Brief on Top Polluters

1. **Top Polluting Regions:**
   - **China** leads global emissions by a significant margin.
   - **Asia, Non Annex I countries,** and the **world** aggregate display high emission values.
   - Regions like **Eastern Asia**, **OECD countries**, and **Annex I countries** follow.

2. **Recent Trends:**
   Annual % change in emissions shows high volatility from 2000–2020.
   - Peak increase: **10.26% in 2004**
   - Notable drops: **2009 (-1.2%)**, **2015 (-2.5%)**, **2020 (-2.96%)**
   - Likely influenced by economic cycles and global disruptions like the COVID-19 pandemic.

3. **Emission Sources (by Item):**
   Major contributors include:
   - **All sectors with LULUCF** (Land Use, Land Use Change, and Forestry)
   - **Energy**
   - **Agricultural systems**
   - **AFOLU** (Agriculture, Forestry, and Other Land Use)

4. **Emissions by GHG Element:**
   Highest emissions from:
   - **CO_2 (fossil fuels and cement):** 1.96 trillion
   - **CO_2 (land use):** 1.21 trillion
   - **CH_4 (Methane):** 507 billion

5. **Forecast Outlook:**
   - If current trends continue, emissions are projected to **exceed 220M metric tons by 2025**.
   - Forecast shows a **steady rise**, emphasizing the need for urgent intervention.

6. **5-Year Performance of Major Emitters:**
   - Top emitting countries show **consistent emissions levels** with minimal decline over 2016–2020.
   - Suggests a lack of aggressive decarbonisation in national policies.