



Quiz !

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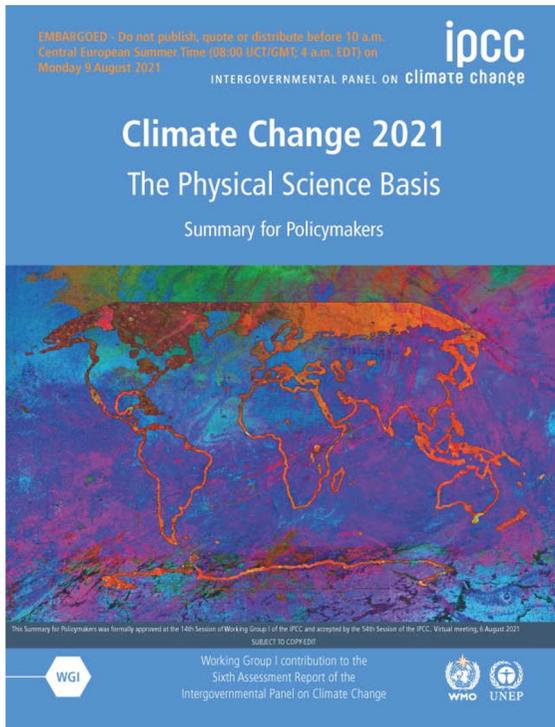


Is the human being the only one responsible for the current climate change?

Quiz !



Is the human being the only one responsible for the current climate change?



Yes !

The global climate disruption is completely due to our activities.

Natural phenomena have a zero average influence.



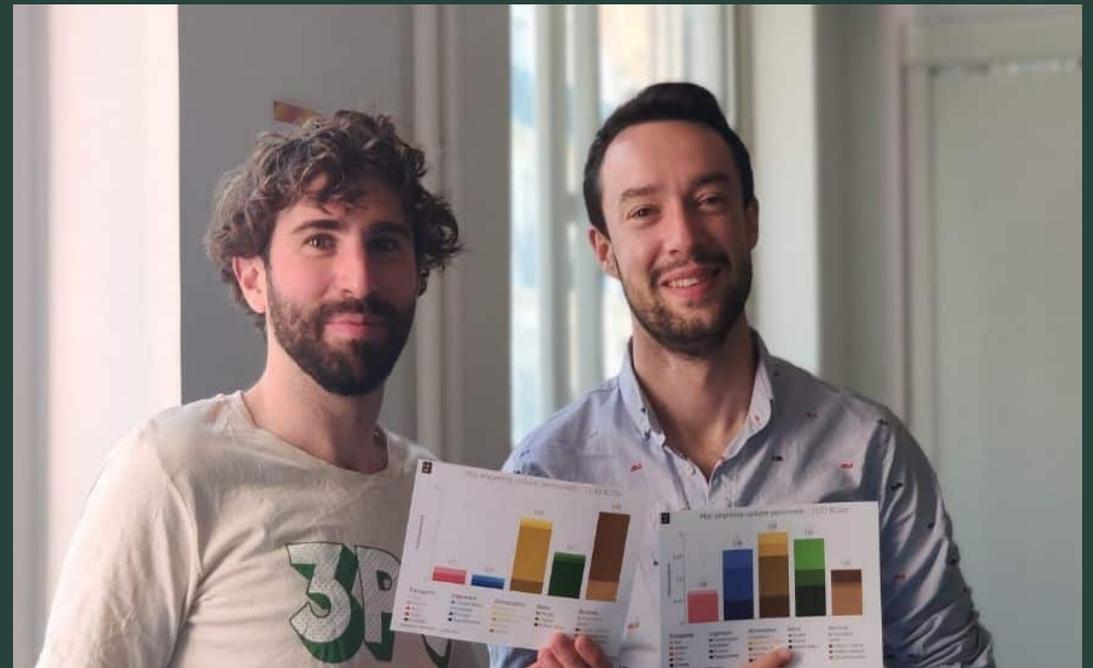
What is the 2tonnes workshop?



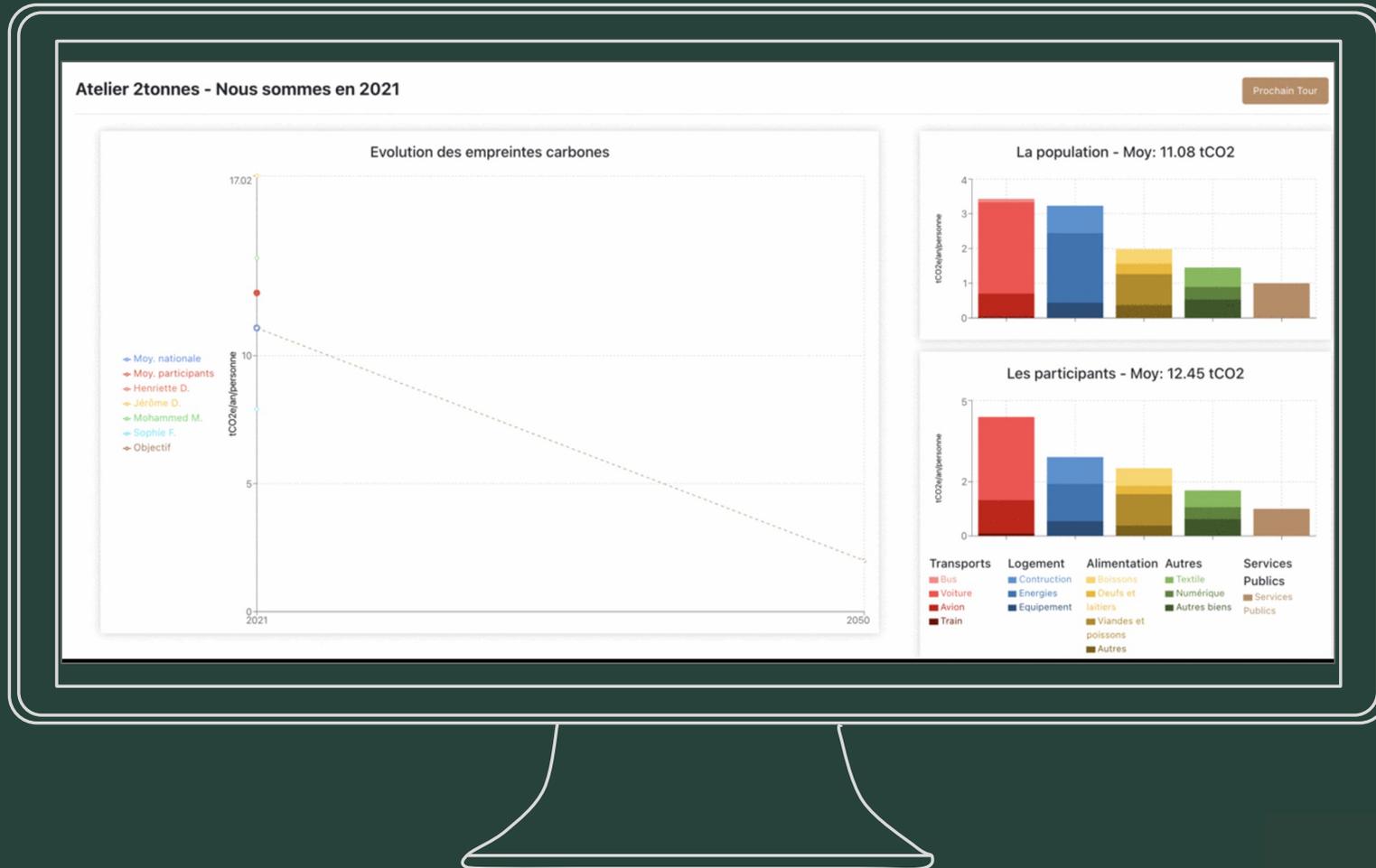
During the 2 tonnes workshop, we'll **simulate the individual choices and collective decisions that can be made between today and 2050 to reduce greenhouse gases emissions**, and see how they can impact individual, national and international carbon footprints.

2 Femmes

Comment agir pour le climat ?



The objective is to define and create a global low carbon transition scenario !

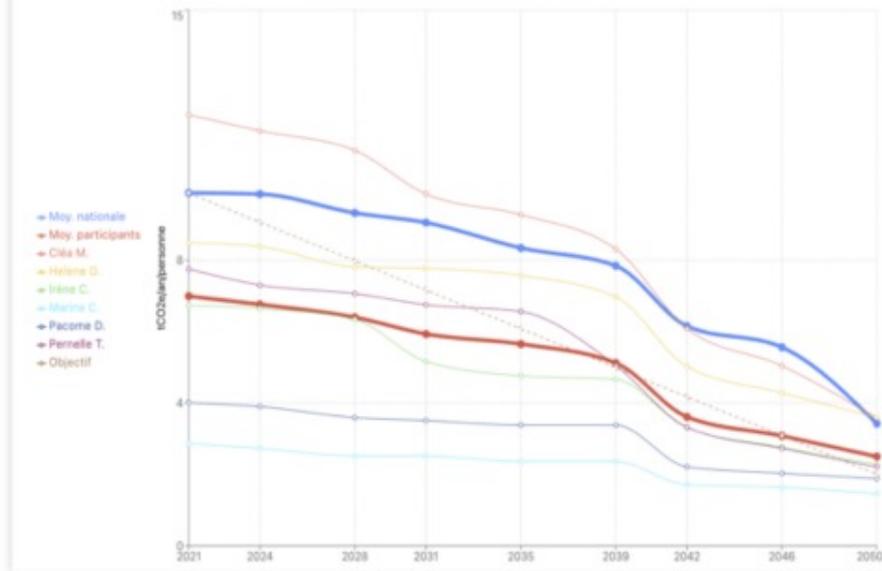


Together, we will define and create a global low carbon transition scenario !

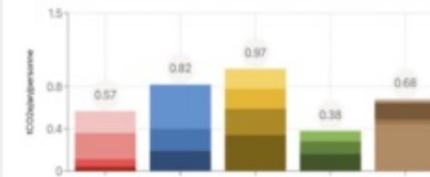
2tonnes x Makesense - Nous sommes en 2050

Tour supplémentaire

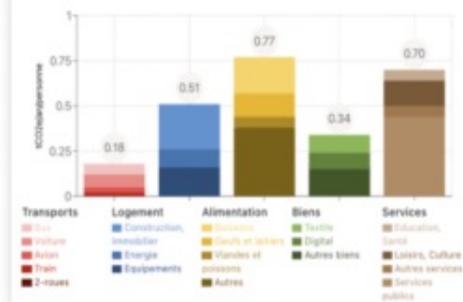
Evolution des empreintes carbone



La population - Moy: 3.42 tCO2



Les participants - Moy: 2.5 tCO2



REFERENCES



ORGANIZATIONS



EDUCATION



Quiz !



What is the climate change mitigation goal ?

Quiz !



What is the climate change mitigation goal ?



Paris Agreement :

“Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels”

Quiz !



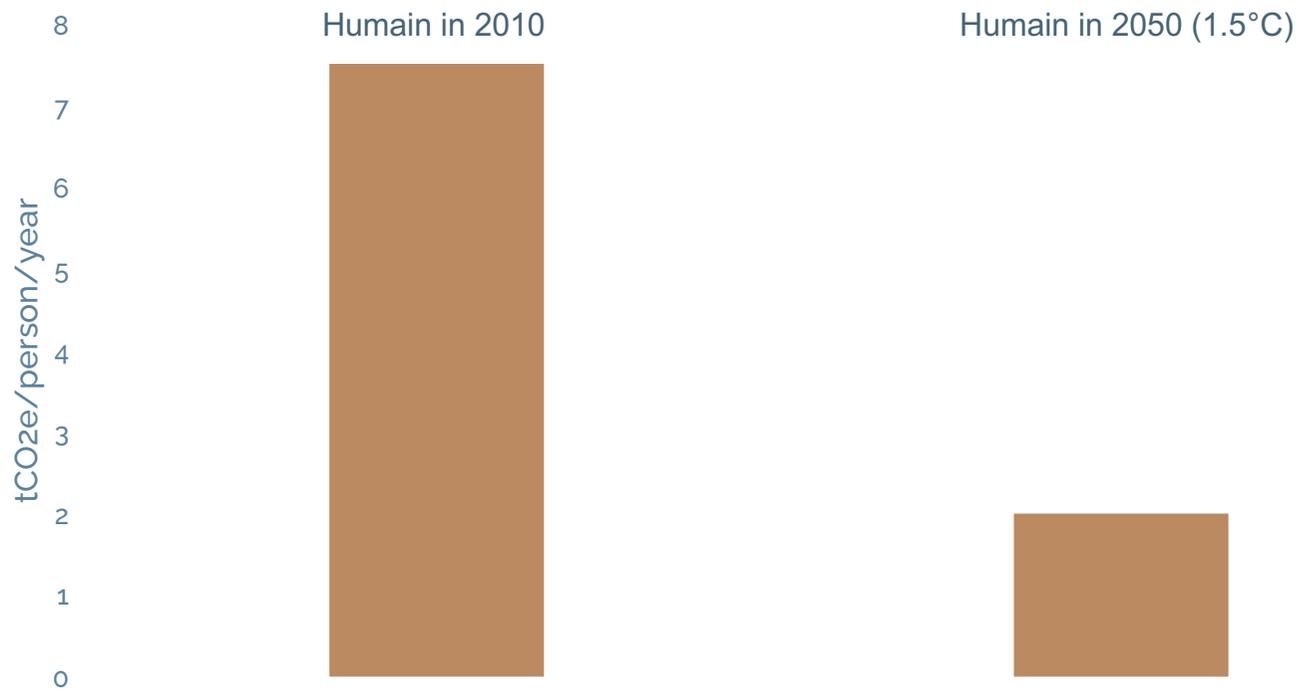
How does this relate to “2tons”* ?

*2tonnes can also be used.

Quiz !



How does this relate to “2tons”* ?



According to the IPCC, limiting our emissions to 1.5° means reducing them to 2tCO2e/human by 2050.

Quiz !



Sort countries in ascending order by their carbon footprint per average person?

USA

China

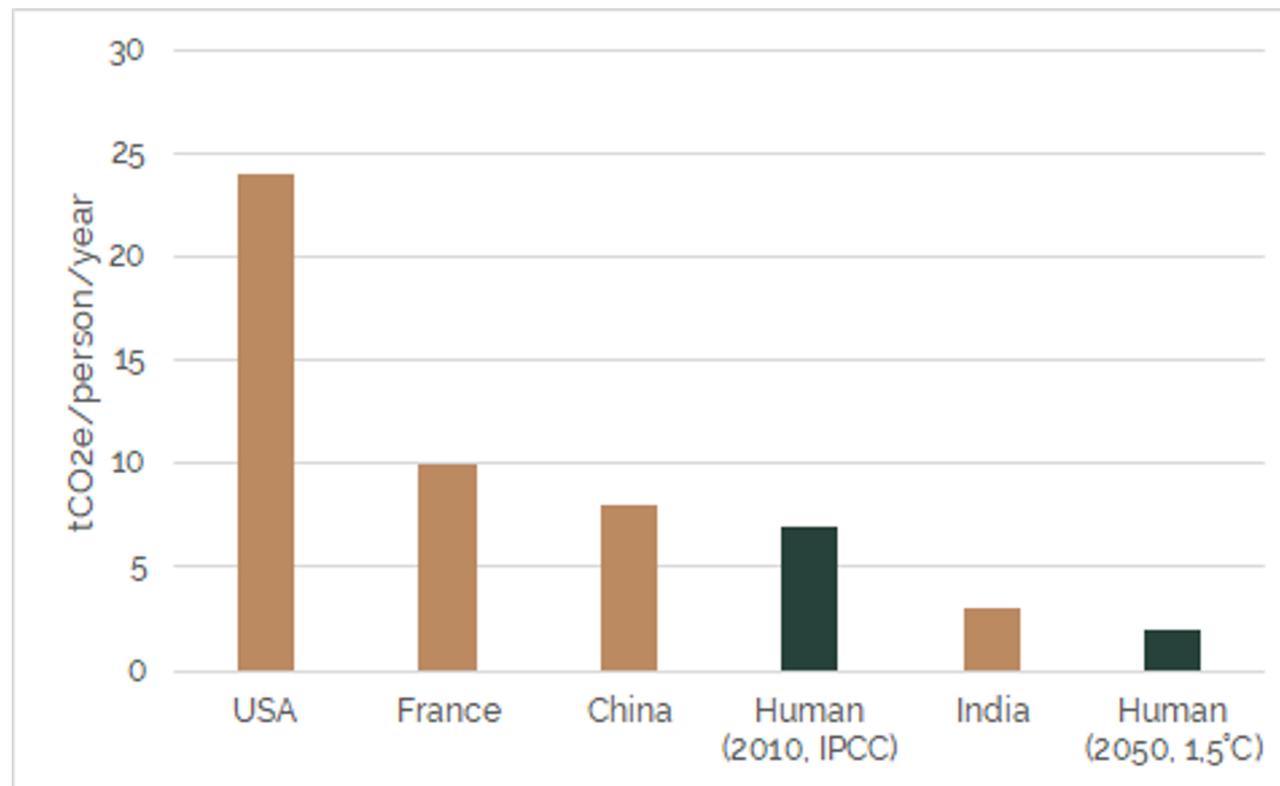
France

India

Quiz !



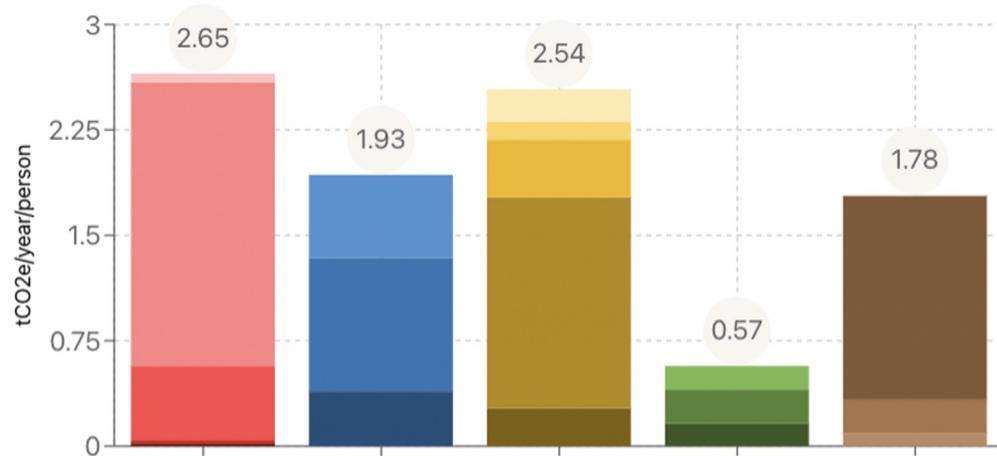
Sort countries in ascending order by their carbon footprint per average person;



How to read a carbon footprint ?



The case of France



Transports

- Bus
- Car
- Plane
- Train
- 2-wheelers

Housing

- Construction, Real estate
- Energy
- Equipments

Food

- Cereals
- Drinks
- Eggs & dairies
- Meat & fish
- Other

Goods

- Clothes
- Digital
- Other goods

Services

- Common services
- Outings
- Other services

Transports

- Bus
- Car
- Plane
- Train
- 2-wheelers

Housing

- Construction, Real estate
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- Cereals
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Introduction – 30 minutes



Game – 1h30



Debrief – 30 minutes



Rules of the game.

Goal : 2tonnes



Reach 2tonnes per person



On average for the world population

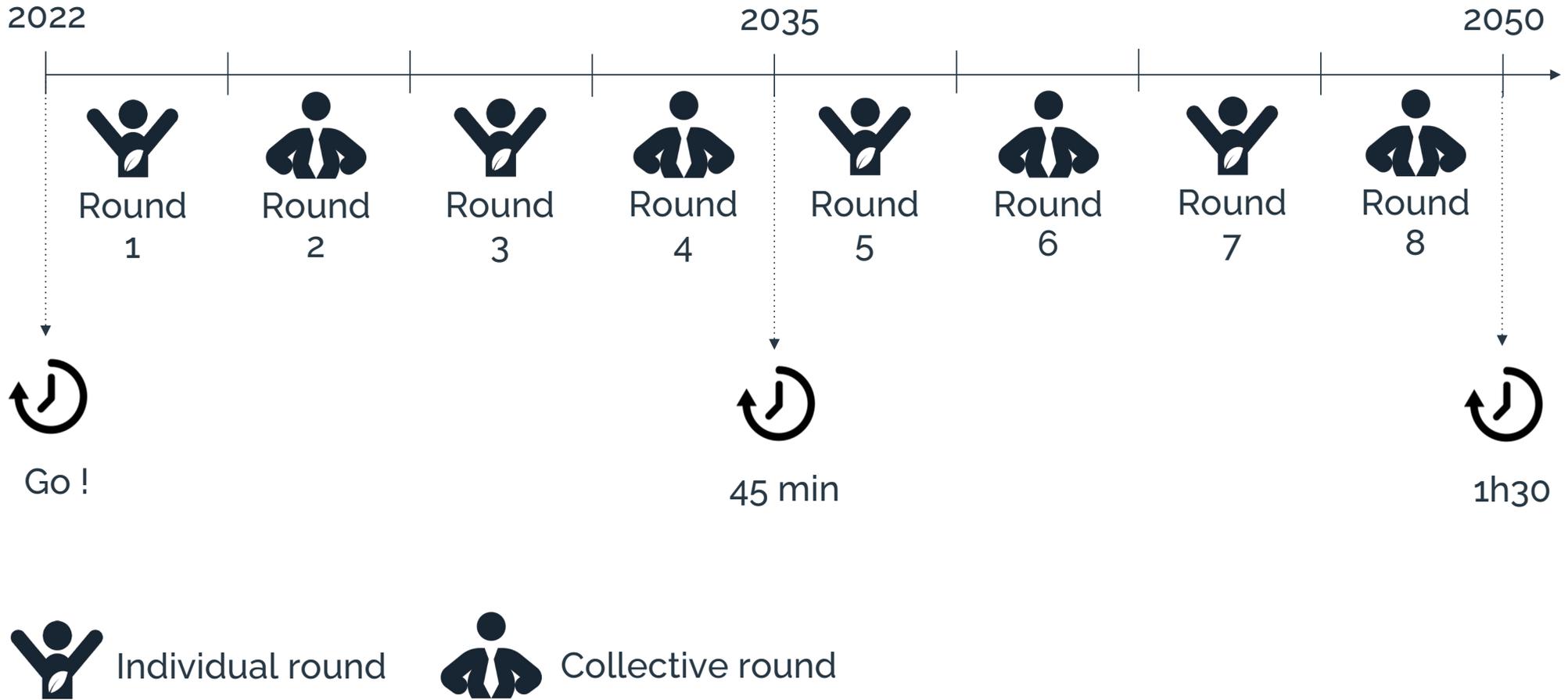


In 2050 (in 1h30)

On our way to 2050 !



Time-line

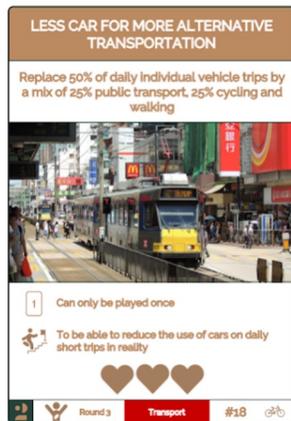


Individual round



You are you. Choose individual actions to reduce your carbon footprint and try to influence society!

Individual action cards



+ a back page with information to go further: do not read systematically.

Heart budget

As individuals, we have a limited capacity to make efforts: we have a **limited number of hearts**.



- Do not exceed the budget
- Each round has 8 extra hearts.

Choices to make

We have to choose from all the actions because our number of hearts is limited. **The aim is to maximise our impact.**

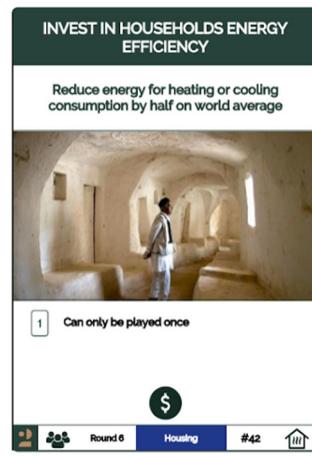
Please note that the impacts are calculated on a personalised basis: think in terms of your lifestyle!

Collective round



You will decide together, as decision-makers, to invest in national levers that will apply to the whole country.

Collective action cards



+ a back page with information to go further: do not read systematically.

A budget in \$

The company invests in transition.
This quantity is limited.



- 1 "\$" ⇔ 1 Trillion Dollars
- Do not exceed the budget
- At least 3 \$ more for each round
- It is possible that this will increase...

Choices to make

We have to choose from all the actions because our number of hearts is limited. **The aim is to maximise our impact.**

Please note that the impacts are calculated on a personalised basis, but apply to the whole population!

Calculations and results



After each end of the round, the emissions decrease! The host shares the results with you.

Calculations in every round

Carbon footprints are calculated **dynamically** and **customized** with the following data:



IPCC reports



FAO database



OCDE database



Work Bank



IO Tables from EORA

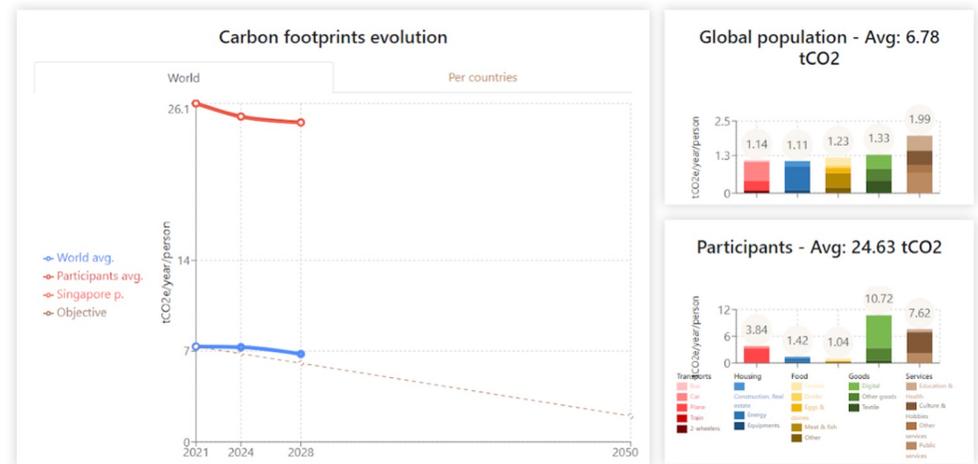


Participants personal data

And many other secondary data sources and inspiration sources...

Display of the evolution of the emissions

The evolution of individual and collective carbon footprints are displayed at the end of each round.

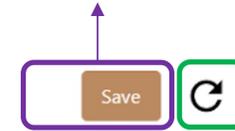


Individual rounds in remote



f"éf"é - Individual round 2021

5. Save after your action choices



1. Update at the beginning of a round

4. Follow your heart budget

Participants

India p. 0 ✓ 8 ♥

Singapore p. 0 ✓ 8 ♥

2. Discover action cards

Batch 1

Cards ⓘ

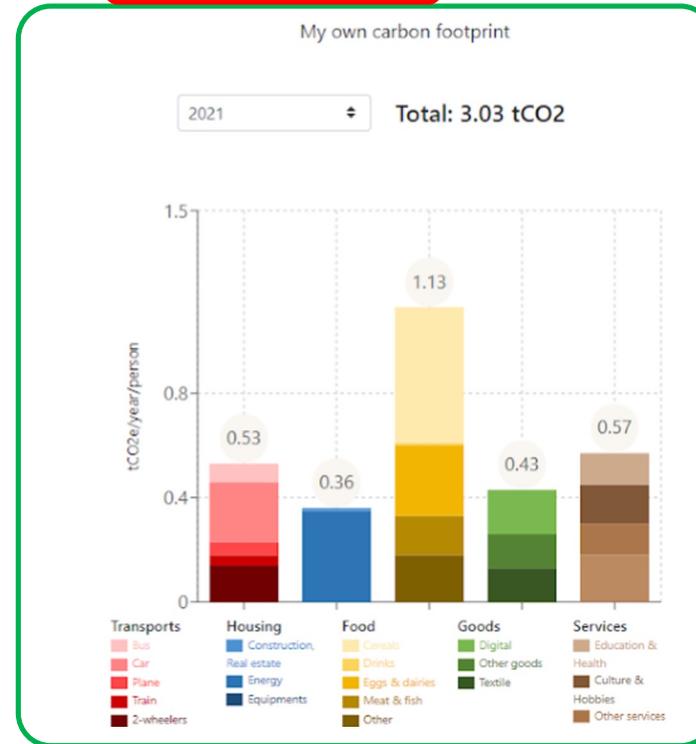
- #1 Flexitarian diet ♥ 4
- #2 Less red meat ♥ 2
- #3 Less eggs and dairies ♥ 1
- #4 Eat local ♥ 1
- #5 Eat organic ♥ 2
- #6 Less food packaging ♥ 2

3. Choose your actions by clicking

India persona

Persona: India persona

If you are a persona: discover your persona



0. Analyze your carbon footprint

Bonus question

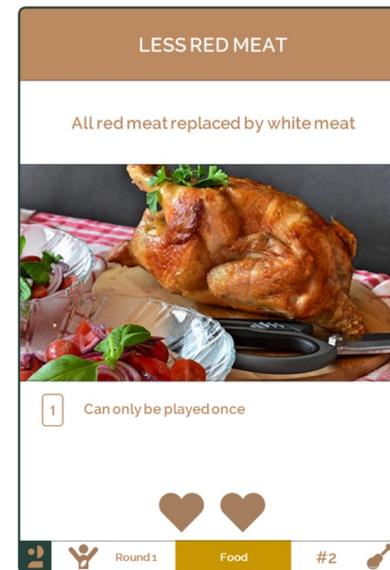
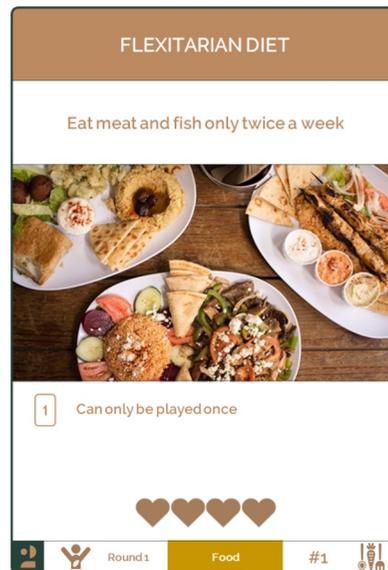


Among all the actions on food, 2 have a huge impact.
Which two?

Bonus answer



Among all the actions on food, 2 have a huge impact.
Which two?



Animals have to be fed: 1 animal calorie is between 7 and 10 plant calories (so a lot of emissions from agriculture). Then, ruminants emit methane.

Bonus question



What kind of actions are priorities?

Actions decarbonizing energy production

Actions reducing energy

Place the actions according to their type.

| ELECTRICITY SAVINGS | LESS DOMESTIC HOT WATER | INVEST IN PHOTOVOLTAIC SOLAR PANELS | LESS HEATING AND AIR-CONDITIONING | RENOVATION AND INSULATION | SWITCH TO AN EFFICIENT ELECTRIC HEATING SYSTEM |
|---|--|---|---|---|--|
| LED lightning, standby appliances unplugged, equipments in "eco" mode, line-drying instead of tumble-drying when possible | Showers twice as short and laundry two times less hot | Replace 50% of your annual electricity production with auto-produced solar electricity | 3°C less at home when using heating and/or 3°C more when using A/C | Reduce energy consumption for heating and cooling by 30% | Replace your space heating system with a heat pump |
|  |  |  |  |  |  |
| 1 Can only be played once  | 1 Can only be played once  | 1 Can be played more than once  Have access to a decent amount of sunshine, and have outdoor space available  | 1 Can be played more than once  Having a nice sweater and a light T-shirt at home!  | 1 Can only be played once  Be the owner of your house/apartment (or deal with your landlord)  | 1 Can only be played once  Be able to install a heat pump in your house, and have access to network electricity  |
| Round 5 Housing #31 | Round 5 Housing #32 | Round 5 Housing #35 | Round 5 Housing #33 | Round 5 Housing #34 | Round 5 Housing #36 |



What kind of actions are priorities?

1. Actions reducing energy

LESS HEATING AND AIR-CONDITIONING

3°C less at home when using heating and/or 3°C more when using A/C



1 Can be played more than once

Having a nice sweater and a light T-shirt at home!

2 hearts

Round 5 Housing #33

RENOVATION AND INSULATION

Reduce energy consumption for heating and cooling by 30%



1 Can only be played once

Be the owner of your house/apartment (or deal with your landlord)

5 hearts

Round 5 Housing #34

ELECTRICITY SAVINGS

LED lightning, standby appliances unplugged, equipments in "eco" mode, line-drying instead of tumble-drying when possible



1 Can only be played once

1 heart

Round 5 Housing #31

LESS DOMESTIC HOT WATER

Showers twice as short and laundry two times less hot



1 Can only be played once

1 heart

Round 5 Housing #32

2. Actions decarbonizing energy production

SWITCH TO AN EFFICIENT ELECTRIC HEATING SYSTEM

Replace your space heating system with a heat pump



1 Can only be played once

Be able to install a heat pump in your house, and have access to network electricity

3 hearts

Round 5 Housing #36

INVEST IN PHOTOVOLTAIC SOLAR PANELS

Replace 50% of your annual electricity production with auto-produced solar electricity



1 Can be played more than once

Have access to a decent amount of sunshine, and have outdoor space available

3 hearts

Round 5 Housing #35

We need to do both. However, it will be easier to change production technologies if demand is lower. Moreover, the manufacturing of technologies has other impacts than on the climate.

Summary - Main levers



- **Control the increase in transport**
- Reduce aircraft traffic
- Develop public transport in developed countries
- Improve car and plane technologies



- Reduce housing energy consumption in North countries
- Improve housing and access to energy in developing countries
- Control housing construction and improve practices



- **Reduce meat consumption, especially red meat**
- Eradicate hunger and reduce waste
- Decarbonize agriculture practices



- **Buy less new goods**
- Objects that last longer
- An evolving relationship with consumption
- Optimize industry and tertiary sector energy consumption



- **Reduce coal and oil consumption**
- Develop renewable electricity production
- Electrify certain uses

Now it's your turn !



And you, what actions would you like to put in place to **accelerate the transition** ?

You are free to create an action card together!

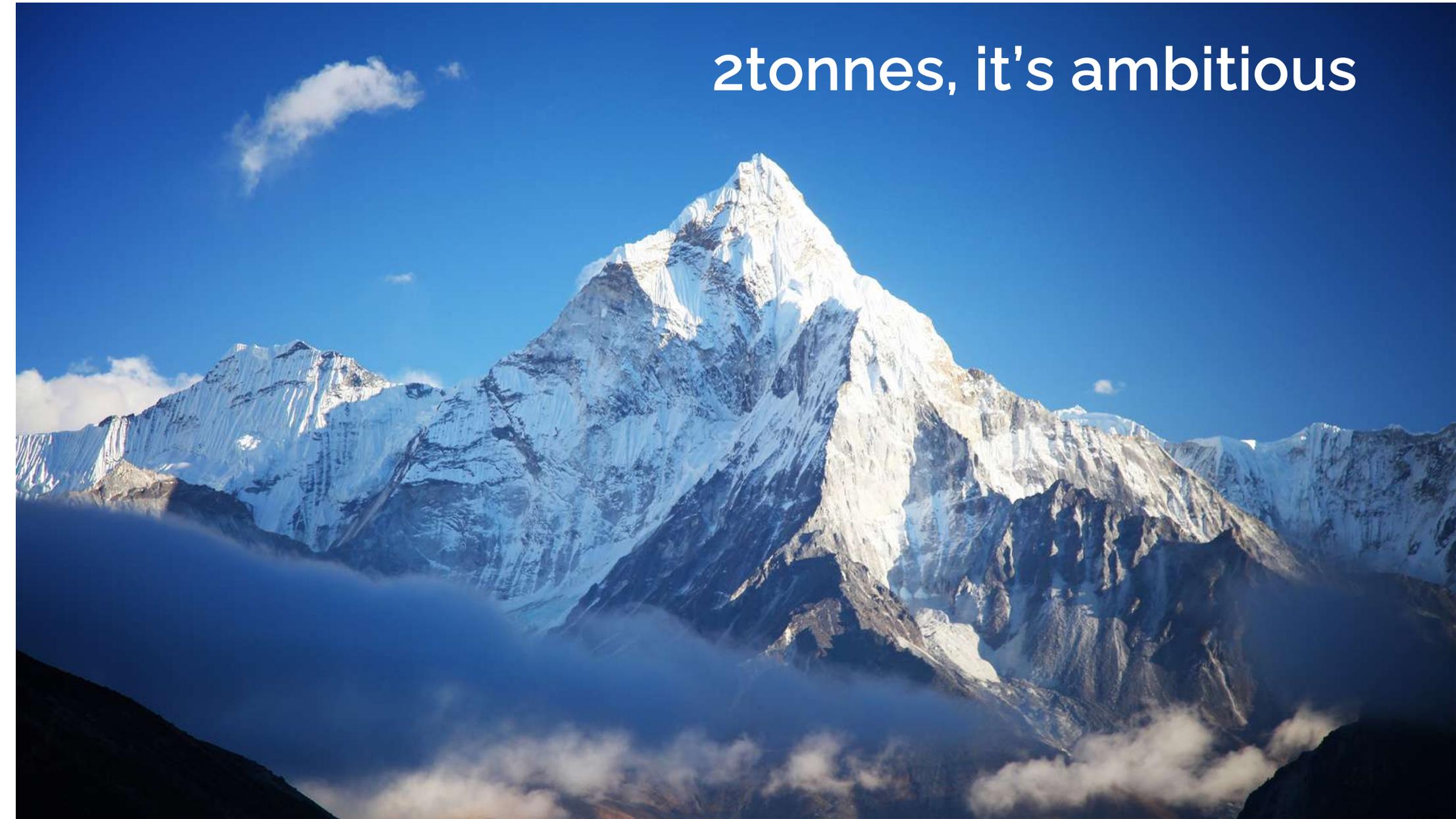
The objective is to represent the chosen action in a card defining the idea you have **as a team**.

[GO TO THE DEBRIEF SLIDES](#)



Conclusion

2tonnes, it's ambitious

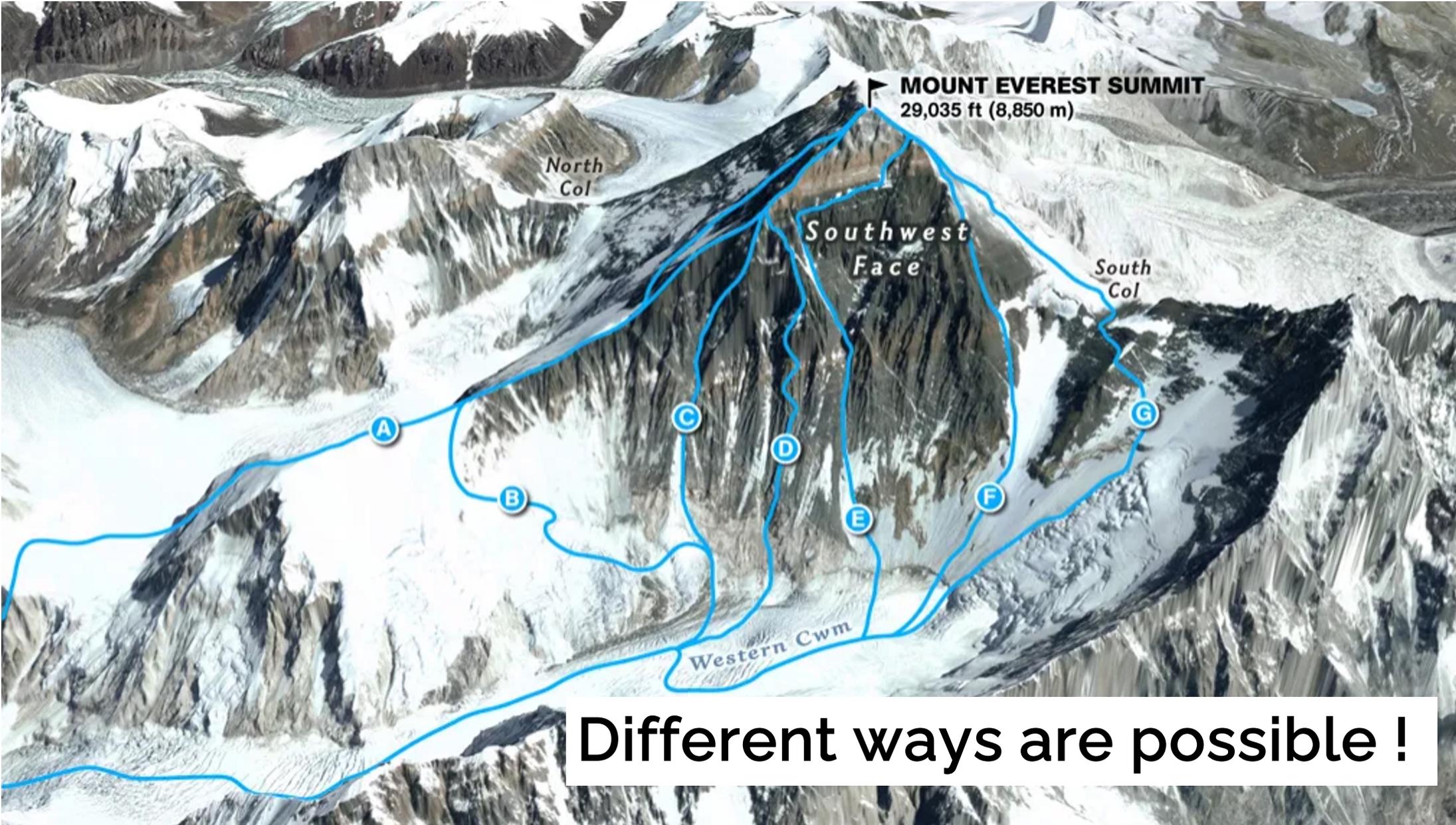


All in the same boat, but with different contexts





To reduce, it's possible.



Different ways are possible !

Social dynamics and influence are very important.





Thank you & let's get in touch!

