

# IECC – what's coming next

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Science Fiction or the Future?

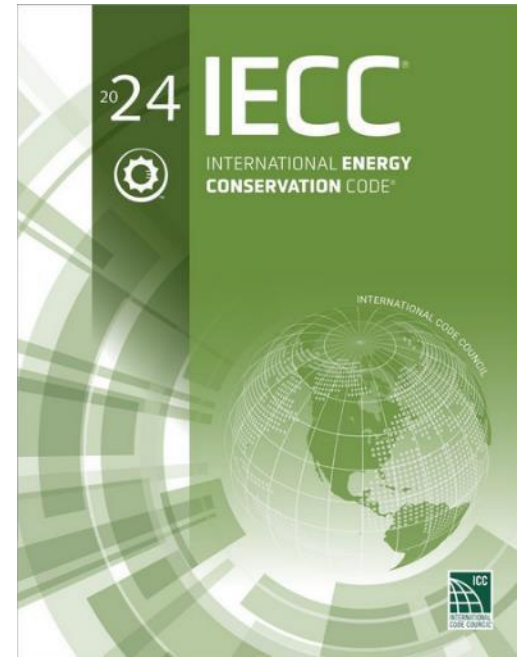
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SOUTHWEST ENERGY EFFICIENCY PROJECT

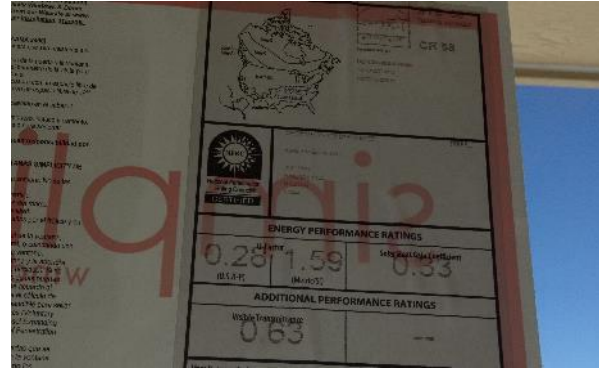
# 2024 IECC – What's Coming Next

- Final stages of development
- Estimated publication in the first quarter of 2024
- (1) Pathways to zero-energy buildings
- (2) Distributed energy resources moving into the code



# 2024 IECC – What's Coming Next

- Intent of the code
  - Provides options to achieve zero energy buildings and through glide paths by 2030
- Extensive building industry participation for past two years
- Continuation of typical energy code upgrades
  - i.e. lower ACH in hot & cold climates



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# 2024 IECC – What's Coming Next



- Increases in residential IECC appendices to support state and local adoption with zero energy pathways
- Zero Net Energy (RC), Electric Energy Storage (RD), All-electric buildings (RE), Stretch code (RG), Carbon rating and reporting (RH), On-site Renewable Energy (RI)



# 2024 IECC – What's Coming Next

- **Electric Readiness – DHW, Clothes and Cooking**
  - Cooking – Dedicated branch circuit 240 volts, 40-amp
  - Clothes – Dedicated branch circuit 240 volts, 30-amp
  - Water – Dedicated branch circuit, 240 volts, 30-amp or 120 volt, 20-amp
- EV Infrastructure – one- and two-family and townhouses provided with one EV space per dwelling unit (40% R-2)



*Toptenreviews.com*



*Rheem.com*



*Sustainable energy action.org*



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# 2024 IECC – What's Coming Next



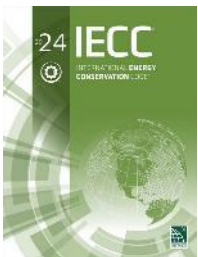
- EV infrastructure moves into many building types from theaters to banks, churches to hospitals, and retail stores to mid- and high-rise residential
- Renewable energy systems capable and off-site renewable energy
- Energy storage ready for future storage



# 2024 IECC – What's Coming Next



- Increases in commercial IECC appendices to support state and local adoption with zero energy pathways
- In addition to the Zero Energy (CC) appendix, there is a 2030 Glide Path (CD), an HVAC stretch (CE), All-electric buildings (CG) and an Electric-Ready appendix (CH)





# 2024 IECC – What’s Coming Next

SECTION	CLIMATE ZONE																
	0A & 1A	0B & 1B	2A	2B	3A	3B	3C	4A	4B	4C	5A	5B	5C	6A	6B	7	8
C406.2.1: 5% heating efficiency improvement	NA	NA	NA	NA	1	NA	NA	1	NA	1	1	1	1	2	1	2	2
C406.2.2: 5% cooling efficiency improvement	3	3	2	2	1	1	1	1	1	NA	1	1	NA	1	1	1	NA
C406.2.3: 10% heating efficiency improvement	NA	NA	NA	NA	1	NA	NA	1	1	1	2	2	1	3	2	3	4
C406.2.4: 10% cooling efficiency improvement	5	5	4	3	2	3	1	2	2	1	1	1	1	1	1	1	1
C406.3: Reduced lighting power	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
C406.4: Enhanced digital lighting controls	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C406.5: On-site renewable energy	8	8	8	8	7	8	8	7	7	7	7	7	7	7	7	7	7
C406.6: Dedicated outdoor air system	3	4	3	3	4	2	NA	6	3	4	8	5	5	10	7	11	12
C406.7.2: Recovered or renewable water heating	10	9	11	10	13	12	15	14	14	15	14	14	16	14	15	15	15
C406.7.3: Efficient fossil fuel water heater	5	5	6	6	8	7	8	8	8	9	9	9	10	10	9	10	11
C406.7.4: Heat pump water heater	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
C406.8: Enhanced envelope performance	3	6	3	5	4	4	1	4	3	3	4	5	3	5	4	6	6
C406.9: Reduced air infiltration	6	5	3	11	6	4	NA	7	3	3	9	5	1	13	6	8	3
C406.10: Energy monitoring	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
C406.11: Fault detection and diagnostics system	1	1	1	1	1	1	NA	1	1	NA	1	1	NA	1	1	1	1

- Additional efficiency requirements expand
- R408 is now based on credit points with credit for a diverse set of systems, applications, and measurements
- C406 expands additional efficiency options and credits for occupancy types and climate zones

