

# HVAC Sustainable Practices Workshop

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# DX Systems



## ➤ Changes

- Equipment Efficiency
- Refrigerants
- Off-shore products

## ➤ Installation

# Changes



- Equipment Efficiencies
    - **Air-Cooled Products Efficiency Standards**
      - >65,000 - <135,000 Btu/h**
        - 11.2/11.0 EER for Air Conditioners
        - 11.0/10.8 EER for Heat Pumps
        - 3.3 COP @ 47°F for Heat Pumps
      - >135,000 - <240,000 Btu/h**
        - 11.0/10.8 EER for Air Conditioners
        - 10.6/10.4 EER for Heat Pumps
        - 3.2 COP @ 47°F for Heat Pumps
- NOTE: Where two EERs are listed, the first refers to systems with electric resistance heat or no heating, and the second refers to systems with all other heating-system types that are integrated into the unitary equipment.

# Changes



- Refrigerant

- January 2010 75% reduction

No production and no importing of HCFC-142b and HCFC-22, except for use in equipment manufactured before 1/1/2010 (so no production or importing for NEW equipment that uses these refrigerants)

- New Refrigerants (R410A, R407C, etc.)
- New Oils (POE)

# Off-shore Products



- VRV, VRF
- Inverter
- Ducted or ductless
- Zoning

# Installation



- Quality Installation Standards
  - ACCA
  - Checklist – Getting what you pay for!
  - Certified Technicians – NATE, BPI
- Duct Sealing
- Evacuation
- Keep It Clean
- Carrier – Life Cycle Cost for HVAC Systems
- Service after Installation (Not Plug and Play)

Thank You!

