



**GLOBAL COLD CHAIN**

ALLIANCE<sup>®</sup>

# Global Standards and the Cold Chain

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Lowell Randel, SVP Government and Legal Affairs



# GLOBAL COLD CHAIN ALLIANCE®



**IARW**  
International Association of Refrigerated Warehouses



The Refrigeration Research & Education Foundation



**CEBA**

Controlled Environment Building Association



1,336 Facilities



85 Countries



344 Companies



5.54 Billion FT<sup>3</sup>

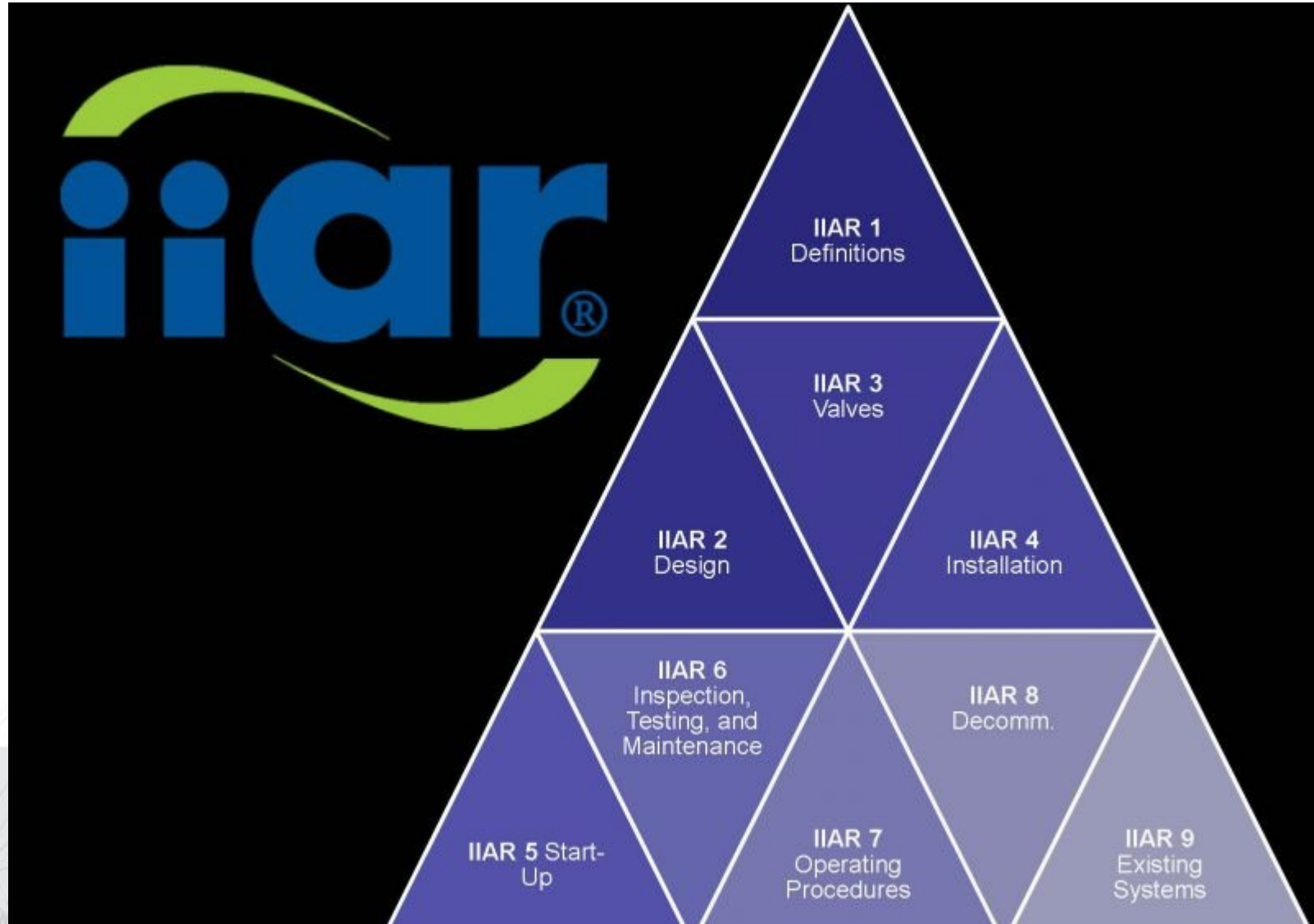


350 Suppliers

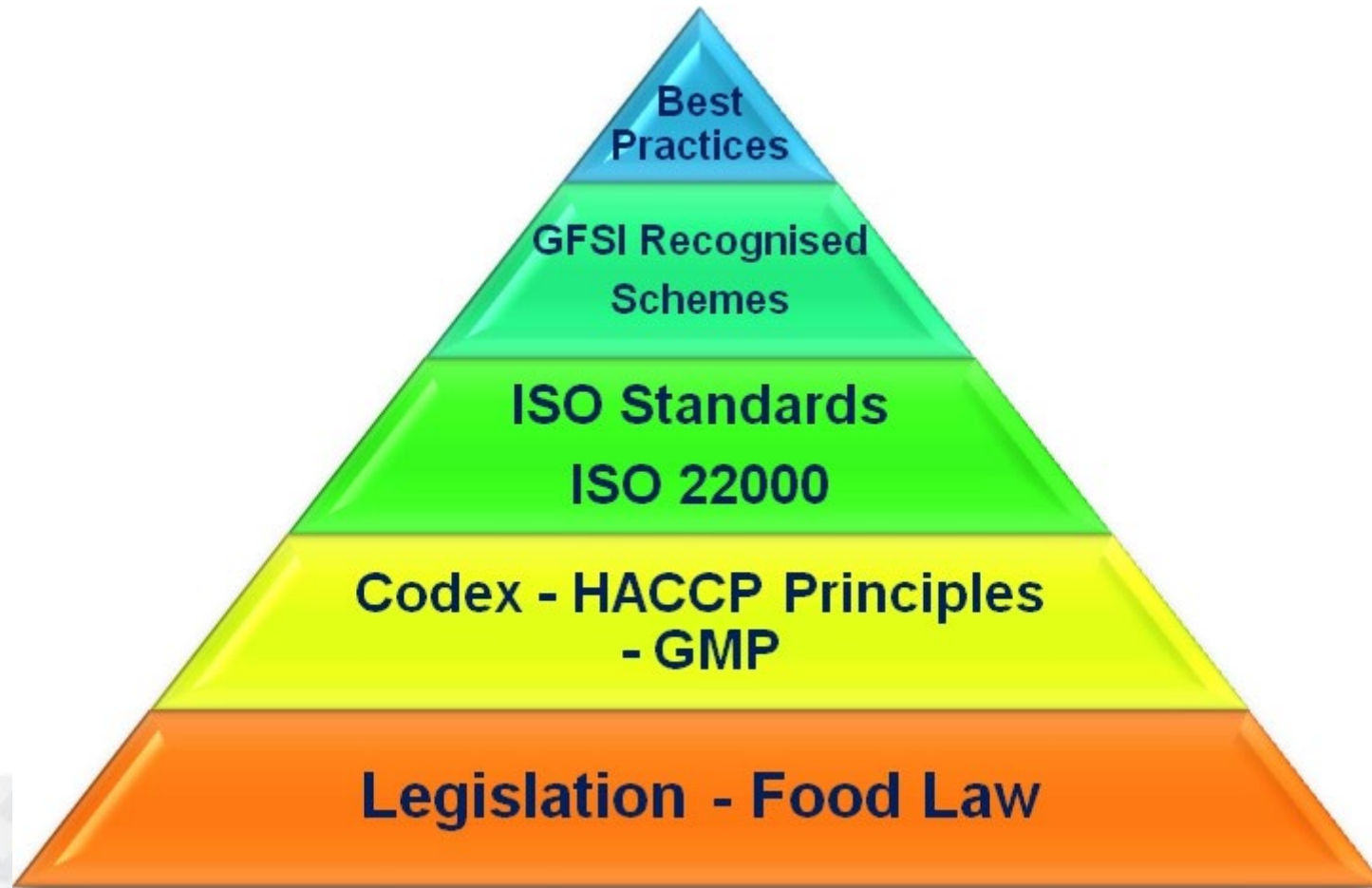
# Industrial Refrigeration Standards

- International Institute of Ammonia Refrigeration (IIAR) publishes global standard for ammonia and CO<sub>2</sub> refrigeration systems
- ANSI accredited
- Recognized globally

**iiar & CO<sub>2</sub>**  
**Safety Standard**



# Approach to Food Standards



# Global Food Safety Initiative (GFSI)

- Global effort to advance food safety and quality
- Certification process working with scheme owners (Examples: SQF and BRC)
- Usually customer driven
- Globally recognized
- Increasingly popular with GCCA members



# Under Development – ISO/TC 315: Cold chain logistics

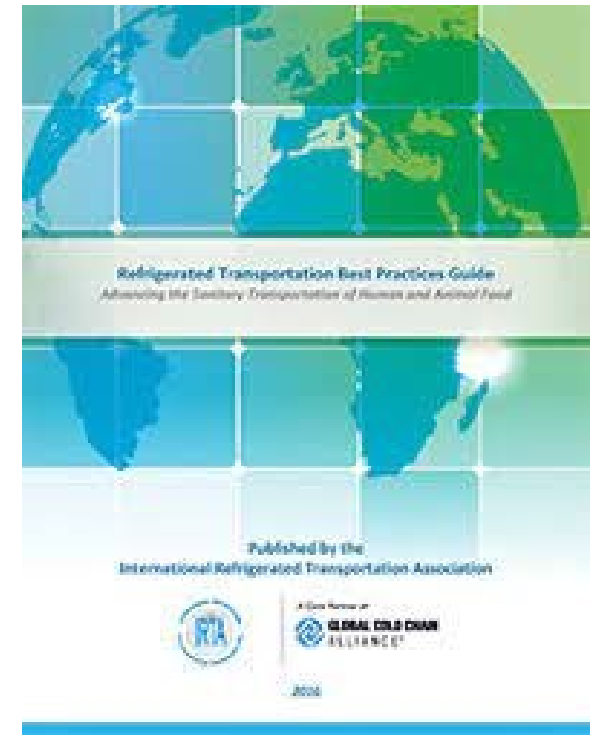
## SCOPE:

- Terms and conditions for carriage/storage service of refrigerated goods, physical handling of refrigerated goods (acceptance, loading, trans-shipment, storage, sorting, transportation and delivery)
- Maintenance and control methods of temperature-controlled facilities, quality control methods throughout the cold chain (e.g. temperature monitoring and control, prevention of damage, loss and delay)
- Hygiene management during carriage/storage service to prevent contamination of goods,
- Facilitation of logistical efficiency
- Manpower management, staff education and training, safety management for staff and workplaces
- Safety and reliability of carriage/storage services
- Information management and data processing such as customer management
- Cargo/parcel tracking (including labelling), as well as terminology.



# Transportation

- GCCA developed best practices for refrigerated transportation
- Certification program developed to recognize achievement of best practices
- Originated in US in response to FSMA regulations, but applicable globally



# Energy

- GCCA developed program to recognize achievement in energy efficiency
- Qualitative and quantitative assessment tools for operators to track facility performance
- Helps build an energy culture
- Not dependent on specific technologies, more about management and performance over time

