### MAURO SPICCI TIMOTHY ALAN SHAW



# CLIMATE ACTION **#NATURE** # FOOTPRINT # MIGRATION **EDUCATION** # ACTIVISM # SOCIAL MEDIA # DEMOCRACY WELL-BEING # LAW & JUSTICE # JOBS # INNOVATION #TECHNOLOGY & A #YOUTH **# OCEANS & WATER** \* Agenda 2030 \* Life skills for the future \* Digital competence \* INVALSI practice

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# **Climate Action**







Sea level rise

30-60 cm by 2100

#### **OUR WINDOW TO AVOID CLIMATE CATASTROPHE IS CLOSING RAPIDLY**

Different temperature scenarios for coral reefs

1.5°C scenario 2°C scenario

70%-90% gone Die off completely









**SEA LEVEL RISE** 



Drought estimated to displace 700 million people by 2030



**DROUGHTS** 

Medium- to large-scale disasters will increase 40% from 2015 to 2030



**DISASTERS** 

**CORAL REEFS** 

**ENERGY RELATED** CO, EMISSIONS **INCREASED** 

6% in 2021 reaching highest level ever



**CLIMATE FINANCE** 

falls short of \$100 billion yearly commitment





**RISING GLOBAL TEMPERATURES** continue unabated. leading to **MORE EXTREME** WEATHER

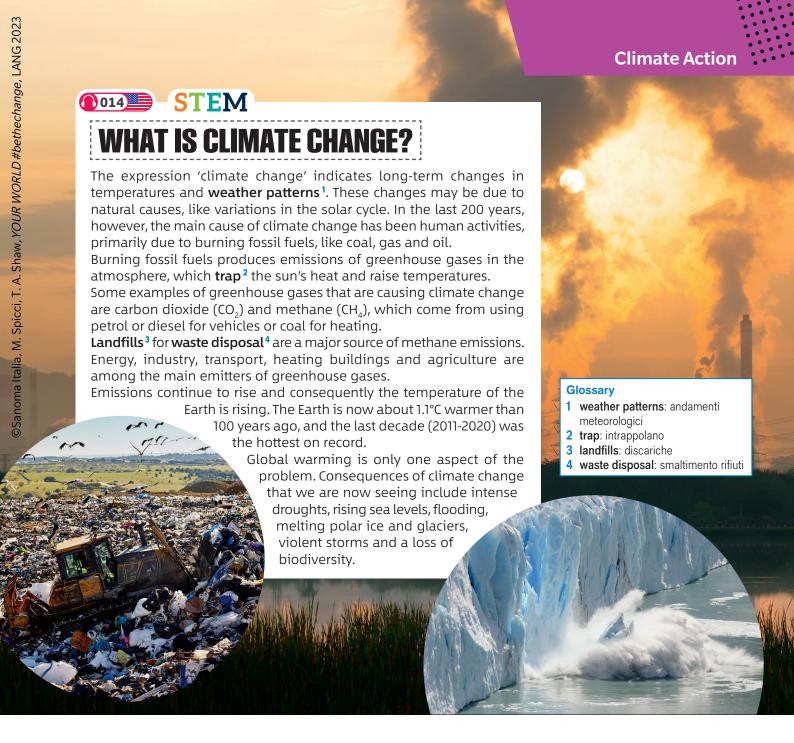


### Look at the infographic and answer the questions.

- 1 What will happen to coral reefs if temperatures rise up to 2°C?
- 2 What will happen to people if we do not fight climate change?
- **3** What effect are rising global temperatures having?
- 2 VOCABULARY Match the English words with their Italian equivalents.
  - 1 reef
- a senza sosta
- **2** drought
- **b** barriera
- 3 unabated
- **c** spostare
- 4 displace
- d siccità







- **3 READING** Read the text and say if the following statements are True (T) or False (F). Correct the false ones.
  - 1 In the last 200 years human activities have contributed to climate change.
  - 2 Greenhouse gases in the atmosphere stop the sun's rays from reaching the Earth's surface.
  - 3 Carbon dioxide and methane are important examples of greenhouse gases.
  - 4 Our planet experienced its hottest temperatures during the Industrial Revolution.
- 4 ANALYSIS & INTERPRETATION Answer the following questions.
  - 1 What examples of fossil fuels do we find in the article?
  - 2 Which activities produce significant quantities of greenhouse gases?
  - 3 What data suggest that global warming is becoming more problematic?
  - 4 What examples of extreme weather conditions are mentioned in the article?

TF

### **EXPLORE THE TOPIC**



## O15 STEM

## What are the effects of climate change?

As greenhouse gases in the atmosphere increase, the global temperature rises. Higher temperatures cause heat-related health problems and make it more difficult to work outside. **Wildfires**<sup>1</sup> spread rapidly in hotter conditions.

Destructive storms have become more frequent and intense in many regions. In tropical regions the warming oceans lead to cyclones, hurricanes and typhoons, which often destroy homes and communities, causing deaths and huge economic losses.

Global warming is changing the availability of water. In many regions long periods of drought mean there is not enough water to irrigate **crops**<sup>2</sup>; this means less food is produced and more people suffer hunger. Oceans and seas absorb most of the heat from global warming.

As oceans warm, their volume increases. Melting ice sheets also cause

sea levels to rise, endangering islands

and coastal communities. The oceans also absorb carbon dioxide, keeping it from the atmosphere. But carbon dioxide makes the oceans more acidic, which threatens marine life and coral reefs.

Climate change threatens the survival of species on land and in the oceans: one million species are at risk of extinction within the next few decades. Climate change and extreme weather phenomena are leading to a rise in hunger and poor nutrition. Heat stress can reduce the availability of water and **grasslands**<sup>3</sup>, affecting both crops and **livestock**<sup>4</sup>.

Climate change is having a devastating impact on health, through air pollution, disease, extreme weather conditions, hunger and shortage of water. Every year, environmental factors are responsible for the death of around 13 million people. Climate change increases the factors that lead

to poverty: floods can sweep away urban slums<sup>5</sup>, while water scarcity affects crops. Over the past decade, weather-related events have displaced about 23 million people every year and left many more vulnerable to poverty.





- 1 wildfires: incendi boschivi
- 2 crops: coltivazioni
- **3** grasslands: pascoli
- 4 livestock: bestiame
- 5 slums: baraccopoli



## **READING** Read Text 1 and match the numbers (1-4) with the letters (a-d) to form four correct statements.

1	In tropical regions the warming	а	a lack of food and hunger.
	oceans cause		
2	Long periods of drought cause	k	the death of around 13 million people every year.
3	Environmental problems cause	c	the displacement of about 23 million people every year.
4	In the last decade weather-related events have caused	C	d destructive cyclones, hurricanes and typhoons.

### 2 ANALYSIS & INTERPRETATION Answer the following questions.

- 1 What negative effects can be seen in seas and oceans?
- 2 What impact is global warming having on food production and famine?
- **3** What two numbers indicate devastating consequences for people?



## 2 COP26 and COP27: together for our planet

The 26<sup>th</sup> United Nations Climate Change Conference, known simply as COP26, was held in 2021 in Glasgow, Scotland, attended by 120 world leaders and over 40,000 registered participants. For two weeks the world focused on all aspects of climate change, but the conference produced a lot of talk and not very much concrete action. Countries confirmed the Paris Agreement of 2015, which aimed to limit the increase in global temperature to well below 2°C above pre-industrial levels.

They recognised the urgent need for action in this 'critical decade'. Carbon dioxide emissions must be reduced by 45% to reach net zero by the middle of the century, but current action plans are failing to achieve the targets set in Paris. Many participants were critical of nations that are not taking serious action to tackle the issue of fossil fuels, accusing their governments of moving from agreements to eliminate to promises to reduce their use of coal and other fossil fuels.

Developed countries were criticised for failing to respect their promise to contribute US\$100 billion a year to assist developing countries. The Glasgow Pact called on rich nations to double their financial support to help poorer nations adapt to the impacts of climate change.



The 27<sup>th</sup> conference (COP27) held in November 2022 in Sharm-el-Sheikh was, of course, conditioned by the energy crisis and the uncertainty caused by Russia's attempted invasion of Ukraine. As a result, fossil fuels could play a more important role in the solution to the energy

crisis in the coming years and the attempt to reduce the use of coal may fail. The world's efforts to combat climate change generally shifted from mitigation to adaptation. The only positive note was recognition of the moral obligation for developed countries to provide economic support to developing countries.

## 3 READING Read Text 2 and complete the following statements.

- 1 The COP26 Conference was held in ...... , Scotland.
- 2 The objective of the Paris Agreement of 2015 was to limit the ...... in to 2°C.
- 3 Countries want to achieve a reduction in ...... by 45%.
- **4** The Glasgow Pact asks rich nations to double their ...... to poorer nations.

## 4 ANALYSIS & INTERPRETATION Answer the following questions.

- 1 Would you describe the COP26 Conference as a success or a failure? What elements of the article justify your answer?
- **2** What does the so-called Glasgow Pact recognise?
- **3** Did the COP27 Conference offer reasons for optimism or pessimism?

#### COMPARING PERSPECTIVES Google "Eco-schools Global" and answer the following guestions.

- 1 How many 'Eco-Schools' are there in the world today?
- 2 In how many countries are 'Eco-Schools' present?
- 3 Do you have any similar initiatives in your school or community? Can you draw up your own 'eco-code'?
- 6 DEBATE Life Skills Debate the following 'motion' in two teams: Proposition team vs Opposition team.

"We believe that climate change is inevitable and that we can do little to prevent it without making unacceptable sacrifices to our lifestyle and economic security."

#### Consider your own ideas and experience. You might use some of these expressions:

impact on our environment • economic problems • need to evaluate priorities • short-term and long-term vision • tomorrow's children • truly global issue

## **◯** CULTURAL LINK





017

## **Saype** (1989-)

The French artist Saype is considered one of the most significant exponents of the contemporary 'Land Art' movement and a pioneer in using a technique called 'field painting'.

Saype's gigantic frescoes are drawn on grass and are visible from the sky: Saype uses the earth as his own **canvas**<sup>1</sup> to convey messages about sustainability, climate change, and collective action.

One of his most notable projects is *Beyond Walls*: based on the creation of a huge fresco representing a symbolic handshake, the project **aims to convey the idea**<sup>2</sup> that by 'working together' humans will be able to face and solve the most urgent issues that are affecting the contemporary world.

Saype uses only natural and biodegradable colours to paint his frescos, meaning that his artworks are ephemeral and intended to disappear quickly in nature.

#### Glossary

- 1 canvas: tela
- 2 aims to convey the idea: mira a trasmettere l'idea



# World issue CLIMATE ACTION IN RESPONSE TO COVID-19

As the Covid-19 pandemic comes under control, countries need to work to rebuild their economies. These recovery plans can and must include ways to build a sustainable, green economy, which will work for both people and the planet.

The UN Secretary-General has proposed six key actions that governments should take to rebuild their economies and societies in an eco-sustainable manner:

- 1 green transition: investments must accelerate the decarbonisation of all aspects of our economy;
- 2 green jobs and sustainable and inclusive growth;
- **3** green economy: making societies and people more resilient through a transition that is fair to all and leaves no one behind;
- 4 invest in sustainable solutions: fossil fuel subsidies must end and polluters must pay for their pollution;
- 5 confront all climate risks;
- 6 cooperation no country can succeed alone.



→ YouTube Watch the first 30 seconds of the video Saype: The Street Artist Who Paints Nature, in which the artist explains the main goal of his artworks.





#### **READING** Read all the texts and answer the following questions.

- 1 How would you define 'field painting'?
- 2 What does Saype's Beyond Walls represent?
- **3** What is its meaning?
- 4 What kind of transformation should countries promote to enhance sustainability?
- **5** Can countries promote sustainability working in isolation?



- 2 SPEAKING Life Skills Look at the picture above and discuss the following questions.
  - 1 What does Saype's graffiti represent?
  - 2 What kind of environmental issues do you think affect the area shown in the picture?
  - **3** What 'environmental message' does Saype's graffiti convey?
  - **4** If you were to give a title to this artwork, what title would you choose?
- 3 YouTube Watch the video Graffiti artist's giant creation on Stormont lawn BBC News NI. Then complete the following statements.
  - 1 Saype's graffiti at the Stormont estate is a sign of ......
  - 2 Saype's graffiti is part of a project called ......, whose aim is to show people the importance of solidarity and friendship 'beyond' ...... around the world.
  - **3** Saype's graffiti is environmentally friendly because he uses ...... colours, which are meant to fade away.



- 4 LISTENING 019 Listen to a journalist describing her meeting with the French artist Guillaume Legros, better known as Saype.
  - 1 What is the main goal of an artist's work according to Saype?
  - 2 How has the pandemic affected Saype's work?
  - **3** What message does *Beyond Crisis* convey?
  - **4** What is Saype's favourite museum?
- the sonnet Love in a Time of Climate Change written by Craig Santos Perez in 2017.
  Can you find any connections between these lines and Saype's artworks?
  Discuss in class.
  - Born in the Pacific Island of Guam, Craig Santos
    Perez is Assistant Professor in the English
    Department at the University of Hawai'i, Manoa.

### 6 #BETHECHANGE



Open www.designforchange.us, go to "Getting Started" and then to "Podcasts". Look for Environmental Issues and listen to some student-created podcasts on the subject.

Once you have become familiar with the format, create a podcast to tackle an urgent environmental issue of your choice and share it with your community.