

# Framework for Estimating MT Savings

## *High-level Outline*

**Presentation to SAG NTG Working Group -- May 8, 2019  
& SAG MT Savings Working Group – May 10, 2019**

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# Outline for MT Savings Framework Paper

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- Purpose
  - Develop a framework for evaluating MT initiatives and estimating MT savings
    - Anticipate further development of unique protocols for individual initiatives as needed (not part of this project)
- Development
  - Based on best-practices nationwide
  - Review through SAG MT Saving Working Group (with presentations to the SAG NTG Working Group)
  - Summary included in the IL TRM by September 2019
  - Organized in two primary sections:
    - Section 1: Background/Context Information
    - Section 2: Estimating Savings

# Section 1: Background and Context

# Section 1: Background/Context

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## Illinois Context

- Future Energy Jobs Act (FEJA)
- Utility Midwest MT Collaborative
  - Catalyzed by Nicor and ComEd – other utilities joining
  - First initiatives for review in Illinois are “legacy” programs: Building Operator Certification (BOC); Illinois Home Performance (IHP) and Codes
  - Other initiatives in the queue
  - MT Business Plan with Logic Model as key tools

# Business Plan Content

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Documents the strategy, assumptions and data at the time of launch

- Changes as knowledge of the market evolves

Contains

- Specified target market and description of product/service
- Logic Model – Theory of Change
  - Barriers; Opportunities; Activities/Interventions; Outputs; Market Outcomes; Ultimate Desired Impact
- Suggested Market Progress Indicators including: data collection/management plan; input from Evaluators
- Multi-year estimated budget; savings; other c-e parameters (e.g. lifetime)
- Other items as needed for that market or utility

# Section 1: Background/Context continued

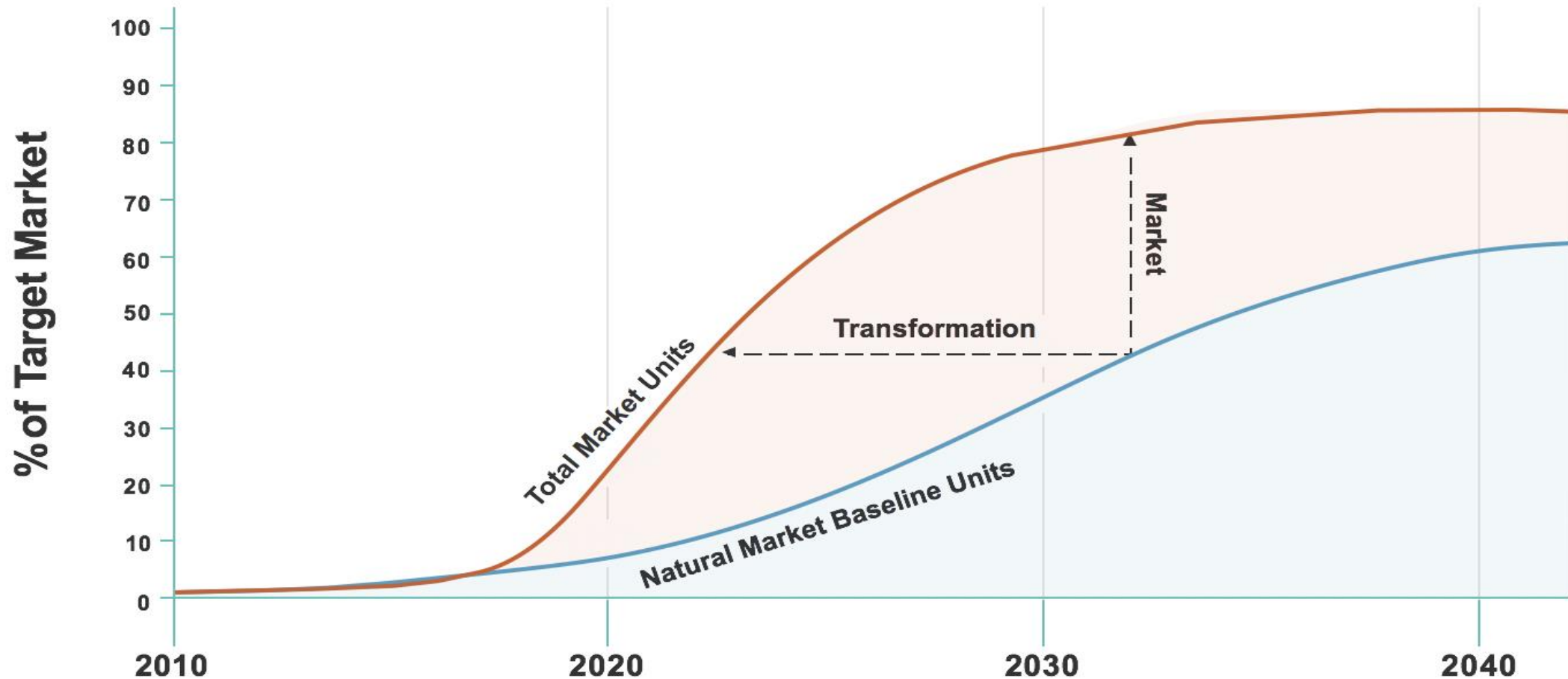
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## Key Characteristics of Market Transformation

- Definition of MT
- Market transformation and resource acquisition
- MT as umbrella hypothesis for driving market change

# Definition of Market Transformation

- Market Transformation (MT) is the strategic process of intervening in a market to create lasting change that results in the accelerated adoption of energy efficient products, services and practices.



# Section 1: Background/Context continued

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- Background and Key Characteristics of Market Transformation
  - Definition of MT
  - Market transformation and resource acquisition
  - MT as umbrella hypothesis for driving market change



Activities can be funded from multiple budgets within a utility (or with a partner)

# Market Transformation serves as a “Theory Umbrella” for Multiple Activities

- **Emerging Technology**
- **Pilots and prep**  
*(e.g., spec development)*
- **Implementation**  
*(including supply chain/  
customer incentives, marketing,  
training, strategic partnerships,  
etc.)*
- **Market research  
and assessment**
- **Codes and standards**

# Section 1: Background/Context continued

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- Evaluation Approach: Theory-based Evaluation
- Differentiating Savings
  - Attribution – Separating units that resulted from the MT Initiative from what would have happened without utility intervention
  - Accounting—Separating units from traditional programs and MT initiatives so there is no double counting
  - Allocation – separating savings among multiple service territories or organizations

# Section 1: Background/Context continued

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- Evaluation Products
  - “Market Progress Evaluation Reports” (MPER): developed on regular basis
    - Recurring efforts to understand the changing market
    - Track the market including “Market Progress Indicators” (MPI)
- What makes an MT Initiative Recognizable?
  - MT Business Plan developed in advance
    - Includes logic model
    - Clear intent to drive lasting market change in chosen market

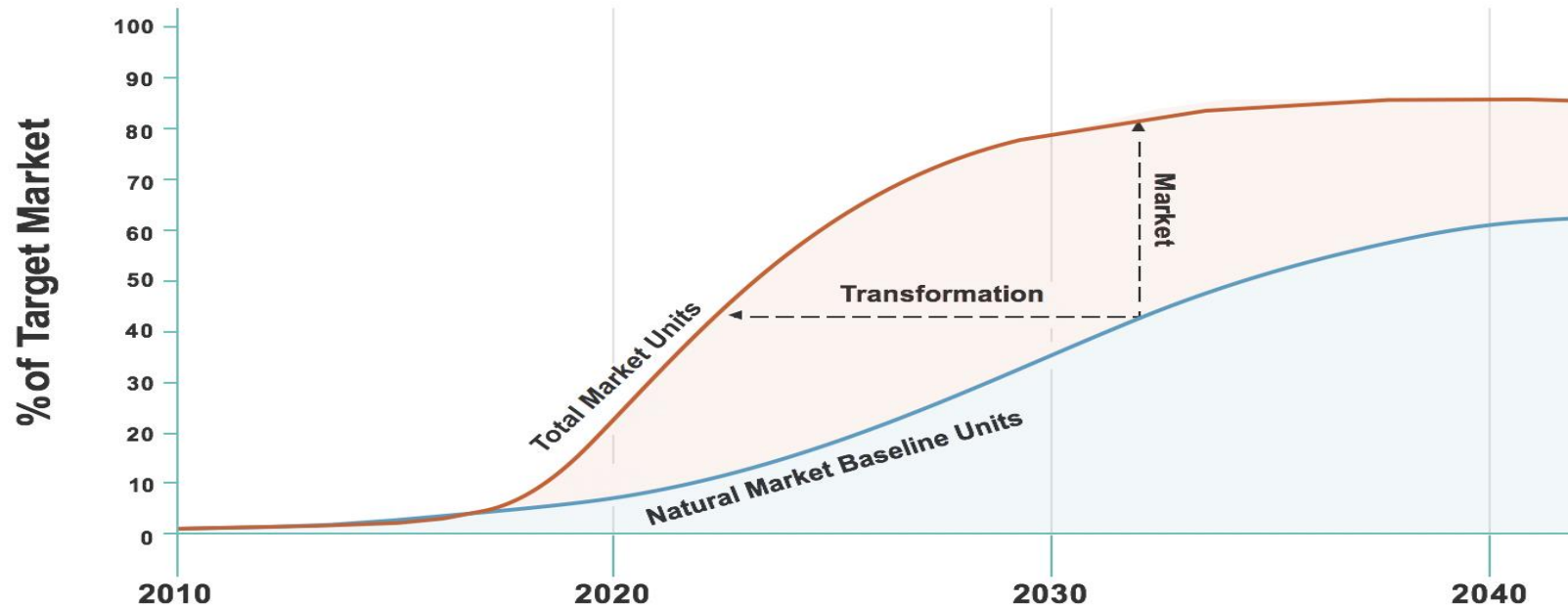
# Section 2: Estimating Savings for MT Initiatives

# Section 2: Estimating Savings for MT

## Overall Framework for the Calculation

$$\text{Unit Energy Savings (UES)} \times \# \text{ MT Units} = \text{MT Savings}$$

- *# MT Units = Total Market Units minus Natural Market Baseline Units;*
- *Then differentiate the units by utility*



# Section 2: Estimating Savings for MT

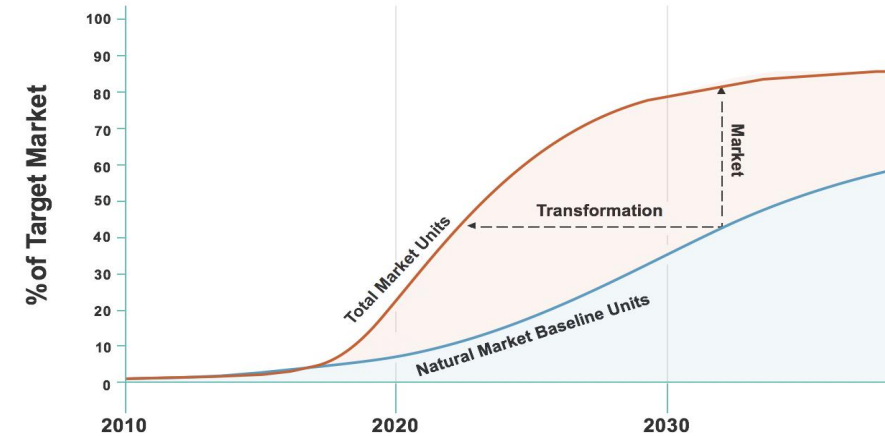
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- Unit Energy Savings: Theory & Practice
  - Measured in kwh/unit; therms/unit, kW/unit
  - Pull from available sources:
    - TRM
    - Other program documents
    - Other states/regions, adjusted
  - Use proxy and improve estimate as initiative is developed

# Section 2: Estimating Savings for MT

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- Developing the number of Units associated with MT:
  - Total Market minus Natural Market Baseline; then differentiate the units
    - Total Market Units: Theory & Practice
    - Natural Market Baseline Units: Theory & Practice
      - Reviewing Natural Market Baseline over time
- Differentiate Units
  - Attribution – Natural Market Baseline is adoption without MT
  - Accounting – MT separate from RA
  - Allocation – Allocate to service territory or organization



# Section 2: Estimating Savings for MT

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## Deeper Dive on Codes and Standards

- Savings from enhancing code compliance
- Savings from Codes/standards Adoption
  - Building “infrastructure” to facilitate code adoption
- Savings from “Stretch Codes”
- Lifetime of code adoption
- Code Implementation Ramp-up



# Key Documents in Review (In process)

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- Prahl and Keating papers for CA
- Summary of ComEd MT Summit best Practices
- Ridge, etc on RPP NTG ratios
- Ridge etc on Modifying CA Resource Acquisition B/C Ratio for MT
- Cadmus and E Code savings
- NMR – MA Methods for market effects
- IMT – ACEEE paper on credit for code programs
- NEEA presentation on Savings from MT to MW MT collaborative
- NY Dept Public Service: Metrics, Tracking and Performance Assessment Working Group on MT

# Appendices

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- Glossary
- Outline of MT Business Plan

# Next Steps

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- Comments welcome!
  - Due May 24
  - Send to Marci Sanders: [Msanders@Resource-Innovations.com](mailto:Msanders@Resource-Innovations.com)
  - Draft Paper will be circulated on June 11
  - Next call to discuss is on June 14