



Utility-Scale Solar AVOIDS SRE

Utility-scale solar separates photovoltaic electricity generation from household users and thus avoids the solar rebound effect.

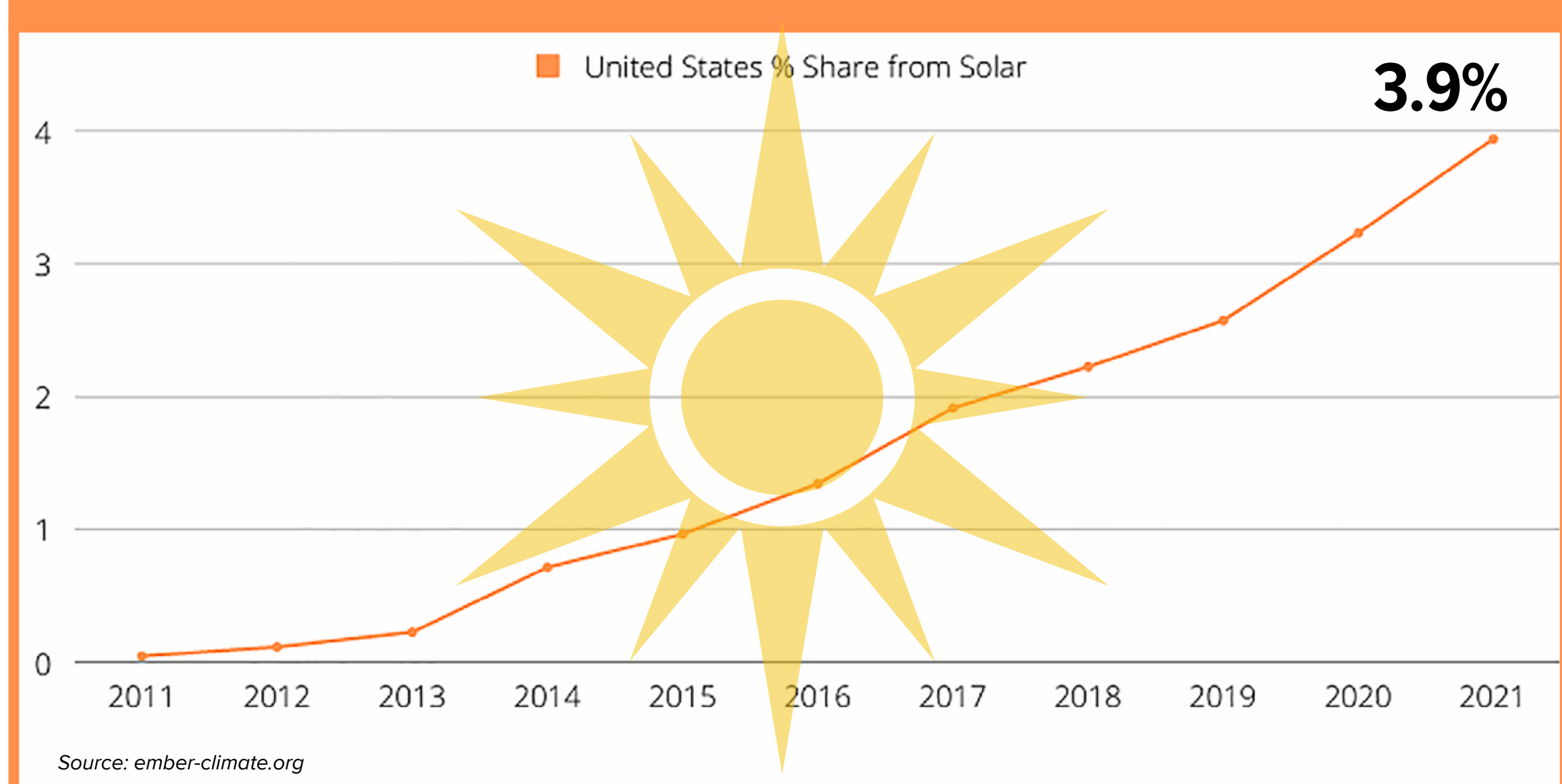
BY CATHY CECERE

Residential rooftop photovoltaics (PV) have become extremely popular. But once homeowners place solar panels on the roofs of their homes, they start using more electricity. This simple consequence is called the solar rebound effect (SRE).

Looking at this situation, it is understandable that “such a rebound would not apply to the case of utility-scale solar,” reported Matthew Oliver, associated professor at Georgia Institute of Technology School of Economics in the *The Electricity Journal* article, “Tipping the Scale: Why Utility-Scale Solar Avoids a Solar Rebound and What It Means for U.S. Solar Policy.”

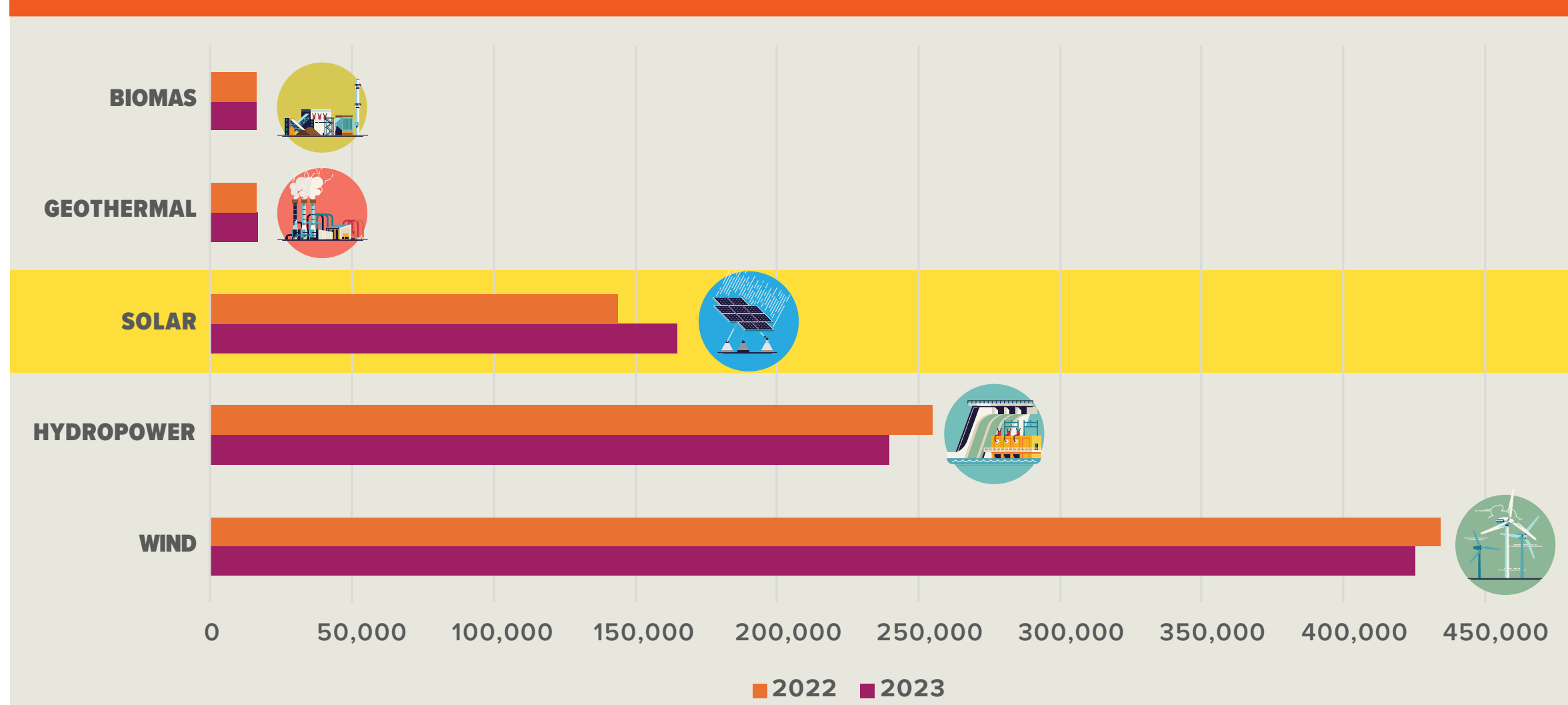
With utility-scale solar, the households’ electricity consumption incentives remain unchanged, Oliver argued. “This is because utility-scale solar decouples PV electricity generation from the household’s consumption decision and avoids the need for a distortionary policy like net metering to incentivize adoption, thus precluding the possibility of a rebound.”

UNITED STATES PERCENTAGE SHARE OF ELECTRICITY FROM SOLAR



U.S. RENEWAL AND ELECTRICITY GENERATION JANUARY THROUGH DECEMBER 2023

NET GENERATION (THOUSAND MEGAWATTHOURS)



DYNAMICS OF ROOFTOP SOLAR INSTALLATION'S REBOUND EFFECTS

