MCDONALD’S
NATURAL
REFRIGERANT
JOURNEY

JEFFREY HOGUE
SENIOR DIRECTOR OF GLOBAL CSR & SUSTAINABILITY
BACKGROUND

- Element of our holistic sustainability strategy
- First 100% Natural Refrigerant restaurant in Veijle, Denmark
- 13,000 pieces of natural refrigerant equipment deployed — propane, isobutane, CO2
- Have made progress — but much more is needed.
MCDONALD’S USE OF REFRIGERANTS

- Estimate 700,000 pieces of refrigerant equipment
  - **Small** <150g charge (shake machines, small refrigerators, ice machines, etc.)
  - **Large** >150g charge (HVAC, walk in coolers)
- Less than 0.2% of our global carbon footprint
- Less than 0.2% of the global supply of packaged HVAC units
- Opportunity lies in energy efficiency — 20% of our CF
OUR OBJECTIVE
REDUCE OVERALL IMPACT ON ENVIRONMENT

\[ \text{# of new/replacement units} = (\text{Allowed by regulation} + \text{Improved energy efficiency} + \text{Cost within 10\% of existing equipment} + \text{Service infrastructure is in place}) \pm 10\% \text{ Total Cost of Ownership} \]
OPPORTUNITIES/CHALLENGES

• Decentralization of our system — Opportunity lies in new/replacements
• Regulatory support for approval of Natural Refrigerants — particularly those that are flammable
• Innovation — >150g systems like HVAC and WIC/WIF
MCDONALD’S & CONSUMER GOODS FORUM IEO SECTOR REFRIGERATION SUMMIT - 2015

INTERESTED? JEFFREY.HOGUE@US.MCD.COM