

UNVEILING THE DIMENSIONS OF SCIENCE

Social, Historical, Cultural, and Ethical Perspectives

Science is more than facts and experiments; it's a dynamic interplay of social, historical, cultural, and ethical dimensions. Let's delve into the fascinating realms that shape the science we know!

Explore how societal values and norms influence scientific endeavours. From gender dynamics, Discover the social impact of science and how it shapes and is shaped by the world around us - from gender dynamics, societal values, media influence and community engagement.
The Social Dimensions of Scientific Knowledge



Journey through the history of science and witness the evolution of ideas and discoveries. Understand how past events and breakthroughs paved the way for today's scientific landscape.
The Big History of Modern Science



Dive into the diverse cultural influences on science. Learn how different cultures contribute to scientific knowledge and how science, in turn, impacts cultural perspectives - influences deriving from local language and social norms to the historical context and religion (*How Does Culture Influence Science?*) dilemmas they navigate in pursuing knowledge. (*How Ethics Can Help You Make Better Decisions*)



How does the public perceive science, and how does this perception influence scientific progress? Uncover the intricate relationship between science and public opinion.
Public and Scientists' Views on Science and Society



Uncover the ethical considerations in environmental science. Explore how science navigates the balance between progress and the preservation of our planet.
Environmental Ethics



What does the future hold for the social, historical, cultural, and ethical dimensions of science? Explore emerging trends and potential impacts on scientific exploration.
The Next Global Superpower Isn't Who You Think



Science is a dynamic tapestry woven with threads of societal, historical, cultural, and ethical dimensions. As we unravel these dimensions, we gain a richer understanding of the intricate and interconnected nature of scientific discovery



Breaking Barriers in STEM

Addressing the Gender Gap

Did you know? Women have historically been underrepresented in STEM fields (Science, Technology, Engineering, and Mathematics), but we're working to change that! Explore the gender gap in STEM and discover the initiatives driving positive change.



28%

THE GENDER GAP IN NUMBERS

Only 28% of STEM workers are women. Let's understand the statistics behind the gender gap and its implications for innovation and diversity. [Women in STEM Statistics](#)



CHALLENGING STEREOTYPES

Break down stereotypes and misconceptions about gender roles in STEM. Discover how diverse perspectives lead to more innovative solutions. [Women In Science](#)



EDUCATIONAL INITIATIVES

Learn about programs and initiatives encouraging girls and young women to pursue STEM education. Find out how education can bridge the gender gap. [The Gender Gap in STEM](#)



SUPPORT NETWORKS

Explore networks and communities that provide support and mentorship for women in STEM. Connect with others who share similar experiences. [Navigating Gender Equality in Science](#)



THE FUTURE OF STEM

Discover how addressing the gender gap benefits everyone. Learn about the positive impact of diversity on scientific breakthroughs and technological advancements. [For the Future of Women in Science, Look to the Past](#)



STAY INFORMED

Stay updated on the latest developments in gender equality in STEM. Follow reputable sources and organisations committed to promoting diversity. [Innovate. Demonstrate. Elevate. Advance. Sustain.](#)



Together, we can build a future where everyone, regardless of gender, has an equal opportunity to thrive in STEM. Join us in breaking barriers and creating a more inclusive world.



Empowering Women in STEM

through Public Engagement

Public engagement with science describes intentional, meaningful interactions that provide opportunities for mutual learning between scientists and the public. Mutual learning refers not just to acquiring knowledge but also to increased familiarity with a breadth of perspectives, frames, and worldviews.

STAGE
scientists and public engagement



01

VISIBILITY AND RECOGNITION:

Public engagement increases visibility, showcasing women scientists as role models. Explore the impact of visibility on recognition, breaking stereotypes and inspiring the next generation. [*Enhanced Visibility for Women and Women's Issues*](#)



02

NETWORKING OPPORTUNITIES:

Engaging with the public creates networking opportunities. Discover examples of such outreach opportunities leading to collaborations, mentorship, and a supportive professional network. [*Opportunities for Public Engagement*](#)



SKILL DEVELOPMENT:

Public engagement hones civic engagement and communication skills, it enhances confidence, fosters leadership, and facilitates interdisciplinary collaboration.



03

ADVOCACY FOR DIVERSITY:

Public platforms amplify recognition of the importance of multiple perspectives and domains of knowledge to scientific endeavours. Examples of such platforms include [*TED*](#), [*RSA*](#), [*Talks at Google*](#), and [*Big Think*](#).



04



05

COMMUNITY BUILDING:

Active involvement builds a sense of community. Discover how women scientists connect with the public, creating spaces for dialogue, shared experiences, and mutual support. [*Public Engagement with Science*](#)



06

CAREER ADVANCEMENT:

Public engagement is a powerful catalyst for advancing women's careers in science - it increases visibility, skills development, and networking opportunities.

Public engagement is a key driver for women in science, providing avenues for empowerment, recognition, and community building. Join the movement to amplify women's voices in STEM and shape a more inclusive scientific future.



Breaking Stereotypes

WOMEN EXCELLING IN STEM CAREERS

Let's challenge stereotypes and celebrate the incredible contributions of women in STEM. Explore the evidence that debunks common misconceptions about women's capacities in pursuing successful and impactful careers in science.



MYTHS

WOMEN ARE NOT SUITED FOR TECHNICAL ROLES IN STEM

Women lack the skills for complex scientific work

Women aren't as innovative as men in STEM

Women aren't interested in STEM.

MOTHERHOOD HINDERS A WOMAN'S CAREER IN STEM

Women lack leadership qualities in STEM

REALITY

Women excel in technical roles. Explore profiles of women making significant impacts in technical and engineering positions, debunking stereotypes about women's capabilities.

[Inspiring the next generation of female engineers](#)



REALITY

Women excel in complex scientific work. There are myriad examples of women who lead groundbreaking research and contribute significantly to advancements in various STEM disciplines.

REALITY

Women drive innovation in STEM. Explore examples of women pioneers whose innovative contributions have shaped scientific fields and industries.

[10 Great Inventions by Women](#)



REALITY

Women have always been passionate about STEM. Explore stories of women who found their passion and excelled in fields like physics, engineering, and technology.

[Women In Science](#)



REALITY

Motherhood and STEM careers can coexist. Effective support structures, flexible work arrangements, and advocacy break down barriers for mothers in science.

REALITY

Women possess strong leadership qualities. Learn about women scientists leading research teams, heading departments, and making significant contributions to STEM leadership.

[The Hidden Women of STEM](#)



IT'S TIME TO SHATTER STEREOTYPES AND EMBRACE THE REALITY OF WOMEN THRIVING IN STEM.

JOIN THE MOVEMENT TO RECOGNISE, CELEBRATE, AND SUPPORT WOMEN ON THEIR JOURNEY TO SUCCESS IN SCIENCE.



VISUAL ELEMENTS ENGAGING THE PUBLIC IN SCIENCE AFFAIRS

An educated society dedicated in protecting the planet



SOURCES

Images & graphs
see example

-
Presentations

-
Videos & animations
What if I told you...

-
TV shows

-
Augmented reality
& virtual reality
VR/AR Association

TARGET GROUP

Scientists

-
Science communicators
For more details click here

-
Students / pupils
see example

-
Public
*If you are interested in climate
change, you can visit COURSERA*

BARRIERS

Fake news
-
Language barriers

↓
Misinformation



BUILDING AN EDUCATED SOCIETY

Saving the planet for the generations to come

There is only one Earth



VISIT: *Volunteer Teaching in Africa*



NARRATIVE & STORYTELLING

principles

key story elements

STORYTELLING CAN EFFECTIVELY SUPPORT AWARENESS AND INTRIGUE IN RELATION TO CLIMATE CHANGE. The power of tangible and real-life stories can highly engage the public.

1

Which climate change story is the right?

TOPIC IDEAS

- *environment*
- *pollution*
- *global warming*
- *glaciers melting*

2

Who is the ideal speaker/narrator?

<ul style="list-style-type: none"> • SCIENTISTS: <i>Seas of plastic</i> <i>Capt. Charles Moore.</i> 		<p>Based on the capacity and background of your speaker the projected effect to your audience may differ - a scientist projects authority through his/her expertise, whereas a celebrity tends to charm the audience due to his/her high acceptance rates.</p>
<ul style="list-style-type: none"> • CELEBRITIES: <i>World food program</i> <i>Zlatan Ibrahimović</i> 		
<ul style="list-style-type: none"> • CROWD HERO <i>Thank you for the rain</i> 		

3

Which is your prospective audience?



4

Connect with audience

Story must be substantiated and credible

BANG

Enjoy the story!

Use the active *maps*

Local stories on the global dimension



THE POWER OF SOCIAL MEDIA

Effective use of social media in communicating science →

The social media has currently a big influence on people, especially on young people. Through social networks we can speak with young generation and we can also talk about climate change with people around the world.

1

Target group:



2

Sources:



3

Advantages:

ACCESSIBILITY

to high end public events

TED talks

GLOBAL COVERAGE

of events. Use of various multimedia means of communication (videos, infographics, animations, photos, etc.)

The big power

4

Challenges & barriers:



DISINFORMATION

Corporate Interests opposing climate change awareness.

Overwhelming volume of information to assess and evaluate.

The controversies and the associated political polarity concerning climate change

Climate change in the Arctic

Political and economic issues

It is crucial to communicate facts surrounding climate change in a **clear and easy to comprehend way.**





COMMUNICATION SPACES *for science communicators*

Sharing research findings concerning climate change is of crucial importance in shaping and informing the public opinion subsequently strengthening support towards sound environmental policies.

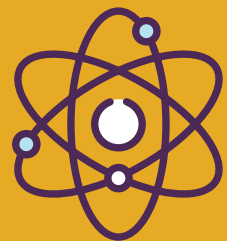
SOURCES



TV shows
The Late Late Show



Radio
BBC Radio 4



Science festivals
Edinburgh Science



TEDx talks

TARGET GROUP

general public

Advantages

Scientist interpret data from research to specialised audience

[More details here](#)

local level

Climate change research

CLIMATE CHANGE

causes of
CLIMATE CHANGE

impacts of
CLIMATE CHANGE

responses to

CLIMATE CHANGE

Mitigation

Adaptation

International spaces from local to global

CHALLENGES & BARRIERS



Complex scientific concepts & information

Misconceptions & confusion



Validity & accuracy of scientific publications
Scientific communication

Language barriers



Engage the public with CLIMATE SCIENCE

To change unsustainable policies and status quo systems, the public needs to be engaged with climate science. The public has a great role in demanding for and starting change. As a researcher you have a role in building bridges between climate science and the public.

www.stage.eu

- Public engagement can lead to behavioural change.
- Public engagement benefits a scientists career as it could increase collegial and social status.
- It is increasingly more important to include public outreach in funding requests.



The public's views influence the focus of climate science

Media shapes the public's understanding of climate science.

Media can be used to inform the public and change perspectives

Power to the people
Involving the Public can expedite the process of transforming existing policies and systems

Tools

Podcast:
SciComm toolkit



[Click here!](#)

Handbook:
Why, when and how to engage the public



[Click here!](#)

Webinar:
Climate Communications Training



[Click here!](#)

An informed public boosts political participation and climate activism, enabling targeted change in unsustainable policies and meaningful shifts in status quo systems.

Changing the world

Performing climate science is one way of changing the world, engaging the public is another! Through proper engagement, the public will gain better insights in your science, which will help to change policies and status quo systems.



PUBLIC SPEAKING *fundamentals*

Content

✓ Tell a story and bring characters to life (but avoid stereotypes)

✓ Create suspense

Emotional engagement

✓ Have a clear objective that is tailored to reach the audience

✓ Be coherent in structure and style

Purposefull & Targeted

✓ Use trusted messengers to convey reliable and factual information

✓ Address misinformation and misconceptions

Scientific & Factual

✓ Empower people to take an active role in addressing climate issues

✓ Provide a vision for the future and link it to justice and equity

Convey problem & Solution

Interaction with audience

- Be knowledgeable about your audience
- Repeat questions and answers
- Start a dialogue / discussion
- Incorporate activities / movement

Style

- **Prosody:** rhythm (fast/slow), intonation (no monotone)
- **Language:** simple and short sentences, avoid jargon
- **Appearance:** What message do you want to convey?

Feminine scientist with a dress, a funny scientist or a stereotypical scientist?

Technology

- Use max. 30 words per slides and avoid too much data graphs
- Be consistent with (readable) colours and (readable) fonts
- Use animations wisely
- Check microphones and pointers beforehand

More information about public speaking fundamentals



[Click here!](#)



[Click here!](#)

More information about climate change science communication



[Click here!](#)



[Click here!](#)



make space for FEMALE & GENDER DIVERSE SCIENTISTS

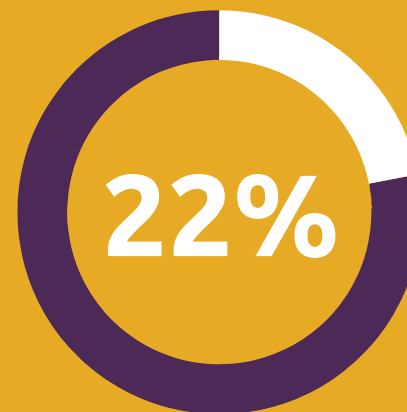
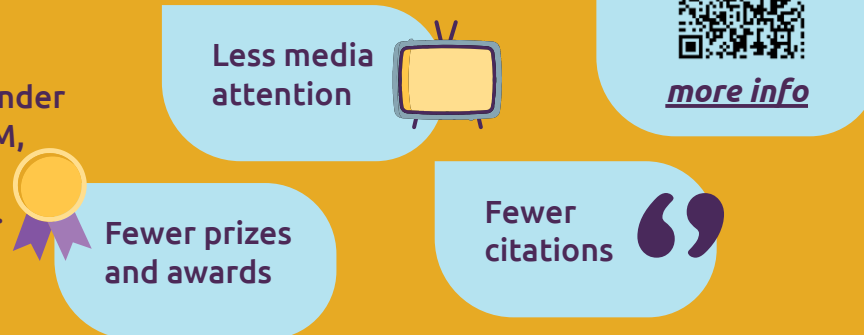
As lack of **gender diversity** limits workplace performance and Europe is facing a shortage of scientists, we cannot deny that the scientific world has to change its environment to a more **safe** and **supportive space** for gender diverse individuals.



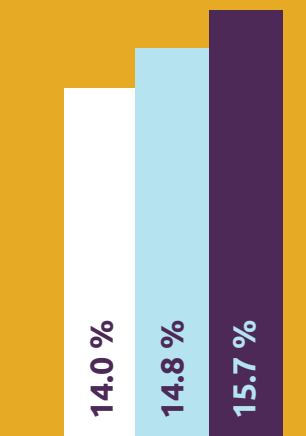
Underrepresentation

The Mathilda Effect

Although many female and gender diverse scientists work in STEM, they do not get the same recognition as male scientists.



Only 22% of professionals working in cutting edge fields including but not limited to artificial intelligence, are female. (World Economic Forum, 2018)



Women inventors in Europe and Northern America (United Nations, 2022).

How to fix?

Individual



Work against **stereotypes**, as those contribute to **career choices** and lead to **discriminatory practices** in the work field (e.g. when hiring new staff).

Create **interventions** to support recognitions by other people, such as managers colleagues, teachers, society.

Manager



Be aware: It is not about attracting women and gender diverse people to science, but about **retaining** them in science.

Pay attention to **structural barriers** female and gender diverse scientists might face during their work, e.g. motherhood.

More information

TedTalk for everyone: Gender inequality is showing up... in climate change



[Click here!](#)

E-course for experts: Gender Equality and Human Rights in Climate Action and Renewable Energy



[Click here!](#)

Book for policymakers & consultants: Mainstreaming gender in mitigation and technology development and transfer interventions



[Click here!](#)



WOMEN *in Climate Science*



Why showcase women?

Women and gender diverse people in climate science face unique challenges and structural barriers, like underrepresentation in STEM and receiving fewer grants and awards. One of the ways to create a welcoming and inclusive work environment is to showcase their work.

DR. PURNIMA DEVI BARMAN

Studied Zoology at Gauhati University (India), paused her dissertation on the Greater Adjutant stork to found the Hargila Army, an all-female grassroots conservation movement. Participants protect habitat but also celebrate the birth of new chicks and sell textiles with the image of the adjutant, thereby improving its previous reputation as a bad omen. She won the 2022 UN Champions of the Earth award for her work.



[click here](#)



EUNICE NEWTON FOOTE

At-home scientist, innovator and women's rights activist. She went to Troy Female Seminary, a pioneering women's school. In 1856 she proved that a cylinder with CO₂ became much hotter than a cylinder with moist air when put in the sun. The presentation and article about her findings did not get much publicity. Three years later John Tyndall published about his discovery of the greenhouse effect, getting full credit.



[click here](#)



DR. JESSICA HERNANDEZ

Indigenous environmental scientist, specialised in marine sciences and Indigenous science. She is the author of the book "Fresh Banana Leaves: Healing Indigenous Landscapes through Indigenous Science" and has a podcast stimulating conversations between Western science and the public, especially indigenous people.



[click here](#)



DR. PENNY WHETTON

Expert in regional climate change projections and lead author on IPCC 3, 4 and 5. She led the development of national climate change projections for Australia. She is also credited for the visualization method of past climate data and projections in one continuous graph. She came out as transgender in 2003, and was married to Greens senator Janet Rice.

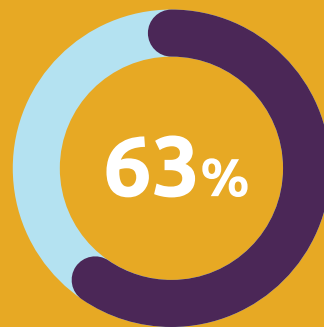


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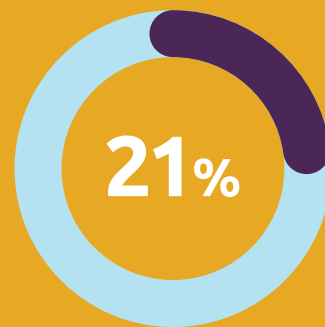


DOES PUBLIC TRUST SURVIVE

the current scientific and technological controversies?



the majority of people have 'medium' trust in scientists



almost one in five people have a 'high' level of trust



one in seven have 'low' trust

Surveys reveal public trust in science and scientists especially when comparing with other professions.

BUT: This favourable attitude is tepid and many people express "soft" positive rather than "strongly" positive views on science and scientists. In particular, worldwide....

Mixed messages about public trust in science. This tepid attitude is much more evident when controversial topics such as vaccines, genetically modified (GM) foods, climate change etc., are discussed

Why do the public show
DISTRUST & DISAGREEMENT
towards science?



Sociocultural background
(e.g. low income)



Conservative political ideology



Religious beliefs



Scientific literacy:
Poor level of understanding the nature of the scientific knowledge & processes

What can be done to promote **TRUST IN SCIENCE & SCIENTISTS?**

1

authentic outreach activities by implementing authentic methods

2

promote contact with scientists

3

promote work with **real data**

4

discuss uncertainty



THE VALUE AND IMPORTANCE OF ENTRUSTING SCIENCE

What does trust actually mean?

The notion of trust includes both the assumption of dependency on the knowledge of others more knowledgeable & a vigilance towards the risk of being misinformed.



When talking for science, people tend to assess trustworthiness by judging:



Scientists' expertise



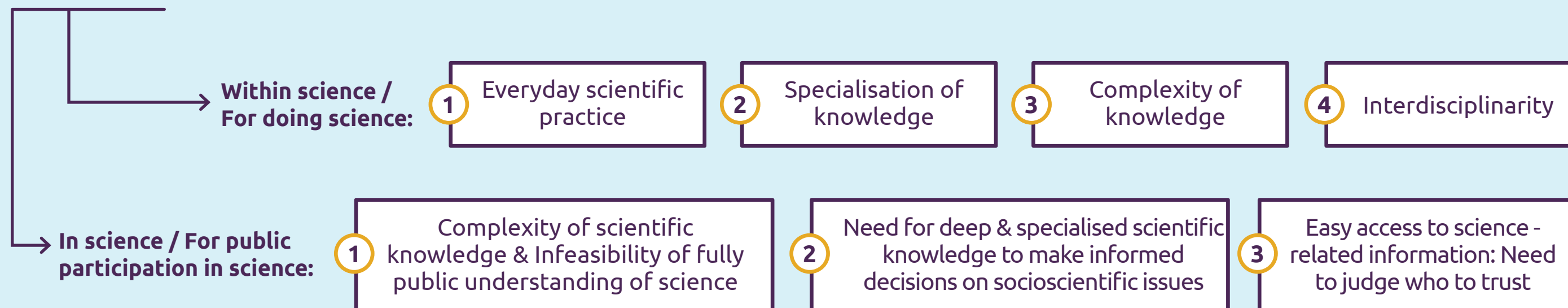
Scientists' integrity



Scientists' motivations

TRUST

Why trust is essential in the context of science?



DEBUNKING FAKE NEWS/MISCONCEPTIONS ABOUT CLIMATE CHANGE

Rhetorical strategies of misinformation in the context of climate change



The most common misinformation about climate change are:

- A** The denial of anthropogenic climate change
- B** The idea that climate mitigation has economic & political implications, incompatible with the ideals of the free market

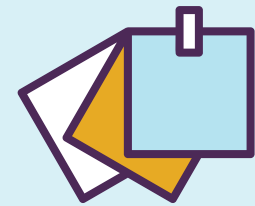
This fake news, which is rapidly & broadly spread through media & especially social media, encourages climate inaction with profound negative impacts on public health & global economy.

BUT HOW CAN THIS FAKE NEWS BE "ESTABLISHED" IN PUBLIC'S BELIEFS?



1 The scientific consensus is undermined & questioned 2 The scientific uncertainty is highlighted while certainty is presented as a condition for climate action 3 Individual scientists are attacked to undermine their credibility 4 Pseudoscientific alternatives are projected through a network of blogs

WHY DOES THE PUBLIC BELIEVE IN FAKE NEWS?



Fake news are sticky "**Continued influence effect**"



Use of **emotional language**



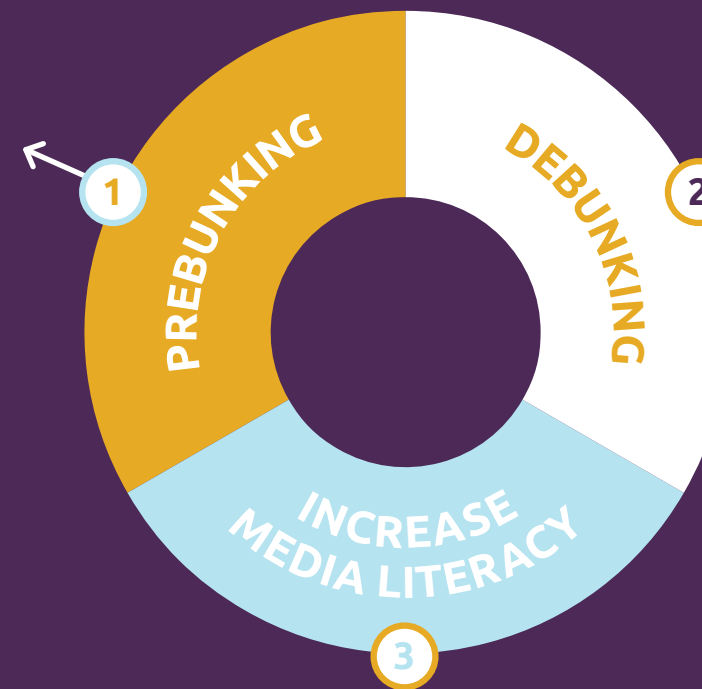
"**Illusory truth effect**"
Increased sense of familiarity by repeated info



Use of "**just asking questions**" strategy

HOW TO DEBUNK FAKE NEWS

- A** In advance exposure to the misleading strategies usually employed to misinform
- B** Provision of warning



Provision of detailed & reasonable refutations:

FACT state the truth first
MYTH point the misinformation
FALLACY explain why the misinformation is wrong

LEARN TO JUDGE & CRITICALLY EVALUATE

- A** The plausibility of the info
- B** The credibility of the source
- C** The expertise of the source
- D** The motives of the source



How public engagement can help address complex climate change issues

PUBLIC ENGAGEMENT: *A driver of societal change aimed at mitigating climate change effects and facilitating adaptation to them*

PERSONAL *Individual level behaviour*



Increase public's knowledge & understanding about climate change issues (Cognitive aspect)



Enhance public's emotion, interest, & concern about climate crisis (Affective aspect)



Motivate public's action taking by adopting a low - carbon lifestyle (Behavioural aspect)



Change in: consumption & eating habits, energy use habits, transportation choices

CIVIC

*collective problem - solving
& involvement in political struggle*



Promote participation in democratic decision - making processes



Increase the quality of decision - making processes



Foster the dialogical relationship between public & scientists



Reinforce public's consent, trust & accountability

For more info follow the tools: [Engaging the Public on Climate Change / Environmental Communication](#) / [A Review of Climate Communication Research](#)

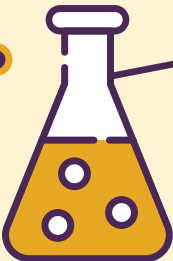


Practise of informing an audience about scientific issues

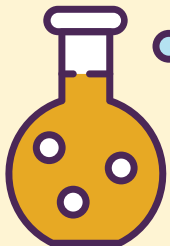
Involving citizens and raising awareness on societal challenges

Key to research-informed policy making, and societal debates

Engage with science is an integral part of everyone's life

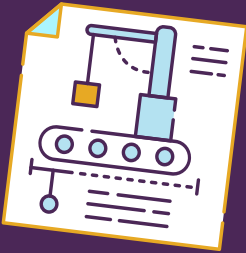


what is **SCIENCE COMMUNICATION?**



Public
SPEAKING

1



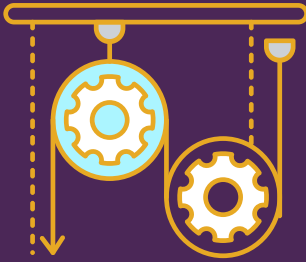
PRESENTATION
of the outcomes of projects or researches

2

when science *can be communicated?*

TRAINING
activities

3



STEM
lessons

4

POSSIBLE STEPS

to achieve an effective science communication



Strengthen the role that research institutions have in science communication

Build partnerships with science communication stakeholders

Develop institutional tools for researchers

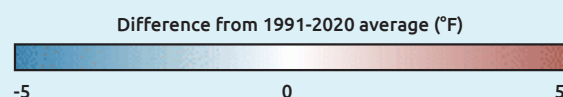
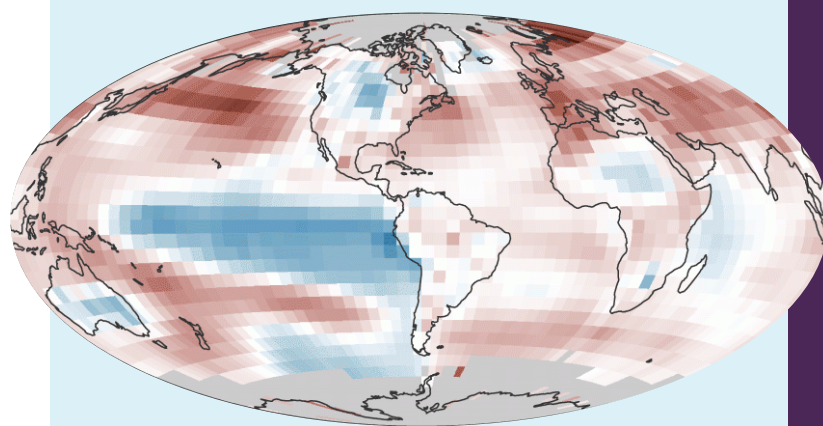
Employ new and diverse forms of knowledge communication



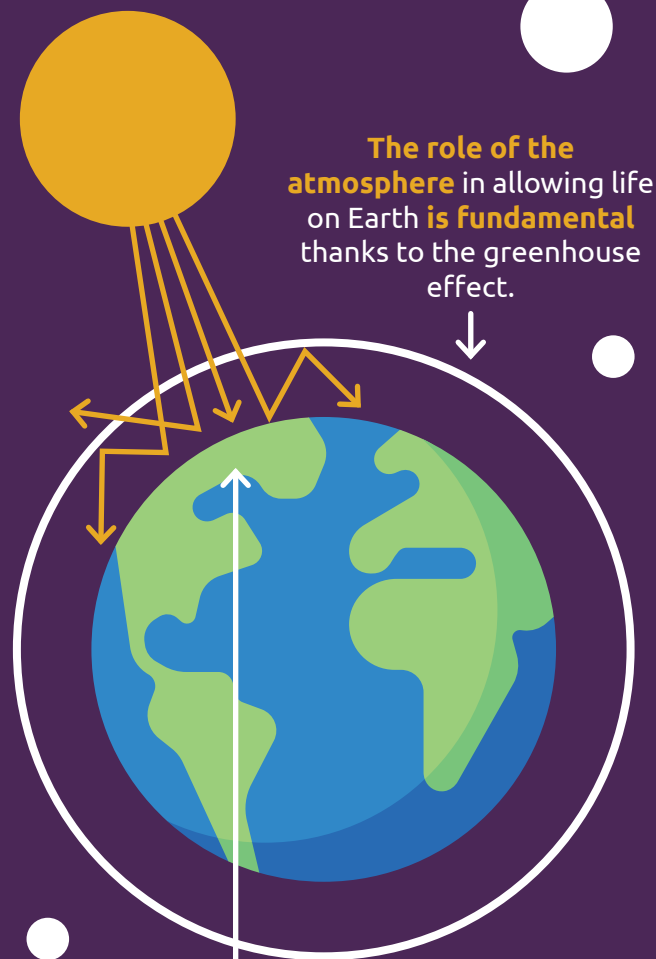
key facts about CLIMATE CHANGE

Climate change refers to long-term changes in temperatures and weather patterns. The increase in the average temperature of the Earth's surface has been recorded at different stages of our planet's climate history. However, we are witnessing an anomalous global warming due to anthropogenic contribution.

it's official
2022 WAS WORLD'S 6TH WARMEST YEAR ON RECORD (1880-2022)



GREENHOUSE EFFECT



The role of the atmosphere in allowing life on Earth is fundamental thanks to the greenhouse effect.

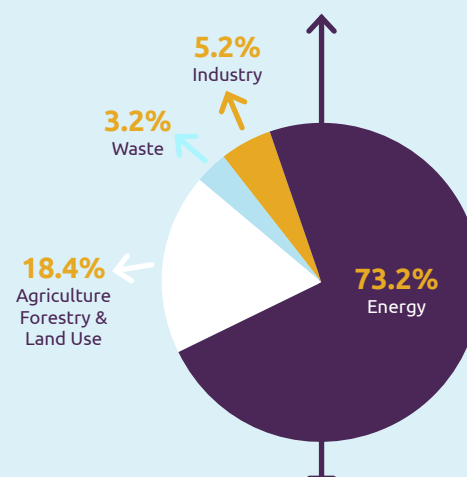
When the sun's rays reach the Earth's surface, they are partly absorbed and partly reflected outward.

Thanks to atmosphere, those reflections are partially retained and redirected to Earth by some gases in the atmosphere, called greenhouse gases. As a result, additional heat is added to the heat from directly absorbed sunlight.

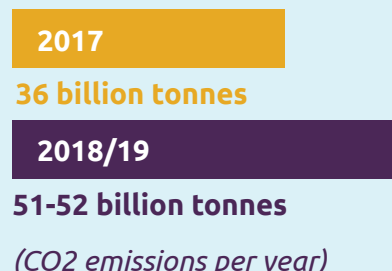
the ANTHROPOGENIC CONTRIBUTE

Industries, transports, energy production facilities contribute to increased emissions of CO₂ and from fossil fuels.

2016
 Global greenhouse gas emissions by sector (global greenhouse gas emissions 49.4 billion tonnes CO₂eq)



Global greenhouse emissions have grown significantly in the past 150 years

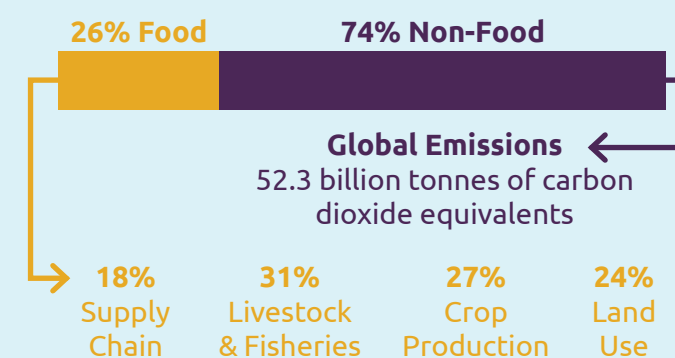


There is a connection between the prosperity of a nation and its carbon emission: in terms of one person's carbon footprint, wealth is one of the strongest indicators



Food Production

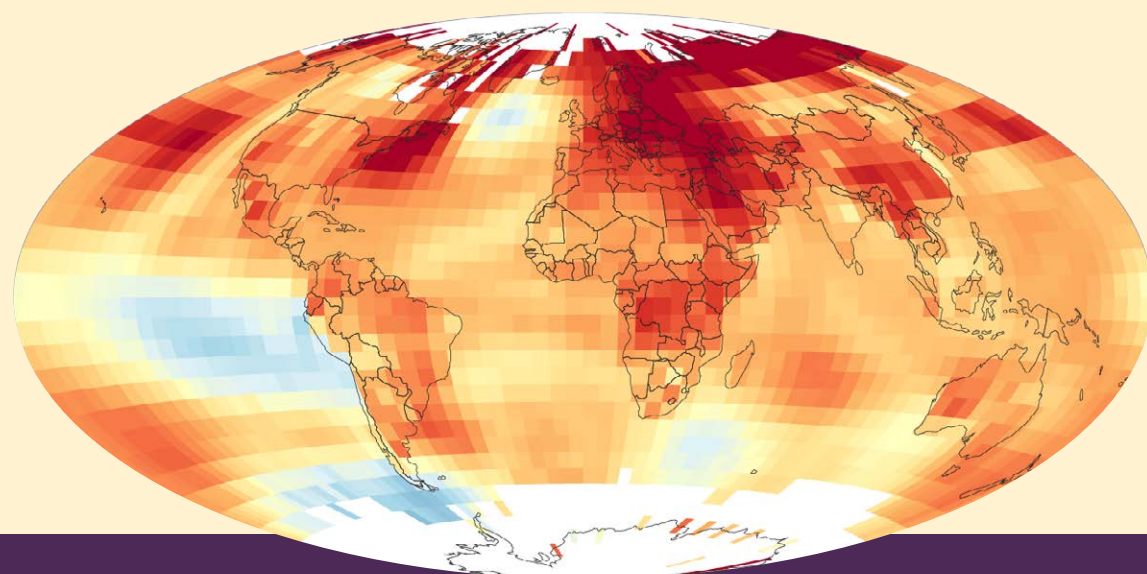
A large part of emission of nitrous oxide and methane comes from agriculture and livestock, which grow more and more intensive.



Who emits the most CO₂?

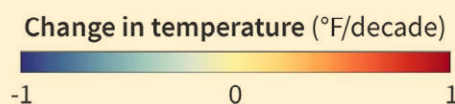


RECENT TEMPERATURE TRENDS (1993-2022)



What are the environmental CONSEQUENCES of CLIMATE CHANGE?

Climate change is **affecting all regions around the world**. Glaciers are melting, **the least amount ever of ice at the North Pole** has been recorded and sea level is rising. Extreme weather events like **floods, heat waves and droughts** are becoming more common.



global IMPACTS

Increasing average global temperature leads to:



More frequent **high-temperature extremes** such as heatwaves



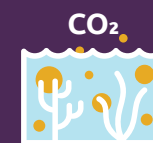
Severe droughts, with greater risks of **wildfires**



Increase of **precipitation and floods**



Decrease in **fresh water availability** and deterioration in **water quality**



Changes in the physical and biological **composition of the oceans**



Impacts on **biodiversity** (like changes in phenology)

Effects on soil: **erosion, decline in organic matter, salinisation, landslides, desertification**

local IMPACTS

Different parts of the world will be impacted differently with climate change, sometimes in some surprising ways



- 1 Ice melting in Greenland has led to the discovery of valuable deposits of minerals that could allow them to enter a new, lucrative market
- 2 Northern Africa: a big issue concerns the lack of water, which is already a cause of conflicts between Countries
- 3 Climate change and malaria. There is an optimal temperature range for malaria to exist in a region

- 4 West Africa is in the warmer side of the optimal range, and warming will push it outside of the range. CC is not likely to increase the burden of malaria there
- 5 East Africa is in the colder side of that optimal range, so warming may make things more favourable for malaria transmission
- 6 Total different situation in Asia. The region around the Persian Gulf and South Asia is going to experience some of the most intense heat waves that has ever been observed

Northern latitudes may actually benefit from climate change
- 7 Arctic melting is opening up some ship passageways that used to be covered by ice, making shipping faster and easier
- 8 Warmer temperatures in places like Russia and Canada due to increased rainfall



PARIS

climate agreement

2015

signing of the Paris Agreement on Climate Change during COP21 of UNFCCC

Framework to achieve decarbonisation, with long-term objectives to tackle climate change and a flexible structure based on the contributions of individual governments

Limit the temperature rise below 2°C to pre-industrial levels, remain within 1.5°C, reach the peak of emissions as soon as possible and reach carbon neutrality

2019

introduction into legislation of EU's goal of achieving zero climate impact by 2050

This means drastically reducing greenhouse gas emissions and finding ways to offset the remaining and unavoidable emissions

2020

introduction of an intermediate goal, by 2030, of reducing by 55% greenhouse gas emissions compared to 1990 levels

2021

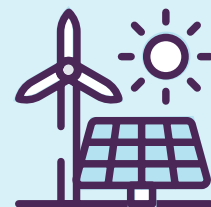
European climate legislation requires EU countries to meet the 2030 & 2050 climate targets

EU countries have committed to spending 30% of the EU's long-term budget for 2021-2027 and Next Generation EU on climate projects.

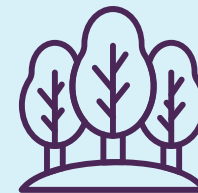
how is CLIMATE CHANGE being dealt in Europe?

European countries have reported **more than 2200 policies & measures** that focus on **reducing or preventing** greenhouse gas emissions **from various sectors**

2200 policies & measures from various sectors



ENERGY & TRANSPORTS



FORESTRY



INDUSTRIAL PROCESSES



AGRICULTURE



WASTE MANAGEMENT

At the European Council level, international agreements have been signed and strategic plans have been provided to tackle the climate crisis.

way to go for

DECARBONISATION

ENERGY TRANSITION

From an energy mix focused on fossil fuels to one at low or zero carbon emission, based on renewable sources

BETTER MANAGING OUR FORESTS

GREENER FARMING

CLEANER TRANSPORTS

PROTECTING OUR ECOSYSTEMS

CIRCULAR ECONOMY

