

# Stretch Energy Codes & Building Performance Standards

Update to IL SAG Market Transformation Working Group

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# Agenda

**Project background**

**Project progress updates**

**Data collection initial results overview**

**Next steps**

# Advanced Building Policies Overview

## Stretch energy codes

Alternative compliance path that defines a higher level of energy efficiency for new construction

## Building Performance Standard (BPS)

Policy that improves existing building stock through setting targets for efficiency upgrades

# Project Background

## Project goal

- Engage with municipalities to adopt and implement stretch energy codes and building performance standards (BPS)
- Develop support programs to help implement
- Develop savings and attribution methodologies that follow market transformation protocols

## Utility funders

- ComEd, Nicor Gas, Peoples Gas and North Shore Gas



# Project Background

## Phase 0 (2018)

- Review of energy codes and utility roles across the country

## Phase 1 (2020)

- Outreach to municipalities to understand needs
- Understand the potential for building policies
- Estimate energy savings

## Phase 2 (2021-present)

- Work with IL Stakeholder Advisory Group Market Transformation working group
- Statewide building energy code updates
- Direct engagement with municipalities through taskforce for policy advancement

# Advanced Building Energy Efficiency Policy (ABEEP) Task Force Goals



Help innovative municipalities pioneer stretch codes and BPS



Get prepared to act on building energy policies and have the tools to do so

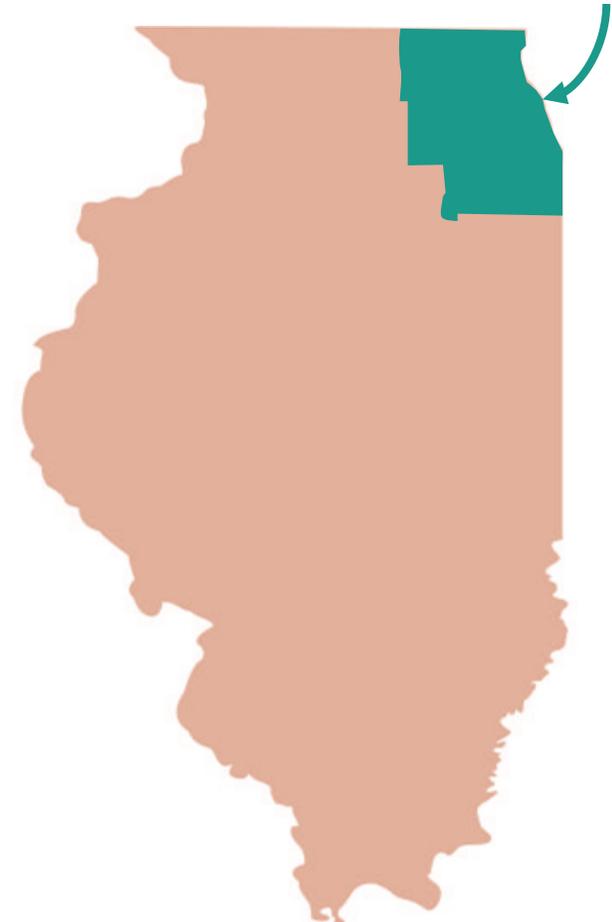


Assist in creation of a roadmap without obligation of adoption



Provide feedback and guidance to utilities on most effective ways utilities can support with compliance and implementation

Metropolitan Mayors Caucus



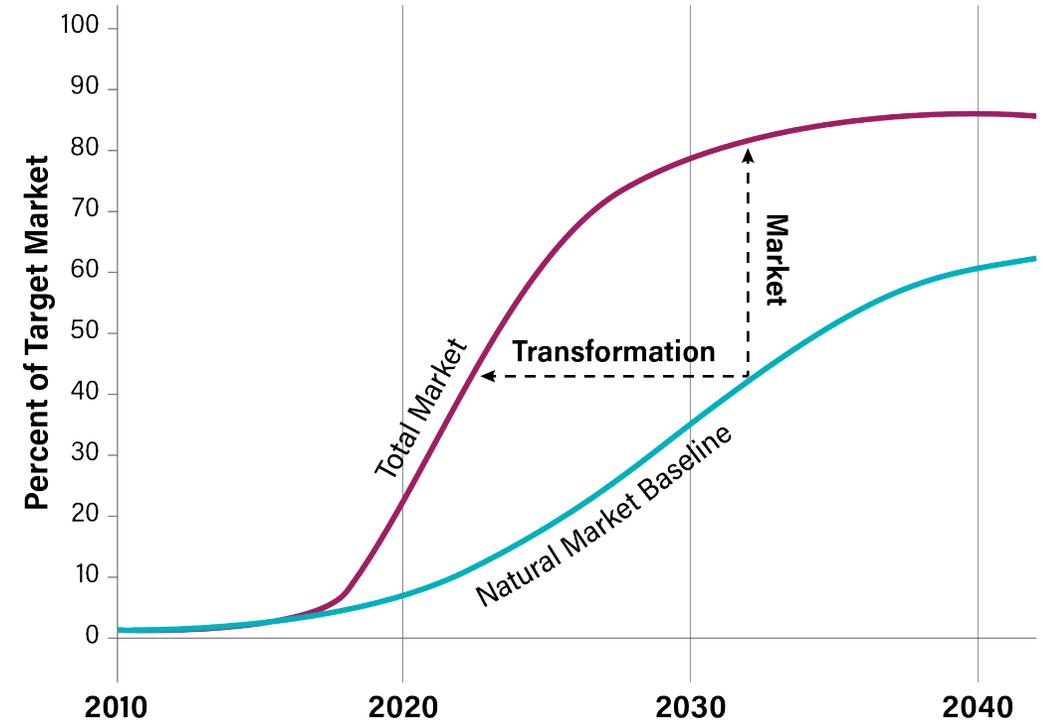
# Role of Utility

## Support for policy adoption/advancement and policy implementation

- Support can include incentives for builders and property owners, training and technical guides, plan review assistance, compliance support, and technical analysis.
- Implementation support directly impacts likelihood of adoption

## Market Transformation vs. Resource Acquisition

- Long-term vision, goal is structural change
- Focus on savings that occur over a longer time horizon, incorporating many levels of engagement



# 2023 MT Program Supporting Documents

Document	Energy Savings Framework	Program Plan/Logic Model	Evaluation Plan
Summary of Document	<i>Market Characterization (Historical trends; market projection with NMB; unit sales &amp; energy savings)</i>	<i>Program actions &amp; intent; expected short-term and long-term outcomes; MPI's &amp; measurement</i>	<i>Proposed evaluation research methods and plan – MPI's &amp; ESF</i>
Document Developer	<i>Program Administrator (utility) with Implementation Contractor</i>	<i>Program Administrator (utility) with Implementation Contractor</i>	<i>Program Evaluator</i>
Review	<i>Program Evaluator (especially NMB); SAG</i>	<i>Program Evaluator; SAG</i>	<i>Program Administrator (utility) with Implementation Contractor; SAG</i>
Updating Process	<i>Evaluator assesses on-going adequacy of ESF; Change Recommendation reviewed by Program Administrator (utility) with Implementation Contractor and SAG</i>	<i>As needed by Program Administrator (utility) with Implementation Contractor with Recommendations by Evaluator</i>	<i>Updated annually by Evaluator; reviewed by Program Administrator (utility) and SAG</i>

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**Slipstream & MEEA**



**Guidehouse**



Goal to present documents in 2024 to SAG

# 2023 Evaluation Approach Updates

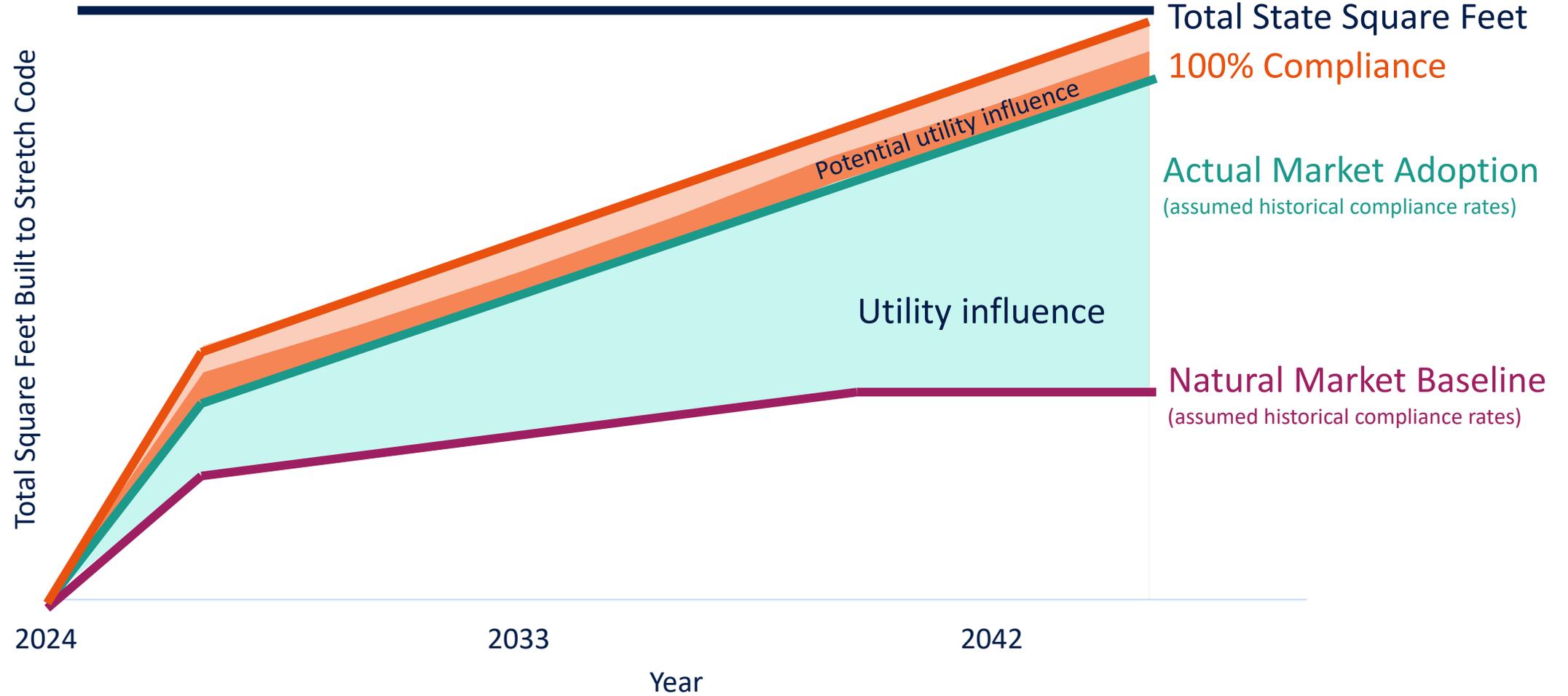
## Data Collection for Energy Savings Framework (ESF)

- Compiled new construction and existing square feet data by municipality
- Developed energy use intensity for stretch and base codes
- Completing interviews and surveys with municipalities to understand impact of utility influence on adoption
- Department of Energy/Pacific Northwest National Lab is providing projected compliance rates for NMB

## Key Elements of Codes/BPS Natural Market Baseline

- Natural market baseline is measured in terms of total square feet building to stretch code or BPS
- Can be measured at statewide level but feedback from municipalities required to understand what influenced decision to adopt stretch code
- Should be reassessed every 3 to 6 years to ensure the NMB still represents the market

# Natural Market Baseline Illustration (not to scale)





# **Data collection initial results overview**

# Overview of Municipal Data Collection

## Intent

- To estimate natural market factors and utility intervention that impact a municipalities decision to adopt a policy

## Data Collection

- 29 municipalities have responded to survey
  - Some have more than one person responding per municipality
  - Two additional interview responses

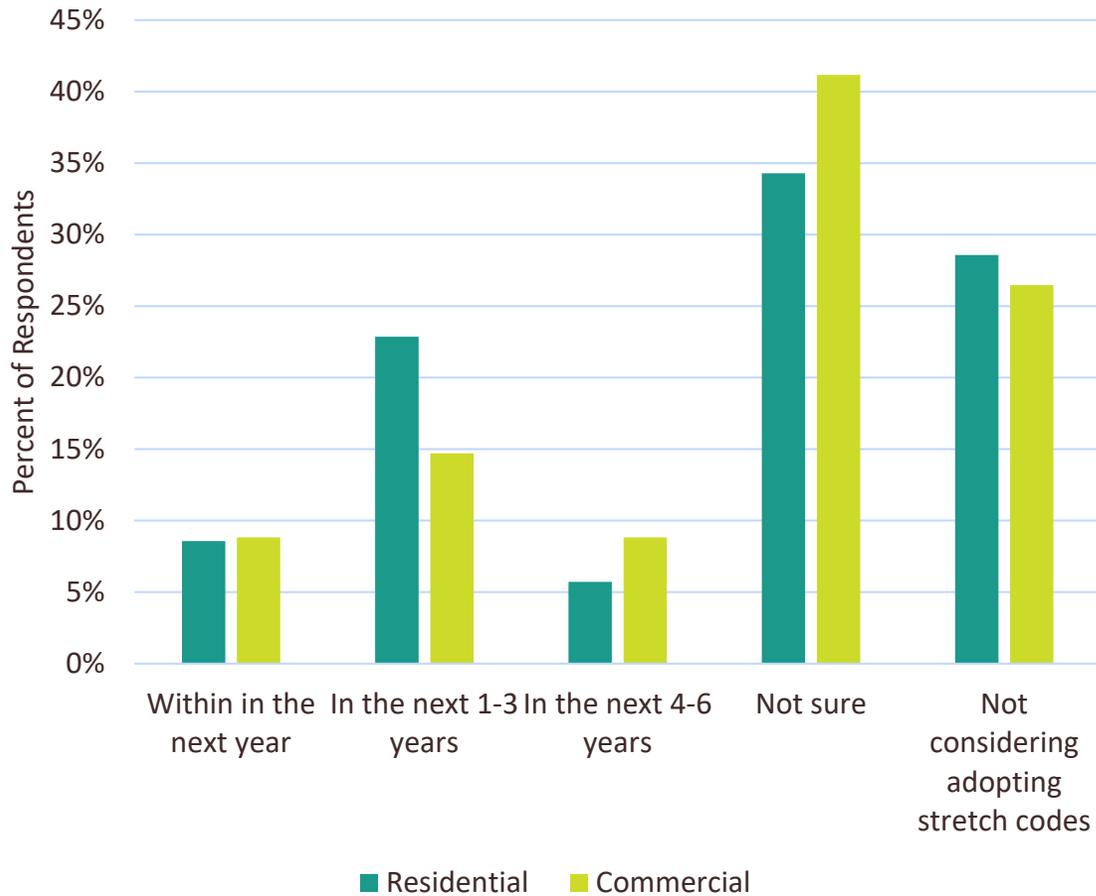
## Instrument Development

- Instrument was developed in collaboration with Guidehouse and funding utilities
- Administered through online survey, sent to more than 100 municipalities

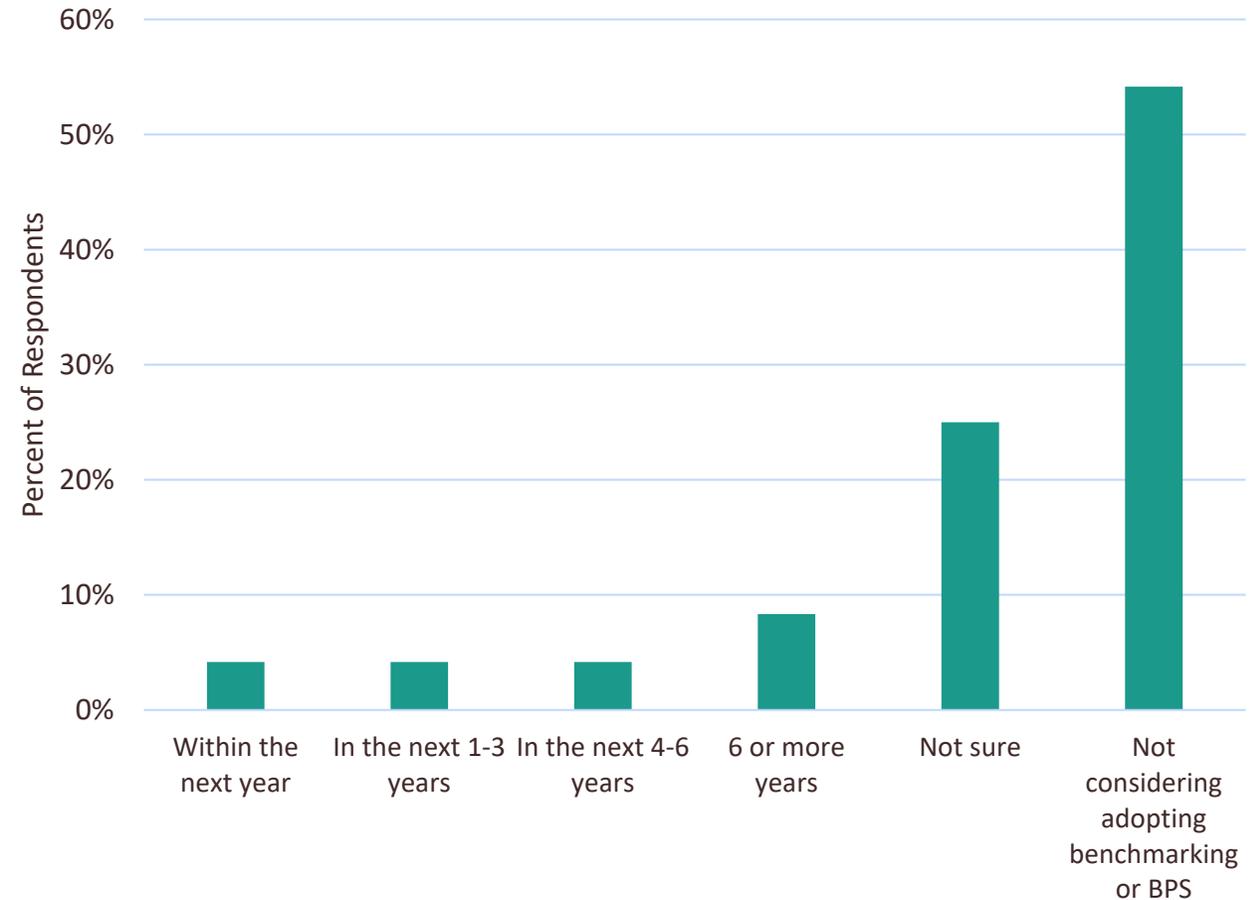
# Likelihood of Adoption

If your municipality is considering adoption, what is the estimated timeline for adoption?

## Stretch Codes

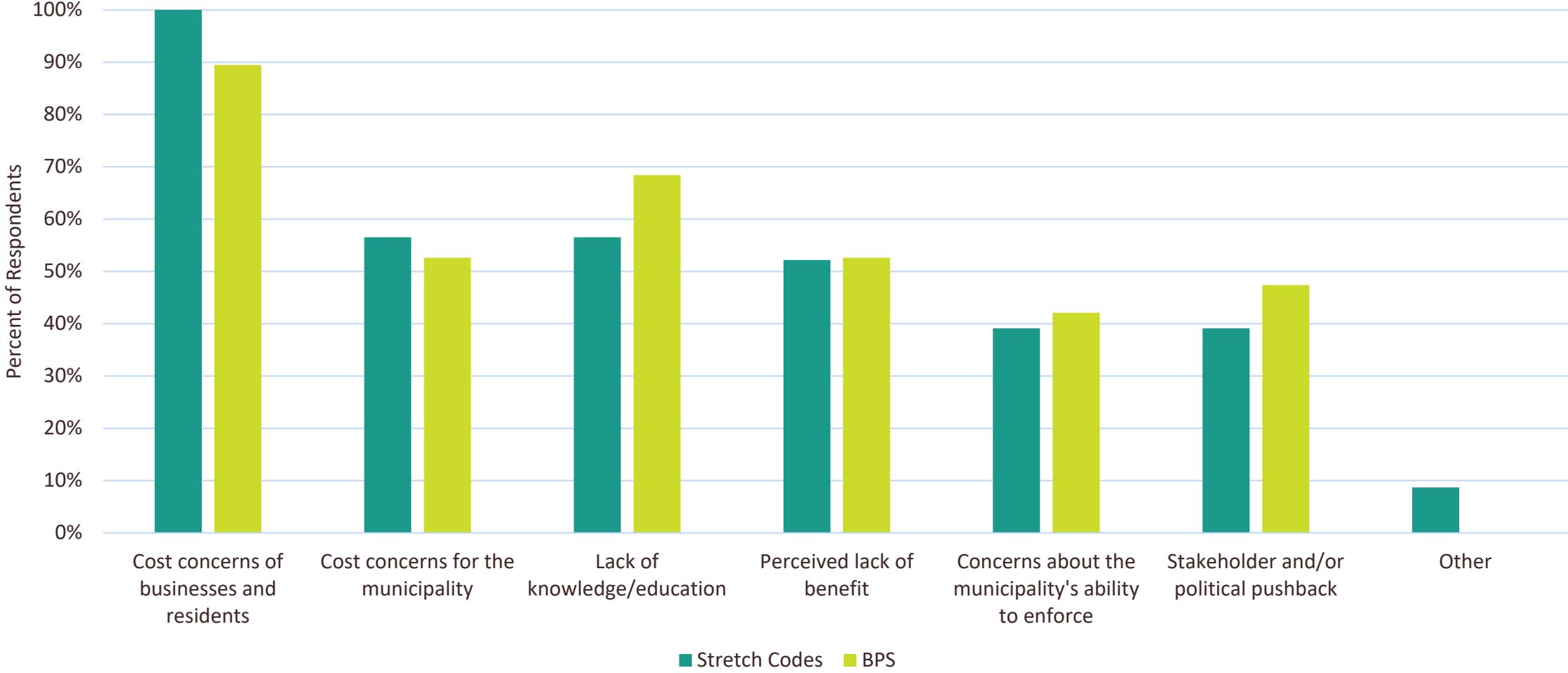


## BPS



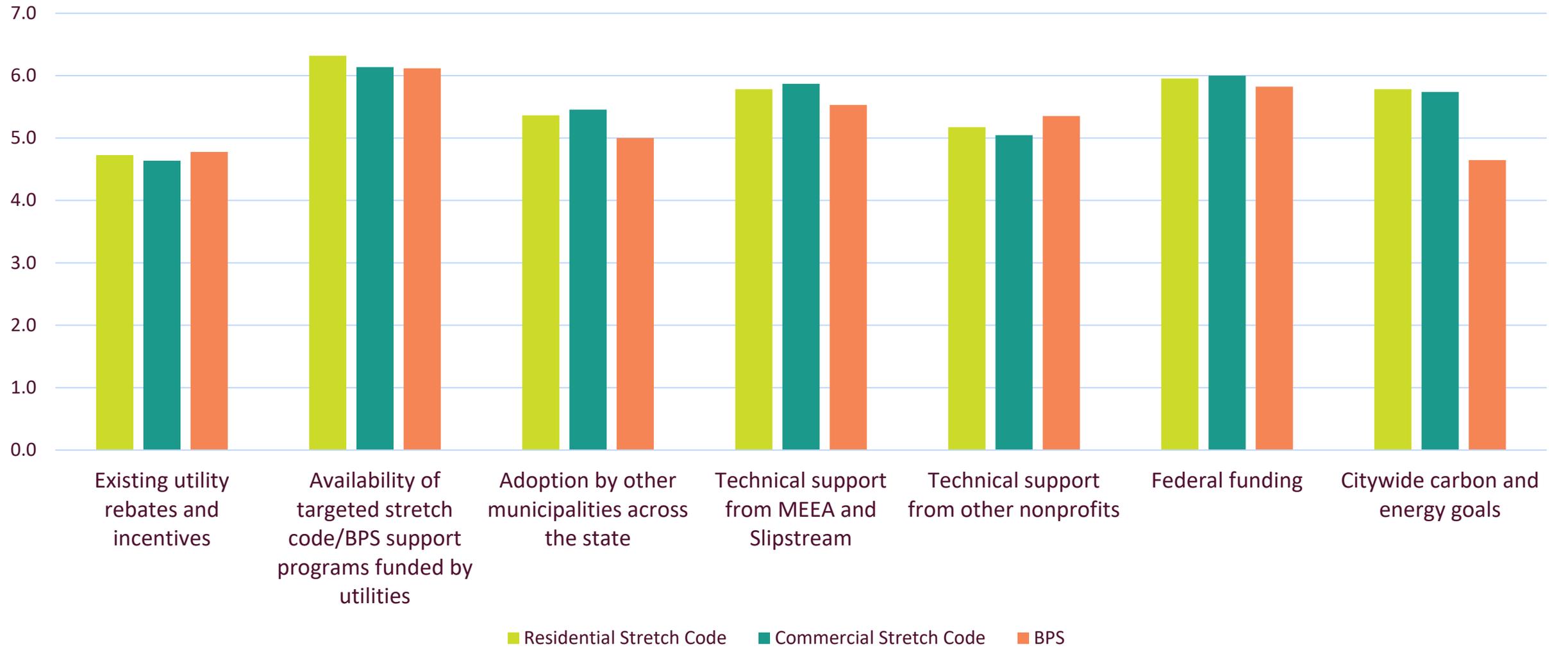
# Perceived Barriers

What are the perceived barriers affecting the adoption or consideration of advanced building policy? (select all)



# Influences

Rate the influence of the following on your municipality's decision to adopt an advanced building policy (0 to 10)





## Next Steps

## Next Steps

MT Supporting Document	Timeline
Energy savings framework	Finalizing data collection and NMB calculations in Q4 2023
Program logic model	Nearly complete
Evaluation Plan	Guidehouse drafting plan in Q4 2023

Supporting documents for Stretch Codes will be delivered in early 2024  
Supporting documents for BPS will be delivered after Stretch Codes

## Slipstream and MEEA contacts



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# Appendix

# Previous SAG Market Transformation Presentations

**March 17, 2021**

<https://www.ilsag.info/event/wed-march-17-market-transformation-savings-working-group/>

**May 7, 2021 – Small group**

<https://www.ilsag.info/event/friday-may-7-mt-code-advancement-small-group-meeting/>

**July 27, 2021 – Small group**

<https://www.ilsag.info/event/tuesday-july-27-mt-code-advancement-small-group-meeting/>

**October 4, 2021**

<https://www.ilsag.info/event/monday-october-4-market-transformation-savings-working-group-meeting/>

**April 21, 2022**

<https://www.ilsag.info/event/thursday-april-21-market-transformation-savings-working-group-meeting/>

**August 16, 2022**

<https://www.ilsag.info/event/tuesday-aug-16-market-transformation-savings-working-group-meeting/>

**May 22, 2023**

<https://www.ilsag.info/event/monday-may-22-market-transformation-savings-working-group-meeting/>