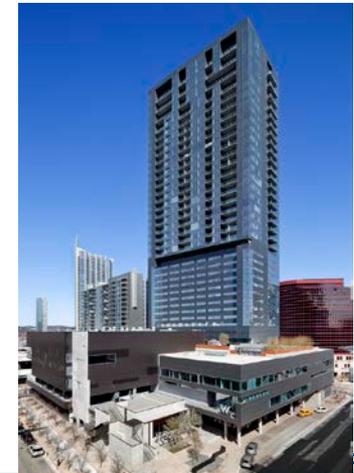




City of Austin
Energy Code

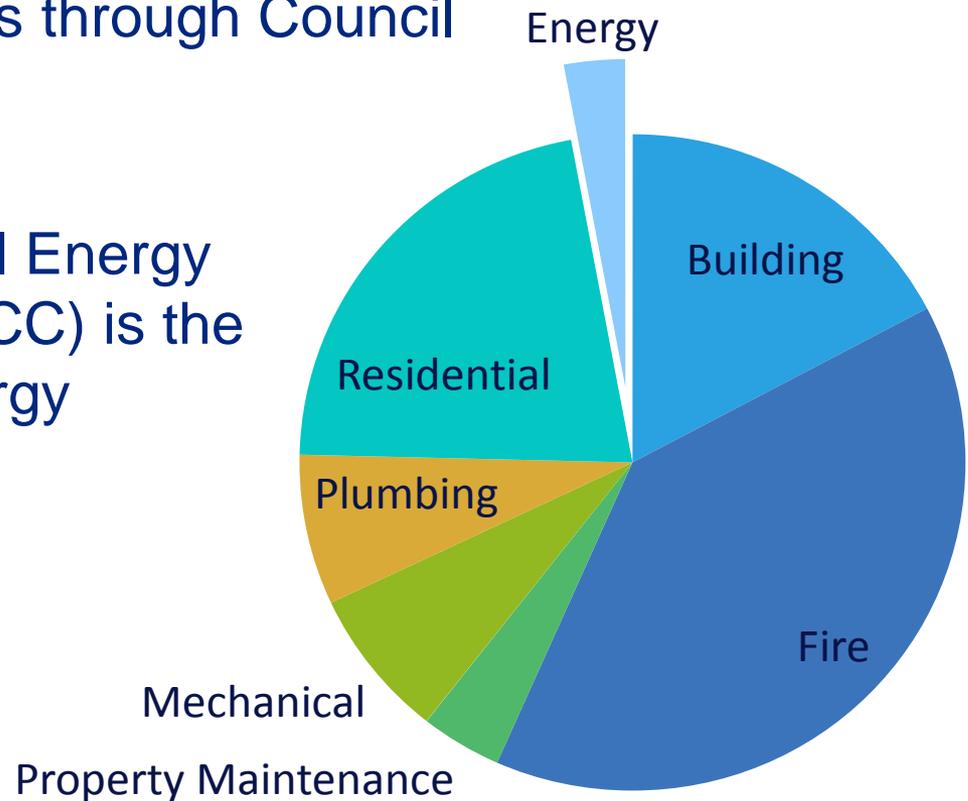
**Austin Energy Utility Oversight
Committee**

May 26, 2016



Regulations

- Development Services Department (DSD) enforces code, takes new codes and associated amendments through Council approval
- For Austin, International Energy Conservation Code (IECC) is the governing code for energy





IECC revised every three years

- Austin Energy drafts local amendments to City Energy Code, DSD takes to Council
 - 2015 IECC with local amendments will be new City code
 - Local amendments target 10 – 15% improvement in efficiency over State code, target lower electricity demand (capacity)
 - Codes divided by Residential & Commercial
 - Extensive stakeholder input
- Seeking Council approval in June
 - Allow 60-90 days notification for stakeholders before enactment
 - Residential to take effect in September, Commercial in November



Residential Energy Code/Amendments: Adopt 2015 IECC

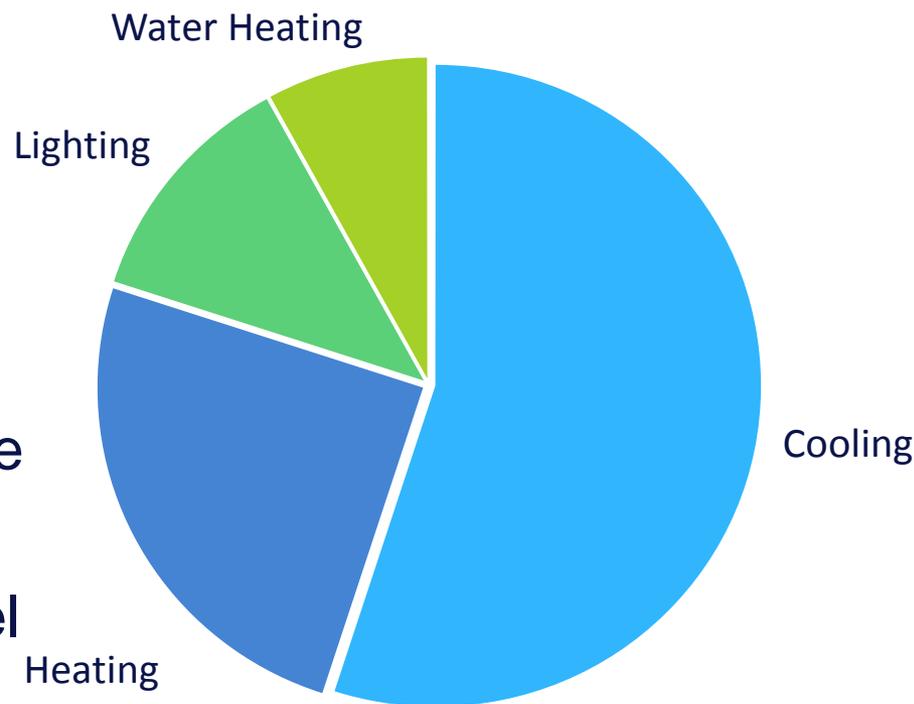
Applies to **new** single family and multifamily - four stories or less

Costs/benefits:

For new affordable 3 bedroom 1,200 sq. ft. home:

- Added construction costs of approximately \$350
- \$37 - \$72 reduction in annual utility bills depending on fuel type
- Reduction in peak demand
 - 0.4 kW (20%) for a mixed fuel home
 - 0.5 kW (15%) for an all electric home

Local Amendments



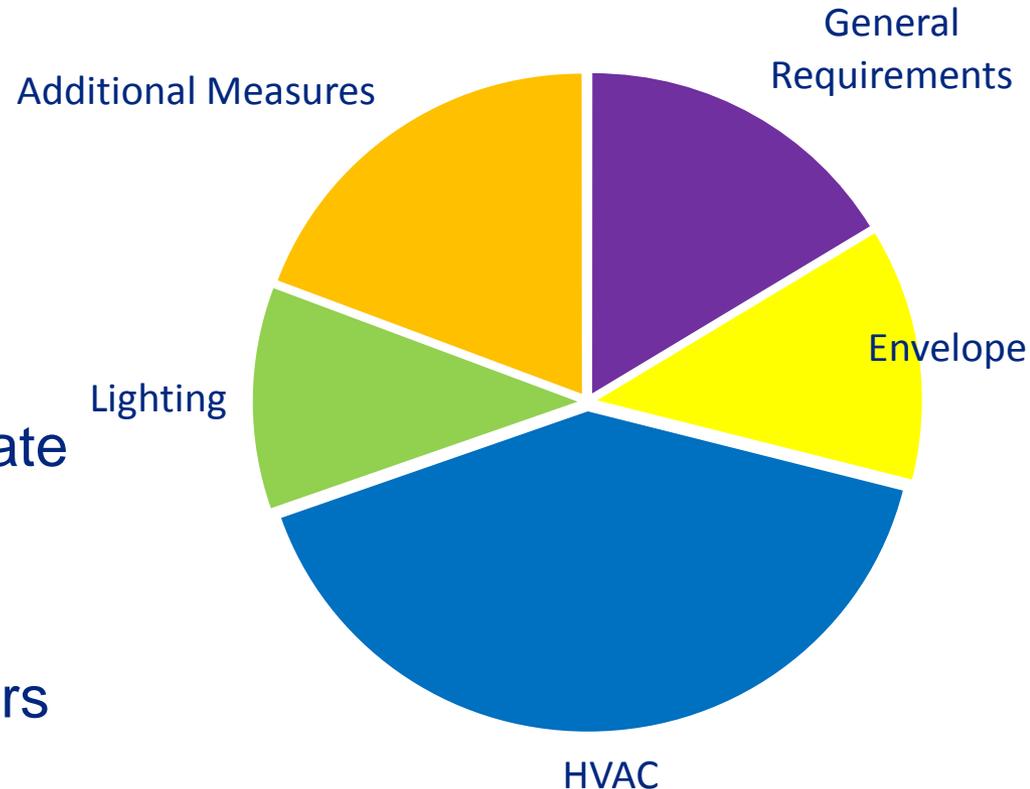


Commercial Energy Code/Amendments Adopt 2015 IECC

Option to use 2013 ASHRAE 90.1 (all IECC or ASHRAE, cannot mix)

Modeled paybacks* range from 0 – 7 years

- Small Office - immediate
- Large Office - 6.8 years
- Stand Alone Retail - immediate
- Primary School - 5 years
- Small Hotel - 3.9 years
- Mid-rise Apartment - 1.9 years



**Source: Pacific Northwest National Laboratory Report: National Cost Effectiveness of American National Standards Institute/American Society of Heating, Refrigeration and Air-Conditioning Engineers/Illuminating Engineer Society Standard 90.1-2013*





Proposed Solar Ready Amendment

Proposed by Resource Management Commission

- Goal - to reserve designated “solar ready” zone in design phase for new construction
- Sets aside roof space to accommodate solar
 - Both residential and commercial
 - Orientation of building/rooftops to catch better sunlight
 - Clustering of air conditioning, vents and other rooftop equipment
- Proceed on parallel path to City Energy Code
 - Will be an amendment to the 2015 City Energy Code
- Getting stakeholder feedback now
- Likely to take effect January 1, 2017





New Construction Solar Ready (Prospective)

Residential

- Basis for code is 2015 IECC Appendix
- 160-240 SF of clear roof area with good solar orientation
- Requires planning of plumbing vents, attic vents, other obstructions
- Promotes simple (affordable) roof designs
- Prewiring is not required

Exceptions:

- Shading
- Homes < 600 SF

Commercial

- Continuous, defined rooftop areas for solar arrays
- Listing of roof structural design loads
- Wall space for inverters and metering equipment
- Reserved space in the electrical distribution system

Exceptions:

- Insufficient rooftop area or roof used for parking or heliport
- Small additions
- Roofs in Downtown Network
- Shading





Summary

City Energy Code to go into effect at same time as State Code

- Austin Energy drafts amendments, vets with stakeholders
- DSD takes all building codes to Council
- Need to make June Council agenda to meet State deadline(s)

“Solar Ready” being proposed by RMC

- On parallel path with rest of energy code
- Will likely be enacted January 1, 2017

