

North America Renewable Power Advisory

# **Solar PV Capacity Addition Forecast for PJM States: 2016–31**

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ihc.com

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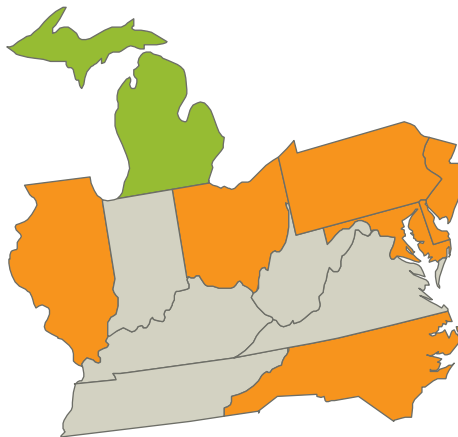
## Summary

- IHS Energy forecasts 22.3  $\text{GW}_{\text{AC}}$  of solar photovoltaic (PV) capacity will be added in states that are fully or partially in the PJM market between 2016 and 2031.
- Virginia, New Jersey, and North Carolina collectively account for 13.5  $\text{GW}_{\text{AC}}$  (60%) of the forecast.
- Solar capacity connected at the distribution level, including both customer-sited and utility-scale, is expected to total 13.9  $\text{GW}_{\text{AC}}$ , exceeding the 8.3  $\text{GW}_{\text{AC}}$  of additions expected from transmission-connected utility-scale solar.
- The federal investment tax credit's (ITC) scheduled reversion to 10% at the end of 2016 is fueling a near term surge in solar additions in 2016 (>1.5  $\text{GW}_{\text{AC}}$ ), which will not be reached again in the outlook until 2026.

# Key policy assumptions

Federal policies	Description
Investment tax credit (ITC)	30% of qualifying capital investment through the end of 2016, 10% thereafter
Depreciation	Five-year modified accelerated cost recovery system

## Renewable power policy

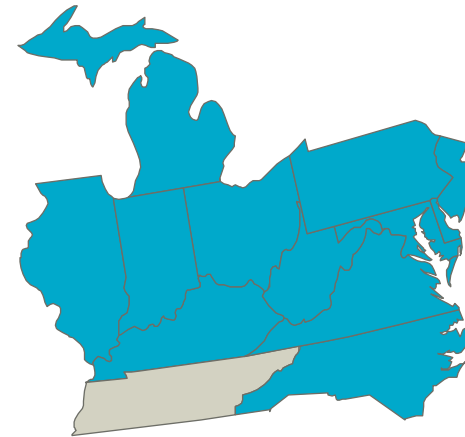


### Key

- Mandatory solar/distributed generation req.
- Mandatory unconstrained renewable power req.

Notes: See summary report for additional state-level policy details.  
Source: IHS © 2015 IHS

## Net energy metering (NEM) policy



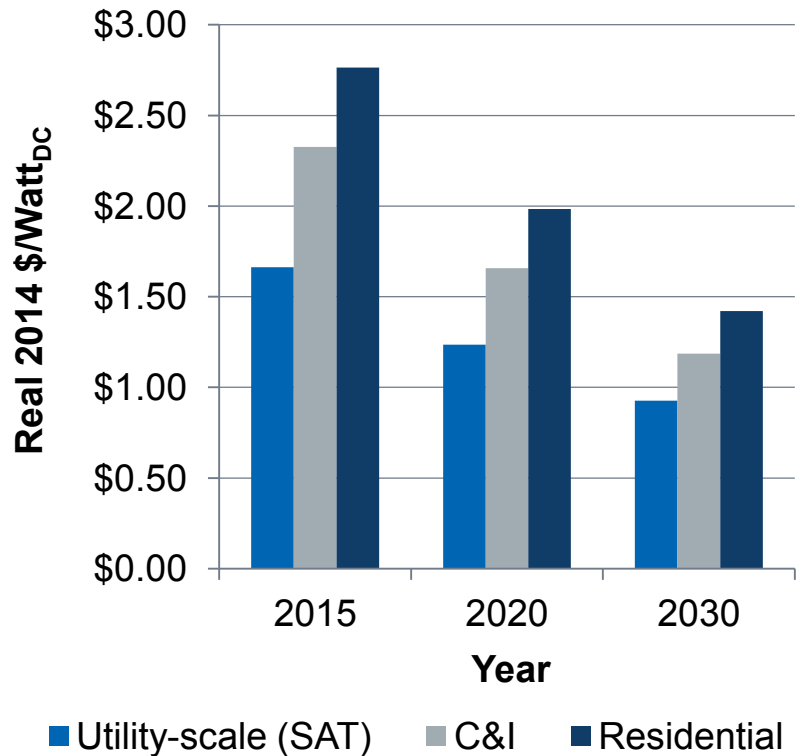
### Key

- Mandatory full retail rate NEM
- No mandatory full retail rate NEM

Notes: See summary report for additional state-level policy details.  
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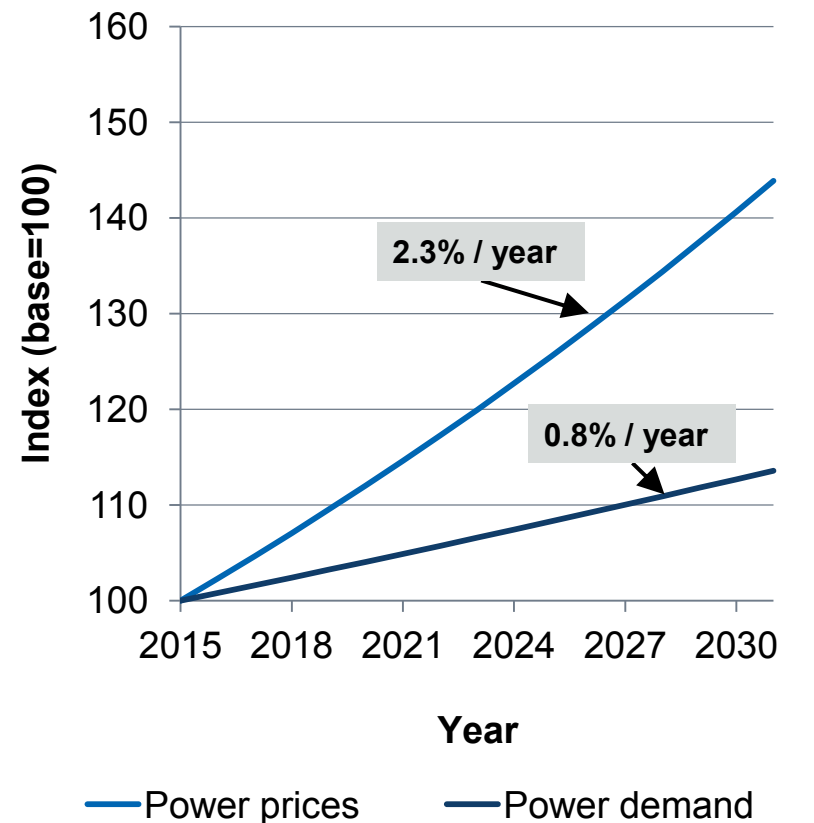
# Key solar technology and power market assumptions

## Solar PV capital costs by segment



Notes: Includes installation and development costs. "SAT" stands for single-axis tracking. "C&I" stands for commercial and industrial.  
 Source: IHS © 2015 IHS

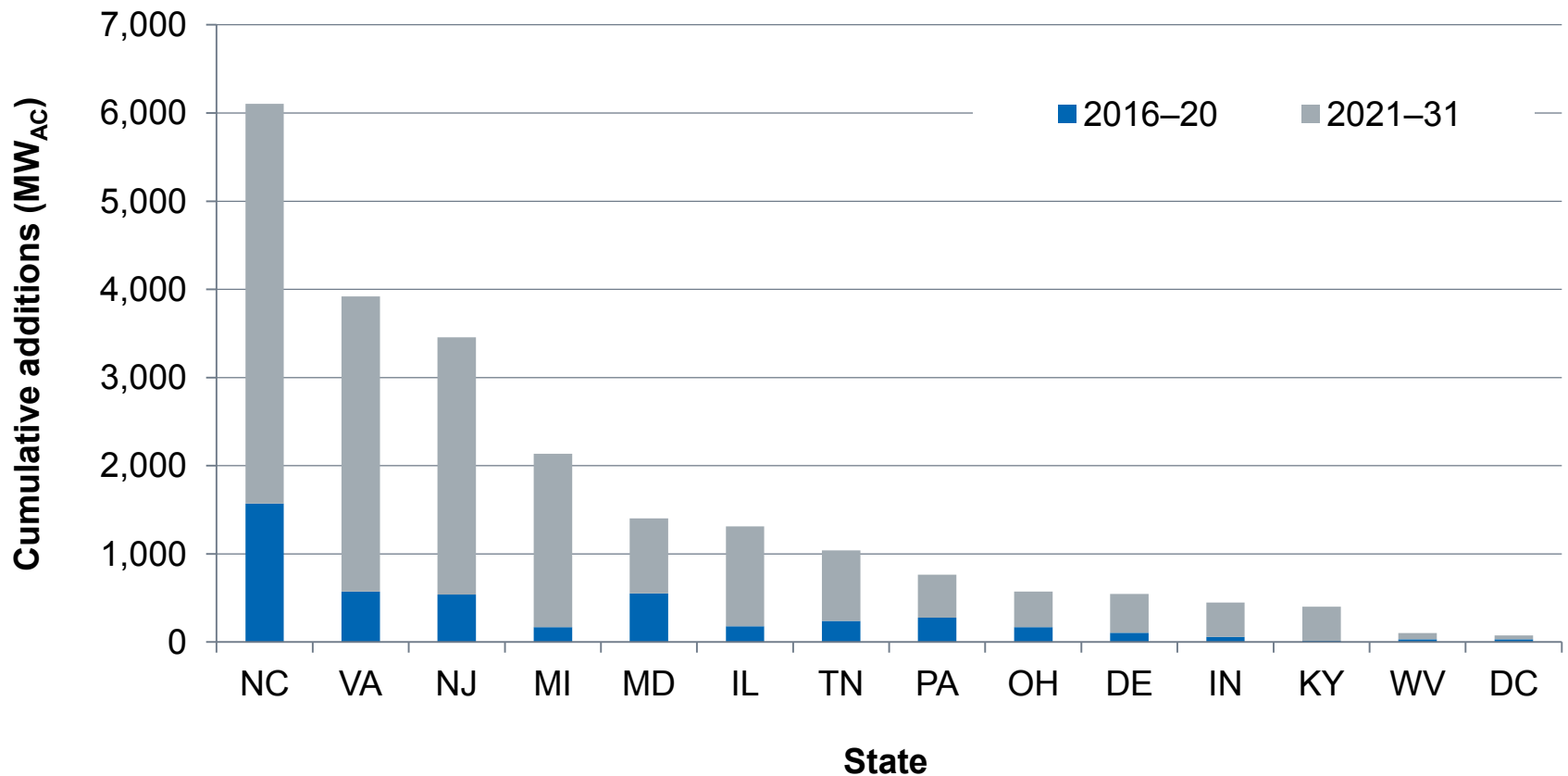
## Power price and demand growth (avg.)



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# Cumulative solar PV capacity additions by state (2016–31)

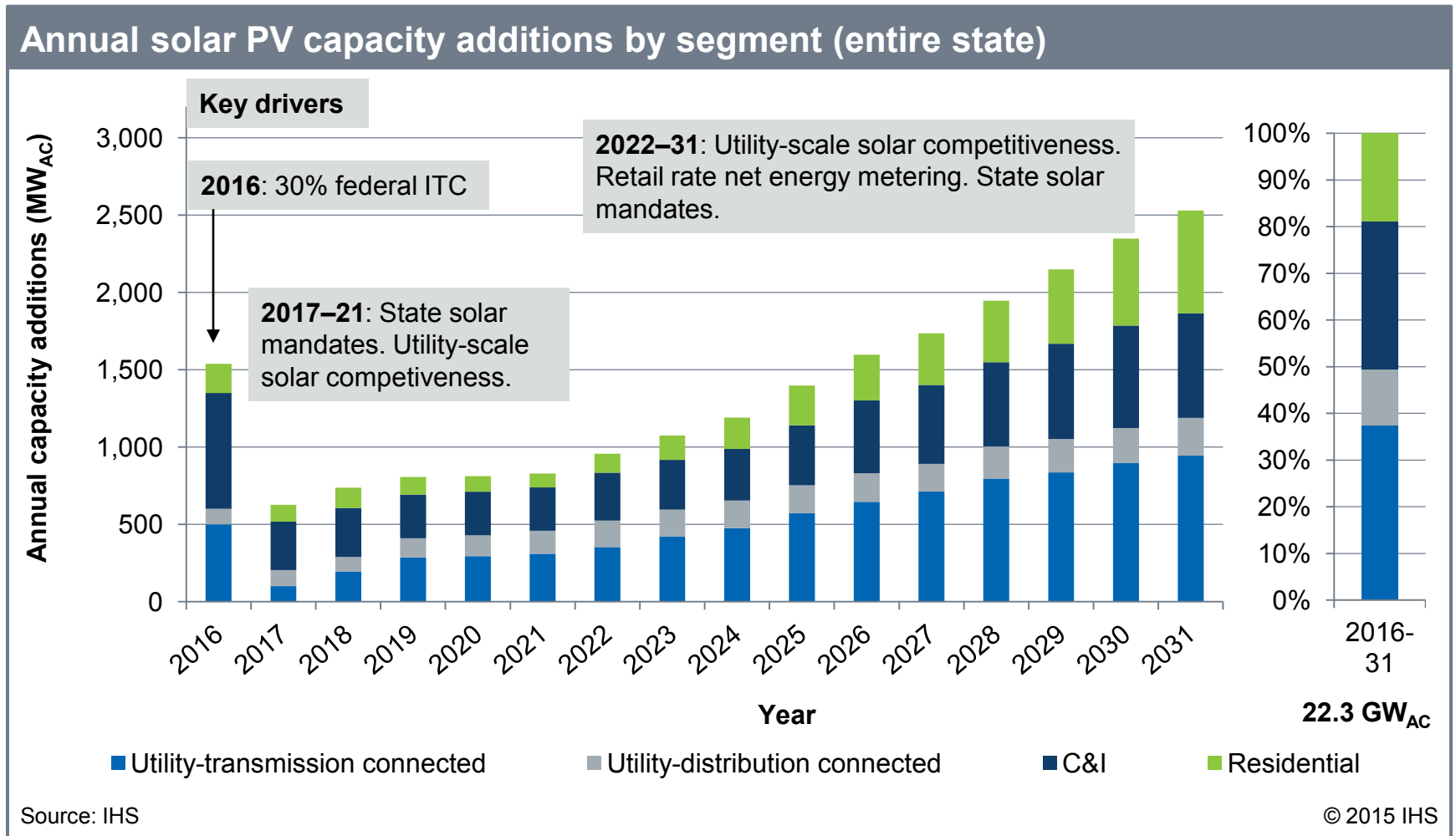
Cumulative solar PV capacity additions by state, 2016–31 (entire state)



Source: IHS

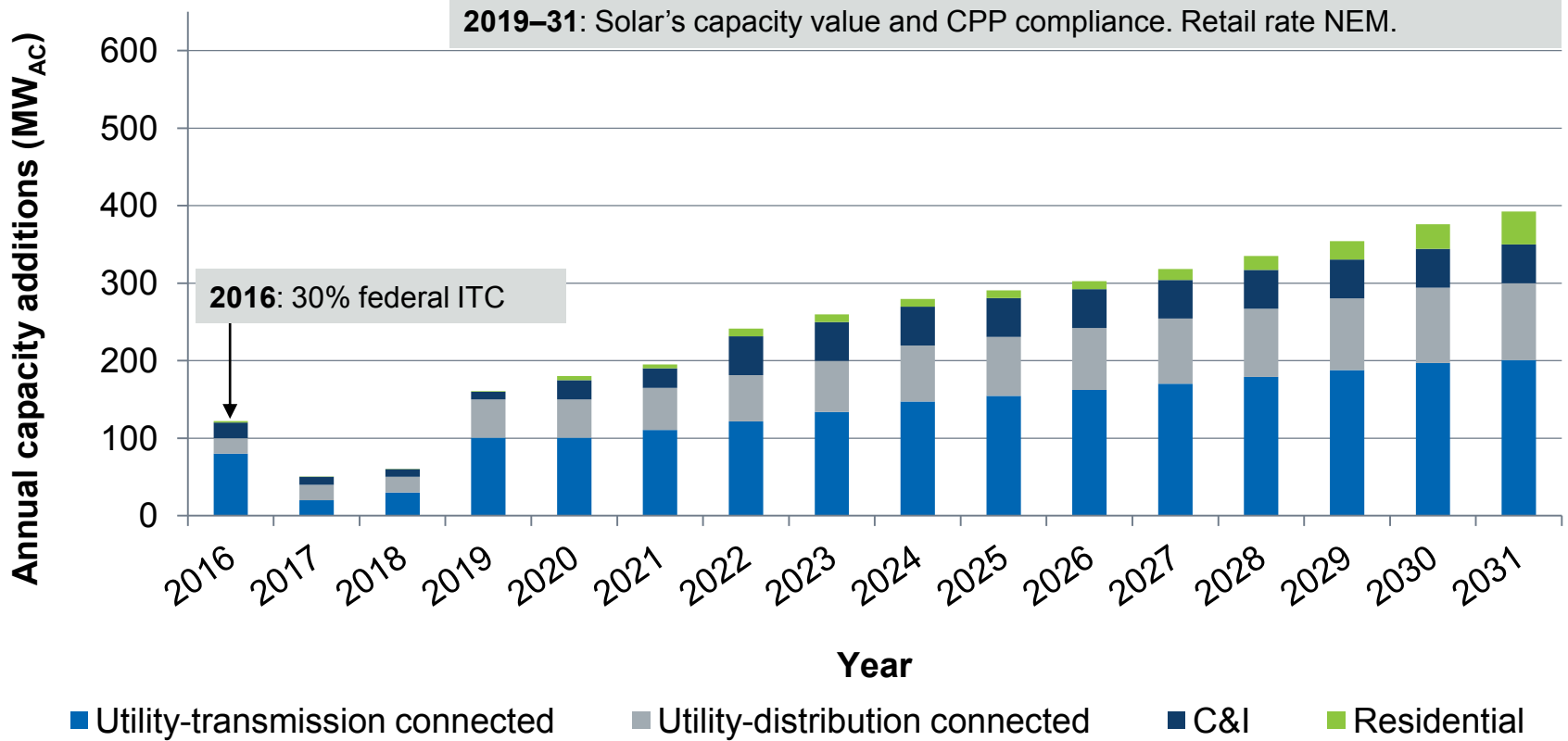
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# Solar PV capacity additions by segment



# Virginia solar PV capacity additions by segment

Virginia: Annual solar PV capacity additions by segment (entire state)



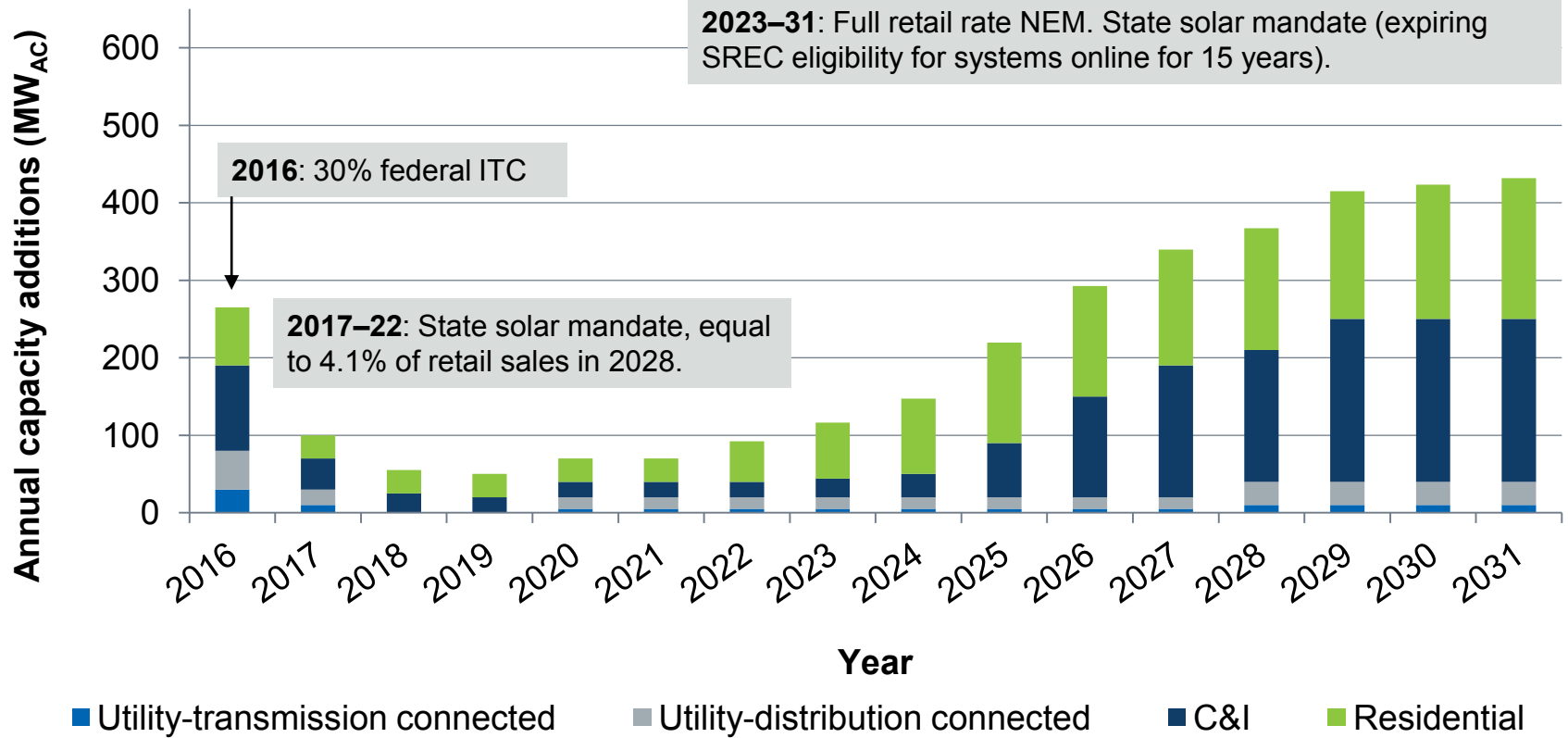
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# New Jersey solar PV capacity additions by segment

New Jersey: Annual solar PV capacity additions by segment (entire state)

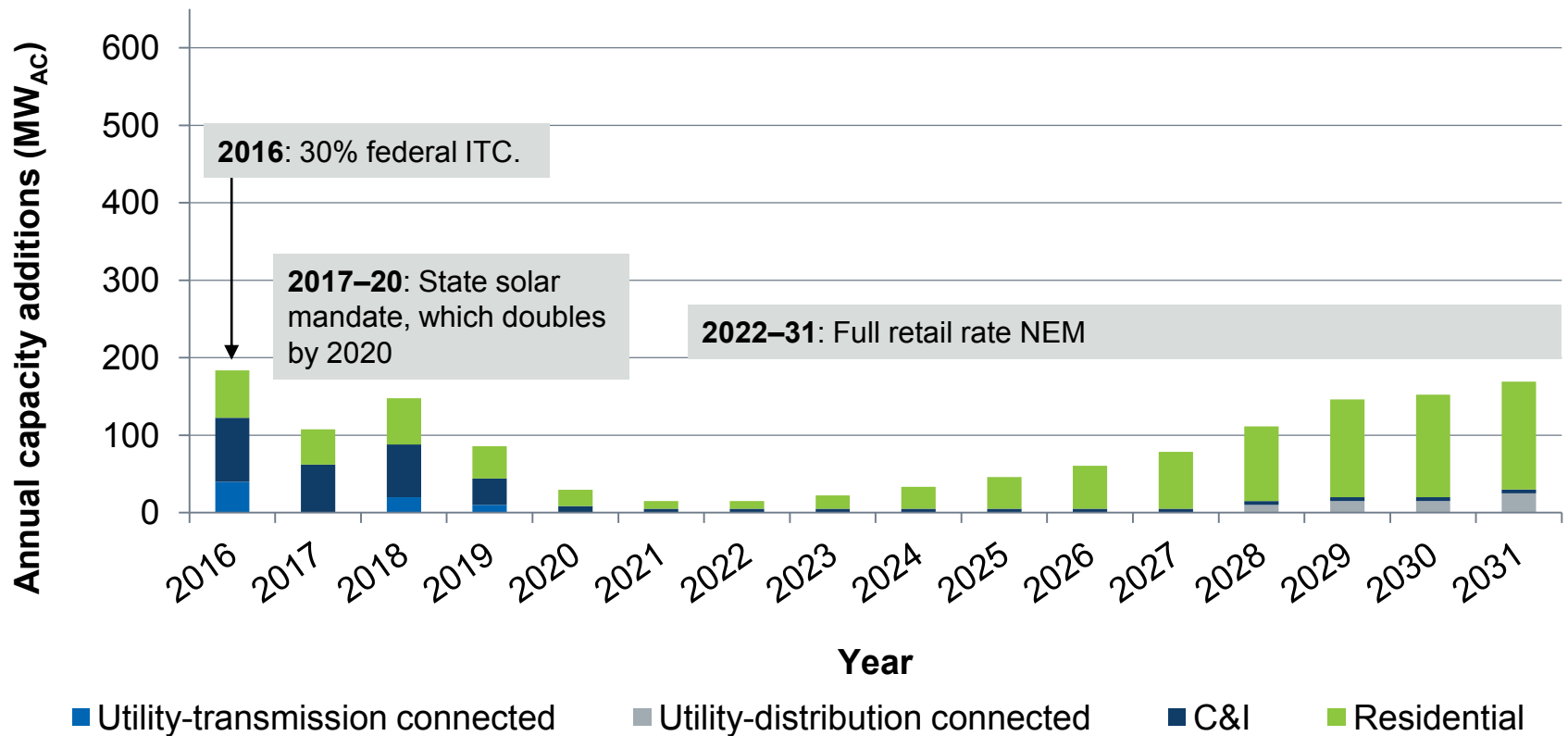


Source: IHS

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# Maryland solar PV capacity additions by segment

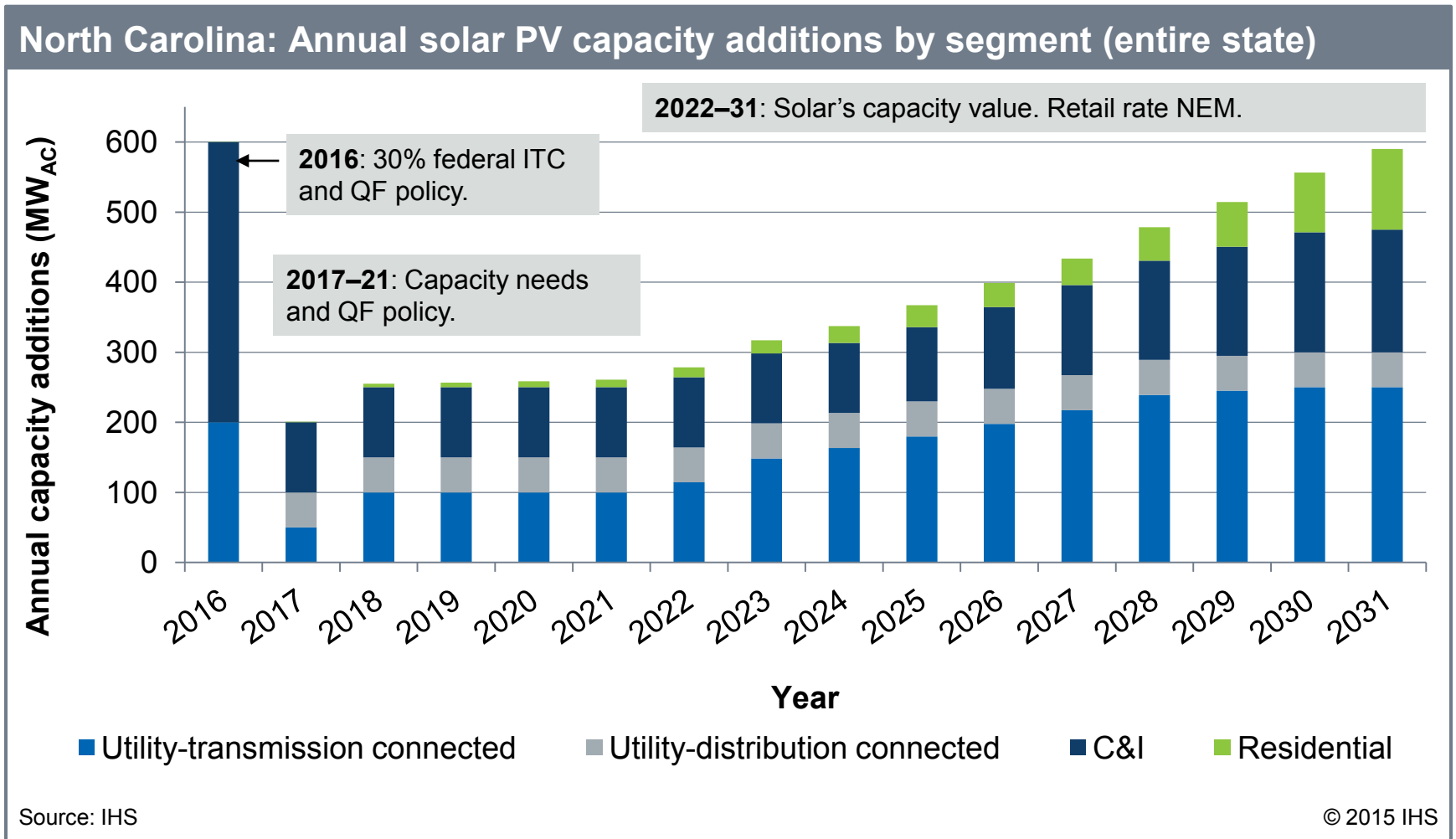
Maryland: Annual solar PV capacity additions by segment (entire state)



Source: IHS

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# North Carolina solar PV capacity additions by segment



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