



Tribi Embedded Technologies

*2nd India Clean Tech Forum
Delhi: 10-11 July 2008*

Confidentiality Note

This presentation contains confidential information intended for select recipients. Any disclosure, copying, or distribution within this presentation, or taking of any action based on it, is strictly prohibited.

Background

The Problem of Growth:



Tribi's Goal: To create energy-saving motion control solutions that push the envelope and generate scale through aggressive ROIs

Business Concept

- Provide about 25% energy savings in motor driven equipment
- Increase appliance life by 15% & reduce maintenance costs by 20%
- Increase the precision & productivity of motor-driven equipment
- Devices that modify the motor speed to operate the appliance optimally

Market Analysis

Target Markets

- **Pumps:** Rs. 1 billion
 - Progress to Date: partnership with Best Pumps & Crompton Greaves
- **Food retail:** Rs. 400 million
 - Progress to Date: product design and testing in progress
- **Telecom shelters:** Rs. 750 million
 - Progress to Date: in discussions with air-conditioner manufacturers
- **Consumer Products:** Very large and rapidly growing

Market Size		
Target Markets	Total Market: 2011 (units)	Tribi Units(2011)
Air-conditioners for telecom shelters	300,000	120,000
Consumer Products (ACs & Ref.)	6,200,000	160,000
Refrigeration Equipment – Food Retail	400,000	95,000
Pumps	3,000,000	130,000
Total	9,900,000	505,000

Products & Services

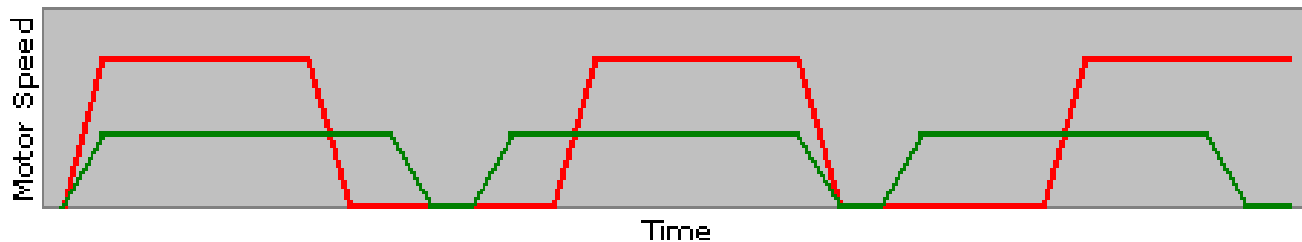
Tribi devices save energy, increase appliance life and decrease maintenance needed

The Tribi Variable Speed Drive

- Varies the speed of the motor based on requirements
- Saves 20% to 35% of energy depending on the application
- Protects the appliance
- Adds intelligence to the appliance
- Gives a quantifiable payback

Current Applications

- Pumps
- Refrigeration & Air Conditioning



User Benefits

End Users

- Improved efficiency – quantified payback
- Improved intelligence
- Wider operating envelope – product functions even in a fast changing scenario

Dealers

- Lesser models – lesser inventory carrying costs
- Better reliability & intelligence – lowers service costs

OEMS

- Increased margins – unit sale can have higher price
- Move up the efficiency ladder (take a ** to a ****)
- Enhanced product intelligence
- Improved reliability – lesser rejection costs
- Lesser models – easier productivity

Social & Environmental Benefit

Economic Benefit

- Reduction in electricity costs
- Fewer models drastically reduce inventory costs for OEMs and dealers

Social Benefit

- Increase in precision of refrigeration increases the amount of time food can be preserved and reduces wastage in food retail sector

Environmental Benefit

Appliance	Electricity Savings (kWh)	Projected Tribi Devices in 2011	Total Electricity Savings in 2011 (kWh)	Total Carbon saved in 2011 (tonnes)
Domestic Pump	125 to 300	133,000	26,600,000	21,000
Visi-cooler	475	40,000	19,000,000	15,000
Display case	1,200 to 2,300	55,000	96,250,000	77,000
Telecom shelter	1,800 to 2,600	120,000	264,000,000	211,000

Marketing & Sales Strategy

Marketing Strategy

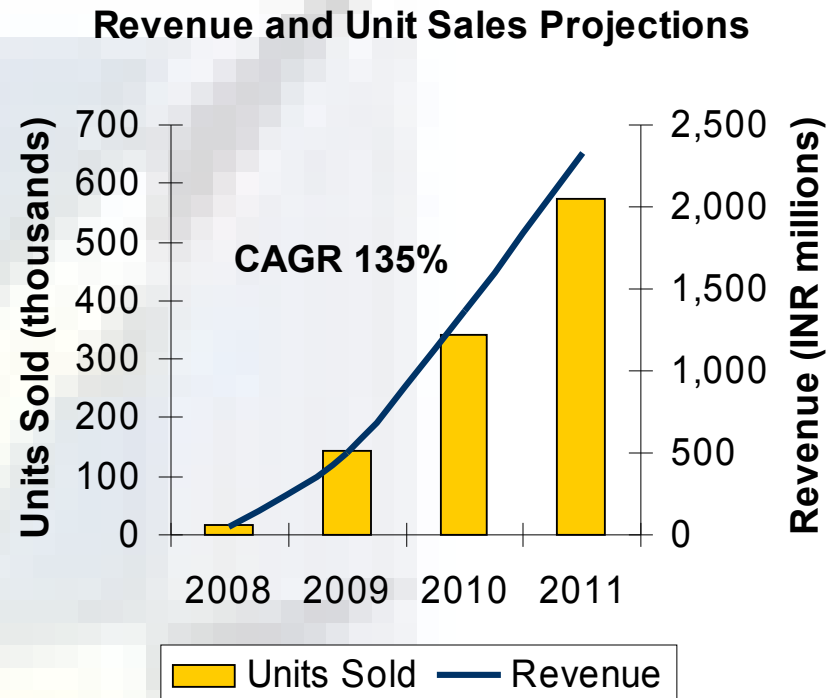
- Form relationships with OEMs
- Begin with applications where operating expenses are critical
 - Pumps
 - Food Retail
 - Telecom Shelter Air Conditioning
- Looking ahead: Consumer applications (air conditioners and refrigerators)
- Alternate – work with Organizations dealing in CERS on programmatic basis

Competition

- International drive developers
 - Not focused on India's power challenges
- Motor manufacturers
 - Lack technical skills
- Appliance companies
 - Too expensive for India

Operational & Financial Projections

	2008	2009	2011
Outreach (units sold)	18,000	138,000	550,000
Revenues (INR millions)	50	510	2,330
Profit (INR millions)	-30	100	710
Return on Assets	-	-119%	57%
Return on Equity	-	-83%	64%



To achieve this...

- 30 OEMs by 2011
- Manufacturing will be outsourced to EMS companies

Financing

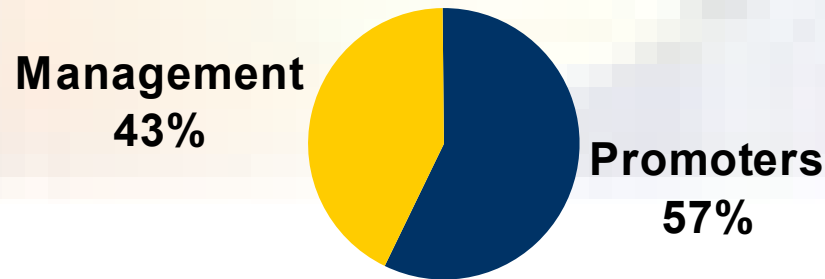
Funding Status

- Funds Raised
 - Build labs for appliance testing
 - Enhance R&D infrastructure
 - Hire and retain appropriate personnel

People & Partners

Name	Position	Experience
Sundar Doraiswamy	CEO	Drive applications in steel rolling, elevators, air-conditioners. Previous Jobs : Siemens, Schindler, Tecumseh
Jitendra Veer Singh	VP (R&D)	Embedded systems & real-time control in Telecom & Manufacturing Automation Previous Jobs : Infosys, Cimtrix
Prashanth Alva	VP (Engg.)	Embedded systems & systems software in Telecom & Manufacturing Automation Previous Jobs : Infosys, Cimtrix

Ownership Structure



Conclusion

- ***Tribi's Goal:***
 - ***To create energy-saving motion control solutions that push the envelope and generate scale through aggressive ROIs***
 - ***To save quantifiable energy***
 - ***To improve product performance in Indian Conditions***
- ***Tribi products in 2 years will address 95 % of the motor ratings produced in the world – can address close to 50 % of the worlds electrical energy consumption***
- ***Unmatched viability, reliability and sophistication to appliances***

Contact Information

Address

Tribi Embedded Technologies Pvt. Ltd.
A-207, KSSIDC Complex Block 1
Electronics City, Bangalore
www.tribitech.com

Contact Person

Sundar Doraiswamy
Sundar.d@tribitech.com