



Co-funded by the European Union



german  
cooperation

DEUTSCHE ZUSAMMENARBEIT



# Promotion of reusable containers in fruit and vegetable trade

## 果蔬农贸运输中循环周转箱的应用

Qingdao Junshengmingshi Logistics Packaging Technical Research Institute  
青岛军盛名世物流包装标准化技术研究院

Implemented by

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

**EXPERTISE  
FRANCE**



Co-funded by the European Union



german cooperation  
DEUTSCHE ZUSAMMENARBEIT

Implemented by



Qingdao

Application and Promotion of Reusable Standardized Containers

青岛

循环共用标准化周转箱的应用推广





Co-funded by the European Union



german cooperation  
DEUTSCHE ZUSAMMENARBEIT

Implemented by



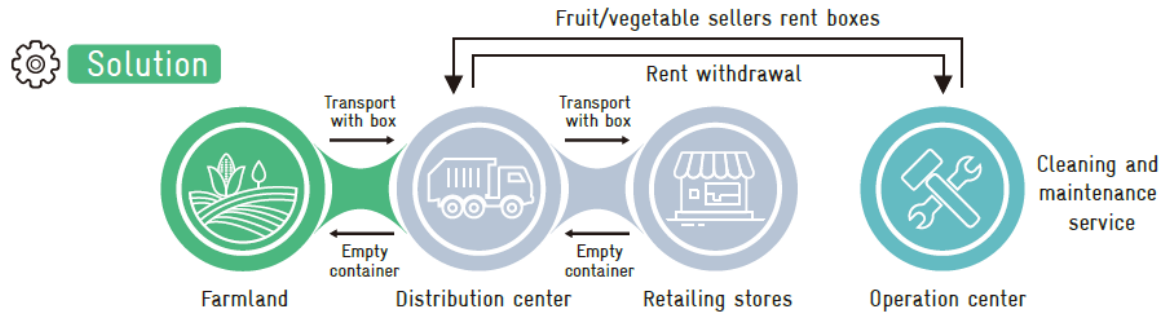
# Qingdao

## Application and Promotion of Reusable Standardized Containers

**Partner** Qingdao Junshengmingshi Logistics Packaging Institute

**Problem** The annual consumption of single-use containers amounts to 17 million pieces in Qingdao West Coast New District (QWCND). Is there any better solution?

**Contribution by Rethinking Plastics** Based on the existing pilot in QWCND  
Business model analysis + Environmental benefit analysis + Policy recommendations



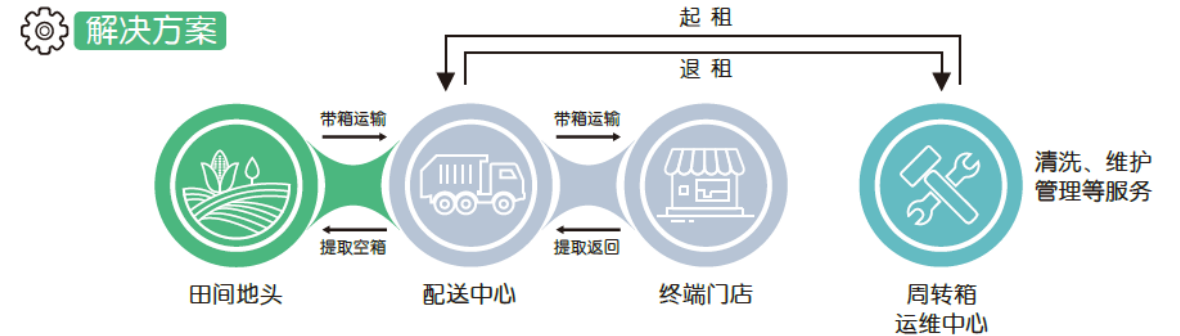
# 青岛

## 循环共用标准化周转箱的应用推广

**合作伙伴** 青岛军盛名世物流包装标准化技术研究院

**拟解决问题** 青岛西海岸新区用于蔬菜水果运输的一次性包装箱约1700万只/年，有没有更好的解决方案？

**项目支持** 依托青岛西海岸新区的标准化周转箱试点，  
商业模式 + 环境效益 + 政策建议





Co-funded by the European Union



german cooperation  
DEUTSCHE ZUSAMMENARBEIT

Implemented by

**giz** Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

**EXPERTISE FRANCE**



# Qingdao

## Application and Promotion of Reusable Standardized Containers

# 青岛

## 循环共用标准化周转箱的应用推广

### Findings



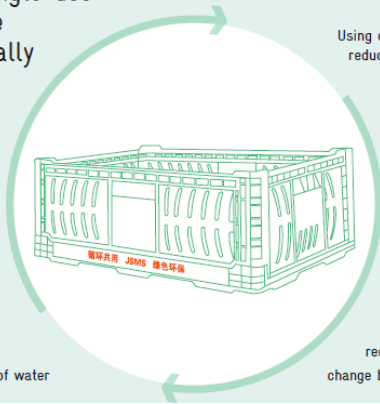
### 主要结论



Compared to the single-use ones, each reusable container can annually

reduce the GHG emissions of **936kg CO<sub>2</sub>eq**

save **516L** of water



The daily cost of each container is **1 RMB**  
Using each reusable logistic container helps reduce single-use material consumption in **120kg**

and save the cost of buying new single-use containers for an amount of **600 RMB**



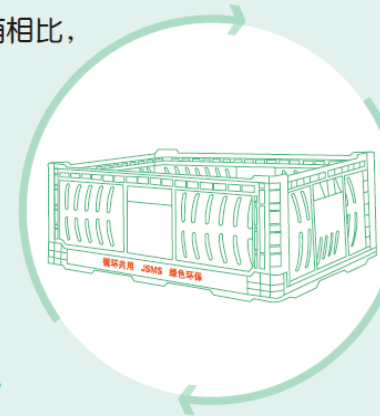
If the food loss during transportation through single-use packaging is **20%** according to research data, using a reusable container can contribute to food loss

reduction in **300kg** /year as there is no need to change boxes during transportation and arrangement in retailers.

和一次性塑料包装箱相比，单个周转箱每年度

减少温室气体排放约 **936kg CO<sub>2</sub>eq**

节约用水 **516L**



每个箱子每日成本约 **1元**  
每个箱子每年减少 **120kg** 一次性材料浪费  
节约购置一次性周转箱成本 **600元**



按照普通 **20%** 计，因周转箱不倒筐运输模式每年可避免食物损失 **300kg**

## Qingdao

### Application and Promotion of Reusable Standardized Containers

## 青岛

### 循环共用标准化周转箱的应用推广

#### Discussion and suggestion 讨论及建议

- 1** The reusable containers have remarkable environmental and economic benefits, and **it can be promoted as a sustainable business model.**  
循环周转箱具有显著的环境和经济效益，**具备形成可持续商业模式的能力，值得推广；**
- 2** The deposit and property management are important for reusable containers. In Qingdao, **digital system was used to improve the management effectiveness and efficiency.**  
周转箱的押金管理及资产管理过程非常重要，青岛试点通过**信息化系统**及内置芯片，有效的提高了运行管理效率；
- 3** In comparison to single-use containers, the reusable containers have higher construction investment and operation cost. The Qingdao pilot received **a green financial loan from China Construction Bank (Qingdao)**, which supports the establishment of a sustainable business model.  
相比一次性周转箱，循环周转箱固定投资额高，运营管理成本高；青岛试点中，中国建设银行青岛支行提供了**绿色金融贷款支持形成了更可持续的商业模式。**