

Ener-t International Ltd.

IHSF Patented Technology



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IHSF Patented Technology



- IHSF[®] = Integrated Hybrid Solar Fuel
- Unique technology developed and patented by the company Ener-t International Ltd
- **The breakthrough of this technology – true hybridization of thermal solar energy with fuel derived thermal energy for use as the prime energy source for power generation with superior efficiencies and qualifications**
- Thermal solar portion in IHSF technology is over 50%!

IHSF[®] is registered name of Ener-t International Ltd.

The IHSF Technology of Ener-t offers:

- Fuel flexibility:
 - 100% renewable, carbon-neutral base load plant by hybridization with renewable fuel (i.e. biomass)
 - Or, use of any fuel available locally - gas, coal, oil etc.
- Built-in thermal storage capability - for dynamic operation and for meeting the true needs of the national grid
- 24/7 all year round power generation - achieve practically 100% CUF of plant using a common power block

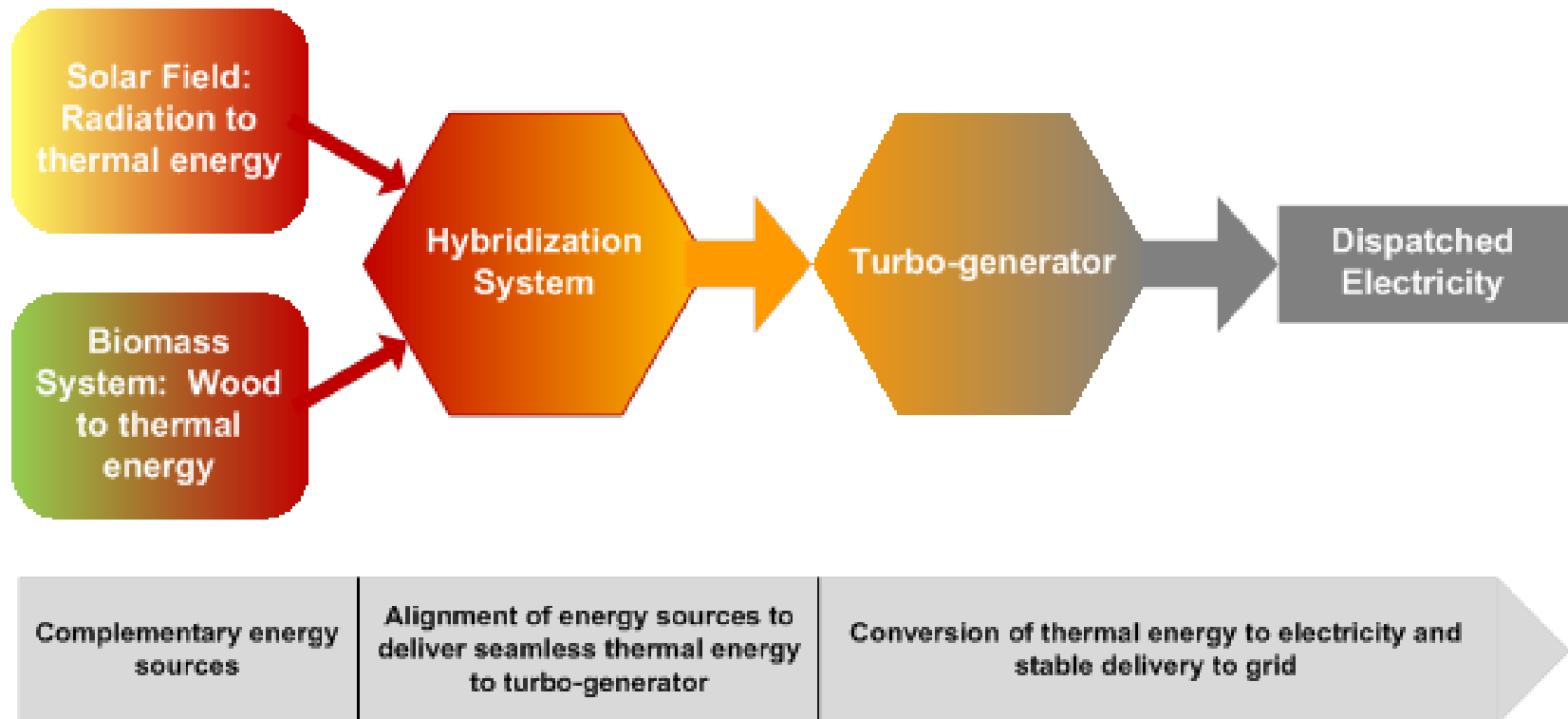
Overview – Why Hybrid?



IHSF Technology – the first renewable technology to meet all grid requirements:

- ‘Base Load’ or ‘Peak Load’ operation as desired
- Full Manageability
- Full Dispatchability
- Fastest dynamic response (better than conventional plants):
 - Frequency and voltage regulation
 - Spinning reserve

IHSF Configuration



IHSF is market ready

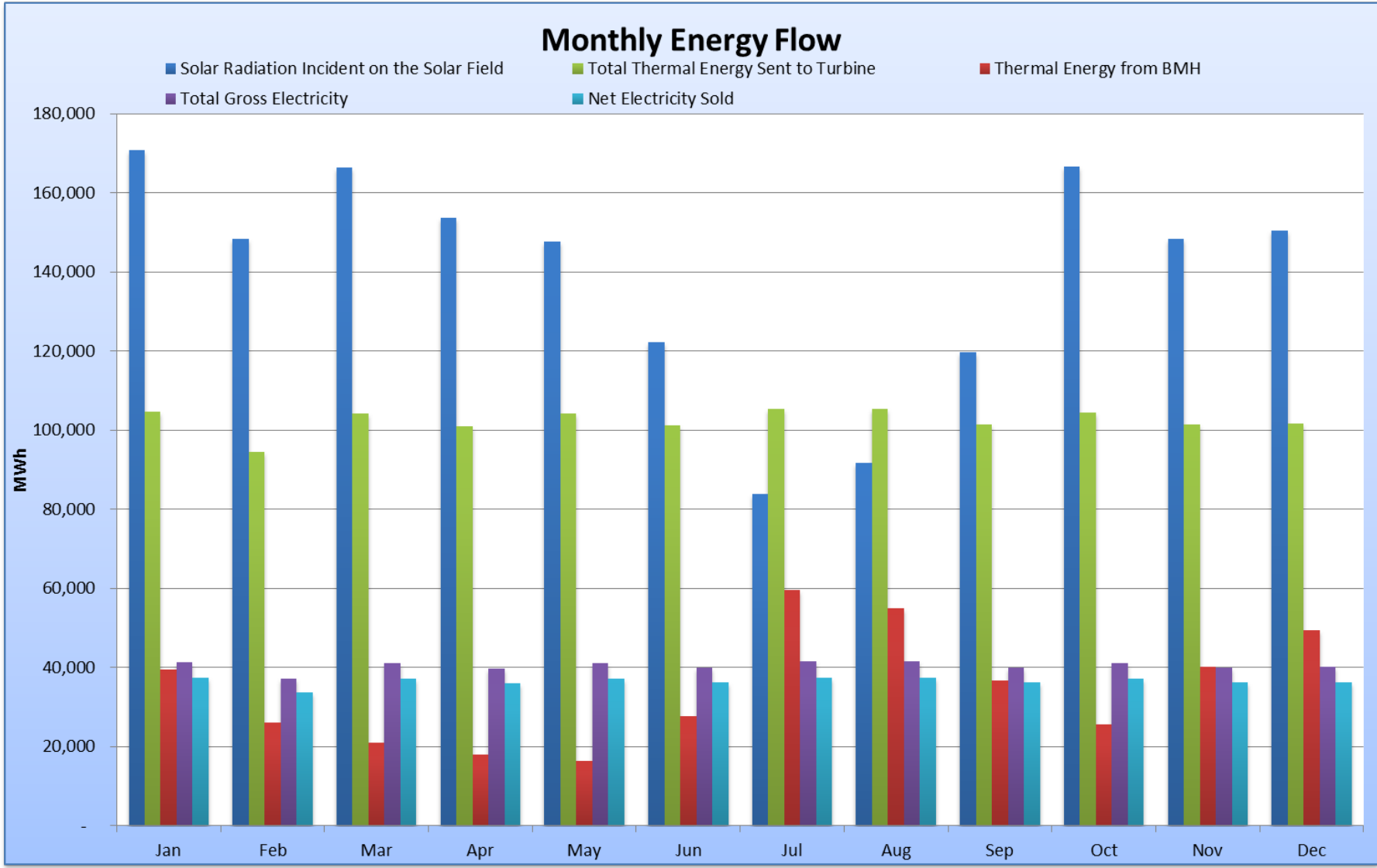


- Use 'all proven' systems
- Fully bankable
- Suitable for megaprojects (hundreds of MW capacity each)
- Competitive cost per kWh net generation
- High local content
- Can be integrated with existing power plants
- Fastest way to achieve high renewable portion in the national power mix

Case Study – Gujarat / Rajasthan

- Annual DNI of 1964 Wh/m²
- 50 MW Net Production
- 24/7 Base Load Plant
- Current Configuration of 67% Solar, 33% Auxiliary Fuel
- Can be configured in almost any ratio of solar to auxiliary fuel
- Must be optimized for specific site
- Auxiliary fuel may be biomass (renewable) or any fossil fuel

Case Study – Rajasthan



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Design for Carbon Neutral Project



We are designing a project in South America:

- 21.8 MW
- 51% thermal solar
- 49% biomass from wood
- Including Thermal Energy Storage

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- Experience – over 30 years since the construction of the 354MW SEGS projects in California
- Technology – the team of Ener-t developed the original solar parabolic trough technology and keep improving this leading technology until today
- Technology provider for successful 3 X 50MW in Spain
- Projects in India:
 - EPC for 50MW in Rajasthan
 - National R&D Center in Jodhpur






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