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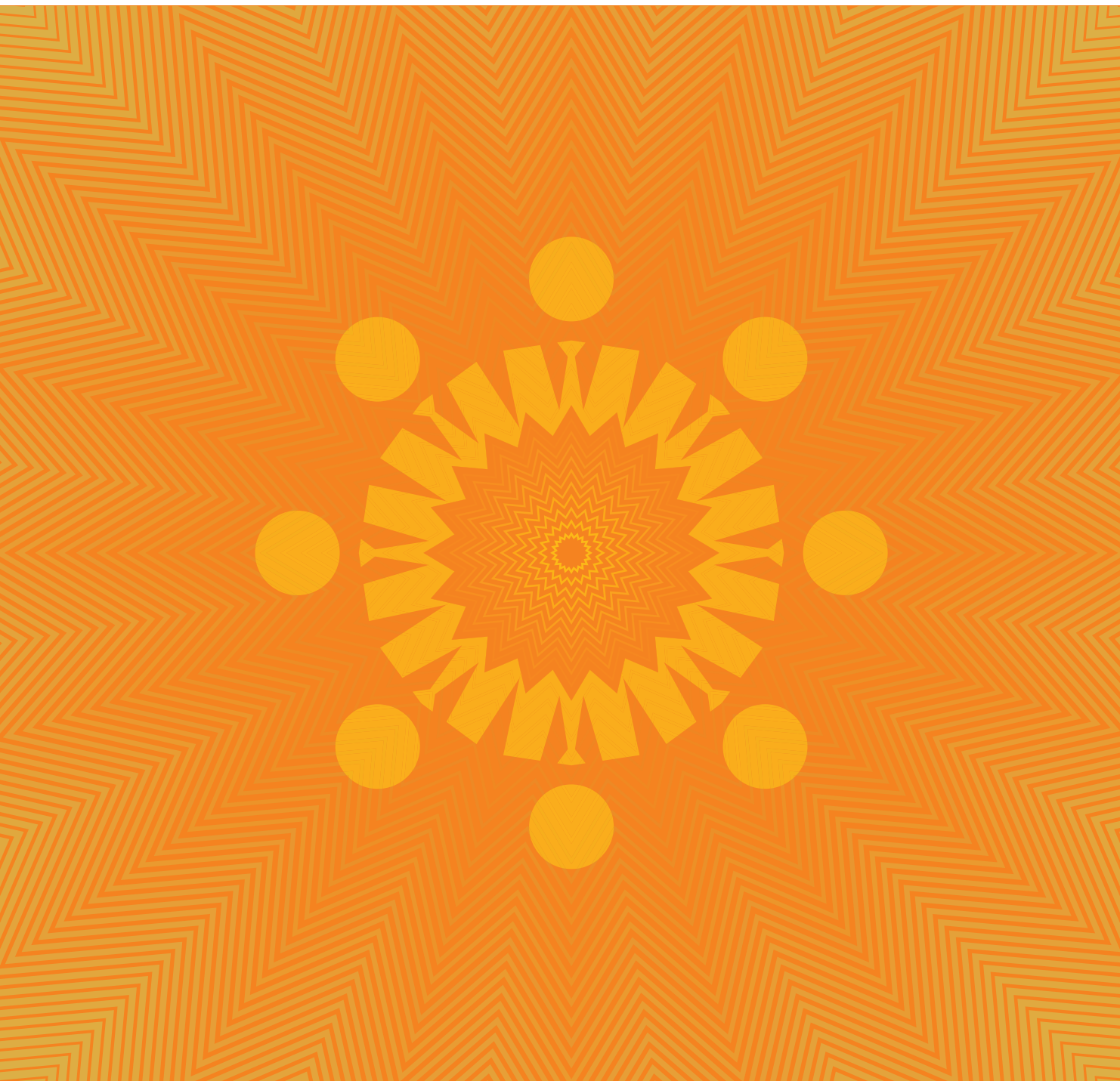


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# INDIA RE CEO SURVEY 2019





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Estimating cost of capital for  
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## Introduction

This is the fourth year of our CEO survey. 41 Indian and international players across the renewable energy value chain have participated in the survey.

### Project developers and financiers



### Equipment manufacturers



### EPC and O&M contractors

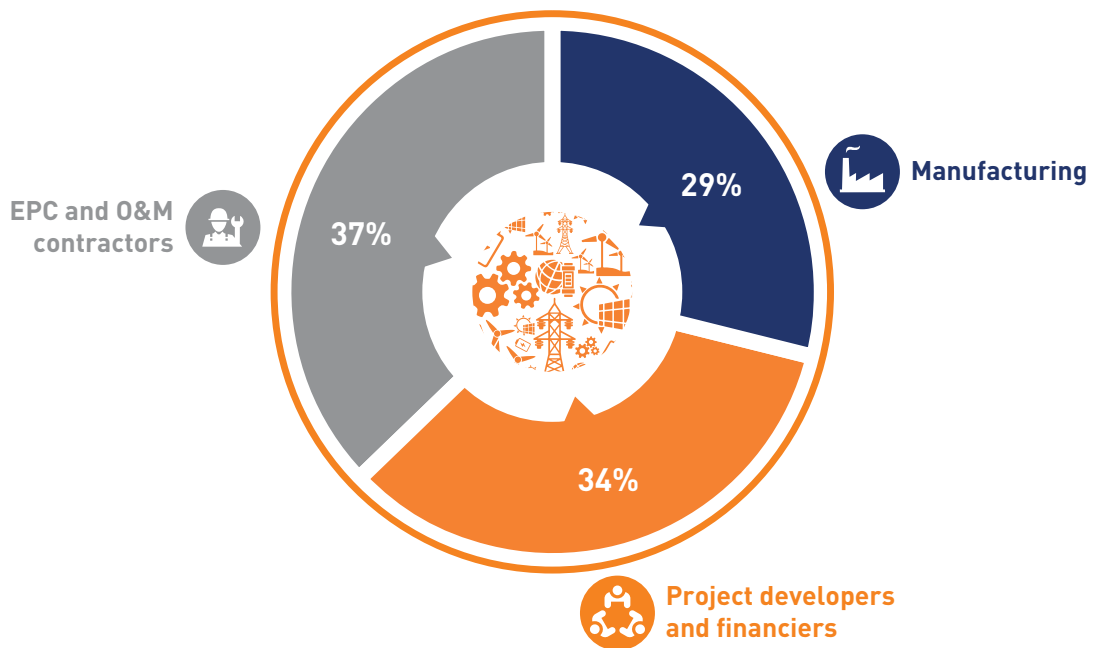


#### Notes:

1. Some company names are shown more than once depending on range of their business activities.
2. For multinational companies, the survey has been completed by respective heads of Indian business units.

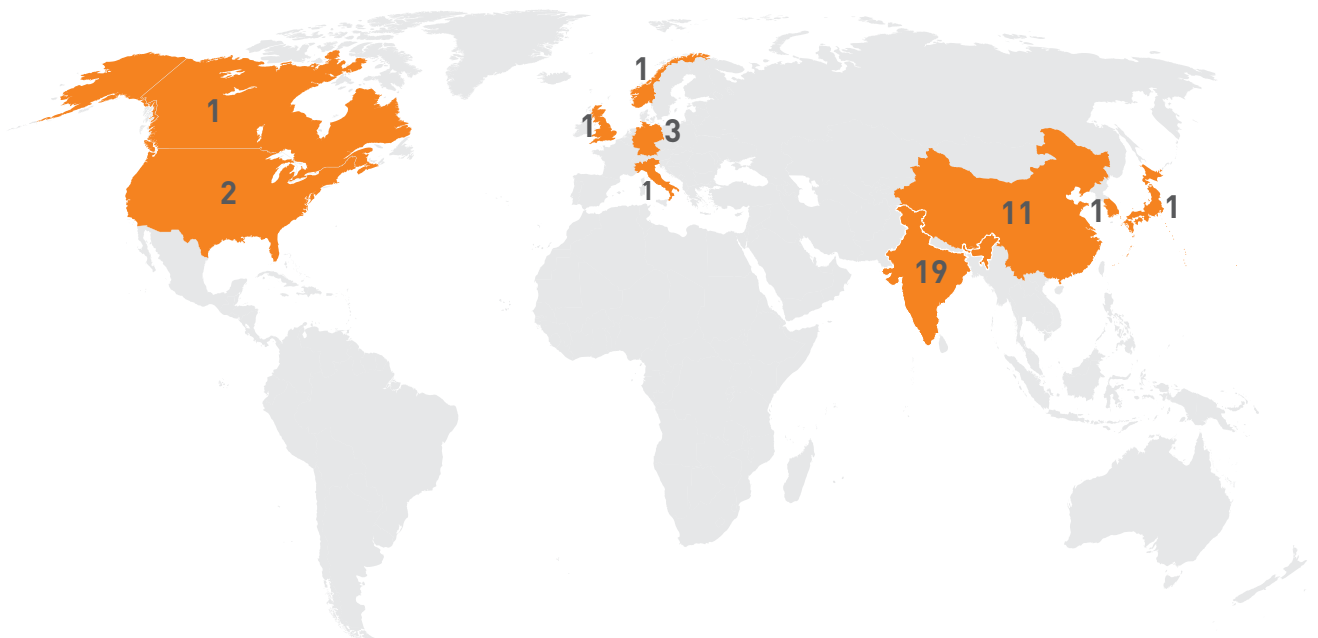
## Respondents across the value chain

The survey participants are highly diversified by business profile.



## Response across the globe

The survey has received an almost equal level of participation from international (54%) and Indian (46%) players.





# RELIABILITY CREATES VALUE

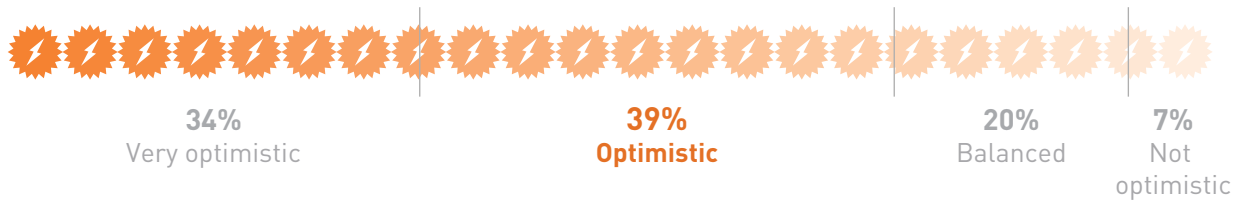
As certain as the sunrise

The background of the entire slide is a photograph of a large-scale solar farm. Rows of dark blue monocrystalline solar panels are mounted on metal racks and tilted towards the sun. The panels are installed on a green grassy field. The sky is a clear, bright blue with a few wispy white clouds. The sun is visible in the upper right, creating a lens flare effect. The overall scene conveys a sense of clean, renewable energy.

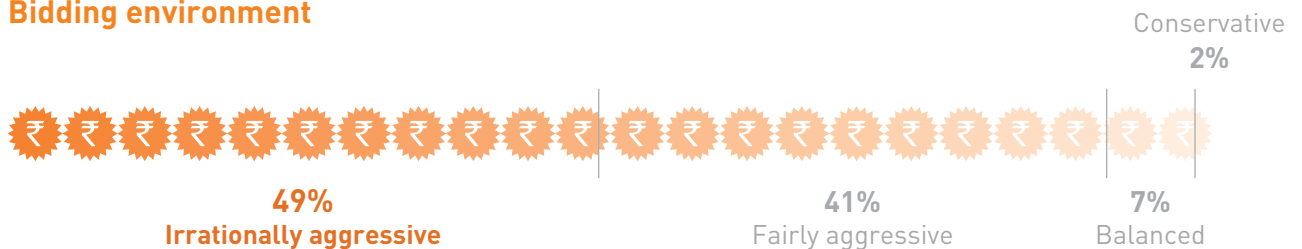
World's No. 1 monocrystalline module manufacturer • Solar's most bankable company  
PV industry highest R&D investments • High power, high yield, high reliability

## Key findings

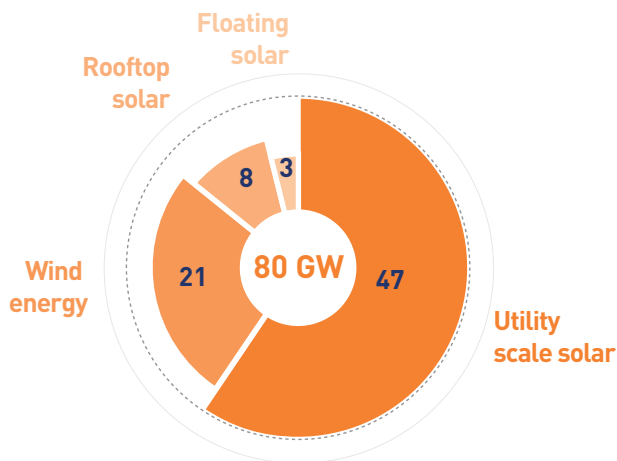
### Industry outlook



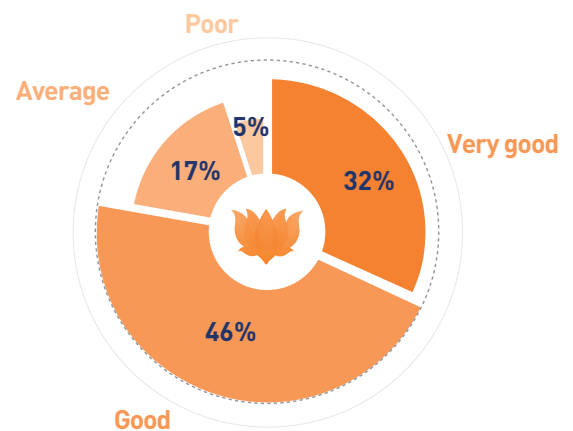
### Bidding environment



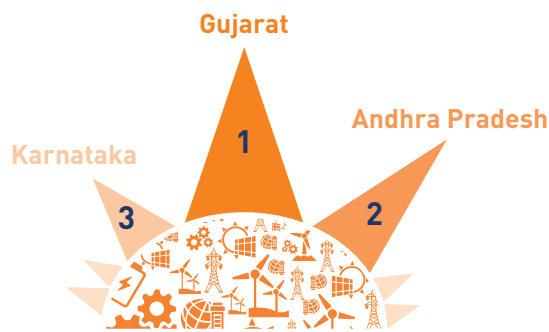
### RE capacity addition in the next 5 years



### Assessment of Modi government's 5 years



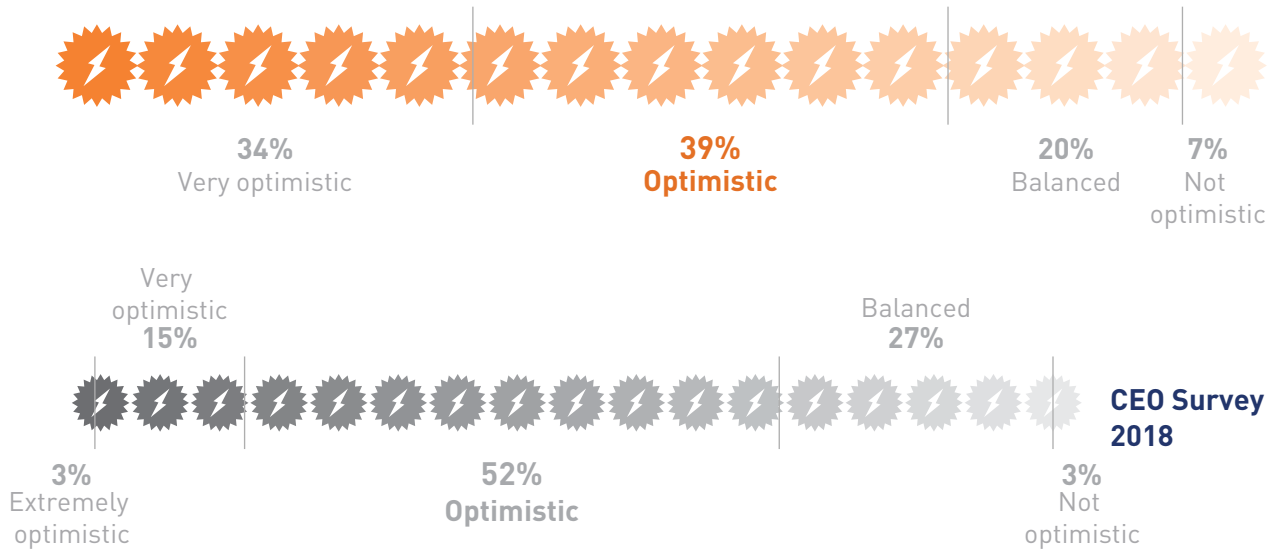
### Ranking of states on ease of doing business



## Industry outlook

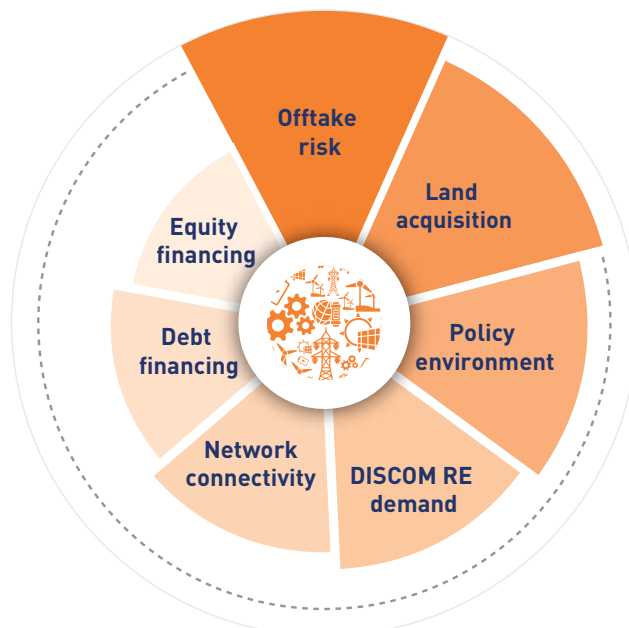
### Business sentiment

The sentiment remains optimistic (3% more than last year) despite imposition of safeguard duty, GST and BIS implementation niggles, project delays, tender cancellations, falling Rupee and policy reversals. In fact, the ratio of “very optimistic” responses is up significantly over last year.



### Business challenges

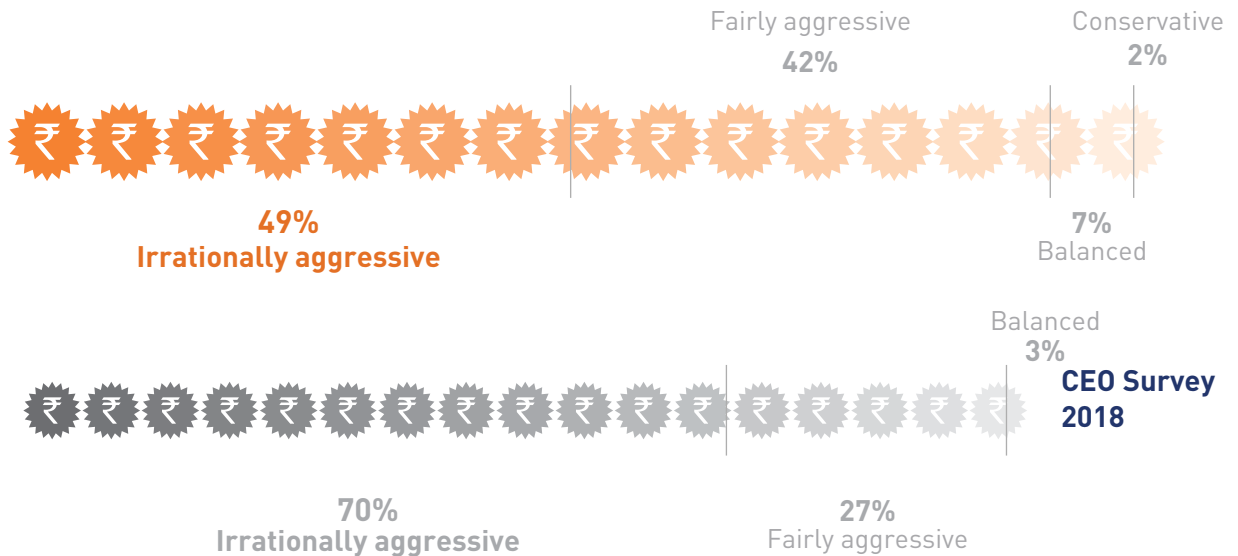
Offtake risk, land acquisition and uncertain policy environment are rated as the biggest concerns in the sector.





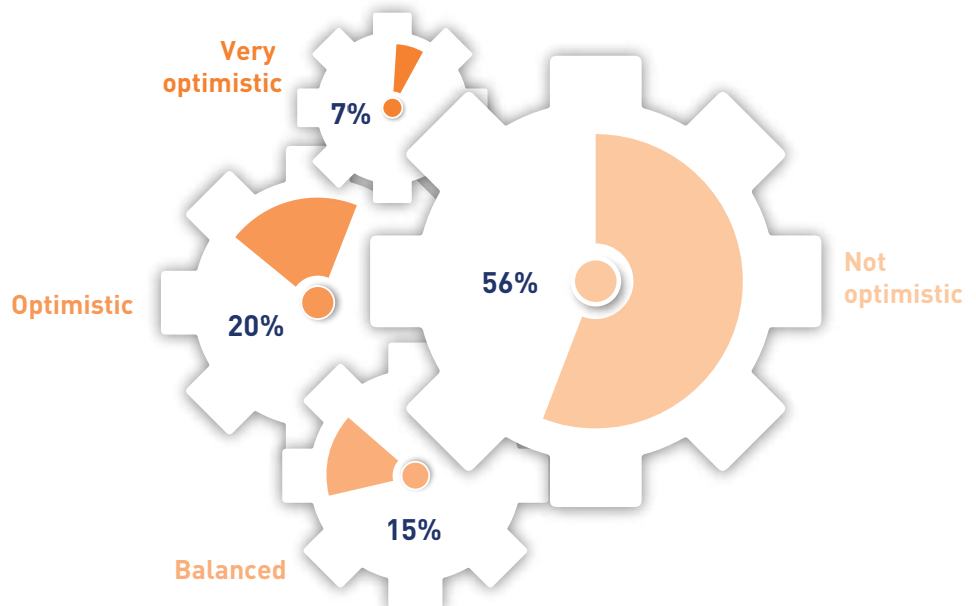
## Bidding environment

90% of the respondents, largely unchanged over last year, feel that the bidding environment in the sector is aggressive. But the ratio of “irrationally aggressive” responses is down from 70% to 49%.



## Manufacturing outlook

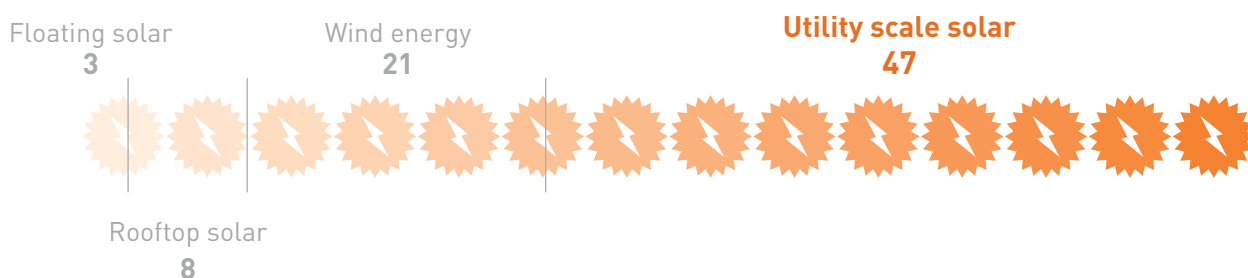
The industry is pessimistic about manufacturing prospects in India. This is understandable as all the government initiatives to promote domestic manufacturing – manufacturing linked tenders, CPSU scheme, KUSUM and safeguard duty – have failed to produce any positive results.



## Capacity addition in the next 5 years

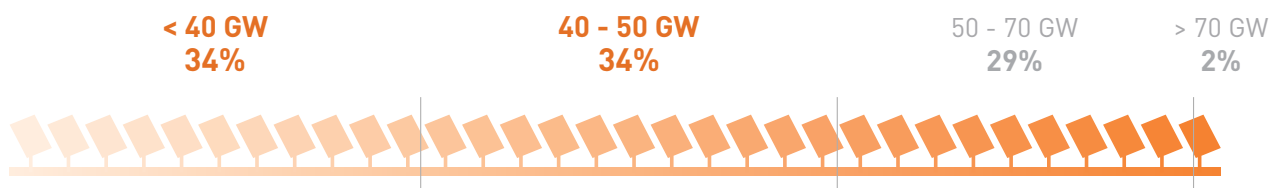
### Total RE

The industry expects total RE capacity addition of 80 GW in the next 5 years. The split between solar and wind power is 58:26.



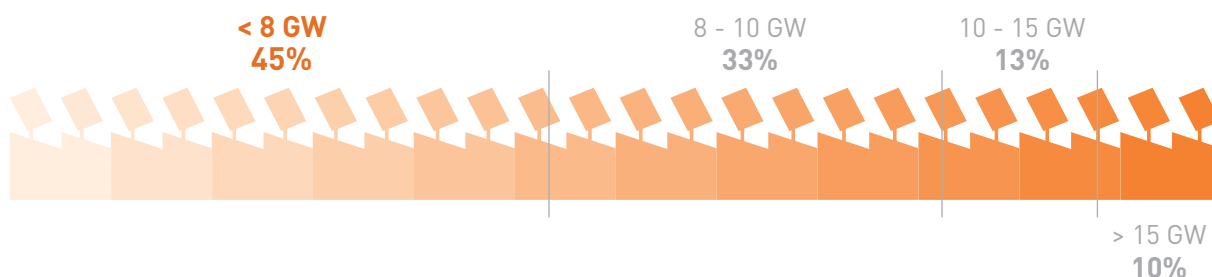
### Utility scale solar

There is a fairly divided opinion on utility scale solar growth prospects with estimates ranging almost evenly between less than 40 GW, 40-50 GW and greater than 50 GW. It is worth noting that we already have 18.6 GW capacity in the pipeline (auctioned and awarded to developers).



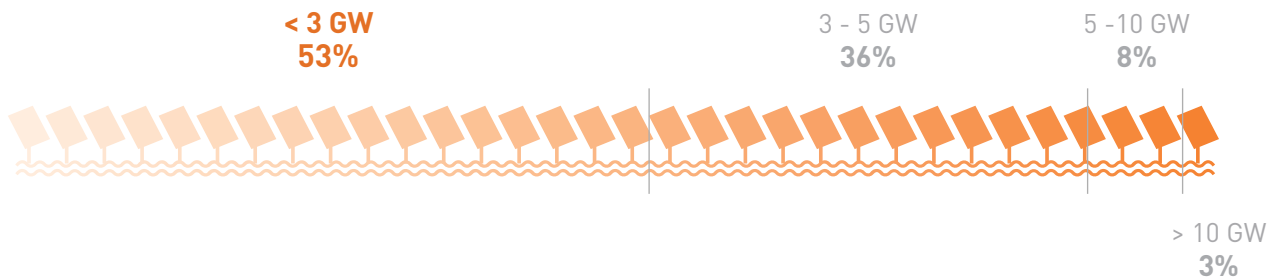
### Rooftop solar

Outlook for rooftop solar is fairly conservative as a clear majority of participants (78%) believe that India would add less than 10 GW capacity in the next 5 years. BRIDGE TO INDIA's estimate for the same period is 18 GW.



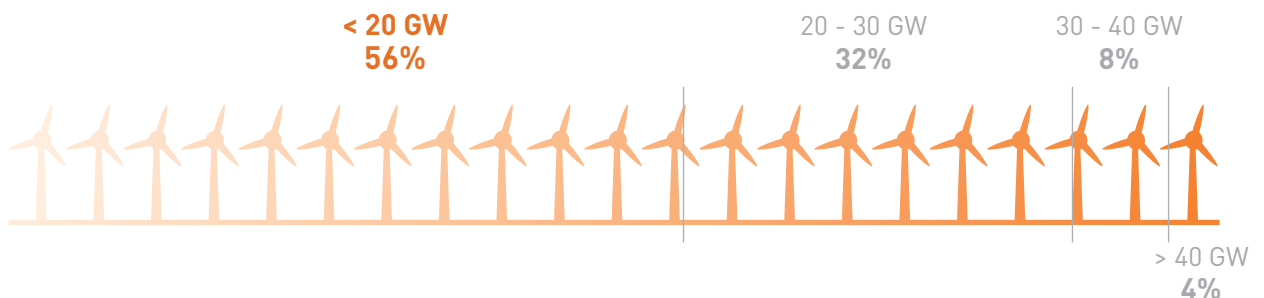
## Floating solar

Majority opinion is for floating solar capacity addition of less than 3 GW over the next 5 years although a significant minority believe that this could go up to 5 GW.



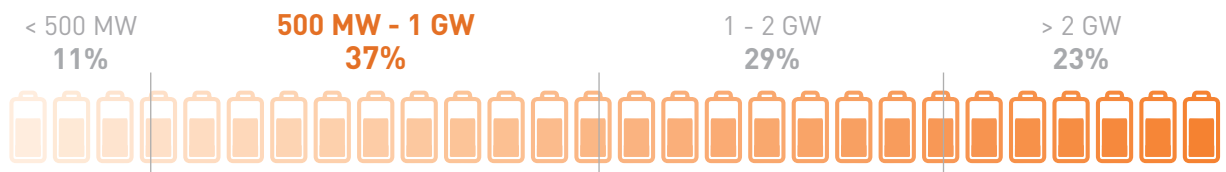
## Wind energy

Outlook for wind power capacity addition feels bleak with 56% respondents believing that India will add less than 20 GW in the next 5 years. Again, it is worth noting that we already have 11.4 GW capacity in the pipeline (auctioned and awarded to developers).



## Grid scale storage

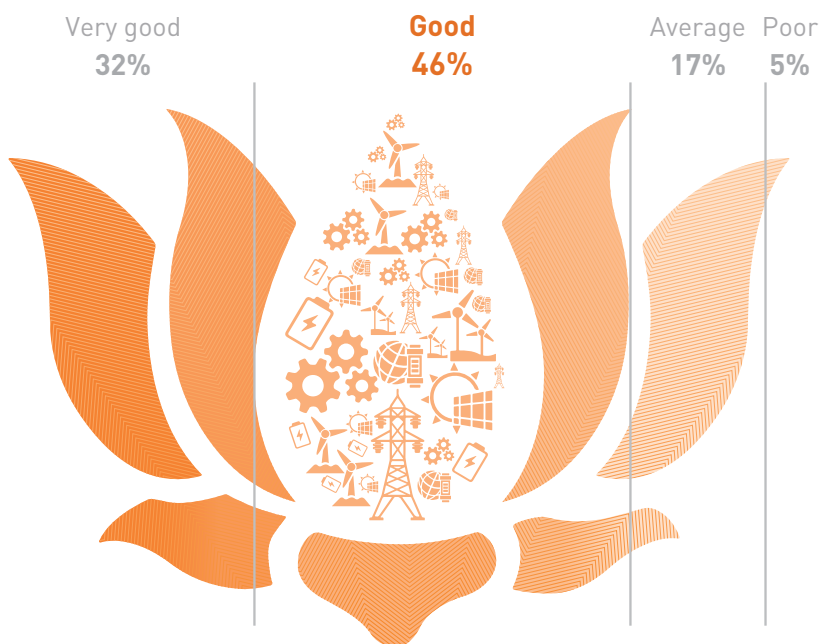
There is a very wide variety of responses on grid scale storage deployment. 48% of CEO's believe that it would be below 1 GW but 23% believe that deployment would go beyond 2 GW.



## Policy environment

### Assessment of Modi government's 5 years

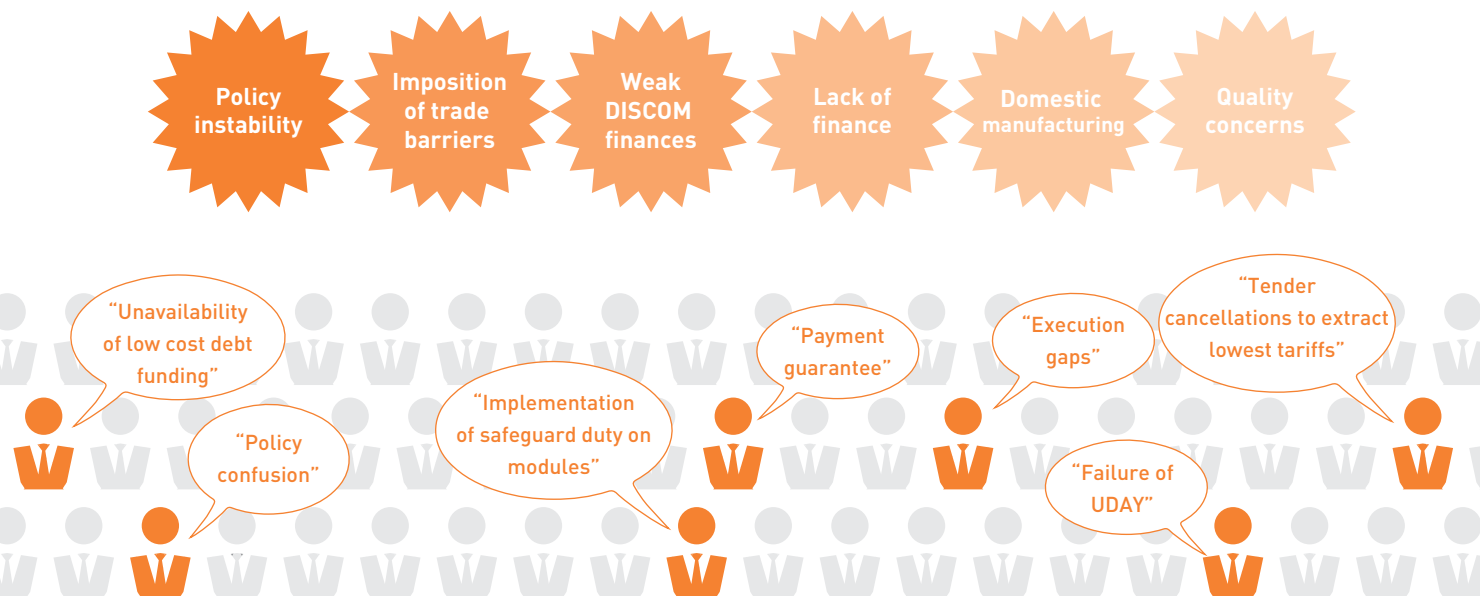
Despite the issues of policy instability, demonetisation, GST and safeguard duty, an overwhelming majority feels positively about performance of the Modi government in the RE sector.



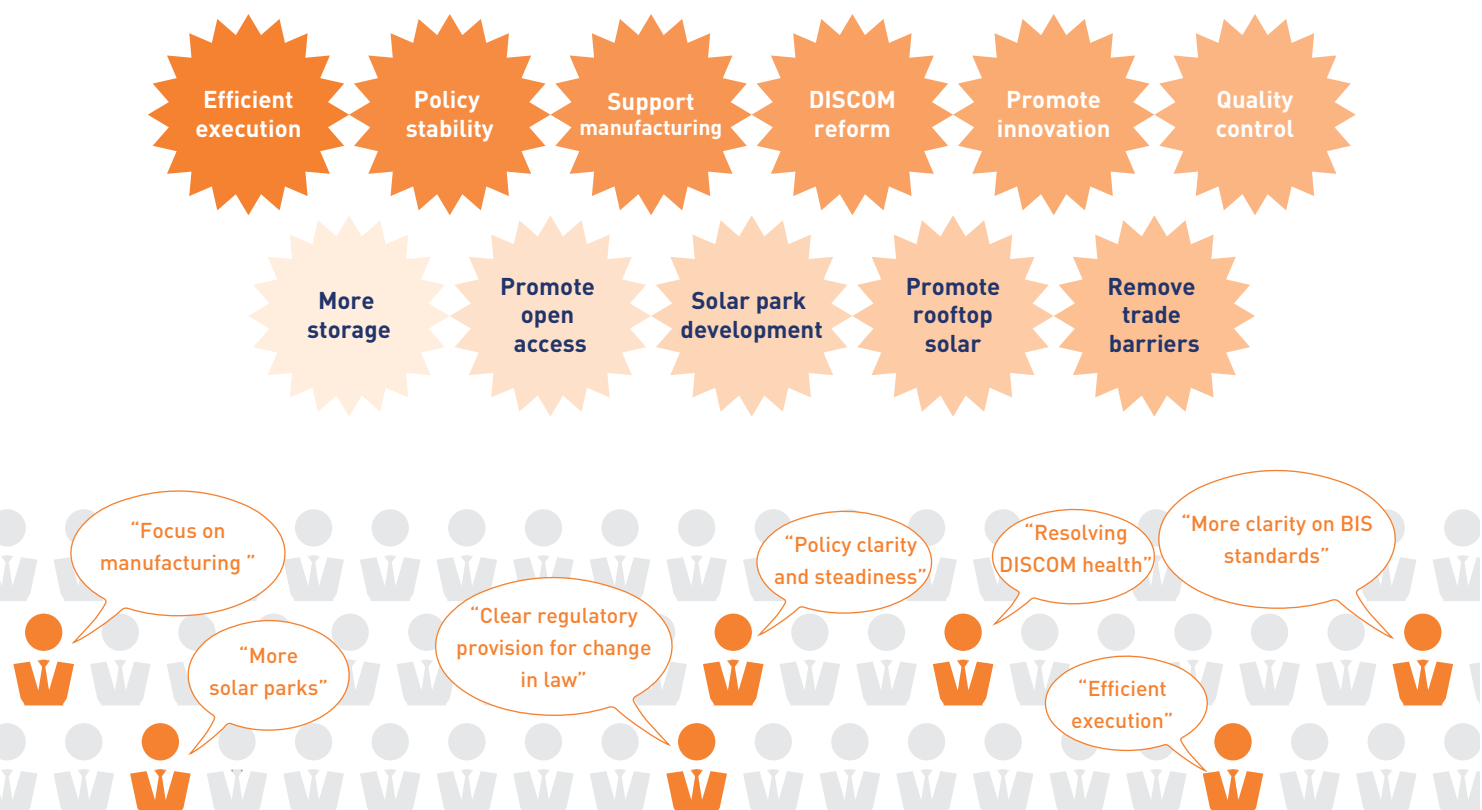
### Key achievements of Modi government's 5 years



## Failures of Modi government's 5 years



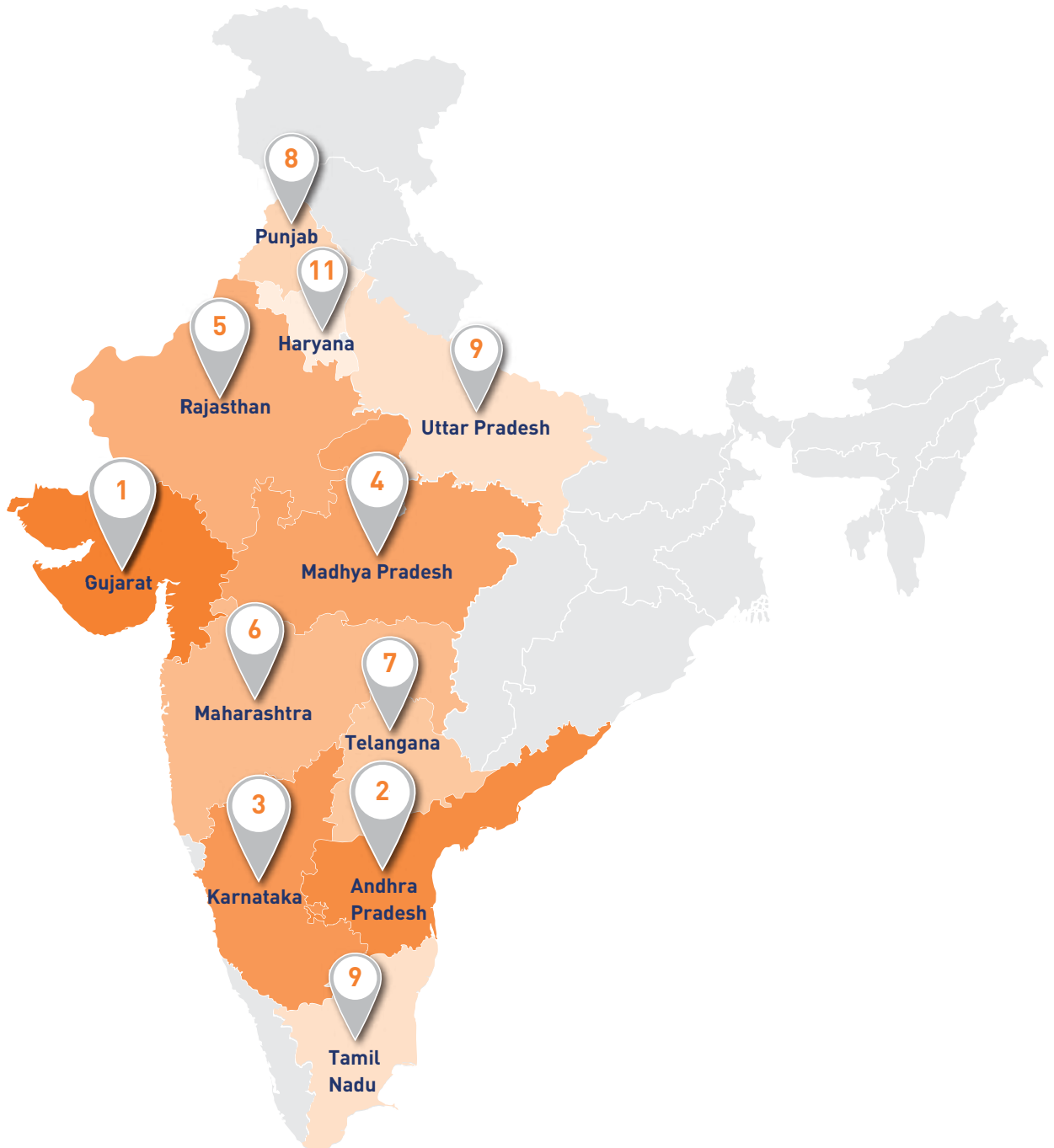
## Expectations from the new government





## Ranking of states

Gujarat, Andhra Pradesh and Karnataka are rated as the top three states on overall 'ease of doing business' - policy framework (clarity and visibility), land acquisition, transmission capacity, permits and approval process, payment track record and curtailment risk. Haryana, Uttar Pradesh and Tamil Nadu come at the bottom in the list of top 11 states.



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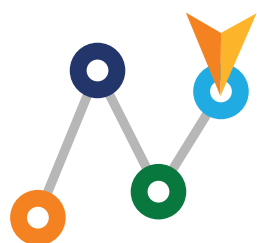


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