

The background of the slide features a dark, textured surface with numerous bright, golden-yellow sparks and light trails, resembling a firework or sparkler. The sparks are scattered across the frame, with some appearing as long, thin streaks and others as bright, starburst-like points of light. The overall effect is one of dynamic energy and celebration.

BCG

THE BOSTON CONSULTING GROUP

‘Infrastructure Finance 2.0 and future of development funding’

NOV 2017

Five themes for discussion today

- 1 Infrastructure becoming bigger, varied and complex
- 2 Government spent going up significantly; bringing back risk capital
- 3 Innovation in policy and models
- 4 Channelizing enhanced interest by foreign investors
- 5 Developing future ready infrastructure

Accelerated infrastructure development (I)



Bharat-
mala

Setu-
Bharatam

MMLPs

Ports

Cleaning
Ganga

\$ 40 bn

\$ 8 bn

\$ 10 bn

\$ 22 bn

\$ 3.5 bn

54,000 km
NH roads

Replace LCs
with ROBs/
RUBs

Serve 50%
freight; 10%
reduction in
costs

189 projects

Sewage
management
in 10 cities

Accelerated infrastructure development (II)



Port-led
Industrial.

\$120 bn

To be
invested
over 2015-
2035



Bullet
trains

\$15 bn

Mumbai-
Ahmedabad;
5 more



Freight
corridors

\$ 25 bn

3,360 km;
32.5T axle
load; 100
kmph



Airports

\$ 1 bn

Develop/
upgrade 50
airports

Emerging sectors gaining traction



Affordable housing



Metros



Inland Waterways



Industrial Parks & Corridors



Smart Infrastructure







Urban transportation

Questions for panel

- ① Many ideas, many announcements, many projects -
Are we ready to deliver?
- ② Opportunities differ on size, viability and maturity -
How to evaluate new opportunities?
- ③ Promoting allied industries and ‘ripple effect’ can be rewarding e.g. bullet trains -
How to actively shape opportunity?

Government outlays & expenditure increasing

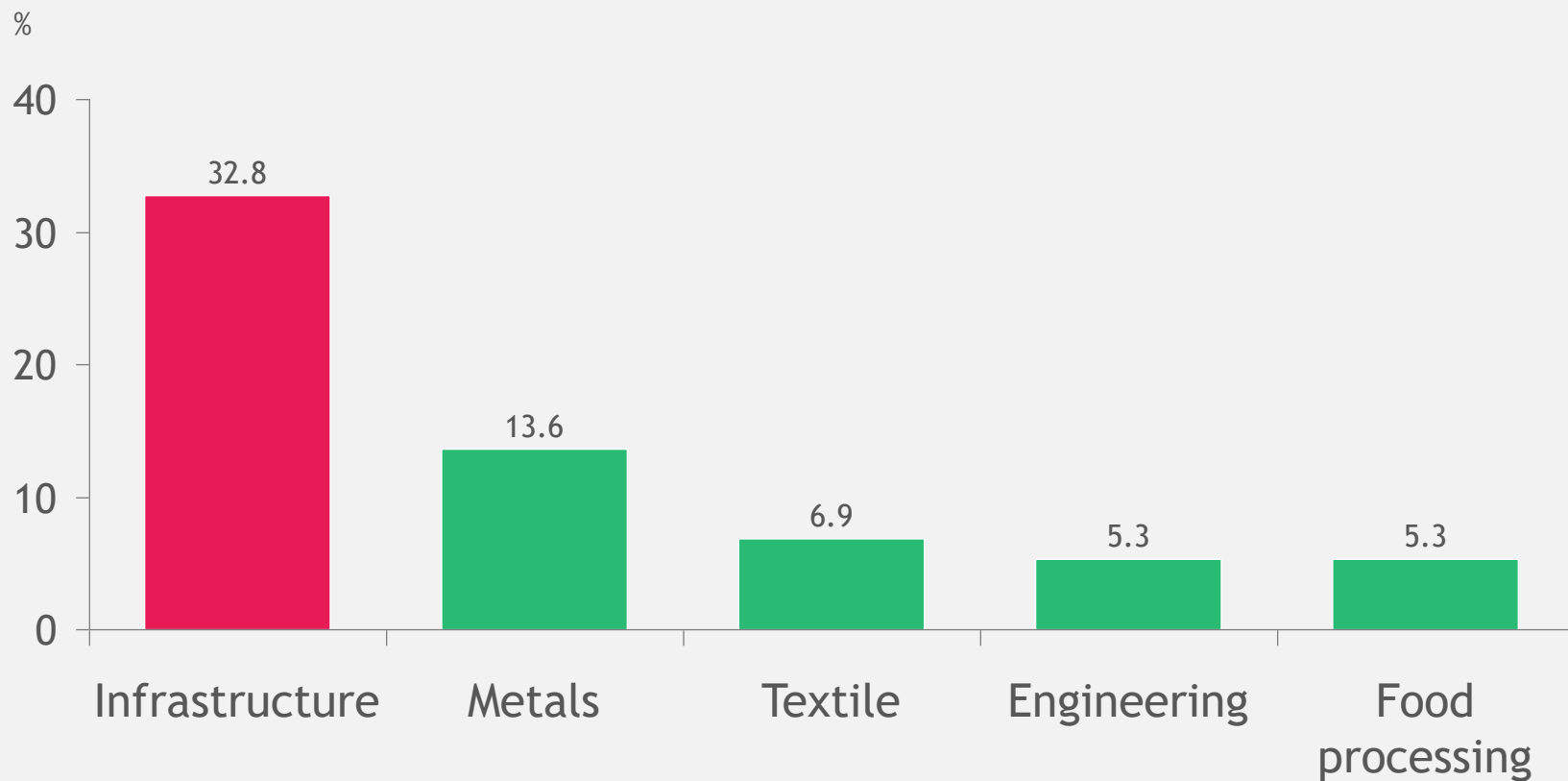
Annual budgetary expenditure (Rs cr)

	2014-15	2015-16	2016-17	2017-18	
 MoRTH	30953	46912	52447	614900	↑
 Shipping	1029	1324	1454	1773	↑
 Power	13204	7734	10475	13881	↑
 Railways	30121	35007	46155	55000	↑

Note: Numbers reported are actual expenditures for 2014-15 and 2015-16; 2016-17 are revised estimated; 2017-18 are budgeted expenditures

Largest NPAs in infrastructure sector

Contribution to total stressed loans by sector

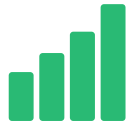


Note: 1. Data as of March 2017. 2. Infrastructure sub-sectors includes power, transport, telecommunications
Source: RBI Financial stability report, June 2017

Questions for panel

- ① Challenge of overhang in balance sheets
Are banks and developers ready for new capex cycle?
What are most appropriate long term products and structures to participate?
- ② Enforceability of contracts is considered a challenge -
How to make re-negotiation or re-structure contracts possible in today's environment?

Innovation in policy, models and PPP



Hybrid annuity

Combination of BOT annuity & EPC models

- Sharing of upfront capital requirements
- Tolling risk with government



Toll, Operate, Transfer

Monetization of completed tollable road assets

- Concession period of 30 years
- Tolling rights for duration of concession period



Least PV of revenues

Variable concession period model

- Concession period adjusted to account for changes in environment to maintain financial returns

Questions for panel

- ① Government spends to fund VG and to spur demand, but as an investor-
What is government's thinking on monetization?
- ② Boosting appetite for private capital
How to improve quality and credit worthiness of projects?

Multiple global investors eyeing the India infrastructure sector

~\$35+Bn worth investments have been made/ committed by leading global investors in the Indian infrastructure space in the last 3-4 years

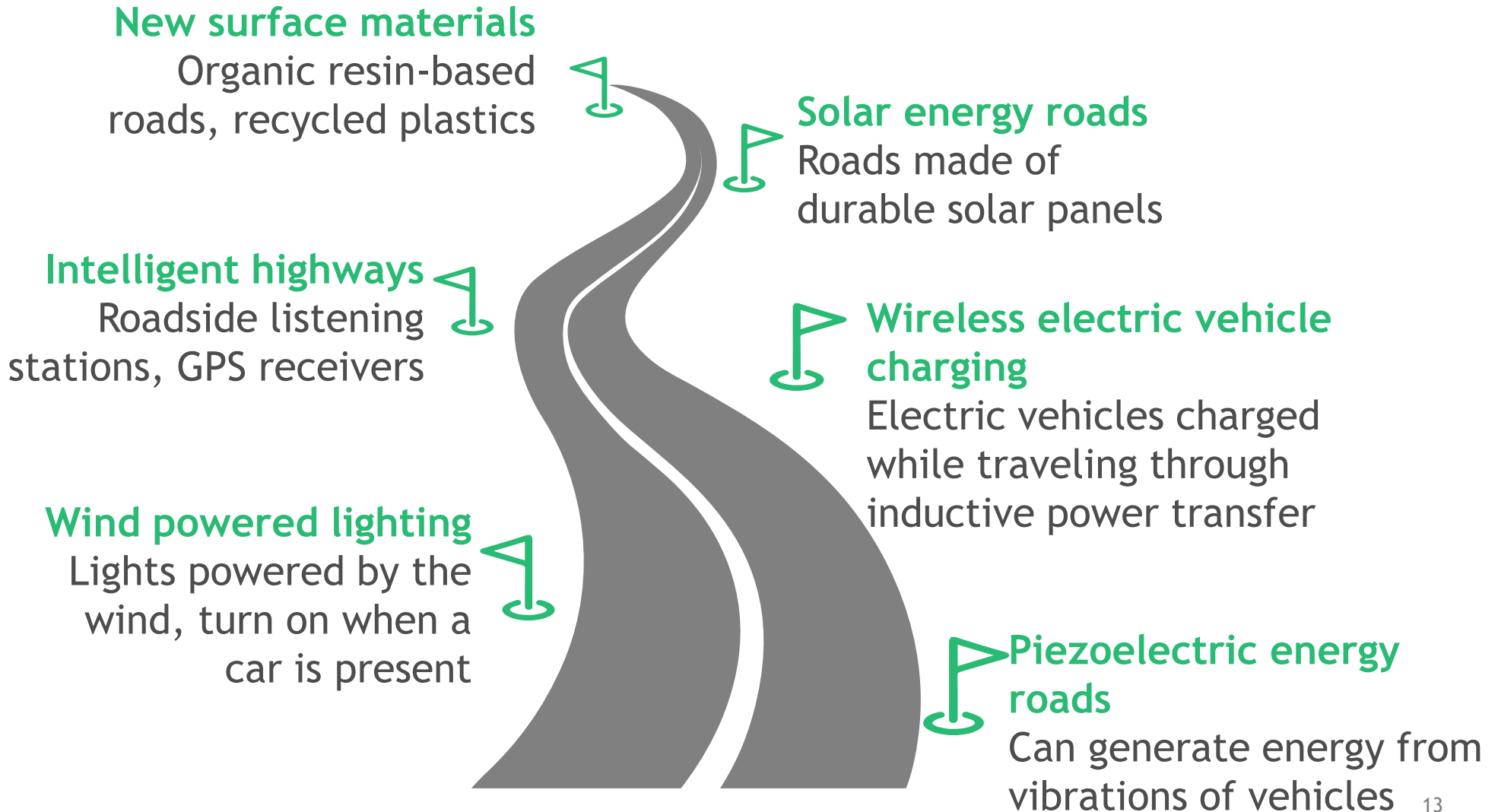


Note: The values indicate the planned + actual investments by these firms/ funds across all projects in India for the past 5 years

Questions for panel

- ① Getting high quality, long term funds should be a priority -
How real is the promise?
What could help facilitate the flow?

Future readiness of Infrastructure - Roads



Questions for panel

- ① Infrastructure is a long term play. It needs to be future ready -
How do players factors 'future readiness' in plans?
Is adequate importance given to O&M and improvement of projects?

Concluding remarks

Use 2 or 3 words / phrases
to describe "Infrastructure
Finance 2.0 and future of
development funding"

Open Questions & Answers