DOMESTIC CONTENT REQUIREMENTS AND INDIA'S NATIONAL SOLAR MISSION

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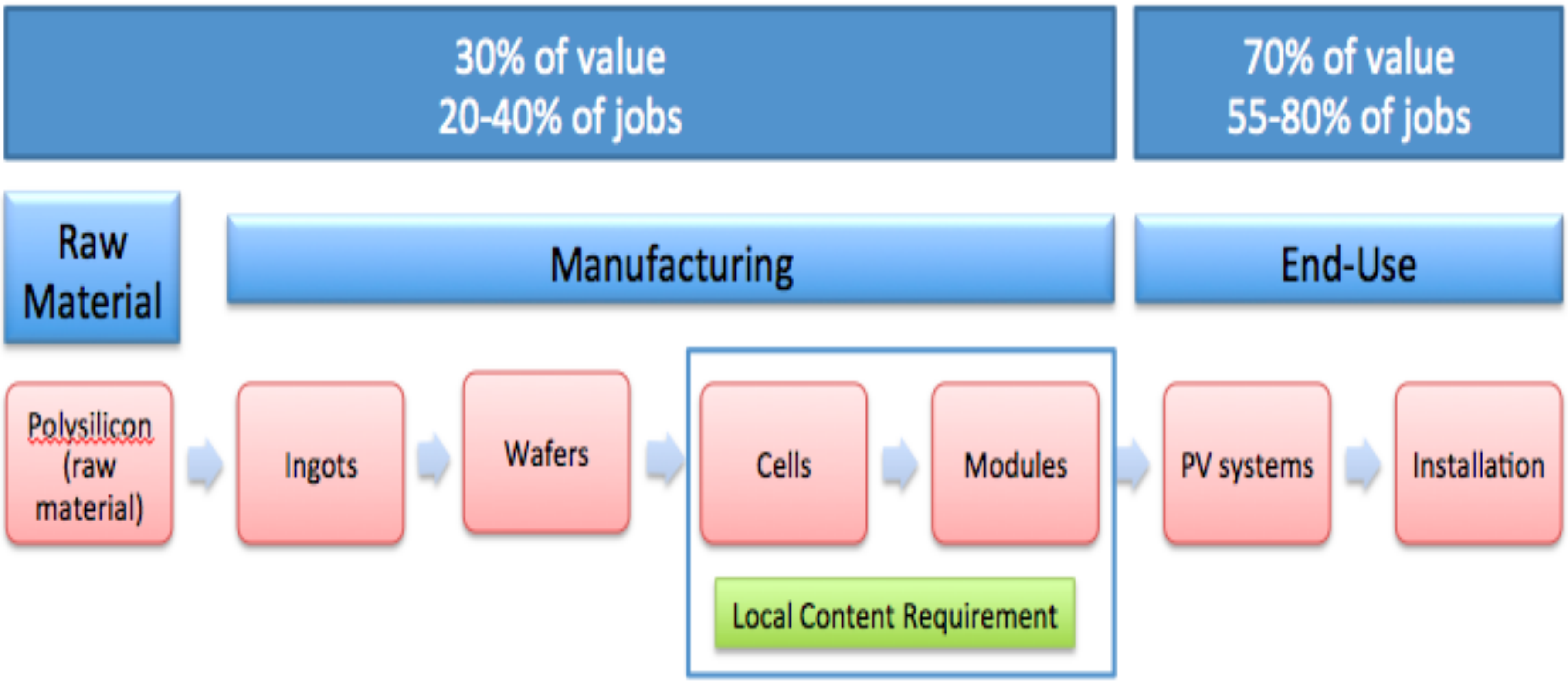
INDIA'S SOLAR PROGRAM

- JNNSM: launched in 2010 under National Action Plan on Climate Change.
  - 1.1 GW of grid connected PV, 0.2 GW of off grid by 2013.
  - 20 GW of grid connected PV, 2 GW of off grid by 2022.

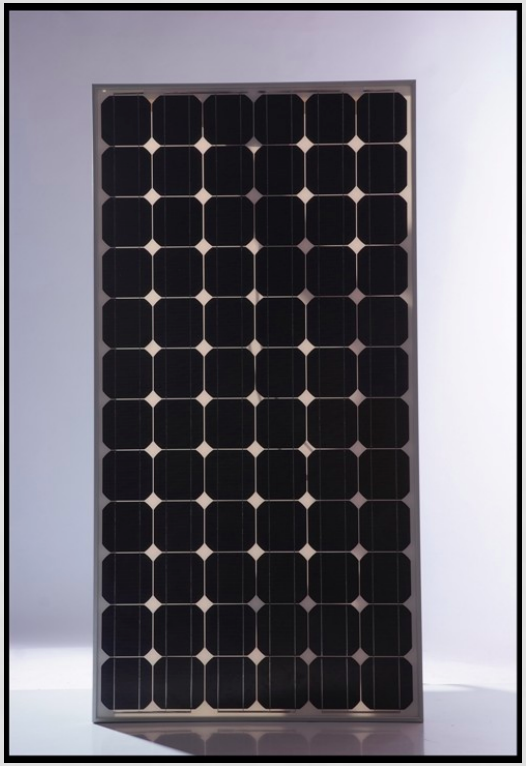
INDIA'S SOLAR PROGRAM

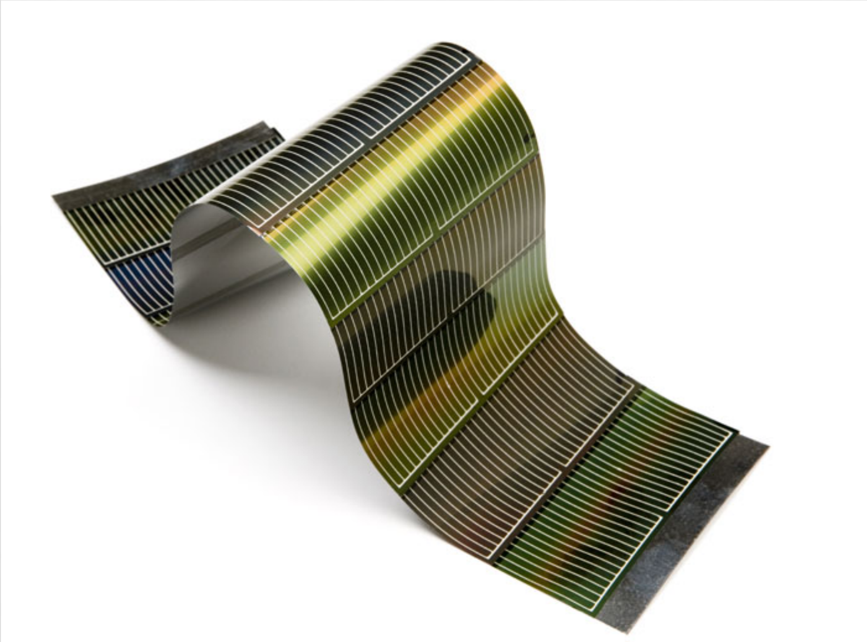
- Phase I: Reverse auction mechanism
  - Solar developers submit bids to government
  - Government selects lowest bids
  - Government purchases power
- Two auctions under Phase I:
  - Batch I: PPAs signed in 2011
  - Batch II: PPAs signed in 2012
- One auction so far under Phase II:
  - PPAs signed in 2014

THE SOLAR PV MANUFACTURING CHAIN



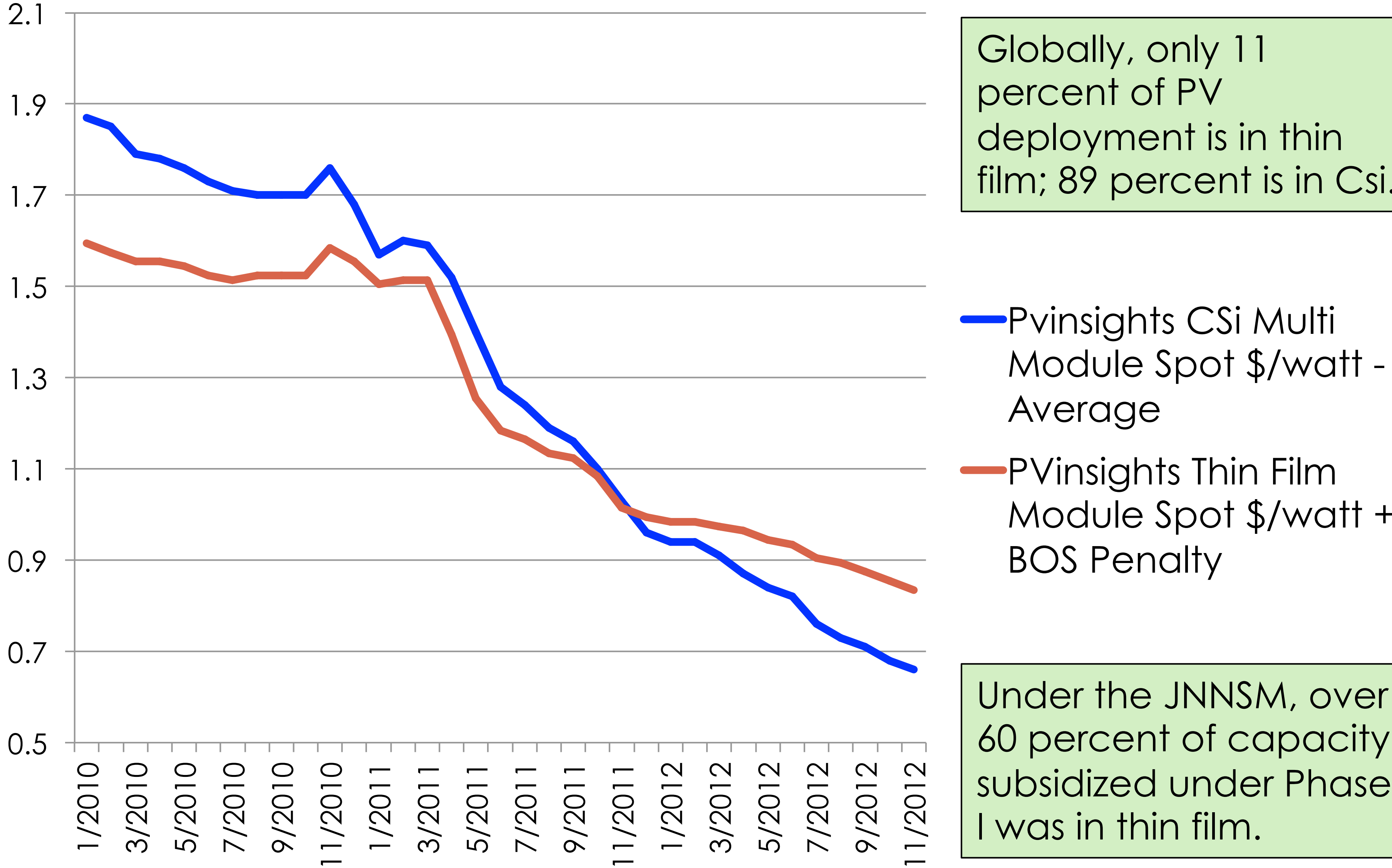
THE PHASE I LCR





- Crystalline silicon panels required to be sourced domestically.
- Thin film panels exempt from the requirement.

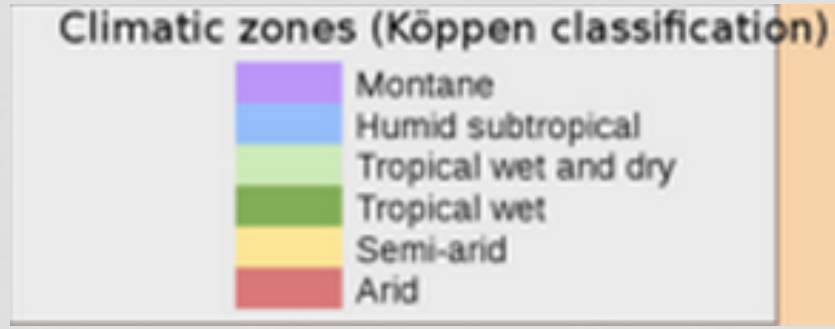
CSi vs Thin Film Module Spot Prices, Adjusted for BOS Penalty, 2010-2012



Globally, only 11 percent of PV deployment is in thin film; 89 percent is in Csi.

Under the JNNSM, over 60 percent of capacity subsidized under Phase I was in thin film.

Gujarat vs. Rajasthan



	Projects Financed 2011-2012	
	JNNSM Projects	Non-JNNSM Projects > 5 MW
Gujarat	0	59
North Gujarat	0	2
Rajasthan	52	2

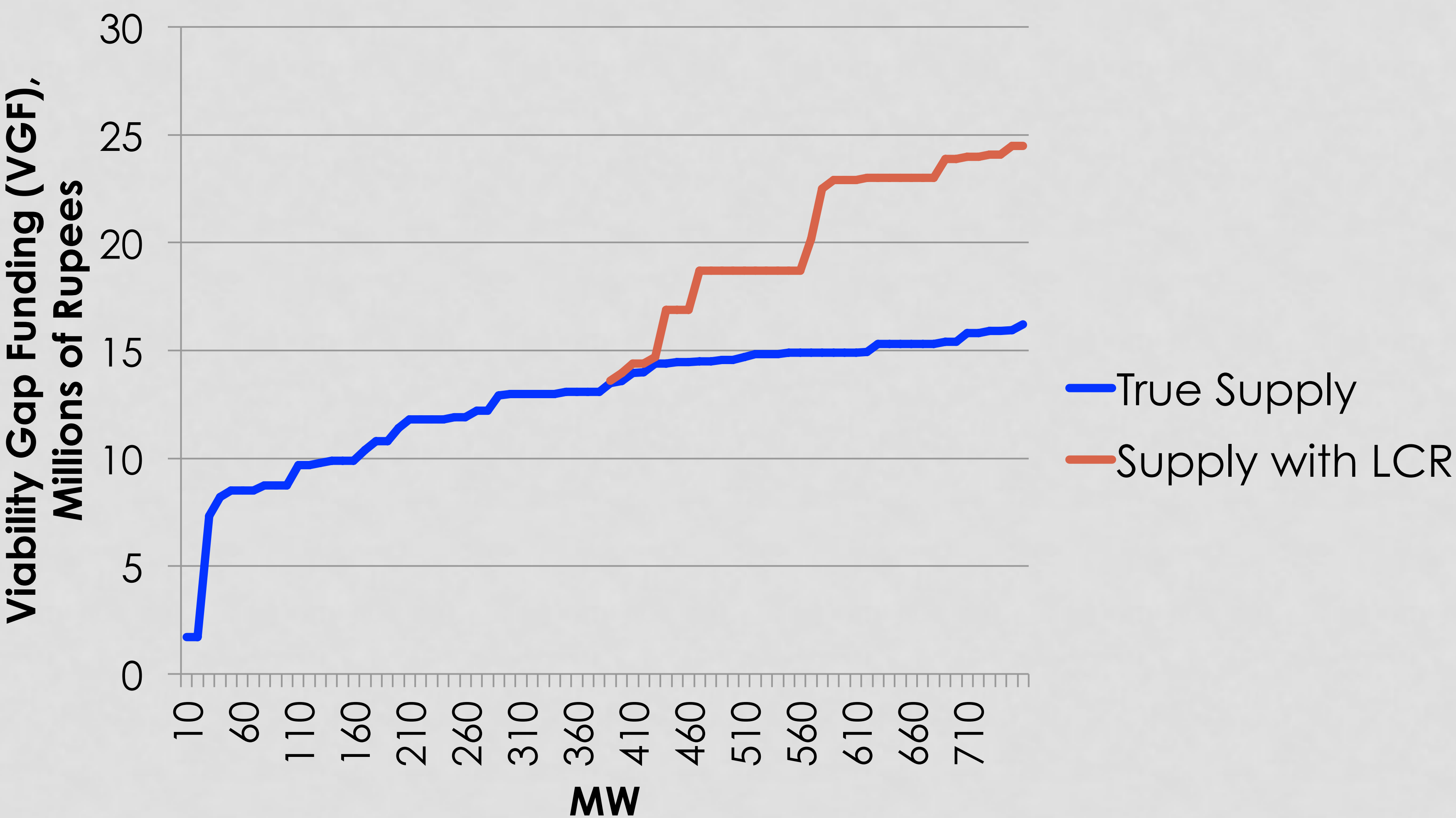
PERCENT MARKET SHARE: FOREIGN CSI, FOREIGN THIN FILM, DOMESTIC

	Rajasthan	Gujarat
Foreign CSi	0	30
Foreign Thin Film	62	38
Domestic CSi	38	33

PHASE II: POLICY ADJUSTMENTS

- Viability Gap Funding (VGF)
- Total 750 MW in Batch I
- Two separate auctions:
  - 375 MW is open; no LCR
  - 375 MW has technology-neutral LCR
- Imported thin film now at a disadvantage
- US has requested a dispute settlement panel in WTO

PHASE II LCR'S IMPACT ON THE COST OF SUBSIDIZING SOLAR GENERATION



SUMMARY

- **Phase I LCR:**
  - **A failure for Indian manufacturing:** No significant additional domestic market share.
  - **A win for foreign thin film manufacturers:** mean estimate of 24% increase in thin film market share.
- **Phase II LCR:**
  - **50% increase** in subsidy at the margin relative to a non-LCR scenario.