

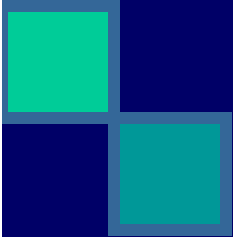

Solar Perspective



Hemant Lamba

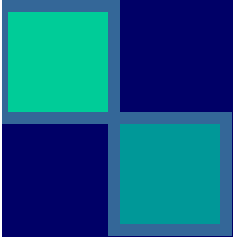



Introduction

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- State of the World Energy
 - Present Energy Scenario
 - Future of Energy
 - Prospects
 - AV Solar Experience
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State of Energy in the World

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- Big Utilities
 - Over Centralized
 - Monopolies
 - Politically Dominating
 - Distant from Users
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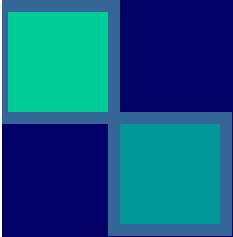


Trends in Fuel

- Coal in 19th Century
 - Petroleum in Early 20th Century
 - Nuclear Post World War II
 - Gas (LNG & CNG) in 1990's
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Nature of Fuels

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- Solid
 - Liquid
 - Air
 - What Next?



Changes for Good

- Deregulation
 - Bankruptcy (Enron, PGE)
 - Political Debacles (9/11)
 - Technical Innovations
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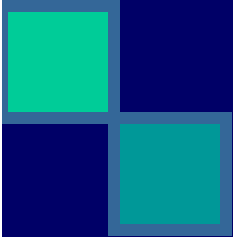


Emerging Scenarios

- Distributed / Decentralized Power
 - Small is Beautiful
 - Small is Viable
 - Energy Service Providers
 - User near to the Producer
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Green Resources

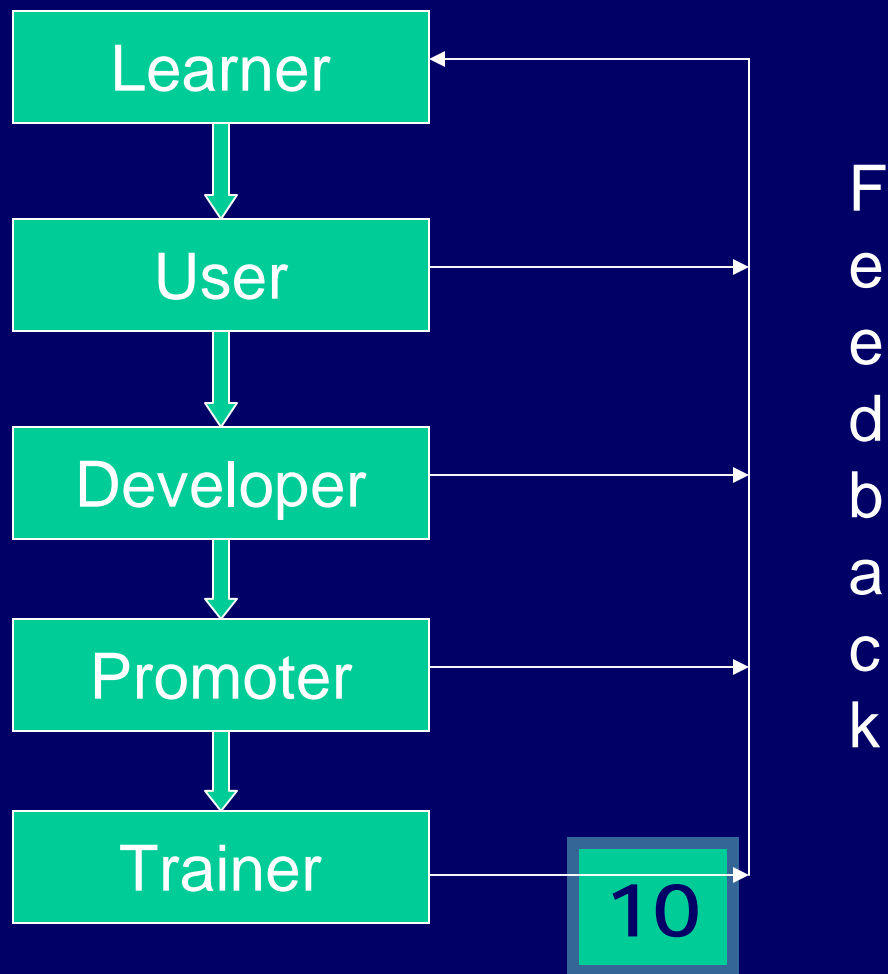
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- Sun
 - Wind
 - Hydro
 - Ocean
 - Biomass / Wood



Emerging Technologies

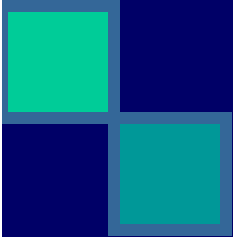

- Wind
 - Solar Thermal
 - Solar Photovoltaic
 - Fuel Cells
 - Micro Turbines / Generators
 - Small Hydro
 - Biogas / Biomass
 - Bio-Fuels
 - Geothermal
 - Wave Power
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AV Energy Development Cycle

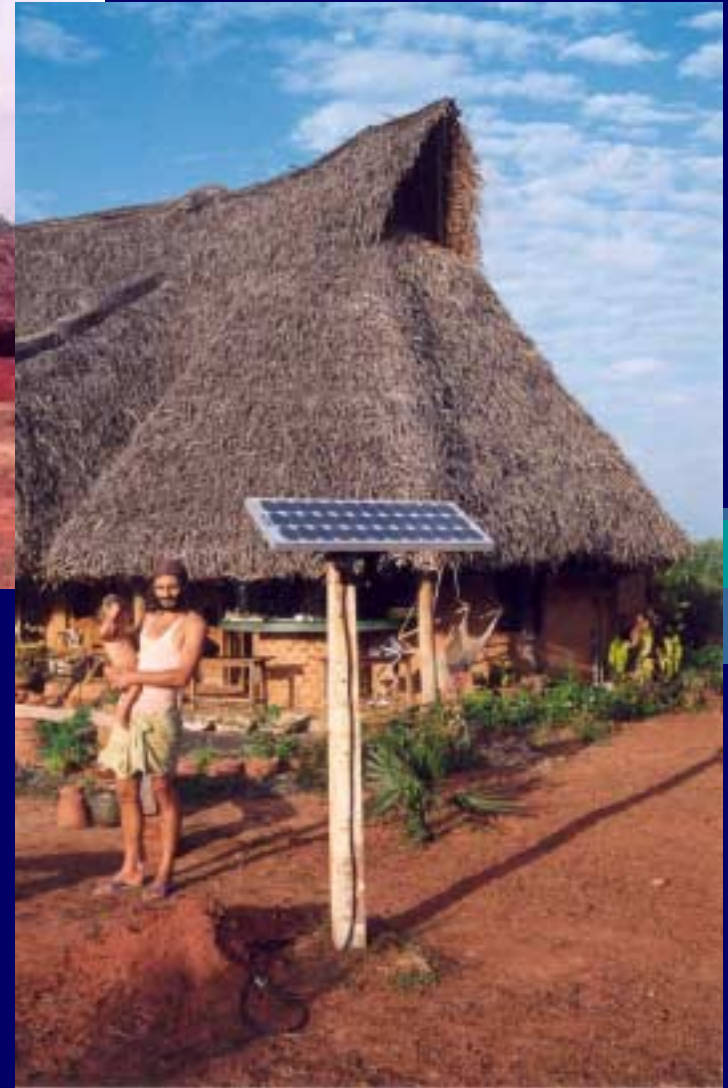




Renewable Energy in Auroville

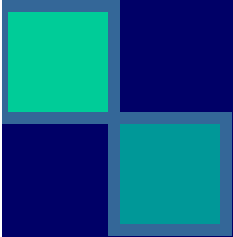

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- A commitment to environment & ecology
 - Energy use based on sustainable use of resources.
 - Several technologies prototyped.
 - Early examples of technologies in use:
Wind Pumps, Solar Home Systems, Solar Cookers, Solar Water Heaters, Solar Steam Cooking, Solar Pumps, Solar Power Plants, Biogas,
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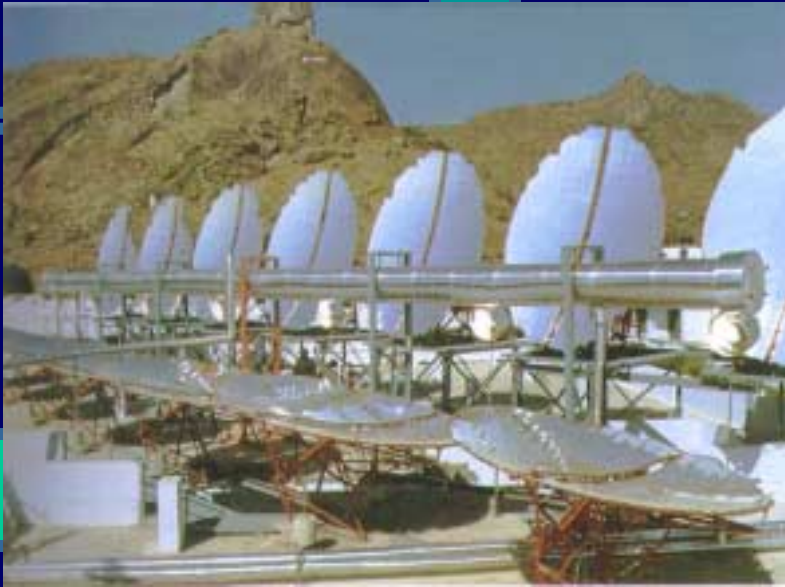






Solar options for India

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- Solar hot water for homes & institutions.
 - Solar cooking for homes and canteens.
 - Solar PV outdoor lighting streets, highway signs, security lights, path lights.
 - Solar PV Pumps for irrigation & drinking water.
 - Solar PV Generators / Power plants.
 - Village electrification.
 - Building Integrated PV (BiPV).
 - Building byelaws to encourage to use RE.
 - Retailing Solar.
 - Service Providers.
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