

7/16/2018

# ***Commercial Code Enhancement (CCE) Initiative***

***DOE Energy Codes Conference***

John Jennings

Northwest Energy Efficiency Alliance



# NEEA is...



**TOGETHER** We Are Transforming the Northwest

# Participating Funders

Avista

Bonneville Power

Administration

Clark Public Utilities

Clallam PUD

Columbia REA

Energy Trust of Oregon

Idaho Power

NorthWestern Energy

Puget Sound Energy

Pacific Power

Seattle City Light

Snohomish PUD

Tacoma Power

# ***Context: Problem Statement***

## **There are challenges ahead**

- Harder to find efficiency measures
- Non-regulated loads
- Operations and Actual performance

# *CCE Initiative Concept*

A regional framework with state specific plans supporting the adoption of **progressively effective** energy codes.

# *Initiative Outcome: Progressively Effective Commercial Building Energy Codes*

- **Market practice leads** and informs code
- **Strategic partnerships** between utilities, jurisdictions and the design and construction industry
- **Less complex** codes
- **Lower energy use**

# *How is CCE Different than the NEEA Code Program?*

- 1. Goal Driven:** Progressively Effective Code
- 2. Future Focused:** Multi-Code Cycles and Strategies for the Future
- 3. Employs Market Transformation Mechanisms**

# *Market Opportunities & Barriers*



**Fragmented  
regional  
voluntary  
programs**



**No Business  
Case for Developers  
and Builders**



**Lack of  
proof for  
proposed tech**




**Resistance  
to Change**



# Market Opportunities/Barriers & Related Interventions

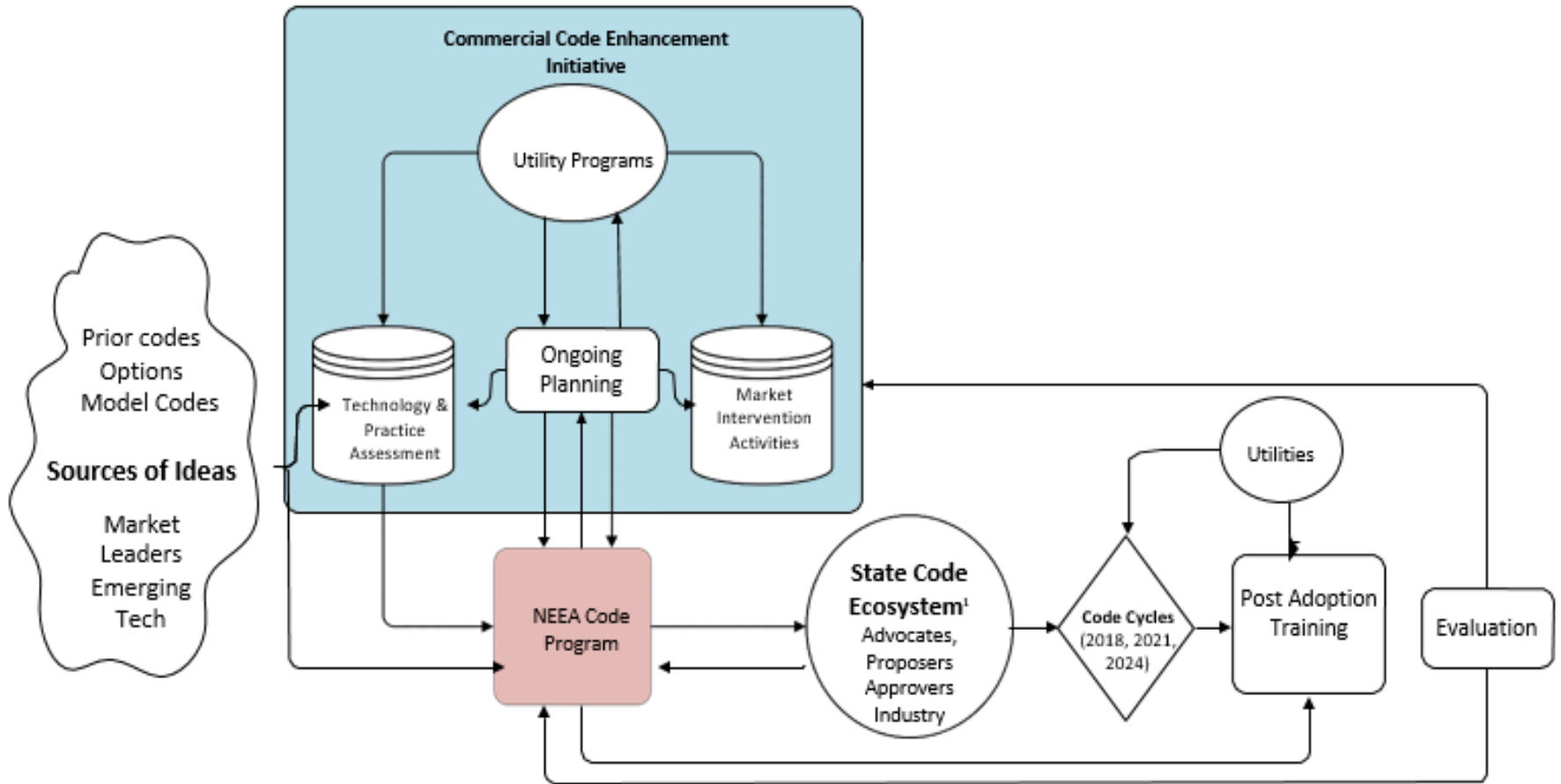
Market Opportunity/Barrier	Intervention
Coordinate fragmented regional CNC voluntary programs and activities	<ul style="list-style-type: none"><li>• Facilitate state action plans;</li><li>• Build acceptance and support in the market through experience and examples (proof of concept) from programs</li></ul>
Concern over cost of change (lack of value proposition) among developers and builders	<ul style="list-style-type: none"><li>• Demonstrate value through solution-oriented, real-world examples (case studies, testimonials)</li><li>• <b>Educate</b> on positive impacts to their business (value proposition)</li></ul>

# Barriers & Interventions - 2

Market Opportunity/Barrier	Intervention
<p>Lack of proof of viability and affordability of proposed technologies</p>	<ul style="list-style-type: none"><li>• Technology research and demonstration</li><li>• Technical assistance, tools, case studies</li><li>• Education and promotion</li></ul>
<p>Resistance to change among code officials (perceived time, cost, hassle)</p> 	<ul style="list-style-type: none"><li>• Agreement on goals and actions through state action plans</li><li>• Demonstration of support from the market</li><li>• Proof of value (viability and affordability) through demonstrations and evidence from voluntary market efforts</li></ul>

# Integration Concept

## PROPOSED STRAWMAN DESIGN FOR CCE INITIATIVE

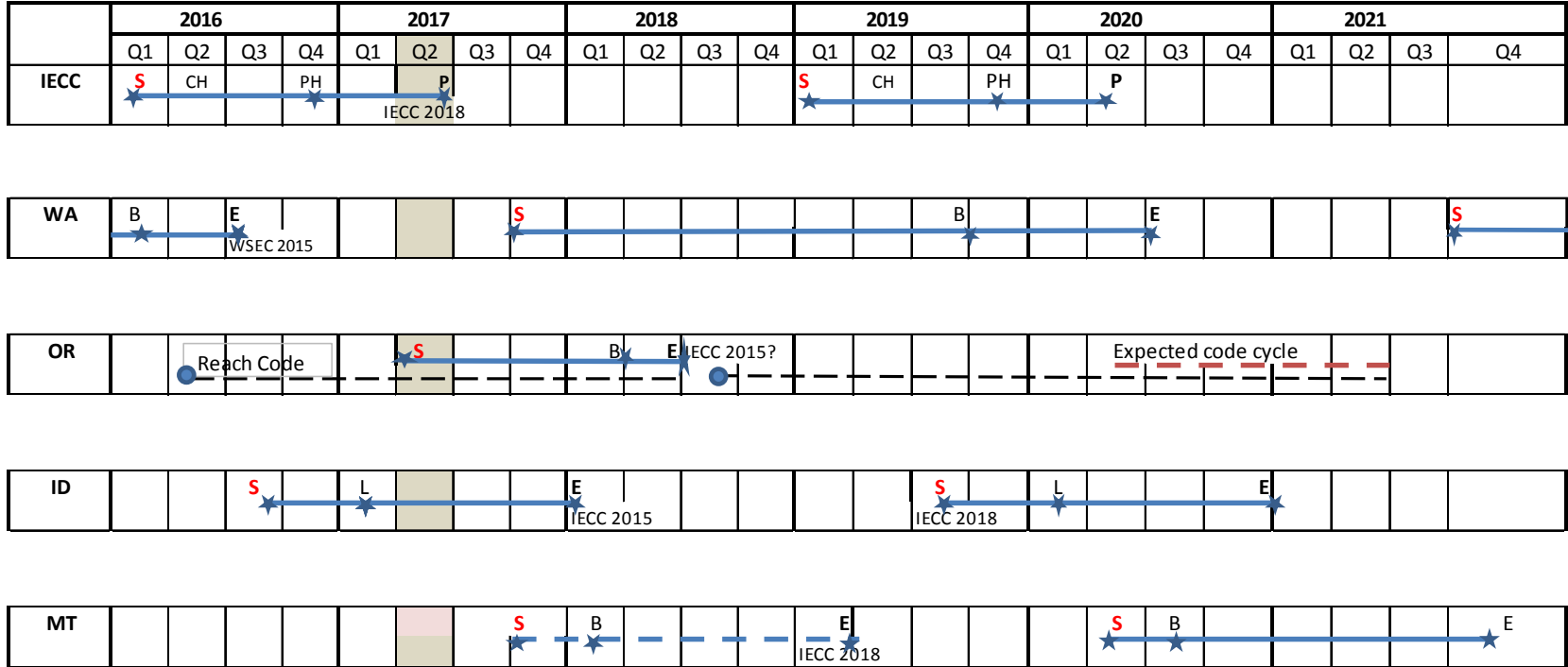


1. State agencies, State Collaboratives, Consultants, Utilities, **Code Officials/Jurisdictions**

# Code Schedules

## Northwest States and National Energy Code Cycles

10/5/2016



CCE begins

- L Legislative Approval
- E Effective Date (Tracking Begins)
- P Published/Adoptable
- B Code Board Adoption
- CH Committee Hearings
- PH Public Hearings
- S Code Proposal Submittal

# *Key Initiative Activities*



State-specific  
Coordination Plans

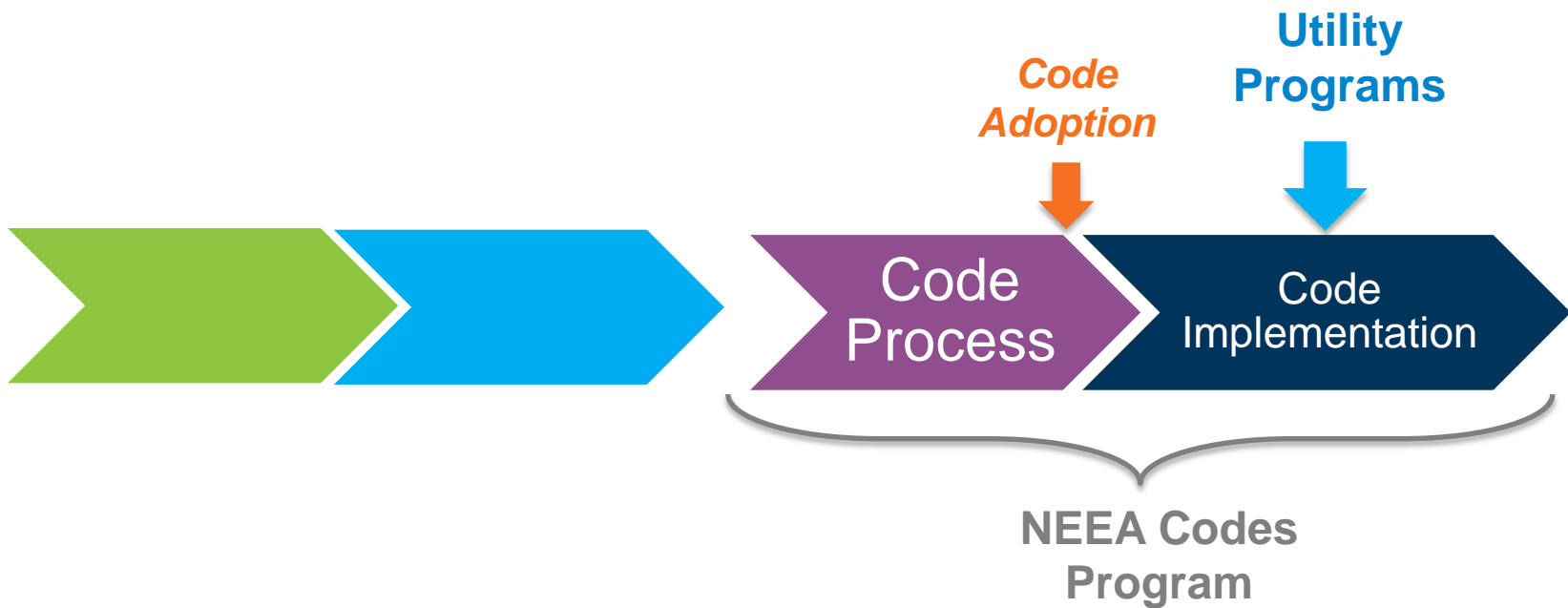


Technology and Practice  
Assessments

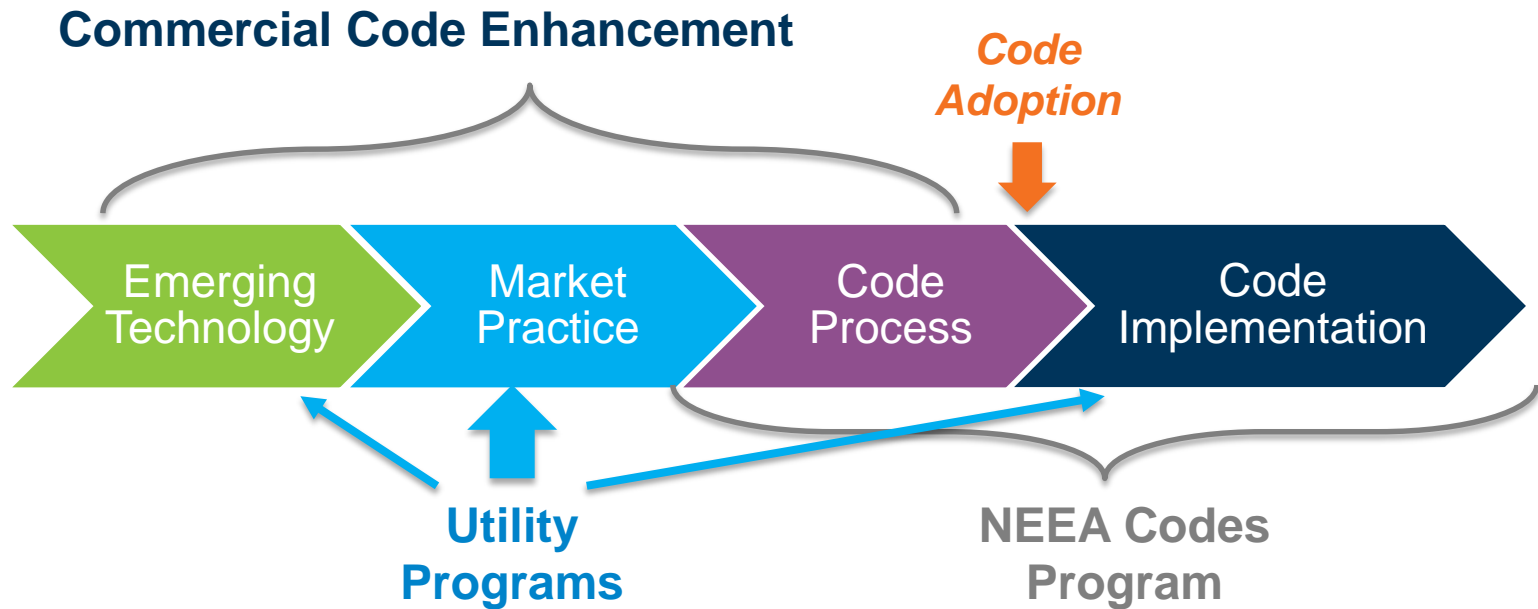


Market Intervention  
Strategies

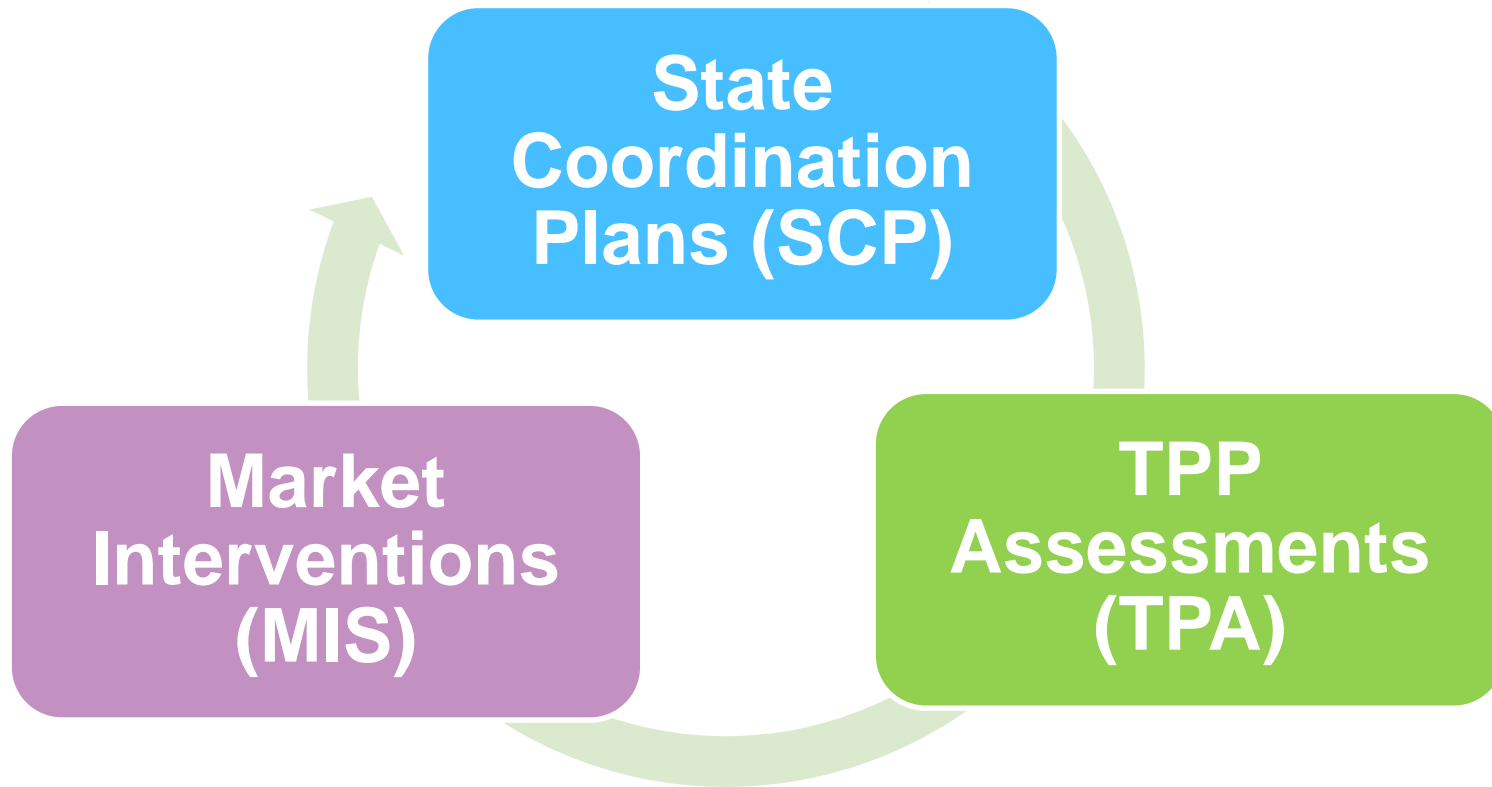
# Pre-CCE Approach



# Desired Future State

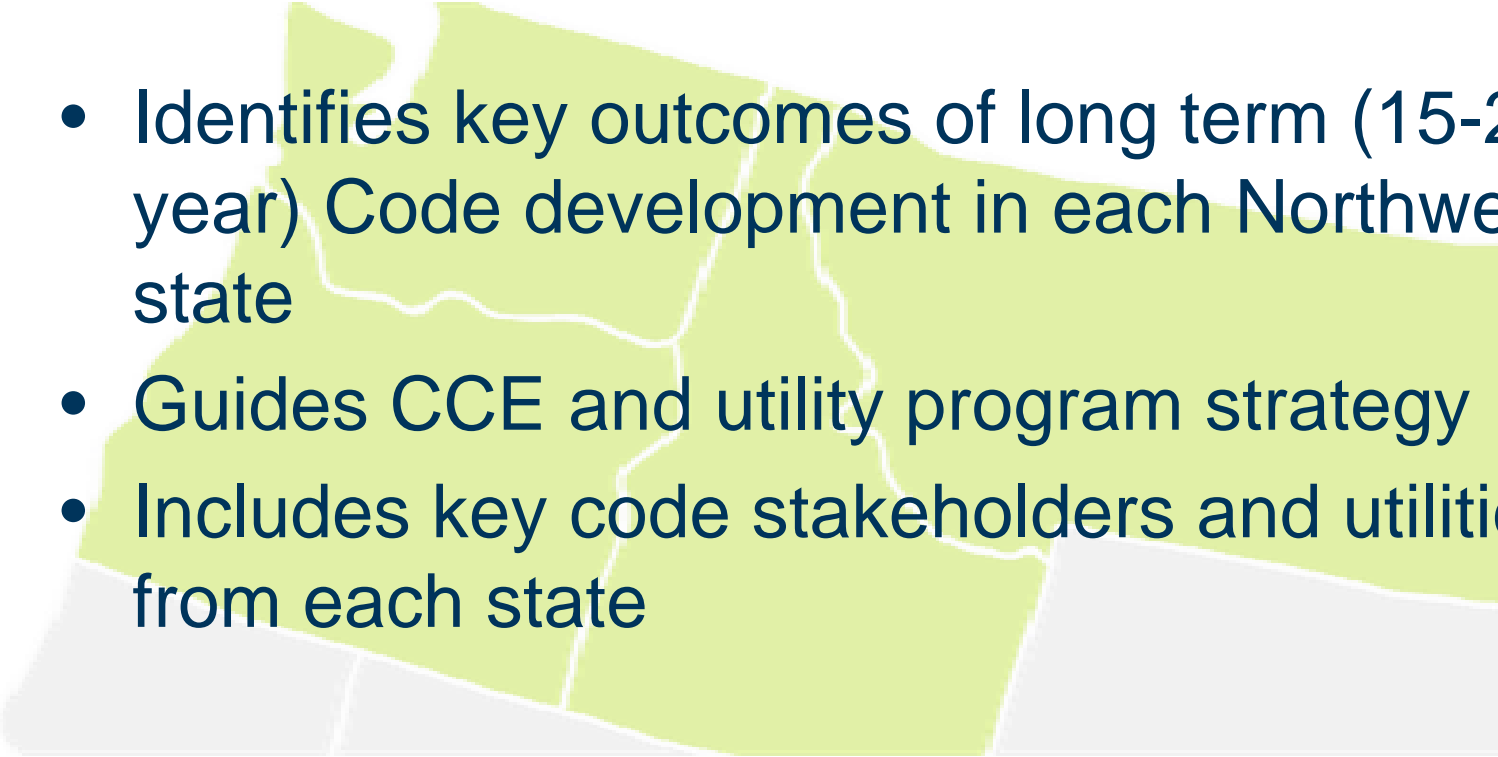


# *Initiative Components*



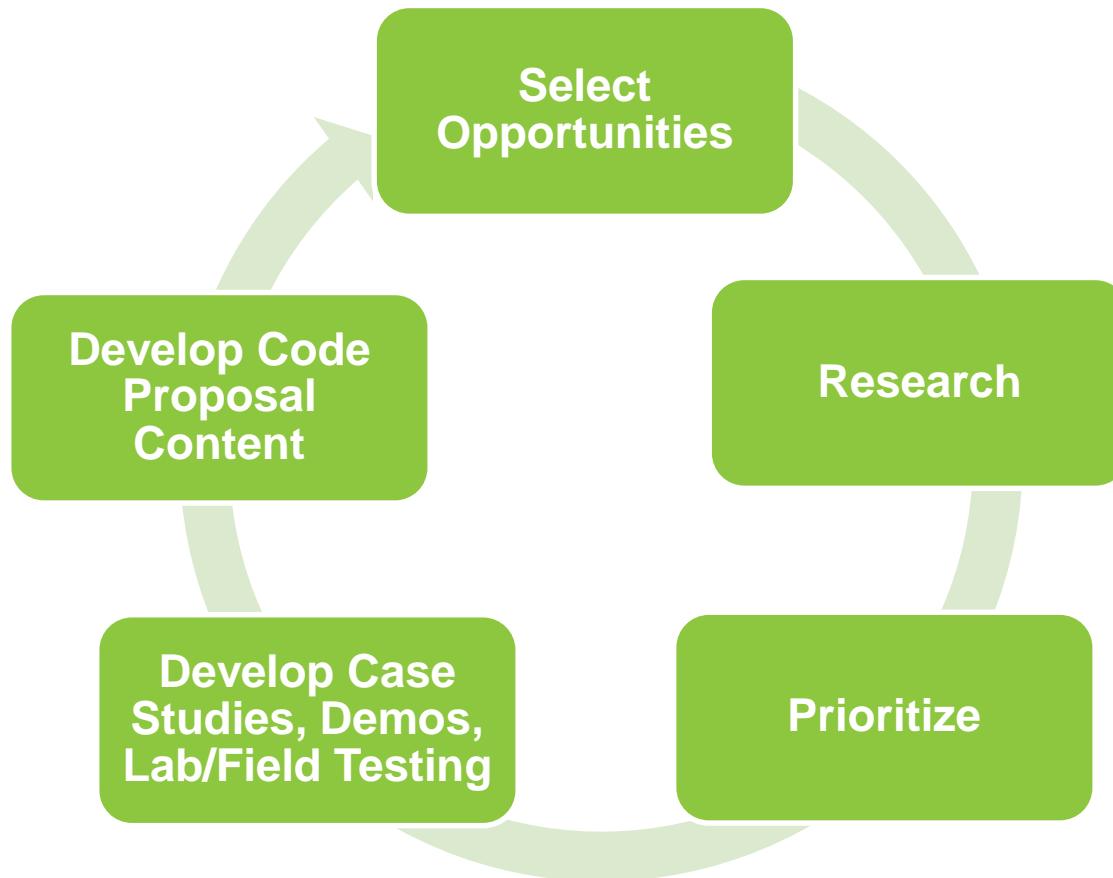


# *State Coordination Plans*

- 
- A map of the Northwest United States, including Washington, Oregon, and Idaho, is shown in a light green color. The map is overlaid with a semi-transparent white box containing the text of the list items. The map shows the state boundaries and is positioned behind the first three bullet points.
- Identifies key outcomes of long term (15-20 year) Code development in each Northwest state
  - Guides CCE and utility program strategy
  - Includes key code stakeholders and utilities from each state

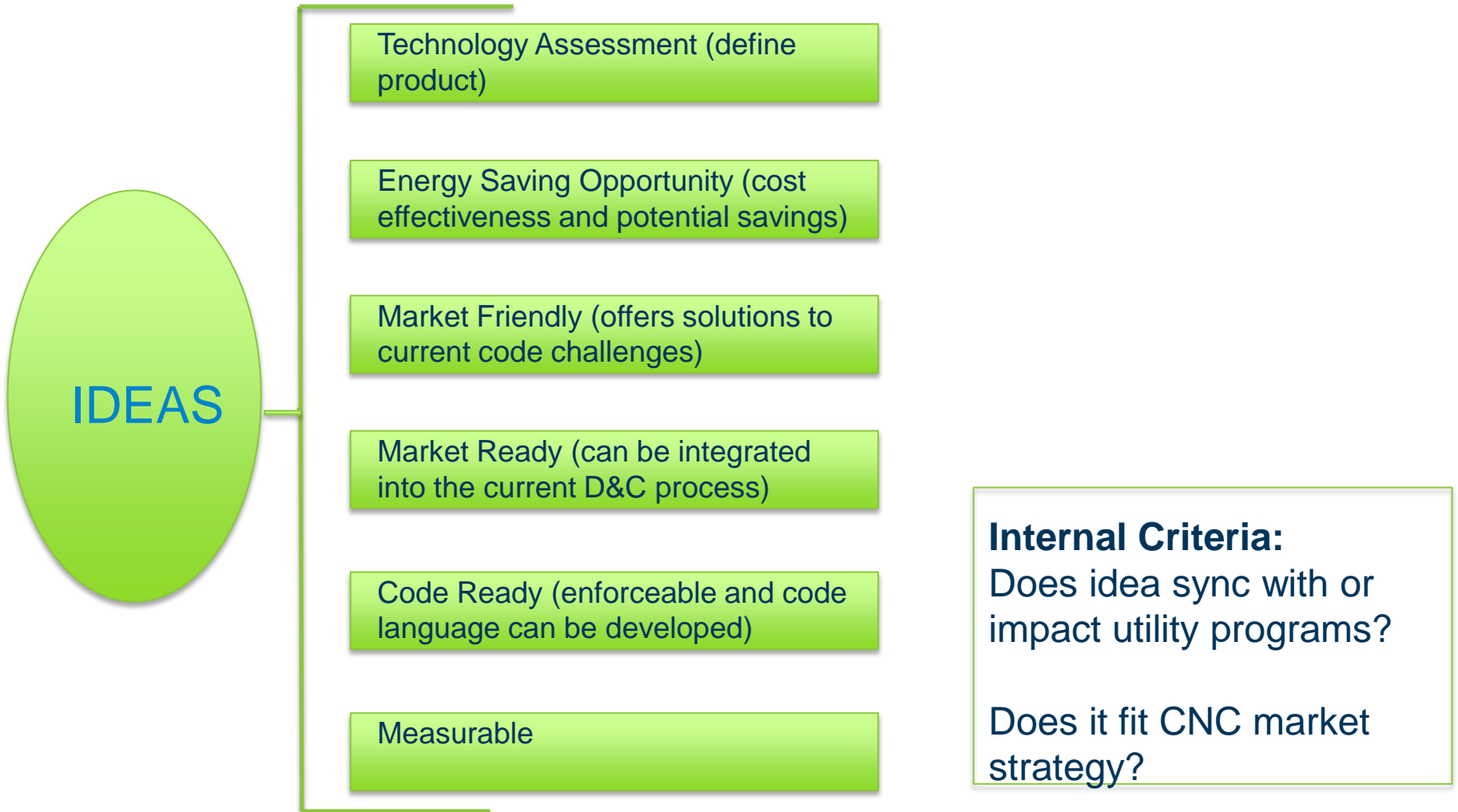
- **More detail in the next presentation**

# Technology/Practice Assessment (TPA)



# CCE TPA in Action

## Filter for Technologies, Practices, and Processes



# *Technology/Practice Criteria*

1. Defined and commercially available
2. More energy efficient than alternatives
3. Market-ready
4. Market-friendly (offers solutions)
5. Code-ready (definable, enforceable)
6. Measurable (impacts trackable)
7. Aligned with NEEA's CNC Market Strategy
8. Compatible with utilities' programs and plans

# Technology and Practice Scoring

		Score				
		1	2	3	4	5
SAVINGS	Energy Savings Opportunity				X	
	Cost Effectiveness			X		
	Measurability				X	
MARKET	Defined and Available					X
	Market Ready		X			
	Market Friendly					X
PROGRAMS	Code Ready				X	
	Industry support	X				
	Compatibility with Utility Programs		X			

# *CCE Implementation*

- Develop state coordination plans
- Apply Technology and Practice Assessment
- **Determine and implement market intervention strategies**
- Periodically convene initiative Utility work group

# *CCE Implementation*

## **Market Interventions:**

- Real-world examples (data, case studies, testimonials)
- Build acceptance and support
  - Awareness
  - Education
- Technical assistance & tools
- Code official / Board information

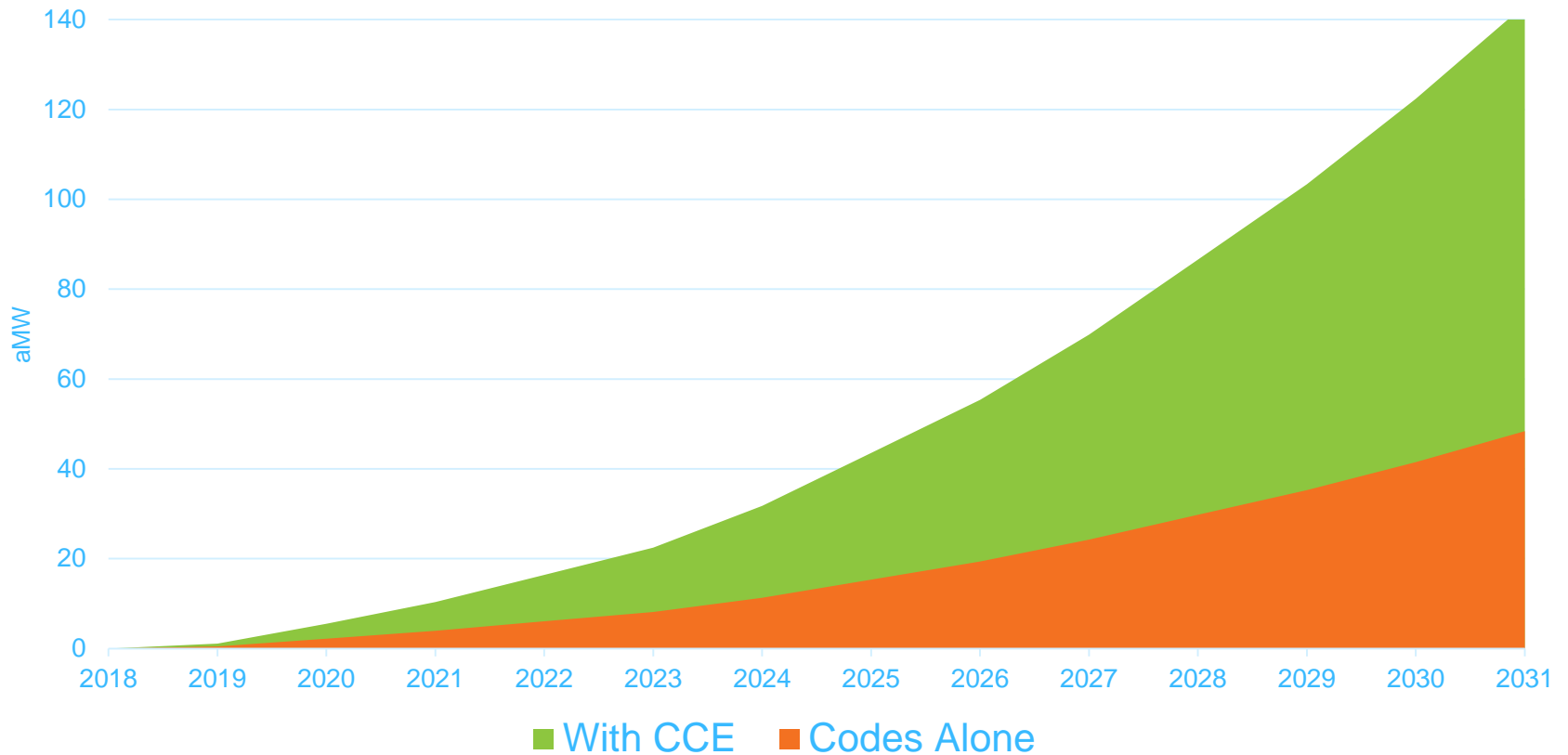
# *Early Actions: WA Proposals*

1. Performance Path Baseline Change to Appendix G
2. HVAC Total System Performance Ratio
3. DOAS Enhancement and Market Preparedness



# Impact: Savings

## Total Regional Savings



# Thank You

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