



إكسبو 2020 EXPO 2020
دبي، الإمارات العربية المتحدة
DUBAI, UNITED ARAB EMIRATES

Expo 2020 RISE Guidelines for Sustainable Operations

SUSTAINABILITY

Prepared for
Expo Dubai 2020 LLC

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ACRONYMS, ABBREVIATIONS AND DEFINITIONS

Acronym/Abbreviation	Expansion
ABS	Acrylonitrile Butadiene Styrene
ASTM	American Society for Testing and Materials
BPA	Bisphenol A
CMR	Carcinogenic, Mutagenic and Reprotoxic
EC	European Commission
EEC	European Economic Community
ESMA	Emirates Authority for Standardisation and Metrology
ETI	Ethical Trading Initiative
EU	European Union
EVOH	Ethylene Vinyl Alcohol
F&B	Food and Beverage
FF&E	Furniture, Fittings, and Equipment
FLEGT	UK Forest Law Enforcement, Governance, and Trade
FoH	Front-of-House
FSC	Forest Stewardship Council
GHG	Greenhouse Gas
GCC	Gulf Cooperation Council
GMO	Genetically Modified Organism
GOTS	Global Organic Textile Standard
HACCP	Hazard Analysis and Critical Control Point
HDPE	High-density Polyethylene
HVAC	Heating, Ventilation and Air Conditioning
ICTI	International Council of Toy Industries
IFRA	International Fragrance Association
ISO	International Organisation for Standardisation
LDPE	Low-density Polyethylene
LED	Light Emitting Diode
LLDPE	Linear Low-density Polyethylene
MF	Melamine Formaldehyde
MSDS	Material Safety Data Sheet
ODP	Ozone Depletion Potential
PA	Polyamide
PBS	Polybutylene Succinate
PBT	Polybutylene Terephthalate
PC	Polycarbonate

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PEFC	Programme for the Endorsement of Forest Certification
PET	Polyethylene Terephthalate
PHA	Polyhydroxyalkanoates
PHB	Polyhydroxybutyrate
PLA	Poly(lactic Acid) or Polylactide
PMMA	Polymethyl Methacrylate
PP	Polypropylene
PS	Polystyrene
PU	Polyurethane
PVC	Polyvinyl Chloride
PVDC	Polyvinylidene Chloride
RSPO	Roundtable on Sustainable Palm Oil
RTRS	Round Table on Responsible Soy
STB	Expo 2020 Sustainability Department
TPS	Thermoplastic Elastomers
UAE	United Arab Emirates
UP	Unsaturated Polyester
UPS	United Parcel Service
VOC	Volatile Organic Compound

Definitions

Definitions	Expansion
Accessibility	Accessibility means a person with an impairment can enjoy the same services, engage in the same interactions, and acquire the same information as a person without impairment in an equally effective and equally integrated manner, with substantially equivalent ease of use. The person with the impairment must be able to participate or obtain information as fully, equally and independently as a person without a disability
Back-of-House	Operational areas used as service zones and restricted from public access, for example, the kitchen within an F&B outlet
Corporate Social Responsibility (CSR)	Corporate Social Responsibility is a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders
District 2020	District 2020 is the world-class mixed-use development that is being developed on the Expo site
Expo 2020 Dubai	The international registered exhibition that will be held in Dubai, the United Arab Emirates, on 20 October 2020. It is also referred to as 'Expo 2020,' 'Expo,' 'Dubai Expo 2020,' 'Expo Dubai 2020,' or 'Expo event'

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Expo Site	The whole site on which Expo 2020 Dubai will be hosted, 4.38sq km in size; also referred to as 'site'
Fairtrade	Fairtrade is a standard that establishes criteria for better working conditions (financially and non-financially) to and securing the rights of, marginalised producers and workers – thus creating a more ethical supply chain
Front-of-House Areas	Areas where visitors to Expo have access
Gluten	Proteins commonly found in wheat and other grains
Goods	Tangible commodities or products that are produced, bought or sold, then finally consumed
Hazard Analysis and Critical Control Point (HACCP)	A recognised management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement, and handling, to manufacturing, distribution, and consumption of the finished product
Halal Products	Products that are permissible in accordance with Muslim practices
Organic Food	Food products that meet an established Certification standard of sourcing ensuring that certain production conditions, such as zero use of synthetic pesticides and fertilisers or routine use of antibiotics or growth hormones, have been met
Packaging	All materials used to contain or enclose a product, such as bags, food containers, and cardboard boxes, etc.
Palm Oil	An edible vegetable oil derived from oil palms
Participants	Countries and multilateral organisations participating in Expo 2020 Dubai. These participants include foreign governments and international organisations, known as Official Participants, and parties such corporations, non-government organisations, academic and research institutions, global initiatives, and foundations, known as Non-Official Participants
People of Determination	People with special needs or disabilities. They are referred to as 'People of Determination' to recognise their achievements in different fields. The definition refers to those who have long term physical, mental or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others
Single-use Materials	Items used only once before they are disposed of or recycled, such as straws, coffee cups, stirrers, utensils, bottles, etc.
Supplier	Any external party that provides Expo with required material, goods, services and works. It includes the entity's parent organisation or company, affiliates, subsidiaries, agents, representatives, principals and other businesses, names or trade names used by such entities

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Sustainability	Meeting the needs of the present without compromising the ability of future generations to meet their own needs
Vegan	The practice of abstaining from eating, and in some cases using, any animal-derived product or byproduct

CHAPTER 1 INTRODUCTION

The Importance of Sustainability to Expo 2020

Expo 2020 Dubai aims to be one of the most sustainable Expos in history. Its sustainability strategy reflects the core theme of 'Connecting Minds, Creating the Future', and it responds to the sub-themes of Opportunity, Mobility, and Sustainability. Requirements for sustainability were defined in the planning stage of Expo 2020. These set the scene for conserving resources, encouraging socially responsible behaviour, and safeguarding the environment in the development and operations of the site and its visitor attractions.

As a consequence, sustainability is expressed throughout Expo 2020's building and infrastructure designs, the use of renewable energy, and the showcasing of innovative technologies. Educational activities are designed to inspire millions of visitors to the event on all aspects of sustainability. Sustainability will also be a key factor as the Expo 2020 site transitions, after the event, into its long-term future state - District 2020. These efforts will add up to Expo 2020 becoming a significant catalyst for positive change for UAE and beyond.

In this context, it is important to maintain sustainable practices throughout the operation of the event. This is an area where suppliers to Expo 2020 will have the opportunity to play a crucial role in achieving their own sustainability aspirations, and, in turn, Expo 2020's high ambitions. This document will help suppliers understand and implement the operational sustainability requirements of Expo 2020.

The RISE Approach for Event Operations

This document contains the requirements that suppliers need to fulfil in order to integrate sustainability into the products and services they intend to supply to Expo 2020. These requirements are underpinned by **R**espect for the workforce, positive **I**mpacts on communities, **S**afety for all, and stewardship of the **E**nvironment. Hence this document is referred to as the RISE Guidelines.

The list below contains examples of where the RISE Guidelines aims to improve sustainability performance:

RESPECT

This covers areas such as child labour, worker welfare, and Fairtrade, where requirements are aimed at guarding the conditions of workers locally and overseas. The importance of making facilities physically accessible for all, including People of Determination (PoD) is addressed. Cultural sensitivity is also required - in relation to Food & Beverage for example.

IMPACT

Requirements in this area support the wider uptake of sustainable behaviours in order to influence positive social development. Corporate Social Responsibility is covered, recognising the opportunity for organisations to actively and positively engage the communities where they operate. Traceability through the supply chain is included, and there are requirements for local and responsible sourcing. Suppliers are also requested to raise awareness to visitors of their sustainability initiatives.

SAFETY

This area sets expectations for suppliers to commit to the Health & Safety requirements of Expo 2020, and suppliers are reminded of the need to comply with Expo 2020 and national policies on food hygiene standards where applicable to their activities. There are also requirements associated with the management and control of the potential health impacts of cleaning and retail products.

ENVIRONMENT

This covers both natural and built environments and recognises the need for good stewardship and accountability. Expo 2020's requirements on the use of single-use plastics and the recycling of packaging materials are set out. The Guidelines require suppliers to minimise packaging and they support Expo 2020's target of diverting 85% of waste from landfill. The sustainable procurement of materials such as paper is reinforced, and there are requirements for the reduction of green-house gas emissions, water consumption, and pollutants.

RISE Guidelines Audience

The primary audiences for the RISE Guidelines are suppliers of products and services to the Expo 2020 event, including partners and international participants.

The criteria that suppliers have to follow are set out in Chapters 2 to 8 below, as follows:

- Chapter 2: General RISE requirements
- Chapter 3: RISE requirements for packaging and single-use materials
- Chapter 4: RISE requirements for food and beverage
- Chapter 5: RISE requirements for retail
- Chapter 6: RISE requirements for cleaning services
- Chapter 7: RISE requirements for logistics
- Chapter 8: RISE requirements for furniture, fittings, and equipment
- Chapter 9: RISE requirements for landscape maintenance

Benefits of Using the RISE Guidelines

Incorporating sustainability into Expo 2020's operations requires good performance across the supply chain. Given the scale of the event, the impacts of the RISE Guidelines will be far-reaching. As well as providing guidance to help hundreds of suppliers conform with Expo 2020's ambitious sustainability requirements, the following benefits are expected:

- reputation enhancement for suppliers who will be able to feel proud to be participants in an event that has raised the bar for sustainable operations;
- a meaningful response to Expo 2020's partners and visitors who demand high levels of social and environmental responsibility; and
- a stimulus to local and international markets to encourage the greater supply of ethical and sustainable goods and services.

It is also hoped that, as part of Expo 2020's legacy, the RISE Guidelines will be used by future international events looking for an exemplar approach to establishing respectful, impactful, safe, and environmentally-friendly practice.

Operational Sustainability Controls, Guides and References

All suppliers must follow the RISE Guidelines in order to be eligible to supply Expo 2020 with goods and services. Failure to comply may ultimately result in the supplier being illegible to be an Expo 2020 supplier.

There are 2 types of criteria:

- mandatory criteria, which are called *Controls*, and
- recommended criteria, which are identified as *Guides*.

The Controls address firm Expo 2020 requirements and must be followed. The Guides are recommended but optional; following them where possible will help Expo 2020 maximise its positive impact for the good of all. Suppliers are therefore requested to implement as many guides as possible.

Each Control or Guide is given a unique code. The first character of the code identifies if the statement is a Control (C) or a Guide (G).

A range of Expo 2020 policies and plans have been listed in the Info Box at the end of each section below. These are denoted with the letter *P* and are included because they complement the sustainability criteria. Suppliers need to become familiar with, and implement, all such policies and plans wherever they are relevant to their activities.

The Info Box also includes references for certain Controls or Guides. These relate to supporting information, such as technical Certification standards, and are denoted by *Ref.*

Scope of the RISE Guidelines

The RISE Guidelines cover people, products, services, and places associated with the operation of the Expo 2020 event, which will run from 20 October 2020 to 10 April 2021. The RISE Guidelines apply to any supplier intending to provide products or services for the Expo 2020 event, including those to be used in preparation for the event, during the event, or for the purposes of demobilising after the event. It covers:

- products that are to be sold or used within the Expo 2020 site, or carry Expo 2020 branding, such as retail goods, gifts, food and beverages, packaging, equipment, and cleaning supplies;
- services that are to be sold or used within the Expo 2020 site, including but not limited to cleaning, catering, logistics, maintenance and event management; and places within the Expo 2020 site boundary, such as retail and F&B outlets, pavilions, service, and operations centres.

Conformance Process

The supplier is required to follow the steps and programme below to demonstrate compliance with the RISE Guidelines, and obtain approval from Expo 2020:

STEP 1: Expo makes the RISE Guidelines and Verification Template available to the supplier

How: Depending on the type of supplier, Expo sends the required information by email from sustainability@expo2020.ae or makes it available for download online

STEP 2: The supplier submits Requests for Clarification (RFCs) if necessary

How: Supplier lists any RFCs in Word format using the template in Appendix D, and submits this by email to sustainability@expo2020.ae using the following Subject 'RISE RFC - [your company name]'

STEP 3: Expo hosts clarification meeting or phone call if necessary

How: Supplier attends an optional phone call or clarification meeting at the Expo 2020 Main Office, possibly along with other suppliers

STEP 4: Expo issues RFC response

How: Expo issues its RFC responses by email from sustainability@expo2020.ae or via an on-line portal, using the template in Appendix D; Expo's RFC responses will be made available to all suppliers

STEP 5: Supplier submits its responses to Expo on the RISE Guidelines

How: Supplier submits the completed Verification Template with supporting evidence by email to sustainability@expo2020.ae

STEP 6: Expo responds to supplier by providing approval or requesting further information

How: Expo emails its approval, or requests further information, using the Verification Template submitted by the supplier

STEP 7: Supplier addresses any requests for further information

How: Supplier re-submits the Verification Template by email, attaching additional evidence to address gaps identified by Expo; Expo provides approval as appropriate using the Verification Template

Programme

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Stage 1									
Stage 2									
Stage 3									
Stage 4									
Stage 5									
Stage 6									
Stage 7									

CHAPTER 2 GENERAL RISE REQUIREMENTS

The following are general RISE requirements that apply to all suppliers and their supply chains, regardless of what products or services they will be supplying to Expo 2020.

These include ethical requirements covering areas such as child labour, worker welfare, Fairtrade, and social responsibility. Such requirements guard the conditions of workers locally and overseas. Accessibility is also covered in this section, recognising the importance of making all on-site facilities physically accessible for all staff and visitors, including People of Determination. Cultural sensitivity is also a requirement, as is commitment to Expo 2020's waste minimisation targets, and its health & safety and environmental policies. Attention is drawn to the importance of sustainable approaches in supplying materials to Expo. Finally, suppliers are encouraged to take the opportunity to support sustainability awareness by highlighting to visitors the sustainability performance of their efforts.

Please see below for details of the requirements for this section. The Info Box at the bottom of this section includes: other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of; a summary of references for this section; a list of other sections of the RISE Guidelines that are relevant to this section; and signposts to further information (if applicable).

C-1 The supplier must comply with The Dubai Code of Conduct 2017, and must confirm that their activities will not conflict with the values of the UAE [Ref-1]

G-2 The supplier should demonstrate they are certified to the overall Fairtrade Trade Standard [Ref-2]

G-3 The supplier should describe their social responsibility activities, including: staff training and development programmes; community engagement; education; or other sustainability aims within the company

C-4 For non-packaging related paper-based products, including printed material such as napkins, brochures, menus, signs and tickets, the supplier must demonstrate that:

- paper usage has been minimised
- paper materials will:
 - be certified to FSC (or a recognised equivalent) or be made of recycled paper [Ref-3, Ref-4]
 - avoid plastic coatings or laminations which make recycling difficult

G-5 The supplier should demonstrate opportunities have been taken to highlight to visitors, the sustainability performance of their activities. This might include, for example, raising awareness on their efforts on climate change mitigation, waste reduction or sustainable materials. Additionally, the supplier should clearly indicate to visitors where they may find any recycling bins and water fountains in their facilities.

C-6 The supplier must confirm that they understand and comply with those Expo 2020 policies and plans listed in the Info Box below which are relevant to their activities

INFO BOX

Other Expo 2020 sustainability-related policies and plans that suppliers need to be aware of

P-1 Expo 2020 Waste Management Policy; Waste Management Operations Plan*

P-2 Expo 2020 Code of Conduct for Vendors

P-3 Expo 2020 Assurance Standards, Worker Welfare

P-4 Expo 2020 Accessibility and Inclusion Policy

P-5 Expo 2020 Dubai's Health, Safety, Quality and Environmental Policy

Summary of References for this section

Ref-1 [The Dubai Code of Conduct, 2017](#)

Ref-2 [Fairtrade Trade Standard, 2019](#)

Ref-3 [FSC Chain of Custody Certification, 2017](#)

Ref-4 [PEFC International Standard, 2013](#)

Other sections of the RISE Guidelines that are relevant to this general section

Not applicable

Notes and signposts to further information

* Expo 2020 has a local UAE waste management provider which will support the realisation of the challenging target to divert 85% of waste from landfill. All suppliers are required to be familiar with these targets and fully support their implementation.

CHAPTER 3 RISE REQUIREMENTS FOR PACKAGING AND SINGLE-USE MATERIALS

The Expectations of All Suppliers using Packaging, including Single-use Materials

Expo 2020 has made a significant commitment to supporting the minimisation of packaging and single-use materials. Packaging refers to any material or container used to wrap or contain food or other products (for example bags, wrappers and boxes); single-use material refers to any material or item intended to be used only once prior to its disposal or recycling (for example a throw-away biscuit wrapper or a disposable coffee cup).

Expo 2020 is particularly concerned with the growing prevalence of single-use plastic waste in society and its negative impact on the environment. Expo 2020 has put in place an overall target to divert 85% of its waste from landfill. It also sets out several specific requirements relating to packaging and single-use materials.

To help meet these requirements, suppliers of goods and services to Expo 2020 should consider ways that they, and their supply-chains, can adopt strategies to reduce packaging and single-use materials prior to goods being shipped to the site. Such strategies should be based on a good understanding of expected quantities of packaging and materials that will arise, and how Expo 2020 plans to manage waste streams during the event.

The requirements set out in this section are highly applicable to F&B and Retail, where packaging and single-use materials are typically used as part of the product offering. The requirements are also applicable to Cleaning Services, where the bulk packaging of cleaning products is significant.

Introduction to Front-of-House (FoH)

Within Front-of-House (FoH) operations, a product is packaged in one of two ways:

- Pre-packaged where it arrives at the site already in its packaging from the manufacturer such as a chocolate bar in its plastic wrapper, a drink in its plastic bottle or a toy in its plastic container
- Post-packaged where it is packaged on-site during the event, such as a sandwich wrapped for the customer in a café or a souvenir wrapped for the customer in a shop

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In relation to plastic, the following general requirements apply to all FoH packaging:

- #1 The packaging used for FoH products that come to the site pre-packaged in plastic from the manufacturer is permitted, although the packaging should be recyclable where possible
- #2 For post-packaged products, there shall be no use of single-use disposable plastic packaging, food containers, plates, cups, cutlery etc for FoH operations, whether the plastic is recyclable or not.

Introduction Back-of-House (BoH)

In relation to plastic, the following general requirement applies to all BoH packaging:

- #3 At least 90% of any packaging within Back-of-House (BoH) operations must be recyclable. This includes plastic wrapping used for bulk packaging.

Summary of Requirements for Plastics

	Pre-packaged	Post-packaged
Front-of-House	<p>#1 Single-use plastic packaging is permitted</p> <p>Recyclable packaging is to be used where possible</p>	<p>#2 Single-use plastic packaging is <u>not</u> permitted</p> <p>This is regardless of whether the plastic packaging is recyclable or not</p>
Back-of-House	<p>#3 Single-use plastic packaging is permitted</p> <p>A minimum of 90% of all packaging is to be <u>recyclable</u></p>	



Specific Packaging and Material Requirements

Please see below for details of the requirements for this section. The Info Box at the bottom of this section includes: other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of; a summary of references for this section; a list of other sections of the RISE Guidelines that are relevant to this section; and signposts to further information (if applicable).

Front-of-House Packaging - pre-packaged

G-7 The supplier should follow the guidelines listed in the table below, and demonstrate that all of their packaging is recyclable:

Recyclable plastic	LDPE and LLDPE / HDPE / PP / PVC / PET / PA / ABS / PBT / PC / PMMA / EVOH / PVDC
Other recyclable materials	Paper / cardboard / aluminium foil / glass / aluminium and containers of other metals
<p>Avoid the following which may compromise recyclability:</p> <ul style="list-style-type: none"> • materials which do not carry a legitimate 'recyclable' symbol • thermoset and polystyrene plastics such as PU, MF, UP, which are challenging or impossible to recycle in the local market • mixing recyclable waste packaging with non-recyclable waste materials • heavily contaminating waste packaging with food or waste residues such as fats • paper or cardboard materials with excessive additives, coatings, non-paper labels, adhesive tape, non-water-based adhesives • plastics with coating and layers • black, dark and opaque coloured plastics 	

G-8 The supplier should demonstrate they have fully considered non-plastic recyclable alternatives to single-use pre-packaged plastic bottles for beverages, such as glass bottles or aluminium cans.

Front-of-House Packaging - post-packaged

C-9 The supplier must demonstrate they have reduced unnecessary packaging. For instance, in packaging souvenirs or foods, the main purpose of the packaging should be to contain the item. Additional packaging, bows, or decorative materials are to be avoided.

C-10 The supplier must not use single-use plastic¹ packaging for post-packaged products. As an alternative, biodegradable plastics² are permitted on condition that:

- they are third-party certified as compostable against any of the following standard specifications: EN 13432 / ISO 14855 / ASTM D6400 / D5338 / D5511 / D6868 / D6691 / D6954 [Ref-5 – 12]

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- labels describing the biodegradable content are: attached to the packaging; provide unambiguous information about the proportion of biodegradable material used; and include clear information about relevant Certifications, standard specifications and the required disposal methods to be followed by the end consumer
- vendors communicate with the customer on the appropriate on-site sustainable disposal routes available for the packaging, i.e. that biodegradable packaging should NOT be placed in the recyclable or landfill (general) waste bins

¹ This means all fossil fuel-based plastics regardless of whether they are recyclable

² This means third-party certified 100% plant-based biodegradable plastics, excluding oxo-biodegradable plastics

G-11 The supplier should demonstrate that for FoH packaging they have considered the sustainable options listed below instead of using single-use plastic products. The supplier may suggest their own alternatives, which will be considered on a case-by-case basis.

Example product	Alternative materials These have the potential to be used instead of single-use plastics because they are biodegradable or re-useable
Food wrapper	PLA, PHB, PBS, Kraft Paper (with natural coatings), Palm Leaf, Cellulose-Based Polymers
Closeable food container	PLA, PHB, PBS, Palm Leaf, Cellulose-Based Polymer
Food plate	PLA, PHB, Palm Leaf, Bagasse
Knife, fork, spoon, stirrer, chopsticks	PLA, TPS, Palm Leaf, Bamboo (no plastic coatings)
Coffee cup	PLA, Kraft Paper (with natural coatings), Palm Leaf
Coffee lid	PLA, Bagasse
Cold beverage cup	PLA, PHB
Cold beverage lid	PLA, PHB
Drinking straw	Paper, Bamboo, Metal, PHA, Sulapac
Carrier bag	PLA, PHB, PBS, TPS, Kraft Paper, Palm Leaf, Cellulose-Based Polymers
Sate skewers	Bamboo

C-12 For drinking straws, the supplier must use materials chosen from the alternative materials list for **G-11** above. The supplier may suggest their own alternatives, which will be considered on a case-by-case basis.

C-13 The supplier must not use on or supply balloons to the Expo 2020 site. Balloons in all forms are prohibited throughout the Expo 2020 event.

C-14 The supplier must ensure that any paper-based materials, including napkins and bags, are:

- made from recycled fibre or certified by FSC, or recognised equivalent [Ref-13 and Ref-14]
- have high recyclability by avoiding excessive additives / coatings / use of non-paper labels, and by using minimal amounts of adhesive tape and non-water-based adhesives

C-15 The supplier must back up any environmental claims made for packaging with credible evidence

C-16 Any condiments such as ketchup or mustard must be served in glass bottles or bulk dispensers, or by other sustainable methods; plastic sachets must not be used

Back-of-House Packaging

C-17 The supplier must ensure that a minimum of 90% of all BoH packaging material, including single-use plastic, will be recyclable and kept clean and segregated prior to disposal; the following table contains guidelines on recyclable materials:

Recyclable Plastic	LDPE and LLDPE / HDPE / PP / PVC / PET / PA / ABS / PBT / PC / PMMA / EVOH / PVDC
Other recyclable materials	Paper / cardboard / aluminium foil / glass / aluminium and containers of other metals
<p>Avoid the following which may compromise recyclability:</p> <ul style="list-style-type: none"> • materials which do not carry a legitimate 'recyclable' symbol • thermoset and polystyrene plastics such as PU, MF, UP, which are challenging or impossible to recycle in the local market • materials for which there is no local recycling capability in the waste management sector • mixing waste packaging with non-recyclable materials • heavily contaminating waste packaging with food or waste residues such as fats • paper or cardboard materials with excessive additives, coatings, non-paper labels, adhesive tape, non-water-based adhesives • plastics with coating and layers • black, dark and opaque coloured plastics 	

G-18 The supplier should use efficient logistical methods to reduce BoH packaging waste, including bulk food packaging off-site and the use of logistical consolidation processes to deliver products to the Expo 2020 site

C-19 The supplier must avoid any unnecessary and excessive packaging for BoH operations

General

C-20 The supplier must demonstrate how and when they will train their staff on handling, segregating and disposing of packaging waste to ensure that it is sustainably managed according to Expo 2020's waste management procedures and the criteria in this section

C-21 The supplier must confirm that they understand and comply with those Expo 2020 policies and plans listed in the Info Box below which are relevant to their activities

INFO BOX

Other Expo 2020 sustainability-related policies and plans that suppliers need to be aware of

P-6 Expo 2020 Waste Management Policy*

P-7 Expo 2020 Waste Management Operations Plan

Summary of References for this section

Ref-5 [EN 13432: Bioplastics performance in industrial composting](#)

Ref-6 [ISO 14855: Determination of the aerobic biodegradability of plastic materials](#)

Ref-7 [ASTM D6400: Labelling plastics designed to be aerobically composted](#)

Ref-8 [ASTM D5338: Aerobic biodegradation of plastic under controlled composting conditions](#)

Ref-9 [ASTM D5511: Anaerobic biodegradation of plastic under high-solids conditions](#)

Ref-10 [ASTM D6868: Coatings or additives designed to be aerobically composted](#)

Ref-11 [ASTM D6691: Aerobic biodegradation of plastic materials in the marine environment](#)

Ref-12 [ASTM D6954: Plastics that degrade in the environment by oxidation and biodegradation](#)

Ref-13 [FSC Chain of Custody Certification, Forest Stewardship Council](#)

Ref-14 [PEFC International Standard, Programme for the Endorsement of Forest Certification](#)

Other sections of the RISE Guidelines that are relevant to Packaging and Single Use Materials

General; Food & Beverage; Logistics

Notes and signposts to further information

* Expo 2020 has a local UAE waste management provider which will support the achievement of the challenging target to divert 85% of waste from landfill. All suppliers are required to be familiar with these targets and fully support their implementation.

CHAPTER 4 RISE REQUIREMENTS FOR FOOD & BEVERAGE (F&B)

The Expectations of F&B suppliers

When providing F&B services to Expo 2020, suppliers in the F&B sector, including those providing services to the International Pavilions, are expected to demonstrate high sustainability performance in several areas relating to their direct activities and those of their supply chains.

Suppliers need to enable wide physical accessibility to their facilities, including for all People of Determination, and demonstrate cultural sensitivity in the products they sell. Local food production should be supported, and organic food production is encouraged. The environmental impacts of food procurement and packaging need to be considered, and food waste needs to be reduced. Food hygiene standards from a recognised source are to be followed. Certain guidelines need to be applied when selecting the materials used in the fit-out of facilities, and plans need to be prepared to demonstrate how energy, water and waste will be reduced for the operation of F&B facilities.

Please see below for details of the requirements for this section. The Info Box at the bottom of this section includes: other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of; a summary of references for this section; a list of other sections of the RISE Guidelines that are relevant to this section; and signposts to further information (if applicable).

C-22 For food prepared on-site, the supplier must supply a minimum of 15% by weight from within UAE and not more than 80% from outside GCC; exemption may be given to ethnic foods for which compliance is onerous particularly when celebrating National Days

C-23 The supplier must ensure that a proportion of food being supplied to Expo 2020 carries organic Certification using a recognised organic standard (for example, the ESMA organic scheme developed in the UAE [Ref-15]). Exemption may be given to ethnic foods for which compliance is onerous when celebrating National Days. The supplier must demonstrate how they will be achieving the following targets:

- fruit, vegetables and dairy: minimum of 25% organically certified by weight
- meat and fish: minimum of 25% organically certified by weight

G-24 The supplier should exceed the minimum requirements in C-23 above:

- fruit, vegetables and dairy: minimum of 50% organically certified by weight
- meat and fish: minimum of 50% organically certified by weight

G-25 The supplier should demonstrate they have avoided the use of food products containing:

- palm oil products, unless Certified by Roundtable on Sustainable Palm Oil (RSPO) [Ref-16]
- soya products, unless Certified by the Roundtable on Sustainable Soy (RTRS) [Ref-17]

C-26 The supplier must demonstrate how they will reduce food waste by at least 85% by weight, and how they will segregate the remaining food waste from other waste streams. Where food waste reduction is not feasible, composting of the remaining food waste may be used as an alternative, noting that Expo 2020 intends to provide a number of composting facilities on-site during the event.

G-27 The supplier should provide a range of culturally sensitive, healthy and appropriate food options including food for people with special dietary needs such as gluten- or dairy-free, vegan, vegetarian, low-sugar, low saturated fat, reduced sodium, and calorie reduced options

C-28 The supplier must confirm that they understand and comply with those Expo 2020 policies and plans listed in the Info Box below which are relevant to their activities

INFO BOX

Other Expo 2020 sustainability-related policies and plans that suppliers need to be aware of

Not applicable

Summary of References for this section

Ref-15 [Organic Food Regulation UAE \(ESMA\)](#)

Ref-16 [Roundtable on Sustainable Palm Oil \(RSPO\)](#)

Ref-17 [Roundtable Sustainable Soy \(RTRS\)](#)

Other sections of the RISE Guidelines that are relevant to F&B

General; Packaging and Single-use Materials; Logistics; Furniture, Fittings, and Equipment

Notes and signposts to further information

- The Expo 2020 Food & Beverage Guide contains reference to hygiene standards covered by the Dubai Food Code and HACCP
- The F&B Fit-out Guide contains guidance on the sustainable fit-out of F&B facilities

CHAPTER 5 RISE REQUIREMENTS FOR RETAIL

The Expectations for Retail Suppliers

All products sold at the event shall follow the values, vision and sustainability requirements of Expo 2020. The sustainability requirements are set out below, and these are to be applied to:

- 80% of retail product offerings to Expo 2020 by the vendor
- Products sold at all retail outlets, the International Pavilions, and the Expo 2020 on-line platform
- The following retail categories:
 - Clothing
 - Toys & Games
 - Others: Beauty and Health; Collectables; Jewellery and Luxury; Souvenirs; Homewares; Luggage, Backpacks and Bags; Publications (art, posters, books, CDs, calendars); and Event-specific products

Please see below for details of the requirements for this section. The Info Box at the bottom of this section includes: other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of; a summary of references for this section; a list of other sections of the RISE Guidelines that are relevant to this section; and signposts to further information (if applicable).

Local and Ethical Sourcing

G-29 For Toys & Games and Clothing products to be supplied to Expo 2020, the supplier should produce, manufacture or assemble a minimum of 15% locally in UAE or GCC

G-30 The supplier should demonstrate they are Certified to the Fairtrade Trade Standard for Apparel and Home [Ref-18]

Legality

C-31 For all retail products, the supplier must demonstrate that any natural material incorporated into the item to be sold is legally sourced. In particular, where tropical wood is used within a product, it must comply with a recognised timber legality or sustainability Certification scheme such as FSC, PEFC, FLEGT or equivalent. [Ref-19, Ref-20, Ref-21]

Health and Safety

C-32 For all clothing items sold on the site, the supplier must conform with Eco Label [Ref-22] or equivalent international standard; alternatively, the supplier must provide Material Safety Data Sheets that demonstrate:

- the production of the associated textiles did not involve substances harmful to health, for example, toxic flame retardants or phthalates; and
- all health risks from exposure of consumers to any residual harmful chemicals in textile products have been eliminated.

C-33 For all Toys & Games sold on the site, the supplier must provide Material Safety Data Sheets that demonstrate:

- that no chemicals harmful to human health were used in their manufacture;
- the materials and products are non-flammable, non-explosive and non-corrosive; and
- the materials and products do not cause lacerations, choking, strangling, burns, electric shocks, damage to hearing or injury to eyes.

Products and Materials

C-34 The supplier must confirm that jewellery products meet the Responsible Jewellery Council Code of Practice or equivalent [Ref-23]

C-35 The supplier must confirm animal-based leather products meet one of the Natural Leather Standards or equivalent [Ref-24]

C-36 The supplier must confirm that perfumes products meet IFRA Standards for Perfumes or equivalent; 90% of all fragrances are to meet one form or another of the IFRA standards or equivalent [Ref-25]

C-37 The supplier must confirm that beauty product ingredients are 'cruelty free' and therefore have not been tested on animals at any stage in product development

Environmental Requirements for Apparel

C-38 The supplier must comply with Option 1 or Option 2 below:

<p style="text-align: center;">OPTION 1 CERTIFICATION Demonstrate compliance with one or more Certification schemes</p>	<p style="text-align: center;">OPTION 2 NON-CERTIFICATION Demonstrate compliance with the following criteria through an action plan and Material Safety Data Sheets (MSDS)</p>
<ol style="list-style-type: none"> 1. Sustainable Textile Production (STeP) [Ref-26] 2. Standard 100 [Ref-27] 3. EU Ecolabel, Clothing [Ref-22] 4. GOTS V.5 [Ref-29] 	<p>Chemical content limits for paints and dyes to be confirmed by MSDSs:</p> <ul style="list-style-type: none"> • No usage of polypropylene (lead-based pigments) • <5% VOCs for printing pastes and no plastisol-based printing • No azo dyes that are listed as aromatic amines [Ref-34]

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<p>5. NSF/ANSI 336 Certification [Ref-30]</p> <p>6. Global Recycle Standard 4.0 [Ref-31]</p> <p>7. The ETI Base Code [Ref-32]</p> <p>8. ISO14001 [Ref-33]</p>	<ul style="list-style-type: none"> No dyes classified as carcinogenic, mutagenic or toxic for human reproduction according to Directive 67/548/EEC [Ref-34] No potentially sensitising dyes if fastness to perspiration is > 4 <p>Chemical content limits for fabrics to be confirmed by Material Safety Data Sheets:</p> <ul style="list-style-type: none"> Acrylic: acrylonitrile < 1g/kg Elastane and polyurethane: aromatic diisocyanates < 5mg/kg Man-made cellulose: S < 120g/kg (filament) and 30g/kg (staple) Polyamide: N20 < 10g/kg polyamide 6 and < 50g/kg polyamide 6.6 Polyester: VOCs < 1.2g/kg <p>Other requirements to be confirmed by basic action plans:</p> <ul style="list-style-type: none"> GHG Reduction: reduce energy consumption within the supply-chain of the product manufacturing process Water consumption and pollution: reduce water consumption and water/air pollution by the supply-chain during the product manufacturing process Sustainable materials: <ul style="list-style-type: none"> optimise the percentage of renewable material used in the apparel optimise the percentage of staple fibres that contain recycled polyethylene terephthalate (PET); for polyester based apparel only
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Environmental requirements for Toys & Games

C-39 The supplier must comply with Option 1 or Option 2 below:

<p style="text-align: center;">OPTION 1 CERTIFICATION</p> <p style="text-align: center;">Demonstrate compliance with one or more Certification schemes</p>	<p style="text-align: center;">OPTION 2 NON-CERTIFICATION</p> <p style="text-align: center;">Demonstrate compliance with the following criteria through an action plan and Material Safety Data Sheets (MSDS)</p>
<p>1. ICTI Ethical Toy Program Audit Checklist [Ref-36]</p> <p>2. ICTI Ethical Toy Program Program Integrity Policy [Ref-37]</p> <p>3. SA8000® Standard [Ref-38]</p> <p>4. EU Ecolabel, Toys [Ref-28]</p> <p>5. ISO 14001 [Ref-33]</p>	<p>Chemical Management to be confirmed by MSDSs:</p> <ul style="list-style-type: none"> Manage and minimise the use of hazardous chemicals such as BPA, PVC, lead, phthalates, cadmium, chlorine, and arsenic Monitor and manage water and air pollution during the manufacturing process <p>Other requirements to be confirmed by basic action plans:</p> <ul style="list-style-type: none"> GHG Reduction: reduce energy consumption within the supply-chain of the product manufacturing process Water consumption and pollution: reduce water consumption and water/air pollution by the supply-chain during the product manufacturing process Material consumption and waste: minimise material inputs into the manufacturing process, and waste arising from it Sustainable materials: <ul style="list-style-type: none"> optimise the percentage of renewable material used in toys and games demonstrate how toys are designed so that they have a long life (durability) and can be reused or passed on to others optimise materials reuse and recycling

Environmental Requirements for 'Others' (refer to 'The Expectations for Retail Suppliers' above)

G-40 The supplier should comply with the following requirements:

- Manage and minimise the use of hazardous chemicals mentioned in Option 2 of **C-39** above, and monitor and manage water and air pollution during the manufacturing process
- Other requirements:
 - GHG reduction: reduce energy consumption within the supply-chain of the product manufacturing process
 - Water consumption and pollution: reduce water consumption and water/air pollution within the supply-chain during the product manufacturing process
 - Material consumption and waste: minimise material inputs into the manufacturing process, and waste arising from it
 - Sustainable materials:
 - optimise percentage of renewable material used in toys and games
 - demonstrate how toys are designed so that they have a long life (durability) and can be reused or passed on to others
 - optimise materials reuse and recycling

C-41 The supplier must confirm that they understand and comply with those Expo 2020 policies and plans listed in the Info Box below which are relevant to their activities

INFO BOX

Other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of

Not applicable

Summary of references for this section

Ref-18 [Fairtrade Standard for Apparel and Home, Fairtrade Certified](#)

Ref-19 [FSC Chain of Custody Certification, Forest Stewardship Council](#)

Ref-20 [PEFC International Standard, Programme for the Endorsement of Forest Certification](#)

Ref-21 [FLEGT Licence, Forest Law Enforcement, Governance and Trade](#)

Ref-22 [EU Ecolabel Clothing and Textiles, EU Commission Decision 2014/350/EU, Article 1](#)

Ref-23 [Responsible Jewellery Council Code of Practices, The Responsible Jewellery Council \(RJC\)](#)

Ref-24 [Natural Leather Standards, Ecocert IMOswiss AG](#)

Ref-25 [IFRA Standards, International Fragrance Association](#)

Ref-26 [Sustainable Textile Production \(STeP\), OEKO-TEX®](#)

Ref-27 [Standard 100, OEKO-TEX®](#)

Ref-28 [EU Ecolabel, Safety of Toys, P-18, Dir. 2009/48/EC of European Parliament and Council](#)

- Ref-29 [GOTS Version 5, Global Organic Textile Standard](#)
- Ref-30 [NSF/ANSI 336 Certification, Sustainability Assessment, Association for Contract Textiles](#)
- Ref-31 [Global Recycle Standard 4.0, Textile Exchange](#)
- Ref-32 [The ETI Base Code, Ethical Trading Initiative](#)
- Ref-33 [ISO14001, Environmental Mgmt. System, International Organisation for Standardisation](#)
- Ref-34 [Regulation \(EC\) No 1272/2008, European Union Law](#)
- Ref-35 [Dubai Guidelines for Toys Safety, Dubai Municipality](#)
- Ref-36 [ICTI Ethical Toy Program Audit Checklist, International Council of Toy Industries](#)
- Ref-37 [ICTI Ethical Toy Program Program Integrity Policy, International Council of Toy Industries](#)
- Ref-38 [Social Accountability 8000 International Standard, Social Accountability International](#)
- Ref-39 [GCC Technical Regulation on Children Toys, GCC Standardisation Organisation GSO](#)

Other sections of the RISE Guidelines that are relevant to Retail

General; Packaging and Single-use Materials

Notes and signposts to further information

- Jewellery Council Code of Practice
<https://www.responsiblejewellery.com/files/RJC-COP-April-2019.pdf>
- Natural Leather Standards
http://www.ecocert-imo.ch/logicio/client/imo/archive/document/sectors/textile/fibres/leather/leder_20111220.pdf
- International Fragrance Association Standards
<https://ifrafragrance.org/>
- EU Ecolabel Clothing and Textile Products
https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1403869165475&uri=OJ:JOL_2014_174_R_0015
- EU Eco-label, Safety of Toys, P-18, Directive2009/48/EC of European Council
<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1566888615426&uri=CELEX:32009L0048>

CHAPTER 6 RISE REQUIREMENTS FOR CLEANING SERVICES

The General Expectations of Suppliers of Cleaning Services

This section requires all suppliers of cleaning services during the Expo 2020 event to minimise as far as practicable all environmental and health impacts of their cleaning processes.

In particular, suppliers need to minimise the use of cleaning products and materials, and use only products and materials that meet recognised global environmental and health standards. They are to apply water and energy efficient cleaning methods and equipment, and avoid effluent from cleaning running-off into the landscape. Any paper materials to be used for cleaning purposes should be environmentally-friendly.

Please see below for details of the requirements for this section. The Info Box at the bottom of this section includes: other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of; a summary of references for this section; a list of other sections of the RISE Guidelines that are relevant to this section; and signposts to further information (if applicable).

Environmental Impacts of Cleaning Products

C-42 The supplier must provide an inventory of all cleaning and pest control products to be used at the Expo 2020 site, and their applications, along with demonstration of certificates showing that all products follow:

- ISO14001 for Environmental Management [Ref-40]
- ISO9001 for Quality Management [Ref-41]
- One of the following or equivalent:
 - EU Ecolabel (All Purpose) [Ref-42]
 - Green Seal [Ref-43]

C-43 The supplier must demonstrate that any paper-based materials used in cleaning processes, such as paper towels, wipes and toilet tissue, are proven to be:

- made from at least 70% recycled material and/or comply with a recognised timber / paper sustainability Certification scheme such as FSC, PEFC or equivalent [Ref-44, Ref-45]; and are
- free of chlorine and other potentially toxic chemicals and materials

C-44 The supplier must make a plan to reduce the following:

- cleaning products and materials
- water used for cleaning
- cleaning effluent

C-45 The supplier must comply with Expo 2020's Sustainable Materials Guidelines; these Guidelines are referred to in Appendix B below and include a list of chemicals banned from the Expo site

C-46 The supplier must use only Expo 2020 provided bin liners. Expo's waste management partner will provide bin liners for sale; a rate card will be made available to suppliers. These are to be used for general wastes (non-hazardous), with the intention that they will be plant-based biodegradable or recyclable. For the disposal of hazardous wastes, please refer to the Waste Management Policy. [P-9]

General

C-47 The supplier must confirm that they understand and comply with those Expo 2020 policies and plans listed in the Info Box below which are relevant to their activities

INFO BOX

Other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of

P-8 [Expo 2020 Sustainable Material Guidelines, Appendix B, Banned Chemical List](#)

P-9 Expo 2020 Waste Management Policy; Waste Management Operations Plan

Summary of references for this section

Ref-40 [ISO14001, Environmental Mgmt. System, International Organisation for Standardisation](#)

Ref-41 [ISO9001, Quality Management System, International Organisation for Standardisation](#)

Ref-42 [EU Ecolabel, All-Purpose Cleaners and Sanitary Cleaner, EU Commission Decision 2014/893](#)

Ref-43 [Green Seal Standard for Industrial and Institutional Cleaners, GS-37, Green Seal](#)

Ref-44 [FSC Chain of Custody Certification, 2017](#)

Ref-45 [PEFC International Standard, 2013](#)

Other sections of the RISE Guidelines that are relevant to Cleaning Services

General; Packaging and Single-use Materials

Notes and signposts to further information

- EU Ecolabel for All-Purpose Cleaners and Sanitary Cleaner
<https://ec.europa.eu/environment/ecolabel/products-groups-and-criteria.html>
- Green Seal Standard for Industrial and Institutional Cleaners, GS-37
<https://www.green seal.org/green-seal-standards/gs-37/>

CHAPTER 7 RISE REQUIREMENTS FOR LOGISTICS

The Expectations of Logistics Providers

When organising transportation, storage and other logistical activities associated with the supply of goods for Expo 2020, all suppliers are expected to demonstrate high sustainability performance relating to their activities.

Several requirements are set out below relating to the logistics of moving goods from their place of storage within the UAE to, and around, the Expo 2020 site. Suppliers need to incorporate sustainability best practice into bulk packaging, transportation and warehousing. The focus of the requirements is on minimising vehicle fuel consumption, greenhouse gas emissions, water consumption, vehicle journeys, packaging, wastes and air pollution.

Suppliers are required to provide a management plan covering the criteria listed below. This plan should address for example: optimisation of vehicle loading (striving to have fully loaded vehicles for both outward and return journeys); procedures for minimising greenhouse gas emissions; the use of re-usable containers (to reduce packaging and waste); and the use of well-maintained vehicles with fuel efficient and low-emission engines (Euro 5 or equivalent should be the minimum standard for vehicles entering the site).

Please see below for details of the requirements for this section. The Info Box at the bottom of this section includes: other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of; a summary of references for this section; a list of other sections of the RISE Guidelines that are relevant to this section; and signposts to further information (if applicable).

Resource Efficiency

C-48 The supplier for logistics services must provide a plan for how they will track and reduce the following within the boundaries of the UAE (from the storage warehouse to the site and visa versa):

- a. vehicle fuel consumption
- b. water consumption associated with the cleaning of vehicles and the running of warehouses
- c. vehicle distance travelled
- d. packaging material associated with bulk transportation of materials
- e. waste types, waste disposal methods, recycling and composting

G-49 The supplier for logistics services should take part in the Carbon Neutral programme provided by the logistics company UPS, Expo 2020's logistics partner. The information about this scheme is provided in the Info Box below

General

C-50 The supplier must confirm that they understand and comply with those Expo 2020 policies and plans listed in the Info Box below which are relevant to their activities

INFO BOX

Other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of

Not applicable

Summary of references for this section

Not Applicable

Other sections of the RISE Guidelines that are relevant to Logistics

General; Packaging and Single-use Materials

Notes and signposts to further information

- Carbon Offsetting using UPS Carbon Neutral Programme
<https://www.ups.com/us/en/services/sustainability/sustainable-services/carbon-neutral.page>

CHAPTER 8 RISE REQUIREMENTS FOR FURNITURE, FITTINGS AND EQUIPMENT (FF&E)

The Expectations of Consultants, Contractors and Suppliers providing FF&E

This section refers to any interior or exterior retail, F&B, event, hospitality or commercial space within the site. It focuses on assuring that all furniture, fittings and equipment used within the Expo site are designed, procured, installed and perform sustainably. It should be noted that prior to installation, design consultants, project managers and contractors should have already followed the relevant Expo 2020 design standards in fitting-out any such facility (please refer to P-10 and P-11 in the Info Box below).

This section includes requirements intended to reduce energy and water consumption as well as reduce the environmental impacts related to the manufacture, supply and use of furniture, fittings, and equipment. There is also a focus on the use of sustainable materials. Suppliers are required to provide evidence of compliance with each sub-section below, including inventories of furniture, fixtures, and materials related to their scope.

Please see below for details of the requirements for this section. The Info Box at the bottom of this section includes: other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of (summarised in the appendices); a summary of references for this section; a list of other sections of the RISE Guidelines that are relevant to this section; and signposts to further information (if applicable).

Kitchen Equipment and Sanitary Fixtures

C-51 Equipment and fixtures used in temporary or permanent retail, F&B outlets, event venues, or hospitality venues must comply with the F&B Guide, Table 11.1, Energy Utilisation (please refer to Appendix A)

C-52 Equipment and fixtures used in temporary or permanent retail, F&B outlets, and event venues must comply with the following:

- a. F&B Guide, Table 11.2, Water Utilisation (please refer to Appendix A)
- b. maximum litre per minute flow rates: shower 8; hand basin 2.5; kitchen sink 4.5
- c. maximum litre per flush rates: toilet 4.5; urinal – 0.5

C-53 Refrigeration and HVAC equipment must comply with the following:

- a. any refrigerants and insulation products will have Ozone Depletion Potential (ODP) of zero
- b. chlorofluorocarbon-based refrigerants will not be used in HVAC and refrigeration systems

Furniture and Fittings including Customs Casework, Decorative Elements, Storage and Shelving

C-54 No furniture that has been manufactured specifically for use at the Expo 2020 site (excluding rented furniture) must be manufactured using substances that have the potential to be toxic or classified as Carcinogenic, Mutagenic and Reprotoxic (CMR), according to EU Ecolabel (Furniture Products) [Ref-46]. This requirement covers materials such as furniture adhesives, finishes, biocidal products, flame retardants, oils, joint fillers, sealants and resins.

C-55 Any coatings used in furniture must comply with the VOC emission values in the Sustainable Materials Guidelines – please refer to Appendix B. This requirement covers all components of furniture that have been manufactured specifically for Expo 2020 (excluding rented furniture), including leather and fabric upholstery, where such components are >5% of the overall weight of the furniture product. Alternatively, compliance with EU Ecolabel (Furniture Products; Section 3) or equivalent is acceptable [Ref-46].

C-56 Where the content of wood or wood-based products used in furniture exceeds 5% of the final product weight, the material must (a) be legally sourced and (b) be covered by a valid sustainability chain of custody certificate such as FSC, PEFC or equivalent, or be made from recycled material. This includes wood, cork, bamboo or rattan. [Ref-47, Ref-48, Ref-49]

C-57 The main furniture components manufactured from plastics must not be manufactured using additives that contain the following metals: cadmium, chromium VI, lead, mercury or tin

C-58 Composite wood materials in furniture must be documented to have low formaldehyde emissions from resins or use resins with no added formaldehyde

C-59 For furniture consisting of multiple component parts or materials, the product must be designed for ease of disassembly, repair, reuse and recycling. It must be possible to dispose of any damaged parts with minimal environmental impact. This aspect must be considered in the design of the product and addressed in instructions for assembly, use and disposal.

G-60 70% of furniture, fittings and equipment should be locally sourced or shipped to the UAE by sea

General

C-61 The supplier must confirm that they understand and comply with those Expo 2020 policies and plans listed in the Info Box below which are relevant to their activities

INFO BOX

Other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of

P-10 Food and Beverage Guide (please note this is indicated in Appendix A)

P-11 Commercial Food & Beverage Fitout Guide

Summary of references for this section

Ref-46 [EU Ecolabel, Furniture Products, 4.2](#)

Ref-47 [FSC Chain of Custody Certification, Forest Stewardship Council](#)

Ref-48 [PEFC International Standard, Programme for the Endorsement of Forest Certification](#)

Ref-49 [FLEGT Licence, Forest Law Enforcement, Governance and Trade](#)

Other sections of the RISE Guidelines that are relevant to FF&E

General; Packaging and Single-use Materials

Notes and signposts to further information

Not applicable

CHAPTER 9 RISE REQUIREMENTS FOR LANDSCAPE MAINTENANCE

The Expectations of Consultants, Contractors and Suppliers providing Landscape Maintenance Services

This section refers to any landscaped space within the site, including hardscaped areas and planters. It focuses on assuring that all such areas are maintained sustainably.

This section includes requirements intended to reduce the use of chemicals pesticides, herbicides, and fertilisers, and it encourages the use of eco-friendly cleaning products. It also supports the use of green waste for composting (as opposed to landfilling it) and seeks to reduce the amount of peat-based compost used.

Details of the requirements for this section are listed below. The Info Box at the bottom of this section includes: other appendices that suppliers need to be aware of; a summary of references for this section; a list of other sections of the RISE Guidelines that are relevant to this section; and signposts to further information (if applicable).

C-62 The supplier must avoid chemical pesticides, herbicides, and fertilisers unless it is highly impractical not to use them, for example where there is an outbreak of pests requiring a particular chemical treatment

C-63 The supplier must reduce water consumption and minimise potable water consumption through the use of recycled water:

- use of efficient irrigation systems (i.e. drip irrigation) and avoid over watering.
- irrigation water uses to be met by treated sewage effluent (TSE).
- exterior water to be monitored and leak detected.
- average water consumption in the public realm not to exceed:
 - 10 litres/m²/day - parks
 - 7 litres/m²/day - streetscapes
 - 4 litres/m²/day - remaining landscape in aggregate

C-64 Where practicable, all green waste must be diverted to composting on the Expo site. Exception may be made for green wastes which are difficult to compost, such as tough palm fronds.

G-65 The supplier should avoid using peat-based compost

General

C-66 The supplier must confirm that they understand and comply with those Expo 2020 policies and plans listed in the Info Box below which are relevant to their activities

INFO BOX

Other sustainability-related policies and plans of Expo 2020 that suppliers need to be aware of

P-12 Expo 2020 Event Assurance Standards, Event Environment, Irrigation and Landscaping Section (Appendix C)

P-13 Event Operations Landscape Operational Plan

Summary of references for this section

Not applicable

Other sections of the RISE Guidelines that are relevant to FF&E

General; Cleaning Services

Notes and signposts to further information

Not applicable

APPENDICES

APPENDIX A: ENERGY EFFICIENCY AND WATER EFFICIENCY F&B

Extract from F&B Guide, Table 11.1, Energy Utilisation

Equipment	Benchmark	Aspiration	Scheme Application
Refrigerators	90% of Central Production Units (CPUs) to utilise energy-efficient refrigerators that have enhanced insulation, new coolants, and remote condensing units.	100% of CPUs to utilise energy-efficient refrigerators that have enhanced insulation, new coolants, and remote condensing units.	Energy Star
Freezers	90% of CPUs to utilise blast freezers.	100% of CPUs to utilise blast freezers.	Energy Star
Dishwashers	75% of CPUs to dishwasher models with a heat recovery condenser device to reuse waste hot water to heat the incoming supply of water.	90% of CPUs to utilise dishwasher models with a heat recovery condenser device to reuse waste hot water to heat the incoming supply of water. 10% of CPUs to utilise dishwasher models that have reduced-size wash tanks, more efficient wash and rinse pumps, and better water filtration technology.	Energy Star
Hobs and Ranges	75% of CPUs to induction hob technology and implement energy-saving practices.	100% of CPUs to utilise induction hob technology and implement energy-saving practices.	Energy Star
Fryers	75% of CPUs to utilise fryers with temperature recovery times, advanced burner and heat exchanger design, and which require less oil. Utilisation of insulated plans is encouraged.	100% of CPUs to utilise fryers with temperature recovery times, advanced burner and heat exchanger design, and which require less oil. Utilisation of insulated plans is encouraged.	Energy Star
Griddles	75% of CPUs to utilise energy-efficient grill systems that automatically switch on following activation.	100% of CPUs to utilise energy-efficient grill systems that automatically switch on following activation.	Energy Star
Hot Food Holding Cabinets	All CPU employees to follow good kitchen practices such as switching off hot food holding cabinets.	All CPU employees to follow good kitchen practices such as switching off hot food holding cabinets. All CPUs to install warning lights to indicate that a hot food holding cabinet has been left on.	Energy Star
Ovens	75% of CPUs to utilise energy-efficient convection or combination ovens, and implement energy-saving practices.	100% of CPUs to utilise energy-efficient convection or combination ovens, and implement energy-saving practices.	Energy Star
Streamers	75% of CPUs to utilise high efficiency, connectionless streamer models.	100% of CPUs to utilise high efficiency, connectionless streamer models.	Energy Star

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Ventilation and Cooling Systems	75% of CPUs to utilise a fully automated control system for demand-based ventilation.	100% of CPUs to utilise a fully automated control system for demand-based ventilation.	Energy Star
Lighting	75% of CPUs to utilise light-emitting diodes (LEDs), daylight sensors, and automatic motion sensors and timed controls.	100% of CPUs to utilise LEDs, daylight sensors, and automatic motion sensors and timed controls.	Energy Star
Heat Recovery Systems	75% of CPUs to utilise heat recovery systems.	100% of CPUs to utilise heat recovery systems.	Energy Star
Water Heaters	75% of CPUs to utilise solar water heater systems.	100% of CPUs to utilise solar water heater systems.	Energy Star UAE Vision 2021 (reduced reliance on fossil fuels)
Drainage and Waste Removal Mechanisms	75% of CPUs to install mechanisms such as grease traps, bio-remediation enzyme systems, or removal devices.	100% of CPUs to install mechanisms such as grease traps, bio-remediation enzyme systems, or removal devices.	Energy Star
Solar Power Supply Systems	75% of CPUs to install solar power supply systems	100% of CPUs to install solar power systems.	Energy Star
Submetering Systems	75% of CPUs to install submeter monitoring systems	100% of CPUs to install submeter monitoring systems.	Energy Star

Extract from F&B Guide, Table 11.2, Water Utilisation

Equipment	Benchmark	Aspiration	Scheme Application
Steamers	75% of CPUs to utilise high efficiency, connectionless steamer models.	100% of CPUs to utilise high efficiency, connectionless steamer models.	Energy Star Dubai Electricity and Water Authority (DEWA) Guidelines
Pre-Rinse Spray Valves (PRSVs)	75% of CPUs to utilise water-efficient PRSVs.	100% of CPUs to utilise water-efficient PRSVs.	Energy Star DEWA Guidelines
Dishwashers	75% of CPUs to utilise dishwasher models with soil sensors, improved water filtration, efficient jets, and strategic rack designs.	100% of CPUs to utilise dishwasher models with soil sensors, improved water filtration, efficient jets, and strategic rack designs.	Energy Star DEWA Guidelines

APPENDIX B: BANNED CHEMICALS LIST

Banned Chemical List

This list does not comprise a full list of materials banned for use. All parties must comply in full with the UAE, Dubai and international legislation, however, the following chemicals shall not be used at Expo 2020 Dubai.

Annex III Chemicals and Chemicals Recommended for Listing

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade

2,4,5-T and its salts and esters	DDT	Octabromodiphenyl ether commercial mixtures
Actinolite asbestos	Dieldrin	Paraquat dichloride
Alachlor	Dinitro-ortho-cresol (DNOC) and its salts (such as ammonium salt, potassium salt and sodium salt)	Parathion
Aldicarb	Dinoseb and its salts and esters	Pentabromodiphenyl ether and commercial mixtures
Aldrin	EDB (1,2-dibromoethane)	Pentachlorophenol and its salts and esters
Amosite asbestos	Endosulfan	PFOS, its salts and PFOSF
Anthophyllite	Ethylene dichloride	Phosphamidon
Azinphos-methyl	Ethylene oxide	Polybrominated Biphenyls (PBBs)
Benomyl	Fluoroacetamide	Polychlorinated Biphenyls (PCBs)
Binapacryl	HCH (mixed isomers)	Polychlorinated Terphenyls (PCTs)
Captafol	Heptachlor	Tetraethyl lead
Carbofuran	Hexachlorobenzene	Tetramethyl lead
Chlordane	Lindane (gamma-HCH)	Thiram
Chlordimeform	Mercury compounds, including inorganic mercury compounds, alkyl mercury compounds and alkyloxyalkyl and aryl mercury compounds	Toxaphene (Camphechlor)
Chlorobenzilate	Methamidophos	Tremolite

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Chrysotile asbestos	Methyl-parathion	Tributyl tin compounds
Crocidolite	Monocrotophos	Tris(2,3 dibromopropyl)phosphate

Annex A, B and C Chemicals and Chemicals Proposed for Listing

Stockholm Convention on Persistent Organic Pollutants

Aldrin	Heptachlor	Pentachlorophenol
Alpha hexachlorocyclohexane	Hexabromobiphenyl	Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride
Beta hexachlorocyclohexane	Hexabromocyclododecane	Polychlorinated biphenyls (PCB)
Chlordane	Hexabromodiphenyl ether and heptabromodiphenyl ether	Polychlorinated dibenzofurans (PCDF)
Chlordecone	Hexachlorobenzene (HCB)	Polychlorinated dibenzo-p-dioxins (PCDD)
Chlorinated naphthalenes	Hexachlorobutadiene	Short-chained chlorinated paraffins
DDT	Lindane	Technical endosulfan and its related isomers
Dieldrin	Mirex	Tetrabromodiphenyl ether and pentabromodiphenyl ether
Endrin	Pentachlorobenzene	Toxaphene

Other Chemicals

The following chemicals are also banned from Expo 2020 Dubai.

- Chlorofluorocarbons (CFCs)
- Methylene Chloride
- Perchloroethylene

Restricted Chemical List

The following chemicals, which have high global warming potentials, shall only be used where analysis is submitted that shows no viable alternative exists.

- Hydrochlorofluorocarbons (HCFCs)
- Halons

Volatile Organic Compounds (VOC)

The contractor shall consider material finishes (internal applications), having lower than the following total VOC (TVOC) content limits:

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Product Type (Paints, Varnishes and Coatings)	Max TVOC (g/L Ready to Use Product)
California Air Resources Board 2007 Suggested Control Measure for Architectural Coatings	As defined by the standard
South Coast Air Quality Management District Rule 1113	As defined by the standard
European Decopaint Directive (2004/42/EC)	As defined by the standard
Canadian VOC Concentration Limits for Architectural Coatings	As defined by the standard
Hong Kong Air Pollution Control (VOC) Regulation	As defined by the standard
Walls and ceilings – interior gloss Trim – gloss, semi-gloss, satin, varnishes and woodstains	75
Walls and ceilings – interior semi-gloss, low sheen and flat washable	16
Ceilings - interior flat	14
Timber and binding primers	30
Latex primer for galvanised iron and zincalume	60
Interior latex undercoat and sealer	65

Product Type (Adhesives and Sealants)	Max TVOC (g/L Ready to Use Product)
South Coast Air Quality Management District Rule 1168	As defined by the standard
European Decopaint Directive (2004/42/EC)	As defined by the standard
Canadian VOC Concentration Limits for Architectural Coatings	As defined by the standard
Hong Kong Air Pollution Control (VOC) Regulation	As defined by the standard
Indoor carpet and carpet pad adhesive	50
Wood flooring and laminate adhesive	100
Rubber flooring adhesive	60
Sub-floor and cover base adhesive	50
Ceramic tile adhesive	65
Dry wall and panel adhesive	50

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Product Type (Adhesives and Sealants)	Max TVOC (g/L Ready to Use Product)
Structural glazing adhesive	100
Architectural sealants	250

Product Type (Carpets and Floor Coverings)	Max TVOC (g/L Ready to Use Product)
Carpets	4-PC (4-Phenylcyclohexene) 0.05mg/m ² per hour
Floor coverings other than carpets (ASTM D5116 or ISO 16000)	5mg/m ² /h at three days 0.5mg/m ² /h at 28 days
Floor coverings other than carpets (ISO 10580)	0.5mg/m ² /h at 24 hours

Formaldehyde

The contractor shall consider engineering wood products (including exposed and concealed applications), having lower content emissions for different testing protocols than the values in the table below:

Test Protocol	Emission Limit/Unit of Measurement
California Air Resources Board Airborne Toxic Control Measure (ATCM) for various composite wood applications	As defined by the standard
AS/NZS 2269:2004, testing procedure AS/NZS 2098.11: 2005 method 10 for Plywood	≤1mg/L
AS/NZS 1859:2004, Particle Board with use of testing procedure AS/NZS 4266.16: 2004 method 16	≤1.5mg/L
AS/NZS 1859:2004, MDF with use of testing procedure AS/NZS 4266.16: 2004 method 16	≤1mg/L
AS/NZS 4357:4, Laminated Veneer Lumber (LVL)	≤1mg/L
Japanese Agricultural Standard MAFF Notification No.701 Appendix Clause 3 (11) - LVL	≤1mg/L
JIS A 5908:2003 Particle Board and Plywood, with use of testing procedures JIS A 1460	≤1mg/L
JIS A 5905:2003 MDF, with use of testing procedures JIS A 1460	≤1mg/L
ASTM D5116	≤0.1(+/-0.0005) mg/m ² hr

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Test Protocol	Emission Limit/Unit of Measurement
ISO 16000 part 9, 10 and 11 (also known as EN 13419)	$\leq 0.1(+/-0.0005)$ mg/m ² hr (at 3 days)
ASTM D6007	$\leq 0.1(+/-0.0005)$ mg/m ² hr (at 3 days)
ASTM E1333	≤ 0.12 mg/m ³
EN 717-1 (also known as DIN EN 717-1)	≤ 0.12 mg/m ³
EN 717-2 (also known as DIN EN 717-2)	≤ 0.12 mg/m ³

APPENDIX C: IRRIGATION AND LANDSCAPING

Extract from Expo 2020 Event Assurance Standards, Event Environment, Section 8.3.2.2, Irrigation and Landscaping

Event organisers and those working on their behalf must:

1. Use of efficient irrigation systems (i.e. drip irrigation) and avoid over watering.
2. Use DM approved Treated Sewage Effluent (TSE) for irrigation to prevent usage of potable water.
3. Water in several short sessions instead of long ones to allow better absorption and reduce evaporation.
4. Check sprinkler system valves periodically for leaks and keep the heads in good repair.
5. Adjust the timer on automatic sprinklers according to seasonal water demands and weather conditions.
6. Ensure sprinklers are shutoff during rainy periods to eliminate unneeded applications.
7. Make sure the sprinkler is placed so it only waters the lawn, not the pavement.
8. Avoid sprinklers that spray a fine mist, which increases evaporation losses.

Appendix D: Request for Clarification (RFC) Template

Please see Conformance Process in Chapter 1 of the RISE Guidelines for details of the RFC submission process

Details to be provided by the supplier	
Name / position of person submitting RFC	
Email address	
Company name	
Date RFC submitted	

Details to be provided by Expo 2020	
Name / position of person reviewing RFC	
Email address	
Date RFC reviewed	

RFC no.	Criterion Chapter Heading	Criterion No.	Clarification requested by the Supplier	Clarification given by Expo 2020
1				
2				
3				
4				
5				
etc				



إكسبو 2020 EXPO 2020

دبي، الإمارات العربية المتحدة

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