



# FRESH PRODUCE PLASTICS PACKAGING DESIGN GUIDELINES



Increase Value in Recycling of PET-based Packaging



Increase Recycling Value in Rigid HDPE and PP



Remove Problematic Elements from Produce Packaging



Use On-Pack Recycling Instructions



Minimize Headspace in Flexible Packaging



Reduce Virgin Plastic Use and Increase PCR Content in Primary Produce Packaging



Increase Recycling Value for PET Thermoformed Trays and Other PET Thermoformed Packaging



Reduce Virgin Plastic Use in Business-to-Business Plastic Packaging



Increase Recycling Value in Flexible Produce Packaging

Starting in 2020, the Consumer Goods Forum (CGF) began release of the Golden Design Rules for Plastics Packaging, outlining rules providing a clear framework that aims to drive innovation and scalable actions that will result in less plastic packaging overall and easier to recycle plastic packaging by 2025 and beyond.

The CGF's Golden Design Rules are important guideposts to how packaging is designed, helping advance challenging systemic change that aims to eliminate plastic packaging waste by keeping it in the economy and out of the environment. The CGF's Golden Design Rules are voluntary, independent, and time-bound commitments that outline specific design changes, aligned with globally recognized technical guidelines.

The Canadian Produce Marketing Association (CPMA) supports the CGF's Golden Design Rules in principle, and consequently has developed the Fresh Produce Packaging Design Guidelines. Inspired by the CGF's Golden Design Rules and informed by extensive consultation with the CPMA's Plastics Packaging Working Group, the **CPMA's Fresh Produce Plastics Packaging Design Guidelines** provide guidance to Canada's produce sector to reduce the environmental impacts of produce primary packaging, as well as seek to reduce the environmental impacts for business-to-business produce packaging.

The CPMA's Fresh Produce Packaging Design Guidelines will be updated on a regular basis as the CGF's Golden Design Rules are enhanced and revised.

# DESIGN RULES AND KEY CONSIDERATIONS

## Increase Value in Recycling of PET-based Packaging

- Use transparent and uncoloured PET, or alternatively transparent blue or green coloured PET in all PET- based produce packaging
- Ensure label material, adhesives and label size is not problematic for recycling

## Remove Problematic Elements from Produce Packaging

- Avoid problematic materials for produce packaging, including: undetectable carbon black plastic; Polyvinyl Chloride (PVC) or Polyvinylidene chloride (PVDC); Expanded Polystyrene (EPS) or Polystyrene (PS); Polyethylene terephthalate glycol (PETG) in rigid plastic packaging; oxo-degradable materials
- In the case of black single-use packaging, explore industrially compostable materials as potential alternatives

## Minimize Headspace in Flexible Packaging

- Minimize headspace for all flexible packaging types, to a level where produce processing is not adversely impacted
- Strive for a maximum of 30% headspace, aligned with the Canada Plastics Pact Golden Design Rules<sup>1</sup>

## Increase Recycling Value for PET Thermoformed Trays and Other PET Thermoformed Packaging

*For PET thermoformed trays and other PET thermoformed packaging:*

- Apply packaging design guidelines to fit with existing recycling programs wherever possible<sup>2</sup>

*For packaging not accepted by existing recycling programs, and where there is a clear pathway for a future recycling system by 2025, meeting the following requirements will be actively pursued:*

- Use mono-material PET designs
- Minimize or avoid direct printing
- Ensure materials and adhesives for lidding films, inserts and other components are recyclable, or do not prevent recycling

## Increase Recycling Value in Flexible Produce Packaging

*For flexible produce packaging made from plastic:*

- Apply design guidelines to fit with existing recycling programs wherever possible<sup>2</sup>

*For flexible produce packaging not accepted by existing recycling programs, and where there is a clear pathway for a future recycling system by 2025, meeting the following requirements will be actively pursued:*

- Maximize polyolefin content (Preferably >90% mono PE, or >90% mono PP; Minimum of either >80% mono PE, >80% mono PP or >80% mixed polyolefins)
- Density <1 g/cm<sup>3</sup>
- Each barrier layer not to exceed 5% of total packaging structure weight
- Minimize or avoid using PVC, PVDC, fibres, metalized film, aluminum foil, or PET

## Increase Recycling Value in All Rigid HDPE and PP

- Ensure label size, materials, adhesives, and inks is not problematic for recycling
- Minimize or avoid direct printing
- For closures, ensure material choice, liners and seals are not problematic for recycling
- Avoid any fillers that increase the density of the packaging beyond 1g/cm<sup>3</sup>

## Use On-Pack Recycling Instructions

- Consider including recycling or reuse messaging on consumer plastic packaging to encourage desired consumer recycling and waste collection behaviors
- In instances where produce packaging applications are subject to regulatory requirements which may limit the inclusion of recycling or related instructions, explore alternatives to on-pack recycling or reuse messaging

## Reduce Virgin Plastic Use and Increase PCR Content in Primary Produce Packaging

- Eliminate unnecessary plastic (unnecessary defined as being eliminated without compromising the functionality of the packaging)
- Adopt light-weighting packaging designs and related best practices
- Maximize post-consumer recycled content which does not compromise produce primary packaging functionality
- Consider packaging reuse models or alternative materials which provide sustainable packaging solutions

## Reduce Virgin Plastic Use in Business-to-Business Plastic Packaging

- Eliminate unnecessary plastic (unnecessary defined as being eliminated without compromising supply chain/operational efficiencies)
- Adopt light-weighting designs and related best practices
- Maximize post-consumer recycled content which does not compromise B2B packaging functionality
- Consider reuse models or alternative materials which provide sustainable B2B packaging solutions

<sup>1</sup> Headspace calculation reference available in the [Golden Design Rule Fact Pack](#)

<sup>2</sup> Reference regional, provincial and/or municipal recycling guidelines, where applicable.