

Anti-dumping duty on solar PV in India: more harm than good

International manufacturing equipment suppliers ~5

- Might be able to sell some equipment in India
- No significant benefit from a global perspective

Indian module manufacturers (without cell manufacturing) ~30

- Around 75% of Indian module manufacturers have no own cell manufacturing capacity, but buy mostly Chinese/Taiwanese cells
- Will suffer from shrinking demand as solar costs rise
- Indian manufacturers are exporting around 80% of their operational capacity. Might suffer from retaliatory action in export markets

Small local entrepreneurs ~1,000s

- Thousands of local solar entrepreneurs across the country will suffer from shrinking demand as solar costs rise
- Many companies will go out of business

International module suppliers (from anti-dumping countries) ~25

Most prominent international module suppliers will be unable to sell in India. Many might close their operations here

Inverter and BOS suppliers ~70

Indian and international inverter and other BoS suppliers will suffer from shrinking demand as solar costs rise

EPC companies ~50

- EPC companies will suffer from shrinking demand as solar costs rise
- Many existing orders might be cancelled
- Even in a shrinking market they might suffer from short term procurement bottlenecks
- Many companies will go out of business

Indian cell manufacturers ~5

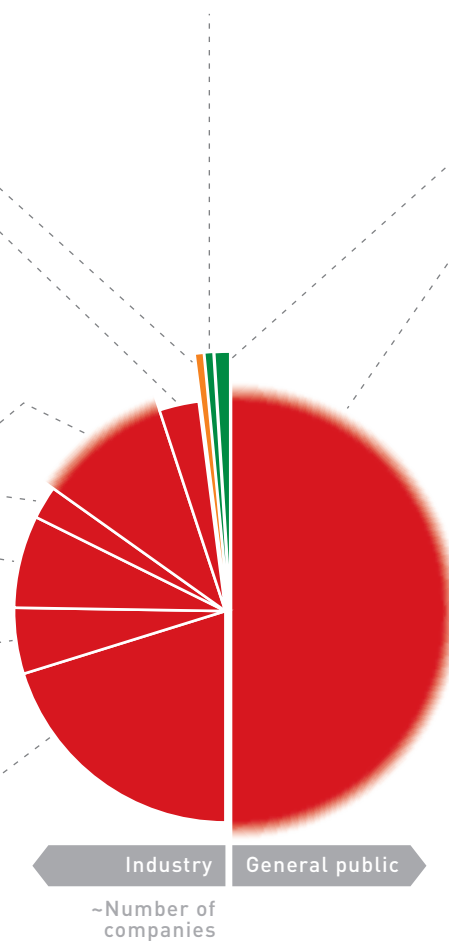
- Demand for their cells will grow. Will be able to run existing lines
- Long term effect unclear. Might suffer from shrinking market and damaged investor confidence
- In the long term they need strong domestic demand and a robust policy environment

International module suppliers (from non-anti-dumping countries) ~10

International module/cell suppliers from countries such as Singapore, Japan and South Korea will benefit disproportionately as they will become price competitive in India

Power consumers/ tax payers ~Millions

- For policy driven projects, the government would have to spend ₹3,581 crore² to neutralize the effect of anti-dumping duties until 2017
- Otherwise, the cost of solar power to the end consumer would increase by ₹0.70 per kWh
- More than anything, India needs energy. The ability of solar to deliver it will be reduced
- The goal of reducing dependency on imported coal will be more difficult to achieve
- The goal of bringing affordable solar lighting to India's unelectrified households will be more difficult to achieve
- India's ability to become a leader in a key future market (solar) will be diminished
- The public – as power consumers or tax payers – will have to pay more for less solar power
- Existing solar jobs will be lost as the market as a whole shrinks. (Cell manufacturing is highly mechanised.)
- New, potentially very large parity markets that do not require government support (e.g. on rooftops) will be pushed back by 2-4 years



Project developers and investors ~200

- Projects worth 1 GW (~ ₹6,500 crore)¹ that are pending shipments, might be scrapped
- Investor and banker confidence will be hit
- Many will downsize or exit from the market

¹ Based on PPAs signed under NSM (350 MW), Punjab (250 MW), Uttar Pradesh (110 MW), Karnataka (80 MW) and Andhra Pradesh (180).

² Assumptions:

- Module costs in India will rise by 15%
- Modules account for 40% of the project cost
- 7.5 GW needs to be installed by 2017 to meet the NSM targets

Anti-dumping duties on solar PV cells and modules will bring the market to a halt

Anti-dumping duties threaten to torpedo the Indian solar market at a time when the new government has made clear its intention to go solar. They are an ill-conceived and ill-timed vestige of the previous government and serve a very small section of the Indian solar industry at the detriment of the majority of the rest, the power consumers and the tax payers.

- Solar will become more expensive (by at least 70 paise per kWh) and up to 1 GW of existing projects could be scrapped. This will set the solar market back by 2 years.
- A small group of Indian industry players will win in the short term. The majority of the Indian industry players (including manufacturers) will lose. In the long term, all lose.
- India should focus on making solar cheaper, not more expensive. Supporting domestic manufacturing is possible under this premise, e.g. by extending cheap loans.

The Ministry of Commerce in India has proposed anti-dumping duties of between \$0.11-0.81 on cells/modules imported from China, US, Malaysia and Taiwan (currently about 80% of modules used in Indian projects). The decision is based on a very narrow data set from two years ago and now threatens to affect the entire industry for years to come. In addition, the proposed duties would be very detrimental to India's larger energy, investment, development and growth story.

The duties will result in an increase in the cost of solar power in India of at least 10% or 70 paise per kWh. Just for the planned new government-incentivized projects of 7.5 GW by 2017, this would cost the Indian power consumer or taxpayer around ₹3,581 cr (\$0.6 bn).

But more likely, anti-dumping duties would hit investor confidence badly and bring the market to a screeching halt, setting it back by at least two years. Up to 1 GW of solar projects could be scrapped. Project developers will be forced to reconsider their plans and commitment to the Indian market. International investors and banks, just gaining cautious new confidence in the Indian market, will be put off. The duties will even harm the majority of domestic module manufacturers, who are almost entirely dependent on cell imports (mainly from China). They will find it very difficult to sell in the India. At the same time, they (like Indian cell manufacturers) are exposed to retaliatory measures in export markets.

The negative sentiment will also affect the entire eco-system including EPC contractors, installers and thousands of solar entrepreneurs selling solar products and services across the country. Many solar businesses will close. In addition to harming the solar industry, the anti-dumping duties have a broader negative effect in the country. More expensive solar can contribute less to ameliorating India's power deficit and energy import woes. Millions of un-electrified households will not get access to a solar solution.

The duties will arguably give a short-term boost to the 3-5 Indian solar cell manufacturers whose sales in India will increase. However, in the long term, they will also be hit by a decline in demand for solar.

We doubt that a one-off measure such as anti-dumping duties would entice investors to set up more manufacturing capacity in India. What would really drive investment into manufacturing in India is the creation of a vibrant, large solar market and long-term measures to boost competitiveness of Indian manufacturing – for example, a consistent and transparent policy framework, investment in R&D and engineering skill development, or the creation of special investment zones with fast track project clearances. India needs to focus on making solar cheaper – not more expensive.

At this point, the anti-dumping duties can only be stopped by a strong political intervention in this narrow, quasi-legal process, in the name of the larger public good.