

# Policy Measures in the United States: Proposed SNAP Regulations

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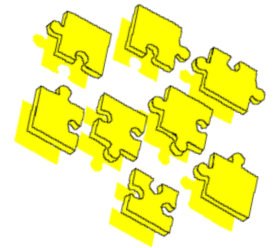
# Addressing HFCs

*President's Climate Action Plan: "To reduce emissions of HFCs, the United States can and will lead both through international diplomacy as well as domestic actions"*

- U.S. Regulations - Significant New Alternatives Policy (SNAP) Program: approve climate-friendly chemicals & prohibit certain uses of most harmful chemical alternatives
- Two separate proposed rules issued
  - 1) proposes adding new lower GWP refrigerants as acceptable subject to use conditions
  - 2) proposes to list as unacceptable certain high-GWP HFCs for specific actions
    - Estimated emissions reductions in 2020: 31-42 MMTCO<sub>2</sub>eq
- Provide federal leadership by purchasing cleaner alternatives to HFCs whenever feasible and transition to equipment using safe, more sustainable alternatives
- Also, continue with other existing regulatory and voluntary programs

# SNAP Program

- Regulatory program: evaluates substitutes that reduce overall risk to human health & environment in industrial sectors
  - Aerosols, Foams, Refrigeration and A/C, Solvents, Fire Suppression, Adhesives, Coatings & Inks, etc
- Since 1994 400+ substitutes reviewed considering:
  - Ozone depleting
  - Global warming
  - Flammability
  - Toxicity
  - Local Air Quality
  - Ecosystem Effects
  - Occupational & Consumer Health/Safety
  - Framework for smoothing transition to safer alternatives
  - Relying on menu of options
  - Sector-focused coordination
  - Unique review program supporting global transition



# 2014: Lower-GWP Refrigerants

- SNAP continues to add new climate-friendly options
  - These flammable refrigerants recently proposed acceptable with use conditions that adopt safety standards

Refrigerant	GWP	End Use and Application					
		Household Refrigerators	Retail refrigerator stand-alone	Vending	Very Low Temp Ref	Heat Transfer	Home AC-Self-contained
Ethane	6				✓	✓	
Iso-butane*	8		✓	✓			
Propane*	3	✓		✓			✓
R-441A* (HC blend)	<5		✓	✓			✓
HFC-32	675						✓

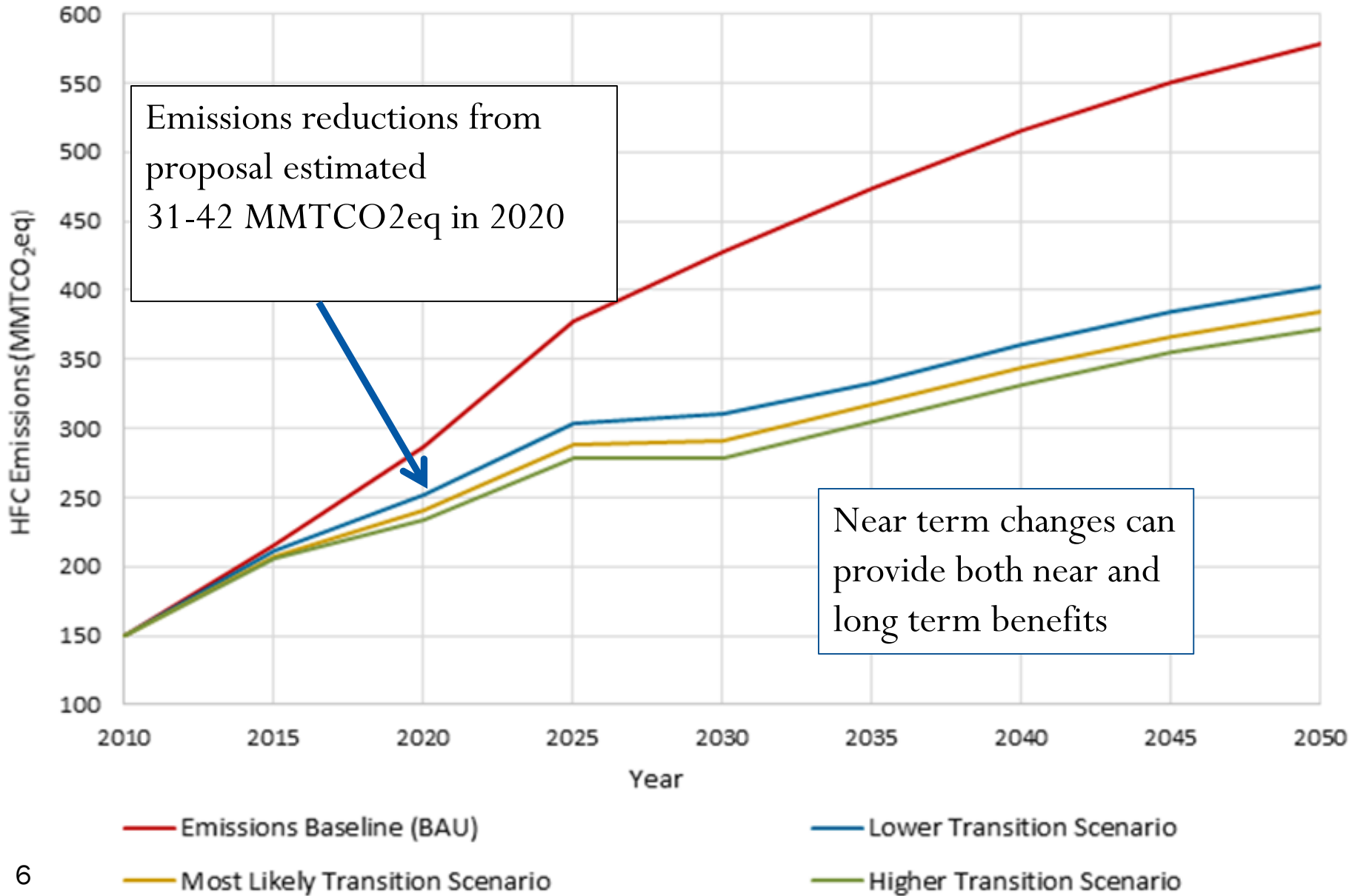
# Proposed Changes to SNAP List

**Change of Status Rule:  
END Use/ Proposed Date**

**Proposed Change**

<p>Aerosols <i>January 2016</i></p>	<ul style="list-style-type: none"> <li>• HFC-134a unacceptable except for some technical and medical aerosols including MDIs</li> <li>• HFC-125, -227ea (except MDIs) unacceptable</li> </ul>
<p>Motor vehicle A/C <i>Model year 2021</i></p>	<ul style="list-style-type: none"> <li>• HFC-134a unacceptable</li> </ul>
<p>Foams <i>January 2017</i></p>	<ul style="list-style-type: none"> <li>• HFC-134a and blends thereof unacceptable</li> <li>• HFC-245fa and HFC-365mfc and HFC blends unacceptable in all foam blowing end-uses except for spray foam applications</li> </ul>
<p>Supermarket systems: remote condensing units, new (&amp; retrofits from ODS) <i>January 2016</i></p>	<ul style="list-style-type: none"> <li>• HFCs unacceptable: HFC-227ea, R-404A, R-407B, R-421B, R-422A, R-422C, R-422D, R-428A, R-434A, and R-507A</li> </ul>
<p>Stand-alone retail food refrigeration, vending machines: new <i>January 2016</i></p>	<ul style="list-style-type: none"> <li>• HFCs unacceptable: HFC-134a, R-404A, R-407A, R-407C, R-507A, other blends</li> </ul>
<p>Stand-alone retail food refrigeration, vending machines: retrofits from ODS <i>January 2016</i></p>	<ul style="list-style-type: none"> <li>• HFCs unacceptable: R-404A and R-507A</li> </ul>

# HFC Emissions Reductions



# Next Steps and Challenges

- Develop final regulations
  - Receive public comments first
- Continue to expand SNAP menu
- Other factors effecting transition
  - Commercialization of full range of alternatives
  - In some cases, standards and codes should be revised
- Continue to address emissions from installed equipment