

## Who are Krysteline

**UK based private company established for 16 years** 

Innovative thinkers in a traditional marketplace

**Excellent track record of Research and Development** 

Global business exporting 95% of its production overseas

**Principle offices in UK, Australia and Quebec** 

#### The main numbers - USA

12 million tonnes of glass containers produced annually

46 plants using 3.9m tonnes of cullet

8 million tonnes of cullet not being utilised



### Feeding the remelt industry

High quality colour sorted cullet

**Extends furnace life** 

**Reduces carbon consumption** 

**Decreases operational cost** 



# Perception

100% of all glass can be used to make new glass

# Reality

8 million tonnes is not converted in remelt

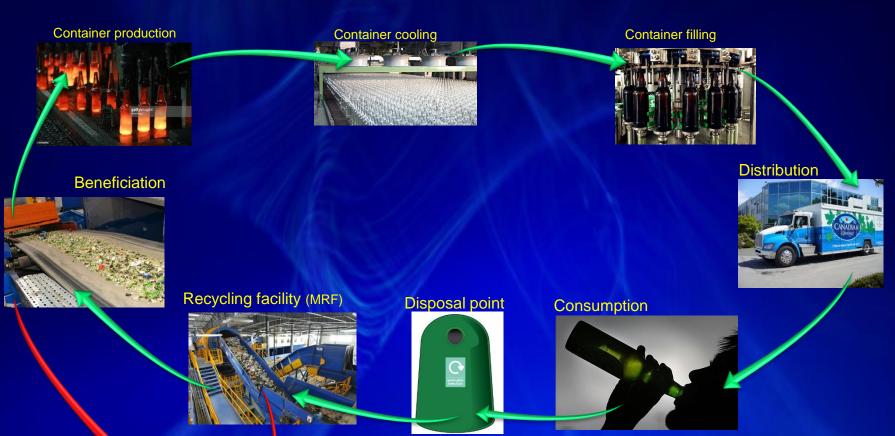
Misunderstood message restricts investment

Location of cullet is often far from remelt plants

The price remelt pay is determined by raw material cost

We have to work hard to rationalise this perception

#### Alternativeglassregydlingsystem



Glass clean-up



**Purification plants** 



End markets

#### Understanding the situation

**Equipment cost and relatively low market prices deter investment** 

Recyclers have high collection and processing costs

**Cullet more economic to collect commingled** 

**Commingling glass decreases quality** 

Landfill is relatively cheap

**Confidence** is low

More investment required for infrastructure

#### Joined up thinking

The UK adopted the Packaging Recovery Note (PRN) system

Designed to stimulate an inclusive recycling system

**Brand owners have to purchase PRNs from the recycler** 

Producers are responsible for their own waste through its life cycle

A few cents increase on all containers covers the cost.

PRNs are traded on the open market for transparency

#### How the PRN stimulates recycling

PRN vale is determined by quality of recycled product

Examples - Aggregate \$15pt, Remelt and purified \$50pt

Recycler is accredited and generates his PRNs

PRN value only redeemable against capital equipment and R&D

Higher quality equipment processes higher quality glass

#### Technological adaptability

Recyclers have to be flexible and adaptable as the market evolves

**Technology must support multiple markets** 

"You find the market and Ill buy your plant"

**Krysteline is committed to this marketplace** 

# "If technology is our future, then we will be well served by those who are leading the way"

