

### CO<sub>2</sub> emissions based on macroeconomic growth assumptions

#### U.S. energy-related CO<sub>2</sub> emissions AEO2022 economic growth cases

billion metric tons





 $CO_2$ 

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### Energy-related CO<sub>2</sub> emissions by sector and fuel

### Energy-related CO<sub>2</sub> emissions by sector AEO2022 Reference case

billion metric tons



### Energy-related CO<sub>2</sub> emissions by fuel AEO2022 Reference case

2021

billion metric tons



Note: Series does not include greenhouse gases other than  $CO_2$ . Industrial sector  $CO_2$  emissions do not include process emissions, such as the emissions from cement clinker production.



 $CO_2$ 



### $CO_2$ Energy-related $CO_2$ emissions based on oil price assumptions

U.S. energy-related CO<sub>2</sub> emissions AEO2022 oil price cases

billion metric tons





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## $CO_2$ Energy-related $CO_2$ emissions by sector based on oil price assumptions

CO<sub>2</sub> emissions by sector, AEO2022 oil price cases



Note: Industrial sector CO<sub>2</sub> emissions do not include process emissions, such as the emissions from cement clinker production.

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)



#### Electric power generation and energy-related CO<sub>2</sub> emissions $CO_2$ based on oil and natural gas supply assumptions

CO<sub>2</sub> emissions and electric power generation, AEO2022 oil and natural gas supply cases

U.S. energy-related CO<sub>2</sub> emissions billion metric tons



Fossil fuel-fired electric power generation generation trillion kilowatthours trillion kilowatthours 2021 6 projections history 5 3 2 2030 2040 2050 2020 2030 2010

**Renewable electric power** projections 2040 2050





# $CO_2$ Electric power generation and energy-related $CO_2$ emissions based on renewable cost assumptions

CO<sub>2</sub> emissions and electric power generation, AEO2022 renewables cost cases

generation

U.S. energy-related CO<sub>2</sub> emissions billion metric tons



Fossil fuel-fired electric power



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**Renewable electric power** 

generation

## $CO_2$ CO<sub>2</sub> intensity by sector

### CO<sub>2</sub> intensity by end-use sector AEO2022 Reference case

metric tons of CO<sub>2</sub> per billion British thermal unit



Note: Each end-use sector takes into account the carbon intensity of electric power. Industrial sector  $CO_2$  emissions do not include process emissions, such as the emissions from cement clinker production.



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