



Buildings

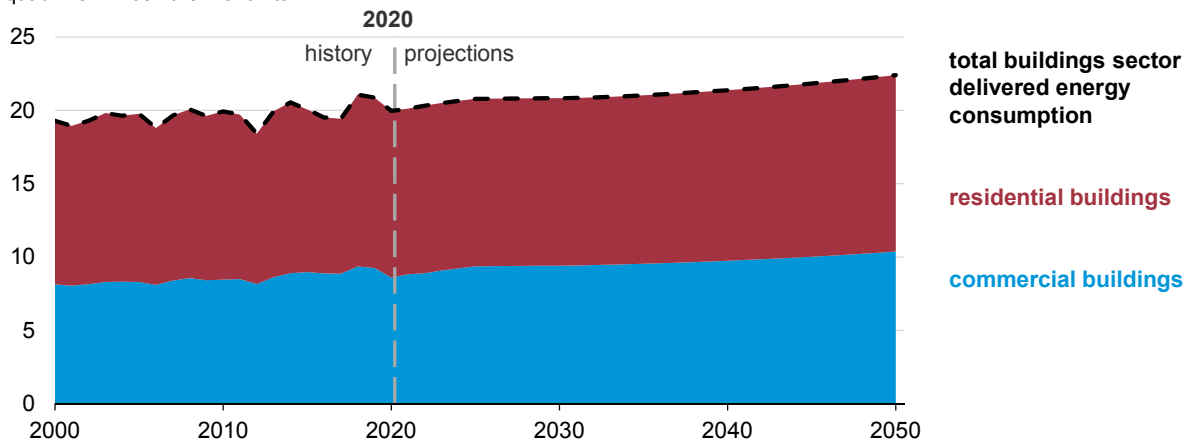


Buildings sector delivered energy consumption

Buildings delivered energy consumption

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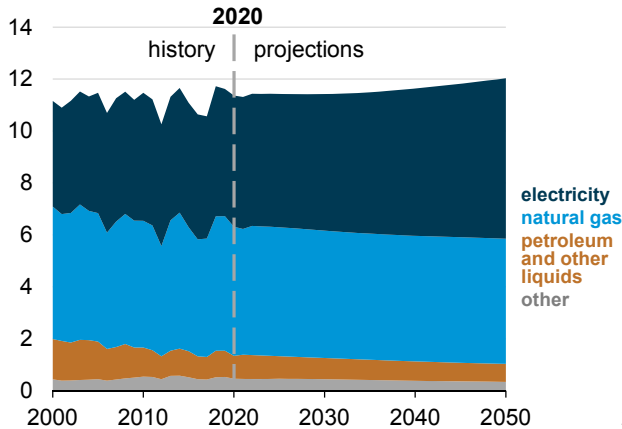
quadrillion British thermal units



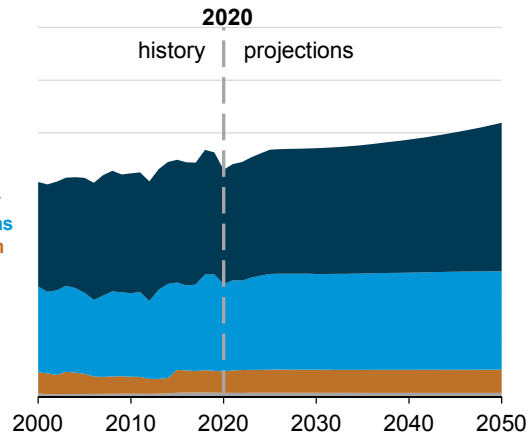


Residential and commercial buildings energy consumption

Residential sector delivered energy consumption
AEO2021 Reference case
quadrillion British thermal units



Commercial sector delivered energy consumption
AEO2021 Reference case
quadrillion British thermal units



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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3



Change in population and residential housing stocks

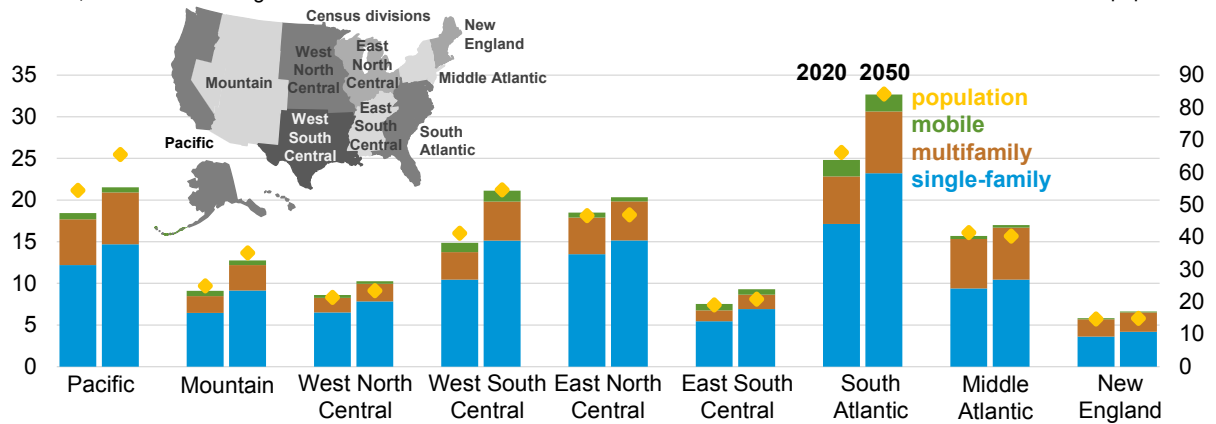
Residential housing unit and population changes by region and type in 2020 and 2050

AEO2021 Reference case

millions, residential housing units

◆ population

millions, U.S. population



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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4

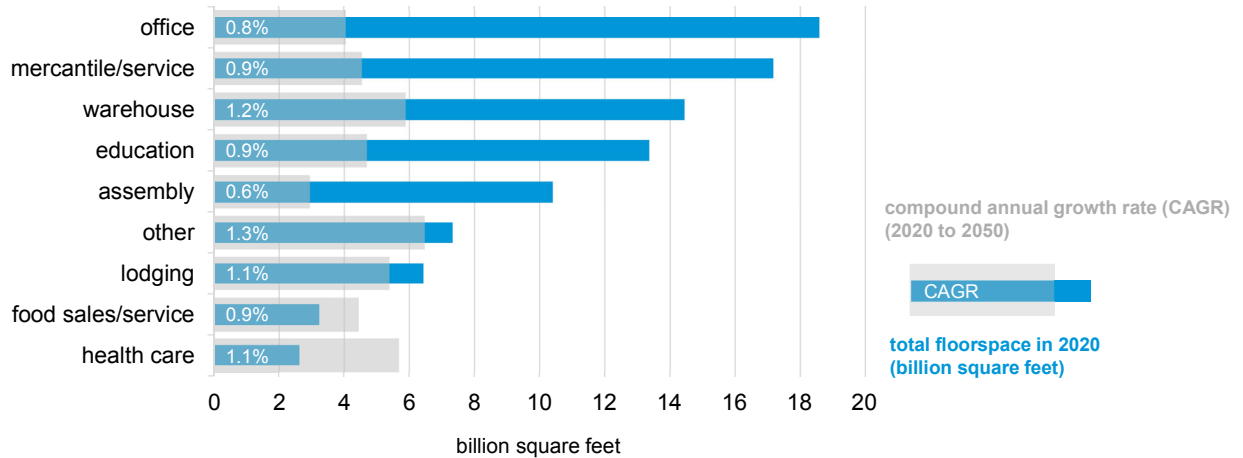


Commercial buildings floorspace growth

Commercial floorspace in 2020 and growth in floorspace from 2020 to 2050

AEO2021 Reference case

percentage growth



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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5

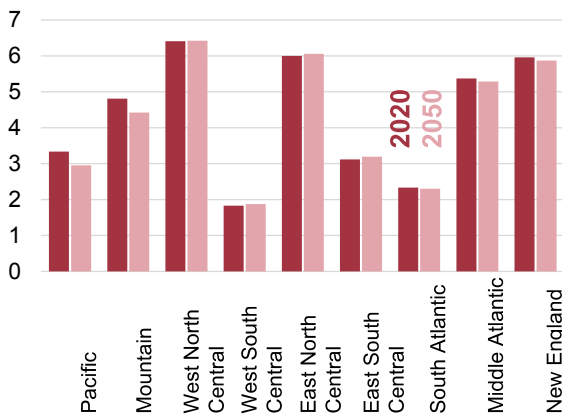


Population-weighted heating and cooling degree days

Population-weighted heating degree days by census division

AEO2021 Reference case

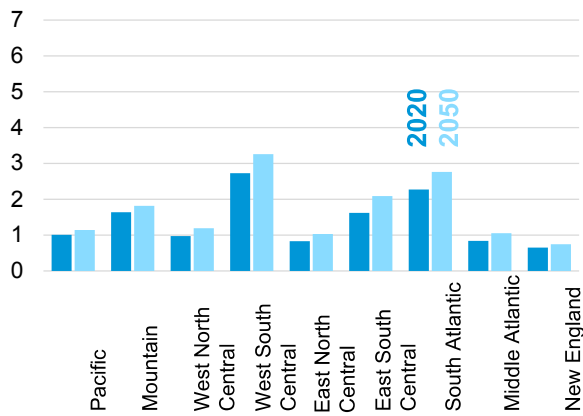
thousand degree days



Population-weighted cooling degree days by census division

AEO2021 Reference case

thousand degree days



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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6

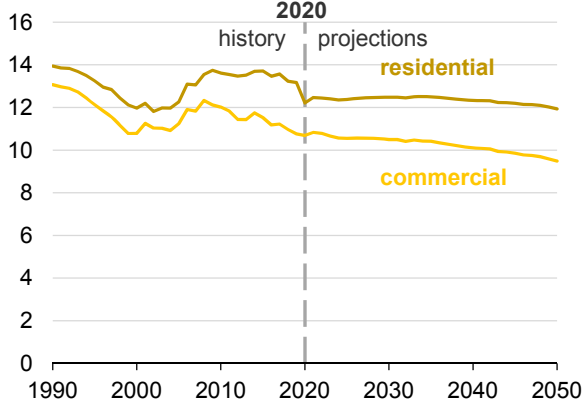


Residential and commercial electricity and natural gas prices

Electricity prices in the residential and commercial sectors

AEO2021 Reference case

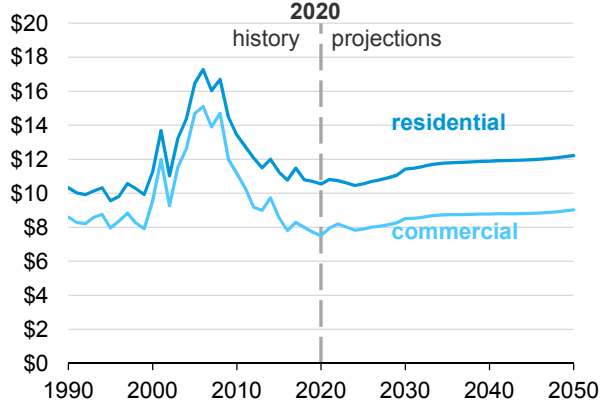
2020 cents per kilowatthour



Natural gas prices in the residential and commercial sectors

AEO2021 Reference case

2020 dollars per thousand cubic feet



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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7

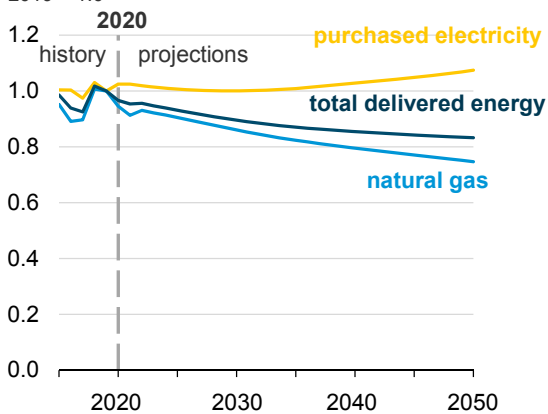


Residential and commercial energy intensity

Indexed residential delivered energy intensity

AEO2021 Reference case

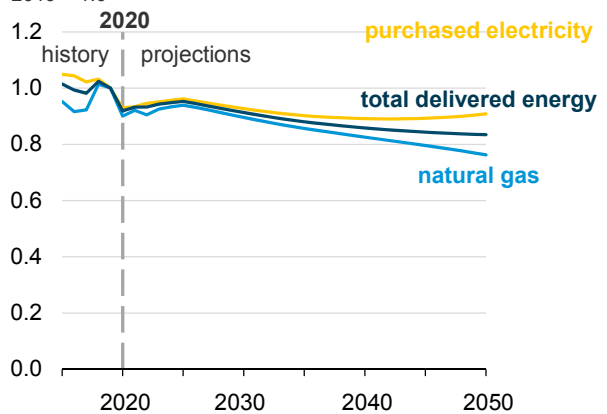
indexed annual energy use per household
2019 = 1.0



Indexed commercial delivered energy intensity

AEO2021 Reference case

indexed annual energy use per square foot
2019 = 1.0



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

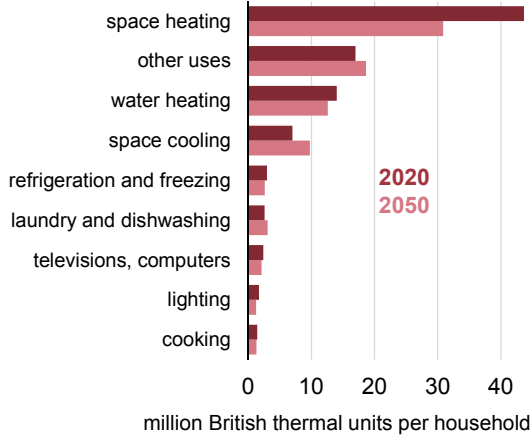
www.eia.gov/aeo

8

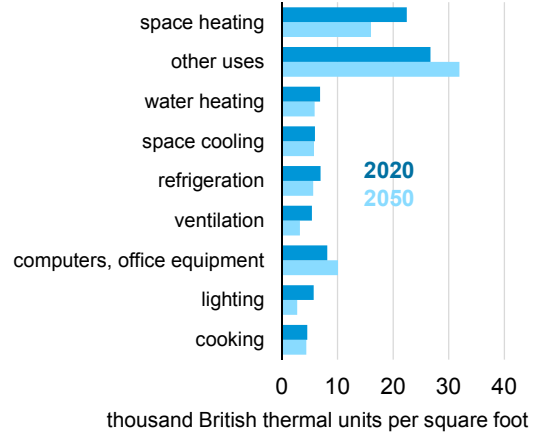


Residential and commercial overall energy intensity by end use

Residential energy intensity by end use
AEO2021 Reference case



Commercial energy intensity by end use
AEO2021 Reference case



Note: Intensities reflect all energy sources consumed, including both purchased electricity and electricity produced onsite for own use.



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

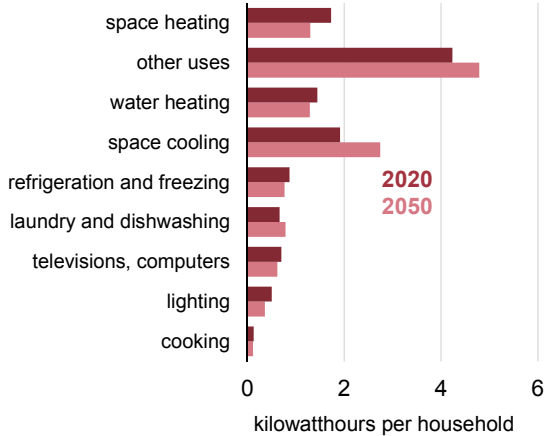
www.eia.gov/ao

9

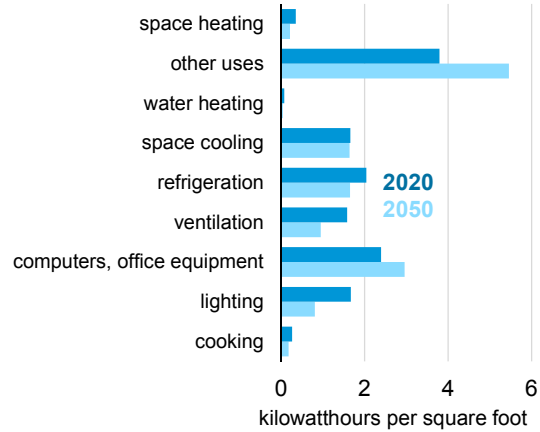


Residential and commercial electricity intensity by end use

Residential electricity intensity by end use
AEO2021 Reference case



Commercial electricity intensity by end use
AEO2021 Reference case



Note: Intensities reflect both purchased electricity and electricity produced onsite for own use.



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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10

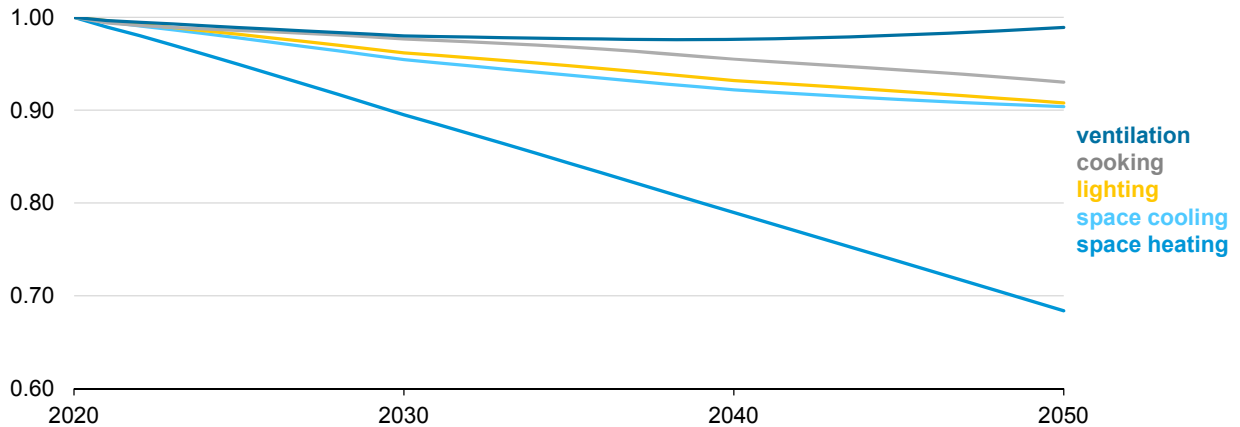


Commercial building end-use intensities

Indexed commercial service provided per square foot of floorspace

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2020 = 1.0



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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11

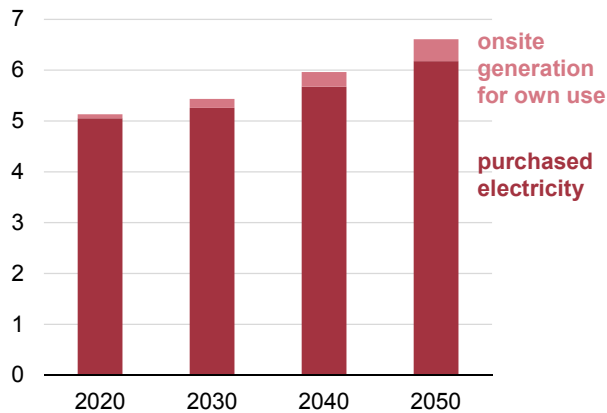


Residential and commercial onsite generation versus purchased electricity

Residential sector electricity consumption

AEO2021 Reference case

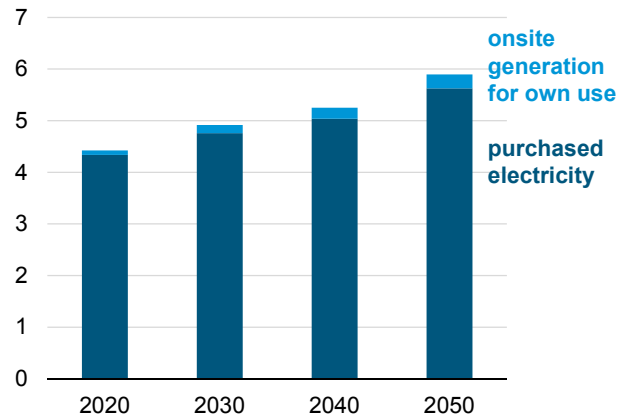
quadrillion British thermal units



Commercial sector electricity consumption

AEO2021 Reference case

quadrillion British thermal units



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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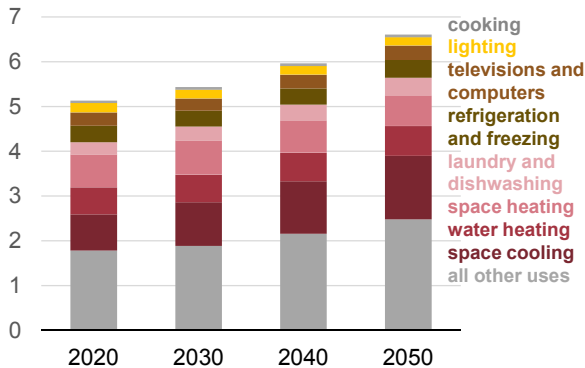
12



Residential consumption of onsite generation versus purchased electricity

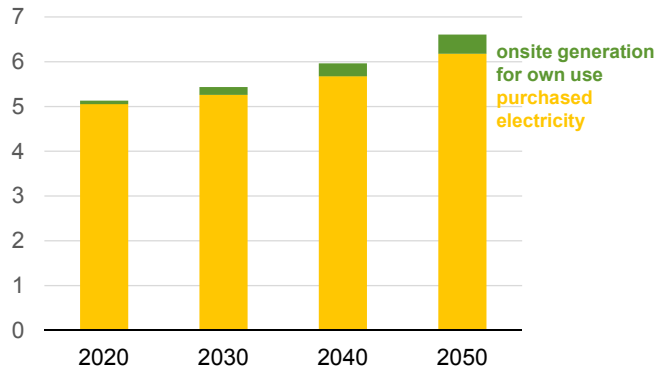
Electricity consumed to meet residential end-use demand

AEO2021 Reference case
quadrillion British thermal units



Onsite generation and purchased electricity consumed to meet residential end-use demand

AEO2021 Reference case
quadrillion British thermal units



Note: Onsite generation projections are not attributed to any particular end use.



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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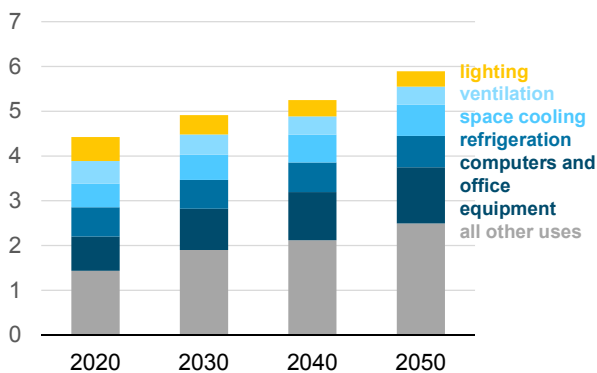
13



Commercial consumption of onsite generation versus purchased electricity

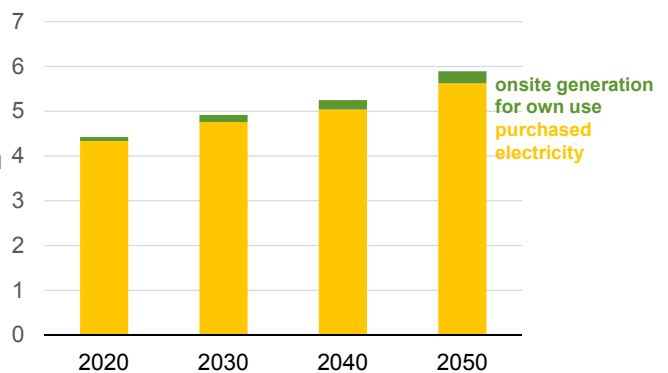
Electricity consumed to meet commercial end-use demand

AEO2021 Reference case
quadrillion British thermal units



Onsite generation and purchased electricity consumed to meet commercial end-use demand

AEO2021 Reference case
quadrillion British thermal units



Note: Onsite generation projections are not attributed to any particular end use.



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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14

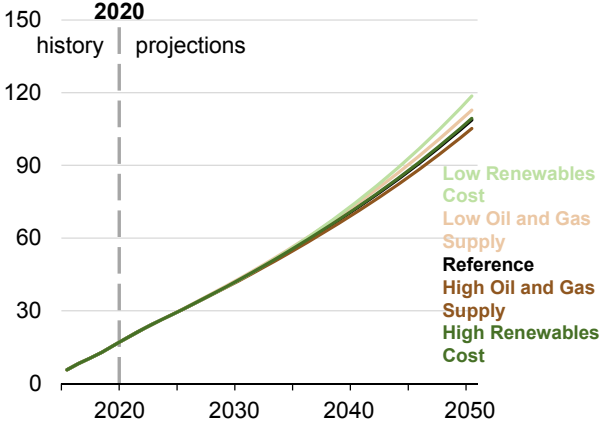


Residential and commercial solar photovoltaic generation capacity

Residential solar distributed generation capacity

AEO2021 Reference case

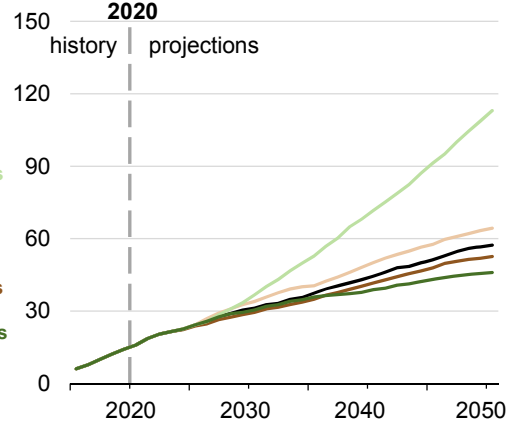
gigawatts direct current



Commercial solar distributed generation capacity

AEO2021 Reference case

gigawatts direct current



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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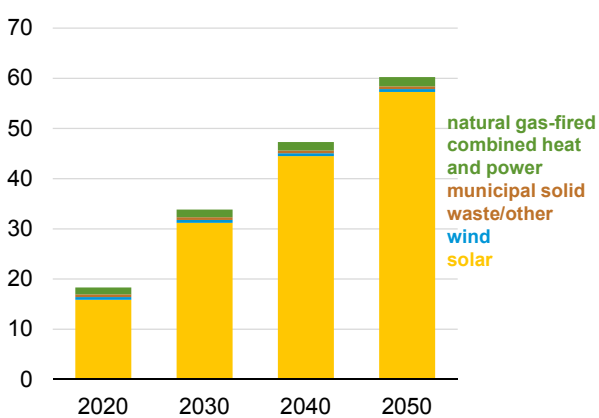


Commercial distributed generation capacity

Commercial distributed generation capacity

AEO2021 Reference case

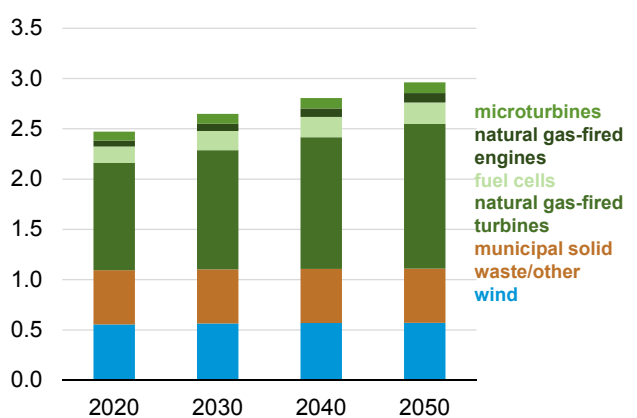
gigawatts direct current



Commercial non-solar distributed generation capacity

AEO2021 Reference case

gigawatts direct current



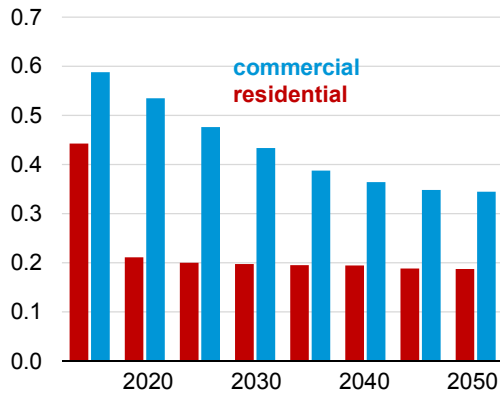
Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

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Residential and commercial lighting consumption and lighting shares

Electricity consumed to meet lighting demand
AEO2021 Reference case
quadrillion British thermal units



Note: Includes both purchased electricity and onsite generation for own use

Lighting shares by type
AEO2021 Reference case

