Education, University of North Carolina at Chapel Hill. Retrieved December 19, 2011, from www.learnnc.org/reference/automaticity

Useful website

Adamovic, M. (2009). *Online utility*. Retrieved June 8, 2011, from www.online-utility.org/english/readability

Source: John Slaght, ISLC, University of Reading, UK.

The SQ3R reading and study system

The SQ3R system was developed in the 1940s and has been used successfully since then. Introduced by Robinson (1946), it is especially useful for reading academic texts, because it helps the reader to understand and to remember the information in them.

5   The term "SQ3R" stands for **S**urvey, **Q**uestion, **R**ead, **R**ecall and **R**eview. These are the five steps you need to take when reading an academic text purposefully, particularly if you want to understand a text fully in order to achieve a goal such as completing a writing task or preparing for a tutorial.

The first step, to **survey** the text, means that you should look at the title, section
10 headings, images and graphs and other figures in the book or article. It is also important to think about what the written style can tell you about the type of text it is (e.g., Is it an academic text? Is it an introductory textbook or a peer-reviewed research article?) and briefly check any references in order to get some idea of the source(s) of the material.

15 After surveying the text, you should begin to **question**. The first questions should relate to the overall topic. Ask yourself: "What do I already know about this?" "What more do I need to know?" A longer text may be divided into sections, each one with a heading, and you can ask similar questions of each section. You could turn each heading into a question and think about what information might be given. For
20 example, an article about "contemporary culture" might have a section headed "The role of museums". This could easily be turned into questions, e.g., "What is the role of museums in contemporary culture?"

The first of the three Rs is **read**. At this point you are likely to use several different reading strategies. The first step is to skim the article for a general idea about
25 the text – reading for the "gist". This will help you become more familiar with the content – giving you a global view and enabling you to see more clearly how the text is organised. Next you need to scan the text and see if any of your questions are answered. Finally, read intensively the parts of the text that you have already decided are likely to be most relevant, and identify the main ideas

30 and any other useful information (including, where relevant, the sources of information, as indicated by the references). A good way to find useful information again – for example, to use in an assignment or in examination revision – is to mark the information using underlining or a highlighter pen and/or to write notes in the margin.

35 The second R is **recall**. To recall means to "remember". Recalling is an essential aspect of the reading process. It can be done at various stages in reading a text – for example, in the case of longer texts, after reading paragraphs and/or sections. You should cover up the text you have read and try to remember the main points. Have your questions been answered? What information was given in each paragraph
40 or section? Recalling this information will tell you how much you have actually understood. If you cannot remember a point, look at the text again, check your understanding of what you have read and repeat the point to yourself. This process also helps you focus on the essentials of the text and express these in your own words. At this point you could write down everything you remember in note form –
45 possibly set out as a mind map.

The final R is **review**. At this stage you should check the text again to make sure your notes are accurate and you have written down everything you need from the text.

Reference

Robinson, F. P. (1946). *Effective study*. New York/London: Harper & Brothers.
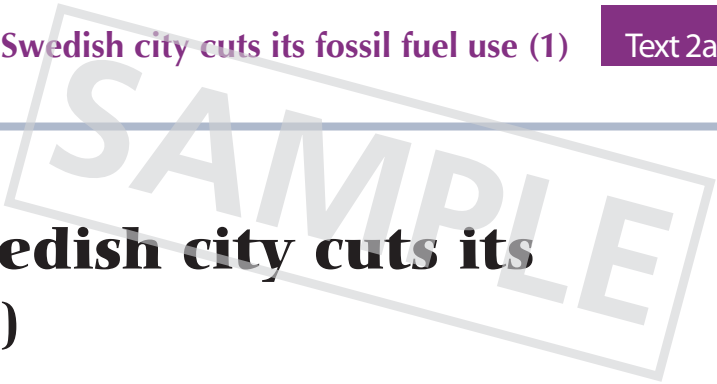
BEYOND FOSSIL FUELS

Using waste, Swedish city cuts its fossil fuel use (1)

KRISTIANSTAD, Sweden – When this city vowed a decade ago to wean itself from fossil fuels, it was a lofty aspiration, like zero deaths from traffic accidents or the elimination of childhood obesity. But Kristianstad has already crossed a crucial threshold: the city and surrounding county, with a population of 80,000, essentially use no oil, natural gas or coal to heat homes and businesses, even during the long frozen winters. It is a complete reversal from 20 years ago, when all of their heat came from fossil fuels.

This area in southern Sweden, best known as the home of Absolut vodka, has not generally substituted solar panels or wind turbines for the traditional fuels it has forsaken. Instead, as befits a region that is an epicentre of farming and food processing, it generates energy from a diverse assortment of ingredients like potato peels, manure, used cooking oil, stale cookies and pig intestines. A massive ten-year-old plant on the outskirts of Kristianstad uses a biological process to transform this detritus into biogas, a form of methane. The gas which is produced is burned to create heat and electricity, or is refined as a fuel for cars. Once the city council got into the habit of harnessing power locally, they began developing fu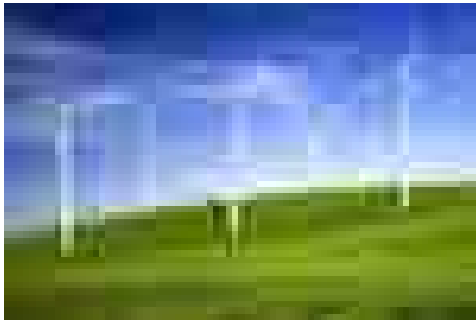el from a variety of sources: Kristianstad also burns gas emanating from an old landfill and sewage ponds, as well as wood waste from flooring factories and tree pruning.

Over the last five years, many European countries have increased their reliance on renewable energy, from wind farms to hydroelectric dams, because fossil fuels are expensive on the Continent and their overuse is, effectively, taxed by the European Union's carbon trading system. Nonetheless, for many agricultural regions, a crucial component of the renewable energy mix has become gas extracted from biomass like farm and food waste. In Germany alone, about 5,000 biogas systems generate power, in many cases on individual farms. Kristianstad has gone further, harnessing biogas for an across-the-board regional energy makeover that has halved its fossil fuel use and reduced the city's carbon dioxide emissions by one-quarter in the last decade. According to Lennart Erfors, the engineer who is overseeing the transition in this colourful city of 18th-century style houses, it is a much more secure energy supply and it has helped create employment.

In the United States, biogas systems are quite rare. There are currently only 151 biomass digesters in the country, most of them small and using only manure, according to the Environmental Protection

65 Agency. The EPA has estimated that installing such plants would actually be feasible at about 8,000 US farms. However, so far, such projects have been limited by high initial costs, scant government
70 financing and the lack of a business model. There is no supply network for moving manure to a centralized plant and no outlet to sell the biogas generated. Still, a number of states and companies are considering
75 new investment. Two California utilities, Southern California Gas and San Diego Gas & Electric, have filed for permission with the state's Public Utilities Commission to

build plants in California to turn organic
80 waste from farms and gas from water treatment plants into biogas that would feed into the state's natural-gas pipelines after purification. Using biogas would help the utilities meet requirements in California
85 and many other states to generate a portion of their power using renewable energy within the coming decade.

Many European countries are making more use of renewable energy from wind farms and gas produced in biomass digesters.

Source: Adapted from Rosenthal, E. (2010, December 11). Using waste, Swedish city cuts its fossil fuel use. *The New York Times*. Retrieved May 9, 2011, from www.nytimes. com/2010/12/11/science/earth/11fossil.html

BEYOND FOSSIL FUELS

Using waste, Swedish city cuts its fossil fuel use (2)

Both natural gas and biogas create emissions when burned, but far less than coal and oil do. Unlike natural gas, which is pumped from deep underground, biogas counts as

5 a renewable energy source: it is made from biological waste that in many cases would otherwise decompose in farm fields or landfills and yield no benefit at all, releasing heat-trapping methane into the atmosphere

10 and contributing to global warming.

Interest in the initiative introduced in the southern Swedish city of Kristianstad was developed by representatives from Wisconsin Bioenergy Initiative in the USA,

15 who toured similar biogas programmes in Germany to help formulate a plan to encourage the industry. The policy director of the Wisconsin group describes biomass as an "opportunity fuel". Like Kristianstad,

20 California and Wisconsin have an inadequate supply of fossil fuel to meet their needs but produce a great amount of waste from food processing and dairy farms. Biogas plants can devour vast quantities of

25 biological waste and manure that would otherwise pollute the air and could affect water supplies, turning these materials into an energy source.

In Kristianstad, old fossil-fuel technologies

30 coexist awkwardly alongside their biomass replacements. The type of tanker truck that used to deliver heating oil now delivers

another type of biomass fuel: wood pellets, the main heating fuel in the region's more

35 remote areas.

Kristianstad calculated that it eliminated 64 tons of CO_2 emissions annually by using wood pellets to heat a city greenhouse.

The start-up costs, covered by the city and through Swedish government grants, have been considerable: the centralized biomass heating system cost $144 million,

40 including constructing a new incineration plant, laying networks of pipes, replacing furnaces and installing generators. However, officials say the benefits have already been significant: Kristianstad now

45 spends about $3.2 million each year to heat its municipal buildings rather than the $7 million it would spend if it still relied on oil and electricity. It fuels its municipal cars, buses and trucks with biogas fuel,

50 avoiding the need to purchase nearly half a million gallons of diesel or gas each year. The operations at the biogas and heating plants generate income, because farms and factories pay fees to dispose of their waste

55 and the plants sell the heat, electricity and

car fuel they produce.

Kristianstad's energy conversion is rooted in the oil price shocks of the 1980s, when the city could barely afford to heat its schools and hospitals. To save on fuel consumption, the city began laying heating pipes to form an underground heating grid known as "district heating". Such systems use one or more central furnaces to heat water or produce steam that is fed into the network. It is far more efficient to pump heat into a system that can warm an entire city than to heat buildings individually with boilers. District heating systems can generate heat from any fuel source, and like New York City's, Kristianstad's heating supply initially relied on fossil fuel. After Sweden became the first country to impose a tax on carbon dioxide emissions from fossil fuels, in 1991, Kristianstad started looking for substitutes. By 1993, it was taking in and burning local wood waste, and in 1999, it began relying on heat generated from the new biogas plant. Some buildings that are too remote to be connected to the district heating system have been fitted with individual furnaces that use tiny pellets that are also made from wood waste. Burning wood in this form is more efficient and produces less carbon dioxide than burning logs does; such heating has given birth to a booming pellet industry in northern Europe. Government subsidies underwrite purchases of pellet furnaces by homeowners and businesses; pellet-fuelled heat costs half as much as oil.

Having dispensed with fossil fuels for heating, Kristianstad is moving on to other challenges. City planners hope that by 2020 total local emissions will be 40% lower than they were in 1990, and that running the city will require no fossil fuel and produce no emissions at all. Transportation now accounts for 60% of fossil fuel use, so city planners want drivers to use cars that run on local biogas, which municipal vehicles already do. That will require increasing production of the fuel. Kristianstad is looking into building satellite biogas plants for outlying areas and expanding its network of underground biogas pipes to allow the construction of more filling stations. At the moment, this is something of a chicken-and-egg problem: even though biogas fuel costs about 20% less than gasoline, consumers are reluctant to spend $32,000 (about $4,000 more than for a conventional car) on a biogas or dual-fuel car until they are certain that the network will keep growing.