



Thank you for downloading this PlayDecide game.

The PlayDecide discussion game allows to talk in a simple, respectful and fact-based way about controversial issues.

The game enables players to get familiar with a question, see it from different perspectives and **form or clarify their own opinion**. PlayDecide also invites players to **look at issues as a group**: can you reach a positive consensus? The game **culminates in a vote** on a number of proposed policy positions.

A PlayDecide session lasts approximately **90 minutes** in total. The ideal number of players is 4 to 8: form several parallel groups if there are more than 8 players.

This pdf contains **all the necessary elements for a group of up to 8 people**. Each player needs a placemat and a copy of the visual instructions. The group shares all the other cards.

The game needs a **facilitator** who takes the time to get familiar with the flow and contents of the game before playing. As a facilitator, you'll find instructions at www.playdecide.eu, where you can also use an online tool to plan your session, guide your group while playing, record vote results and compare them with all other sessions of this game played in the world.

You can also create your own games using the PlayDecide template or translate existing games into your own language.

Enjoy!

For any question or information, ask the community via the PlayDecide Facebook page or email info@ecsite.eu.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 869474.

Instructions

1 / Preparation. You will find step by step online support for facilitators on the PlayDecide website: if you wish to use it, log in at www.playdecide.eu and choose “plan a session”.

Print out your cards and placemats (from p.4 to the end of this pdf) following the print specifications indicated at the bottom of each page.

This pdf contains all the necessary elements for a group of up to 8 players. If you have more participants, divide them into parallel groups and print more copies.

Each player needs a placemat (p.4) and a copy of the visual instructions (p.5). The group shares all other cards. Provide pens and pencils for all.

For best printing results, use 160g/m2 paper. You need:

- One A3 white paper sheet per player for the placemats
- 15-20 white A4 sheets in total for visual instructions, story cards, white cards, cluster mats and vote results sheets
- 3-4 green A4 sheets in total for info cards
- 3-4 blue A4 sheets in total for issue cards
- 1 yellow A4 sheet in total for yellow cards

Cut out the cards.

2 / Getting started. From start to finish, the game will take about 90 minutes to play.

As a facilitator, you can **log onto the www.playdecide.eu website to plan your session** and use the facilitator’s tool during the game. As you press “start”, a timer is launched and instructions take you through the different stages of the game, all the way to recording and sharing the results of your session.

All players have a placemat in front of them. There are **different types of cards** that will gradually **fill up the placemats**.

The facilitator talks the players through the flow of the game and its three main stages using the visual instructions. He or she points out the **aims of the game**.

Before the first phase starts, the facilitator reminds all players about the conversation guidelines (bottom left on their placemat) and hands out the **yellow cards**. Anyone can raise a yellow card to pause the discussion in case they feel someone is not respecting the guidelines. When the issue is solved, the discussion resumes. On the top right of the placement there is a space for personal notes and ‘initial thoughts’.

3 / Game phase 1: Information. This part of the game takes approximately **30 minutes**.

In this stage players get familiar with the issue, see it from different perspectives and **form or clarify a first personal opinion**. At the end of this stage, **each player has one or two of every kind of card on her or his placemat**.

1. All players read the **introduction** (top-left of their placemat).
2. All players read a few **story cards**. They each choose one they find significant and put it on their placemat. Each player briefly summarizes their story card to the group.

3. All players exchange and read **info cards**. They each choose two they find significant and put them on their placemat. Each player briefly summarizes their info cards to the group.
4. All players read **issue cards**. They each choose two they find significant and put them on the placemat. Each player briefly summarizes their issue cards to the group.

Players can use the white cards at any time to add information and issues if needed.

4 / Game phase 2: Discussion. This part of the game takes approximately another **30 minutes**.

In this stage, players **share their first opinion with others and refine their point of view** as they hear different arguments and perspectives. Players use the cards gathered in the first stage to sustain their arguments.

There are **different ways to discuss**. Choose one that fits the character of the group.

- You may use the 'Free form': no restrictions, the discussion flows among the players. Everyone tries to respect the guidelines (if not the yellow cards can be used).
- A more structured way to discuss is to 'talk in rounds'.

5 / Game phase 3: A shared group response. This last part will take approximately **20 minutes**.

This stage invites players to **look at issues as a group**: what opinions are present in your group? Can you reach a positive consensus on a position?

1. Everybody reads the **policy positions** again.
2. Try to look for common ground. Is there a policy position you can all live with? If not, try as a group to formulate your own 'fifth policy'.
3. All players **vote individually** in turn on all policies.
4. **Votes are recorded** on the printed voting sheet or directly online if you're using the facilitator's tool that provides a nice visual summary and allows you to compare your group's results with that of other players around the world.

6 / Upload results. If not done during the session, the facilitator logs in at www.playdecide.eu and transfers the results from the voting sheet to the website. Your results will be added to the results of all other sessions played in the world and available to download as a spreadsheet.

WATER-MINING



We depend on water for food, energy, health, transport and economy. And we need to produce and use water in a way that is sustainable, affordable and fair. This need is even more urgent with the climate crisis. By treating urban waste water and sea water, we can recover fresh water to address this problem. And new technologies can help us do this more efficiently and sustainably. Thanks to these technologies, we can also produce energy and valuable materials from waste water and sea water. What approach should Europe take towards these technologies?

Positions

1. We should ensure seawater desalination and wastewater treatment benefit the local economy as much as possible, even if this means smaller economic benefits across Europe.
2. We should ensure the local environmental impact of seawater desalination and wastewater treatment is minimised as much as possible, even if this means less global environmental benefit.
3. We should ensure seawater desalination and wastewater treatment benefits the European economy as much as possible, even if this means some environmental impact.
4. We should ensure that the health and safety risks of seawater desalination and wastewater treatment are as low as possible, even if this means less efficiency.

Aims of the game

- Get familiar with this question and see it from different perspectives
- Form or clarify your own opinion
- Work towards a shared group vision
- Vote on policy positions, share your results and compare them with the opinions of others who played the same game elsewhere in the world

Story Card

Info Card

Info Card

Initial Thoughts

Write down your initial thoughts, use White cards to add issues

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Issue Card

Issue Card

Guidelines

You have a right to a voice: speak your truth.
But not the whole truth: don't go on and on.

Value your life learning. Respect other people.
Allow them to finish before you speak.

Delight in diversity.
Welcome surprise or confusion as a sign that you've let in new thoughts or feelings.

Look for common ground.
'But' emphasises difference; 'and' emphasises similarity.

Three stages

1. Information. Clarify your personal view on the subject, reading and selecting the cards which you feel are most important for you. Place your cards on the placemat and then read them aloud to the other players. **± 30 min**

2. Discussion. Together with the other players, start discussing. Everyone gets a chance to speak. Use your cards to provide arguments. As a group, identify one or more larger themes that you all feel relevant. **± 30 min**

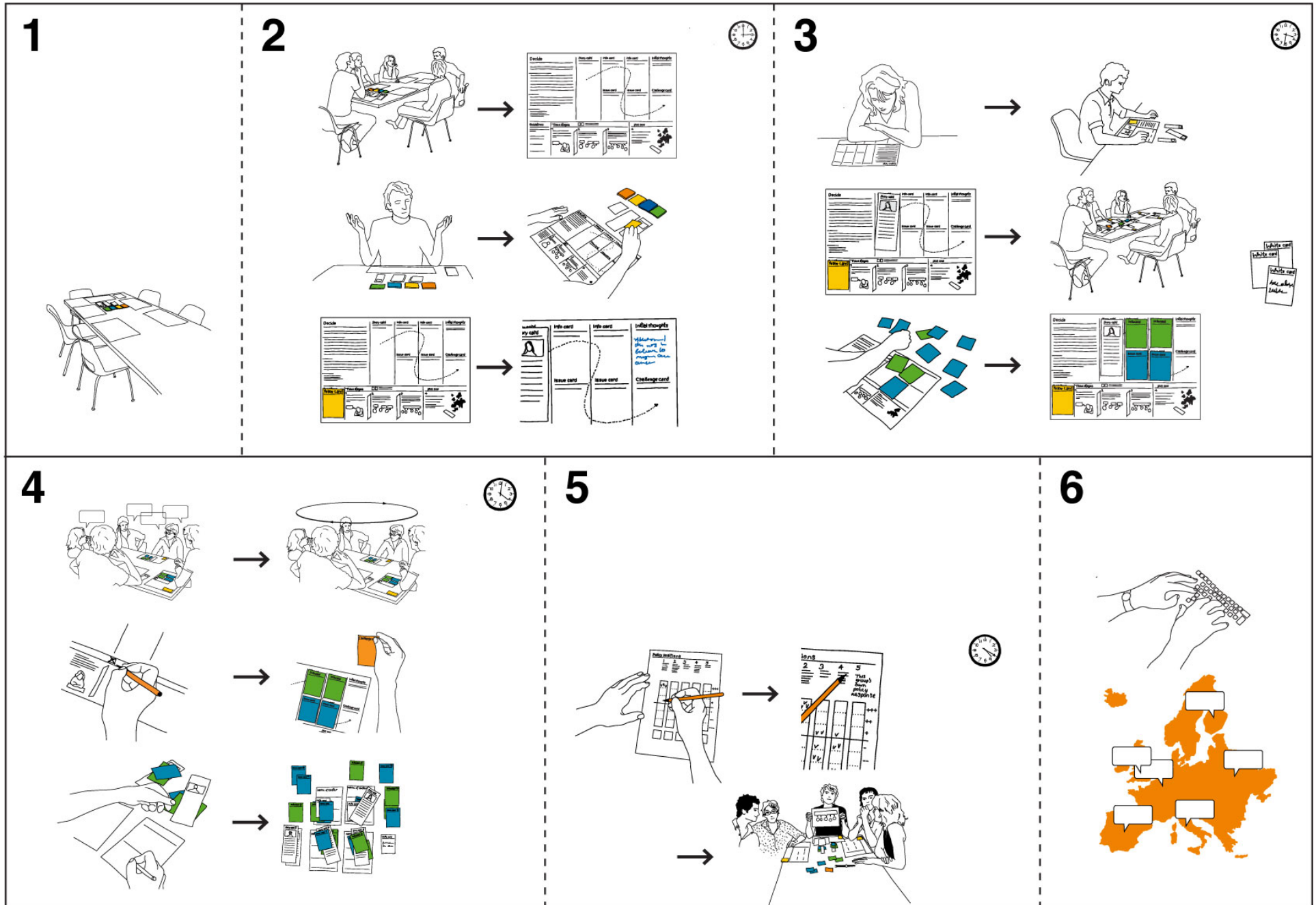
3. Shared group response. As a group, go back to the proposed positions. Can you reach a positive consensus? You can formulate a new common policy if you wish. All vote individually on each position. **± 20 min**

... plus one

4. Sharing. Go to www.playdecide.eu to share the results of your group and see how other people who played this game voted. You can also download a game to play with your friends or colleagues or create your own game.



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Info Card 1

Europe regulates water reuse

As of June 2023, the EU set water quality requirements for the safe reuse of treated urban wastewaters in agricultural irrigation, including monitoring, risk management and transparency.

Info Card 2

Water stress around the Mediterranean

Around the Mediterranean, 20% of the population lives under constant water stress, where there is not enough quality water to meet demand. In summer, over 50% of the population is affected by water stress.

Info Card 3

Water shortages mean energy shortages

In the European droughts of summer 2022, the lack of stored water affected hydropower generation and cooling systems of other power plants.

Info Card 4

What drives water scarcity?

Water scarcity is driven by climate and water demand. The climate controls whether freshwater resources are available, and in what season. Water demand depends on how much we use water for activities like industry, agriculture, tourism, irrigating parks and street cleaning, for example.

Info Card 5

Europe wastes water

The water saving potential in Europe has been estimated at 40%. Water could be saved by making buildings and manufacturing more efficient, and reducing leakages in networks.

Info Card 6

Europe's rivers under pressure

Only 42% of the 1.7 million kilometres of rivers and streams in Europe have "good ecological status", meaning they only vary slightly from undisturbed conditions. Urban wastewater is currently the main threat to their status.

Info Card 7

Tourists put pressure on water

The service sector, including tourism, accounts for 11% of Europe's total annual water use. Small Mediterranean islands in particular are under severe water stress conditions as tourists can outnumber locals 15 to 1.

Info Card 8

Reused water can help biodiversity

Waste water can be reused to restore river flows or supplement water in lakes and wetlands, helping to preserve biodiversity.

Info Card 9

Who uses the most water?

Agriculture is the largest user of freshwater in Southern Europe, varying between 50 per cent in Italy and 80 per cent in Greece, followed by industrial and urban use, including tourism and commercial activities.

Info Card 10

Some EU countries reuse a lot of water

Cyprus already reuses more than 90% of its wastewater. In Malta, the figure is 60%. Greece, Italy and Spain reuse between 5 and 12% of theirs.

Info Card 11

Heat energy from wastewater

Much urban wastewater comes from warm sources like showers and washing machines. Studies show that wastewater contains nearly five times the amount of energy that is needed for the process of treating it. So treatment facilities could help heat and power the cities that produce it.

Info Card 12

Desalination is energy-intensive

Desalination uses a lot of energy to force water through osmosis membranes under high pressure. It is estimated that this energy consumption will increase eight-fold over 25 years globally, due to increased demand for freshwater.

Info Card 13

Reusing brine from seawater

Desalinating sea water produces a by-product, brine. It is often released back into the sea where it can damage the ecosystem. But new technologies mean the brine can be exploited as a source of raw materials for agriculture and the chemical industry.

Info Card 14

Desalination is mostly for drinking water

In the EU, most of the water produced by desalination is used for the public water supply. It makes up around 4.2% of the total used by the public on average.

Info Card 15

Agriculture and Europe's economy

44 million jobs in Europe are dependent on agricultural production. The EU is the world's largest agrifood exporter, with over 40% of our land mass devoted to agriculture.

Info Card 16

Managing risks of wastewater reuse

Even treated wastewater can contain pathogens and pollutants which may pose risks to our health. In Europe, these hazards are carefully monitored and controlled to protect public health.

Info Card 17

Running out of phosphorus

We need phosphorus for fertiliser. But it is predicted that extractable phosphorus resources will become scarce or even run out in the next 50 to 100 years.

Info Card 18

How is water reused?

Water can be reused for drinking. It can also be reused for agriculture, industrial processes, watering parks and gardens.

Info Card 19

Water, water everywhere

72% of the Earth's surface is covered with water, but less than 3% of this is suitable for uses like drinking and irrigation.

Info Card 20

Water stress affects Europeans

In an average year, 30% of Europeans are affected by water stress - where there is not enough quality water to meet demand.

Info Card 21

"Forever chemicals" and reusing wastewater

PFAS are known as "forever chemicals" - widely used, man-made chemicals that can accumulate over time, threatening the health of humans and the environment at high concentrations. Urban wastewater treatment plants can be a source of PFAS.

Info Card 22

Water shortages affect crops in Europe

In the European droughts of 2022, water and heat stresses meant a much smaller yield of crops - particularly maize, soybeans and sunflowers.

Info Card 23

The threat of soil degradation

Soil degradation is estimated to cost the EU €97 billion per year - over a quarter of Europe's total agricultural output of €365 billion. Land degradation could increase food prices by 30% over 25 years.

Info Card 24

Europeans say yes to drinking recycled wastewater

According to a 2022 survey, 75% of respondents in the Netherlands favour recycling water to produce drinking water. In Spain the figure was 73%.

Issue Card 1

How do we regulate what we don't know?

Safety is regulated based on what is known. What about the risks that we don't know?

Issue Card 2

More, more, more

By finding technological solutions for water stress, aren't we letting people and companies get away with wasting even more water?

Issue Card 3

War for water?

In the 20th century, wars were fought for oil. Will the wars of the 21st century be fought for water?

Issue Card 4

Business opportunities are limited

We may have the technology to recover nutrients from wastewater, but will companies get a return on their investment? If it isn't economically feasible, how will it happen?

Issue Card 5

Even more future resources from wastewater

In the future, bioplastics, enzymes, metals and minerals could all be recovered from wastewater with advancing technologies - all valuable resources. Will they be relevant compared to what we consume?

Issue Card 6

Water seems cheap

If water cost us more, would we waste it less and value it more?

Issue Card 7

Treat more or pollute less?

Shouldn't we push industry to pollute water less, rather than investing in treatment to take the pollutants out?

Issue Card 8

Where is the energy coming from?

Energy currently used for desalination typically has a high carbon footprint. If desalination is not coupled with renewable energy, it is estimated to cause a 180% increase of carbon emissions over 25 years.

Issue Card 9

Agriculture: go big or go small?

Do we want Europe's animal production to feed Europeans? Or to export as well?

Issue Card 10

How do we see urban wastewater?

Is it a residue that must be treated to be discharged, or a valuable raw product full of crucial resources like water, nutrients, and energy?

Issue Card 11

Who owns sea water?

Does the sea belong to us all? Should private companies be allowed to make profit from desalination?

Issue Card 12

Global economy or local economy?

If we treat our wastewater or sea water, use it to water crops, and then export the vegetables to other countries, how is that helping local people?

Issue Card 13

Who pays to treat water?

The more we treat and reuse wastewater and sea water, the more it costs. Who is going to pay for that?

Issue Card 14

One size fits all?

Conditions in countries across Europe are so different - should we focus on local solutions and making regulations more flexible?

Issue Card 15

The “yuck factor”

Do people reject the idea of treating wastewater as a source of drinking water because of the scale of the risks? Or because the idea disgusts them?

Issue Card 16

Transparency

How can we make sure water reuse and desalination are done transparently?

Issue Card 17

How can we ensure we help the poorest in Europe?

By investing in access to fresh water, or by investing in the economy to reduce poverty?

Issue Card 18

Who does sewage belong to?

Sewage comes out of me! Do I own it? Is it OK if companies make money from it?

Issue Card 19

Can regulation promote water reuse?

In a European consultation, most people saw regulation as an effective way for the EU to promote water reuse in Europe. Most supported legally-binding standards at EU level.

Issue Card 20

Look to the future

It's hard enough to get governments to invest in solving current issues. How can we get them to address the future problems we face with water and nutrient scarcity?

Issue Card 21

Trust in government

In a country where people trust their government more, people are more likely to accept new technologies in water reuse and desalination.

Issue Card 22

Water as a human right

Access to safe drinking water and sanitation are internationally recognised human rights. How does that affect our view?

Issue Card 23

Is water reuse cost-effective?

How can we measure the benefits?

Issue Card 24

There is no zero risk

What level of risk to our health and our environment are we willing to accept?

Issue Card 25

A risky business?

Part of the reason companies don't invest in wastewater reuse technologies is that contaminants and pathogens in wastewater pose a big risk.

Guidelines Yellow Card!

Use the yellow card to help the group stick to the guidelines. Wave it if you feel a guideline is being broken or if you do not understand what is going on.

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Story Card 1

Ekaterina, Cyprus



I work for the water department for the government of Cyprus. Ours is the most water-stressed country in Europe - lots of long droughts. Desalination of seawater is one way of producing more water, but it's expensive as it requires a lot of energy. We're looking into new technology that uses the brine to produce raw materials for industry and make desalination affordable. But honestly, times are tight and it's a struggle to find private investors to support the development of this new technology.

Story Card 2

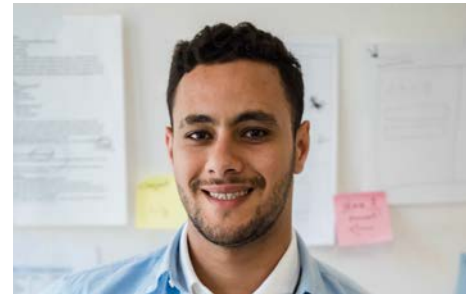
Alicia, Spain



I work in tourism for the city government in Almería - the most beautiful city in Andalucia! But of course water is a big issue for us and I'm glad the government is planning on desalinating sea water. I heard they use 80% of the desalinated water for agriculture and only 20% in the city - shouldn't more be used in our cities, where it benefits local people directly and supports the tourist industry?

Story Card 3

Thomas, France



We've been hit hard by droughts where I live in France and the heatwaves are getting worse and worse. It's a real worry for me that this situation is only going to get more serious over time. What I don't understand is why farmers here are trying to grow crops like maize, to feed livestock, that require a lot of water. They need to move on and adapt so we don't waste water and fertiliser trying to keep their farms going.

White Card

White Card

White Card

Story Card 4

Nikoleta, Bulgaria



I work at a wastewater treatment plant where we take contaminants out of sewage, producing fresh water. With new technologies we can do that even more efficiently. For me it's a tricky one. I understand that we need to find new sources of water but I'm still not sure I'd be comfortable with a whole generation growing up drinking water recovered from sewage. As much as I know it's sustainable, I do find the idea disgusting. We can never rule out the possibility that a disease like E coli enters the water system from treated sewage. I don't trust the government with my tax money - why would I trust them to keep my water safe?

Story Card 5

Antonia, Italy



I'm an environmentalist living on the Po river in Italy and it makes me so sad these days to see the state of the Po. It's been ruined over the years by industry and agriculture. And now with the droughts farmers are leaving fields empty. To me this is an ecological emergency. I have heard that fresh water can be recovered from wastewater and introduced to these ecosystems to help them recover. Is more technology the answer? For Italians here, the river is part of who we are!

Story Card 6

Annemarie, Netherlands



I'm a researcher and we've developed technology that can extract a valuable biopolymer from urban wastewater that can be used for fertiliser or in the textile industry, for example. It's very green - fully degradable and means we can rely less on other polymers. Now we're setting it up in Portugal and I'm excited to see how it can help things locally there, even if I'm a bit nervous about what the reaction will be like from local people. I'm learning to speak a bit of Portuguese so I can find out!

White Card

White Card

White Card

Story Card 7

Khadija, Sweden



In my city they're talking about starting to reuse wastewater for drinking water. Some people find that disgusting but it seems like a good ecological option to me. That said, One thing does worry me. I've been reading about antibiotics and even heavy metals that can accumulate in our bloodstream - if we reuse water, don't these pollutants come with it? I'm not sure we know all the long-term risks.

Story Card 8

Hans, Belgium



I work for a private water company here in Belgium and we have started producing drinking water at a desalination plant on the Belgian coast using canal water. 12 million litres a day! The new technology we're using is very exciting and we hope to expand rapidly, creating lots of jobs locally. Although I have to say my heart sinks every time I see my neighbours wasting water hosing their gardens!

Story Card 9

Ann, Ireland



I'm a researcher working for a start-up and we've developed some sweet new tech that can be used to get phosphorus out of urban wastewater. It's an exciting innovation but what we're struggling with now is getting investors to back us! They really don't seem convinced that governments are going to get on board with wastewater reuse. It's so frustrating to see Europe so slow to commit - especially when phosphorus is so important to make fertilisers for European farms. Phosphorus is currently under the control of big multinational companies.

White Card

White Card

White Card

Story Card 10

Rafael, Spain



I work for a plant that treats urban wastewater in La Llagosta. We're working with researchers to try out a new technology that can take phosphorus out of wastewater and recover it for use as fertiliser. The technology works better in the summer than in the winter when it's cold but they're working to improve it. My worry is that the cost of water is going to go up for farmers and industry. Life is expensive these days and I'm struggling to pay the bills myself some months.

White Card

White Card

White Card

Policy positions for WATER-MINING

1
We should ensure seawater desalination and wastewater treatment benefit the local economy as much as possible, even if this means smaller economic benefits across Europe.

2
We should ensure the local environmental impact of seawater desalination and wastewater treatment is minimised as much as possible, even if this means less global environmental benefit.

3
We should ensure seawater desalination and wastewater treatment benefits the European economy as much as possible, even if this means some environmental impact.

4
We should ensure that the health and safety risks of seawater desalination and wastewater treatment are as low as possible, even if this means less efficiency.

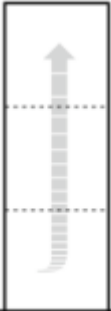
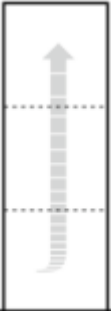
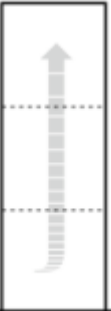
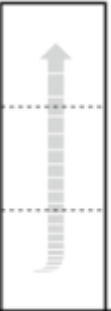
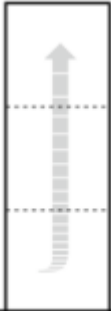
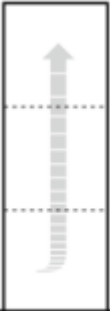
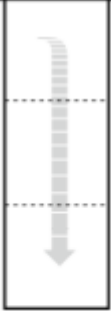
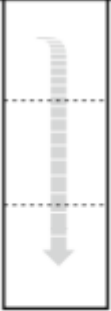


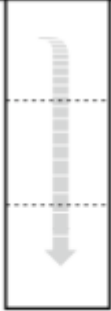
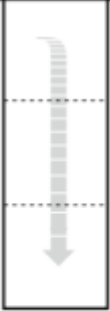
A
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B
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Policy positions for WATER-MINING

	1	2	3	4	A	B	
Support							+++
							++
							+
Acceptable							-
							--

Not acceptable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Abstain							



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