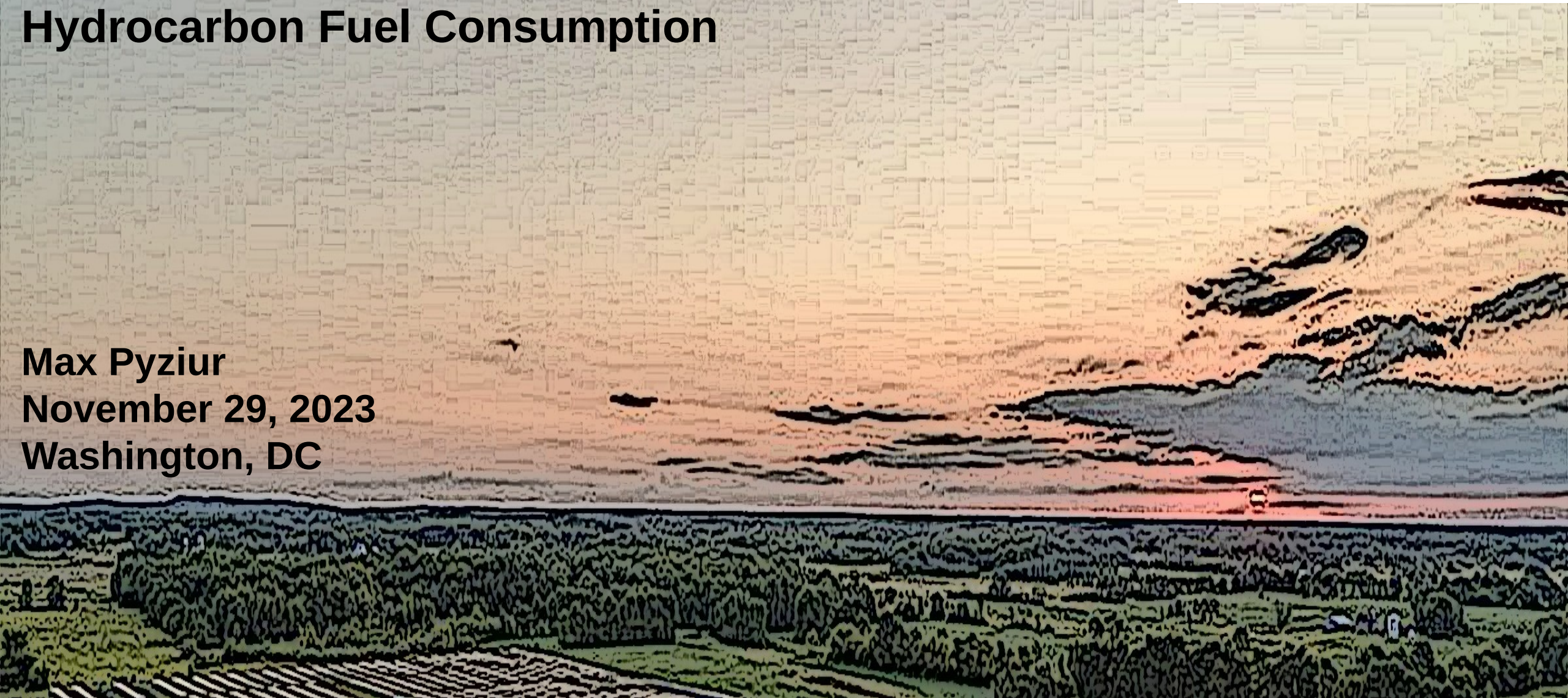


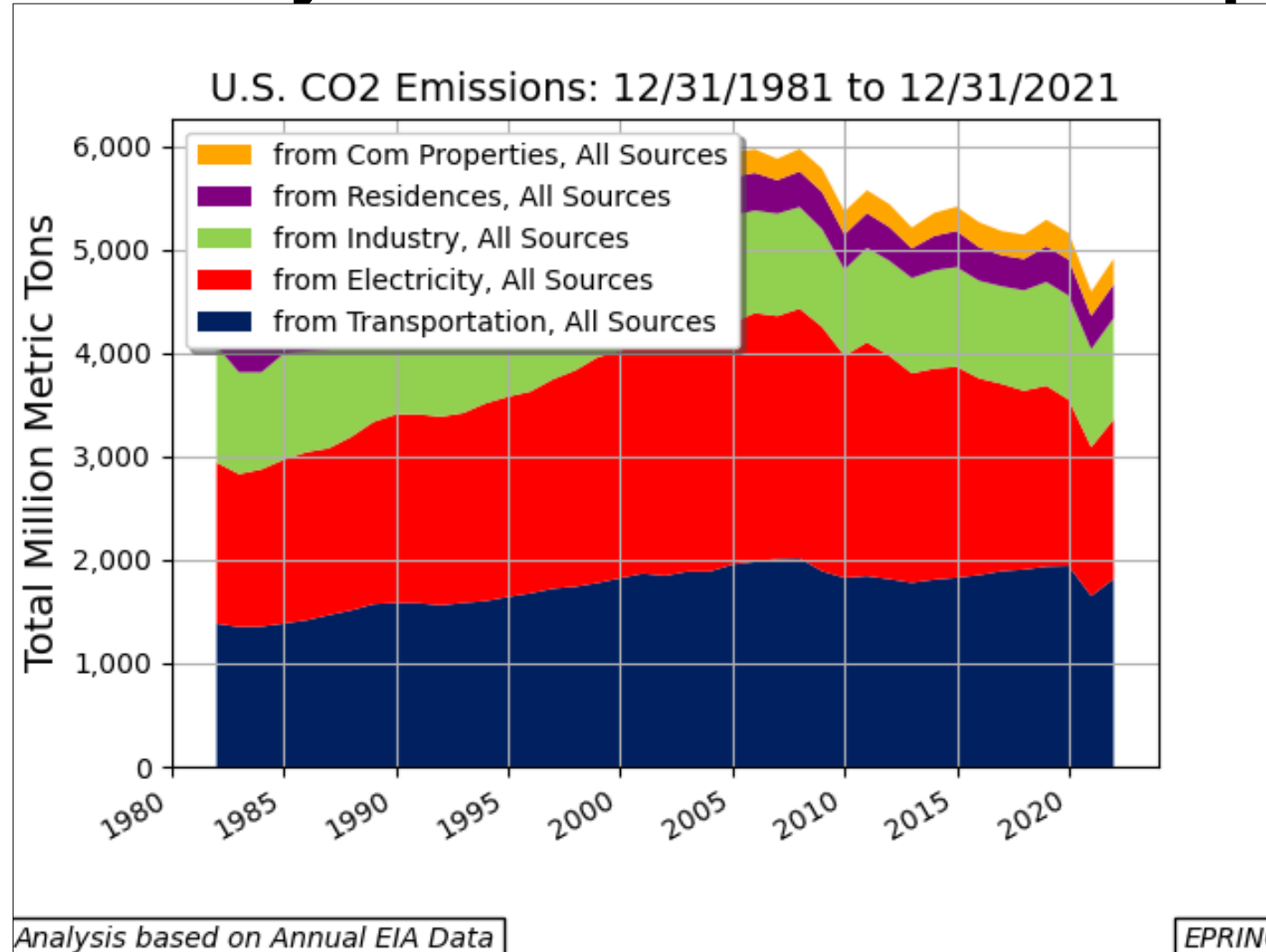
Chart of the Week #2023-46

U.S. CO₂ Emissions from Hydrocarbon Fuel Consumption

Max Pyziur
November 29, 2023
Washington, DC



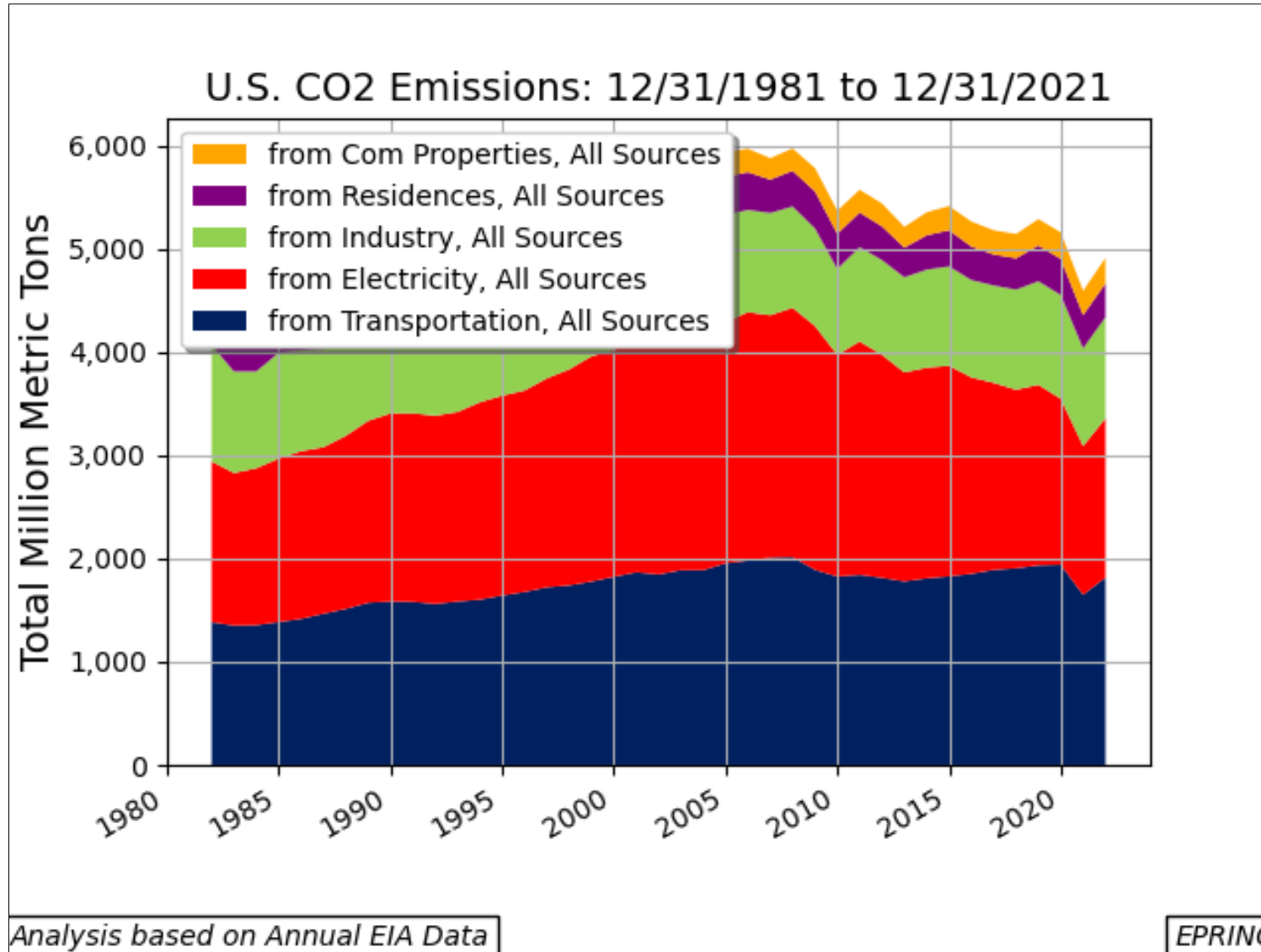
U.S. CO₂ Emissions from Hydrocarbon Fuel Consumption



U.S. CO₂ emissions plateaued at 6 billion metric tons from 2004 to 2007 and have declined since then.

CO₂ emissions from hydrocarbon fuel consumption as projected by the U.S. Energy Information Administration (EIA) for 2024 are expected to be 4.75 billion metric tons, a decrease of over 20% since their peak.

U.S. Annual Electricity Production



Critical to this decline has been the displacement of coal-powered electricity generation by natural gas. From 2005 to 2021, coal-fired generation declined to a total 900 hundred million megawatt hours, an annual rate of almost 5%.

During the same period, natural gas-fired generation grew to 1,580 hundred million megawatt hours at an annual rate of 4.7%.

U.S. CO₂ Emissions from Hydrocarbon Fuel Consumption

- Global CO₂ emissions from hydrocarbon fuels are 36.4 billion metric tons per year according to the most recent data available. Of this, the U.S. emits 4.9 billion metric tons, or 13.5% of the global total.
- U.S. CO₂ emissions plateaued at 6 billion metric tons from 2004 to 2007 and have declined since then.
- CO₂ emissions from hydrocarbon fuel consumption as projected by the U.S. Energy Information Administration (EIA) for 2024 are expected to be 4.75 billion metric tons, a decrease of over 20% since their peak.
- Critical to this decline has been the displacement of coal-powered electricity generation by natural gas. From 2005 to 2021, coal-fired generation declined to a total 900 hundred million megawatt hours, an annual rate of almost 5%.
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- This slide deck is available at: <https://eprinc.org/chart-of-the-week/>
- For more information on this chart, please contact Max Pyziur (maxp@eprinc.org).