

The Kyoto Protocol & The Paris Agreement

Kyoto Protocol, 2005: Required 38 developed countries to reduce emissions by an average of 5 percent below 1990 levels. **By 2006:** China surpassed the US emissions, and India's emissions are almost equal to those of the EU. By 2012, global emissions had risen 44% from 1997 levels, driven by emissions growth in developing nations. Per capita, these countries still emit much less than the West. **The Kyoto Protocol had failed to restrict global emissions.**

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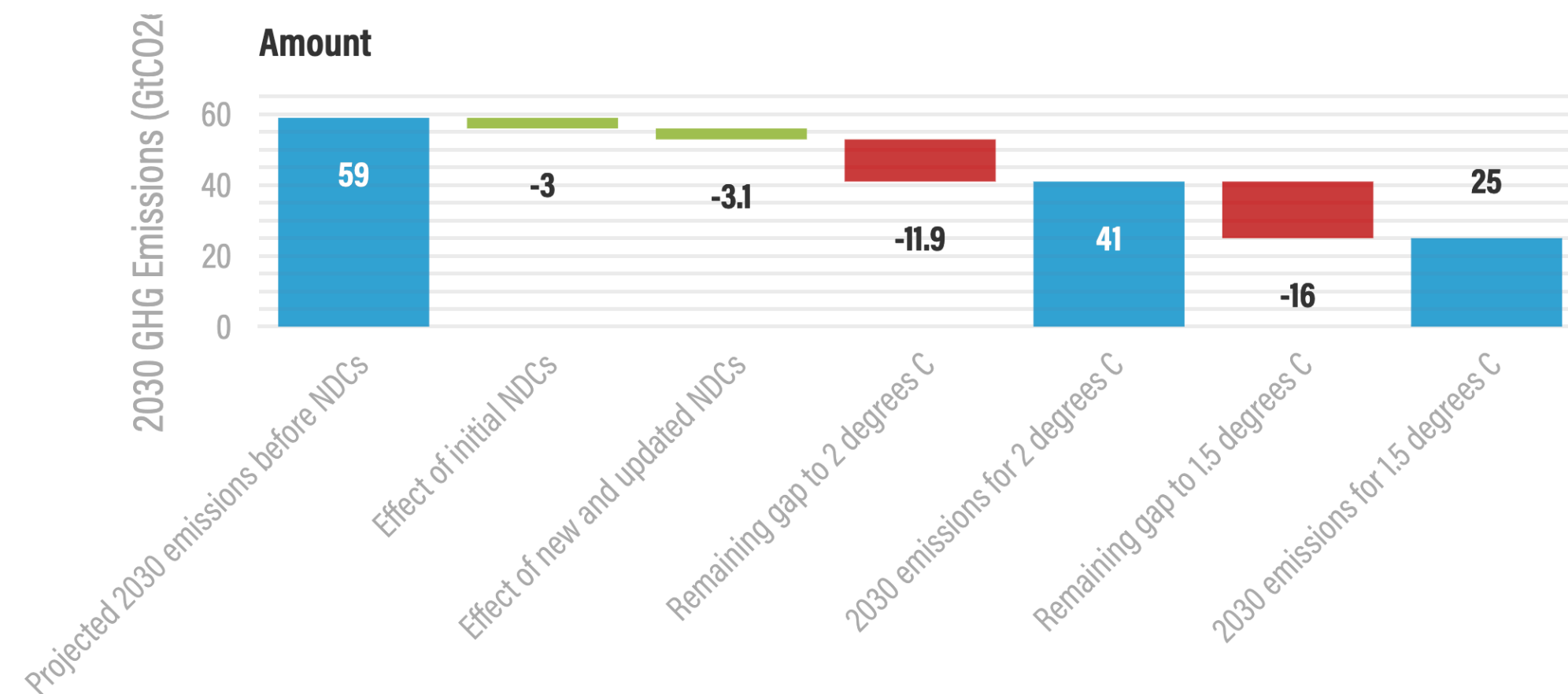
Paris Agreement, 2015: requires all countries to set nationally determined contributions (NDCs). Goal: limit warming to below 2 °C, try 1.5°C. Also: achieve net-zero emissions in the 2nd half of the century. **As of 2021:** Many countries have submitted their second NDC. **BUT:** The first round of NDCs promised to reduce only 5% of emissions, the next round, if countries complied with their own promises, only another 5%. **The goal of 1.5 °C was never realistic given the equivalent CO₂ of ~500 ppm in 2024 and the ocean cooling effect that delays the greenhouse warming already induced.**

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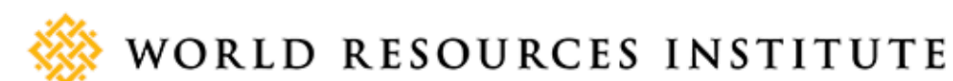
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NDCs Relative to the 2030 Emissions Gap



Source: Author's calculations based on UNEP Emissions Gap Report and Climate Watch (2021)
New and updated NDCs as of October 12, 2021



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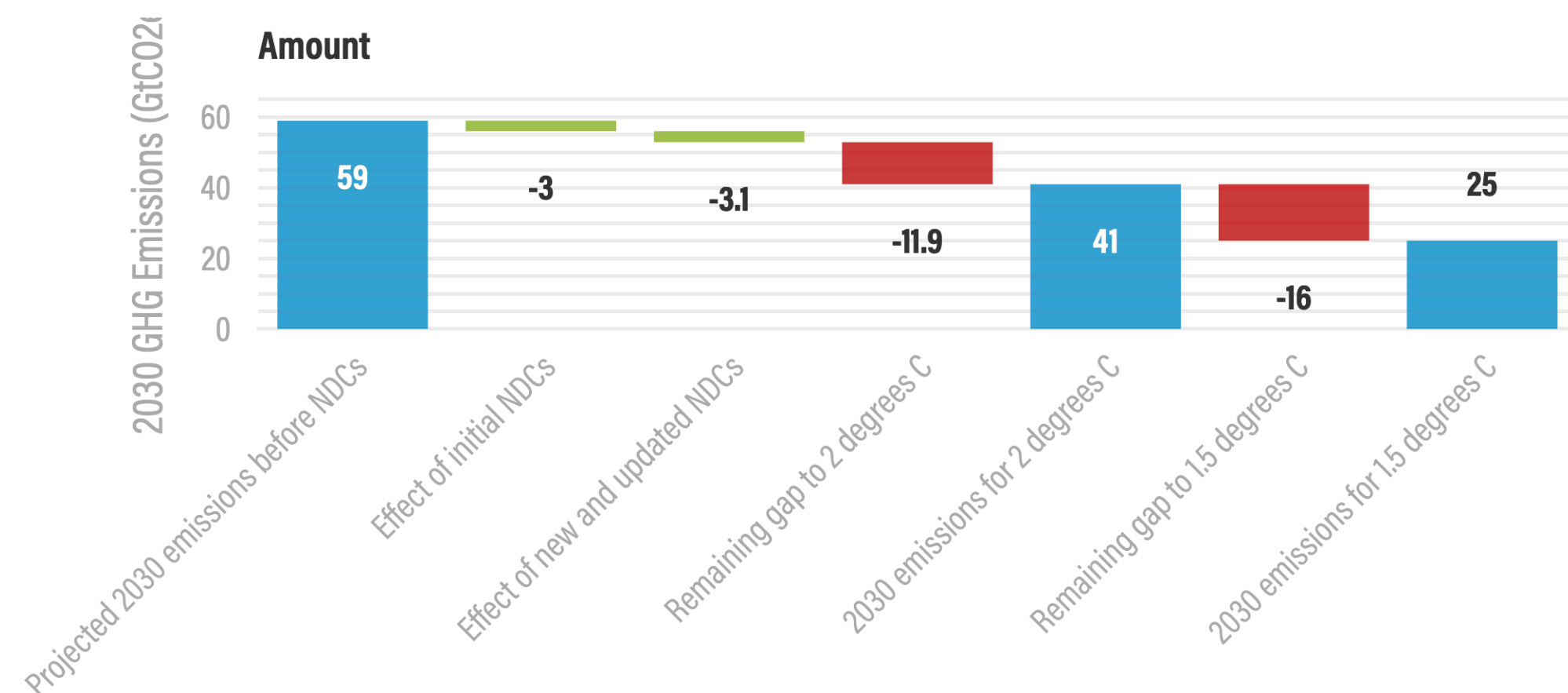
<https://www.climateforesight.eu/articles/success-or-failure-the-kyoto-protocols-troubled-legacy/>
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<https://www.activesustainability.com/climate-change/5-years-since-paris-agreement-which-countries-have-strengthened-fight-against-climate-change/>

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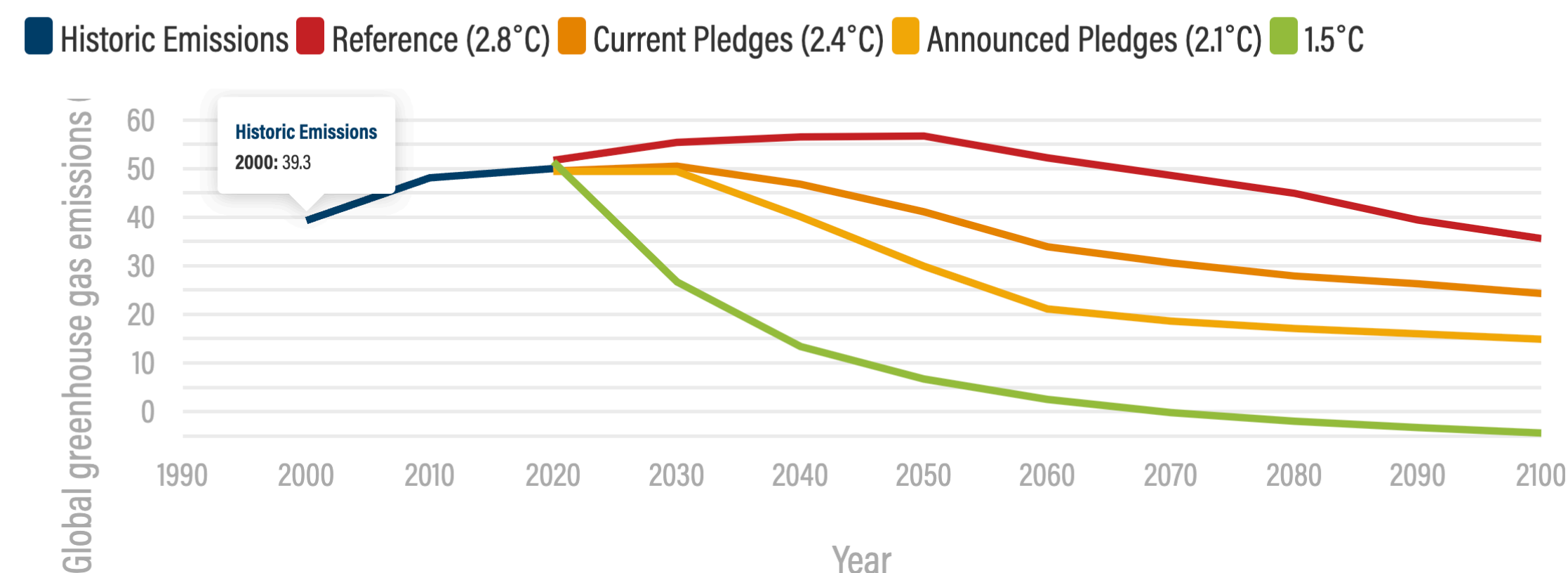
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Emissions and Temperature Outcomes for NDCs and Net-zero Pledges



Source: Adapted from Climate Analytics and World Resources Institute (2021)
Reference scenario from Climate Action Tracker (2019); 1.5C-Compatible scenario from IPCC



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