



Kingdom of the Netherlands

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بيت التصدير
JORDAN EXPORTS

Knowledge Product 3

Sustainable Food Packaging in Jordan



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Sustainable Food Packaging in Jordan

Towards Sustainable Packaging in Jordan

Sustainable packaging is of growing importance as the country and its consumers become increasingly aware of environmental and health-related concerns. Sustainable packaging is not only a response to global environmental concerns but also an expression of cultural and environmental awareness.

It not only presents a chance for businesses to meet changing consumer demands and comply with regulations, but it provides also a concrete business case by increasing resource efficiency, retaining the value of resources through recycling and minimising material losses. As sustainable packaging gains momentum, entrepreneurs should be aware of the drivers behind the momentum and how to capitalise on this development.

1

Environmental Awareness: In light of the EMV, Jordanians are becoming more environmentally conscious, and there's a growing demand for sustainable packaging solutions that minimise waste and reduce environmental impact. Jordanian consumers are increasingly looking for eco-friendly and recyclable options.

2

Resource Conservation: Given the arid environment in Jordan, there is a heightened awareness of the importance of conserving resources. Sustainable packaging can help reduce the consumption of water and energy, which presents a viable business opportunity.

Sustainable Food Packaging in Jordan

3

Regulatory Compliance: Jordanian authorities are increasingly recognising the importance of sustainable packaging and may introduce regulations to ensure the safety and sustainability of food packaging. Businesses aiming for long-term competitiveness should stay informed about regulatory changes in order to anticipate market changes. Important regulations already in place include the Jordanian Standards and Metrology Organization (JSMO) Law No. 12 of 2006, the Environmental Protection Law No. 72 of 2006 and the Solid Waste Management Regulation No. 4 of 2003.

4

Consumer Preferences: In light of the EMV, Jordanian consumers are beginning to pay a premium on food safety and sustainability. They are increasingly looking for food products that are not only safe but also come in eco-friendly packaging. Meeting these preferences can be a key selling point for food businesses.

5

Local Initiatives: Local initiatives and businesses in Jordan are actively working towards sustainable food packaging solutions. Such businesses are often at the forefront of implementing innovative packaging practices that align with global sustainability trends (for examples see the following slides on the company showcase).

6

Balancing Tradition with Modernity: Sustainable packaging needs to strike a balance between preserving Jordan's traditional packaging and adopting more modern and environmentally friendly practices.

7

Challenges and Opportunities: Sustainable packaging in Jordan faces challenges related to cost, infrastructure, and a lack of consumer awareness in the mass market. These challenges however, interpreted as opportunities, will give entrepreneurs and businesses the chance to position themselves advantageously.

The Business Case for Sustainable Food Packaging

Sustainable packaging presents a business case beyond mere environmental responsibility:

Meeting Consumer Demand: There has been a noticeable global shift in consumer behavior towards a growing preference for eco-friendly products and packaging. Consumers are increasingly willing to pay a premium on sustainably packaged products.

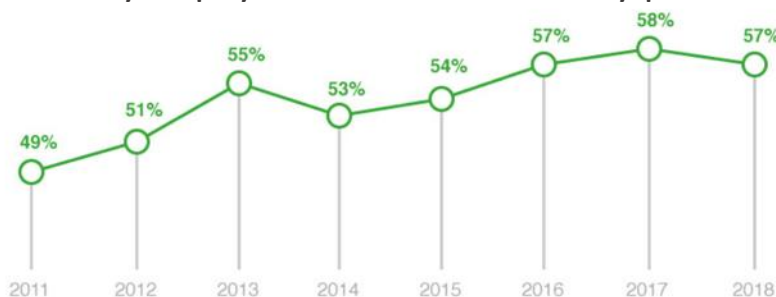
Cost Savings and Efficiency: Optimising packaging design and materials reduces material usage, transportation costs and waste disposal expenses. Innovative packaging solutions, such as lightweight and compostable materials, can further enhance efficiency and reduce overall costs.

Innovation and Collaboration: As industries invest in research and development, businesses can gain access to innovative solutions through collaboration with industry experts and packaging suppliers to gain a competitive advantage.

Brand Building: Packaging provides an opportunity to enterprises to visibly differentiate themselves in the market and to demonstrate their commitment to sustainability and environmental responsibility. A strong brand image attracts eco-conscious customers and strengthens competitive advantage.

Regulatory Compliance and Risk Mitigation: By proactively complying with increasingly strict regulations around packaging waste, businesses reduce the risk of fines, penalties and reputational damage. The EU is currently proposing a EU-wide legislation on packaging and packaging waste with the aim of making all packaging recyclable by 2030.

Would you pay more for eco-friendly products?



Percentage of global internet users who say they would pay more for sustainable products

Source: GlobalWebIndex 2011-2018 (Base: 1,711,325 internet users aged 16 - 64)

Company Showcase: Green Fields Oil, Jordan

Green Fields Oil is a Jordanian enterprise which offers over 100 natural and organic products, such as cold-pressed and steam distilled oils, Hydrosols or Seed Paste. Its journey towards sustainability in packaging began with the realisation that it could significantly reduce its environmental footprint. It reports that the benefits of sustainable packaging have been enhanced brand reputation and customer loyalty.

The enterprise adheres to the sustainable packaging action areas by:



Using sustainable packaging materials such as glass bottles and corrugated carton

Sourcing raw material from local, family-based farmers (such as pomegranate seeds or Jojoba nuts)



Recycling by-products and using them in other projects, such as converting waste from the cold-pressing process, e.g. almond and coconut residues, into nutritious flours



Using glass bottles, which maintain the purity and quality of oils without the risk of contamination



Green Fields Oils
مصنع السهول الخضراء للزيوت



Company Showcase: Shammar Honey, Jordan

Shammar Honey is a family-run enterprise that produces organic Jordanian honey and a variety of bee products. The enterprise has made the active decision to use recycled packaging materials in order to decrease its environmental footprint. The decision has also **led to an increased brand recognition as the enterprise won the Arab Starpack Pro Packaging Award in 2022** in the category of Food & Agriculture for not only its environmental dimension but also for the design of the packaging.

The enterprise actively adheres to the sustainable packaging action areas by:



Using carton made from recycled packaging material, thereby reducing the amount of materials used to create its packaging and reducing the environmental footprint of the enterprise



Producing its product from 100% local and organic inputs and value chains, thereby reducing import and production costs



Company Showcase: Abu Sido Farms, Jordan

Abu Sido Farms produces vegetables such as tomatoes, cucumbers or melons sourced from farms across the Jordan valley. The enterprise exports its produce to Europe and across the Middle East. Furthermore, Abu Sido Farms holds a Global G.A.P certification. The decision to use sustainable packaging have resulted in a decrease in damaged products and product waste and therefore an increase in profit.

The enterprise adheres to the sustainable packaging action areas by:



Sourcing 100% of its produce from local farms in Jordan and local value chains, thereby reducing import and production costs



Using a zigzag cardboard packaging to protect the products from damage during delivery, thereby minimising material loss and product waste and preserving the products' quality



Deep-Dive on Food Packaging

Role

The main role of packaging is to protect your products during the delivery from Point A (production) to Point B (consumption) and to ensure that they reach the consumer unharmed. As an enterprise, packaging is also important in:

- Advertising the product through the design of the packaging
- Extending the shelf life of the product to maintain its value and
- As a way to reduce product waste

Material

Packaging comes in different forms and materials depending on the need of the manufacturers and the nature of the product. Lightweight materials include **paper** and **plastic**, **metal** and **glass** are heavier and more durable choices. Traditional packaging materials are increasingly being replaced by alternatives like recycled paper, cardboard, plant-based plastics and compostable materials.

Types

Products are typically protected by the combined properties of:

- **Primary packaging** comes in direct contact with the product and protects and preserves the product inside
- **Secondary packaging** is used to group a certain number of products together into a cohesive unit
- **Transport packaging** is used to transport larger numbers of goods safely and securely



Food packaging types and regulations

Primary Packaging

- Subject to stringent regulations to ensure the safety and hygiene of the contents
- Regulations require primary packaging to provide clear and accurate product labelling (e.g. ingredients or nutrition facts)
- Depending on the material, there may be specific regulations related to environmental impact and sustainability



Transport Packaging

- When transporting hazardous materials, specific regulations (such as UN Model Regulations) govern the design, construction and labelling to ensure safety during transport
- Transport packaging may be subject to regulations related to load securing and stability which aim to prevent accidents and damage during transportation
- Customs and import/export regulations may apply which dictate the types of packaging that can be used for specific goods and the requirements for labelling and documentation

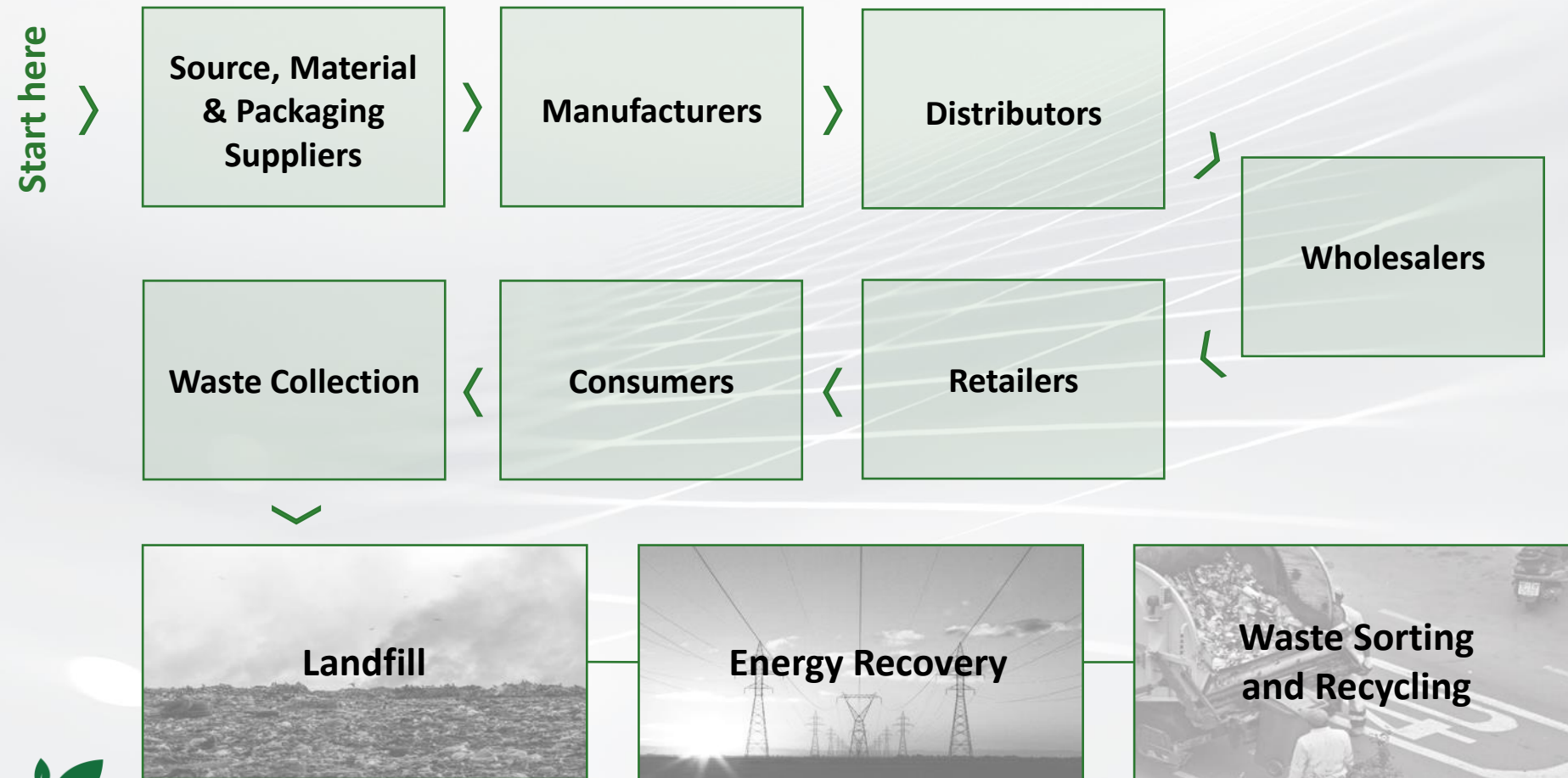
Secondary Packaging

- Subject to regulations related to the packaging's impact on the retail environment such as packaging size, shape, and design to facilitate shelf display and storage
- May be subject to recycling and environmental standards similar to primary packaging.
- Additional packaging materials, such as cardboard boxes, need to comply with these regulations



Sustainability aspects in the packaged food life cycle

At each product life stage, different demands, expectations and regulations on packaging may influence its design and how the packaging will be treated once it reaches the end of product life. At the start of the cycle the aim is to prevent food losses during production and processing caused by inadequate packaging. Once the product reaches the retail and end-consumption stage, the sustainability focus shifts to minimising food waste and reintroducing waste into the product life-cycle.



International Legal Frameworks for Sustainable Packaging

Instead of a singular comprehensive international legal framework for sustainable packaging, various international agreements and guidelines address aspects related to sustainability and environmental considerations in packaging. The specifics of packaging regulation often fall under national or regional jurisdictions and the legal framework can vary significantly from one country to another.

Jordanian businesses aiming for long-term success in a global market increasingly valuing environmental responsibility should consider relevant international agreements alongside national laws and regulations. Businesses should implement packaging practices that meet the recommended international standards, promoting food safety and sustainability.

This aligns with global expectations and facilitates international trade in food products. Here are some key international legal and regulatory frameworks and agreements that play a role in promoting sustainable packaging for food:

				
<p>United Nations (UN) Sustainable Development Goals (SDGs) Goal 12 emphasises to "Ensure sustainable consumption and production patterns" - emphasises waste reduction and sustainable packaging practices</p>	<p>UN Framework Convention on Climate Change (UNFCCC) Sets global climate goals indirectly impacting packaging sustainability & focuses on reducing greenhouse gas emissions</p>	<p>World Trade Organization (WTO) Agreement on Technical Barriers to Trade (TBT) International trade agreement providing guidance on technical regulations and standards for packaging</p>	<p>Codex Alimentarius Commission Provides guidance on food safety and packaging materials and ensures safe and sustainable food packaging practices</p>	<p>ISO Standards The International Organization for Standardization (ISO) develops and publishes various standards related to packaging, including ISO 14001 (environmental management systems) and ISO 18600 (packaging and the environment).</p>

International Legal Frameworks: ISO 18600 series

In May 2012, the International Organization for Standardization (ISO) published standards on packaging and its relationship with the environment that harmonise all existing approaches to minimise the environmental impact of packaging. These are solutions contributing to ease the current common framework of requirements referred to reduce the impact of packaging waste.

ISO has released six standards, aligned with European standards CEN, targeting responsible packaging:

ISO 18601

The umbrella standard that describes the general requirements for the use of standards

ISO 18602

Optimisation of the packaging system, including the minimisation of hazardous heavy metals and contaminants

ISO 18603

Reuse of packaging

ISO 18604

Recovery of packaging materials

ISO 18605

Valorisation of packaging by energy recovery

ISO 18606

Valorisation of packaging by ecological recovery

From ISO 18602 to ISO 18603 and ISO 18606, the series supports innovation and sustainability while still delivering on food safety and reducing food waste. The standards provide guidelines to integrate environmental considerations in the development of the packaging system. Something interesting is that these standards do not require third-party certification, and therefore, **they are clearly established as a guide on the path toward more sustainable packaging**. However, whilst voluntary standards are prescriptive, if a company intends to meet a standard, it must demonstrate that it took reasonable steps to comply with all requirements.

The new ISO standards offer a voluntary but universally accepted framework to ensure the sustainability of packaging. They are intended to harmonise existing legislation in the field of packaging and environment so that local regulatory frameworks are no barrier to the introduction of new products. The implementation of the ISO 1860 series can contribute positively in internationalisation and export plans.



EU Legal Frameworks for Sustainable Packaging

The international market for sustainable packaging is evolving towards more stringent regulations, increased consumer awareness and a fundamental shift in industry practices. As Jordan's largest trading partner and one of the deepest markets for sustainable goods, the EU offers significant growth potential for Jordanian food exporters. The EU legal framework on sustainable packaging is considered a model for developing legal initiatives in other countries and aims to reduce waste, improve resource efficiency, and encourage sustainable packaging practices. The regulations are broadly applicable to all sectors within the food industry.

Jordanian businesses which prioritise sustainable packaging solutions are thus poised to align with market trends, meet regulatory requirements, and enhance their competitiveness in a rapidly changing global landscape. Compatibility with these regulations:

Facilitates the ability to export to the EU as well as to regions following similar standards.

Enhances competitiveness in global markets through the transfer of knowledge and technology regarding sustainable packaging practices

Eases integration into global supply networks



EU Legal Frameworks for Sustainable Packaging

1

Packaging and Packaging Waste Directive (94/62/EC): Sets targets for recycling and recovery of packaging waste, requires packaging to be designed for reusability and recyclability, and mandates implementation by member states into national laws.

The European Commission has proposed a new regulation to replace the existing Directive on Packaging and Packaging Waste 94/62/EC. The new directive aims to prevent packaging waste by reducing the amount of packaging in the EU market, boosting high-quality recycling, and reduce the need for virgin materials in packaging with mandatory targets for recycled content and fostering a market for secondary materials.

2

Extended Producer Responsibility (EPR): Promotes EPR through directives like the Waste Framework Directive (2008/98/EC), shifts responsibility for packaging waste management to producers, importers, and distributors, and encourages eco-friendly packaging design and recycling.

3

Single-Use Plastics Directive (2019/904/EU): Aims to reduce the environmental impact of certain single-use plastic products, including food and beverage containers. While not specific to packaging, this directive addresses items that impact packaging waste and encourages eco-friendly alternatives.

4

Circular Economy Action Plan: outlines a comprehensive strategy for achieving a more circular and sustainable economy. This includes measures to reduce waste, promote recycling, and encourage eco-design, which can impact packaging materials and their sustainability.

5

EU Eco-design Directive (2009/125/EC): sets minimum energy efficiency requirements for various products, including packaging machinery. This indirectly encourages the development of more sustainable packaging processes and materials.

6

REACH Regulation (1907/2006/EC): governs the use of chemicals in products, including packaging materials. It aims to ensure the safe use of chemicals and promote the substitution of hazardous substances with less harmful alternatives in packaging.

7

Voluntary Initiatives: Labels and eco-certifications for sustainable packaging, such as the EU Ecolabel, which certifies products with reduced environmental impact, including packaging.

Sustainable Food Packaging Checklist and Action Areas

Sustainable Food Packaging Approaches



As an enterprise, you can implement and enhance sustainable packaging through various avenues. You can utilise the following checklist comprising three key action areas for entrepreneurs to get started.

Checklist Overview

- The checklist consists of three action areas with defined objectives and relevance.
- It provides an overview of the **objective, relevance** and **action items** for each action area – Resource Efficiency, Recyclability of Resources and Safe Packaging.
- In addition, to see how the action areas translate into practice, we have compiled several **case studies of Jordanian enterprises** which have implemented respective measures.
- Finally, the checklist provides a **repository of resources** which you can use to further learn more about the topic.





Action Area 1: Resource Efficiency

1 Objective

Resource Efficiency aims to reduce and optimise overall material consumption and avoid the amount of waste created in the process and thereby reducing the resulting environmental footprint of packaging materials.

The resource efficiency of packaging can be optimised for instance by:

- 1) Reducing the **weight and volume** of packaging,
- 2) Increasing the **efficiency of production and transportation** processes,
- 3) Increasing the amount of **renewable or recycled resources** used for producing the packaging.

2 Relevance

A resource efficient package combines **minimising the use of materials and energy** throughout its product lifecycle with **minimising the amount of material losses** during the production process.

Investing in the optimisation of your resource efficiency along the packaging lifecycle therefore **minimises the production costs** and **reduces the environmental footprint** of your enterprise. A high resource efficiency enhances the value of the resources you use and therefore results in lower cost and higher profit.

At the same time, it is crucial to **ensure that improvements in resource efficiency are not offset** by increased damage to the product or the creation of higher amounts of waste in the process.





Action Items: Resource Efficiency

In order to explore different avenues to optimise your packaging resource efficiency, consider the following questions:

- Can a **change in design** reduce the volume or weight of the packaging while maintaining the same capacity? Can you replace single components of your packaging with **thinner or lighter materials**?
- Can you **reduce the overall size of your packaging**, e.g. by improving pack-to-product ratio and pallet efficiency?
- Can **you use less material** by modifying the volume you sell, e.g. by selling more units per box, increasing portion sizes, etc.?
- Are all single components of your packaging necessary** or can they be eliminated, e.g. intermediate layers, shrink wrap, adhesives or tapes?
- Are there any ways to **avoid creating or reduce its amount** as part of your production process?
- Can you **increase energy efficiency in production and transportation processes**, e.g. by choosing materials that provide better protection in order to minimise cooling cost, switching to more efficient vehicles or renewable energy sources for your distribution?
- Can you replace components with **renewable or recyclable materials**, e.g. replacing single-use plastic materials or using materials with lower life-cycle emissions?





Self-Assessment: Resource Efficiency

1 To what extent are the following statements true for your packaging on a scale from 0-5 (0 lowest, 5 highest)?

Packaging design

Score (0-5)

- Single components of your packaging can be eliminated
- Single components of your packaging can be replaced by thinner or lighter materials
- Less material can be used for your packaging by e.g. modifying volumes

Production and transportation

Score (0-5)

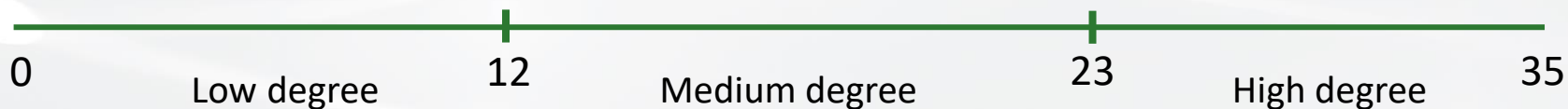
- You can reduce or avoid the amount of waste created as part of production
- You can increase energy efficiency in production and transportation processes

Renewable and recycled input

Score (0-5)

- You can replace components with renewable or recyclable materials
- The use of recycled input results in favourable trade-offs

2 Add your aggregated score and determine the overall degree of resource efficiency of your enterprise:





Action Area 2: Recyclability of Resources

1 Objective

The Recyclability of Resources aims to ensure that material used for packaging can be recycled, repurposed or re-used after the packaging has reached the end of its product life and to ensure that there are systems in place that allow the recoverability of the packaging.

The recyclability of packaging can be optimised by:

- 1) **Re-using or recycling packaging to be used again** as packaging
- 2) **Recycling materials used for packaging for other functions** or purposes
- 3) Introducing or improving **systematic approaches** for reuse, recycling, composting or energy recovery

2 Relevance

The reduction or avoidance of material and waste (see action area “Resource Efficiency”) achieves the highest potential environmental value. But if and when the creation of waste is unavoidable, it is crucial to **ensure that your packaging waste can either be recycled, re-used or recovered.**

Retaining waste within your value creation chain for as long as possible **maximises the value of the raw material** you have used to create your packaging. By ensuring that your packaging can be recycled, re-used or recovered, **your enterprise minimises material losses as well as the need for more virgin materials. Less waste results in increased savings for your business.**

Furthermore, you can create **additional value for your enterprise by making use of material waste** that would have otherwise ended in landfills.





Action Items: Recyclability of Resources

In order to explore different avenues to improve the recyclability of your packaging, consider the following questions:

- Are you using **recycled material** in your packaging? Could you increase the percentage of recycled material?
- Which effects would a higher percentage of recycled materials have on **functionality, efficiency, consumer acceptability**, etc.?
- Is part or all of your packaging **physically capable and strong enough to be re-used**? If yes, do you have a system in place for re-using your packaging?
- Is your **packaging designed in a way so it can be used for a different purpose**? E.g. glass bottles that could be used to store condiments, food, etc.
- Is your **packaging capable of being recycled or recovered**? E.g. as a material, through composting or energy recovery?
- If not, could the package be created from a **recyclable material that fulfils functional requirements** (such as product protection, food safety, etc.)?
- Can your **customers return the packaging** and do you have a collection system in place?
- Are you aware of any **collection or composting system** that is accessible to the consumers of your target market?





Self-Assessment: Recyclability of Resources

- 1** To what extent are the following statements true for your packaging on a scale from 0-5 (0 lowest, 5 highest)?

Re-using packaging materials

Score (0-5)

- You can increase the percentage of recycled materials in your packaging
- Your packaging is designed in a way that enables its re-use as packaging material

Re-purposing packaging materials

Score (0-5)

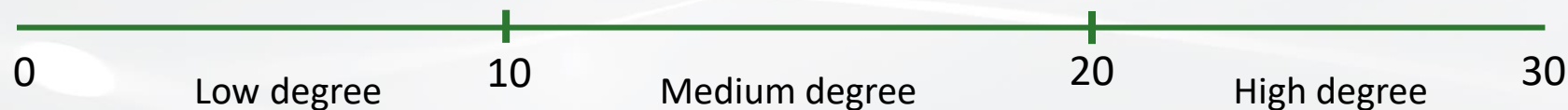
- Your packaging is designed in a way that it can be used for different purposes
- Your packaging can be recycled as a material, through composting or energy recovery

Systematic recycling approaches

Score (0-5)

- You have a system in place for collecting packaging waste.
- There are external collection systems in place that could improve your recycling efforts

- 2** Add your aggregated score and determine the overall degree of recyclability of your enterprise:





Action Area 3: Safe Packaging

1 Objective

Safe Packaging aims to prevent and control the contamination or physical damage to fresh produce. Equally as important, it also aims to ensure that the packaging itself is produced and assembled in a clean manner to prevent any contamination of the content it carries.

Safe Packaging can be strengthened by:

- 1) Increasing **compliance with hygiene and safety standards** to ensure clean production processes,
- 2) Decreasing **the risk of damage and waste** throughout the supply chain,
- 3) Ensuring that **packaging and labels provide information** on how to open, handle, store and consume the products.

2 Relevance

Ensuring that your products (particularly if you sell fresh produce) are **safely packed and delivered** is important to maximise your products' shelf life for as long as possible. A longer product lifecycle results in **lower material losses and more satisfied customers** for your enterprise. Ensuring that your packaging keeps your products safe therefore directly translates into higher profits for your enterprise.

The life cycle of your products can further be extended by giving your consumers the right **instructions on how to open, store and to safely consume them** in order to preserve their quality for as long as possible.

Safe Packaging also plays a crucial role in **reducing food waste** as diligent design, storing and handling processes can prevent damage to and wastage of your products throughout the entire supply chain.





Action Items: Safe Packaging

In order to explore different avenues to improve the recyclability of your packaging, consider the following questions:

- Are you using a **risk management system** to select materials and substances used in production processes to assess whether they compromise the safety of quality of your products?
- Are you using **hazardous substances** in your packaging material such as heavy metals, Bisphenol A or plasticisers? If yes, could you replace or eliminate them?
- Do the **physical properties of your packaging** material prevent food contamination? Are you using materials as part of your packaging that counteract the proliferation of bacteria?
- How much of your product is **damaged or wasted in your supply chain**? Do you know the reasons for the damage (e.g. faulty packaging, storage or handling)?
- Could you **prevent food waste** in your supply chain (e.g. by changing the packaging design in terms of size or weight, improving storage and handling systems)?
- Do you **label your products** with information on how to open, handle, conserve and consume them (including e.g. indicating expiry dates, etc.)?
- Are your consumers aware of how they can **recycle your packaging and product waste**?
- Are you **aware of any initiatives** in your industry which promote the development of eco-labels?





Self-Assessment: Safe Packaging

- 1** To what extent are the following statements true for your packaging on a scale from 0-5 (0 lowest, 5 highest)?

Hygiene and safety

Score (0-5)

- You screen and select materials and substances used in production processes
- You are not using hazardous materials for your packaging
- Your packaging prevents food contamination and proliferation of bacteria

Damage and waste

Score (0-5)

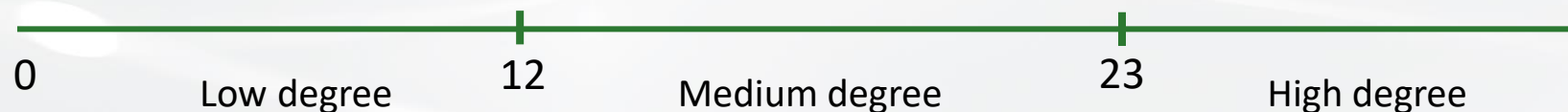
- Your packaging can be used for different purposes other than packaging
- Your packaging can be recycled as a material, through composting or energy recovery

Packaging and labels

Score (0-5)

- You have a system in place for collecting packaging waste
- There are external collection systems in place that could improve your recycling efforts

- 2** Add your aggregated score and determine the overall degree of safe packaging of your enterprise:



Outlook for Sustainable Food Packaging in Jordan

Jordanian perspective

Policy makers in Jordan are increasingly aware of the topic. The country's legal framework on this issue is still under development, but new regulations around packaging waste and recycling will have a long-lasting effect on the private sector. This increased awareness is reflected in initial regulatory frameworks such as:

- **Green Growth National Action Plan 2021-25**

An action point within this plan is to upgrade sorting, packaging and wholesale vending facilities for fruits and vegetables to improve quality control.

- **Framework Law on Waste Management No. 16 of 2020**

Starting in 2024, companies will be obliged to pay a fee for packaging materials. Initially, this regulation applies to companies above a certain threshold of domestic sales, but gradually smaller companies will also be required to pay. Respective fees will fund the expansion of separate waste collection, sorting and recycling.

International Perspective

The international market for sustainable packaging is evolving towards more stringent regulations, increased consumer awareness and a fundamental shift in industry practices. Businesses active in the export market have to align with these trends in order to stay competitive:

- **Circular Economy Practices:** Materials are reused, recycled, or repurposed to minimise waste and environmental impact.
- **Reducing Single-Use Plastics:** Reliance on single-use plastics is reduced through regulations and consumer preferences driving a shift towards more sustainable alternatives.
- **Innovative Materials:** The market is witnessing a surge in the development and adoption of eco-friendly packaging materials, such as bio-based plastics and compostable materials.
- **Extended Producer Responsibility (EPR):** The concept of EPR is gaining traction, placing responsibility on producers to manage the entire lifecycle of their packaging, including recycling and disposal.
- **Transparency and Certification:** Consumers are increasingly demanding transparency about the environmental impact of packaging by way of certification schemes and eco-labels.

Support Offers in Jordan



Jordan Exports

JORDAN EXPORTS (JE) is the umbrella organisation for Export Promotion and Development in Jordan, with references in the government's Economic Priorities Program and National Export Strategy and as a stakeholder of Jordan's Economic Modernization Vision. It provides export readiness assessments, as well as export market and finance information, and organizes trade fair participations and business missions. JE manages the Jordan Export Portal (JEP) and finance support under the Industrial Development Fund and the Export Acceleration Program of Jordan.

National Packaging Center (JoPack)

The central service provider for enterprises in the field of sustainable packaging is the National Packaging Center - JoPack founded in 2016 through a partnership between the Jordan Chamber of Industry and local industrial chambers.

JoPack provides targeted advice for businesses around packaging design, best practices and packaging materials and offers training services for industrialists to keep them up to date with the latest technologies related to packaging activities.



Challenges to Sustainable Food Packaging in Jordan

While policy makers become increasingly aware of sustainable packaging and enterprises are starting to take up initial measures to adopt sustainable packaging approaches, the business environment for sustainable packaging in Jordan is still rather uncondusive and a variety of challenges to a widespread adoption remain:

Lack of awareness

While there is an increasing demand for eco-friendly products, enterprises consider sustainable packaging as a marketing and corporate responsibility measure rather than as a tangible solution to increase competitiveness or improve efficiency.

Hindering regulations

Several regulations in place actively prevent businesses from fully implementing sustainable packaging practices, such as legal limitations to reuse glass bottles, honeycomb cartons for shipments, or the recycling of food waste.

Limited access to sustainable materials

A limited supply of sustainable packaging material in the country leads willing businesses to import suitable materials at a greater cost, which disincentivises suppliers and businesses from implementing adequate measures.

Lack of business support services

Professional and targeted advice or consulting on sustainable packaging practices is scarce and existing support services (such as JoPack) lack the financial means to sufficiently advocate training and the necessary prototyping and testing facilities.

Lack of incentives to sustainable packaging

Given the uncondusive business environment for sustainable packaging in Jordan, innovation is spearheaded by individual enterprises at sector level. Front-runners are driven by their own environmental convictions rather than by economic or public incentives.



Key Recommendations for Sustainable Food Packaging

Despite the systemic challenges to the adoption of sustainable packaging practices in Jordan, stakeholders at the enterprise and sectoral level are in a position to advocate and drive the change towards a more conducive business environment for packaging innovation.

At enterprise level

- Explore advocacy and agenda setting options at a sectoral level.
- Promote sustainability efforts to strengthen brand image.
- Use the resulting publicity to advocate for regulatory changes which ease the adoption of sustainable packaging in Jordan.
- Cross-share experiences with other enterprises at the sectoral level and engage in collaboration.

At sector level

- Invest in improving and expanding recycling infrastructure, recycling technologies and circular value chains which facilitate the systemic uptake of sustainable packaging practices.
- Increase consumer awareness and drive community support for behavioral change around recycling and availability.
- Support the technical and financial capabilities of business support services to build up the necessary capacities to deliver tailor-made advice.
- Engage in knowledge-sharing, industry collaboration and best practice sharing with international stakeholders in the field.

Repository of Resources

Sustainability in packaging 2023: Inside the minds of global consumers
August 16, 2023 | Article

Consumer sentiment on sustainability is changing as we emerge from the COVID-19 pandemic. A few common themes are clear, but views on packaging materials and environmental priorities vary by country.

McKinsey & Company • Listen to the article: Sustainability in packaging 2023

Packaging checklist for food & drink business - a sustainability checklist

Design & innovation | Food production | Food manufacturing | Transport & distribution | Retail stocking & display | Customer usability

fdf food & drink federation | INCPEN

Version 3 - Updated October 2020

SUSTAINABLE PACKAGING GUIDELINES
SPGs

Sustainable Food Packaging: An Integrative Framework
Romina Santi ^{1,*}, Paola Garrone ², Mattia Iannantuoni ² and Barbara Del Curto ^{1,2,3}

Abstract: The paper proposes a comprehensive and operational definition of Sustainable Food Packaging (SFP). Sustainability is a multifaceted concept, yet most SFP conversations decline it as a mere material substitution issue. The efforts of regulators, packaging producers, food companies, and consumers towards the design and adoption of SFP products are likely to fail without a common understanding of the multiple means by which food packaging contributes to sustainability. Based on an extensive literature review and the contributions of SFP innovation experts, the paper builds a Food Packaging Sustainability Framework (FPSF) that encompasses the three main dimensions of SFP, namely environmental conservation, food safety, and social value, and operationalizes them in terms of objectives and actionable levers. The framework can be used as a tool to search and evaluate food packaging products, a conceptual guide for SFP design, and a narrative platform for coordinating supply chain actors, including consumers. The experimental activities applying FPSF gathered the different actors in the supply chain to jointly adopt the integrated model that distributes environmental, social, and economic benefits along the entire production chain.

Keywords: food packaging; sustainability; supply chain; food packaging design

BRIEFING
EU Legislation in Progress

Revision of the Packaging and Packaging Waste Directive

OVERVIEW

Most goods require packaging at several stages of their product life. Today, the diversity of packaging items and materials is considerable. Between 2009 and 2020, the total mass of packaging waste generated in the EU rose by 20%. The Packaging and Packaging Waste Directive (PPWD – Directive 94/62/EC) lays down measures to prevent the production of packaging waste, and to promote reuse of packaging and recycling and other forms of recovering packaging waste. It also sets out the requirements that all packaging placed on the EU market must meet. These provisions are designed to reduce the disposal of packaging waste and to promote a more circular economy.

As part of the European Green Deal and the new circular economy action plan, the European Commission put forward a revision of the PPWD in November 2022. The initiative's objective is to ensure that all packaging is reusable or recyclable in an economically feasible way by 2030. The aim is to reinforce the essential requirements for packaging to ensure its reuse and recycling, boost the uptake of recycled content, and improve the requirements' enforceability. Measures are also envisaged to tackle over-packaging and reduce packaging waste.

The proposal is now in the hands of the co-legislators. During its November 16 plenary session, the European Parliament is expected to vote on the report adopted on 24 October by its Committee on the Environment, Public Health and Food Safety (ENVI). The report as voted would then form Parliament's position for negotiations with the Council, which has not yet adopted its position.

QUICKSTART GUIDE

DESIGN FOR RECOVERY
REUSE, RECYCLING OR COMPOSTING

Introduction

This Quickstart is intended to be used in conjunction with AFPCO's Sustainable Packaging Guidelines (SPGL) by providing a decision tree, designed to help guide decisions on the most appropriate recovery pathway for a particular packaging category. This Quickstart should be considered first, followed by a series of Quickstarts which provide a quick high-level guide to design strategies that improve the recyclability of different materials; these can be found at the end of this document.

NOTE: The Quickstart is intended to be general guidance only and the information provided has been developed based on current knowledge at the time of publication.

It is important to keep in mind the waste hierarchy (Figure 1) to achieve highest potential environmental value. Reduction generally achieves the highest value, followed by reuse, material recycling, organic recycling and energy recovery. As a general rule, material recycling that keeps materials at their highest value for as long as possible is preferable to organic recycling.

Compostable materials should be avoided if there is already a well-established recycling system for that type of packaging. Exceptions to this rule may include:

- Packaging heavily contaminated with food or another organic nutrient, and which cannot be easily removed by the consumer and is therefore unsuitable for material recycling.
- Packaging that could facilitate the recovery of waste organics, for example food waste bags for food and garden organics (FOGO) collections, or packaging in venues with a high proportion of food waste where all of the compostable material can be collected and processed together.

If a claim is to be made (e.g. on the label) that packaging is either 'recyclable' or 'compostable' it must meet two essential requirements:

1. It must be designed for recovery (material recycling or organic recycling) and
2. There must be a collection system that can be accessed by at least 80% of the population for available in the facility where the packaging will be consumed (e.g. a collection for composting from a cafe or food court).

Regulatory requirements may also apply.

ACCESS THE RESOURCES

The drive toward sustainability in packaging—beyond the quick wins

January 30, 2020 | Article

By Peter Berg, David Peter, Anna Stanek, Daniel Nantigöden, and Saku Porsinen

Can system-level approaches, including collaboration along the value chain, make our approach to packaging more sustainable?

How Consumer Packaged Goods Companies Can Profit from Sustainable Packaging

FEBRUARY 3, 2023
By Aparajita Sarkar, Robert Baker, Rebecca Marschke and Esteban Bortugno

The growing trend towards sustainable packaging is more than just a feel-good story—it's how Consumer Packaged Goods companies can realize future profitability

Many Consumer Packaged Goods (CPG) companies have ambitious 2025 and/or 2030 commitments to adopt more sustainable packaging. These commitments, made five to seven years ago, were seen as long-term pledges. But now various factors are increasing pressure on CPG companies to accelerate efforts and engage more broadly with the supply chain in order to fulfill their stated objectives.