



UNITED STATES
CLIMATE ALLIANCE

USCA Building Decarbonization Roadmap

August 3, 2021

Mitigation Work Group Buildings Meeting

U.S. Climate Alliance

Bipartisan coalition of governors who work together to achieve goals of Paris Agreement to keep temperature increases below 1.5 degrees Celsius:



- Collectively reduce GHGs by at least 26-28% by 2025; 50-52% by 2030; and achieve overall net-zero GHG no later than 2050
- Accelerate policies to reduce GHG pollution, build resilience, and promote clean energy deployment
- Center equity, environmental justice, and just economic transition
- Track and report progress to global community

- Speak with a Unified Voice
- Multi-State Strategies
- Inspire Action at Home and Abroad
- Support Implementation of State Climate Change Policy Priorities



To drive down the emission of these harmful pollutants, **Canada and Mexico accept the SLCP Challenge** issued by the U.S. Climate Alliance, and we each agree to develop and implement ambitious SLCP strategies.





Power & Carbon
Pricing



Transportation &
Mobility



Natural & Working
Lands



Buildings



International
Partnerships



DDP & GHG
Inventories



Industry



HFCs



Methane



Equity & Just
Transition

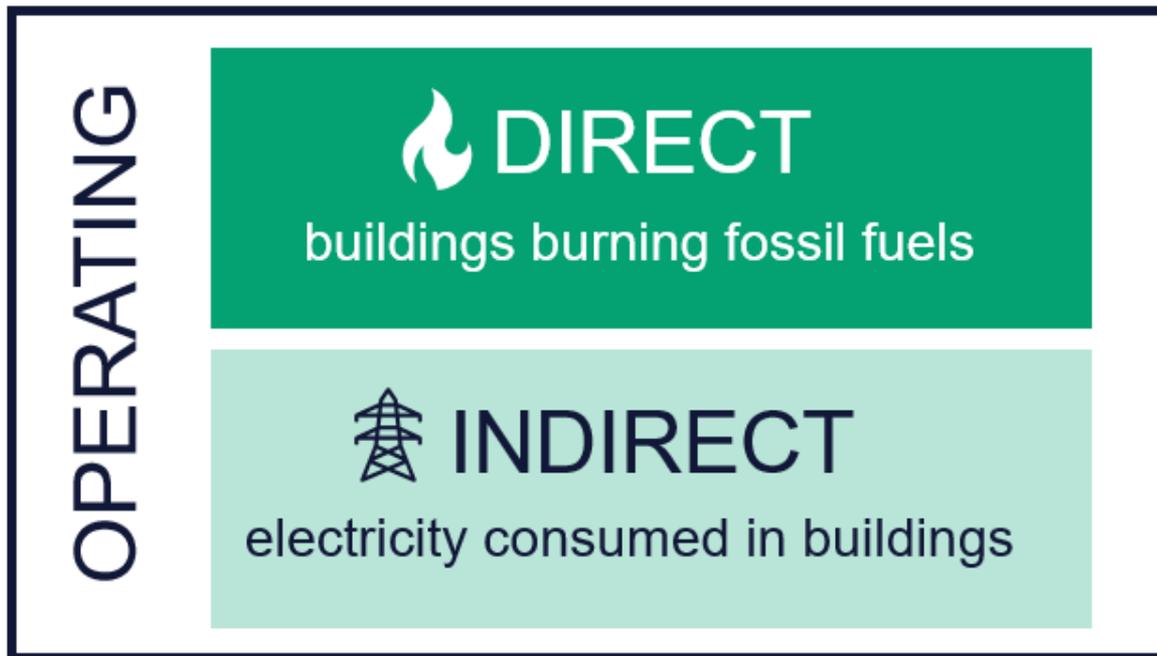


Finance



Resilience

Building Sector Emissions

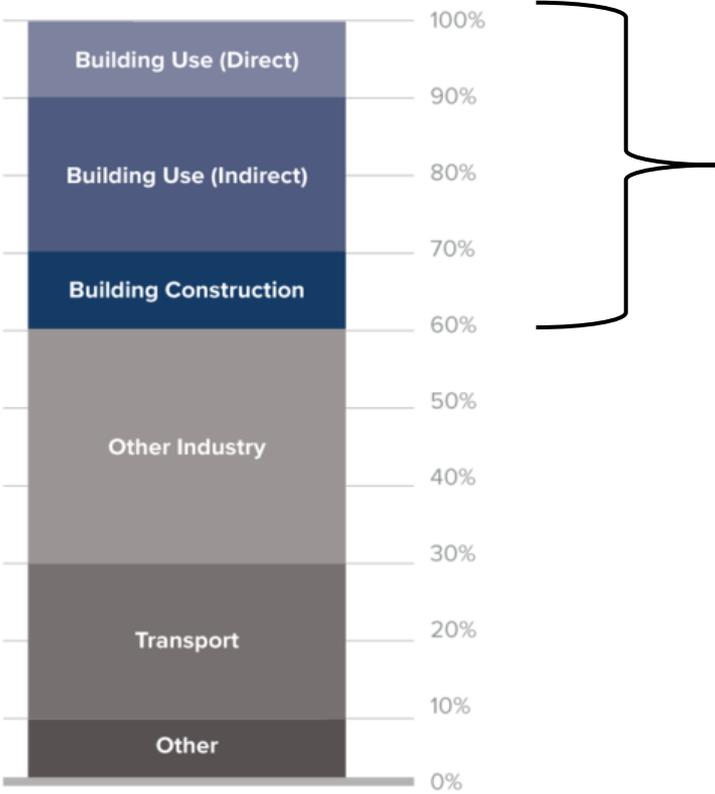


EMBODIED

life cycle
emissions
associated
with building
materials



Global CO₂ Emissions by Source



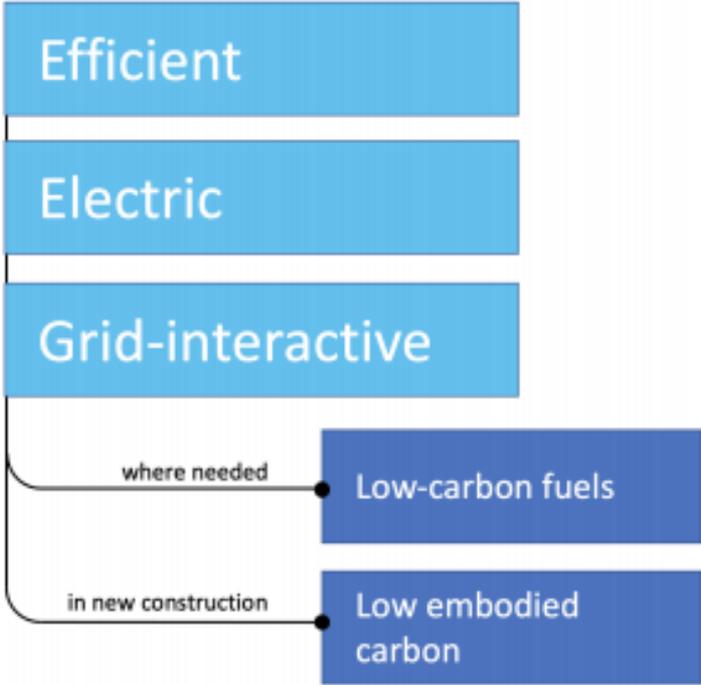
Building construction + operations account for 40% of global CO₂ emissions

Building Decarbonization Roadmap



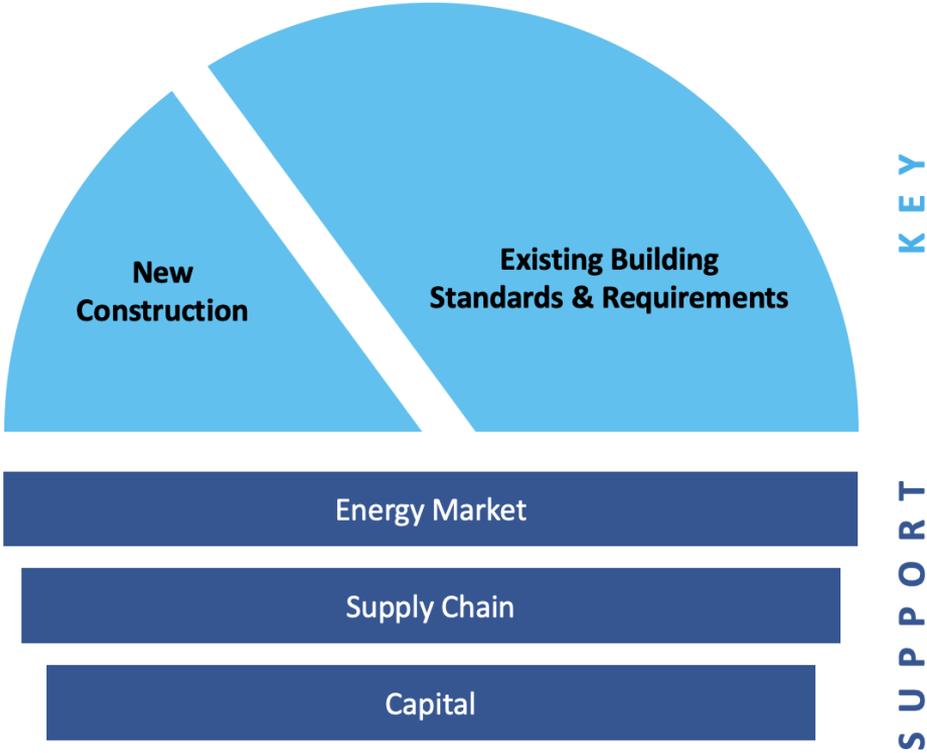
- Produced for USCA by RMI through collaboration with staff from various state offices as well as industry experts
- A tool designed to summarize highest-impact actions that states can take to decarbonize buildings
- Does not represent a policy plan for USCA or any specific USCA states

Key Principles of Building Decarbonization



BUILDING TRANSFORMATION PATH

Strategies for Building Decarbonization



Using the Roadmap

- Frame the policy strategy
- Examples from other states

- **Key Considerations**

 - Energy and Emissions Impacts

 - Cost and Economic Considerations

 - Equity Considerations

 - Cross-Sectoral Considerations

 - State Authority

 - Potential Challenges

 - Key Partners

 - Policy Variants

 - State Context Considerations

 - Resources

Building
Transformation
Menu:
Key Strategies

Foster Zero-Carbon
New Construction

New Building Requirements

Gas Supply and Infrastructure Planning

Establish Building Standards
and Equipment Requirements

Building Performance Standards

Appliance Efficiency Standards

Beneficial Electrification of Equipment

K E Y

Building Transformation Menu: Support Strategies

Transform the Energy Market	Strengthen the Workforce and Supply Chain	Expand Access to Capital
Regulatory and Policy Landscape Alignment	Supply-Side Incentives	Reduce Costs
Demand Flexibility and Utility Rate Design	Workforce Development	Provide Financing
Climate-Aligned EERS	Low-Embodied-Carbon Materials and Low-GWP Refrigerants	
Targets for Technology Acceleration	Advanced Building Construction	
Consumer Incentives		
Performance Benchmarking, Disclosure, and Transparency		
Consumer Education		
Leading by Example		

SUPPORT

Expected Impact of Pathways

Institutional				
Program				
Operational				
Planning				
Commitment				

Key:

- Transformative
- High Impact
- Medium Impact
- Low Impact
- Unlikely Impact

Questions or Clarifications?

Roadmap can be found at:
<http://www.usclimatealliance.org/publications-1>

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