



# KEEP IT COOL

CLIMATE CHANGE EDUCATION

## Set 3 for Teachers: Selecting your project

This is a support set for Teachers primarily, but also for Professional Learning Communities (PLCs) participating in the Keep It Cool: Climate Change Education (KIC:CCE) Project.

The KIC:CCE Project aims to implement innovative, curriculum activated CCE projects, involving learners and communities. The project aims to facilitate collaborative, continuing professional development and improve the teaching and learning of climate change education in the South African education system. Secondary school teachers will implement the change projects, with guidance and support from the school leadership team for the successful implementation of the projects. At the same time, teachers have the opportunity to form Professional Learning Communities (PLCs) to facilitate their professional development collaboratively. Key themes that run through the materials are gender equity, good governance, and social inclusion. The support sets provide stories, examples, tools and processes that can be used within the KIC:CCE Project by PLCs, the school leadership team and teachers.

#### VERSION 1 – September 2021

Reference: Vallabh, P. & Walsh, A. (2021).  
Set 3: Selecting your project. Support Sets  
for School Leadership Teams and Teachers.  
Keep It Cool: Climate Change Education  
Project. Flemish Association for Development  
Cooperation and Technical Assistance  
(VVOB), Pretoria.

Brooklyn Forum  
1st Floor, Lobby 1  
377 Veale Street & Fehrsen Street  
Pretoria 0181  
South Africa

First Edition, First Impression 2021

Enquiries: +27 (0)12 753 1135  
[www.vvob.org](http://www.vvob.org)  
<http://southafrica.vvob.org>

#### Copyright:

*This is an open educational resource. This resource can be reproduced and adapted for non-commercial research and educational purposes that are not-for-profit, provided the author and publisher VVOB are duly acknowledged.*

*Review team: Misser, S., Naidoo, N., Snyman, C., & Thomas, K.*

*Copy-editing: Angela Vogt. Original Cover Design: Francis Lotz, adapted by Leanne Burford, Nelson Sampaio. Pedagogic Graphic Design: Priya Vallabh. Layout: Nelson Sampaio.*

# ORIENTING TO THESE TEACHING SUPPORT RESOURCES

In Set 2, we looked at rooting your climate change project in your local context by exploring locally relevant matters of concern. Set 3 will focus on refining your project ideas and selecting a project. In this set, we provide a range of support tools to help you to think through your project selection process.

## SET MAP

### ORIENTING TO THE NATIONAL CURRICULUM

There are 8 sets in this Keep It Cool: Climate Change Education (KIC:CCE) project. The first set (What is a curriculum activated climate change project?) provides an overview, from which you can start thinking about your project. Each set shares examples of curriculum activated climate change projects intended to support you to integrate climate change education into your classroom. The inspirational stories provide possibilities that you can explore. What can you find out from the stories about possible projects, approaches, or partners?



The stories will reference topics and page numbers from CAPS. The theme of each set is shown by the picture.

## What will you find in the sets?

These sets are arranged into three key activity groups: IMAGINING POSSIBILITIES, FINDING OUT, TRYING OUT.

**Curriculum links / Project ideas/ Inspirational stories/ 'How to' guide**



Working together with a team of people will make the task of selecting your project easier. Consider including other teachers, learners, and community members in your planning.



# IMAGINING POSSIBILITIES

## THE SWAYIMANE PROJECT – SCIENCE USED FOR THE PEOPLE

The Swayimane School in uMngeni, KwaZulu-Natal has implemented an exciting project to reduce death or harm caused by lightning strikes, and as part of their weather monitoring system. The project contributes to strengthening climate resilience in their community.



Swayimane: An exciting climate change project for learners, the school, the community



Stakeholders in the uMngeni Resilience Project (URP) at Swayimane High School, KwaZulu-Natal From Christine Cuénod, UKZN, 2019.

### PARTNERSHIPS

Using *Science*  
Indigenous  
Knowledge

Teachers link the  
project to CAPS

Skills Development  
for Youth



Approximately 200 people die from lightning strikes in South Africa each year. Many more are harmed when struck by lightning.

The school is part of a wider network of partnerships in the area, and works together with many other organisations and communities to strengthen climate resilience and reduce vulnerability. They collaborate with different organisations and groups to make changes in the local context.

### What is climate resilience?

Climate resilience is the ability to anticipate, prepare for, and respond to socio-ecologic threats caused by climate change.

## Project partners

The school works in a network with many other partners.

Each partner takes on a different role, depending on their skills and resources.

Teachers work with learners to understand climate change, and to learn about the weather monitoring station.

The automated weather station collects data that university researchers use to inform planning, and to support sustainable farming practices in the area.

Other partners help to provide climate resilient infrastructure and equipment such as a 'lightning warning system'. This system includes sirens and flashing lights that warn communities, learners, and farmers when there is lightning strike danger.

Farmers work to integrate indigenous farming methods, and support youth to learn about sustainable farming methods too.

# Valuing indigenous knowledge

The URP includes research into indigenous knowledge about the environment, climate, and crops. See the strong call for respect for, and use of, indigenous knowledge together with science, with regard to climate change:

Swayimane High School Principal Mr Mkhizwana Dlamini says:

The school feels empowered by the URP project on our grounds.

Teachers can use the Swayimane story in the classroom to look for examples in their local area where elders use indigenous knowledge in understanding weather, agriculture, the soil, and water. The phenomena of weather and lightning can be linked to the topics of interactions and interdependence in the environment (Grade 8 NS); and sustainable farming practices link to required attitudes and values in Geography. These are only some examples. Can you think of more ways to apply the learning gleaned from the story in your teaching and learning practice?

Find out more about the project at:

<https://caes.ukzn.ac.za/news/umngeni-resilience-project-installs-lightning-warning-system-at-swayimana-school/>

Natural Sciences SP, Gr.7-9, 2011: Indigenous knowledge (CAPS pp.5, 8-10, 13, 16, 34, & 45);

The Greenhouse Effect (CAPS pp.15 & 82);

Climate change (CAPS p.82)

Topics covered in CAPS as follows: Geography FET, Gr 10-12, 2011: Indigenous knowledge (CAPS, pp.5 & 60); Climate change (CAPS, p.21); The Greenhouse Effect (CAPS p.21); Geography's Big Ideas (CAPS, p.8); Geographical skills (CAPS, p.9); Heating of the atmosphere (CAPS pp.13, 17, 21, & 30); Sustainability (CAPS pp.9, 12, 14, 17, 34, & 36)

## Key partners

South African National Biodiversity Institute (SANBI)

uMngeni Resilience Project

South African Local Government Association (SALGA)

University of KwaZulu-Natal



# FINDING OUT



See below for steps that you can follow to help you to choose a curriculum activated climate change project – first of all, by exploring a matter of concern.

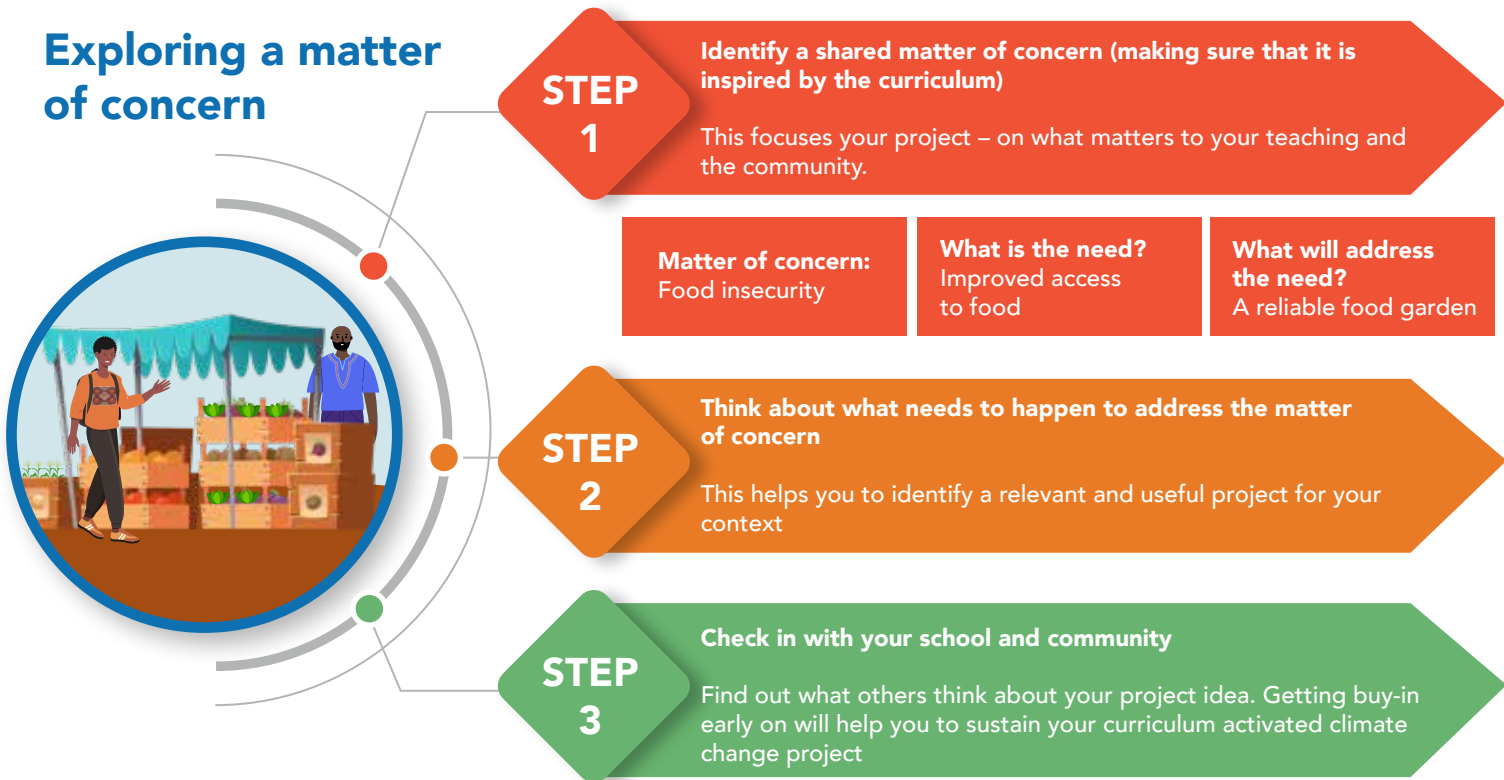
Exploring a matter of concern

Aligning your project focus with values, needs, and available resources

Clarifying focus

## CHOOSING A CURRICULUM ACTIVATED CLIMATE CHANGE PROJECT

### Exploring a matter of concern



**Result: You may now have 3 possibilities for your project**

### ALIGNING YOUR PROJECT FOCUS WITH VALUES, NEEDS, AND AVAILABLE RESOURCES

Use these questions to help you to clarify which of the three possible curriculum activated climate change projects seems to align best with your values, needs and the available resources. This would be a useful exercise to do together with: your learners, other teachers, and interested members of your community. Remember to keep CLIMATE CHANGE at the centre of all your discussions. You may want to use a large piece of newspaper paper for this process.



#### STEP 1

Start by writing CLIMATE CHANGE in large letters across the top of the page

#### STEP 2

At the bottom of the page, draw three blocks - one for each of three project ideas

#### STEP 3

Use the activities in this lesson set to help you to clarify a relevant and useful curriculum activated climate change project that you can implement

WHAT

#### WHAT DO WE VALUE?

What is important to you, your learners, your school and your community? (Your values) What are your values linked to teaching and learning? What are your environmental values? What are the shared values in your school and community?

WHY

#### WHAT DO WE NEED?

What do your learners, your school and your community need? How do they link to climate change-related matters of concern in your community?

WHEN

#### WHICH RESOURCES ARE AVAILABLE?

Which resources do you have available? Time, materials, skills, knowledge, networks, other people, space?

WHERE

HOW

**Result: You may now have a clearer idea of which project option is more feasible.**

# TRYING OUT

## PROJECT SUPPORT TOOL: CLARIFYING YOUR PROJECT FOCUS

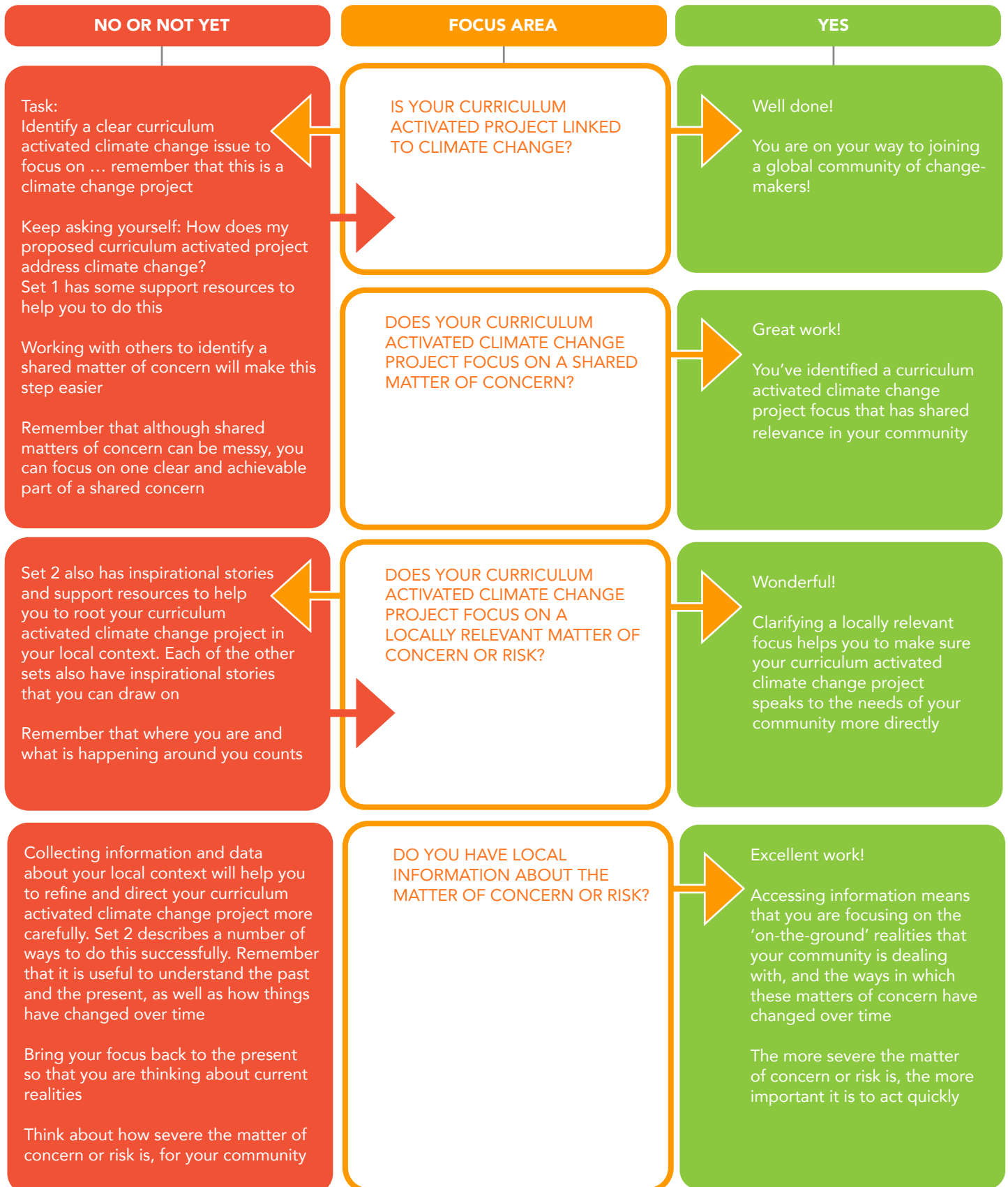
Use this flow chart to help you to clarify your project focus and ensure that your project is relevant to your school, community and curriculum context. The 'traffic light' flow means that you need to work on each focus area until you get the 'green light' to move to the next question.

**KEY:**

**Red** The answer is 'No' or 'Not yet'

**Orange** Focus area that you need to clarify before moving on

**Green** Yes! Now you can move on to the next focus area



**NO OR NOT YET**

**FOCUS AREA**

**YES**

Working with others helps to strengthen ongoing support and buy-in from your community

Set 5 has some ideas for how you can do this

You can also look at the inspirational stories in each of the lesson sets

ARE THERE OPPORTUNITIES TO INCLUDE YOUR COMMUNITY IN YOUR CURRICULUM ACTIVATED CLIMATE CHANGE PROJECT?

Keep going! You're doing great!

Working together is good for everyone. It makes your curriculum activated climate change project more sustainable and more meaningful to your community

Collaborating with other organisations means you increase your access to more skills and resources

You also gain access to networks of people who share your concerns and can support you with your curriculum activated climate change project implementation

Set 5 offers some ideas for connecting with different partners, to get you started

HAVE YOU IDENTIFIED NGOS, COMMUNITY GROUPS AND OTHER PROJECT PARTNERS ALREADY WORKING ON THIS MATTER OF CONCERN OR RISK?

Power to the people!

You are now part of a global network of people who care about climate change, and who are working to improve their communities

Your project should help you to do your job as a teacher

There are many opportunities to learn about climate change in the CAPS curriculum

Identifying them early on helps you to keep your climate change project curriculum activated

The beginning of each set book includes curriculum links for you

Take some time now to identify the curriculum links you are focusing on

DOES YOUR CLIMATE CHANGE PROJECT ALIGN WITH THE CAPS CURRICULUM?

Teaching the nation ... teaching your community!

Taking care of teaching and learning is your core work. Well done on making clear links and using your professional expertise to guide your curriculum activated climate change project

To plan your way forward, you need to know where you are going

Ask yourself ... "What do I hope to achieve? What is my goal for this project?"

Take time now to identify an overall outcome, and 3-5 core goals

Keep your goals practical and achievable - remember that every contribution helps to create a more sustainable and safe world

DOES YOUR CURRICULUM ACTIVATED CLIMATE CHANGE PROJECT HAVE A CLEAR GOAL OR OUTCOME?

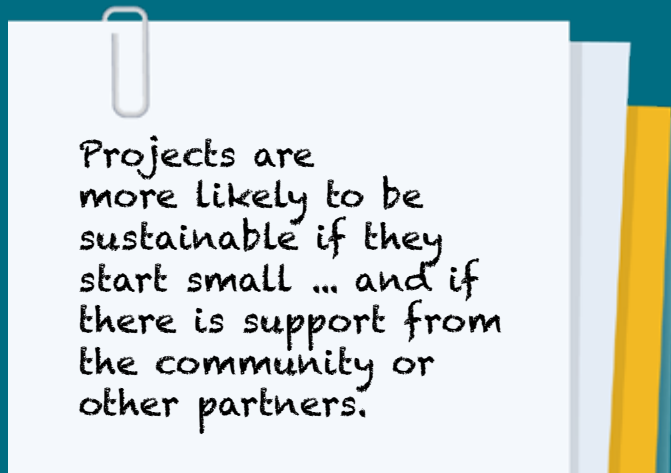
Ready! Set! Go!

Now that you have a clear direction, you can begin to plan your way forward



NO OR NOT YET	FOCUS AREA	YES
<p>Keep your ideas practical and do-able</p> <p>Small, achievable changes on the ground will make a big difference, and help you to stay motivated</p> <p>Review your goals and plans. Can you break them up into smaller steps?</p> <p>Are there some goals that are aspirational? (And that will need collaboration and more support?)</p> <p>Identify a range of small, achievable goals, and one aspirational goal</p>	<p>IS YOUR CURRICULUM ACTIVATED CLIMATE CHANGE PROJECT PRACTICAL TO SET UP? IS IT ACHIEVABLE?</p>	<p>Well done on caring about real change!</p> <p>Being practical means that you have a stronger possibility for real change that you can see on the ground. If your curriculum activated climate change project is practical and achievable, it is more likely to be sustainable</p> <p>Also, by drawing on support – from the school, the community or other organisations – this can help to ensure sustainability</p> <p>You will not be alone!</p>
<p>Try writing down three clear benefits of your project</p> <p>Remember that you don't have to change the entire world all at once. You just need to make your contribution in the best way you can</p>	<p>CAN YOU CLEARLY DESCRIBE HOW YOUR SCHOOL AND COMMUNITY WILL BENEFIT FROM YOUR CURRICULUM ACTIVATED CLIMATE CHANGE PROJECT?</p>	<p>Outstanding!</p> <p>Being able to describe the benefits of your project means that you can motivate others to join you, and share your work with others more easily</p>
<p>Thinking about measuring and reporting at the start of a curriculum activated climate change project helps you to collect information as you go along. It makes reporting much easier in the end</p> <p>How will you know that you are achieving your goals?</p>	<p>HAVE YOU THOUGHT ABOUT HOW TO MEASURE AND REPORT ON THE CHANGES YOU ACHIEVE IN YOUR CURRICULUM ACTIVATED CLIMATE CHANGE PROJECT?</p>	<p>Excellent work!</p> <p>You are well on your way to designing a useful, relevant and practical curriculum activated climate change project!</p>

**Result: You may now have a clear idea of the most appropriate project option.**



Reflecting on the suggested selection process:

How useful were the processes offered in this set for you? Were you able to clarify and refine your project focus?

Have you selected your project?

If not, perhaps you need to get support to help you. Set 5 has ideas about where you can find support.

# WHAT HAS BEEN COVERED IN THIS SET?

This set provides tools and a process to help you to select a curriculum activated climate change project.



## The 'IMAGINING POSSIBILITIES' story

Provides an example of a curriculum activated climate change project

## The 'FINDING OUT' and 'TRYING OUT' processes support you to:

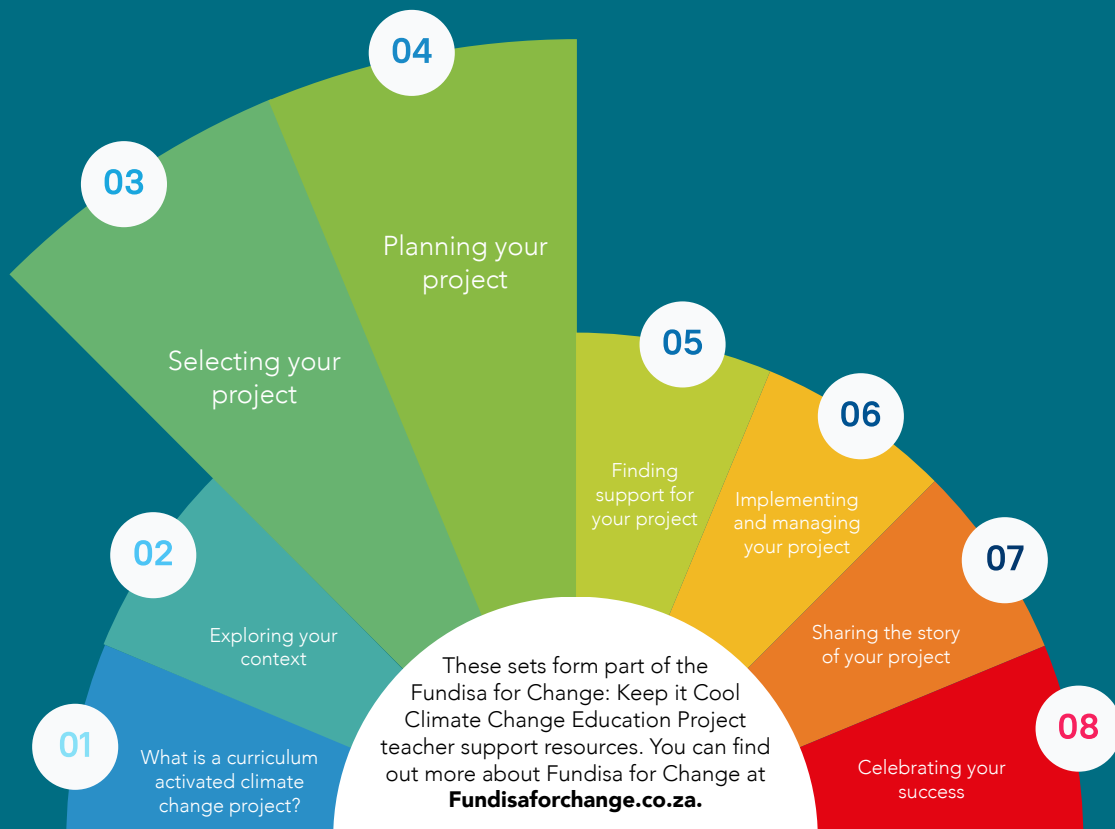
- Clarify and refine your project focus
- Assess risks and opportunities
- Select your project
- Strengthen the potential of your project



If you are not sure about which curriculum activated climate change project you could start, you could choose to work through Sets 1, 2 or 3 again to clarify your thinking. Or you might choose to refer to set 5, which is about finding support for your project. You might find useful suggestions about where you can find support in that set. A third possibility is that you could ask colleagues or other school stakeholders to work through options with you.

**By working through this set, you are able to choose your curriculum activated climate change project using a range of support tools. You now have a project to focus on through the rest of these sets.**

The next set looks at planning your curriculum activated climate change project:



# REFERENCES

Brundrit, S. 2014. Teaching Climate Change. (Natural Sciences). Fundisa for Change Programme. Environmental Learning Research Centre, Rhodes University, Grahamstown.

CSIR. 2019. The Green Book: Adapting South African settlements to climate change. Available at: <https://greenbook.co.za/>

Department of Basic Education. 2011. Curriculum and Assessment Policy Statement (CAPS) Further Education and Training Grades 10-12, Geography. At: <https://www.education.gov.za>

Department of Basic Education. 2011. Curriculum and Assessment Policy Statements (CAPS) Senior Phase Grades 7-9, Natural Sciences. At: <https://www.education.gov.za>

Rosenberg, E. 2009. Teacher Education Workbook for Environment and Sustainability Education. Rhodes University Environmental Education and Sustainability Unit, Grahamstown. Distributed through Share-Net, Howick. Available at: <https://ibali.uct.ac.za/s/ccse/page/welcome>

Vogel, C., Misser, S. & Vallabh, P. 2013. Teaching Climate Change. (Geography). Fundisa for Change Programme. Environmental Learning Research Centre, Rhodes University, Grahamstown.

## Another resource for you:

The KIC: Climate Change Education Project has developed an extensive digital library of materials for all KIC partners.

**What** is in the resource? Open Educational Resources (OER's) that focus on teaching and learning about climate change and sustainability

**When** will you be able to access it? The website is live

**How** can you access the resource? <https://ibali.uct.ac.za/s/ccse/page/welcome>

**How** can the resource be used? Its primary purpose is to provide the teaching community (from primary, through to teacher educators) with relevant text and media resources to enhance their teaching practices and courses. You can do general searches by main categories such as climate change topic, foregrounded approach, or target audience. Each general category is then broken down into subtopics to help you find your areas of interest

You will be able to add interesting materials that you generate or find!

If you would like more information about curriculum focused, transformative learning, and transformative teaching and learning methods, then look at the Fundisa for Change core resources. You can download them from the Fundisa for Change website.

<https://fundisaforchange.co.za>





## basic education

Department:  
Basic Education  
REPUBLIC OF SOUTH AFRICA



## forestry, fisheries & the environment

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA



UNIVERSITY OF  
ZULULAND



University of Fort Hare  
*Together in Excellence*



RHODES UNIVERSITY  
*Where leaders learn*



University of Venda



UNIVERSITY OF  
KWAZULU-NATAL™  
INYUVESI  
YAKWAZULU-NATALI



*casme*

CENTRE FOR THE ADVANCEMENT OF SCIENCE AND MATHEMATICS EDUCATION



WESSA

PEOPLE CARING FOR THE EARTH



Biodiversity for Life

South African National Biodiversity Institute

+27 (0)12 753 1135 • <http://southafrica.vvob.org> • [www.vvob.org](http://www.vvob.org)