

1 The Sustainability Movement: Waste segregation across the globe

2 Overview

Topic	How do people in New Zealand and Germany deal with waste disposal and recycling?
Aims	<p>By the end of the lesson, the pupils will have gained knowledge about the sustainability topic of waste disposal and recycling and raised their cultural awareness by gaining insights into the practice of waste disposal and recycling in New Zealand and comparing it to their known system.</p> <ul style="list-style-type: none"> - Pupils are motivated to engage in the topic of waste disposal and recycling with the help of a connection drawn to the 'Fridays for Future' movement and by personally identifying with the topic. - Pupils can point out key elements in the circle of consumption, waste disposal and recycling by analyzing the elements of the slogan 'reduce, reuse, recycle' and reflecting upon its order. - Pupils can apply the general comprehension strategy of skimming to understand the main points of information in a web research request by collecting information about the New Zealand system. - Pupils widen their understanding of different practices around the globe (intercultural learning) by the comparison of two systems of waste disposal and recycling. - Pupils are able to oppose and compare the two systems regarding similarities and differences by filling in a table on the worksheet. - Pupils practice to take a stand for something important to them by expressing and justifying their personal opinion on the system they prefer. - Pupils become sensitized for the importance of recycling by reflecting upon their own behavior and cultural practices in Germany.
Level	Grade 8/9
Time	90'
Content	slogan 'there is no planet B', slogan 'reduce, reuse, recycle', picture taken at a public space in Auckland showing the categories used for waste disposal and recycling in New Zealand, comparison of the waste disposal and recycling systems in New Zealand and Germany, zero-waste movement
Materials	<p>M1: Worksheet for students (Pictures from task 1.) 'recycling photo' by rawpixel and 2.) 'reuse vector' by Vectorium are taken from Freepik. Pictures from the header and task 5.) are taken from AdobeStock.) M2: Photo 'What goes where?' M3: QR code 'Quiz it – New Zealand'</p>

3 Didactic considerations

Most of the tasks can either be completed individually, with a partner (e.g. Think, Pair, Share) or in team work (e.g. group discussion). Choose the convenient social form for your learning group.

Lead-in: You can pick the terms 'sustainability'/'sustainability movement' or the slogan 'there is no planet B' to pick up on the FridaysForFuture movement and include students personal experience realm. Maybe your students have been part of it in the past or are actively engaging in it.

- 1.) The pupils are asked to reflect their personal behavior and judge their own contribution when it comes to everyday actions like waste disposal & recycling. To engage with this topic shows them that everyone and every action have an effect. If sharing the outcome with a partner or the group, it might trigger a discussion and the pupils might get motivated to reflect on their behavior and even change it. You can return to task 1.) after having finished your sequence to talk about whether the students will be answering the question in the same way.
- 2.) The slogan 'reduce, reuse, recycle' is to be analyzed by the pupils in terms of word meaning, but they are also supposed to judge why the words are presented in that order. By reflecting they should find out that waste disposal & recycling are parts of a cycle and that it is representing the last step in that cycle. Consumption and waste disposal & recycling are closely linked to each other and every individual can get active on each level. Hereby you provide your students with a self-efficacy experience by showing them how a change of behavior changes the outcome and exemplify one possibility of how they can get active about what they might be demanding when engaging in the climate movement.
Consider picking up the prefix 're-' and its meaning when talking about the slogan's vocabulary (ducere, lat. = führen)

A student's output could look like this:

The slogan means that we have to do three things considering our consumption in order to live a sustainable lifestyle. First, we have the choice to reduce our consumption overall and by doing so we will also reduce our waste production. Second, we should try to reuse whatever we own, which includes repairing things, lending to and from other people or buying second hand. Third, we are supposed to properly recycle broken and no longer usable items.

- 3.) The zero-waste movement is a very actual trend and lifestyle. The students could come up with loosely sold goods as an example. Some might also mention self-made cosmetics. You can include further discussion on "Unverpackt-Läden", agricultural cooperatives, the cultural practice of farmers markets and activate them to take pictures of these and other examples in the linguistic landscape. You could also provide your students with recipes for self-made cosmetics or cleaning agents. If students do not know the term 'zero waste', you could ask for the definition of the entailed words and let them figure out what could be ways to not produce any waste. Consider to change social forms and let them do partner work on this task.
- 4.) To practice what they have learnt so far about the system of waste disposal & recycling in New Zealand and in order to prepare for the next task, the pupils can play a sorting game with the provided QR code. This task entails a change in medium and you could integrate the usage of mobiles or tablets to access the game.

The QR code is also included in the add-on material in a bigger format in case you want to provide it on the blackboard in order to integrate movement and activate the group or in case it cannot be 'read' by the devices on the worksheet.

Did you know? – You can create QR-codes yourself very easily and not just encode URLs, but also MP3, pdf and other files. I used (qrcode-monkey.com). (It is free and I did and do not get rewarded for mentioning it!)

- 5.) The sticker ‘What goes where’ gives us information about the categories used for waste disposal & recycling in New Zealand. Apart from the differently used color codes, your students might directly notice differences in the categories compared to the German ones (e.g. glass is not separated, what is called ‘landfill’ would go in the recycling bin in Germany, the plastics are sorted according to number).

The photo is also included in the add-on material in a bigger format in case you want to print it out in color and present in on the blackboard.

- a. the provided link recycle.co.nz gives your students the possibility to access more background information and include digital learning and research in your teaching sequence
- the subcategories ‘NZ needs our Help’ and ‘Can it be Recycled?’ provide sufficient information for answering the posed questions
 - this website also provides a ‘Recycling Week 2022’ challenge that you might want to pick up (see the category ‘We’re the Solution’)
- b. by comparison of two different systems of waste disposal & recycling, the students become aware of differences and similarities

The filled in table could look like this:

New Zealand	Germany
similarities:	
<ul style="list-style-type: none"> - organic waste is a separate category - paper is a separate category - the bins are color coded ... 	
differences:	
<ul style="list-style-type: none"> - glass is not separated - ‘landfill’ would go in the recycling bin in German - the plastics are sorted according to numbers - less categories in total ... 	<ul style="list-style-type: none"> - glass is separated even by color - more categories exist in Germany, not so much waste goes to landfill/‘Restmüll’ - all plastics go to the same bin - public glass container collection points ...

- c. for personal growth it is important to deliberately make choices, take on a stand and to be able to justify a decision

4 Background information

The OER material is based on the VELAD project of the universities of Leipzig, Auckland and Dunedin in 2022, being a collaborative discovery of linguistic landscapes concerning the

topic of sustainability. The project's results provide a comparative approach to sustainable practices in Auckland, NZ and Leipzig, Germany. The subtopic waste disposal & recycling is taken from it.

You find helpful information on waste disposal & recycling in New Zealand here:

recycle.co.nz / [Recycling & Disposal | Plastics New Zealand](#)

This source provides a critical opinion on the topic:

[New Zealand is not as clean or green as we think – plastic waste is polluting our land | Lizzy Carmine | The Guardian](#)

Very recently (May 2022) published information by the Ministry for the Environment:

[Waste | Ministry for the Environment](#)

To be able to compare New Zealand's system of waste disposal & recycling to the German one, you find background information at:

[Abfall und Recycling - NABU](#) / [Das solltest du über Recycling wissen - quarks.de](#)

Very interesting seems the attempt of the city of Kiel to become a zero-waste city:

[Kiel - Zero Waste City](#)

Maybe your pupils are up for a zero-waste challenge:

[30 Tage Zero Waste Challenge: Less Waste einfach \(naturalou.de\)](#)

5 Material

see **appendix** for

M1: Worksheet for students


M2: Photo 'What goes where?'


M3: QR code 'Quiz it – New Zealand'

BECOME PART OF THE SUSTAINABILITY MOVEMENT



Picture 1

1.) Do you separate your rubbish...		no	rarely	sometimes	mostly	always
... at home?	Picture 2	☆	☆	☆	☆	☆
... at school?		☆	☆	☆	☆	☆
... in the city centre?		☆	☆	☆	☆	☆
... at the station?		☆	☆	☆	☆	☆



Picture 3

2.) Think about the meaning of the slogan!
Consider its order.

3.) Have you heard of ZERO WASTE 

What is it about?

Are you aware of any zero-waste practices?

Picture 4

4.) Quiz it – New Zealand

Go ahead and scan the QR code with your mobile phone. Take the quiz!



5.) What goes where?



Picture 5

This sticker on a public bin shows categories of waste segregation in Auckland, New Zealand.

a.) For more information go to recycle.co.nz and find out about the following questions:

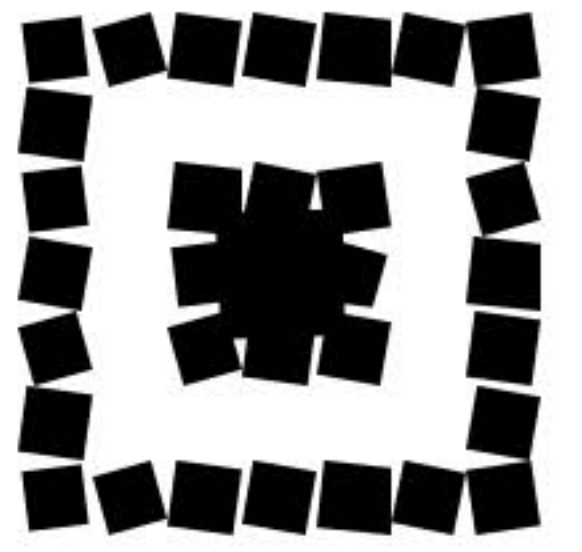
- Which categories of sorting do exist?
- What do you notice about the bins?
- What does 'landfill' mean?
- What do you find out about the numerical codes on plastics?

b.) Compare it to what you know about the German system.

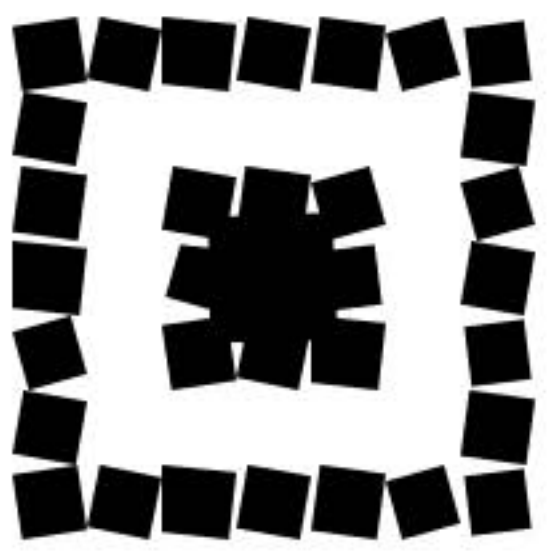
What is similar? What is different? Fill in the table.

New Zealand	Germany
similarities:	
differences:	

c.) Which system do you find more convenient and why? Be able to justify your decision.



wasteMINZ



What goes where?

ORGANICS



MIXED RECYCLING



LANDFILL



SECURE BIN



PLEASE EMPTY AND RINSE YOUR RECYCLING | PUT CARDBOARD BEHIND THE BINS