What is Market Transformation?
Market Transformation as it has been developed and implemented by the Northwest Energy Efficiency Alliance (NEEA) can be defined in a single statement as:

“Market Transformation is the strategic process of intervening in a market to create lasting change in market behavior by removing identified barriers or exploiting opportunities to accelerate the adoption of all cost-effective energy efficiency as a matter of standard practice.”

In practice, the definition breaks down into some key components described below.

1. Market Transformation is a strategic process.
Market Transformation takes a long-term view of a specific but complete market and the opportunities that exist within that market to increase efficiency. The efficiency opportunities might be accomplished through a range of voluntary market interventions (see below) from the introduction of new and emerging technologies or practices to involuntary measures such as a change in codes and standards.

This process of Market Transformation is not complete when a single technology or practice achieves a specific market share benchmark. Rather, transformation can be considered complete when all of the achievable efficiency opportunities have been adopted into the market or the remaining market barriers are insurmountable.

This process consists of several distinct phases that are repeated as needed as the market moves upward towards achieving full potential. These phases include:

1. Identify Market Barriers: The first phase is to identify specific market barriers to adoption of energy-efficient products, services and practices. It includes the evaluation of high-potential technologies and examines impediments that may include product availability, quality or price; lack of financing; insufficient technical capability or tools; and low awareness of business benefits.
2. **Assess Opportunities and Leverage Points:** The next phase in the process is to develop a comprehensive strategic plan to address the identified market barriers and exploit opportunities in order to achieve the full market potential for efficiency. This step includes the identification of potential market partners that can influence supply and demand of market-ready, energy-efficient products, services or practices.

3. **Develop and Implement Market Interventions:** This step of the process moves to developing comprehensive strategies to overcome identified market barriers through opportunities and leverage points. It also involves developing an implementation plan that identifies specific market interventions and appropriate market actors to implement these activities.

4. **Evaluate and Adapt Initiatives:** As the implementation process moves forward, the components of the project and overall strategy need to be assessed and evaluated and adjusted or revised as indicated by the market data. Because markets are dynamic, it is critical to approach the process of Market Transformation with tools that allow for adaptive management of the implementation process.

2. **Market Transformation is about strategic intervention.**
While there are different mechanisms that can be used to intervene in a market, long-term success depends on strategic deployment of these interventions. Ensuring that the interventions are sequenced and targeted to specific market barriers and market actors at the appropriate stages of the market adoption curve ensures that the successes build upon each other. For example, in the early stages of market adoption, the primary consumer markets will be a group of innovators that are less sensitive to price and more likely to take risks. Market interventions during this phase should emphasize product advantages over “conventional” alternatives and focus on developing the “competitive advantage” offered by the products. However, this early intervention should be designed to lead to an increase in sales volume that can support a reduction in unit price allowing the product to be more attractive to later market segments that are more price sensitive.

3. **Market Transformation is about specific markets.**
Market Transformation efforts by definition need to be focused on a specific market made up of definable market actors and decision makers on both the supply and demand side of the market.

4. **Market Transformation results in sustainable changes in the market.**
For Market Transformation effort to progress, interventions should result in sustainable market changes that will continue even after the particular intervention ends. There are many ways to affect markets on a short term basis but that have no long-term positive change on the market. Market Transformation activities should be designed with an end result of market changes that are sustained by the natural market dynamics even after the intervention is complete. This sustainability should be the logical outcome from the process of identifying and addressing market barriers or opportunities such that when these are addressed in a successful manner that the market is permanently altered.

5. **Market Transformation is about behavioral change.**
In the end, all of the market interventions are about changing the behavior of both supply-side and demand-side market actors. Accordingly, the intervention approaches are designed in a way that is focused more on people and their actions than the technology innovations that make it possible.
However, in some cases, changes to the technologies or services need to be made to align with an appropriate change in the behavior of the market decision makers.

6. **Market Transformation is about addressing barriers and leveraging opportunities.**
One of the distinguishing features of Market Transformation is the deliberate focus on *market barriers and opportunities*. If the intervention efforts are going to result in lasting market change, they must be addressed at correcting a specific market barrier or leveraging a unique market opportunity. For example, in many markets during the early stages of market adoption there is often a lack of awareness about the technology or service. It goes without saying that customers simply can’t buy what they don’t know about. Specific market interventions need to be developed to increase awareness through the appropriate market channels where people get information about those products or services.

7. **Market Transformation is about accelerating and/or increasing market adoption.**
The process of Market Transformation is perhaps best described by the theory of diffusion of innovation and expressed by a curve showing the increasing market share of a specific technology or practice in a market. The graph below illustrates the process of a product moving through this cycle and how various activities interact to accomplish the full market potential. Market Transformation activities are designed to result in either *increased* market adoption compared to what would have happened, or they might result in *acceleration* in time of adoption, or both. This change in market adoption is ultimately what delivers energy savings.
8. Market Transformation is complete when the market incorporates all cost-effective efficiency opportunities as standard market practice. Markets may be considered transformed when all cost-effective, technically available energy efficiency is or will be automatically included in all market transactions as matter of standard market practice. This implies that all decision-making structures on both the supply side (manufacturing, distribution, sales and marketing) and the demand side (performance goals and objectives, purchasing behavior, operational behaviors) include energy efficiency into the normal, everyday decision-making. This process can be completed using a combination of both voluntary and involuntary measures.

NEEA’s Role in Market Transformation
In a comprehensive Market Transformation effort there will be many market actors playing different roles during different periods of the transformation process. The graph below illustrates the components of intervention during the product life cycle and who might be involved at different stages.

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre-Commercialization: Technical Assessment / Market Test</td>
</tr>
<tr>
<td>2</td>
<td>Addressing Market Barriers: Awareness / Availability/Information</td>
</tr>
<tr>
<td>3</td>
<td>Accelerated Market Adoption: Price / Features / Competition</td>
</tr>
<tr>
<td>4</td>
<td>Codes and Standards: Code development / Code adoption</td>
</tr>
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[Diagram showing the sequence of market transformation phases and the role of NEEA, utilities, market, and government at different stages.]
Historically, NEEA has served a central role in Market Transformation including:

1. NEEA has helped develop strategic plans for transforming markets. This includes conducting market research, working with market actors and defining strategies including specific market intervention over the entire course of a product life-cycle regardless of whether NEEA or others would be the primary implementation agent for those interventions.

2. On the implementation side, NEEA has been most active in the early stages of the market adoption process; i.e. working to facilitate introduction of new and emerging technologies and practices and to remove early barriers to adoption.

3. Lastly, NEEA has been active in the process of developing and facilitating adoption of efficient codes and standards to complete the life-cycle process and lock-in efficiency gains in the market.

4. By dramatically increasing both the long-term potential for energy efficiency and real time results, NEEA is helping the Northwest achieve a more sustainable future. For examples of how NEEA has broken through market barriers to create lasting change on a regional and national level, please see the Success Stories section of neea.org.