

A better supply chain serves us all



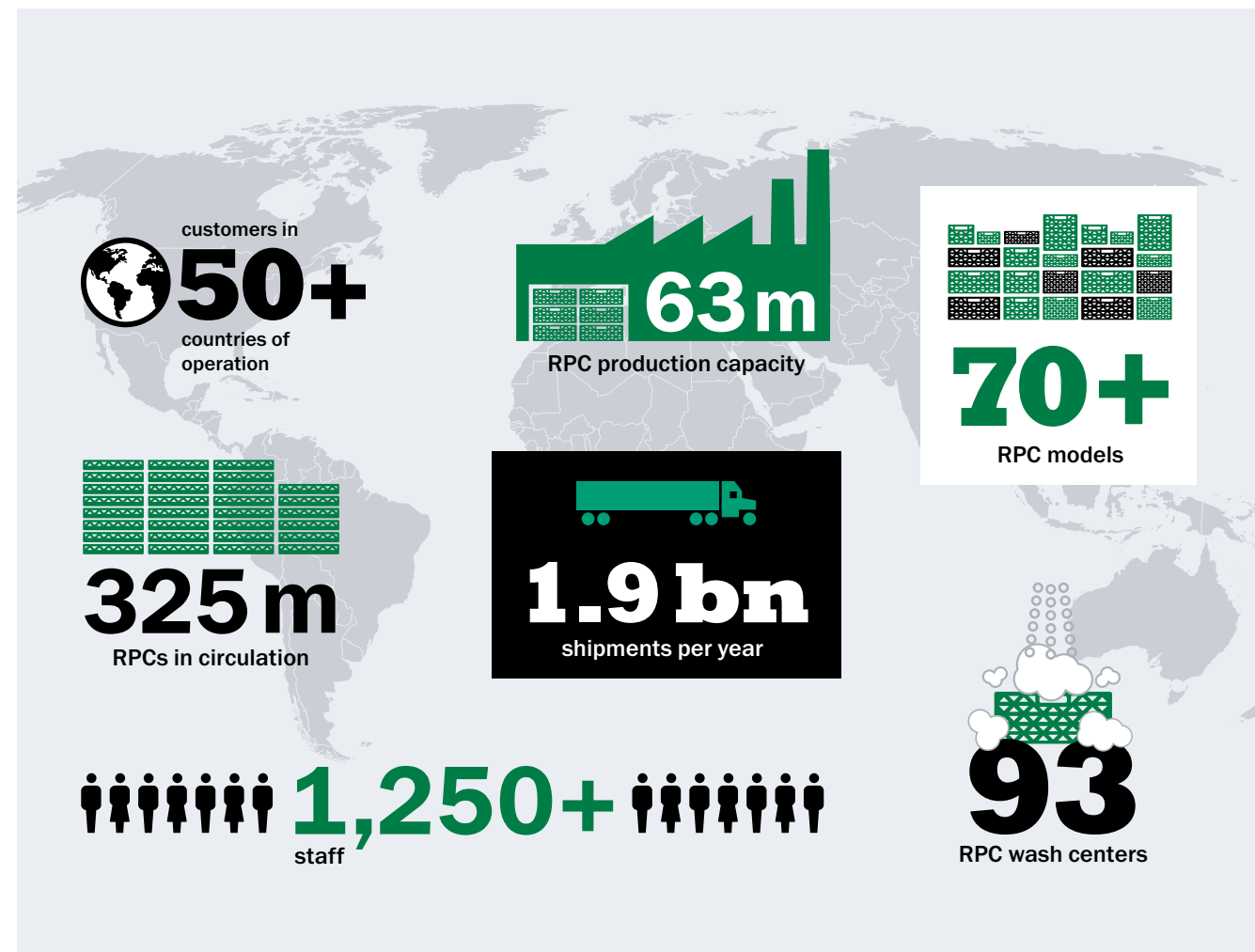
Reusable Plastic Containers (RPCs) – your solution
for the fresh food supply chain since 1992.

Delivering fresher food with Reusable Plastic Containers (RPCs) since 1992.

IFCO is the leading global provider of reusable packaging solutions for fresh foods, serving customers in 50+ countries.

IFCO operates a pool of over 325 million Reusable Plastic Containers (RPCs) globally, which are used for over 1.9 billion shipments of fresh fruits and vegetables, meat, poultry, seafood, eggs, bread, and other items from suppliers to grocery retailers every year.

IFCO RPCs ensure a better fresh food supply chain by protecting freshness and quality and lowering costs, food waste and environmental impact.



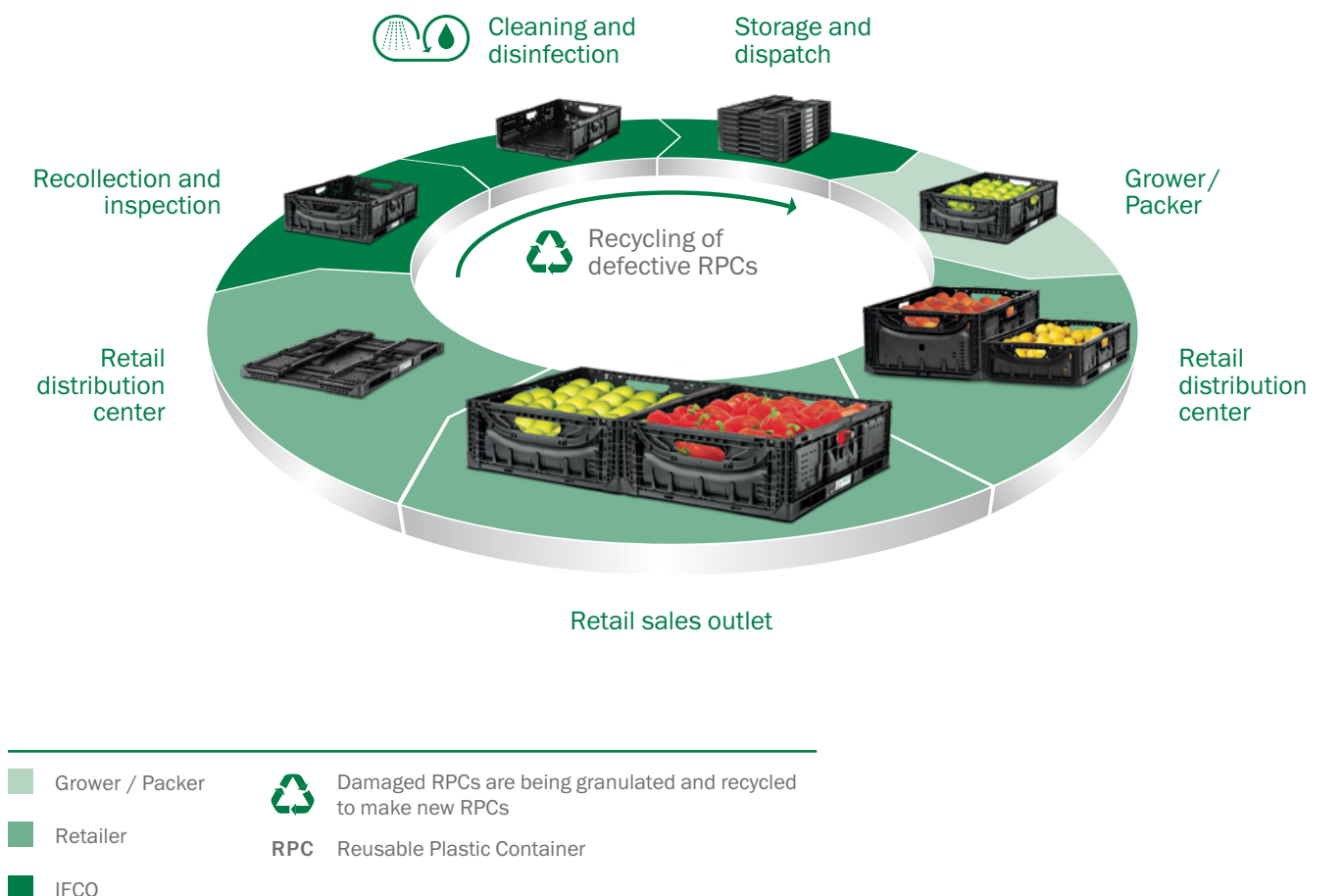
IFCO SmartCycle™ – A circular approach

Our pooling system, the IFCO SmartCycle™ is designed to ensure the highest possible levels of operational efficiency, food safety and retail readiness. IFCO manages every step of the pooling system – from delivering clean RPCs to grower/packers, to picking up

empty RPCs from distribution centers, to cleaning and sanitizing, again ready for redistribution.

With more RPCs in circulation worldwide than any other supplier, IFCO can supply whatever your business demands.

IFCO SmartCycle™





Switching from single-use packaging to IFCO RPCs reduce costs in supply chains by up to 27% eliminating up to €681 million each year.

10%

Costs reduction

For producers

- Fresh produce cools faster and more efficiently
- Less damage during transport and fewer rejections
- Space-saving design and minimal inventory requirements



51%

Costs reduction

For retailers (Point-of-Sale)

- Ergonomic handling for faster replenishment
- No packaging waste
- Greater savings with optional one-touch merchandising



25%

Costs reduction

For retailers (warehouse)

- Lower handling, storage and equipment costs
- Less product damage
- Ergonomic RPC design means fewer pulls and strains



5%

Costs reduction

For transport

- Secure stacking for a more stable pallet
- Designed for most efficient use of space
- Unaffected by moisture



Data from: Analysis of Packaging Cost Impacts, Fraunhofer Institute for Material Flow and Logistics on behalf of IFCO SYSTEMS, 2008; University of Bonn, Institute for Animal Science, Cold-Chain Management Working Group and the Fraunhofer Institute for Material Flow and Logistics, 2013; Analysis of the Impact of Packaging on Indirect Costs in the Retail Fresh Produce Supply Chain, California Polytechnic State University, 2015

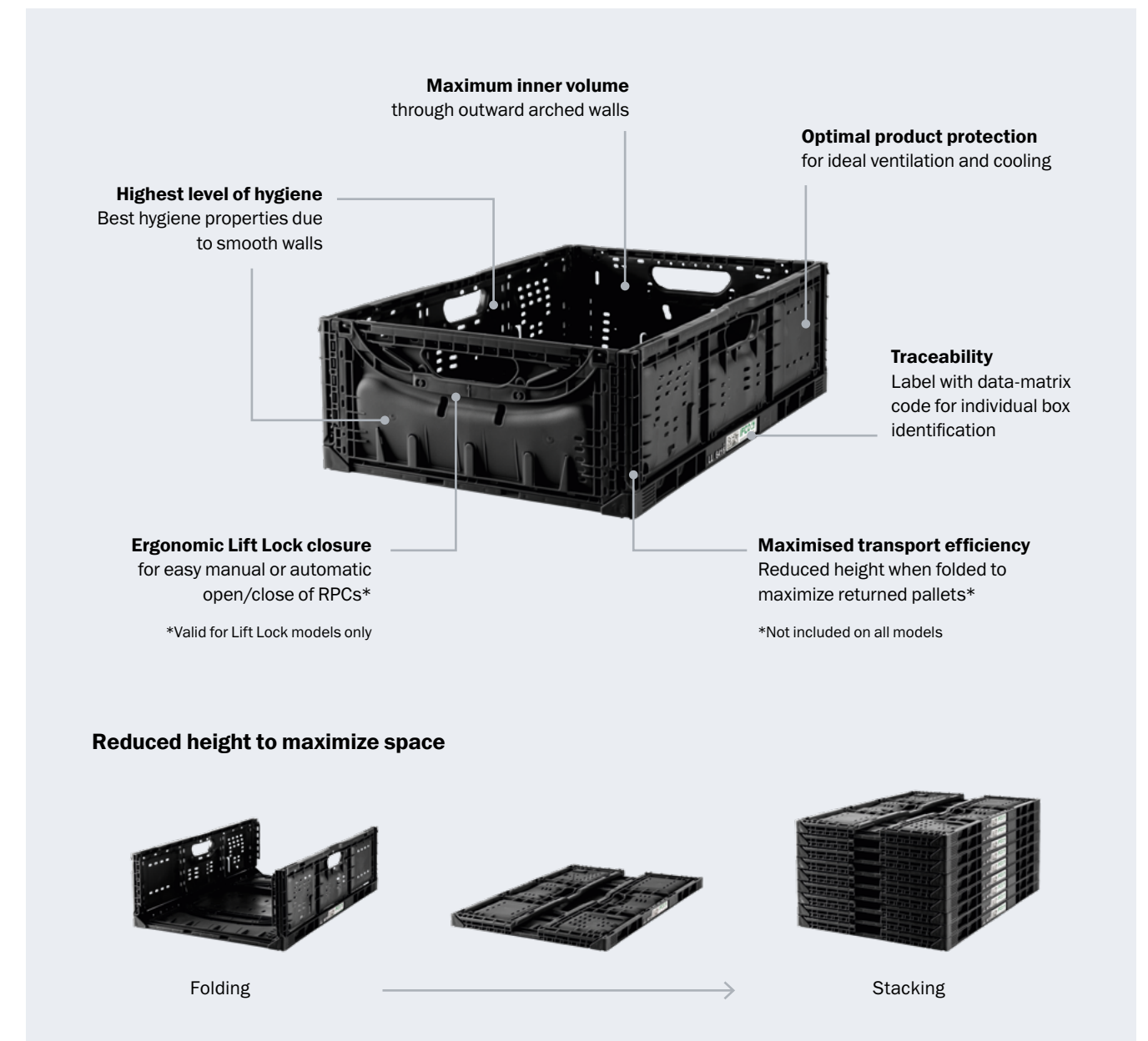
The most extensive product range of any pool provider

More than 70 models of RPCs suit all types of fresh food, in multiple sizes, with optimized solutions for fresh fruit and vegetables, bananas, meat, fish, seafood, eggs and baked goods.



RPCs are designed specifically to transport fresh products

IFCO RPCs reduce product damage by over 96% and are proven to extend the shelf life of fresh produce thanks to their characteristics: sturdy construction, highly-ventilated, foldable, stackable and sustainable.



Food safety is just as important to our customers as freshness and quality. That's why IFCO adheres to strictly enforced global standards of hygiene and sanitization.

Because our RPCs are meant to be reused, the cleaning process plays a critical role in ensuring the food safety of our RPCs. This is why we base our wash and sanitization processes on cleaning science. We perform ongoing hygiene testing to verify the cleaning process is effective and free from harmful bacteria.

We use highly-automated processes that are designed to deactivate or remove human and plant pathogens. Our RPCs are prewashed, washed, rinsed and sanitized with disinfectants before they are dispatched again.

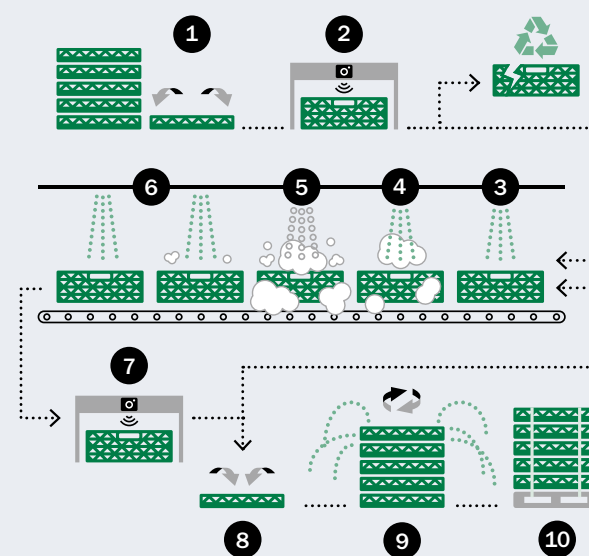
IFCO's SmartGuardian™ continuously monitors wash processes, and the data is regularly validated.

Only IFCO offers this level of safety and validated wash and sanitation processes globally.

Rigorous cleaning processes, continuously improved

- 1 RPCs arrive at the IFCO service centre and are opened for cleaning
- 2 Mechanical function check: damaged RPCs are sent for repair or recycling
- 3 Pre-rinse with hot water at high pressure to loosen and remove further debris
- 4 Main wash with hot water at high pressure using highly effective detergents
- 5 RPCs are sanitized using highly effective disinfectants
- 6 Rinsing with fresh water to remove any residual chemicals
- 7 Quality check: RPC's that don't meet IFCO's quality standards are washed again
- 8 RPCs are folded and stacked
- 9 Centrifugal drying process removes water by spinning the stacked RPCs rapidly
- 10 Stacks are palletized and secured for safety

The SmartCycle™ cleaning process



As supply chains turn to automation to become more cost-effective, IFCO RPCs are ideal for optimizing automated processes.

The right choice of packaging is critical in automated logistics centers for fresh produce. As growers pack fruit and vegetables in IFCO RPCs, and as retailers turn to automation, it means reduced costs and handling throughout the entire supply chain.

As a global market leader in reusable packaging, IFCO offers high levels of product compatibility and standardization. Our RPCs' compelling characteristics make them ideal for warehouse automation.



IFCO RPCs: the ideal solution for automated processes

- ✓ **Durable material**
Withstands temperature and moisture extremes
- ✓ **Optimal ventilation**
Efficient cooling and temperature regulation
- ✓ **Base configuration**
Provides smooth passage on rollers or conveyors
- ✓ **Sturdy construction**
Protects products in tall stacks
- ✓ **Standardized dimensions**
Essential for scanning and recognition
- ✓ **Large range of models**
Transports wide range of products
- ✓ **Securely stackable**
Avoids tilting and slippage
- ✓ **Standardized footprint**
Essential for high volume operations
- ✓ **Moisture-resistant**
Maintains shape and size despite high humidity
- ✓ **High compatibility**
Minimal deviation between product generations



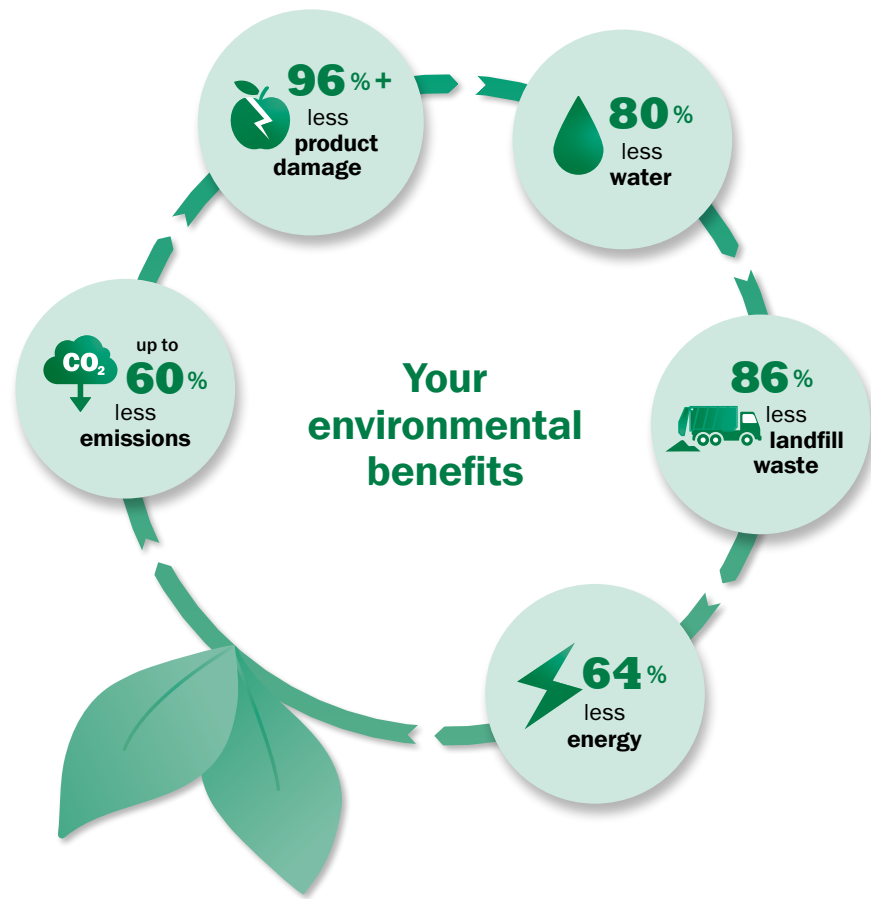
Less waste out, fewer natural resources in. Make the sustainable choice.

IFCO RPCs have been proven to provide a more sustainable alternative for the fresh supply chain than single-use packaging.

RPCs reduce solid waste and environmental pollutants dramatically, while generating significantly lower levels of greenhouse gases, using less water, and requiring less energy.

Along the supply chain, growers, distributors and retailers are changing from single-use to reusable packaging and moving toward a circular business model designed to reduce waste by reusing resources.

Sustainability is important to us all. Let's protect the things that matter!



Comparative Life Cycle Assessment of Reusable Plastic Containers and Display-and Non-Display-Ready Corrugated / Containers Used for Fresh Produce Applications, Franklin Associates (2017); The Sustainability of Packaging Systems for Fruit and Vegetable Transport in Europe based on Life-Cycle-Analysis (2018); RPC Supply Chain Cost Impact Analysis by Dr. Jay Singh and Dr. Koushik Saha, Cal Poly State University (2015)



Want to know more?

We look forward to answering any questions you may have. To find your local office or for more information visit [IFCO.com](https://www.ifco.com)

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