

## Daya Solar Powered Bio-Toilets for Rural India

Australian scientist and solar pioneer Dr Dilawar Singh (PhD, IIT, Delhi) has conceived and designed a "Solar Powered Bio-Toilets Complex".

The bio-toilet is equipped with a solar-powered water pump to lift ground water to the overhead water storage tank for flushing the toilets. The complex is also equipped with energy efficient LED lights, and wash basins are attached to the complex side walls for hand washing.

Commonly toilets are connected to septic tanks or sewerage systems that can often create unpleasant odours. By using the bio-degradation technology, the sewage is decomposed by bacteria producing (bio)gas that can be used either for gas cooking, electricity generation in a gas generator, or flared, and so eliminating odours.



The 6 chamber Daya Solar Powered Bio-Toilets Complex will cost approximately Rs.10 lakhs in India (\$A20,000).

This Daya Solar Powered Bio-Toilets Complex could also be used in rural and regional Australia where there is no sewerage lines. In a very hot climate, Daya Solar Powered Bio-Toilets Complex could also be cooled with solar powered air conditioners.