

## Hitchhiker pests

**Quarantine Regulators Meeting** 



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## RISKS OF SEA CONTAINERS











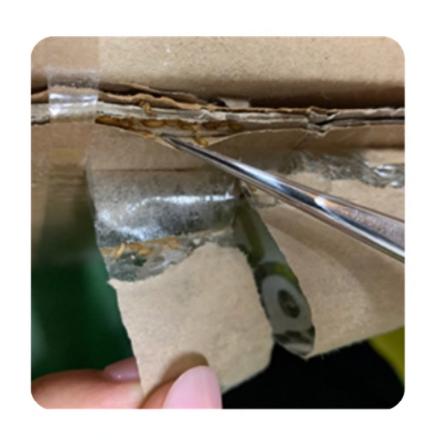




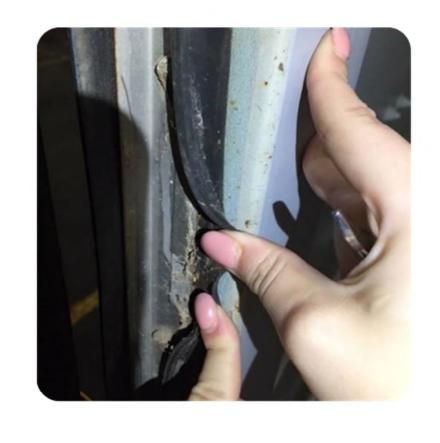


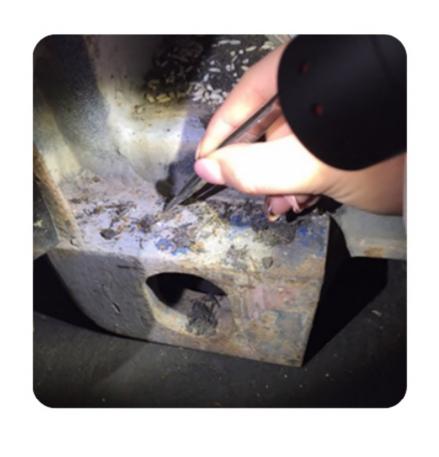


## KHAPRA BEETLE RISK OF SEA CONTAINERS



















# **CONSEQUENCES** (over 20 years)

**Khapra beetle** \$15.5 billion



**Giant African snail** \$1.5 billion



**Exotic invasive ants** \$8.5 billion





**Asian Honey bees** \$0.7 billion



# (\$) ONSHORE MANAGEMENT COSTS

### Inspection and treatment costs

#### **Scenario**



Arrives from a high-risk country



Inspected on wharf



Found to be contaminated with soil and snails



Tarped and directed for treatment

#### **Costs**



On-wharf lifts = \$200-300/lift



Inspection = \$50/quarter hour



On-wharf storage costs = \$272-340/day (storage > 3 days)



Tarping = \$3,000 - 5,000/container



Transport costs to treatment facility = \$125/hour

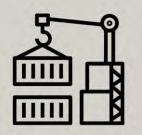


Onshore treatment = \$340-545



Cleaning = \$160





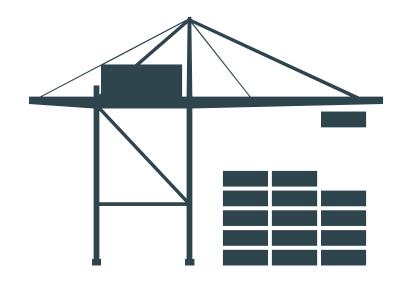
## **CONTAINER LOGISTICS: KEY**



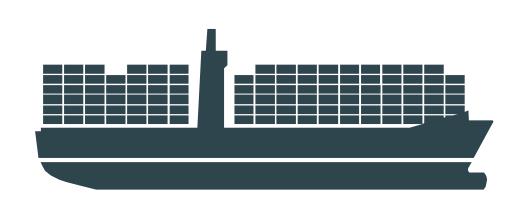
Container depot



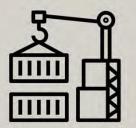
Pack or unpack point (warehouse)



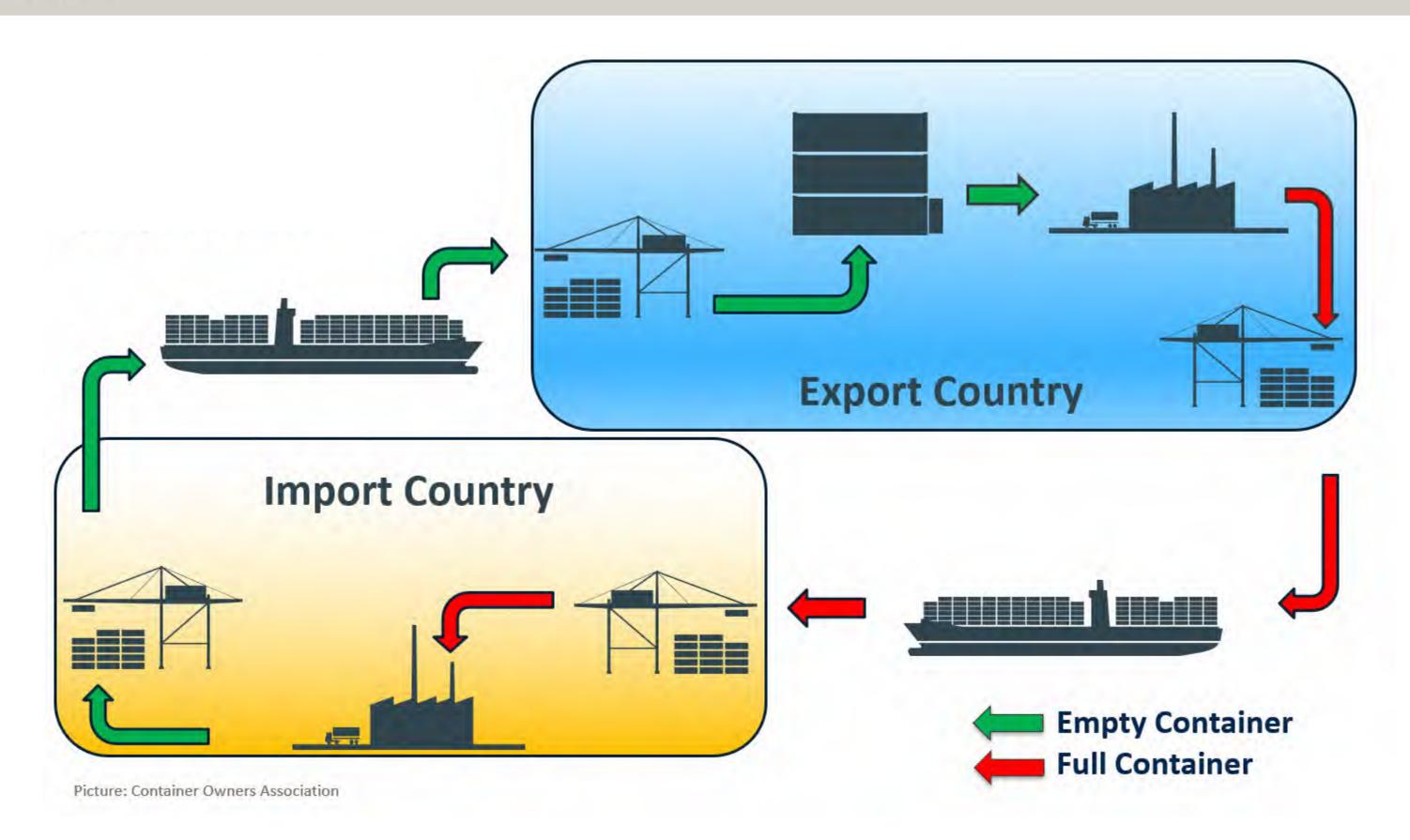
Container terminal

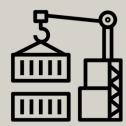


Container vessel

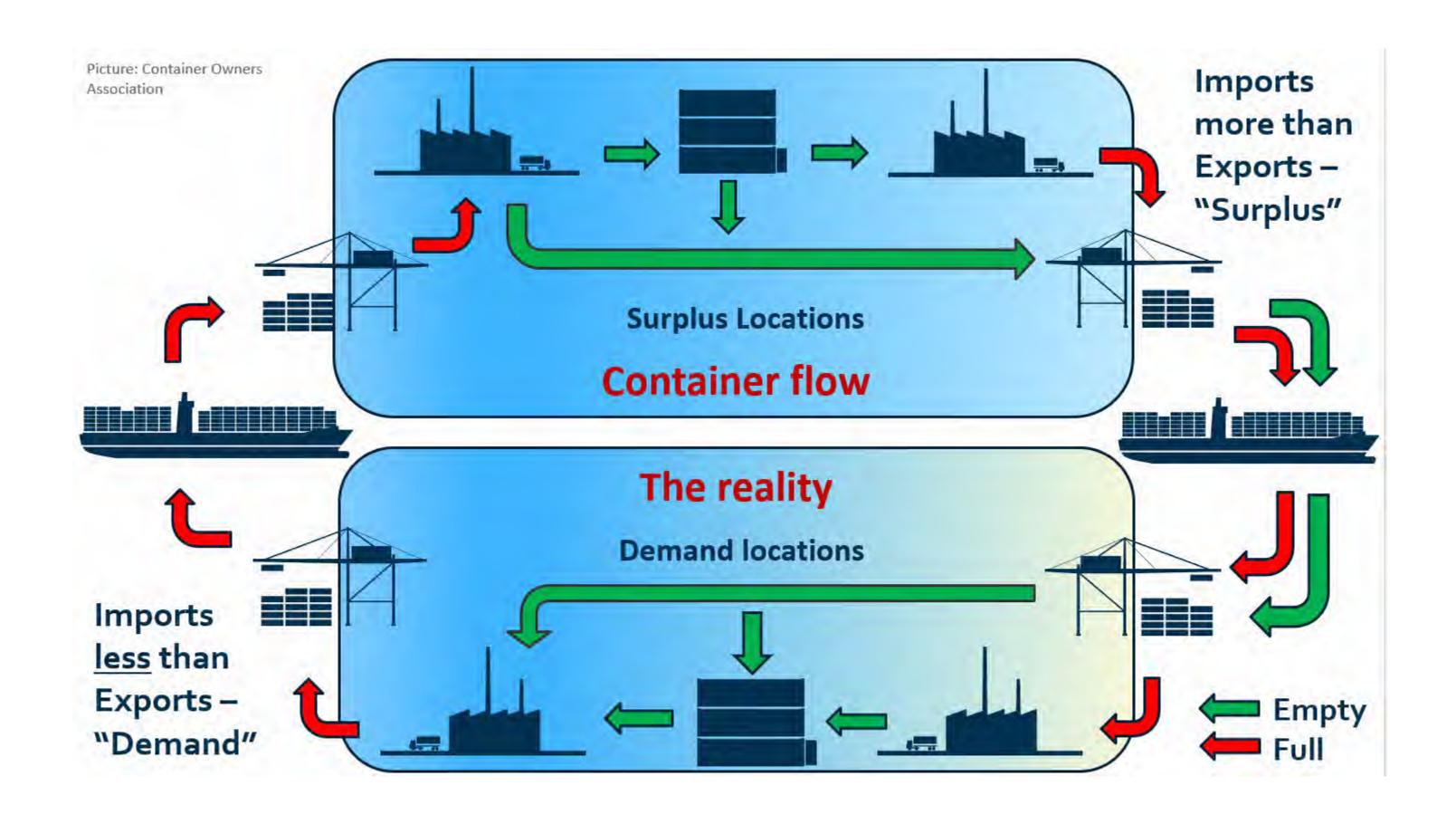


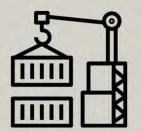
# CONTAINER LOGISTICS: WHAT MOST PEOPLE THINK



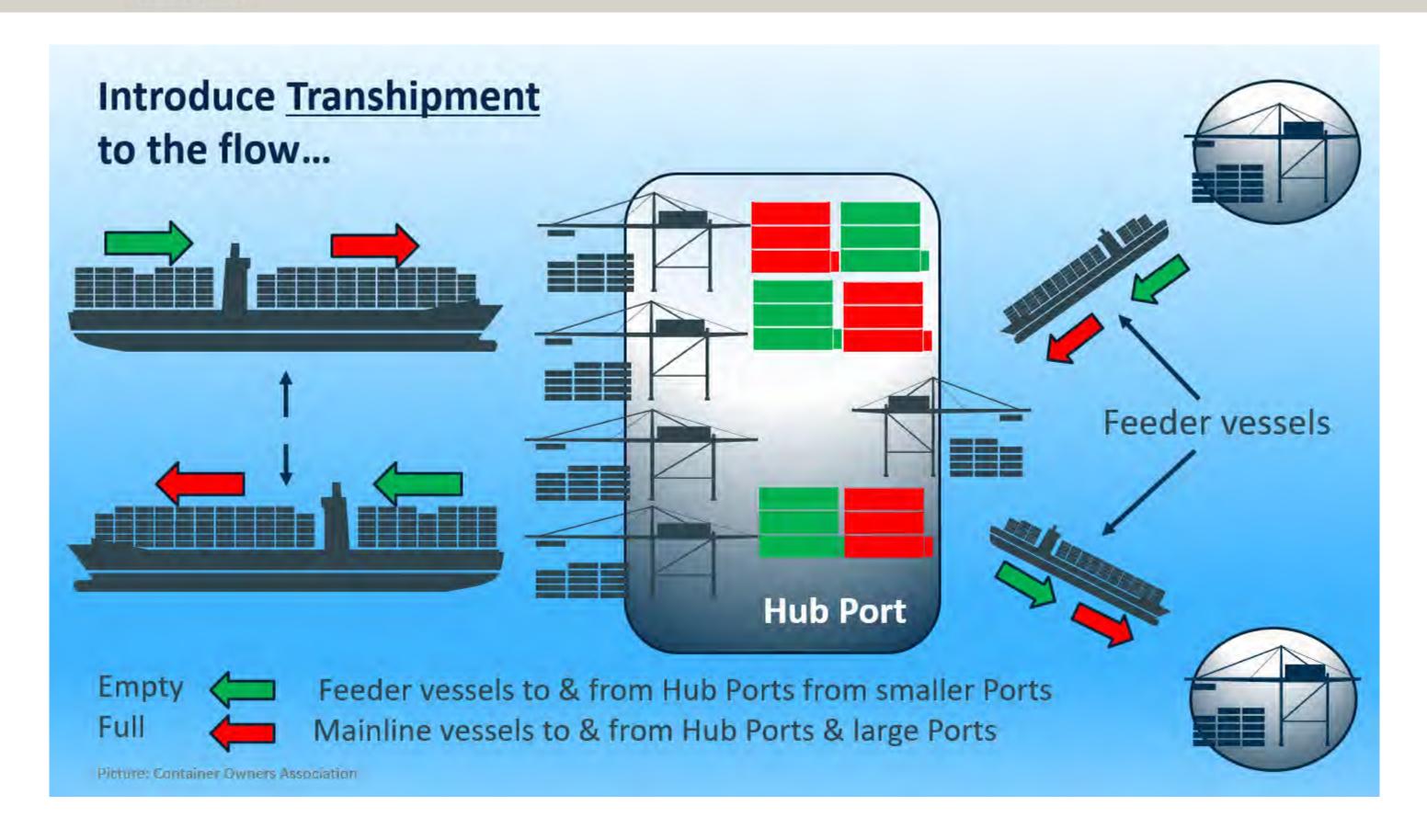


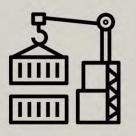
## **CONTAINER LOGISTICS: THE REALITY**



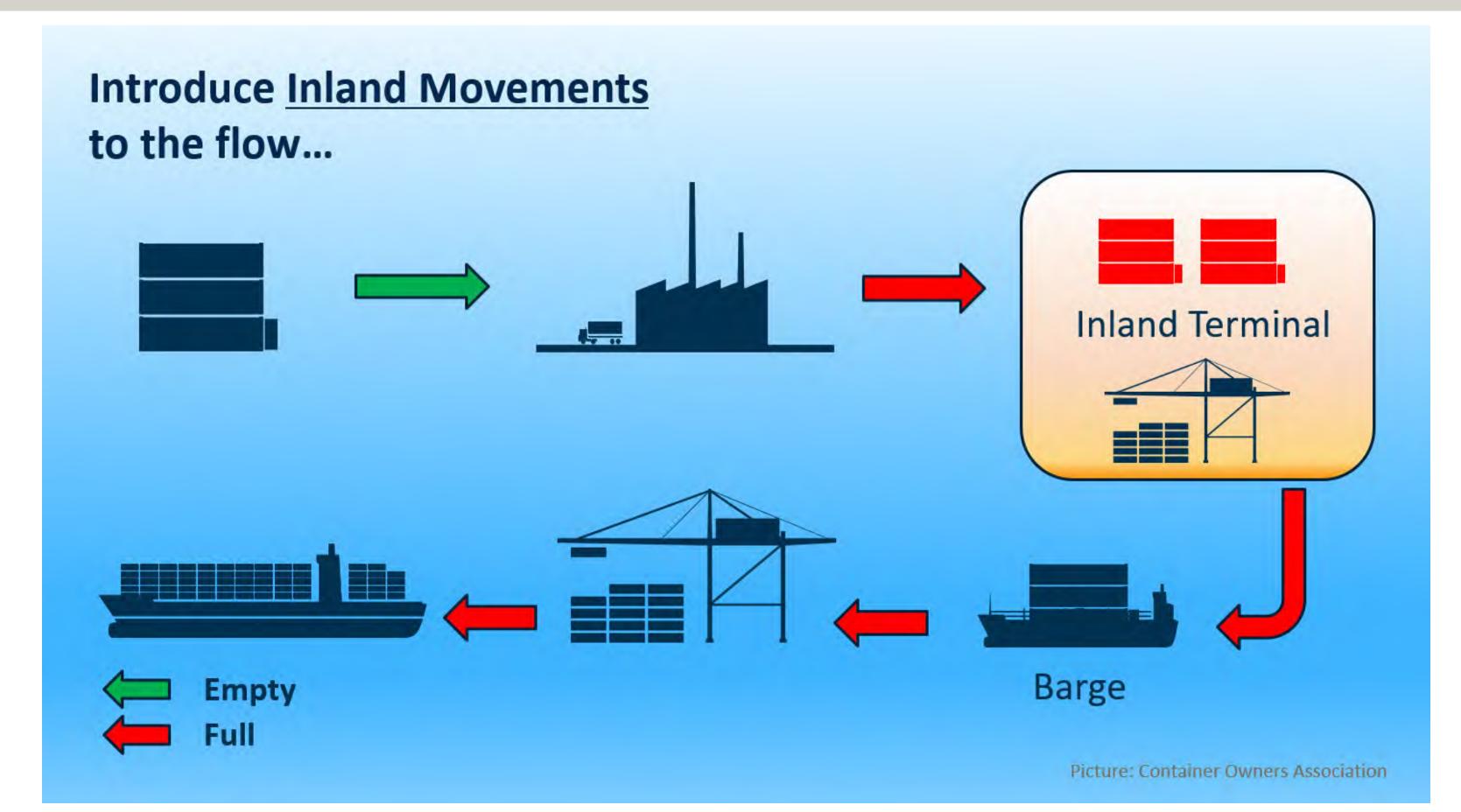


## **CONTAINER LOGISTICS: TRANSHIPMENT**





## **CONTAINER LOGISTICS: INLAND MOVEMENTS**



# CONTAMINATION TOUCH POINTS



Pack points



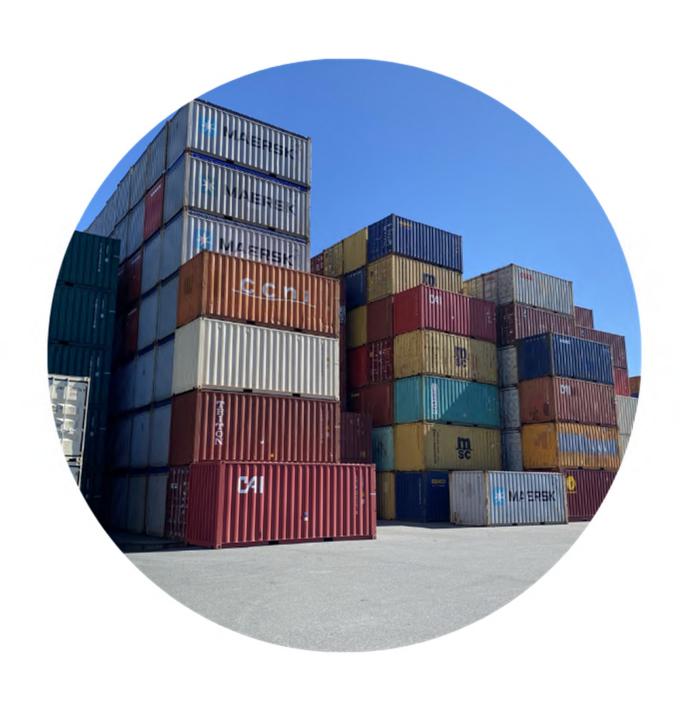
Terminals/container depots



Container vessels



Contaminated goods





### Risks include (external and internal):

- Containers placed on grassy areas or soil are more likely to be contaminated by insects, snails and plant parts, including seeds.
- Entry of pests through container doors left open.
- Soil entering the container on the feet of persons, or on the wheels of handling equipment.
- Cross contamination from cargoes.

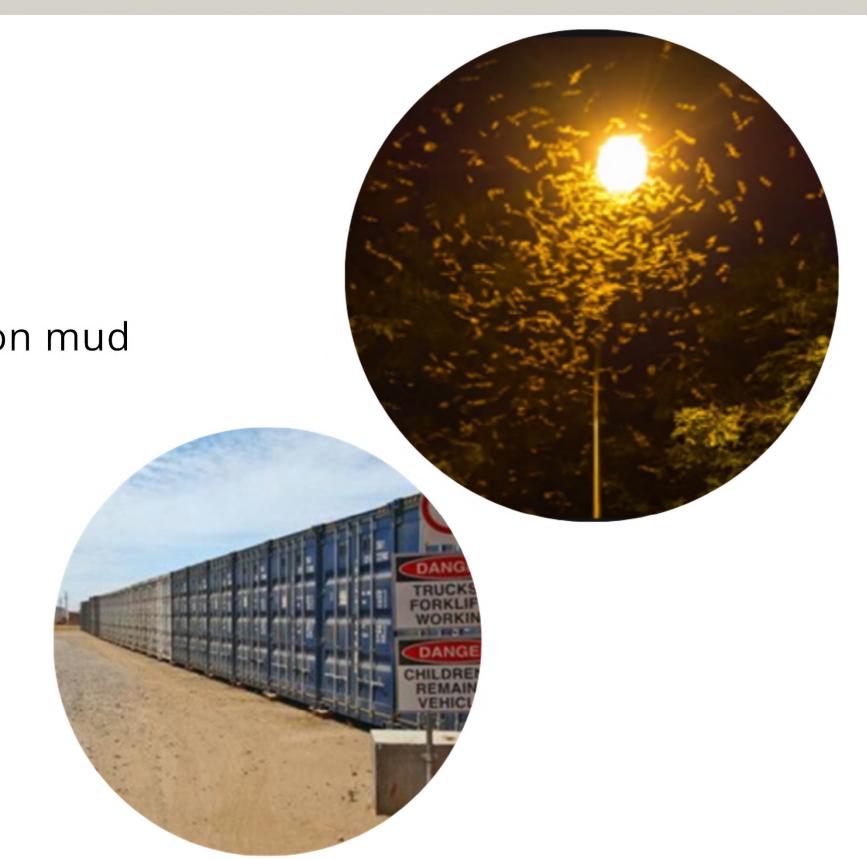




Risks include (mainly external):

Contamination due to positioning of containers on mud

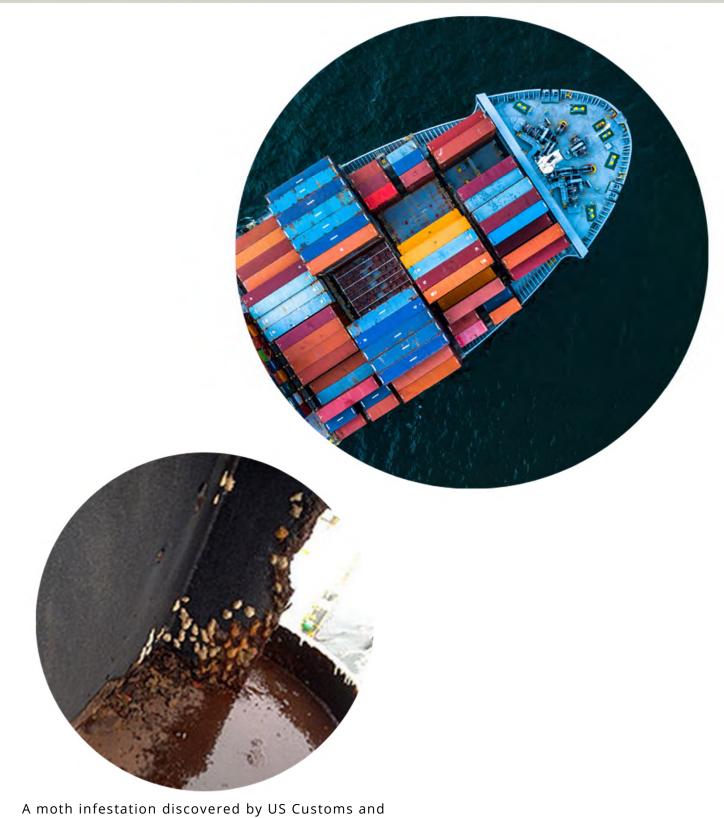
- Lights that attract insects
- Cross contamination between containers
- Contamination from natural habitat
- Pest habitats or resident pest populations





## Risks include (mainly external):

- Cross contamination between containers
- Cross contamination from ship holds



A moth infestation discovered by US Customs and Border Protection on a cargo ship in Jan, 2013 (Source: US CBP)



### Risks include:

- Contamination from infested goods
- Contamination from packaging

Khapra beetle is an example of this



Enhanced data capture & analytics

Innovative technologies

Education and awareness

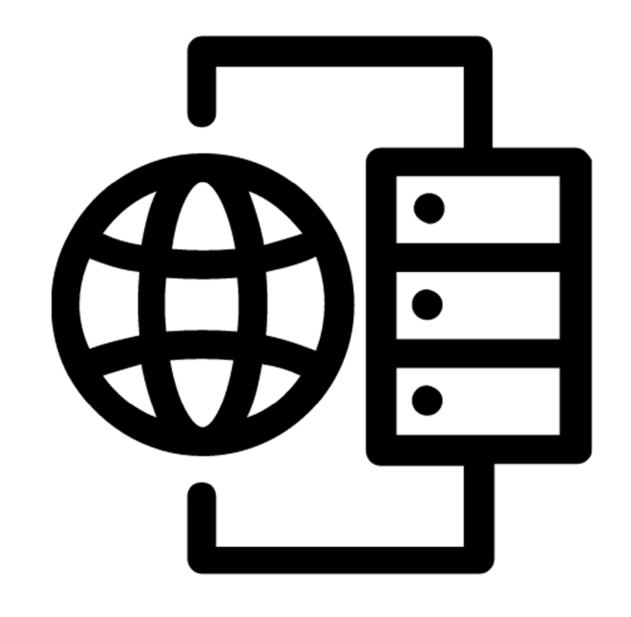
Onshore industry arrangements

Offshore supply chain assurance

Offshore quality systems

# COLLABORATION WITH TRADING PARTNERS

- Data and intelligence sharing
- What is working
- Opportunities for joint management of systems
- Offshore assurance schemes
- Innovative technologies









#### **7 TIPS FOR KEEPING CONTAINERS CLEAN**

Help us keep hitchhiker pests out of Australia by keeping sea containers clean. Avoid border delays and unexpected costs by following these tips.



Inspect: Visually inspect containers for pests like khapra beetle and contaminants such as grain residue or soil. Pay attention to the bottom rails, forklift pockets, twist lock fittings, internal surfaces, container tops and the underside and cross members, if safe to do so.



Clean containers: Vacuum, sweep or pressure water wash containers before packing goods to remove contaminants and pests. Avoid scraping containers across the ground when moving.



Clean storage areas: Keep storage areas clean. Store containers away from pest habitats or resident pest populations. Store containers on paved/sealed storage and handling areas where possible. Use traps and other pest control methods to keep storage areas pest free.



Pack clean goods: Only pack containers with clean goods.

Store goods in a clean, enclosed area prior to packing. Keep the container doors closed prior to and after packing goods. Use clean handling equipment when packing goods.



**Keep away from lights:** Don't keep containers under bright lights as they attract insects that can infest goods and the container.



Use higher grade containers: Use higher grade containers e.g. containers with no cracks in the floorboards, to reduce the risk of sheltering pests.



Avoid contaminated areas: Avoid driving through areas that can contaminate the container e.g. waste water, manure and other animal faeces.



# **QUESTIONS**

