

عوجة واحدة ONE WADAH

Plastic Reduction Toolkit

Made for Events

Presented by:

اللجنة العليا
للمشاريع والبرث
Supreme Committee
for Delivery & Legacy



Foreword

With the FIFA World Cup 2022 on the horizon, Qatar is getting ready to welcome over 1.7million visitors from all corners of the globe. Over the span of 28 days, visitors will enjoy attending matches in stadiums and fan festivals, visiting tourist attractions, and relaxing in their accommodation. Events will also be an important part of the experience.

From bidding and planning, to construction and operations, Qatar has incorporated sustainability in every step of the way. The FIFA World Cup 2022 Sustainability Strategy governs the full sustainability program, and places an emphasis on five environmental focus areas; sustainable buildings, carbon emissions, waste, air quality and water.

Reducing plastic waste from events is a great opportunity to contribute to combatting the global plastic waste crisis. By taking a close look at the plastic components of any item, its wrapping and its packaging, we can find ways to eliminate the plastic or replace it with other types of materials. This will reduce the flow of plastic in society, and ultimately in our oceans, rivers and beaches.

Global visitors will not only enjoy the tournament itself but also immerse themselves in the rich cultural experiences Qatar has to offer. To deliver an unforgettable visitor experience, we need to work together to reduce plastic waste to protect our precious natural environment.

Eng. Bodour Al Meer
Sustainability Director
Supreme Committee for Delivery
and Legacy

If the current consumption does not change, ocean plastics are projected to outnumber all fish by 2050. With 79% of the generated plastic waste from 1950 to 2015 entering landfills or the environment, working towards reducing plastic waste and increasing circularity is an urgent task for everyone.

The Supreme Committee for Delivery and Legacy recognised this issue and partnered with us to begin a journey of measuring, reducing, offsetting and communicating plastic use during the World Cup in 2022. Through this partnership, we generated One Tide. One Tide is a community of conscious residents in Qatar coming together on the issue of plastic waste. This community has provided the opportunity to engage with the Qatari community so that we all can learn more about plastic pollution and attain the critical tools needed to take substantial steps towards sustainability.

We hope that this reduction toolkit will serve as a starting point for you to join us in this journey to reduce plastic use and waste from your operations.

Tom Peacock-Nazil
Founder
Seven Clean Seas

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Why is plastic pollution a problem?

Plastic is used across industries for its durable, versatile, cost-effective, and lightweight characteristics. Yet, plastic pollution is increasingly a problem because of the large amount of plastic produced alongside the mismanagement of waste. Almost 5,000 million metric tons of plastic waste from 1950 to 2015 ended up in landfills or in the environment, which is 500,000 times the weight of the Eiffel Tower. By 2050, there will likely be more plastics than fish in the oceans, which could stay in the environment for up to 600 years.

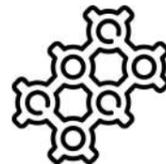
How long do these items stay in the environment?



Waxed Milk Carton
(3 Months)



Cigarette Butt
(1.5-10 Years)



Plastic Beverage Holder
(400 Years)



Styrofoam Cup
(50 Years)



Plastic Grocery Bag
(1-20 Years)



Disposable Diaper
(450 Years)



Plastic Bottle
(450 Years)



Monofilament Fishing Line
(600 Years)

Economic Costs



Economic Loss: Plastic packaging causes a loss of 80 - 120 billion USD to the economy every year due to the one-time use of plastic packaging and its escape into the environment.



Economic Risk: Economic costs of marine plastic to the marine ecosystem value are estimated at between \$2.5 trillion every year. Businesses will lose a large portion of their revenue if they have to internalise the negative impacts of plastic on the environment.

Environmental Costs



Biodiversity Loss: Over 100,000 marine mammals and more than 1 million seabirds are killed every year from consuming ocean plastic or being entangled in them.



Climate Change: Plastics account for 6% of the global oil consumption, which is equivalent to the worldwide aviation sector. By 2050, plastics will likely account for 20% of global oil consumption.

Social Costs



Health Risk: Eating animals that have consumed plastics or been exposed to toxic chemicals from plastics can harm human health. BPA, a plastic additive widely known for its health risks, was found in all 47 samples of human lungs, liver, spleen, and kidneys.



Poverty Trap: In many countries, the waste management industry relies on informal workers, who earn a meagre income between US\$2 and US\$8 a day. This low level of income often traps vulnerable communities in a cycle of poverty, where entire families and children need to work to make a living. Beyond this, the employment of such waste collectors in many locations is bonded labour, which the UN categorises as modern-day slavery.



What are the benefits of reducing plastic waste at your event?

Raising awareness and getting ahead!

A global event is an excellent opportunity to raise awareness of plastic worldwide and inspire governments to minimise and manage plastic waste. Moreover, as a part of a series of events from the world's first Plastic-Neutral World Cup, we can encourage millions of people to reduce plastic.

Promote resource efficiency

Reducing plastic consumption and waste means less usage of raw materials, lower emission, and less pressure on the environment. Greater resource efficiency!

Help reduce carbon emissions

Studies show that the carbon emission of conventional plastics is estimated to increase by more than three times in 2050. Therefore the most effective and straightway to reduce plastic-related GHG emissions is to reduce the use of plastic, particularly single-use plastic.

Reduce operational and impact costs

Generally, plastic is derived from fossil fuel-based chemicals. Therefore price changes in fossil fuels can impact the production of plastic, increasing the cost of operation. The financial cost of plastic pollution was estimated to be \$75 billion each year. The damage of plastics to marine ecosystems alone was estimated at US\$ 13 billion each year.

Meeting consumer demands

Events are a great space to raise awareness for sustainability as they provide a platform to a diverse and wider audience. A study shows that nearly 6 in 10 global consumers would change their purchasing habits to reduce their environmental impact, and about 80% of them stated that sustainability was important to them. Out of the those who noted that sustainability was important, over 70% would pay more to purchase from sustainable brands.

Promote and increase brand reputation

Negative publicity on plastic litter with brand logos could damage companies' reputations. However, taking action to manage plastic consumption can improve companies' image.

How can we take part in the Qatar National Vision 2030?

Qatar is aiming to be a regional model in fulfilling both developmental and environmental targets, with the new environmental strategy covering five key environmental spheres:

-  Greenhouse gas emission and air quality
-  Biodiversity
-  Water
-  **Circular economy and waste management**
-  Land use

Out of the five key environmental spheres, **circular economy and waste** will have a direct influence on the goods and products we all consume on a day-to-day basis. This transition will involve the phasing out of single-use, disposable, and unrecyclable plastics and majority of which are used at your event.

So **why do we need to start reducing plastic at events? Where can we start making these changes? How do we stay ahead of the curve? What are the considerations in making plastic reduction strategies? What are the possible recommendations?** These are all important questions that this toolkit will address.



**Let's get
started!**



Plastic that may be used at your event

Knowing plastic that may be used at your event is essential before you can reduce or avoid them. Below are some examples of plastic commonly found at events:

Bags	Catridges (ink)	Food packaging*	Ponchos (raincoat)	Sweet wrappers
Ballons	Chopsticks	Gaffer tape	Polystyrene boxes	Tea capsules
Banners	Cigarette butts	Giveaways	Polystyrene balls and packing	Tickets
Beer cups	Cling wrap	Glitter	Pouches (packing)	Toothpicks
Bin bags	Clothing	Hazard tape	Race bibs	Trays
Bottle caps*	Coffee cups*	Ice-cream wrappers	Rope	Tubs
Bottles*	Cups	Laminated paper	Shopping bags	Uniforms and textiles
Bowls	Cup lids	Lanyards	Shrink wraps	Wine goblets
Boxes	Condiment containers	Lids	Signs	Wrapping/sleeves
Branding	Confetti	Merchandise	Stationery	Wristbands
Bubble wrap	Cutlery	Packets	Stickers	...
Buckets	Fireworks	Pallet "cling" wrap	Sticky tape	...
Bunting	Flags	Pallet banding	Stirrers	...
Butter (single-serve)	Furniture	Plates	Straws	...
Cable/zip ties	Food containers*	Plastic packaging*	Streamers	...

**Most used plastic items at FIFA Arab Cup 2021 (based on the plastic waste study)*



Ways to reduce your plastic footprint



1 Refuse

Do we really need this item?

The best way to reduce plastic footprint at your event is to prevent unnecessary plastic in the first place. By identifying and rethinking your choice, you can avoid single-use items such as bottles, bags, and straws. For example, 40.7% of the total plastic waste from the FIFA Arab Cup 2021 was plastic bottles.

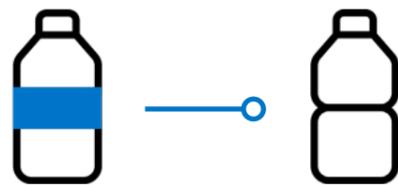


Avoid single-use plastic items

2 Reduce

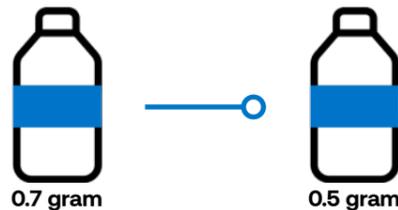
How to do better with less?

If eradicating plastic is not possible, finding opportunities to use it less is the next best approach. One of the ways to reduce your plastic is by working with your suppliers to redesign the volume, size, durability, thickness, and variety of the items used. Finding ways to use less plastic packaging is also essential. For example, 13.8% of the total plastic waste from the FIFA Arab Cup 2021 was plastic packaging. Maybe consider renting instead of buying. Ultimately, the reduction can provide additional benefits as it is relatively manageable, popular to implement, and financially advantageous.



Downgauging

Reduce the number of natural resources and materials used in packaging



Lightweighting

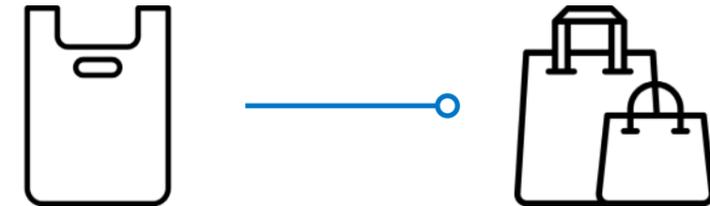
Reduce the density or weight of packaging, making it thinner and lighter



3 Reuse

Re-using 'as-is' or repurposing into new stuff

Reuse is an approach that focuses on prolonging or extending the lifetime of plastic. By using reusables, it reduces the demand for virgin plastics as well as the impact on the environment. Start by exploring what single-use plastics at your event can be replaced with reusable alternatives. Further, work with your suppliers to design plastic items to be reusable or easily repaired.



Use reusable items

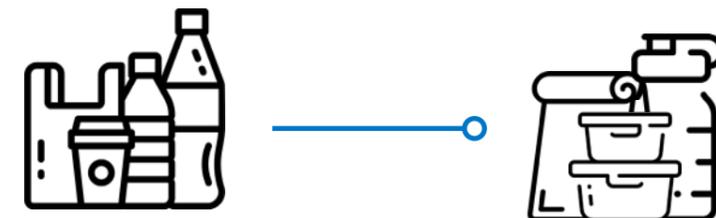
Case study

Qatar Foundation managed to reduce the amount of single-use water bottles used at Education City by 112,000 plastic bottles per month by installing water coolers in all the buildings and encouraging students to use reusable water bottles.

4 Replace

Make sure the alternative materials can deliver sustainability!

Consider finding alternative materials for items that cannot be avoided or reused at your event. Choosing plastic-free and sustainable materials is one solution to minimise environmental pressure. Besides, make sure alternative materials delivers a lower environmental footprint by taking note of their concerns and can be reused, recycled, or composted.



Use sustainable materials



Here are some sustainable alternatives for you to consider:

Glass	
Benefits In general, glass has a significantly higher recycling rate than plastic.	Concerns Consume more energy and resources in production. Make sure you reuse it!
Metals	
Benefits Metals like aluminium are commonly and highly recycled globally	Concerns Make sure it's certified sources, and you recover it after use!
Certified paper	
Benefits Paper-based materials such as corrugated paper and cardboard from certified sources are biobased and easily biodegrades.	Concerns Make sure it's certified sources, and you recover it after use!
Compostable & Biodegradable	
Benefits Materials that breakdown at an industrial or home composting condition (compostable) & can be broken down by microorganisms.	Concerns Ensure to avoid oxo-degradable or photo-degradable plastic as they are most likely to break down into microplastic and leak into the environment.
Recycled plastic	
Benefits Recycled plastic reduces the volume of waste in dumpsites, rivers, and the sea. Moreover, using recycled plastic avoids the emission of an amount equivalent to that generated during the production of raw plastic.	Concerns Ensure that it is recycled and not discarded to the environment!



5 Recycle

How to ensure everything gets recycled?

Recycling plastic is challenging! However, it helps recover the existing plastic and prevents plastic from ending up in landfills or ecosystems.

Here are some ways to increase recyclability at your event:



Procure recyclable plastics

Assess what recycling options are available and ensure only recyclable plastics exist at your event.



Proper collection and segregation of plastic waste

Not only provide sufficient bins but also ensure the collection and segregation of plastics are adequate. Additionally, implement a system for consumers to return the merchandise, packaging, or any plastic items collected back to the vendor. These efforts will maximise the amount of plastic recycled or recovered in waste management facilities.



Case study

- Despite sufficient bins inside the stadiums at the Arab Cup, waste was left behind in the seating areas. Therefore, assigning someone responsible is beneficial for ensuring the waste is captured in all event spaces.
- Despite having separate bins at the Arab Cup, the compostable and recyclable waste still had significant contamination, thus hindering waste segregation and recycling efforts. However, clear signage or volunteers at waste bins has been shown to help successful waste segregation.



Plastic item alternatives

Encourage suppliers, vendors, catering, sponsors, and everyone involved to steer clear of plastic by transforming your plastic items into better alternatives. Including this in the code of conduct as part of environmentally responsible products will bound their commitment.

Shops & Merchandise

Example items	Alternative choices
Balloons	Avoid balloons. Never release balloons into the environment.
Fireworks	Use light show instead of fireworks.
Glitter	Use biodegradable glitter or rice paper confetti.
Merchandise/gifts	Avoid the use of single-use plastic items and packaging.
Packaging	Ask suppliers to reduce plastic packaging and/or use alternative materials (see page 13).
Shopping bags	Switch to reusable, compostable and fairtrade paper bags or cotton bags.
Signage	Use reusable materials such as cardboard.

Catering

Example items	Alternative choices
Cling film	Switch to waxed paper wraps or use containers instead (e.g. reusable food containers, glass, etc.).
Coffee and tea capsules	Avoid coffee pods and capsules by using coffee urns or espresso machines.
Cutlery, cups, plastic bottles, plates/bowls & stirrers	Use reusable materials (e.g. stainless steel) or compostable options (e.g. wood, bamboo, and paper) if washing facilities are unavailable.



Branding

Example items	Alternative choices
Accreditation	Use reusable materials and avoid unnecessary information so they can be reused. FSC paper is desirable.
Banners	Choose recyclable plastics such as PET as material and/or reusable materials.
Flags	Choose reusable or recyclable materials. Use sustainable inks for printing (e.g. VOC-free inks).
Laminated paper	Use reusable materials such as plastic wallets.
Lanyards	Switch to reusable products and ensure the collection after the event.
Signage	Use reusable materials such as cardboard.
Stationery	Avoid plastic products or use recyclable materials.

Sponsors

Example items	Alternative choices
Banners	Use reusable or recyclable materials such as PET, and never use PVC (see page 25).
Laminated paper	Avoid laminated paper and opt for reusable plastic wallets.
Lanyards	Use reusable materials and ensure their collection after the event.
Plastic cable ties	Replace with reusable bungee cords and velcro versions.
Stationery	Opt for non-plastic or recycled products.



Quick Tips for Event Organiser

Before event



Planning the event

- Set up your plastic reduction goal!
- Communicate your plan to all stakeholders and establish agreement
- Plan supporting facilities such as waste stations with clear signage
- Ensure collection and segregation service plan
- Spread your message of plastic reduction efforts in media events

• **Avoid disposable beverage containers and water bottles**
Use refillable instead.

• **Reduce decor waste**
For example, use reusable materials such as cardboard or hire electronic signage.

• **E-invites!**
Avoid tickets, brochures, and any invitation materials by going digital. This will reduce resources, money, and waste.

During event



Awareness

Ensure vendors, staff, & attendees are aware of the plastic reduction effort.

Implementation

Ensure everyone at your event is executing the plastic reduction effort.

Documentation

Document your plastic reduction effort.

After event



Results identification

Identify the results of your plastic reduction effort immediately.

Communication

Communicate the results and ask for feedback from all stakeholders.

• **Celebrate and spread your message!**



Event Stakeholders



Identify your stakeholders!

When designing a sustainable or plastic-free event, it is essential to identify everyone who may be responsible for the purchase and use of plastic items. All plans and actions will be successful and more manageable when you know who to engage closely, keep informed, fulfil their needs, or merely consider.

Below is a list of common stakeholders in an event and is susceptible to change according to your event.

Stakeholders	What do they need to do?
Local authorities/ Waste management contractor	Provide waste management services such as recycling, composting, and disposal facilities.
Sponsors	Support the plastic reduction effort in any merchandising and spread the message through their own platforms.
Suppliers	Avoid or reduce plastic use and supply sustainable alternatives.
Catering	Ensure the implementation of the plastic reduction plan across the outlets.
Workforce	Support the plastic reduction effort by understanding the plastic waste generation of their activities and facilities.
Security	Intervene items that will cause litter and waste management problems entering the site.
Attendees	Support the organiser by spreading the awareness of the plastic reduction effort publicly.



List your stakeholders below and put their names into the stakeholder matrix based on the level of interest and power to help your identification process.



Engage & pull the contract!

- 1 Once you identify the stakeholders, discuss your plastic reduction plan immediately. You may find helpful suggestions and creative solutions.
- 2 Then, integrate your plastics plan into the contract as soon as possible, so they have time to prepare.

Communicate & check!

- 1 Assign who's responsible for delivering your plan to other stakeholders.
- 2 Maintain communication of your plastic reduction effort closely to ensure all the stakeholders know their role and what they need to do.
- 3 Keep checking and double-checking. "Are the plastic reduction effort at your event being implemented?"
- 4 Obtain your data by working with all stakeholders to make it easier to track the progress



Enhance collection & segregation



Which plastic can be recycled?

You may be aware that some plastic products are different from each other. Sometimes they are hard or soft, flexible or brittle, stretchy or not stretchy. Do take note that polymer type determines the recyclability of plastic. Please check and communicate with your suppliers to steer clear of non-recyclable plastics.

Here are plastic polymers widely considered to be recyclable in Qatar:

Resin Identification Code	1	2	3	4	5	6	7
Polymer name	Polyethylene Terephthalate	High-Density Polyethylene	Polyvinyl Chloride	Low-Density Polyethylene/ Linear Low-Density Polyethylene	Polypropylene	Polystyrene	Other
Abbreviation	PET or PETE	HDPE	PVC	LDPE/LLDPE	PP	PS	Other
Recyclability	yes	yes	no	yes	yes	no	no
Examples	Bottles, cups, containers, trays, garments	Food containers, milk and juice bottles, plastic bags, wristbands	Banners, stickers, wraps, pipes, flooring, containers, cable covers	Plastic bags, lining on food containers, zip lock bags	Bottle caps, food containers, ropes, floor mats	Food containers, trays, cups, fruit and vegetable boxes, coffee lids	Hard reusable bottles, wine goblets, plastic lined paper cups



How to make effective signage for waste bin?

Signage is critical to make attendees aware of what items can or cannot be recovered in each bin.

Here are some ways to make effective signage for your waste bins:

- 1 Use clear instructions and effective sentences for communication to get everyone on board.
- 2 Put illustrations or infographics to help describe the waste categories and make it easier for people to contribute. The easier it is designed, the more impact you will have.

Compostable waste	Recyclable waste	Residual waste
		
Fruit & vegetable scraps, meat scraps & bones, egg shells, used paper towel, and tissues	Plastic cutlery, paper plates, cardboard, cartons, paper, plastic containers, glass, and plastic bags	Nappies, tea bags, used coffee cups, and styrofoam

- 3 Design all signage to be reusable for future events. For instance, avoid the use of event date or other non-essential information. Here are some tips for your signage materials.

Reusable alternatives When possible, design all signage to be reusable for future events.	What to avoid Avoid toxic inks and recover the paper and cardboard signs after the usage.
Compostable alternatives If your signage cannot be reused, use cardboard or compostable options such as paper.	Consider recycled materials A signage made from some recycled materials and recyclable.

- 4 Include messages on why we need plastic reduction effort, such as 5R (Refuse, Reduce, Reuse, Replace, and Recycle), as part of educating and raising awareness to the attendees.





Recommendations



Provide reusable/compostable cutlery and food containers at concession stands

According to the plastic waste study at FIFA Arab Cup 2021, we could reduce up to 16% of plastic waste from food and beverage packaging if reusable/compostable materials were used. However, opt for compostables if washing facilities are not available.



Work with stakeholders to ensure the current sustainable procurement policies

Work collaboratively with all stakeholders to create sustainable procurement policies. Thus, only sustainable materials are available such as recycled plastics, recyclable plastics, and compostable materials.



Provide reusable drinking bottles and water refilling stations

Providing reusable drinking bottles and water refilling shows the implementation of the commitment to reduce plastic waste. For example, shifting towards reusable drinking water bottles and refilling stations for the workforce can help reduce up to 10.4% of the total weight of plastic waste collected at the FIFA Arab Cup 2021.



Implement post-waste segregation at the event

Implementing a post-waste segregation system could help reduce waste contamination and increase the capture rate of recyclables. For instance, Al Bayt Stadium implemented this system and was able to increase waste segregation in the FIFA Arab Cup 2021.



Ensure plastic waste collected for recycling is being recycled

Before the event, ensure that recycling facilities are ready and available at the end of the line. Therefore, once the plastic waste is collected and segregated for recycling, the event organiser can transfer them to the facilities. Thus securing the value of recyclable plastic.



Introduce bottle bins to specifically collect plastic bottles

Although avoiding plastic bottles is a priority, providing bottle bins optimises the collection and secures its value since plastic bottles usually make up the most of plastic waste generated.



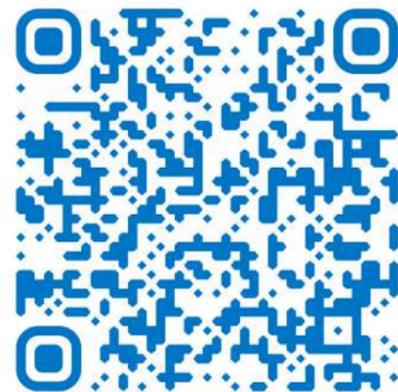


Join the movement with the first Plastic Neutral World Cup

The Supreme Committee for Delivery and Legacy (SC) has partnered with Seven Clean Seas (SCS) to deliver the world's first Plastic-Neutral World Cup in 2022. There are five pillars to this partnership: Awareness, Estimation, Reduction, Offsetting, and Legacy.

Approaching the event, a huge focus will be placed on plastic use and waste management.

It's time to take action and seize the opportunity to become market leaders in achieving sustainability goals for plastic.



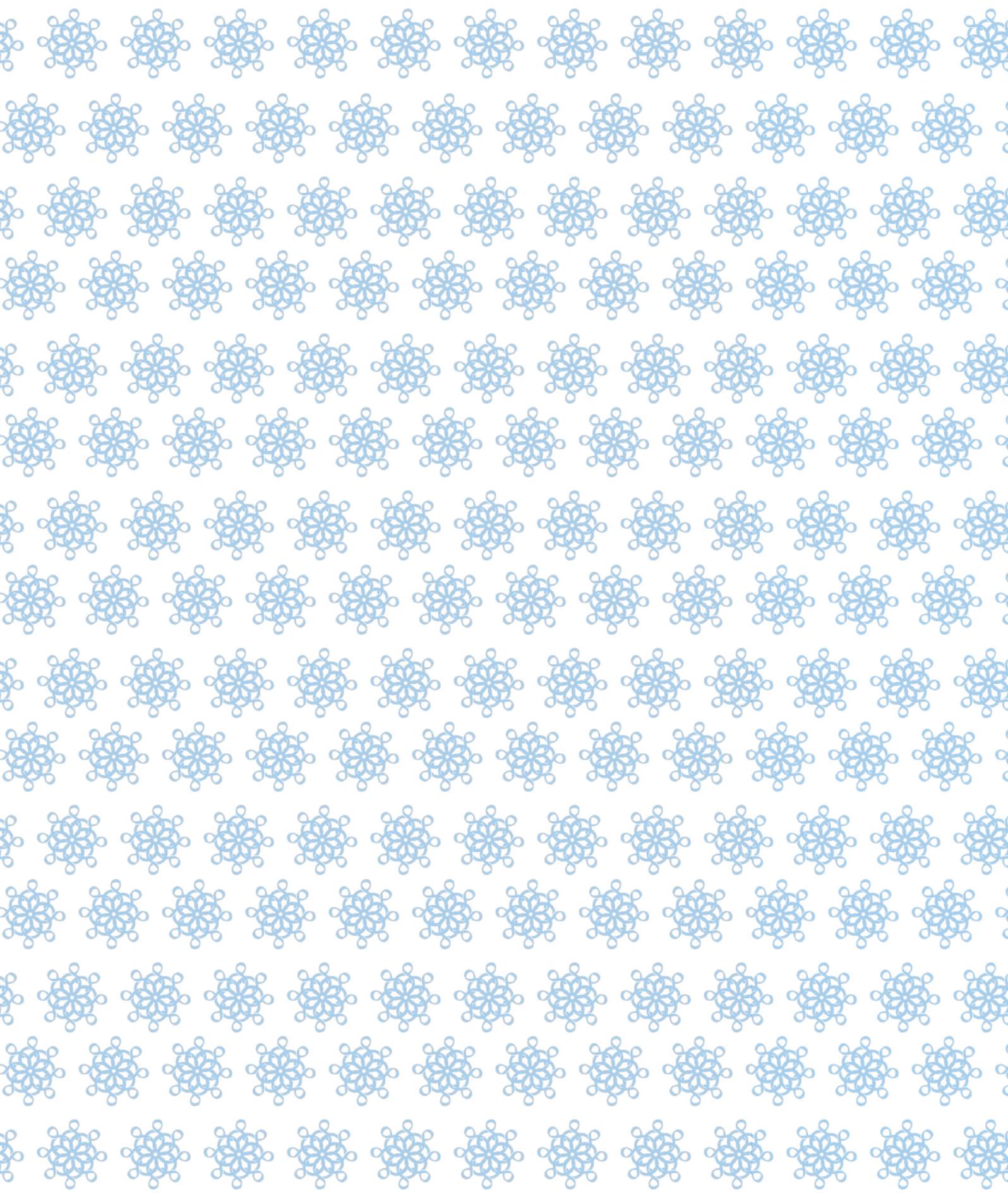
Scan the QR code to learn more



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