

CREATE4 ADELAIDE

WELCOME TO CREATE4ADELAIDE!

Create4Adelaide is a year-long journey inviting you to take creative action to tackle climate change in South Australia. In March, 2,000 of your classmates voted on the top three climate change priorities. Now, it is your turn to take action!

According to a study led by the University of Bath (UK), 3 in 4 young Australian people experience anxiety about the future. They claim they are not given the the voice they need in order to tackle the burning issue that is climate change. As an unprecedented democratic journey, Create4Adelaide was conceived to give you the much needed tools to make your voices heard.

This pack will help you learn about climate change in order to create powerful artworks. Your artwork should suggest how South Australia can address your chosen priority - leading to an idea for a campaign or a practical solution.

THIS PACK GIVES YOU :

ABOUT CREATE4ADELAIDE

WHAT IS **CLIMATE CHANGE?**

3 PRIORITIES





WHAT IS CLIMATE CHANGE?



WHAT IS CLIMATE CHANGE?

According to NASA, climate change is defined by "a long-term change in the average weather patterns that have come to define Earth's local, regional and global climates".

CLIMATE CHANGE OR GLOBAL WARMING? IT'S BOTH!

Climate change is one of the consequences of global warming. Human-led activites generate greenhouse gases, which cause the Earth's temperature to rise, leading to irreversible alterations to its energy.

Australia has warmed by 1°C in both air and sea temperature since 1910, with most of the warming occurring since 1950.



In Adelaide, the number of hot days per year is projected to increase from 20 to 26 per year by 2030.





Burning gases

Greenhouse gases include CO2, water vapour and methane. They are released into the atmosphere when fossil fuels, such as oil, coal and gas are burnt for energy. In excess, greenhouse gases trap the sun's heat, and cause the Earth's surface temperature to rise.



SO, WHAT ARE GREENHOUSE GASES?





greenhouse

Global warming



Climate change

MITIGATION VERSUS ADAPTATION

In order to deal with climate change, two strategies exist:

 \rightarrow mitigation means we **fight back**: we find ways to stop and reverse the effects of climate change

 \rightarrow adaptation means we **learn to live** with the new climate patterns and their consequences.



WHY DOES CLIMATE CHANGE OCCUR?

Human activities have significantly increased the emission of greenhouse gases into the atmosphere, through:

• EXCESS IN PRODUCTION **AND CONSUMPTION OF** RESOURCES

 \bigcirc 4 billion tonnes of food are produced every year, yet 33% of it is wasted.



In Australia, 70% of the food wasted every year is perfectly edible

 \bigcirc We burn fossil fuels for energy such as heat and electricity. These are non renewable sources of energy yet, they provide nearly 80% of the world's energy needs





There are more than 17 million cars in Australia, meaning more than 90% of households have one.

POOR ENVIRONMENTAL CHOICES:

 \bigcirc The use of fossil-fueled transportation,

 \bigcirc The production of polluting and non-recyclable materials, such as plastic.



Australians have been going through a recycling crisis in the past two years: in 2022, only 13% of the country's plastic was recycled, the rest went to landfill!



THE IMPORTANCE **OF COUNTRY**

Aboriginal and Torres Strait Islander peoples are facing the loss of sacred country, culture and rights to make decisions that <u>affect this land</u>. They are intimately connected to Country and have knowledge and cultural practices that should be centred in the fight against climate change.

Climate change is an issue of environmental and social justice. It is an issue that affects everybody, but the impacts are not evenly distributed. Australia has among the world's highest greenhouse gas emissions per person, and despite Indigenous Peoples in Australia contributing the least emissions, <u>reporting from Lowitja Institute</u> has shown that they are among those most affected by the consequences.

You can learn more by engaging with <u>Seed Mob</u>, Australia's first Indigenous youth led climate network.

"COUNTRY IS MORE THAN A LANDSCAPE : IT IS A LIVING ENTITY WITH A YESTERDAY, A TODAY AND A TOMORROW, WITH A CONSCIOUSNESS, AND A WILL TOWARD LIFE."

CLIMATE CHANGE IS A **POLITICAL ISSUE: THE PATHWAY TO SOLVING IT MUST INVOLVE INDIGENOUS** ACTORS

• The climate issue is embedded in Australia's colonial past: it is necessary to find "two-way" solutions, where both Western and Aboriginal science are summoned.



6.2% of those affected by the 2022 floods in regional areas outside Sydney were Aboriginal and Torres Strait Islander people, despite making up just 3.3% of the general population.



Darwin

 HOW CAN WE TAKE INSPIRATION FROM THE INDIGENOUS **TO HEAL** COMMUNITIES **COUNTRY?**

Indigenous fire management methods used in North Australia (low intensity burning early in the dry season to reduce grass fuel) greatly reduced the scale of destruction caused by the 2019 fires.

Dubbo 15.4% Sydney 1.3%

PRORTES





#1 EXTINCTION OF ANIMALS AND PLANTS

Animals and plants are threatened by Earth's growing population. In consumerist societies guided by principles of capitalism, humans have been taught to use nature's resources in destructive ways. We are currently experiencing the sixth mass extinction of animals and plants.

WHAT IS EXTINCTION?

Extinction occurs when species of animals or plants are diminished, due to environmental forces or because of evolutionary changes in their members.

Lonesome George, died in 2012

EXTINCT IN THE WILD:

ENDANGERED:

Blue Whale

South China Tiger



NEAR THREATENED: Zebra



WHAT CAUSES EXTINCTION OF WILDLIFE?

○ Damaging farming and agricultural practices:



 → The use of pesticides pollutes the air, and intensive grazing damages soils;



 \rightarrow Deforestation, which destruct habitats for animals and plants;

→ Overharvesting and overfishing,
which reduce sizes, genetics and
diversity of species.

 In Australia, the introduction of new species into the ecosystem
when Europeans settled in the
1700s created an imbalance with
the continent's native species.



→ Predation led by the red fox and the feral cat has proven to be extremely destructive

○ Greenhouse gases emitted by human practices:



ightarrow Although plants need CO2 to thrive, too much of it is damaging for them and won't make them "grow faster", if the soils and water are damaged.



→ Extreme weather events damage natural habitats, destroying the home of animals and plants The "Black Summer" of bushfires killed or displaced an estimated 3 billion animals: 60 000 of them were koalas. This is more than the population of Tasmania!



#1) EXTINCTION OF ANIMALS AND PLANTS

CONSEQUENCES

Most endangered **animals** in Australia:



Numbat



Gouldian finch



Mountain pygmy-possum



Orangebellied parrot



Koala (especially vulnerable after the 2019-20 bushfires)

> 533 animal and 1,385 plant species are currently listed as **Endangered or Critically** Endangered



Plants:

Certain plants are particularly endangered after the Black Summer bushfires. Rainforests are important ecosystems which thrive in moist environments.



"AUSTRALIA HAS LOST MORE MAMMAL SPECIES THAN ANY OTHER CONTINENT"

 \rightarrow rainforests cover only about 0.3% of Australia, yet they contain about 50% of all Australian plant families and about 30% of Australia's mammal and bird species.

Seas:

The condition of the 8,000 kilometres of the Great Barrier Reef that runs from Brisbane to Perth is in danger, which is equivalent to twice the distance between Australia and New Zealand.

WHAT IS SA DOING?

 \rightarrow Fight for the Reef campaign: an initiative led by WWF and the Australian Marine Conservation Society to raise awareness of the major threats to the reef

 \rightarrow Dana and Sam Mitchel founded the Kangaroo Island Koala and Wildlife Rescue Centre in response to the fires. They have been on the frontline of the wildlife rescue and rehabilitation effort, as close to 800 bushfire-impacted animals have come through their gates for care.



EXTINCTION OF #1 **ANIMALS AND PLANTS**

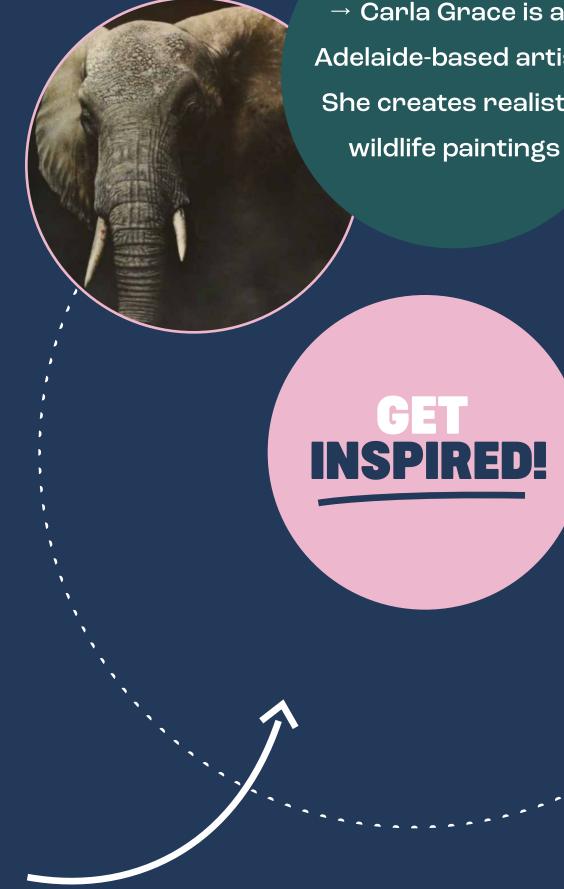
HOW CAN YOU TAKE ACTION?

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 \rightarrow MAKE SURE YOUR PETS, **ESPECIALLY YOUR CATS, ARE NOT DAMAGING THE NATIVE** ECOSYSTEMS;

-> JOIN A LOCAL BRIGADE TO **PARTICIPATE IN MAKING A CENSUS OF ENDANGERED ANIMALS.**

-> FIND OUT WHAT FAUNA AND **FLORA ARE ENDANGERED NEAR** YOU: www.threatened.org.au/



 \rightarrow Carla Grace is an Adelaide-based artist. She creates realistic



-> WHICH ENDANGERED **ANIMAL IS DEAREST TO YOU? DRAW A PICTURE OF IT!**

→ GO TO THE BOTANICAL **GARDENS AND GET CREATIVE ABOUT ENDANGERED PLANTS!**



 \rightarrow CREATE A SHORT FILM ON **AN ENDANGERED ANIMAL** THAT LIVES NEAR YOU.





#2) EXTREME WEATHER EVENTS (BUSHFIRES, FLOODS, DROUGHTS)

Extreme weather events are the ways in which climate change expresses itself. The occurrence of extreme events has nearly doubled over the past decades.

IT ALL COMES DOWN TO WATER.

When temperatures rise on Earth, more water is evaporated from the sea. This leads to dry weather conditions, which increases the risk of droughts and bushfires. The evaporated water is stocked in the atmosphere through moisture. The more water there is, the more intense the rainfall will be, which can then lead to floods.

More heat from sun causes greater evaporation

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More moisture forms clouds



Droughts:

A drought is an extended period of unusually dry weather and low precipitation for a region This threatens the water supply, which then impacts agriculture as well as the basic needs of populations.



A flood is an overflow of a large amount of water beyond its normal limit. In urban areas, flooding often occurs because of the lack of infrastructure put in place to drain excess water caused by rainfall.



Bushfires:

A bushfire is a fire in <u>scrub</u> or a forest, especially one that spreads rapidly. In areas with a lot of vegetation, dried out trees become the perfect source of fuel for fires, making them extremely difficult to put out.

> The 2019-2020 bushfires burned more than 46 million acres in New South Wales, which is equivalent to more than 15 times the size of Sydney area.

In 2022 Cabbage Tree Island was completely flooded, and its inhabitants were evacuated: a traumatic experience for the Indigenous communities in particular, who now feel displaced and out of country.

In SA, surface water level in the swamp will fall by up to 1 metre by 2030.

3 Heavier rain

#2) EXTREME WEATHER EVENTS (BUSHFIRES, FLOODS, DROUGHTS)

WHAT IS SA DOING?

As a way of mitigating the effects of greenhouse gases, South Australia is actively reducing its emissions, and has two main goals:

 \bigcirc 50% reduction on greenhouse gas emissions by 2030; \bigcirc achieving net zero emissions by 2050.

 \rightarrow During the bushfires, many local artists came together to host charity concerts, where all proceeds went towards bushfire relief.

HOW CAN YOU TAKE ACTION?

PARTICIPATE IN REGREENING ACTIONS BY PLANTING OR GROWING A GARDEN

PROMOTE THE CONSUMPTION OF LOCALLY-GROWN FOOD

ORGANISE EVENTS AT SCHOOL THAT PROMOTE CLIMATE CHANGE AWARENESS

CONCERT

INSPIRED

→ In 2020, 100 artists across the world and Australia used charcoal left behind from the Black Summer bushfires in Australia to create empowering pieces of art.

→ CREATE AN ARTWORK INSPIRED **BY SCHOOL STRIKE 4 CLIMATE:** WHAT WOULD YOUR SLOGAN BE?

→ CREATE A SHORT DOCUMENTARY **ON THE IMPACTS OF BUSHFIRES/ DROUGHTS/FLOODS. INTERVIEW YOUR NEIGHBOURS, YOUR FRIENDS, YOUR FAMILIES TO GET TESTIMONIES.**

-> WHAT ARE SOME WORDS THAT COME **TO YOU WHEN THINKING ABOUT EXTREME** WEATHER EVENTS, AND HOW THEY HAVE **IMPACTED YOU? WRITE THESE WORDS** DOWN, AND SEE IF YOU CAN MAKE THEM INTO A POEM. YOU CAN THEN TURN THIS **POEM INTO A SONG!**



#3 POLLUTION OF OUR AIR AND WATERWAYS

WHAT IS POLLUTION?

Pollution is the introduction of harmful materials into the environment.

We breathe in 11,000 litres of air a day. The more polluted the air is, the more we take in dangerous chemicals into our lungs. People living in higherdensity polluted areas may deal with dangerous short and longterm effects resulting from being exposed to pollution.



Air pollution: When abnormal substances enter the air we breathe, through:

- Burning fossil fuels for industrial practices
- cars

In 2021, China released 11 billion metric tons of CO2 into the atmosphere, making it by far the world's largest polluter. This is equivalent to more than 20 times the mass of all the people in the world combined.

Although Australia is vulnerable to short-term pollution spikes due to extreme weather events such as bushfires and dust storms, its air quality is usually amongst the cleanest in the world.

WHAT ARE THE CAUSES?

- Using motor vehicles such as

Water pollution:

When dangerous substances enter the water, like plastic, which never fully decomposes and can be a choking hazard for many marine animals

> Microplastics (any type of plastic less than 5 mm in length), are in the air we breathe, the tap water we drink, and the food we eat: "on average, we ingest about one credit card's worth of plastic a week, according to 2019 Australian analysis."

Every 60 seconds, we dump the equivalent of one garbage truck straight into the ocean. This could mean there will be more plastic than fish in the world's oceans by weight in 2050.

> An estimated 1 000 turtles die each year due to plastic ingestion.

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#3) POLLUTION OF OUR **AIR AND WATERWAYS** WHAT IS SA DOING?

South Australia was the first state in the country to ban single-use plastic as of March 1st, 2021.

HOW CAN YOU TAKE ACTION?

→ PARTICIPATE IN BEACH **CLEANUPS**

→ USE GREEN TRANSPORTS: **GET TO SCHOOL BY BIKE/ SCOOTER/SKATEBOARD, OR BY PUBLIC TRANSPORT**

-> THINK ABOUT HOW YOU **COULD UPCYCLE THE CLOTHES YOU WANT TO GET RID OF: A PAIR OF TROUSERS COULD BECOME SHORTS, A DRESS CAN BE MADE INTO A TOP!**

 \rightarrow The Australian artist **Barefooted Welder creates** life-size metal sculptures of creatures, using discarded metal he picks up in landfills.

INSPIRED

Since 2015 he has collected over 7 tonnes of scrap metal, including steel, copper, and aluminium.

-> CREATE AN ARTWORK USING **ITEMS PICKED UP FROM THE BEACH CLEANUPS**

-> CREATE AN ARTWORK THAT CAN **BE EXHIBITED NEAR A RIVER OR BEACH, WHICH ENCOURAGES PEOPLE TO STOP POLLUTING THE WATER.**

→ TURN OLD CLOTHES INTO **AN ARTISTIC ITEM OF CLOTHING:** CUT OUT FABRIC, SEW, MAKE IT YOUR OWN!















