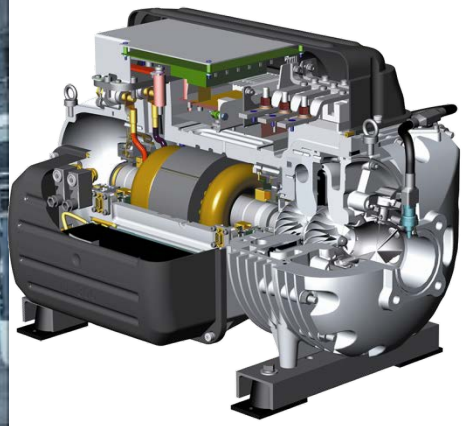
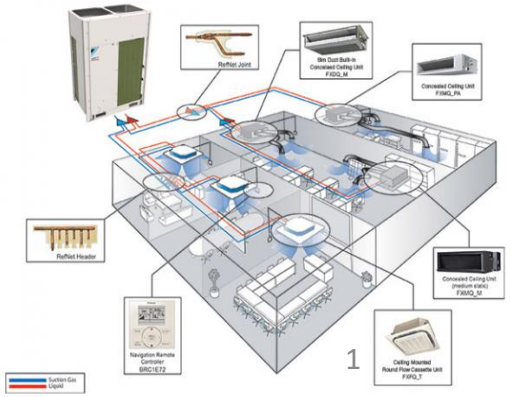
HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY
School of Heat Engineering and Refrigeration

TECHNICAL REGULATION ON HFCs MANAGEMENT: NEEDS FOR ADAPTING TO THE NATIONAL DECREE IN VIET NAM

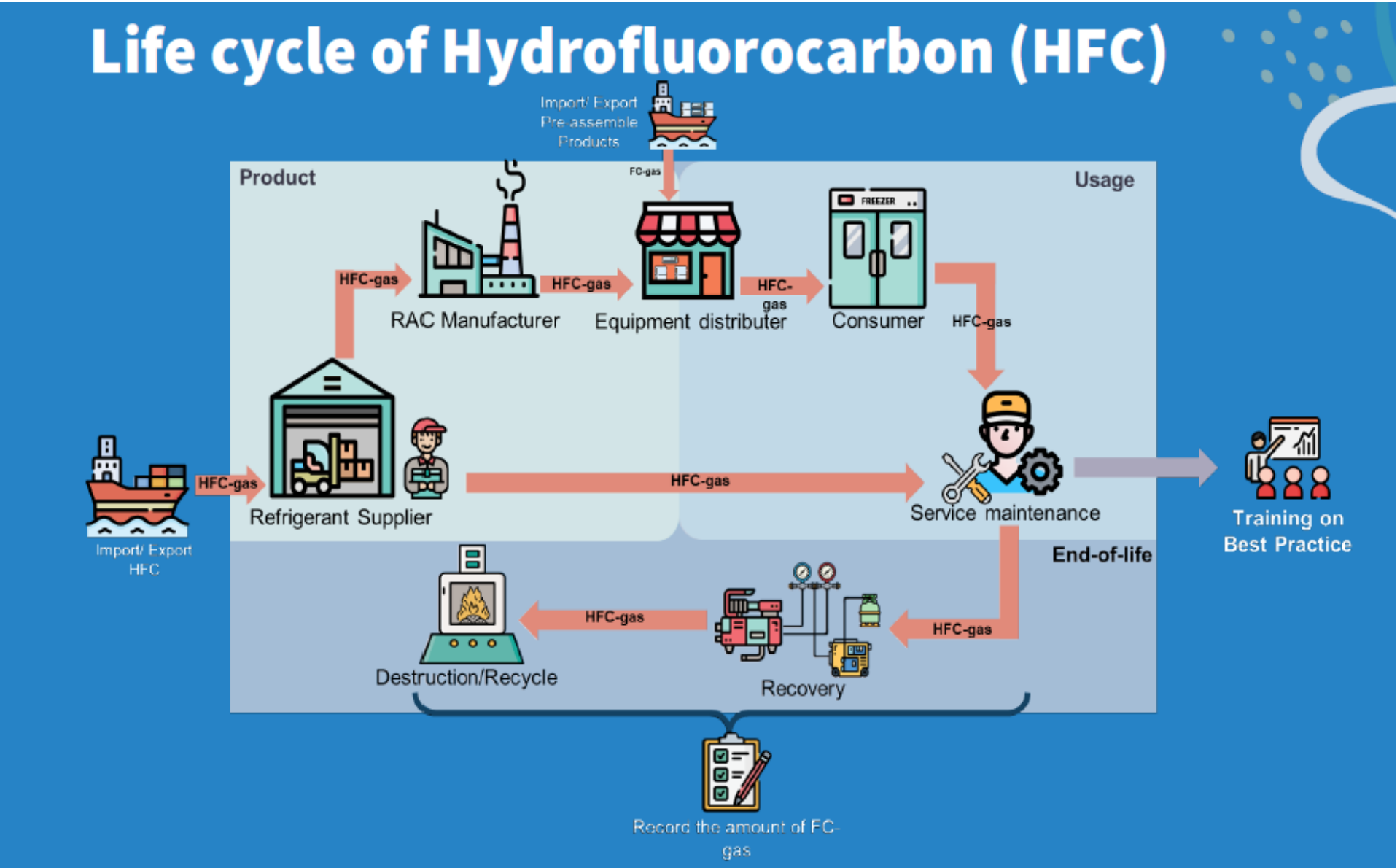


Outlines

1. Overview of related standards (refrigerants – controlled substances)
2. Challenges in implementing the Decree in Viet Nam
3. Proposed regulations for adapting to the Decree in Viet Nam
4. Supports from the Japanese partner
5. Discussion

Management of HFCs by technical regulations



Overview of the related standards

1. ISO 817:2014 (TCVN 6739:2015) - Designation and safety classification
2. ISO 11650:1999 (TCVN 7329:2003): Performance of refrigerant recovery and/or recycling equipment (Last reviewed in confirmed in 2021)
3. ISO 5149:2014 (TCVN 6104:2015): Refrigerating systems and heat pumps – Safety and environmental requirements (4 parts)
4. ISO 20854:2019: Thermal containers - Safety standard for refrigerating systems using flammable refrigerants - Requirements for design and operation
5. IEC 60335-2:2019: Particular requirements for commercial refrigerating appliances and ice-makers with an incorporated or remote refrigerant unit or motor-compressor

Challenges in implementing the Decree

1. Lack of technical standards/regulations for the recovery, recycling, reclamation and destruction of refrigerants (only 1 technical standard)
2. Lack of technical standard/regulations for safety of flammable refrigerants (only 1 technical standard)
3. Lack of facilities for the recovery, recycling, reclamation and destruction of controlled substances (only 1 small destruction plant)
4. **Weak awareness of HFCs management from community:**

   - High investment and operating cost

   - Lack of information about the HFC management

   (Improvement by training courses in the HPMP II)

Regulations for adapting to the Decree (Article 24 and 28)

1. Development of current technical standard (TCVN 7329:2003) to the regulation about refrigerant recovery and/or recycling, reclaimed and destructed equipment/system.
2. Development of a new safety standard (e.g., equivalent to ISO 20854:2019) for refrigerating and AC systems using flammable refrigerants (R32, R290, R600a, NH_3, etc.).

Supports from the Japanese partner

1. Knowledge sharing of HFCs management in recycle, reclamation and destruction of refrigerants from commercial and industrial refrigerating and air conditioning equipment and systems.
2. Knowledge sharing of technical issues to manage flammable refrigerants in the field of refrigeration and air conditioning.
3. Facilities for promotion of refrigerant reclamation and destruction plants for refrigerating and air conditioning equipment and systems.

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THANK YOU

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