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## Solarisation of Agriculture Pumps: A Business Case for India

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### Abstract

India represents one of the major global agrarian economies with about 70% of its rural households still depending upon agriculture for their livelihood. Majority of the farmers in India are small and marginal. Affordability to irrigate determine the sustainability of the agricultural activities and also the income of the farmers. The Government quite often is required to support availability of cheap electricity resulting in huge subsidy requirements.

Solarisation of grid connected agriculture pumps assumes critical significance in this respect due to maturing of technology and continuously declining solar costs. The pace of implementation, however, is still to catch up as Solarisation is a capital-intensive solution. The Government of India is providing impetus through specially crafted schemes and this has given emergence to various business models benefiting the farmers and the Government also. This paper discusses the overall context of Solarisation of agricultural pumps in India, reviews the business models and identifies situations for their replicability.

**Keywords:** Irrigation Pumps, Solarisation, Electricity Subsidy, Net Present Value, Payback Period