

ASHRAE's Technical Resources

Building Performance Standards and Beyond

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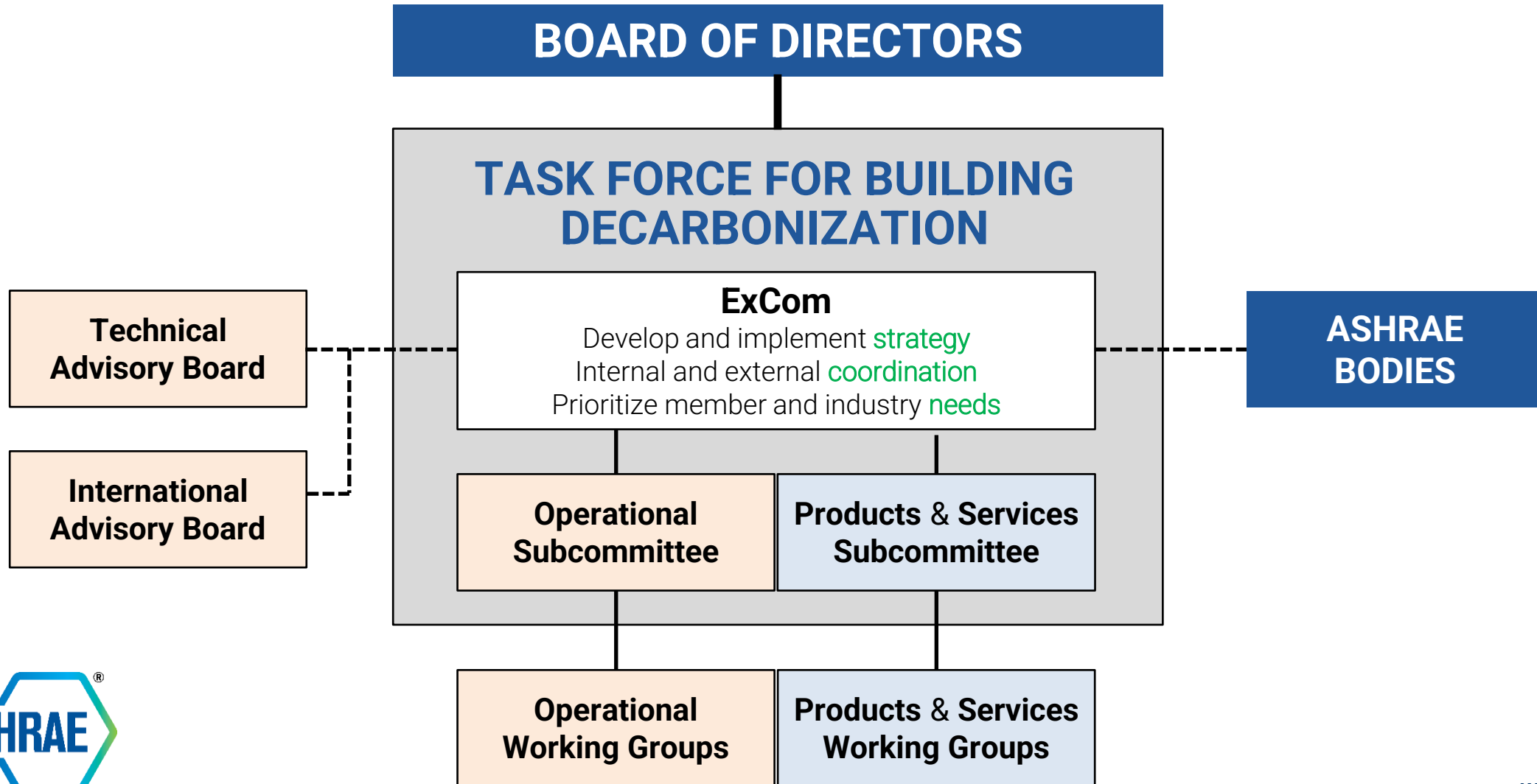
ASHRAE Task Force for Building Decarbonization

National Energy Codes Conference

July 20, 2022



ASHRAE Building Decarbonization Task Force



**TFBD
ExCom**

Kent Peterson, Chair
Don Colliver, Vice Chair
Blake Ellis
Luke Leung
Bing Liu
Clay Nesler
Stet Sanborn

**TASK FORCE FOR
BUILDING
DECARBONIZATION**
2022-23

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Beth Tomlinson, VC

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Guide WG**
David Heinzerling

**Heat Pump Application &
Operation Guide WG**
Mark Frankel

**Healthcare Decarbonization
Guide WG**
Walt Vernon

**Building Performance Standard
Technical Guide WG**
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Andrea Mengual, VC

**Grid-interactive Buildings for
Decarbonization Guide WG**
Katherine Hammack

**Building Decarbonization Whole
Life Design Guide WG**
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Web Site & Knowledge Hub WG
Carrie Brown

Training & Education WG
TBD

**Handbooks, guides,
white papers,
audit tools**

**Building codes &
standards,
equipment
standards, BPS**

**TECHNICAL
TOOLS**

**WEB SITE
KNOWLEDGE
HUB**

EDUCATION

**Policy goals,
ASHRAE positions
& commitments**

**Online/classroom,
professional
development,
certification**

**POSITION
DOCUMENT**

Who are we – BPS Working Group

ASHRAE Task Force for Building Decarbonization

ASHRAE BPS Working Group

- Bing Liu, Chair (2021-2022)
- Harry Bergmann
- Gina Bocra
- Amy Boyce
- Kim Cheslak
- Dru Crawley
- Francesca Romana d'Ambrosio
- Travis English
- Glenn Friedman
- **Adam Hinge (Chair, 2022-2023)**
- Toby Lau
- Charlie Marino
- Paul Matthew
- Travis McDaniel
- **Andrea Mengual (Vice-chair, 2022-2023)**
- Dave Ribeiro
- Emily Salzberg
- Blake Shelide
- Wayne Stoppelmoor
- Travis Walter
- Jian Zhang



What are we working on – available resources

BPS Needs Assessment

Identify the needs to develop and implement the building performance standards

BPS Overview

Overview of the key areas on BPS policy design

- ✓ Target Setting
- ✓ Implementation and Enforcement
- ✓ Equitable Application and Compliance Support

BPS Resources and Publications

Available resources and publications on policy, tools, metrics, and international efforts



What are we working on – work in progress

Moving ASHRAE Standard 100 to Building Performance Standard

- Task Force suggested to change of title, purpose and scope to reposition ASHRAE 100 to better serve the needs of building performance standards
- The revised TPS is now out for public review

BPS Technical Guide



ASHRAE's BPS Technical Guide

Purpose

Provide **technical basis** and background to policy makers, relevant climate, energy, environmental advocates, as well as inform ASHRAE membership about issues to be considered when **developing and implementing a BPS**.

Scope

- Address technical issues around BPS
- Identify and compare different BPS metrics
- Present the technical issues around each of these metrics for policy maker education.
- Present technical basis for BPS targets. Present technical comparisons of targets.
- Address normalization for different building types, space uses, and climate zones.
- Show how the targets relate to new construction codes.

Not included in the Scope: Single-family residential buildings that might be considered as a future guide document.

BPS Guide Preview

(Available Spring 2023)



Chapter 1 Introduction and background



Chapter 2 Performance metrics



Chapter 3 Performance targets



Chapter 4 Pathways to policy goal



Chapter 5 Major Considerations



Chapter 6 Analyzing policy design choices and impacts

Technical Guide Timeline

- July 2022: 80% draft under the working group review
- October 2022: 90% draft for the public review
- November 2022: 100% final draft for publication design and layout
- January 2023: Final guide posted for **free download**



Alignment with Energy Codes

- ❑ **Policy Goals:** both BPS and codes will serve the same jurisdiction and require coordination between their objectives to ensure they are both contributing to progressing the jurisdiction's goals.
- ❑ **Metrics:** aligning the metrics used in a jurisdiction's BPS and existing codes can help minimize confusion for building industry stakeholders and prevent competing priorities from detracting from the BPS goal.
- ❑ **Performance:** jurisdictions should assess the gaps and limitations of existing energy codes in terms of the ability of new buildings to comply with the BPS and evaluate potential updates that could better reflect the requirements of the proposed standard.
- ❑ **Reporting and Compliance Requirements:** identifying ways to transition a building's information from new construction code compliance to BPS compliance could help reduce the reporting burden for building owners.



Standards to Address Decarbonization

Standards	Duration	Start
Standard 100 Code-intended Building Performance Standards	18 months	Jul-22
Standard 90.1 Informative Code-intended Language	18 months	Jul-22
Standard 90.2 Code-intended Language	18 months	Jul-22
Standard 211 Commercial Building Energy Audits	12-18 months	Sep-22
ASHRAE Whole Life Carbon Standard (240P)	24 months	Jul-22
Expediting other carbon-related standards		





We'd like to hear from you!

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<https://www.energycodes.gov/bps/bps-technical-assistance>