

TRIGGER TREEQUEST – A SERIOUS GAME

PLAYERS' GUIDE



BY



trigger

ABOUT THE PLAYERS' GUIDE

TRIGGER Treequest is an educational game developed within the **TRIGGER project** to raise awareness and build capacity around the complex links between **climate change and health risks**.

Designed with flexibility in mind, the game can be adapted for a wide range of contexts—from **schools** to **community groups**.

In the players' guide you will find:

- How to play
- The printing guidelines
- The game

BEFORE PLAYING

Before getting started, note that the game is designed for:



Age: +16



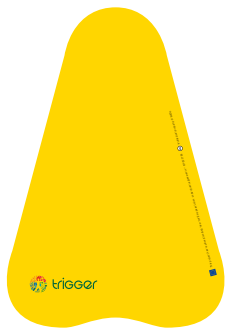
Players: 2–5 players
or teams



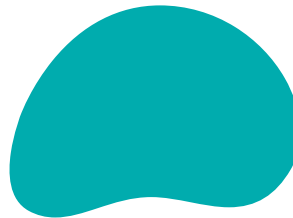
Duration: 20–60
minutes

HOW TO PLAY

CONTENT

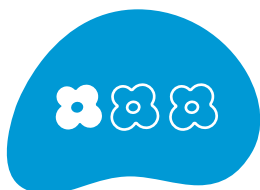


X5
tree trunks



66 leaves
Questions - front side
Answers - back side

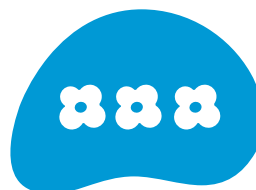
The leaves are divided into
3 difficulty degrees:



EASY
1 flower



MODERATE
2 flowers



DIFFICULT
3 flowers

5 knowledge categories:



The questions on the leaves can be of different types including:

- **True/False** questions
- **Open questions** (short answer required)
- **Questions with 3 answer options**
- **Name-questions** (e.g., Name three different tree species)

GETTING READY

- Decide whether to play as individuals or teams.
- Decide on the winning scenario you want to use in this playing session (see below).

HOW TO WIN

Build the most knowledge-rich tree: grow a strong tree filled with leaves that reflect different levels and categories of knowledge.



Before you start playing, decide which winning scenario you want to play with:

- You have answered one question of each category and one extra question from a category of your choice.
- You have answered 3 easy, 2 moderate, and one difficult question.
- Set a time limit (e.g., 20 min) and after the time is up, the player/team wins that has answered most questions.
- Create your own winning scenario

In case of a tie, the player/team with the most difficult questions answered wins.

THE SETUP



Each player/team gets one yellow tree trunk. Place it in front of you.



Sort all questions by their difficulty degree (easy, moderate, difficult) and make three piles.



The person with the coldest hands starts. After that you can go around the clock.

ON YOUR TURN

- Decide which type of question you would like to answer (easy, moderate, or difficult and which category).
- The player/team to your right reads out the question.
- If you are playing as a team, anyone of the team can answer the question.
 - **If you answer correctly**, you keep the leaf and place it on your tree.
 - **If you don't answer correctly**, the other players/teams can give it a try. The first to get it right keeps the leaf and places it on their own tree.

ADDITIONAL PLAYING OPTIONS

Here are some options to make the game even more entertaining:



Choose a moderator who will be reading out the questions to everyone and the player/team who answers first will get the leaf.



If you answer a question wrong, you will lose one leaf from your tree. You can decide which leaf you give away.



Play with a dice: each question category gets a number from 1-5. Roll the dice to know which question category you need to answer. If a 6 is rolled, the player/team can decide on the category.



Play with a bag: add all questions into a bag and draw a random question from it when it is your turn.

FEEDBACK IS ALWAYS WELCOME!

Let us know what you think about the game
via email at info@project-trigger.eu

PRINTING GUIDELINES

1

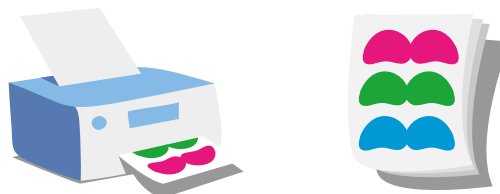
Once the 2D VERSION PDF (Homemade printing) is downloaded, **open the file**.



2

Print all pages of the PDF; they contain the game pieces. In this case, you can use regular paper (80gsm) or whatever weight your printer paper supports.

It's recommended to print on white paper and print in color.



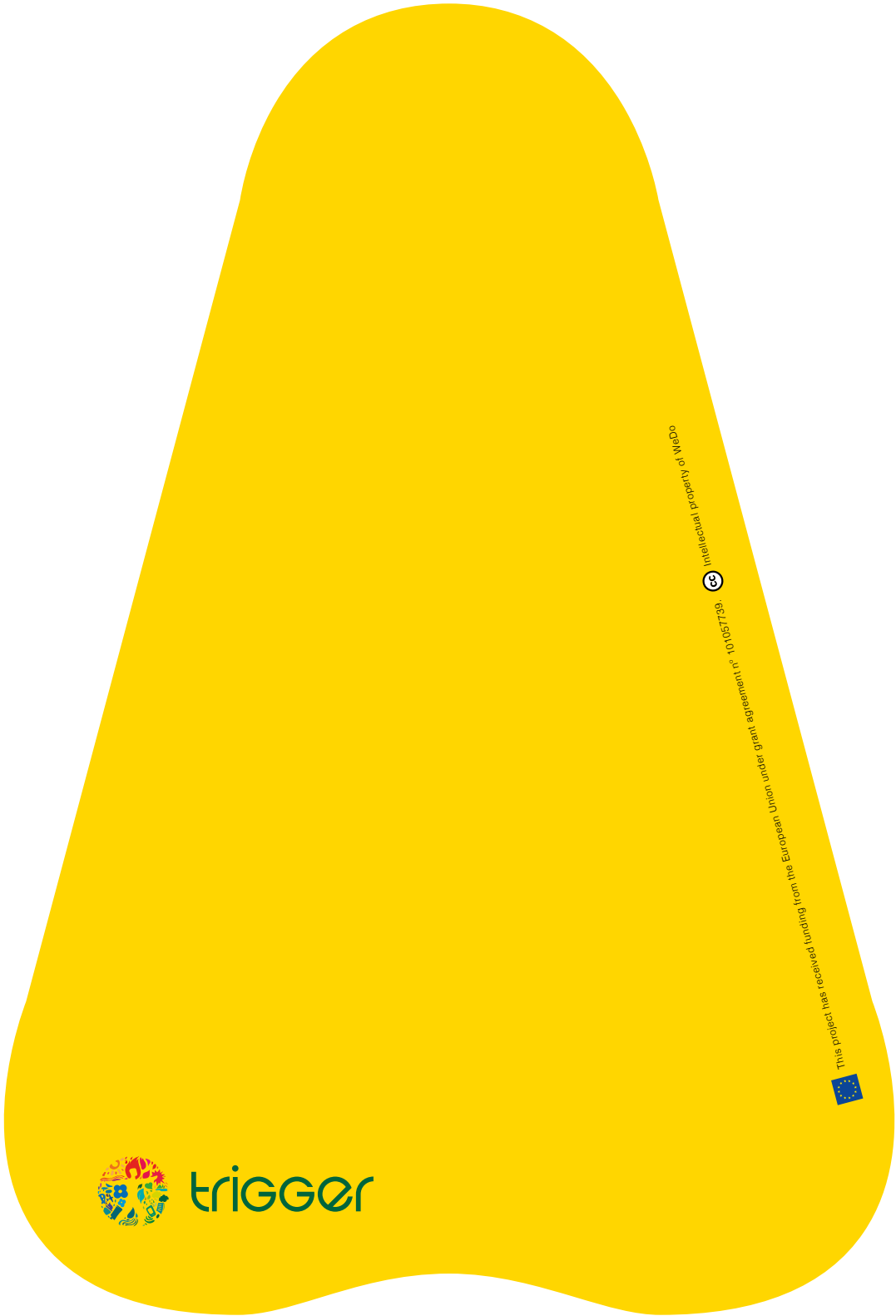
3

Once the sheets are printed, **cut out the silhouette of each figure** (defined by its own color), **fold it in half** and you'll have all the pieces to start playing.



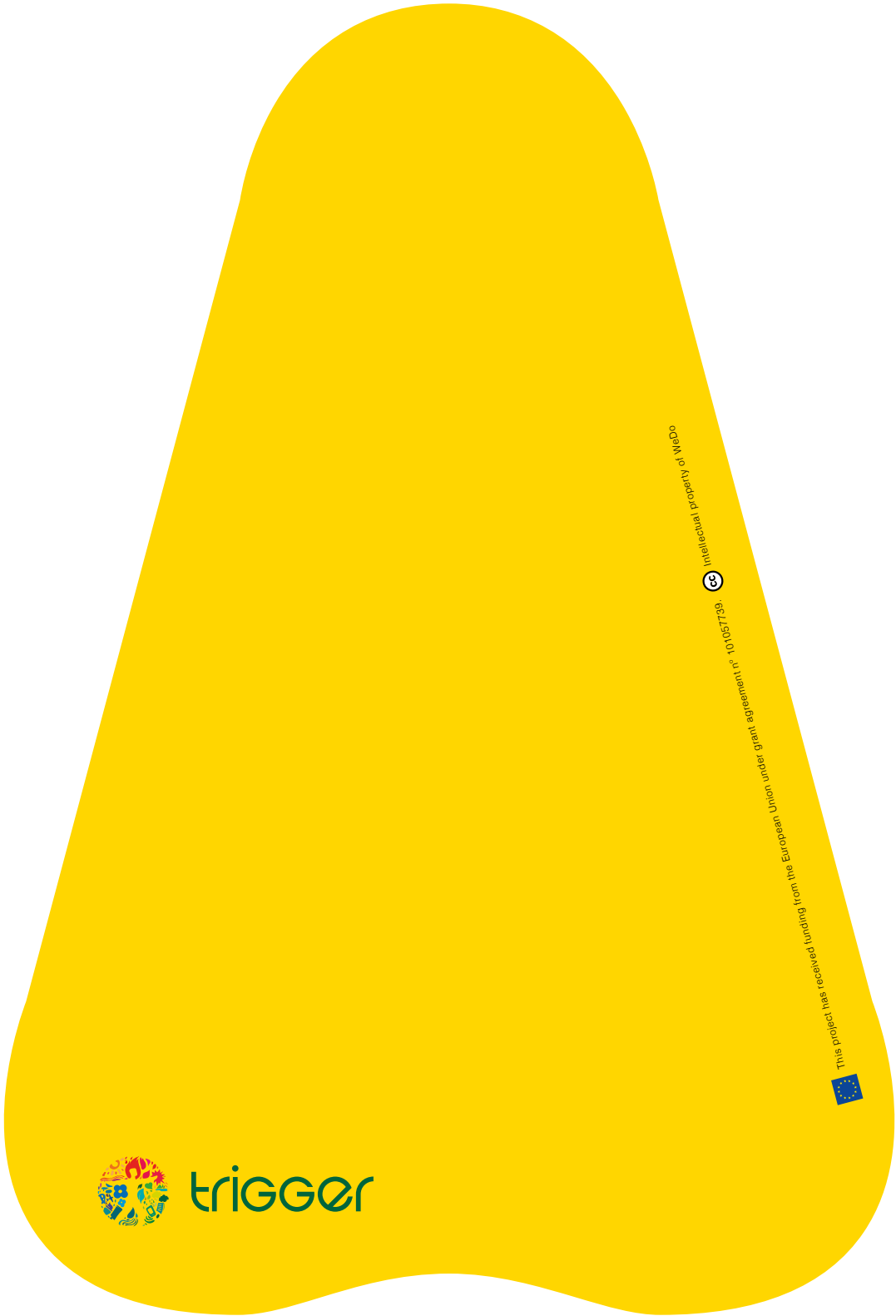
* For a better experience, glue it with white glue.

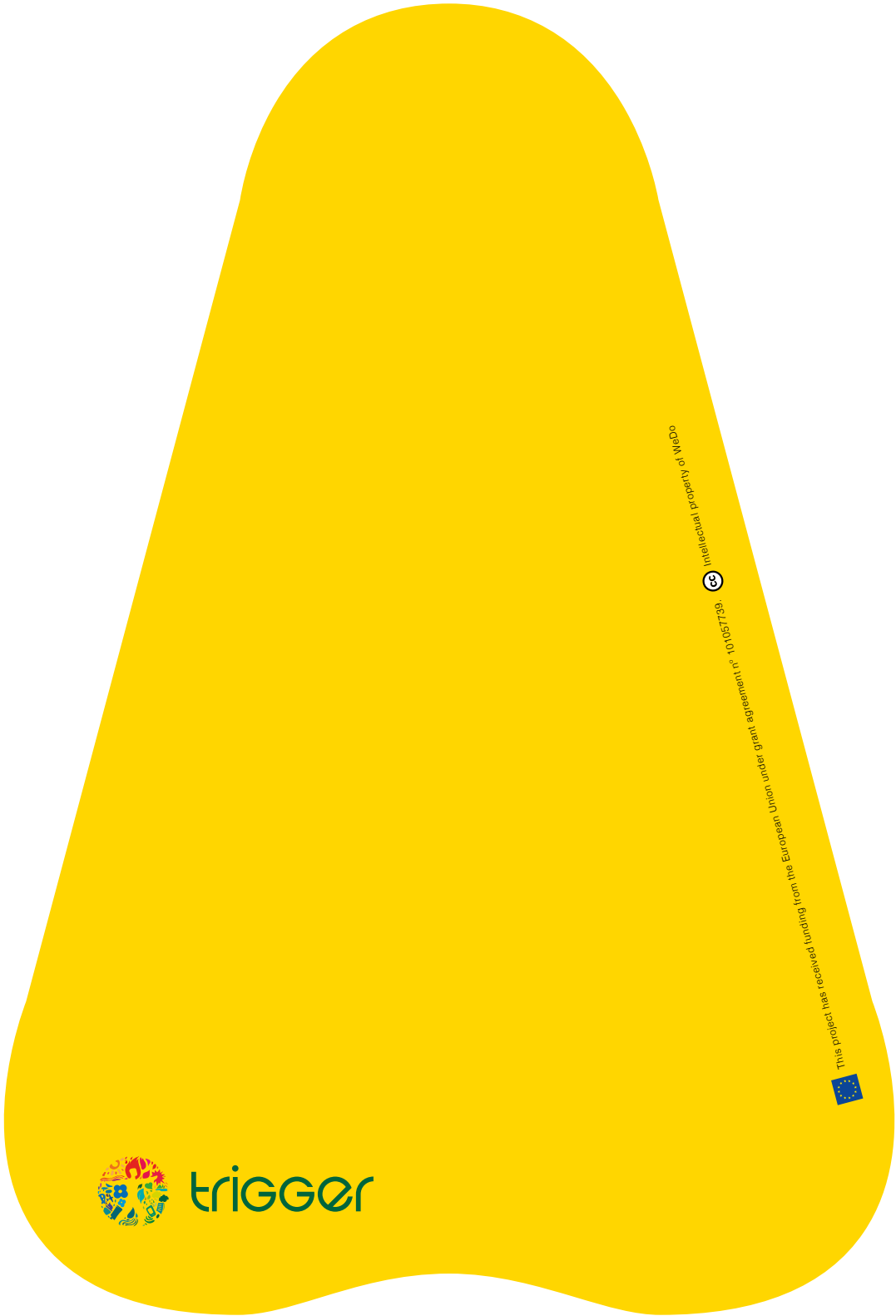
In the following pages you will find all the elements that compose the game.

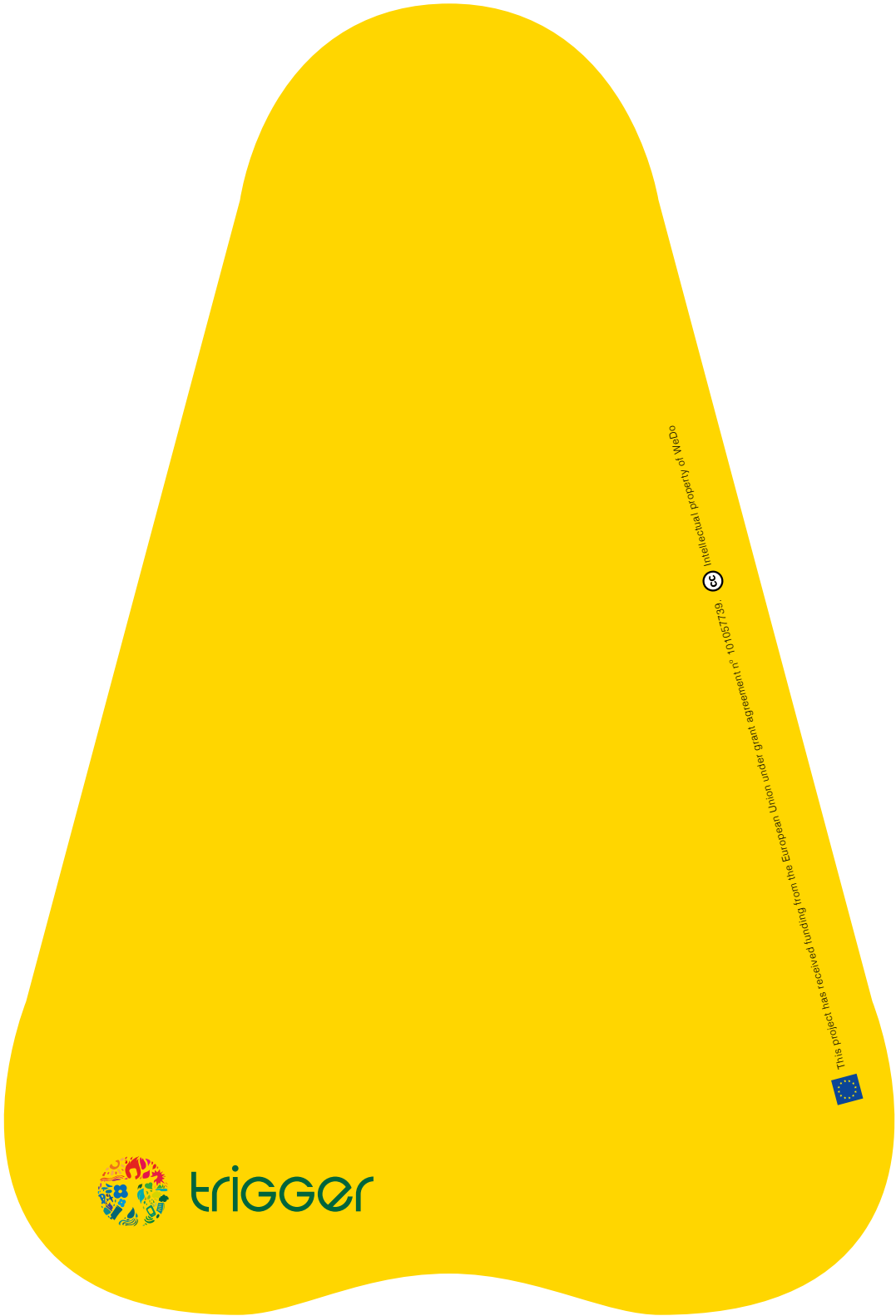


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 Intellectual property of WeDo
This project has received funding from the European Union under grant agreement n° 101057739.



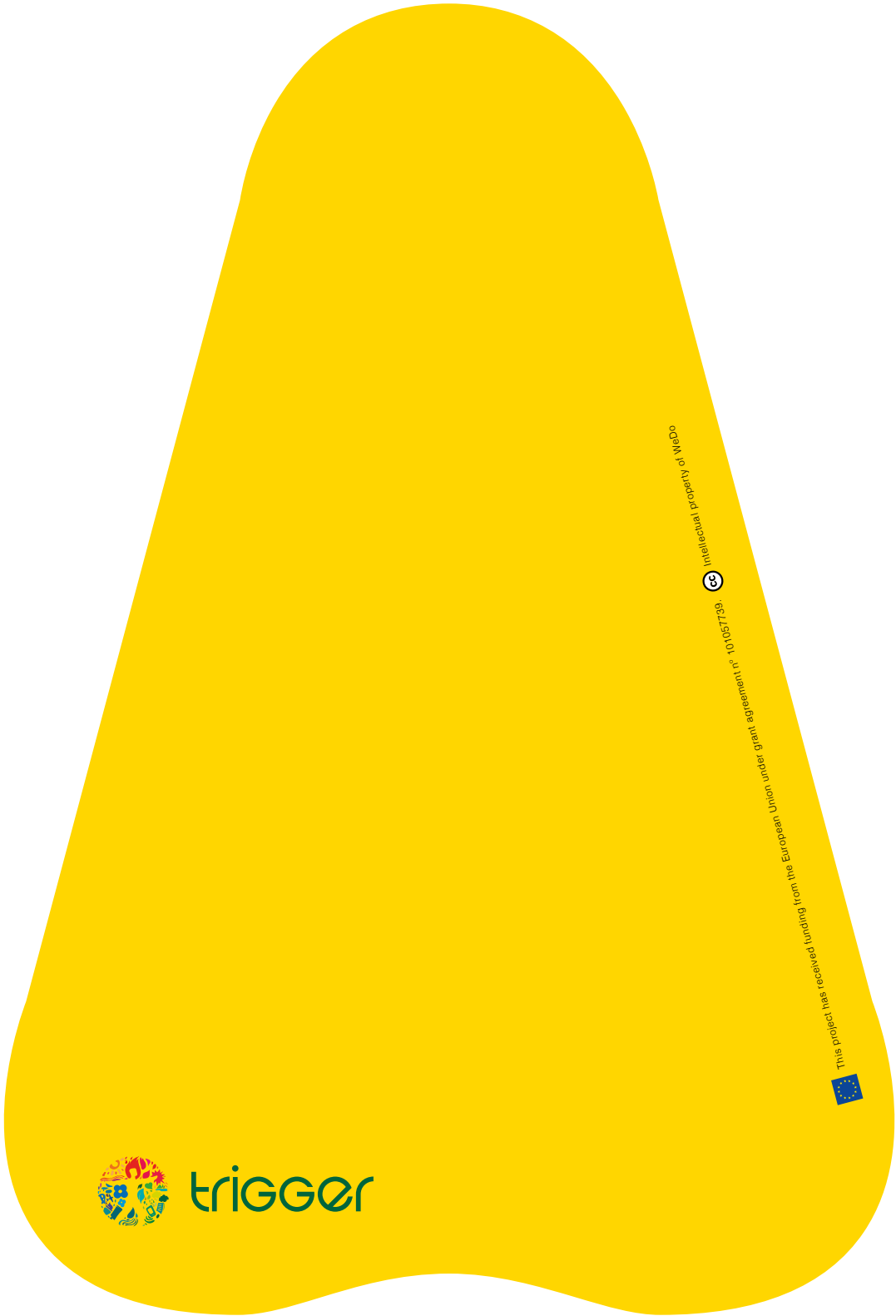


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CLIMATE CHANGE

True or False: Less heatwaves are expected in Europe due to climate change.



ANSWER

False - The number of heatwave days is expected to increase in most areas in Europe.



ECOSYSTEM

True or False: Some hazardous air pollutants are known carcinogens (a substance, organism or agent capable of causing cancer).



ANSWER

True - Examples include diesel exhaust, benzene, and formaldehyde.



HEALTH IMPACTS

Which of the following is not a common mental health effect of climate change?

- A) Decreased heart rate
- B) Distress
- C) Anxiety



ANSWER

A) Decreased heart rate



HEALTH IMPACTS

True or False: The airways of smokers are wider than in healthy lungs.



ANSWER

False - The lungs have a reduced capacity due to damaged alveoli (air sacs) and inflammation.



HEALTH IMPACTS

True or False: Air pollution can trigger asthma attacks.



ANSWER

True - Air pollutants can irritate the airways and worsen asthma symptoms.



HEALTH IMPACTS

True or False: Air pollution can worsen both respiratory and cardiovascular diseases.



ANSWER

True - Exposure to pollutants like PM, ozone, nitrogen dioxide, and sulphur dioxide can worsen existing conditions.



HEALTH IMPACTS

Which organ is directly affected by air pollution?

- A) Heart
- B) Brain
- C) Lungs



ANSWER

C) Lungs



HEALTH IMPACTS

True or False: High humidity levels can make warm temperatures feel even hotter and reduce the body's ability to cool down.



ANSWER

False - Air pollution has an impact on asthma hospital admissions.



HEALTH IMPACTS

True or False: Poor workplace air quality can lead to decreased employee productivity and increased health issues.



ANSWER

True - Inadequate ventilation and high levels of pollutants can impair cognitive function, reduce concentration, and increase the likelihood of respiratory problems.



HEALTH IMPACTS

Which imbalance can heatwaves cause in the elderly?

- A) Sodium level problems
- B) High cholesterol
- C) Low blood pressure



ANSWER

A) Sodium level problems



HEALTH IMPACTS

True or False: Air pollution does not have an impact on asthma hospital admissions.



ANSWER

False - Air pollution has an impact on asthma hospital admissions.



HEALTH IMPACTS

Which feelings are commonly reported when people think about climate change?

- A) Joy & excitement
- B) Grief & helplessness
- C) Boredom & confusion



ANSWER

B) Grief and helplessness



HEALTH IMPACTS

True or False: Floods and wildfires have only short-term mental health impacts.



ANSWER

False - Floods and wildfires can have long-term mental health effects that last years.



POLICIES

Which EU legislation sets the goal for climate neutrality by 2050?

- A) European Climate Law
- B) Nature Restoration Law
- C) European Climate Pact



ANSWER

A) The European Climate Law



POLICIES

Which of the following is least used by cities to encourage climate-friendly behaviour?

- A) Bike lanes
- B) Public education
- C) Cash rewards



ANSWER

C) Cash rewards



POLICIES

True or False: Most local policies highlight how climate action can improve public health.



ANSWER

False - While some local policies do highlight the link between action and health, it is not a universal feature across policies.



ADAPTATION

True or False: People who live near forests or water tend to report better mental health.



ANSWER

True - Exposure to nature can reduce stress, improve mood, and enhance overall well-being.



ADAPTATION

How is Bologna adapting to rising temperatures?

- A) Installing air conditioners
- B) Planting trees and urban gardens
- C) Creating more parking lots



ANSWER

B) Planting trees and urban gardens



ADAPTATION

True or False: Oulu plans to increase biodiversity in green spaces by planting a wider range of tree species.



ANSWER

True - In fact, Oulu aims to increase biodiversity across various elements of green spaces, not just tree variety.



ADAPTATION

True or False: Geneva has developed local heatwave plans that include neighbour-to-neighbour support to protect the elderly.



ANSWER

True - Around the world, heat action plans often include strategies like volunteer check-ins, buddy systems, and direct community outreach.



CLIMATE CHANGE

True or False: Global surface temperature between 2011–2020 was about 1.1°C above pre-industrial levels (the period before the 1850).



ANSWER

True - The average global surface temperature was about 1.1°C above pre-industrial levels, with greater warming over land than oceans.



CLIMATE CHANGE

Where was the highest temperature (48.8°C) in Europe recorded in 2021?

- A) Sicily (Italy)
- B) Athen (Greece)
- C) Granada (Spain)



ANSWER

A) Sicily (Italy)



ECOSYSTEM

According to WHO guidelines, what is the daily safe limit for the air pollutant PM2.5?

- A) 5 $\mu\text{g}/\text{m}^3$
- B) 15 $\mu\text{g}/\text{m}^3$
- C) 45 $\mu\text{g}/\text{m}^3$



ANSWER

B) 15 $\mu\text{g}/\text{m}^3$



ECOSYSTEM

Name at least two air pollutants.



ANSWER

Possible answers: PM2.5; PM10;
NO₂; O₃; SO₂; CO₂



HEALTH IMPACTS

Which air pollutant is most dangerous for our lungs (respiratory health)?



ANSWER

PM2.5 which stands for fine particulate matter, with particles 2.5 microns (0.0025 mm) or smaller in diameter



HEALTH IMPACTS

Why do we sweat when it is hot?



ANSWER

To reduce our inner body temperature.



HEALTH IMPACTS

True or False: Long exposure to cold temperature tightens our skin blood vessels.



ANSWER

True - Long exposure to cold narrows skin blood vessels which is a process that helps the body conserve heat by reducing blood flow to the skin's surface.



HEALTH IMPACTS

True or False: Cold temperatures can cause blood clotting and infarcts.



ANSWER

True - Cold can increase the risk of blood clotting and potentially lead to infarcts, which are areas of tissue death due to a lack of blood supply.



HEALTH IMPACTS

Why can we have difficulties in breathing when it is cold?

- A) Cold air is trapped in our airways
- B) Lack of oxygen
- C) It dries our airways



ANSWER

C) Cold air dries our airways



HEALTH IMPACTS

How far can PM2.5 (air pollutants e.g., from burning wood) travel in our lungs?

- A) To the bronchi
- B) To the alveoli
- C) To the trachea



ANSWER

B) To the alveoli



HEALTH IMPACTS

How does extreme heat affect your blood pressure?

- A) Lower it
- B) Raise it
- C) It does not affect it



ANSWER

A) Lower it



HEALTH IMPACTS

True or False: People living in low-income urban areas are less affected by air pollution than wealthier individuals.



ANSWER

False - People living in low-income urban areas are more affected by air pollution than wealthier individuals.



HEALTH IMPACTS

Name at least two mental health impacts of climate change and related hazards.



ANSWER

Possible answers: Climate anxiety; Stress; Depression; Trauma; Psychiatric Disorder



HEALTH IMPACTS

Name at least three physical health impacts that have increased risk because of climate change (and related hazards).



ANSWER

Possible answers: Heatstroke; Injuries; Asthma attacks; Waterborne diseases; Vector-borne diseases; Allergic reactions; Cardiovascular stress



HEALTH IMPACTS

True or False: Colder temperatures can increase the risk of heart attacks by raising blood pressure.



ANSWER

True - When exposed to cold, blood vessels constrict to conserve heat which increases blood pressure and the heart has to work harder to circulate blood.



HEALTH IMPACTS

True or False: Men are more sensitive to air pollution and heat because they sweat more and have larger lungs.



ANSWER

False - Women are more sensitive to air pollution and heat because they sweat less and have smaller lungs.



HEALTH IMPACTS

Who is especially vulnerable to mental health problems after disasters like floods or wildfires?

- A) Office workers
- B) Tourists
- C) Children



ANSWER

C) Children



POLICIES

Which greenhouse gas emission reduction target is set by the European Climate Law for 2030 compared to 1990?

- A) At least 40%
- B) At least 55%
- C) At least 66%



ANSWER

B) At least 55%



POLICIES

True or False: The Paris Agreement legally binds countries to specific emission targets.



ANSWER

False - It is a legally binding international treaty, it does not impose legally binding emission reduction targets on countries.



POLICIES

The European Climate Law (2021) binds the EU to a net-zero emission target. By which year?

- A) 2030
- B) 2040
- C) 2050



ANSWER

C) 2050



POLICIES

Which type of action do local governments in Europe expect more from citizens?

- A) Community action
- B) Individual action
- C) Business action



ANSWER

B) Individual action



POLICIES

True or False: Most local climate policies include cost-benefit calculations of health effects.



ANSWER

False - They usually do not include estimations on health impacts.



ADAPTATION

What is a climate oasis in Augsburg's adaptation plan?

- A) A desert-style park with solar panels
- B) A small shaded green space
- C) A water pond



ANSWER

B) A small shaded green space



ADAPTATION

Augsburg's health resilience strategy includes

- A) climate checks for hospitals
- B) free fitness classes
- C) evacuation schemes



ANSWER

A) Climate checks for hospitals



ADAPTATION

How is Oulu adapting to heavier rainfall?

- A) Paving areas
- B) Encouraging rainwater tanks in homes
- C) Creating permeable surfaces



ANSWER

C) Creating permeable surfaces



ADAPTATION

What is one way Heraklion plans to reduce emissions in transport?

- A) Expand public transport options
- B) Increase fuel taxes
- C) Add city bicycles



ANSWER

A) Expand public transport options



ADAPTATION

How is Geneva informing the public about climate change?

- A) Broadcasting cartoons
- B) Hosting climate dinners
- C) Recruiting climate ambassadors



ANSWER

C) Recruiting climate ambassadors



ADAPTATION

What does the UV index help people understand?



ANSWER

Risk of sunburn or UV-related health effects (e.g. need for sunscreen or staying in the shade)





CLIMATE CHANGE

Name one social health impact of climate change.



ANSWER

Possible answers: Loss of jobs; Difficulties in access to public health services; Disruption of social networks



ECOSYSTEM

Which environmental factor influences thermal comfort outdoors?

- A) Air temperature
- B) Mean radiant temperature
- C) Wind speed



ANSWER

B) Mean radiant temperature



HEALTH IMPACTS

Why do we shiver when we feel cold?



ANSWER

Our muscles are contracting to produce heat



HEALTH IMPACTS

How does the air pollutant PM2.5 affect our airways and alveoli?



ANSWER

It irritates or inflames them.



HEALTH IMPACTS

Which air pollutant causes the highest number of annual deaths in the EU?

- A) Fine particulate matter (PM2.5)
- B) Nitrogen dioxide (NO2)
- C) Ozone (O3)



ANSWER

A) Fine particulate matter (PM2.5)



HEALTH IMPACTS

True or False: Heatwaves are only dangerous for people with existing heart conditions.



ANSWER

False - While people with existing heart conditions are at higher risk during heatwaves, heatwaves can affect anyone.



HEALTH IMPACTS

How does the air pollutant PM2.5 impact our cardiovascular health?

- A) Lowers blood pressure
- B) Causes inflammation
- C) Lowers heart rate



ANSWER

B) Causes inflammation



HEALTH IMPACTS

True or False: Ultrafine particles (e.g., PM2.5) are less harmful than PM10 due to their small size.



ANSWER

False - Ultrafine particles are more harmful than PM10 due to their small size.



HEALTH IMPACTS

Which underlying condition increases cardiovascular risk during heatwaves?



ANSWER

Hypertension (high blood pressure): when the pressure in your blood vessels is too high (140/90 mmHg or higher).



HEALTH IMPACTS

Name at least two weather factors that influence how hot or cold we feel.



ANSWER

Possible answers: Temperature; Humidity; Wind; Radiation



HEALTH IMPACTS

True or False: Carbon monoxide supports oxygen binding to haemoglobin in red blood cells.



ANSWER

False - Carbon monoxide prevents oxygen from binding to haemoglobin in red blood cells.



POLICIES

Which health impact of climate change is least addressed in current EU policies?

- A) Physical health
- B) Mental health
- C) Social health



ANSWER

B) Mental health



POLICIES

Name three sectors which are usually discussed in EU policies.



ANSWER

Possible answers: Agriculture; Manufacture; Transport; Telecommunications; Education; Human health



POLICIES

Which type of public participation is common in local climate policies?

- A) Citizens give feedback
- B) Citizens co-design solutions
- C) Citizens take decisions



ANSWER

A) Citizens give feedback



POLICIES

Which citizen climate actions are primarily targeted in local European policies?

- A) Energy use at home
- B) Food consumption
- C) Mobility and transport



ANSWER

C) Mobility and Transport



ADAPTATION

Name a nature-based strategy in urban design that improves outdoor thermal comfort?



ANSWER

Possible answers: Planting trees; Planting green roofs; Increasing shaded areas; Use reflective materials; Installing water features



ADAPTATION

How is Bologna reducing the use of drinking water for irrigation?

- A) Importing water
- B) Prohibiting gardening
- C) Reusing treated wastewater



ANSWER

C) Reusing treated wastewater



ADAPTATION

How is Heraklion protecting cultural heritage sites?

- A) Relocating them
- B) Using heat reflective paint
- C) Monitoring their condition



ANSWER

C) Monitoring their condition