BONNEVILLE POWER ADMINISTRATION

Emerging Technologies

Multifamily New Construction
Qualified Program List

MEMO

Decision Background Paper

Fiscal Year 2026 Updates to the Multifamily New Construction Qualified Programs List

1. Purpose

This document provides the analytical basis for the fiscal year 2026 updates to the Bonneville Power Administration (BPA) Multifamily New Construction (MFNC) Qualified Programs List (QPL). The analysis evaluates the energy savings performance of common voluntary building certification programs relative to the current state energy codes in Washington, Oregon, Idaho, and Montana. The findings herein support the final QPL eligibility criteria established in the BPA Implementation Manual.

2. Background

BPA's MFNC measures incentivize the construction of buildings that achieve energy savings beyond local code requirements. The QPL identifies pre-approved certification programs that meet BPA's performance tiers:

- **Tier 1:** 10% energy savings above the applicable state code baseline.
- **Tier 2:** 25% energy savings above the applicable state code baseline.

BPA's evaluated each program against the individual energy codes of Washington, Oregon, Idaho, and Montana. The versions of codes and programs evaluated are detailed in Table 1.

Table 1: Comparison of Code and Program Versions

Code and Program Versions Compared		
State Energy Code	**Current Version**	**Code Update Notes**
WSEC - Commercial	2021 WSEC	Significant code upgrade
WSEC- Residential	2021 WSEC-R	---
Oregon Commercial Energy Code	ORSC based on ASHRAE 90.1-2022	Significant code upgrade
Oregon Residential Energy Code	ORSC based on 2021 IRC	---
Montana Commercial Energy Code	Based on ASHRAE 90.1-2018	Moderate code upgrade
Montana Residential Energy Code	Based on IECC 2021 with amendments	---
Idaho Energy Code	Based on IECC 2018 with amendments	No change in code stringency

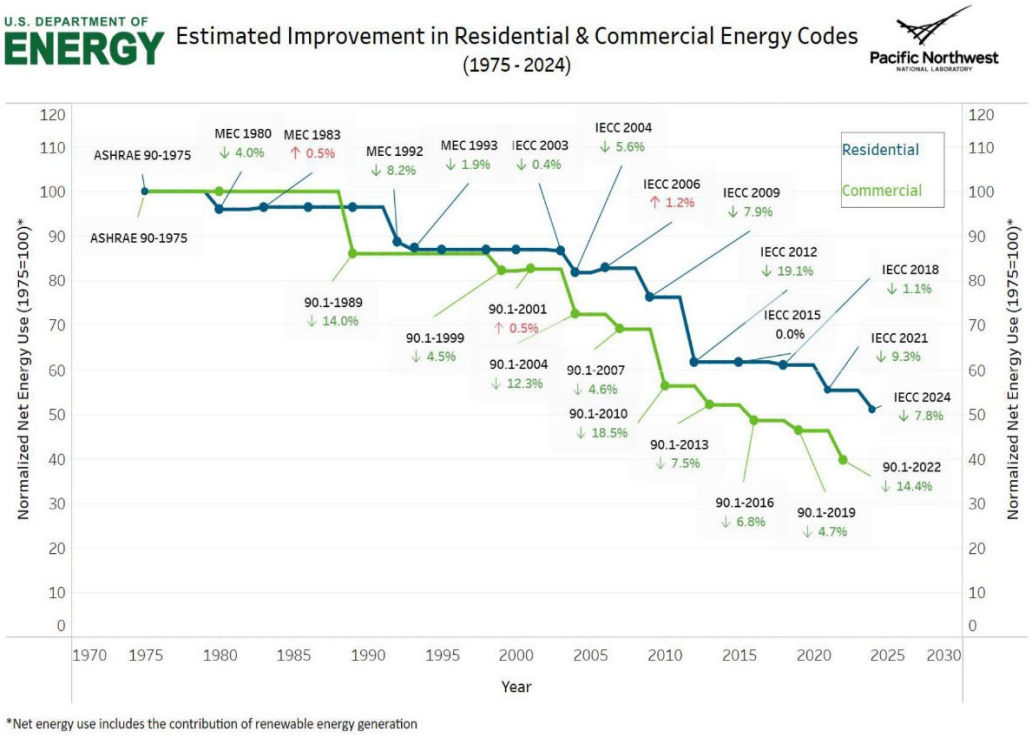
Code and Program Versions Compared		
Program	**Current Version**	**Update Notes**
BPA MFNC Measures	**IM 2024-2025 (10/24)**	**Performance Targets Unchanged**
Passive House	Phius Certification Guidebook v24.1.1_redline	New documentation but performance targets unchanged
Built Green	Multifamily Version 2024	New stringency targets
EnergyStar	Multifamily New Construction (OR-WA) v1.2, rev. 5 2025	New stringency targets
DOE ZERH	MF v2, rev. 1	New stringency targets
Earth Advantage	Multifamily v1.6, rev. 5, 2021	No change in standard
National Green Building Standard	2020 NGBS Green	Not previously evaluated

3. Methodology

The analysis relied on a standardized, quantitative methodology to ensure a consistent comparison across all programs and state codes.

- **Data Source:** The evaluation is anchored by data from the U.S. Department of Energy (DOE) Building Energy Codes Program (BECP). The historical progression of national energy code stringency is shown in Figure 1.

Figure 1: National Energy Code Stringency Improvement



- **Core Metric:** The Energy Index: The BECP framework normalizes the stringency of all state and national energy codes into a standardized Energy Index, using a 2004 code as a 1.0 baseline. This allows the performance of any code to be represented by a single, comparable number.
- **Program Evaluation:** Voluntary certification programs were evaluated by cross-referencing their stated performance targets against the Energy Index of their chosen national standard (e.g., ASHRAE 90.1). This process derived a comparable Energy Index for each voluntary program, enabling a direct comparison against the Energy Index of each state's code.
- **Analysis Scope:** The analysis relied on the published, whole-building performance targets of each program. A prescriptive, measure-by-measure comparison was beyond the scope of this evaluation. The derived Energy Index is the primary metric used for comparison.

4. Summary of Program Analysis & Findings

An overall comparison of the relative stringency of all evaluated programs and updated state codes is summarized in Figure 2. This high-level view illustrates the performance landscape before the detailed state-by-state analysis.

Figure 2: Overall Stringency Comparison Results

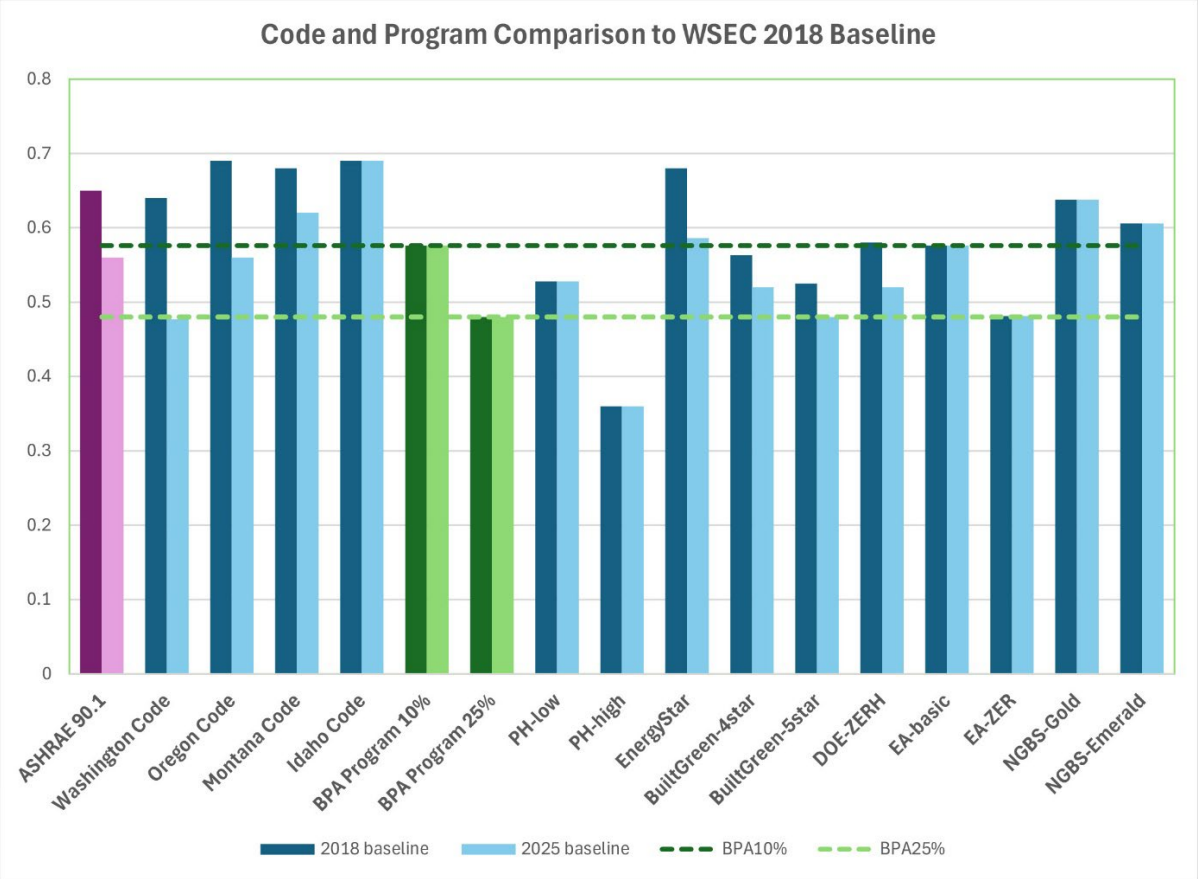


Table 2 provides a comprehensive summary of the state-by-state results, indicating where each program qualifies for BPA's performance tiers.

Table 2: Summary of Program Performance Relative to State Energy Codes and BPA Performance Tiers

Program	State							
	Washington		Oregon		Montana		Idaho	
	COM	RES	COM	RES	COM	RES	COM	RES
ENERGY STAR				○		○	○	●
DOE-ZERH				●	○	●	●	●
Built Green (75 pts)	○	○	○	●	●	●	●	●
Built Green (90 pts)	○	○	●	●	●	●	●	●
Earth Advantage Base				○		○	○	●
Earth Advantage ZER			○	●	○	●	●	●
NGBS Gold				○		○		●
NGBS Emerald				○		○	○	●
Passive House (low)				●	○	●	●	●
Passive House (high)	●	●	●	●	●	●	●	●

5. Individual Program Findings

The detailed data from the charts and tables above yield the following key findings for each program:

- **ENERGY STAR Multifamily:** Stringency is modest. Analysis confirms it meets Tier 1 only for Low-Rise buildings in Oregon and Montana and for Mid/High-Rise in Idaho. It is not stringent enough for any project type in Washington.
- **DOE Zero Energy Ready Home (ZERH):** Meets Tier 2 in Montana and Idaho and Tier 1 in Oregon but fails to meet any tier in Washington.
- **Built Green:** Effective in Washington. For other states, qualification is dependent on using the performance path to verify savings.
- **Earth Advantage:** The program's outdated prescriptive path necessitates project-specific performance verification for QPL eligibility.
- **National Green Building Standard (NGBS):** Limited alignment with BPA's energy-only goals justifies restricting its QPL eligibility to specific high-performance tiers and states.
- **Passive House (PH):** Performance uncertainty supports a conservative approach, requiring performance verification for higher tier incentives.

The following graphs present detailed state-by-state results.

Washington

Figure 3: Stringency Comparison of Washington Commercial Energy Code to Voluntary Programs

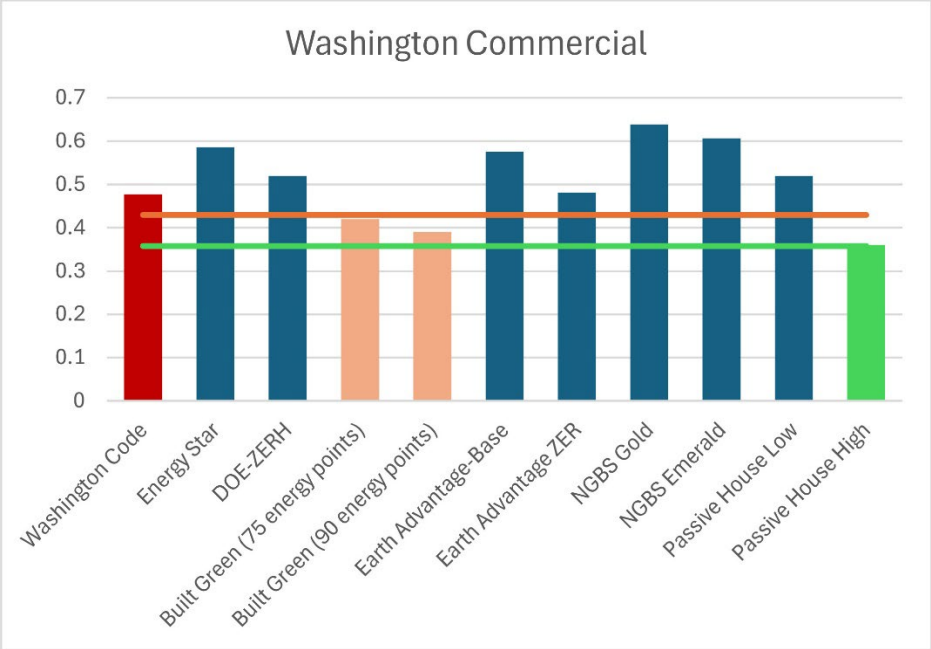
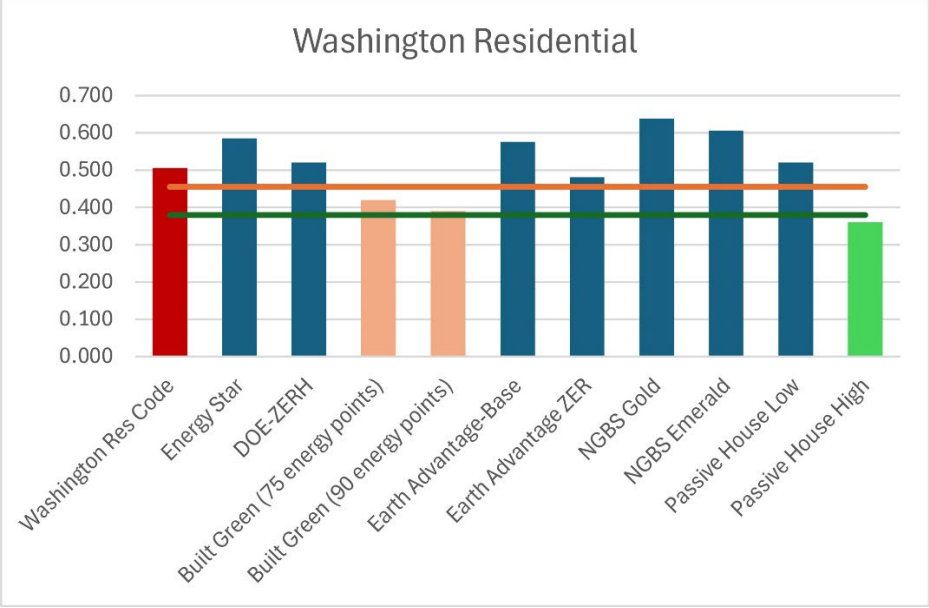


Figure 4: Stringency Comparison of Washington Residential Energy Code to Voluntary Programs



Oregon

Figure 5: Stringency Comparison of Oregon Commercial Energy Code to Voluntary Programs

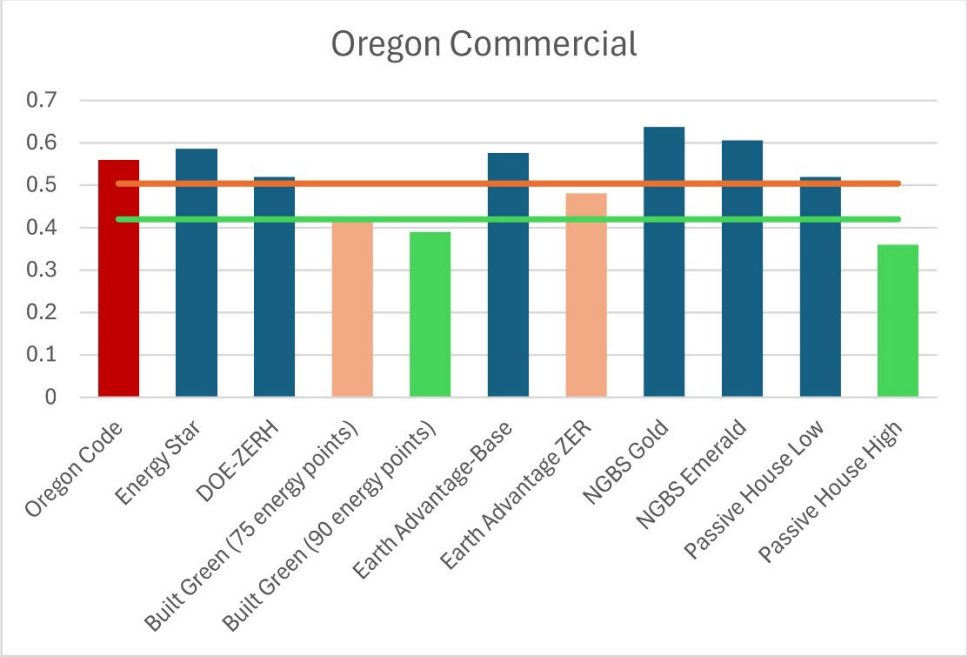
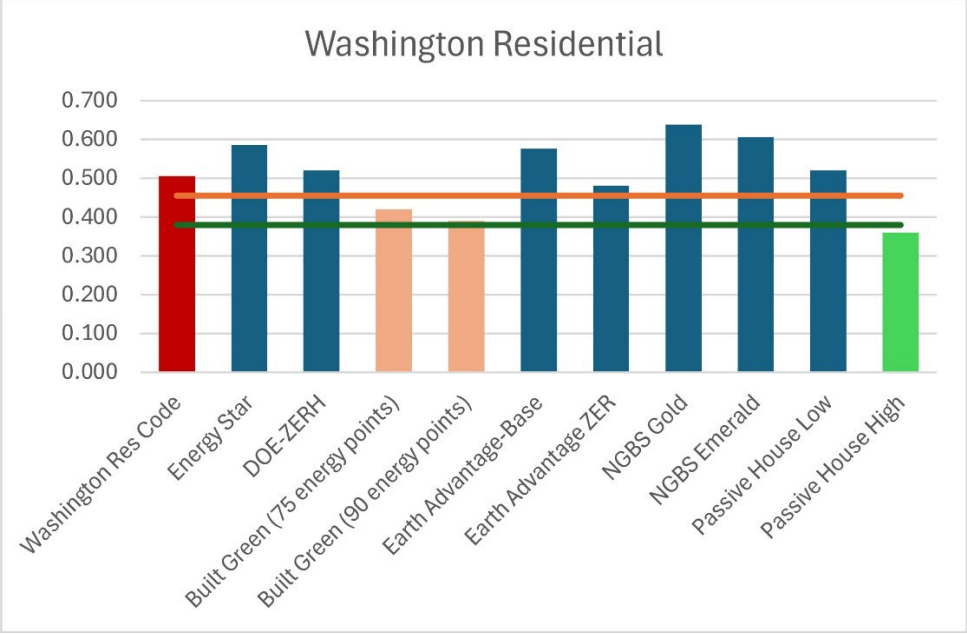


Figure 6: Stringency Comparison of Oregon Residential Energy Code to Voluntary Programs



Montana

Figure 7: Stringency Comparison of Montana Commercial Energy Code to Voluntary Programs

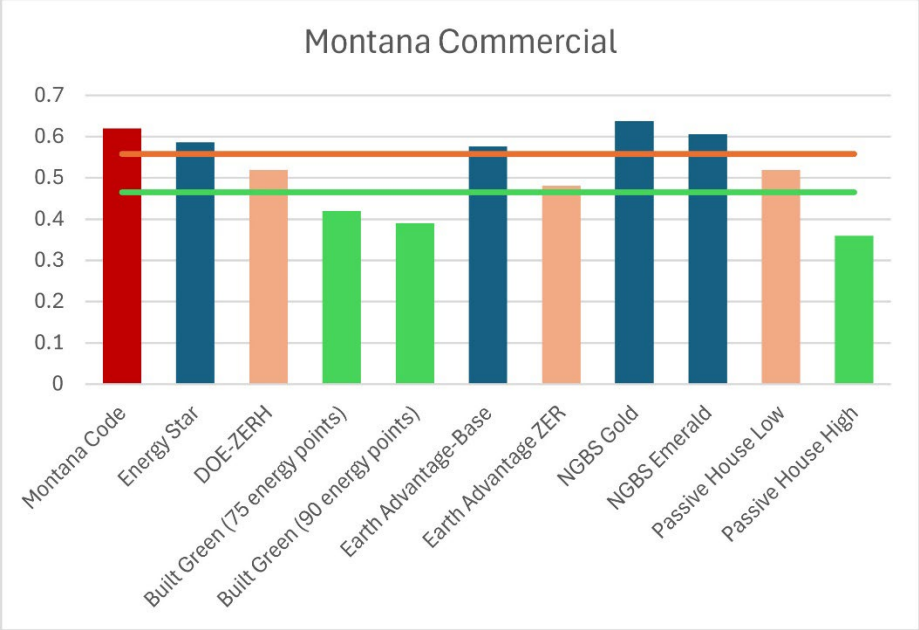
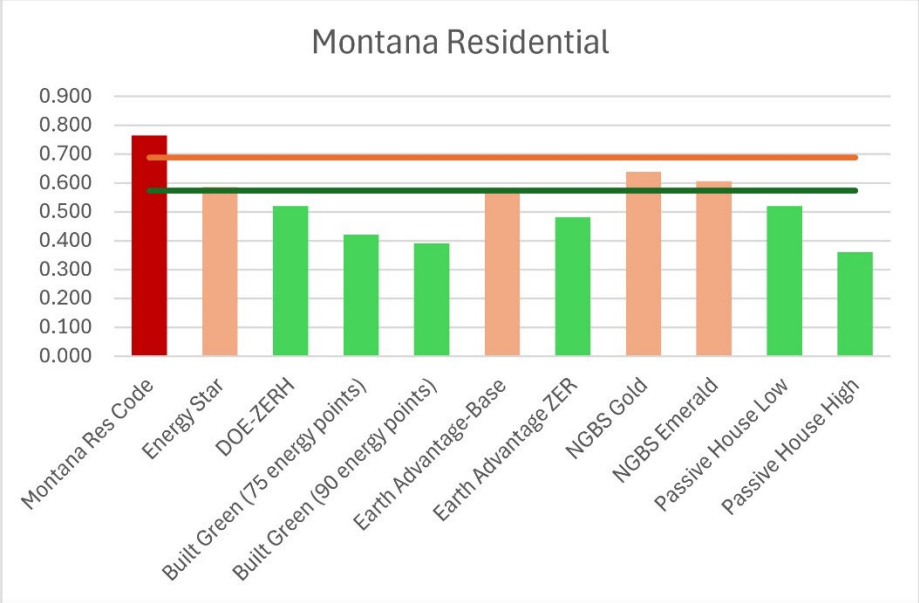


Figure 8: Stringency Comparison of Montana Residential Energy Code to Voluntary Programs



Idaho

Figure 9: Stringency Comparison of Idaho Commercial Energy Code to Voluntary Programs

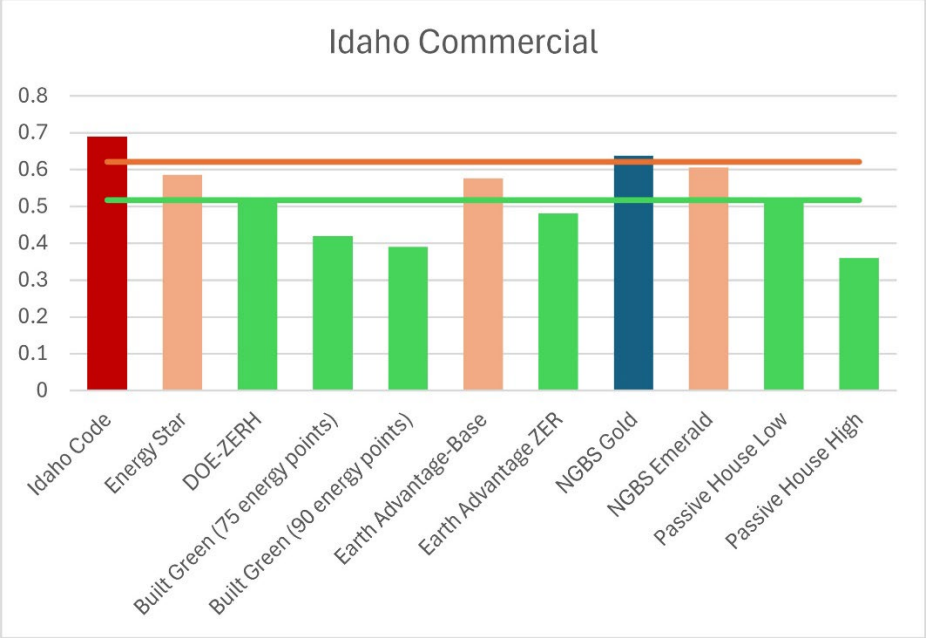
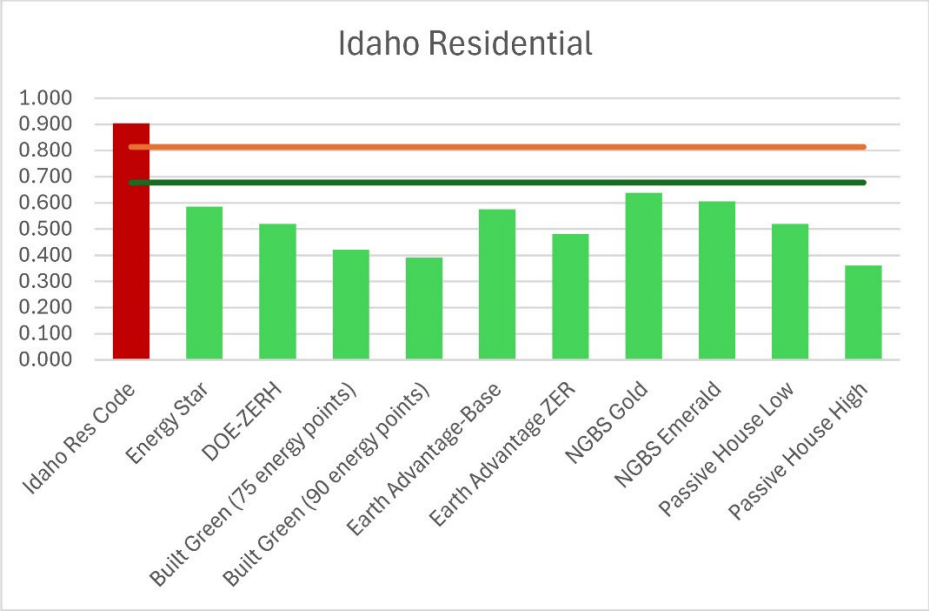


Figure 10: Stringency Comparison of Idaho Residential Energy Code to Voluntary Programs



6. Conclusion

The technical analysis detailed in this background paper confirms that due to rising state code baselines, the eligibility of voluntary certification programs for the MFNC QPL must be re-evaluated on a state-by-state and building-type basis. The findings support the specific program, state, and building-type restrictions adopted in the final FY 2026 Implementation Manual, ensuring that BPA incentives are directed only to projects that verifiably achieve the required energy savings beyond local code. The established QPL is a result of balancing this technical analysis with administrative feasibility and BPA's regional energy-saving objectives.