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# India Solar Overview

May 2019

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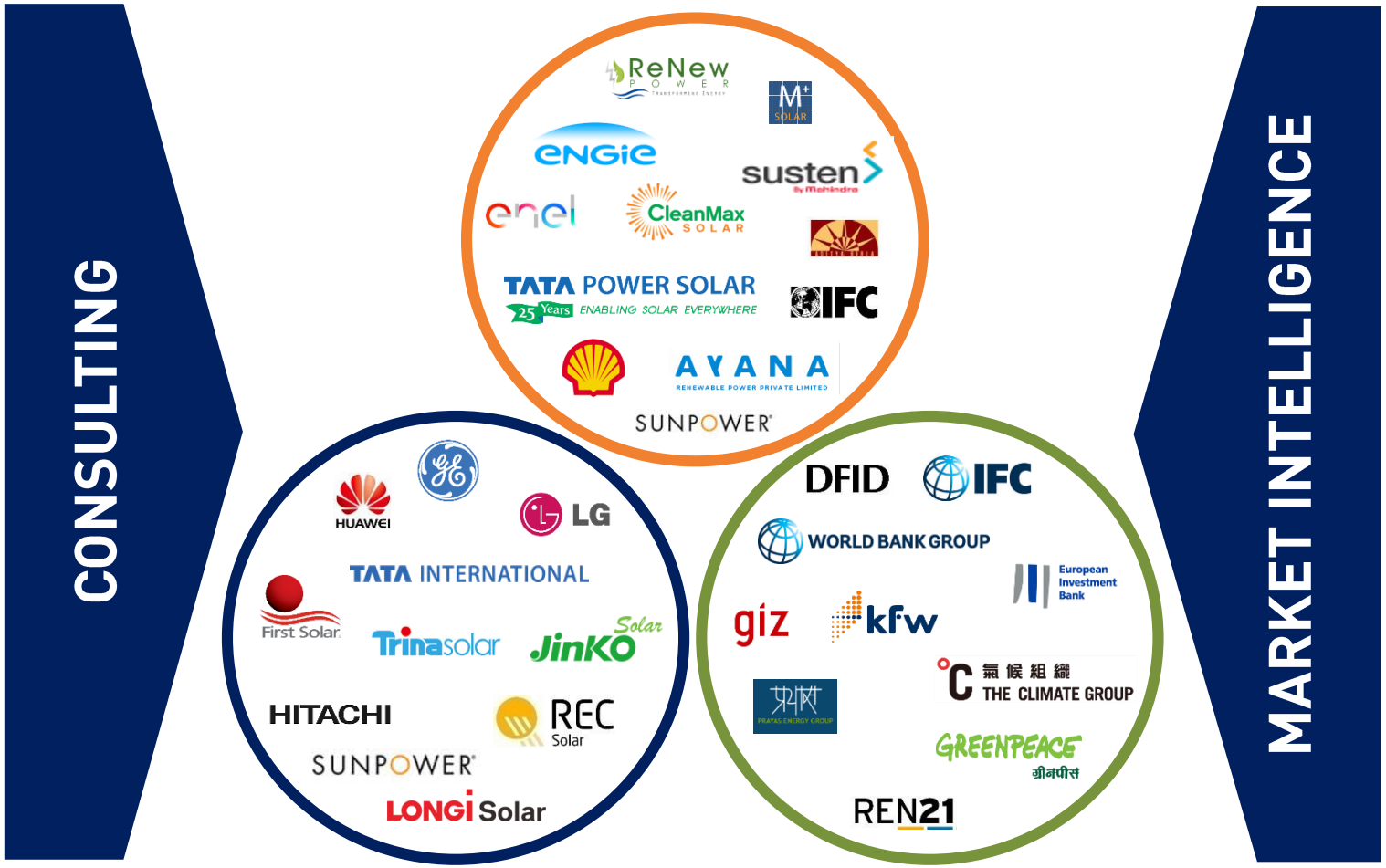
# BRIDGE TO INDIA is a clean energy consulting and research services company



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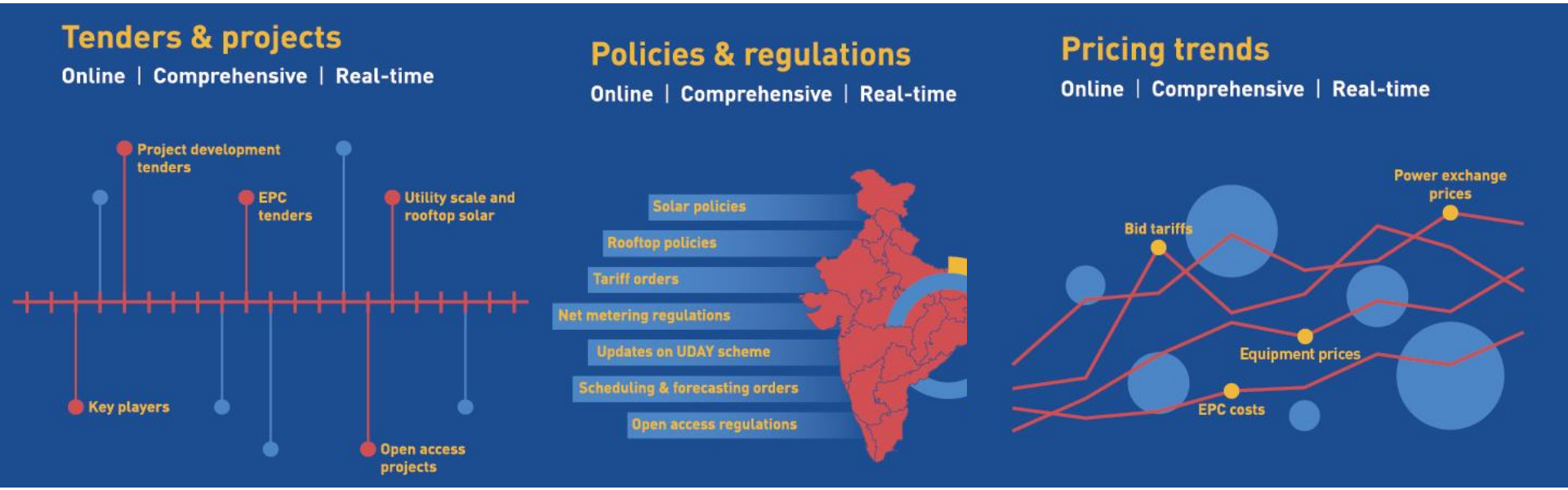
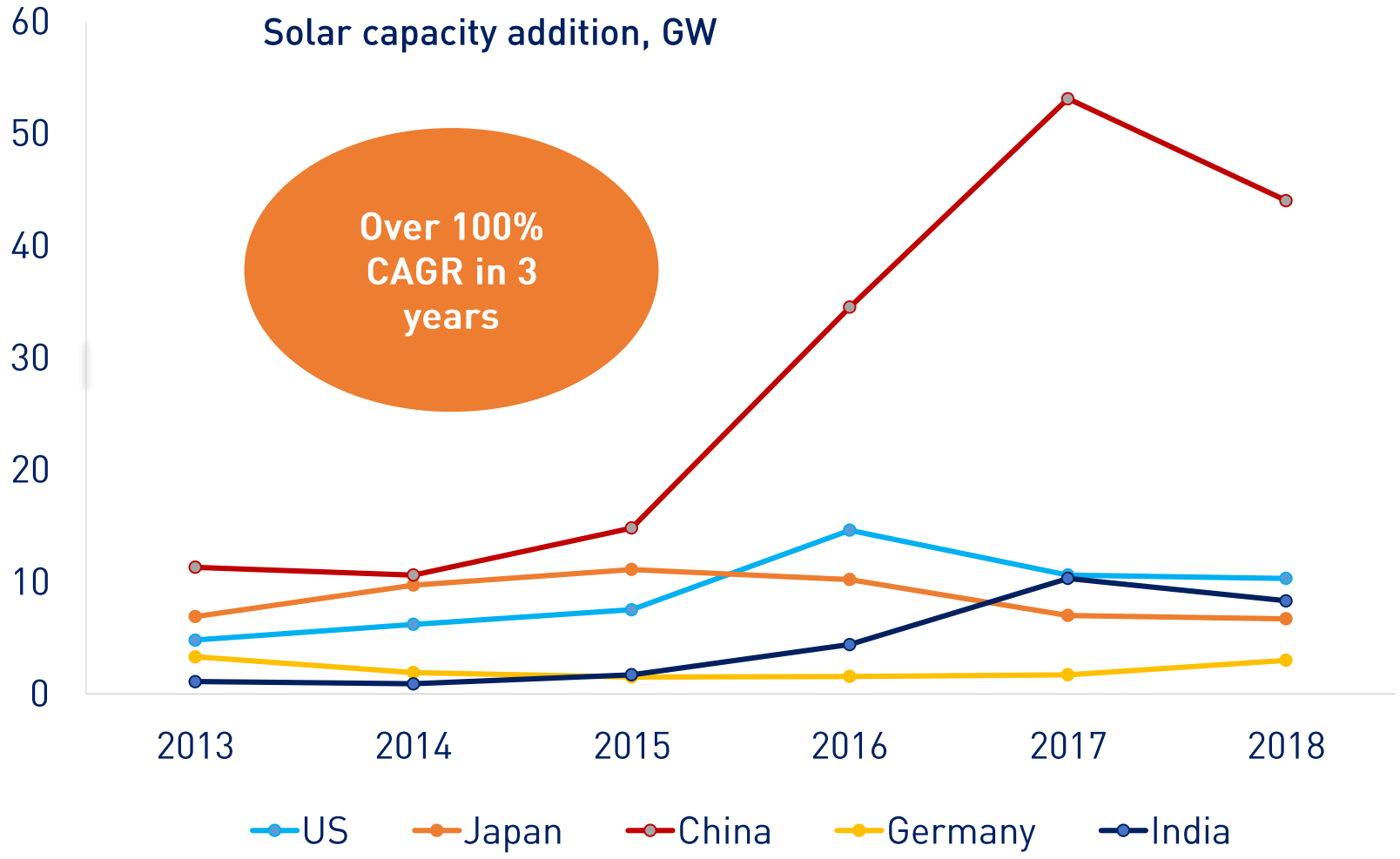
# India Solar Navigator

www.indiasolarnavigator.com

Tenders | Projects | Policies and regulations | Prices | Player profiles | News



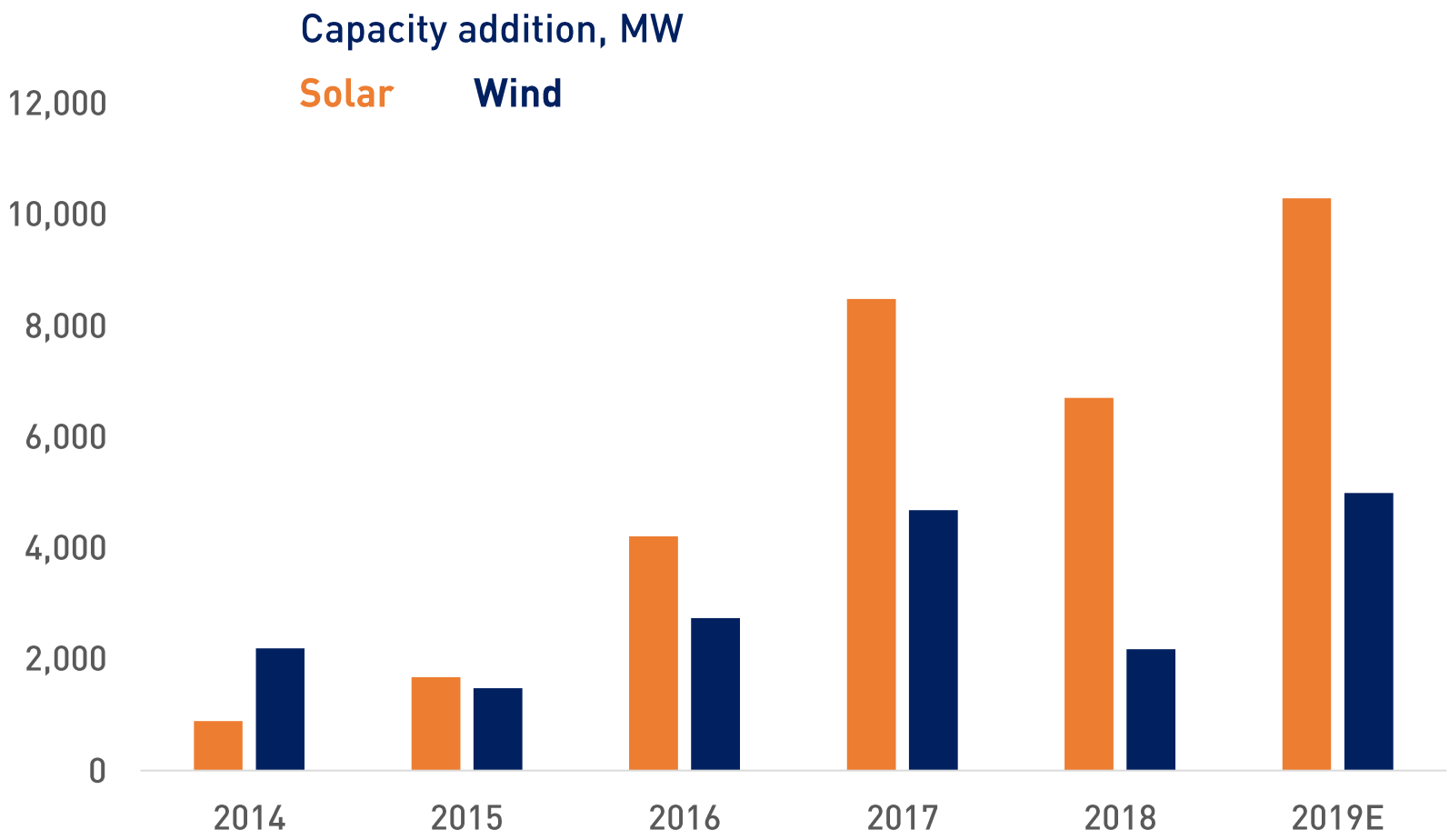
# India is the third largest solar market in the world






Source: REN21, Greentech Media, BRIDGE TO INDIA research

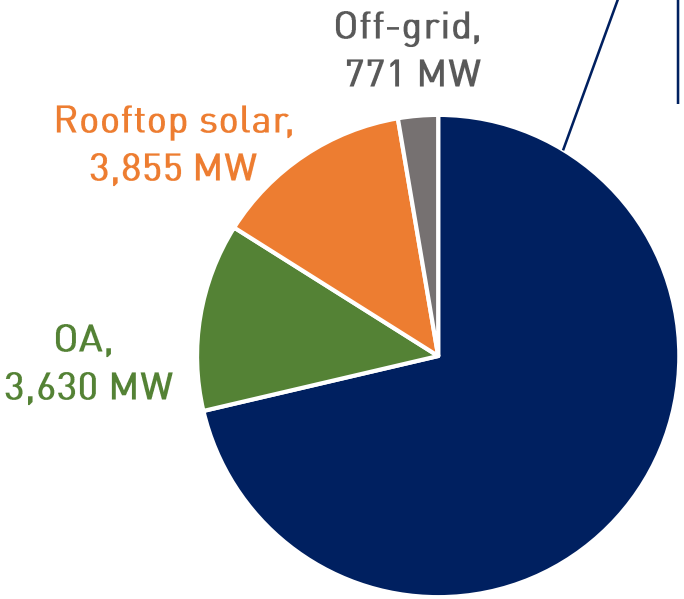
# Solar has overtaken wind and all other technologies to become the leading power source





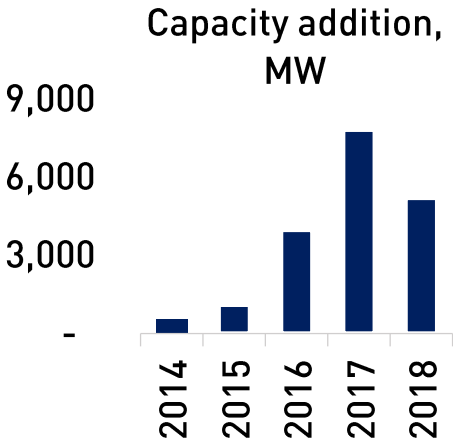

Source: BRIDGE TO INDIA research

# Utility scale solar is leading the way




**Policy based, utility scale**
**20,533 MW**

- Strong policy thrust
- High impact



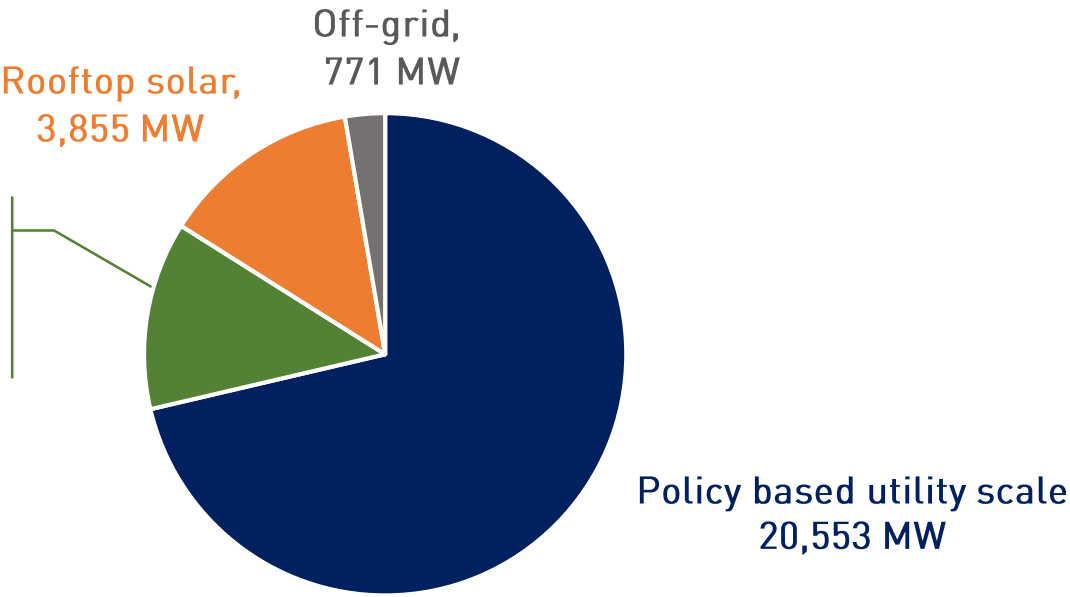


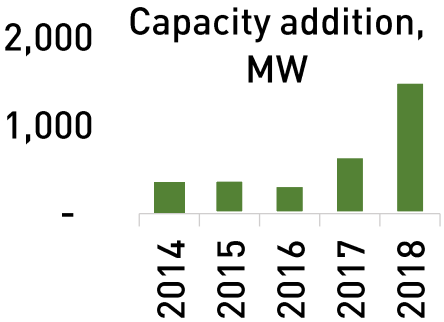

Source: MNRE, BRIDGE TO INDIA research

# Open access solar outlook is uncertain because of policy challenges

**Open access solar**
**3,630 MW**

- Financially attractive
- Policy uncertainty



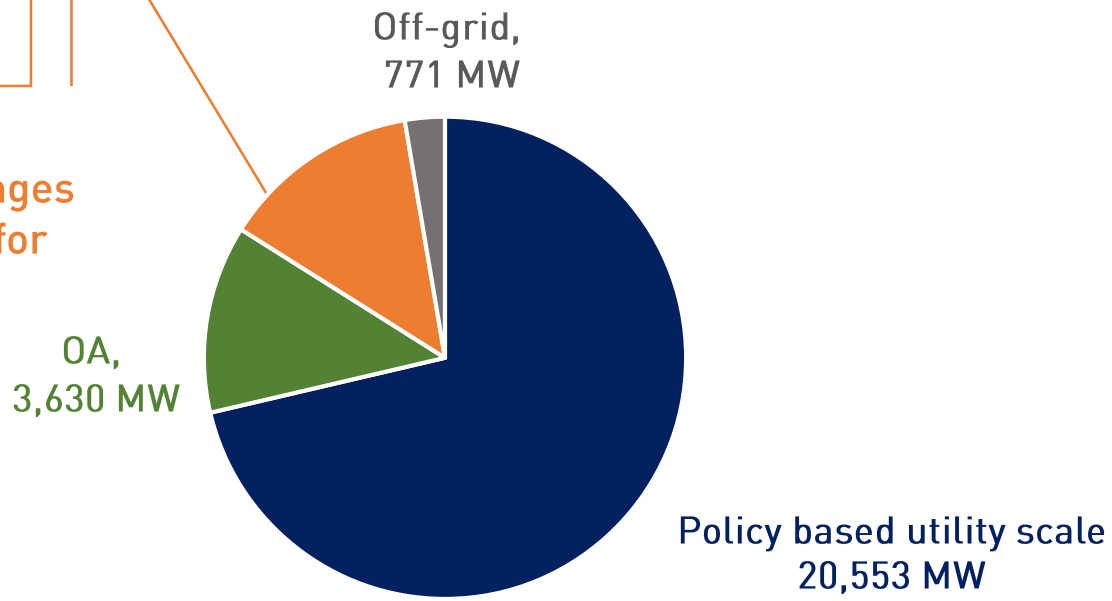


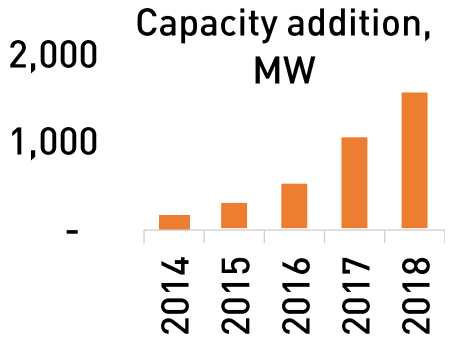

Source: MNRE, BRIDGE TO INDIA research

# Rooftop solar has great momentum

**Rooftop solar**
**3,855 MW**

- C&I demand driver
- Net metering challenges
- Financing problems for residential and SME customers

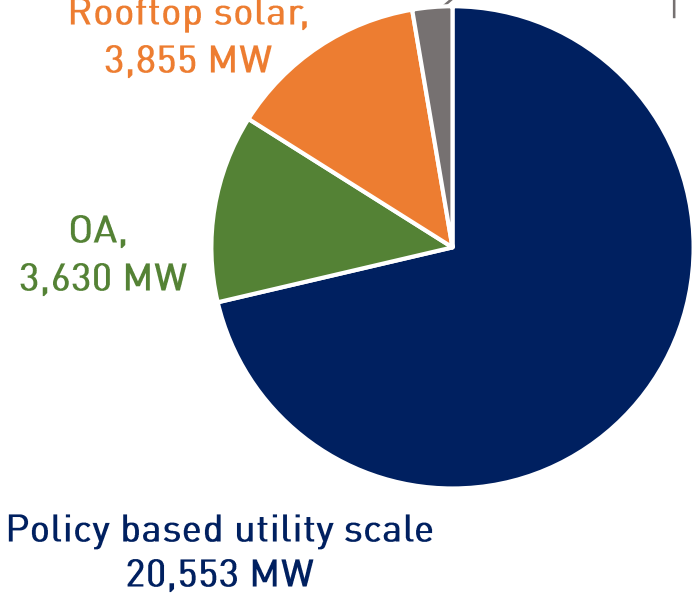




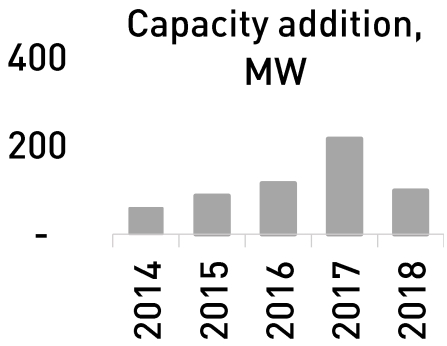

Source: MNRE, BRIDGE TO INDIA research

# Off-grid solar is heavily dependent on government incentives




**Off-grid solar**
**771 MW**

- Focus on grid expansion
- Policy uncertainty
- Solar pumps?

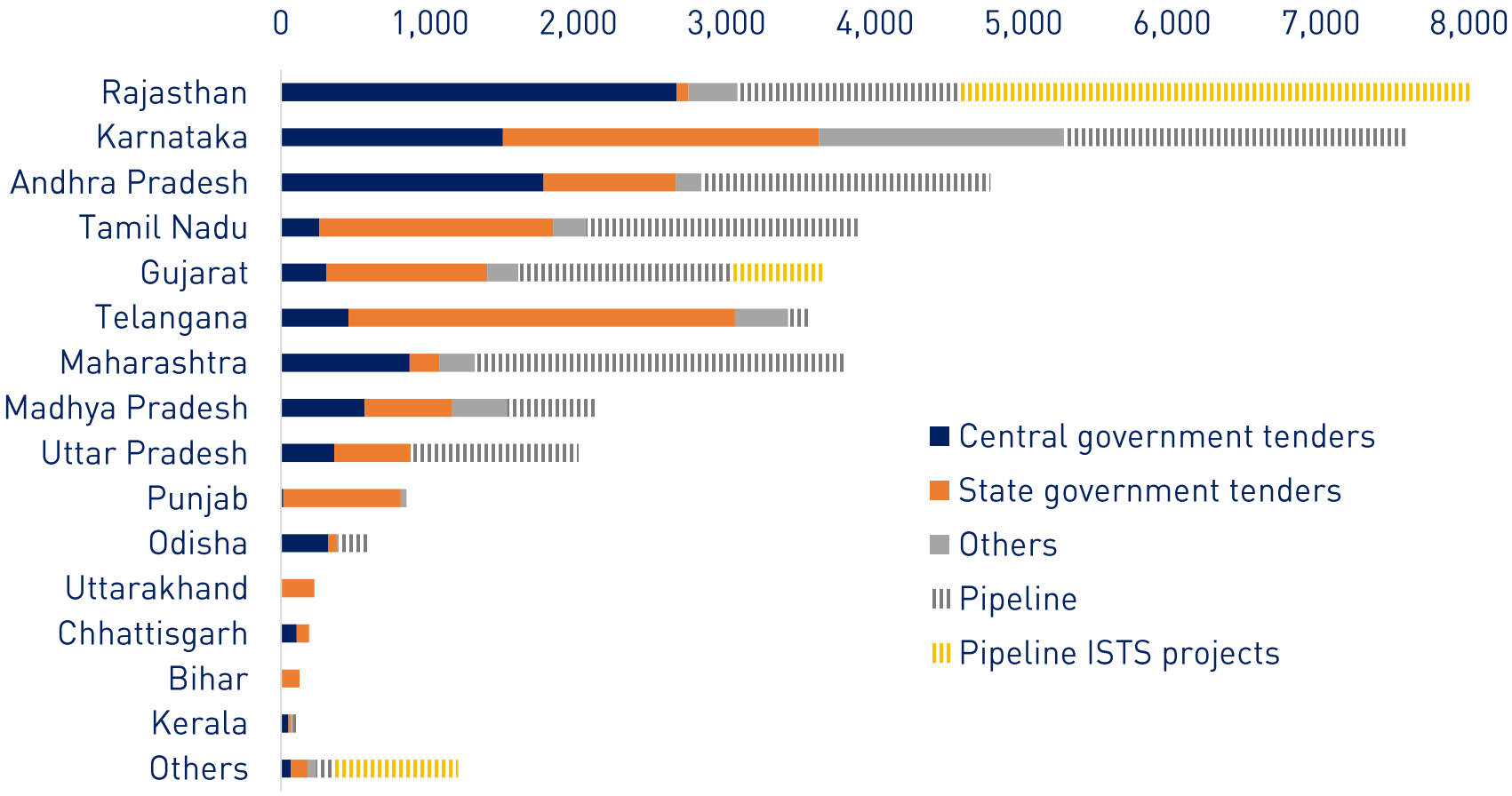





Source: MNRE, BRIDGE TO INDIA research

# Concentration of capacity in a few states has highlighted execution challenges

## Utility scale solar capacity, MW

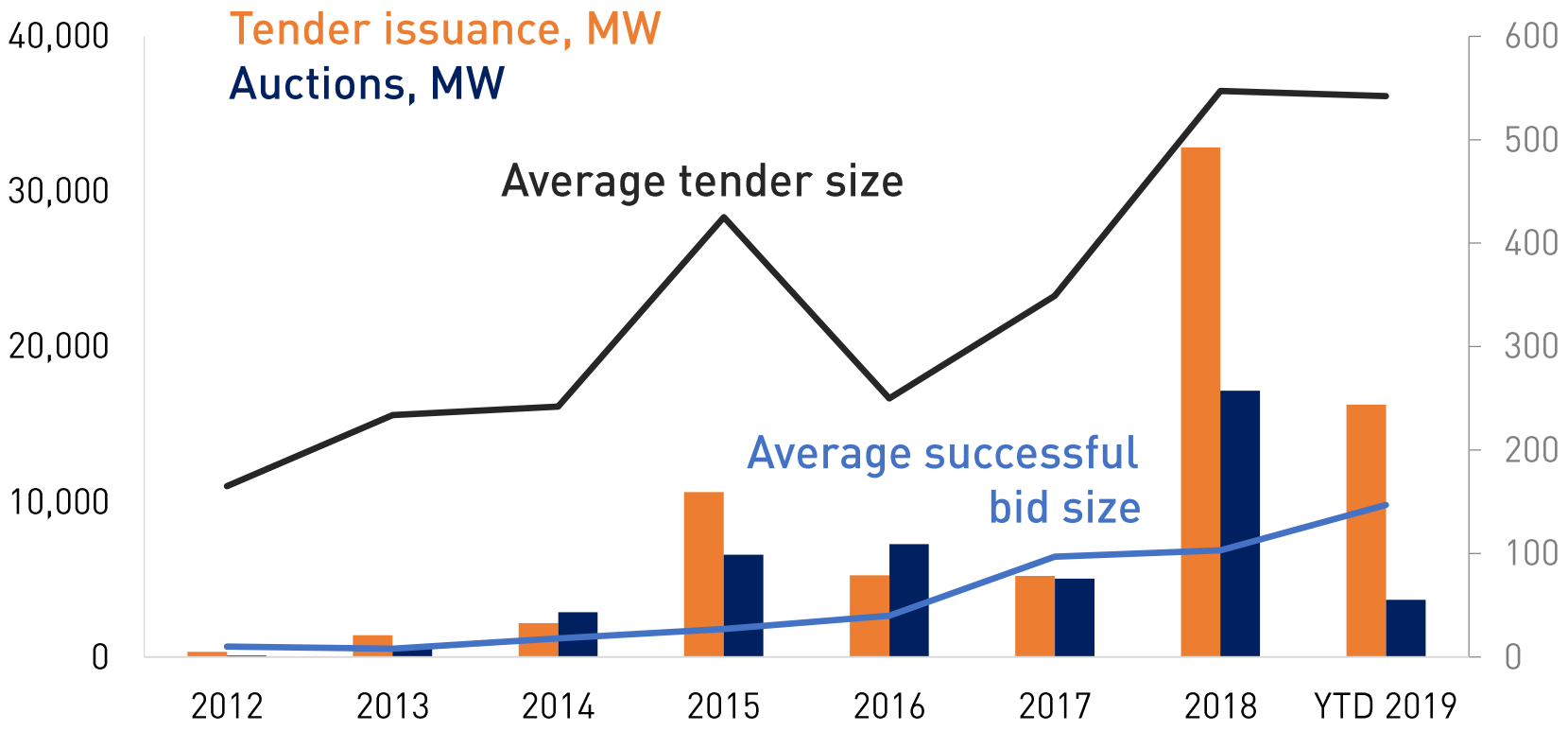





Source: BRIDGE TO INDIA research

# Tender progress is being slowed down by pricing pressure and execution challenges

## Utility scale solar tender issuance and auctions, MW

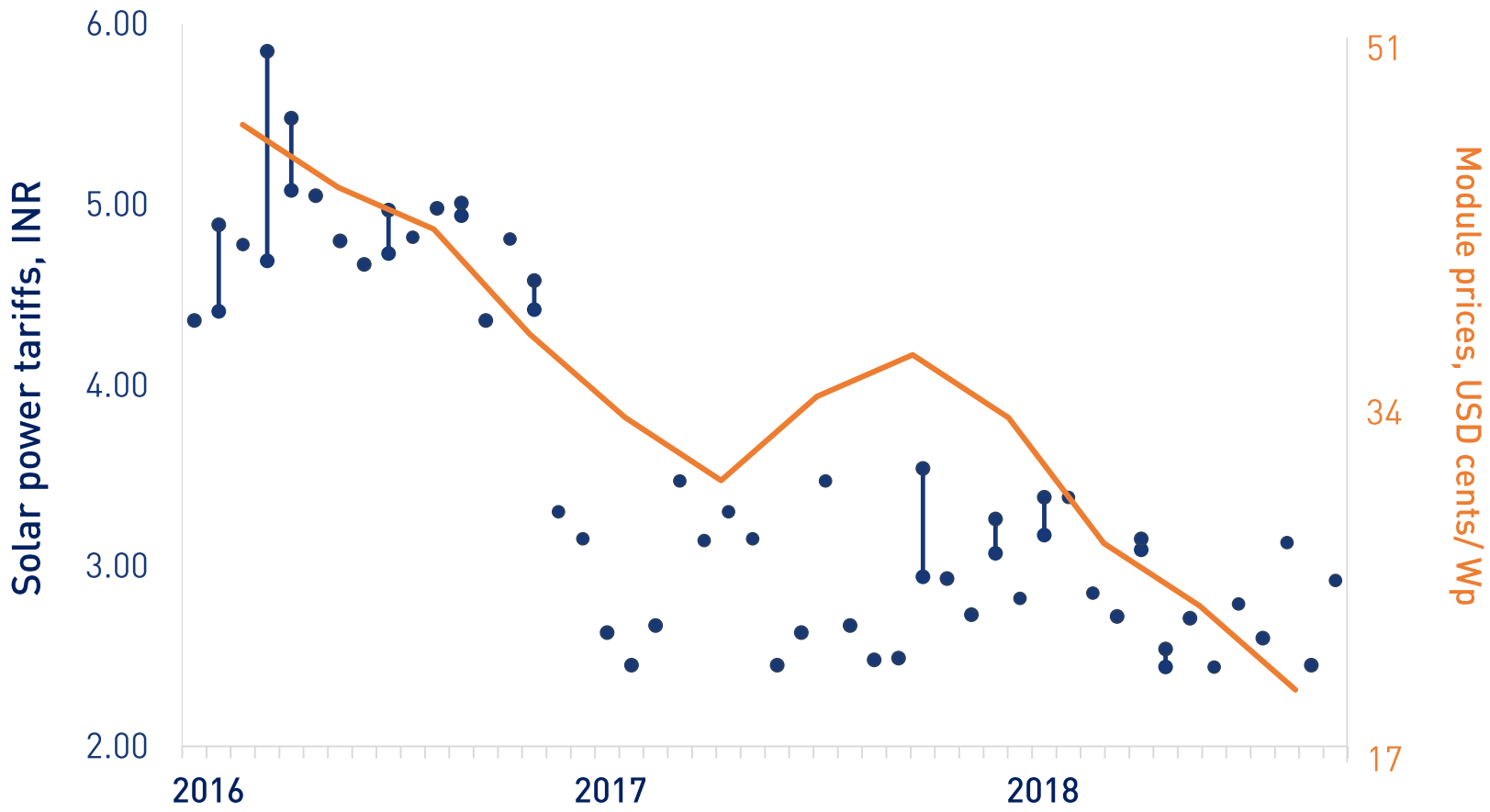



Note: Figures exclude cancelled tenders.



Source: BRIDGE TO INDIA research

# Solar tariff decline is being checked by adverse movement in other factors






Source: BRIDGE TO INDIA research

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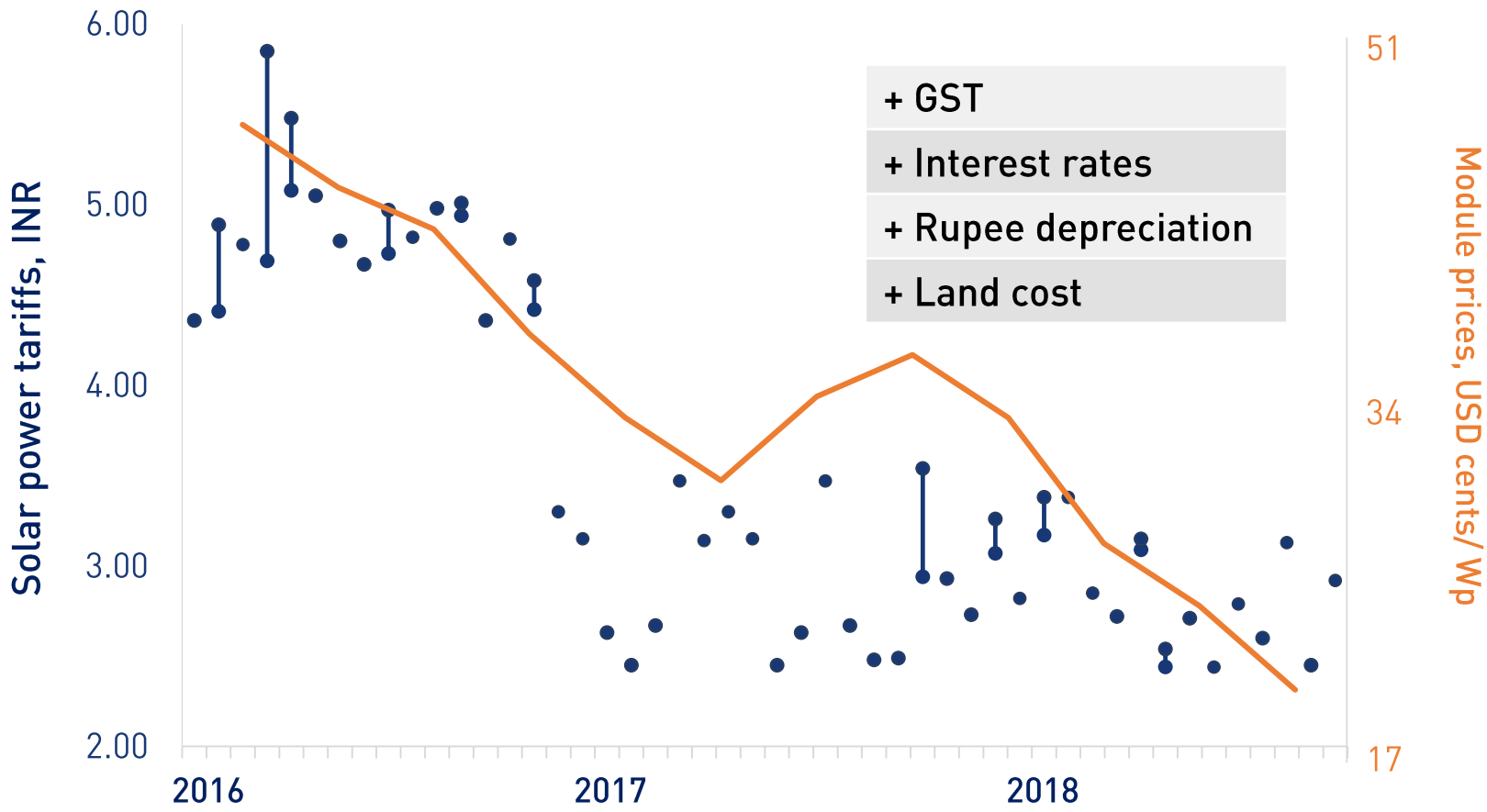




Source: BRIDGE TO INDIA research

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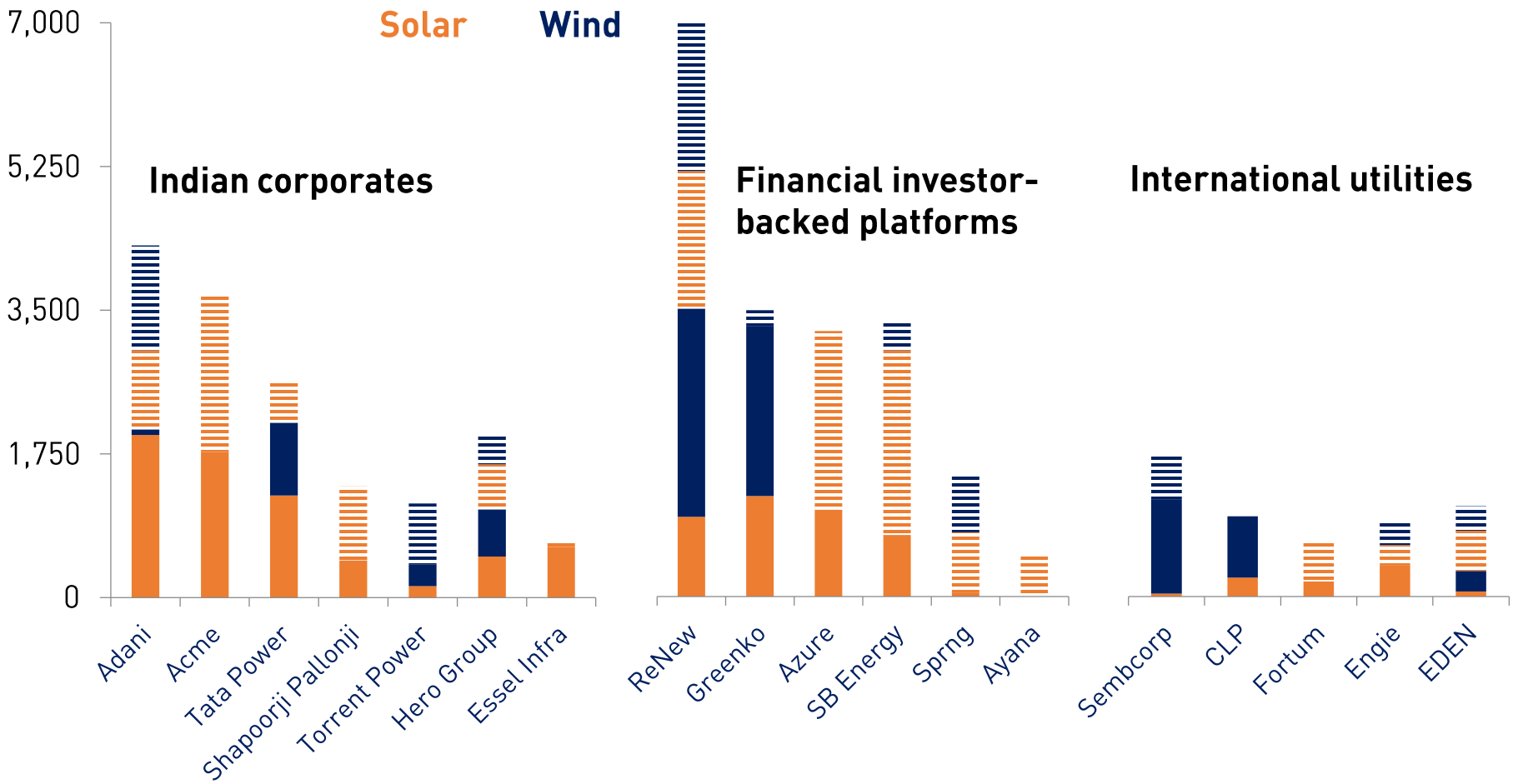
# Financial investor driven platforms have been the most aggressive

Commissioned and pipeline capacity, MW (Dec 31, 2018)






Source: BRIDGE TO INDIA research

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# The sector faces huge pricing pressure across the value chain

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If risk is not priced properly:

- Poor quality projects
- Poor performance > bank defaults
- Loss of capital

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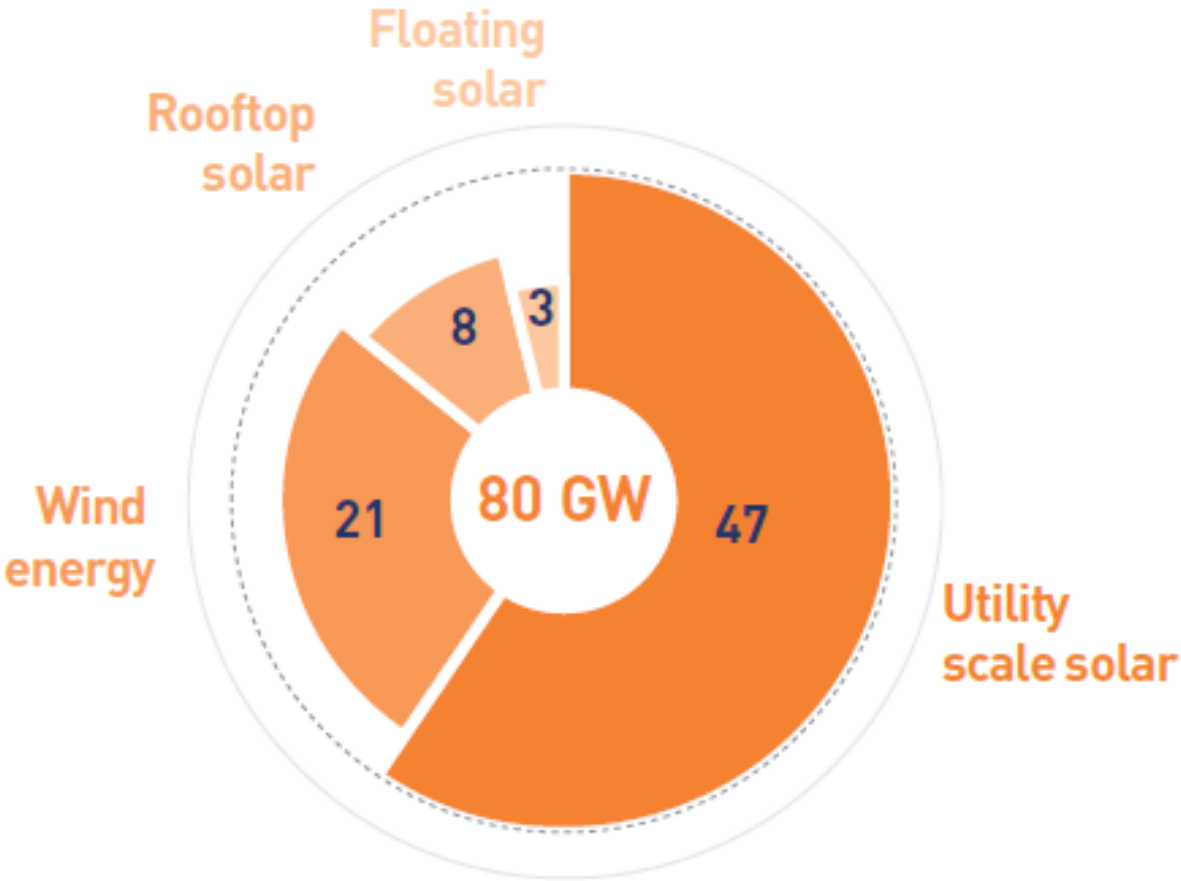
# Conclusion

# India is expected to add 80 GW of RE capacity in the next 5 years




Source: India RE CEO Survey by BRIDGE TO INDIA

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# We need a stronger foundation for long-term growth of the market

- Fixation with low prices must go, focus more on performance and reliability
- Prioritise distributed generation
- Act proactively on land acquisition and transmission
- Act urgently on grid integration

  Ancillary services; storage technology; flexible thermal plants; demand side management
- PPA structure and risk allocation needs to change
- Provide visibility on manufacturing policy

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