



Q1
2009



HPS IS ELECTRIFYING RURAL INDIA



THE OPTIMAL SOLUTION - 4 POWER REQUIREMENTS:

1. Low cost
2. Locally generated (off-grid)
3. Operated by local villagers
4. Sustainable (economically/environmentally)



COMPETING TECHNOLOGIES



~~\$0.25/kWh~~



~~\$0.50/kWh~~



~~\$0.25/kWh~~



PERFECT FEEDSTOCK



RICE HUSK!

21 million tons India
400+ tons produced locally
Milled locally
Waste product
Extremely low cost



- Electricity provider to off-grid rural Indian villages
- Design, own, and operate 40-100kW power plants that use rice-husk as feedstock
- First 100% producer gas based power plants



IST PLANT

Tamkuha, Bihar, India



HPS CURRENT STATUS

- Operating 8 power plants (23 villages; ~36K people) for 20 months; each installation operationally profitable after 3 months
- Created new proprietary generator set and fuel-agnostic gasifier; expanded capacity to 100kWh
- Reduced CapEx by 12%
- Scale capability of 2 plants/month
- Grant from Shell Foundation (\$163K); Won 4 business competitions (\$100K); Indian gov't renewable energy subsidies (\$50K)
- Named PopTech Fellows, FastCompany 2008 “Social Entrepreneurs of the Year”



HPS MANAGEMENT

HPS has a passionate, capable management team with deep market knowledge.

Manoj Sinha	Gyanesh Pandey	Charles Ransler	Ratnesh Yadav
President	CTO/COO	Business Development	CAO
<ul style="list-style-type: none">• IIT Varanasi, '99• MS, Umass Amherst• Intel (10 patents)• Darden '09• Pop!Tech Fellow	<ul style="list-style-type: none">• IIT Varanasi, '99• MS, Rensselaer Polytechnic• International Rectifiers• In India	<ul style="list-style-type: none">• BA, UVA• Founder/CEO Topik Solutions• Darden '09• Batten Entrepreneurial Scholar	<ul style="list-style-type: none">• BA, Delhi Univ.• 8 yrs of experience running small businesses in the region



HPS ADVISORS

Selco India



Harish Hande, Ph.D.

International Finance



Lynn Tabernacki

Legal



Chuck Brown

Business Development



Simon Desjardins

Financing



Stein Kretsinger

Energy



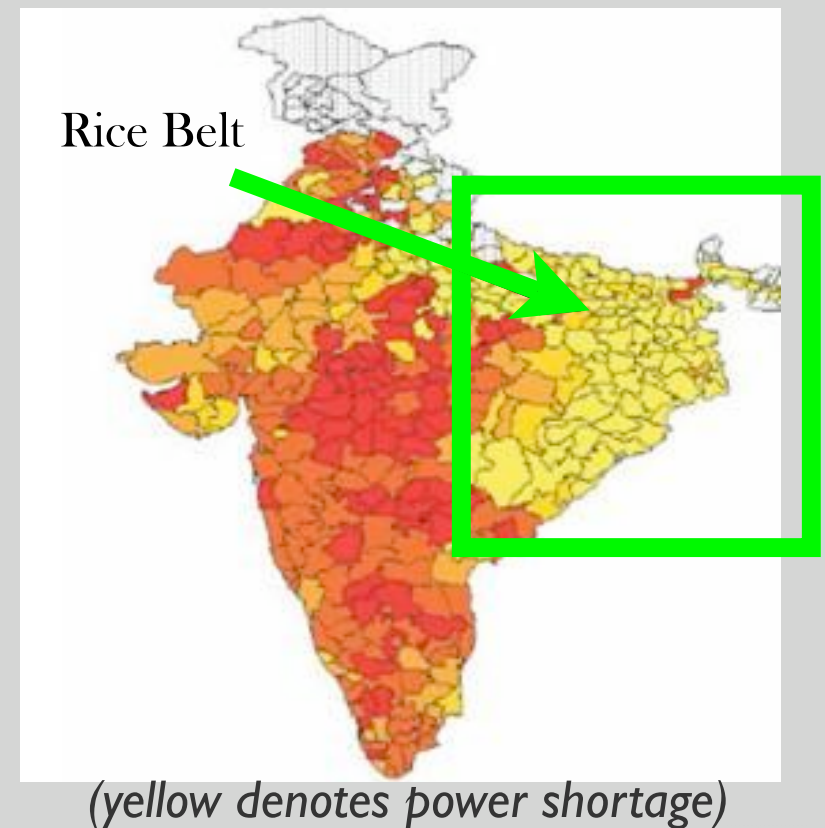
Bill Hall

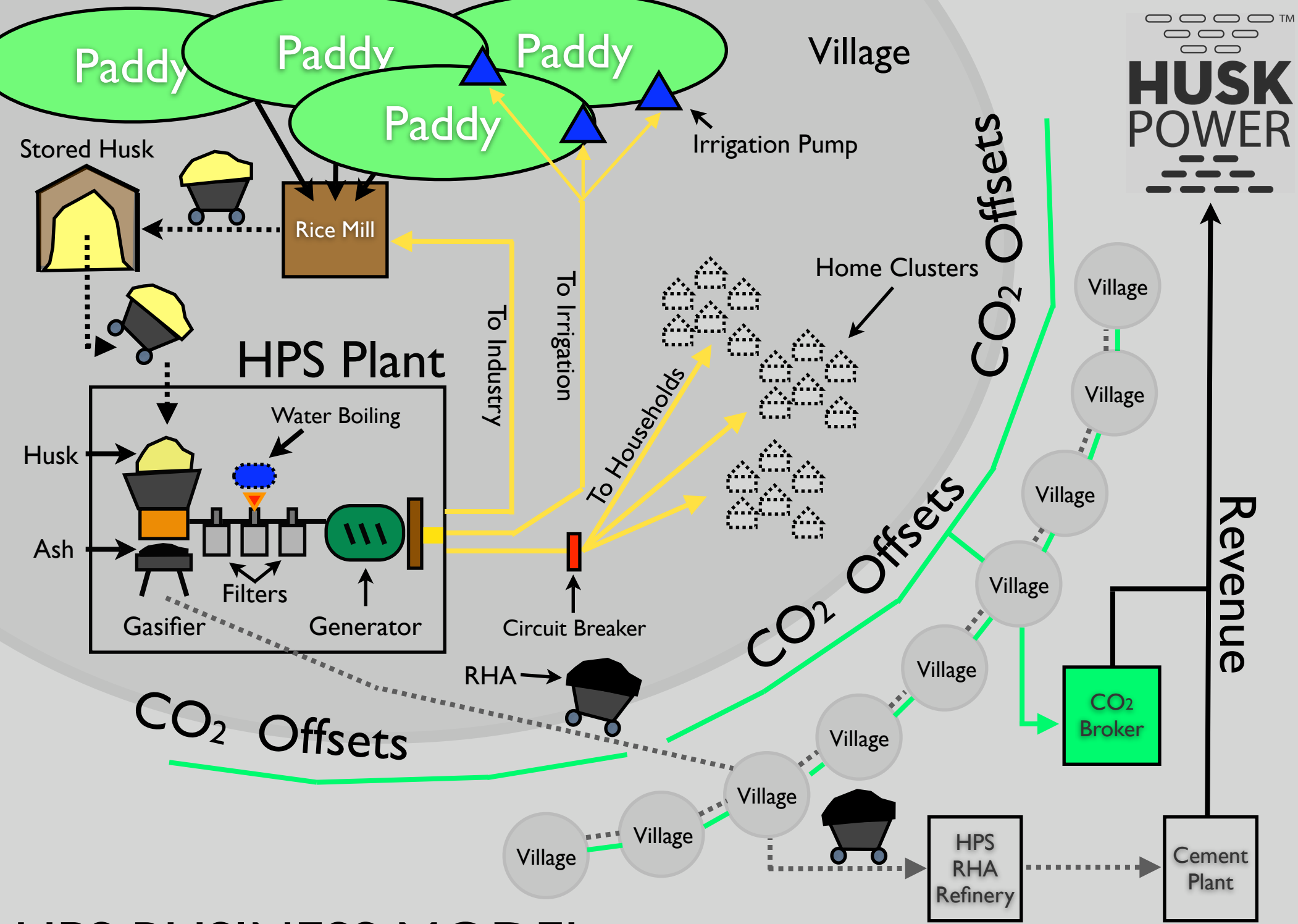


MARKET OPPORTUNITY

125,000 un-electrified villages in India

- **\$102B** rural power market
- HPS targets **25,000** villages in “Rice Belt”
- **\$43B+** carbon credit and RHA markets





HPS BUSINESS MODEL

P&L - SINGLE VILLAGE

Each village breaks even in 3 years.

YR	1	2	3	4
CapEx	\$(27,000)			
Revenue	\$14,600	\$17,000	\$21,600	\$24,000
Expenses	\$(5,150)	\$(6,000)	\$(7,000)	\$(8,000)
Tax	\$(2,040)	\$(2,490)	\$(3,570)	3990
Net Cash	\$(19,540)	\$8,510	\$11,030	\$12,010
Cum. Cash Flow	\$(19,540)	\$(11,030)	\$0	\$12,010



BUSINESS DEVELOPMENT STRATEGY

HPS is quickly growing a network of profitable villages.

- CERs
 - CDM certification (\$1,300/plant/year PAT)
- Rice Husk Ash
 - Short-term: Coal replacement (\$2,500/plant/year)
 - Long-term: Cement component
- Partner with MFI's
- Partner with MNRE



GROWTH STRATEGY

HPS will expand rapidly within the Indian Rice-Belt.

Plants	Install Date
Tamkuha	August, 2007
Dhanaha	November, 2007
Bheetaha	May, 2008
Chainkuhwa	August, 2008
Madhubani	December, 2008
Marchahwa	January, 2009
Daunaha	February, 2009
Dahwa Barwa	March, 2009
Manjharua	April, 2009

- Expansion to 2nd Cluster
- Training Center
 - 70 Operators in 2010
- Manufacturing Partner
 - Contract agreement
- 3 Plant Dev. Teams



CO₂ OFFSET SCHEDULE - 5 Years

Year	Plant Installations	CO ₂ Offsets (tons CO ₂)	Cumulative
2008	3	300	300
2009	23	2300	2600
2010	100	10000	12600
2011	500	50000	62600
2012	1000	100000	162600



USAGE OF FUNDS

	2008	2009	2010	2011	2012
Plants	3	23	100	500	1000
Patent Filing	\$0K	\$20K			
R&D/Legal	\$50K	\$75K	\$150K	\$150K	\$150K
Training Centers	\$0K	\$10K	\$50K	\$100K	\$100K
CapEx	\$100K	\$540K	\$2M	\$8M	\$20M
Founders/ Grant	\$400K	\$700K			
Series A/B + Debt			\$3M	\$9M	\$17.5M



FINANCIAL OVERVIEW

	2009	2009	2010	2011	2012
Plants	3	23	100	500	1000
Revenue	\$30K	\$237K	\$1.27M	\$6.2M	\$15.5M
EBITDA	\$15K	\$118K	\$633M	\$3.1M	\$7.7M
Exit Value				\$25M	>\$62M



HPS SUMMARY

- Huge market in India - with international expansion capabilities (Ecuador - Q4 '09)
- Proven model - 20 months of operations
- Scaling up effectively (2 plants/week)
- IRR 30%+
- Huge Social ROI - Our customers say:

“India got independence from England 60 years ago ... but this village got its independence today.”

