Stretch Energy Codes & Evaluation of Market Transformation

IL SAG – Market Transformation Savings Working Group

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Purpose of this Discussion

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- Discuss proposed options for evaluation for stretch code advancement
- Address questions and feedback
- Determine clear next steps

Agenda

- Discussion of Key Points of Feedback on the Evaluation

  Pathways Document

  - Review of changes since last version
  - Distinction of Policy Advancement and Support Evaluation
  - Overview of Advancement Evaluation
  - Overview of Support Evaluation

- Next steps

Overview of Pathways Document

Highlights of Updates Since Oct 4th

Reorganized evaluation elements to follow sequential order

Added attribution scoring for code advancement and support actions

Shortened length of main document to focus on estimation and evaluation only and organized information into the two main headers (Eval of Policy Adv and Eval of Stretch Code Support)

Put background information in Appendices

Reminder on the Document's Intent

- Lay out clear path for evaluators to follow for Evaluation of Market Transformation Initiative
- Developed to be included the TRM update

Key Points of Feedback

Key Points Overview

- Common language
- Definitions for Policy Advancement and Code Compliance Support
- Process for evaluation
- Cyclical nature of Market Transformation Program
- Attribution Savings Estimation
- Effectiveness Score Estimation
- Logic model

Common Language for a Market Transformation Initiative (MTI) – Advancement

Current Language	Suggested Change	Equation (if applicable)
Gross Technical Potential (GTP)	Market Potential Saving (MPS)	
Gross Energy Savings	Actual Market Savings (AMS)	= MPS x Deemed Compliance Rate
Net Savings	Market Transformation Initiative (MTI) Savings	= AMS – NOMAD* **Natural Occurring Market Adoption OR Natural Market Baseline OR Base Code Baseline*
Attributed Savings	MTI Savings Attributed to Utility	= MTI Savings * Attribution Factor

Definitions for Policy Advancement

Gross Technical Potential for Policy Advancement (Market Potential Savings): Technical potential if every single municipality implemented a stretch code and had 100% compliance

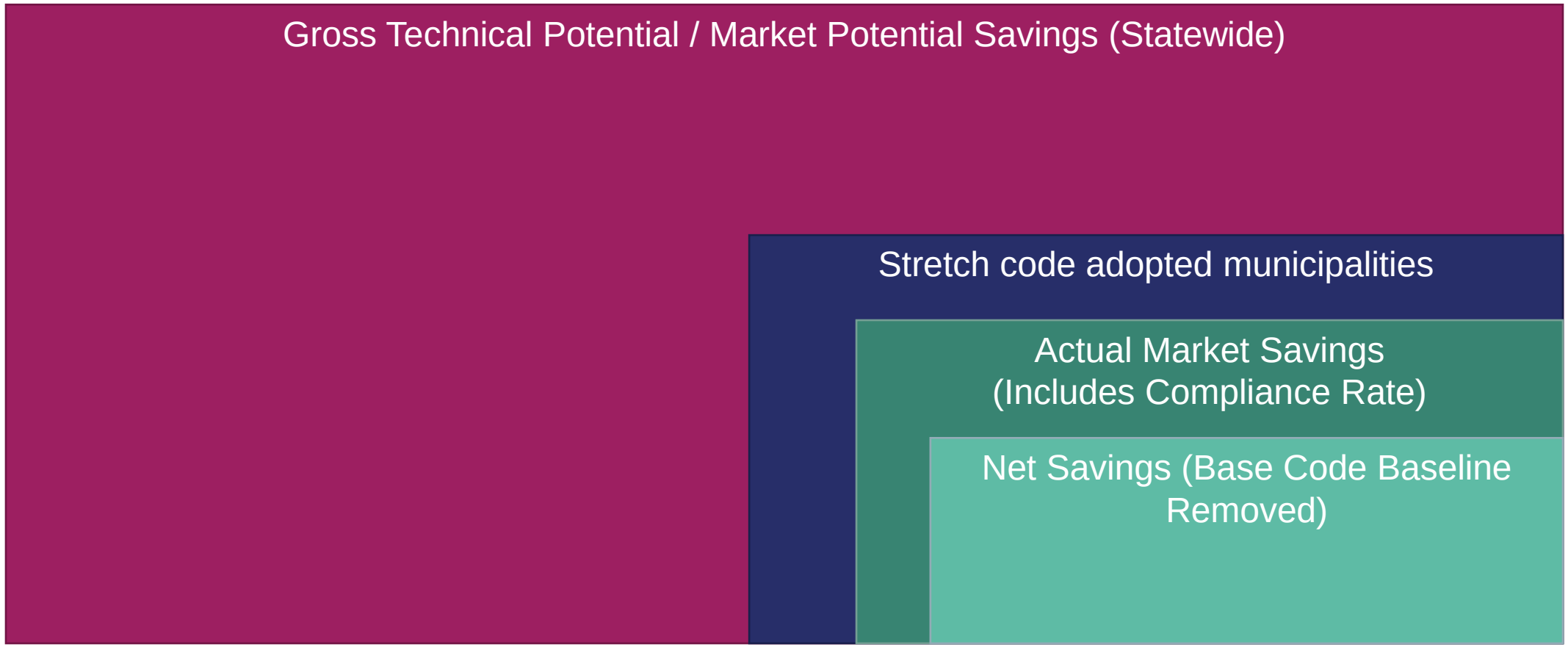
Compliance Rate: the percentage of buildings that would have been built according to code had there not been a utility code support program (deemed for each evaluation cycle). Incorporated into a Gross Energy Savings or Actual Market Savings.

Base Code Baseline(BCB)* : the estimate of what would have happened if policy advancement programs did not exist (deemed for each evaluation cycle)

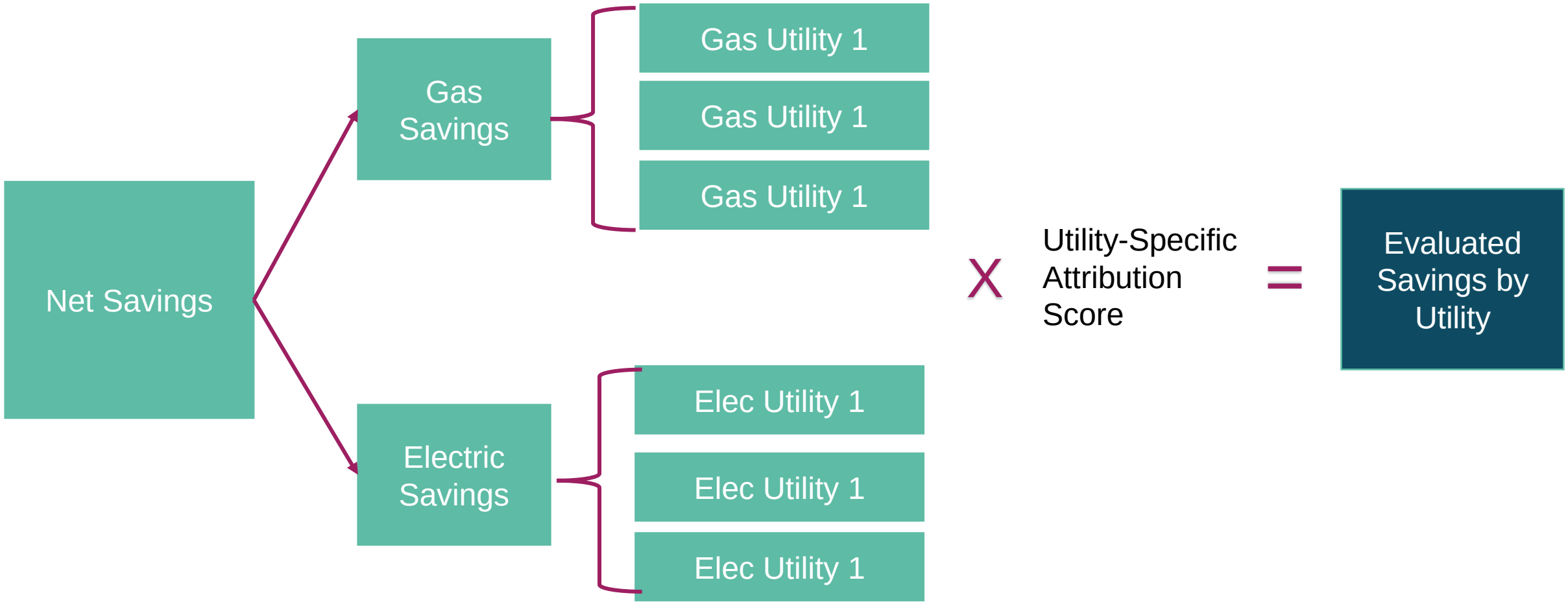
*previously referred to as NMB / NOMAD

Attribution: the percentage that is applied to estimate utility credit for advancing the stretch code

Policy Advancement Illustration



Policy Advancement Illustration



Definitions for Code Compliance Support

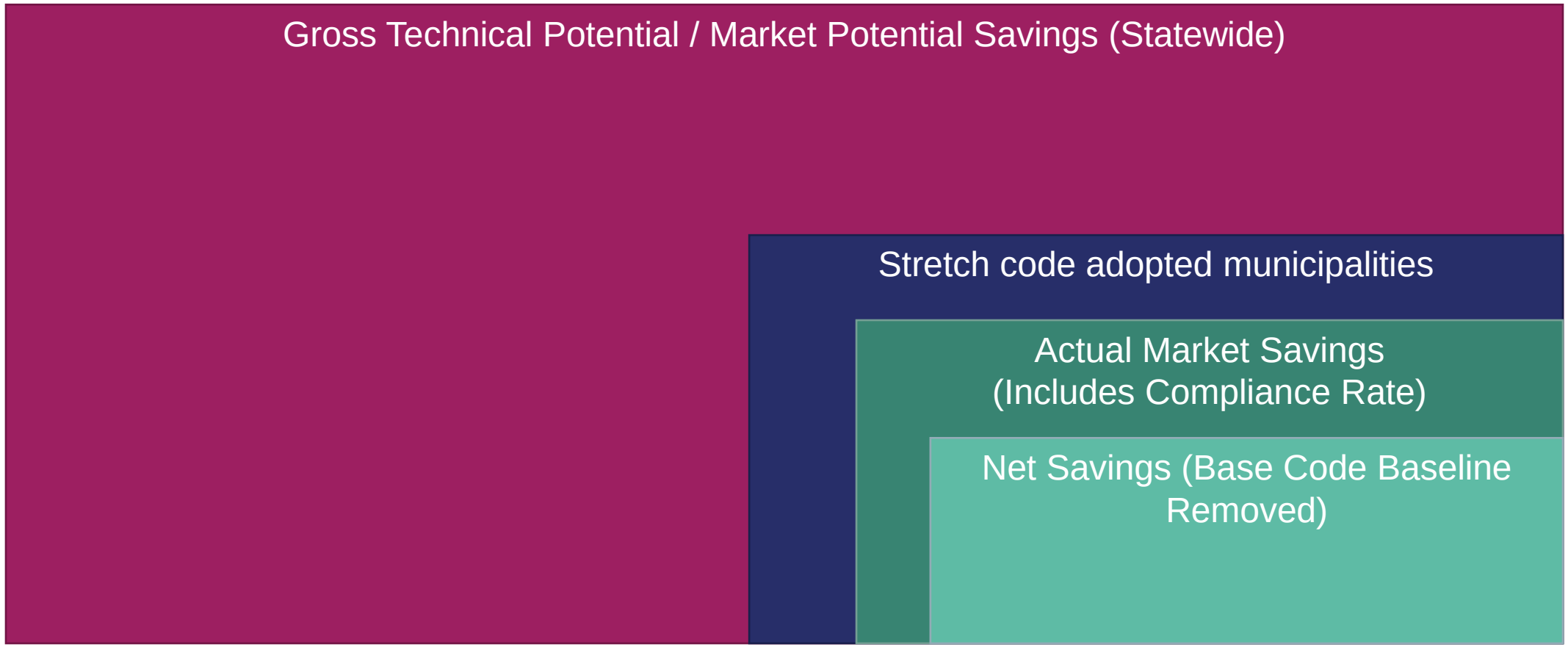
Market Potential Savings for Code Support Programs: Technical potential if those municipalities that adopted a stretch code had 100% compliance.

Stretch Code Compliance Baseline (SCCB)*: the estimate of what would have happened if code support programs did not exist

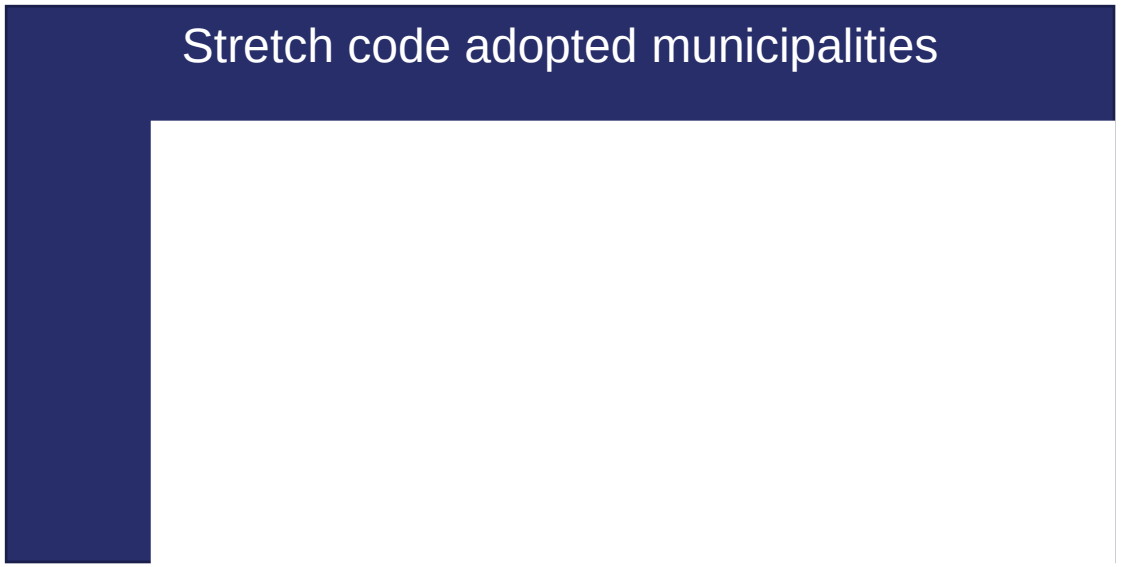
*previously referred to as NOMAD/NMB

Effectiveness score: the percentage that is applied to estimate utility credit for increasing stretch code compliance relative to the deemed achievable code compliance

Stretch Code Support Illustration

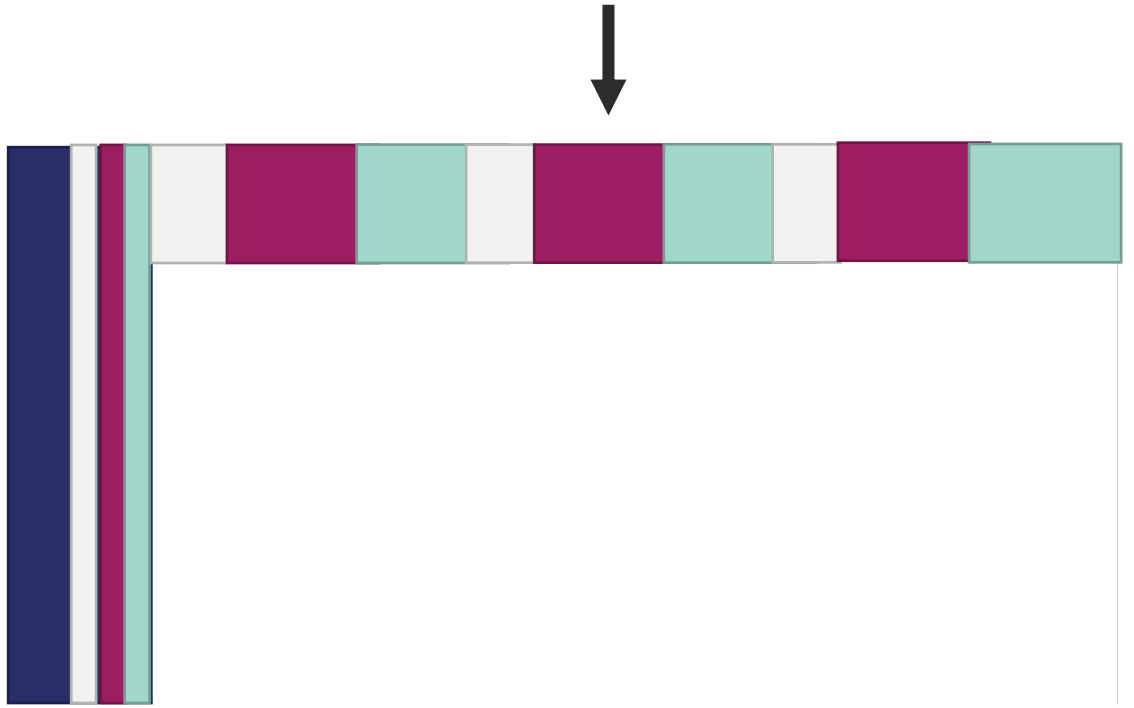


Stretch Code Support Illustration

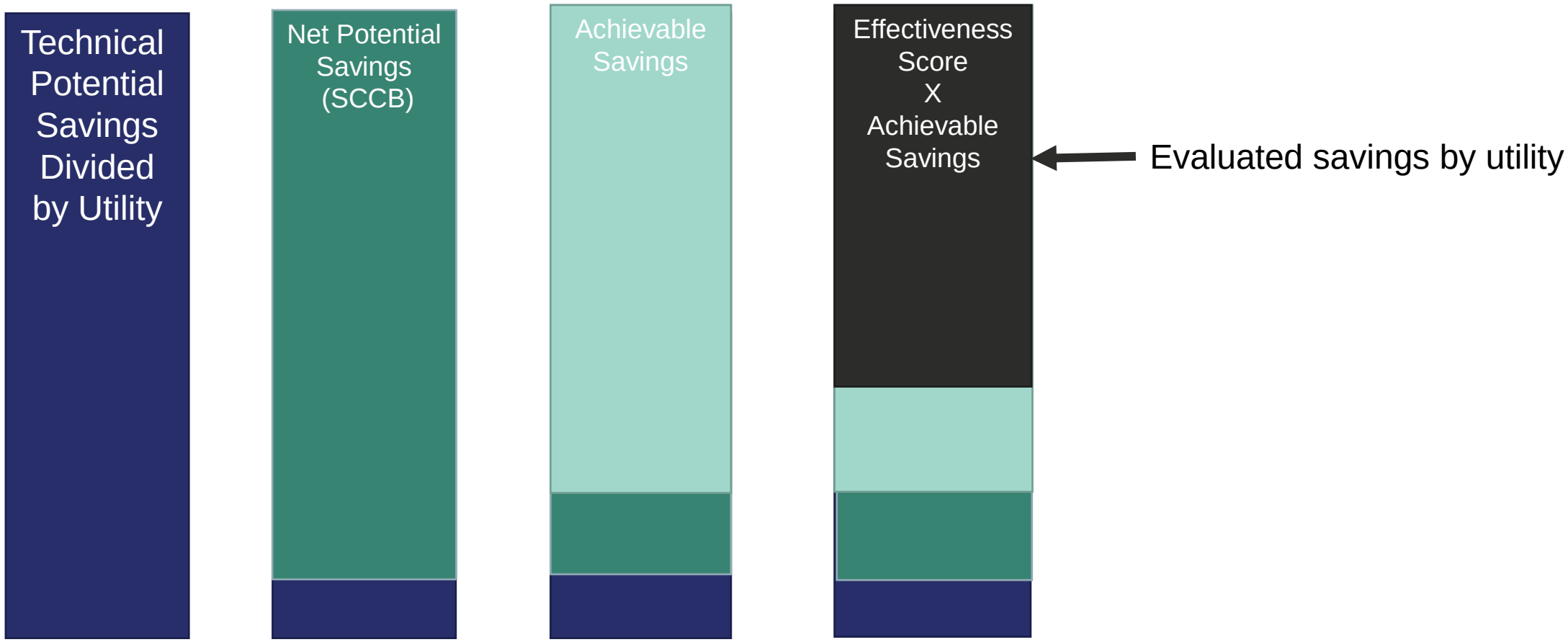


Stretch Code Support Illustration

Code support programs divided amongst utilities



Code Support Illustration



Cyclical Nature of Codes and MT Initiative

Reflects the ongoing nature of a Market Transformation Initiative.

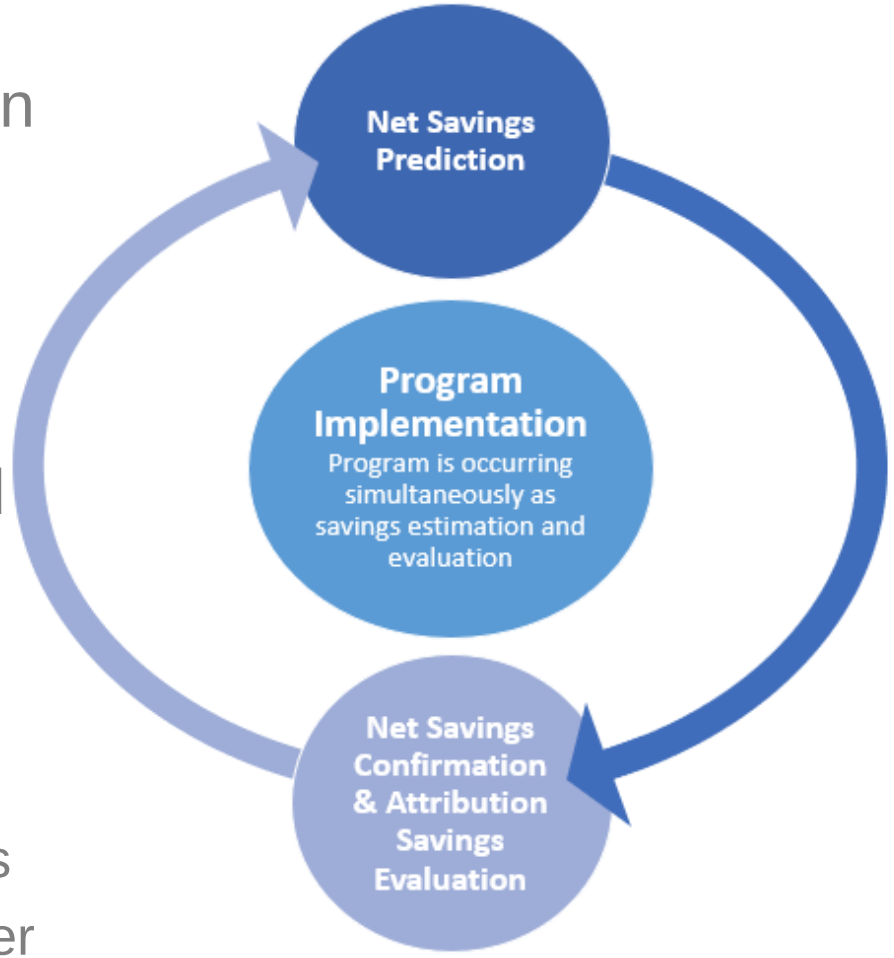
- What is the program cycle?

  Stretch code cycle: every 3 years*

  Evaluation cycle: as frequent as utilities would like it

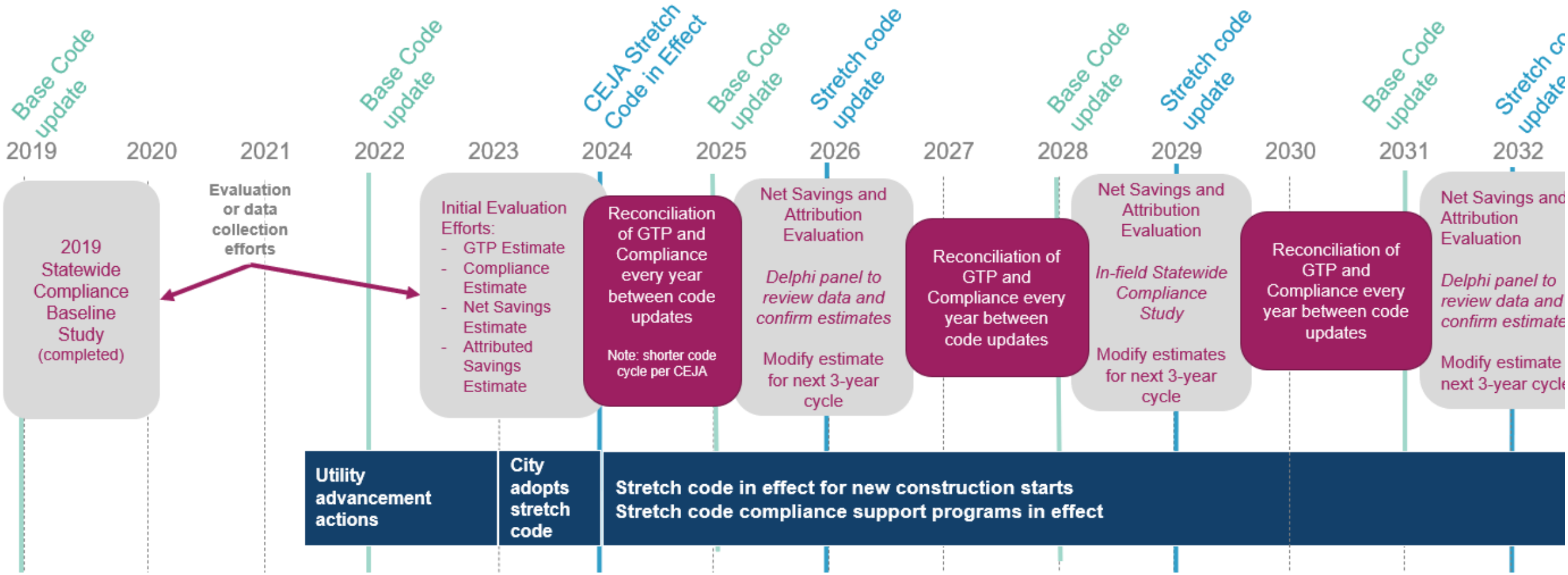
- When does utility influence start?

- What happens when utility support ends?
  - Policy Advancement – utilities can continue to claim savings
  - Code Compliance Support – utility cannot claim savings after they stop providing support



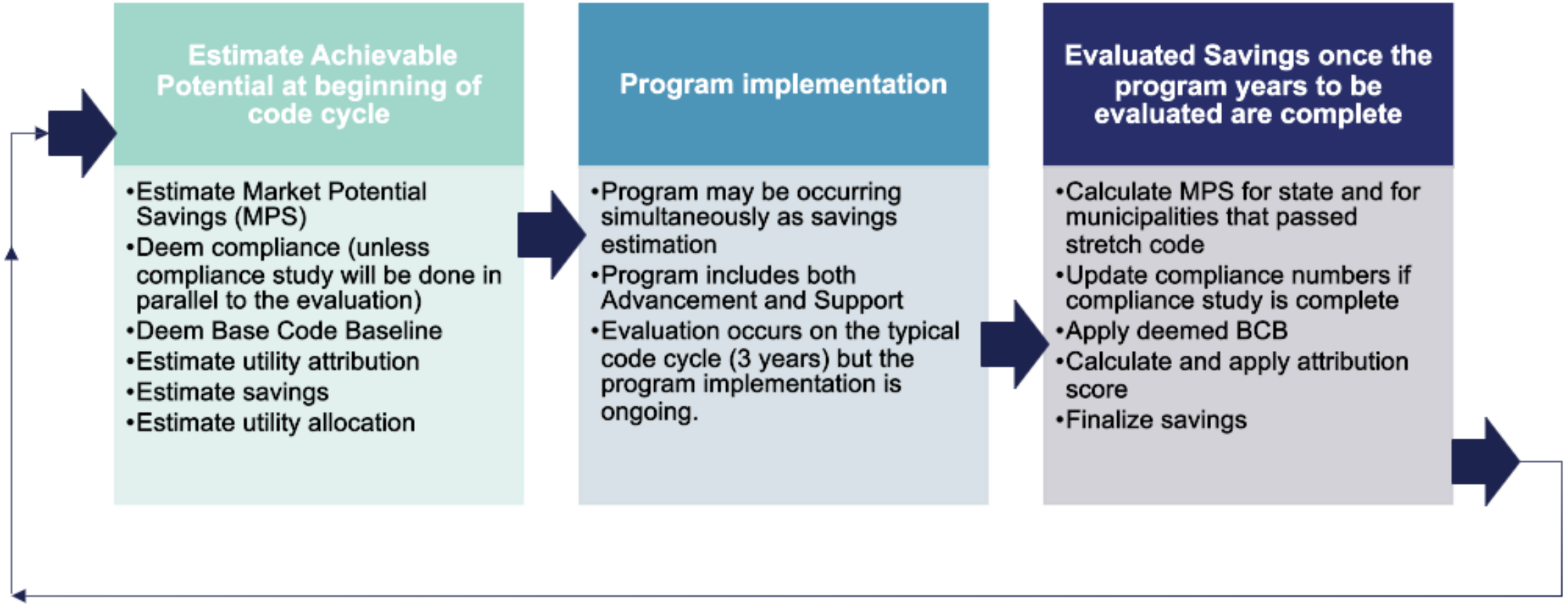
* First stretch code cycle is 2 years.

Illustration of Utility Influence and Evaluation of Policy Advancement and Code Support



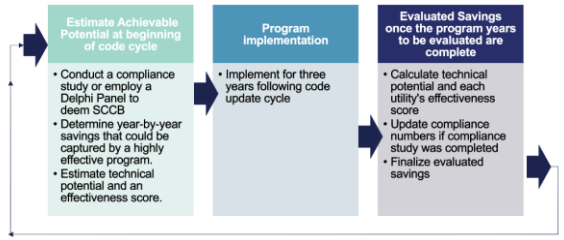
Process for Evaluating Policy Advancement

Feedback: What is evaluator's role?



Process for Evaluating Code Support Programs

Feedback: Frequency of compliance studies?



Attributed Savings Estimation

Category of Influence	Participation Action	Documentation Examples	Weight
Utility-Initiated Research (30%)	Funding and conducting research on market analysis, energy analysis, cost-effectiveness, and statewide impacts	Scope of work and financial receipt for research papers, final research studies and supporting documentation	25
	Develop revisions to code language that can be used in stretch codes. Reviewing of public documentation and information	Meeting minutes, email discussions, written language revisions and rationale or included in research papers. List of reviewed public documentation and information and following actions or included in research papers.	5
Advocacy for Advancing Policy (30%)	Vocally (or in chat) participating in discussion at public or decision-making meetings. Attending public meetings (information-gathering with little-to-no participation). Writing and submitting comments in ordinance development process	Meeting minutes, calendars. List of comments, email discussions, written comments and rationale.	10
	Creating, providing and/or presenting information to a group or key stakeholders. Convening stakeholder meetings to develop technical aspects/policy language	Meeting agendas, meeting minutes, calendars, stakeholder list, presentations, email discussions, written language, stakeholder survey.	13
	Submitting policy language or recommendations for consideration of adoption. Funding and conducting participation in public processes on behalf of the utilities. Giving public testimony in support/against specific policy language/idea	Submission receipt, email/physical copy of submission, policy language. Scope of work and financial receipt, list of public meetings and participation in processes, meeting minutes, stakeholder survey. Testimony language, meeting minutes, stakeholder survey.	7
Utility program development (30%)	Promising technical support or incentives via a utility program to support policy implementation. Creating specific utility program to fit policy implementation needs	Meeting minutes, presentations, email discussions, written or testimony language, stakeholder survey, stakeholder feedback on utility effects. List and details of program components specifically designed to support stretch code	30
Undefined or miscellaneous (10%)	Meaningful influence on code advancement outside of the categories of influence listed above	To be determined. Depends on nature and content of influence	10

Code support effectiveness

Compliance Enhancement Activity	Scoring Metrics	Documentation Examples	Weight	Notes
Training Sessions: Classroom, In-field, Webinar, etc. (35%)	Curriculum covers topics where compliance improvement is possible/necessary	Training materials such as PowerPoints or worksheets	15	Baseline studies can be used to highlight key areas of low compliance
	Training sessions are frequent, accessible, and see high attendance as a result	List of trainings held and attendance numbers	10	Also, can show a mix of demographics in attendees i.e., builders, code officials, etc.
	Training sessions increase knowledge/understanding of attendees	Participant surveys completed after the training sessions	15	Can utilize a simple rating system over various categories such as Lighting, HVAC, etc.
	Training sessions result in improved practices by relevant attendees	Participant surveys completed 2-6 months after the session	10	Will need to determine which attendees receive this survey
Phone and Email Technical Support (10%)	Experts are consistently available to answer questions regarding code updates, and these resources are advertised to relevant stakeholders	Hours of availability for information resources, as well as marketing materials for/links to these resources	5	Could be undertaken by the utility, local government, or a third party with utility funding/support
	Information resources are utilized by relevant stakeholders and useful responses are given in a timely manner	Call and email records to/from information hotlines	10	Could request to record calls to assess performance
Supporting a circuit rider or third-party specialist. (25 %)	Credentials and effectiveness of circuit riders or specialists.	Resume, CV and experience notes, as well as satisfaction surveys	10	Provided by utility
	Full time equivalence (FTE) of circuit riders or specialists	Employment records and schedule information	15	Provided by utility
Resource Development: Checklists, Field Guides, FAQs, etc. (15%)	Useful resources are developed and distributed by the utility or a third party	Example materials and distribution pathways	15	These could be tied into the trainings as well as take-home materials
Stakeholder Engagement (10%)	Utility participates in industry groups, maintains contact with building departments to make sure information and resources are up to date	Meeting minutes, emails, etc.	10	Utility maintaining a list of active builders could be useful as well for training and documentation purposes
Undefined or miscellaneous (5%)	Meaningful influence on code compliance outside of the categories of influence listed above	To be determined. Depends on nature and content of influence	5	Allows utilities to get credit for areas not identified

Other questions

- How would a stretch code MTI interact with existing (resource acquisition) utility rebate programs since some of the same energy-efficiency measures are expected to be included in both?
  - If there is a building with RAP participation, the utility would get 100% of the savings for that building above Base Code Baseline. The Savings for the building would be removed from the MT evaluation as if it had never been built.
- How, if at all, would building performance standards factor into the MTI and its evaluation?
  - At this point, BPS do not factor into this MTI but we will consider BPS next
- What is the cost for evaluating the entire Stretch Code MTI? What is for evaluating only the “acceleration” portion or only the “compliance” portion?
  - We don’t have an exact cost. Combining the two has cost efficiencies

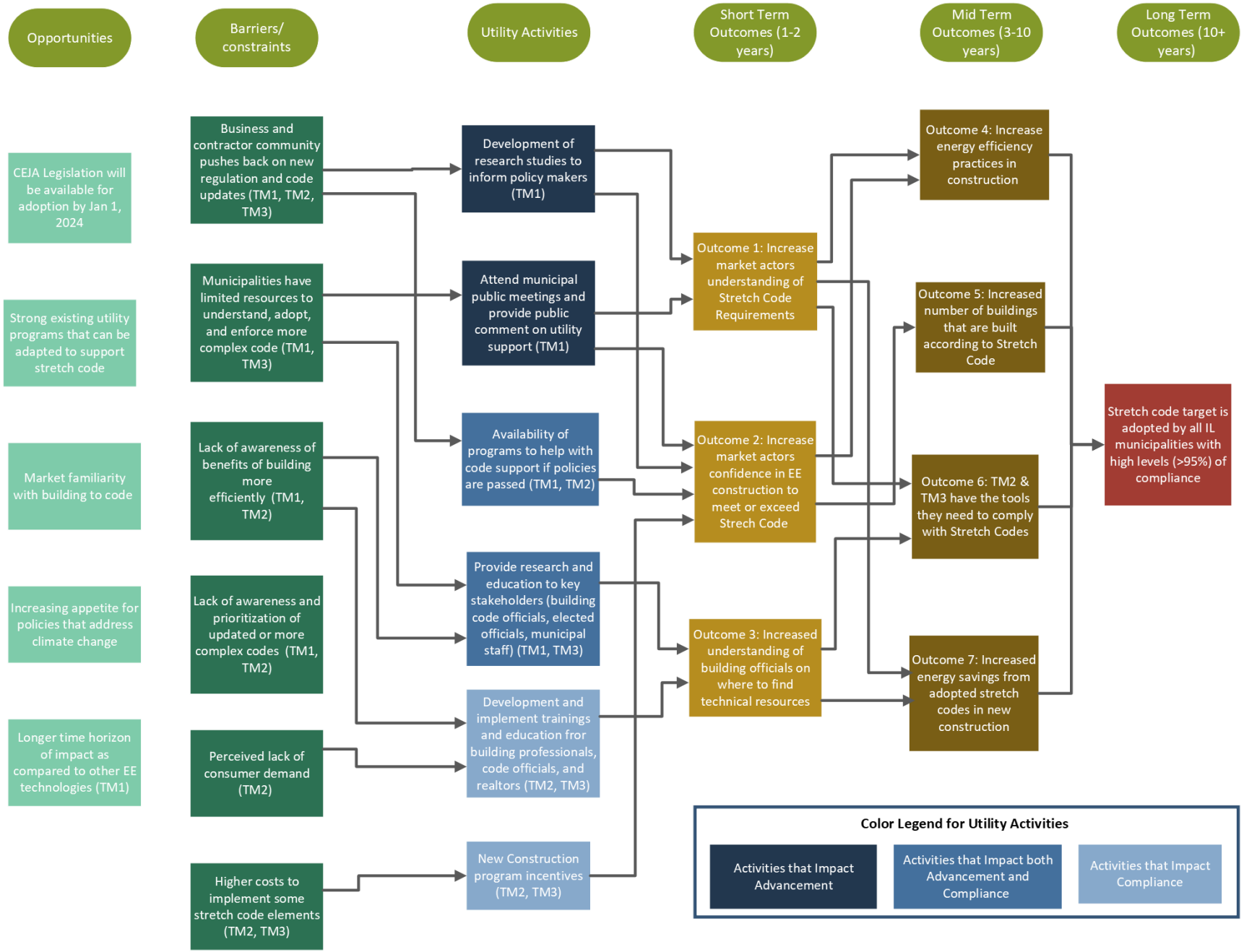
Utility Activity	Of What	Municipality Size	Utility Support Timeframe		Sector		Activity Detail
			Pre-1/1/24	Post-1/1/24	Com	Res	
Accelerate Adoption	Above current statewide base energy code	> 1 million residents	x	x	x	x	Policy advancement support: research, advocacy, program development, other
	CEJA stretch code or above	> 1 million residents	x		x	x	Early adopter assistance / preparation for CEJA
	CEJA stretch code or above	> 1 million residents		x	x	x	Policy advancement support: research, advocacy, program development, other
	Above current statewide base energy code	All	x		x		Policy advancement support: research, advocacy, program development, other
	CEJA stretch code	All	x		x	x	Early adopter assistance / preparation for CEJA
	CEJA stretch code	All		x	x	x	Policy advancement support: research, advocacy, program development, other
Support Compliance	Above current statewide base energy code (once adopted)	> 1 million residents	x	x	x	x	Trainings, technical support, circuit rider/3rd party specialist, resource development, stakeholder engagement, other
	CEJA stretch code or above	> 1 million residents	x		x	x	Early adopter assistance / preparation for CEJA
	CEJA stretch code	> 1 million residents		x	x	x	Trainings, technical support, circuit rider/3rd party specialist, resource development, stakeholder engagement, other
	CEJA stretch code	All	x		x	x	Early adopter assistance / preparation for CEJA
	CEJA stretch code	All		x	x	x	Trainings, technical support, circuit rider/3rd party specialist, resource development, stakeholder engagement, other

Logic Model

- Feedback to include the logic model in the main document
- Feedback to include language on what the evaluation plan should include, such as MPIs

DRAFT Logic Model for Stretch Codes Advancement and Compliance Support

Purpose for stretch code program: to transform the commercial new construction market by advancing building energy stretch code adoption and support code compliance



Next steps

- Finalize the pathways document based on feedback received
- Work with stakeholders to include into TRM
- Move on to Building Performance Standards

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