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HUSK POWER SYSTEMS: FINANCING EXPANSION

In Washington D.C., late April meant enjoying the cherry blossoms, but for Manoj Sinha and Chip Ransler, it was all about securing the future of their company—Husk Power Systems (HPS). They had just left their second meeting with Simon Pasternik, a partner at GreenPoint Partners and a potential investor. HPS needed $1.5 million to $2.5 million of expansion capital to grow quickly beyond the small footprint it had established in northeast India. It aimed to provide electricity to millions of rural Indians in a financially viable way. With 10 "mini power plants" and a presence in 25 isolated Indian villages as of April 2009, the goal was to reach 350,000 to 400,000 consumers in 400 villages by the end of 2011.

GreenPoint, a green-energy-oriented and emerging-markets-focused firm, was a great fit to finance HPS. During their first meeting, Pasternik concentrated on the usual drivers of investment decisions: EBITDA, operating margins, and the management team. This time, he carefully examined how the operations side of the business might affect the expansion plans and the ability to deploy that much capital. Pasternik grilled Ransler and Sinha on whether HPS had the capability, operational structure, and management team in place to meet the financial projections the business plan laid out.

Ransler and Sinha were certain HPS's business model was well suited for India's environment and that it capitalized significantly on obstacles unique to India. Ransler painted HPS's future as bright: It would be a dominant supplier of electricity to remote rural areas. The country's demographics and geography spoke loudly to the market size and to the potential entry barriers and operational challenges. Investors seemed to agree. GreenPoint was one of about a dozen funds that showed serious interest in investing in HPS.

But the problem lay in the financing terms different investors offered. HPS's growth plan was aggressive. And alternative revenue streams such as carbon credits were uncertain. Investors aggressively discounted for these risks, which significantly affected the equity stake they demanded. GreenPoint's offer at the second meeting was different from all prior pure (preferred) equity offers (**Exhibit 1**). In return for a $2.5 million capital infusion, GreenPoint asked for a convertible note security that would vest upon the next equity investment round.

This case was prepared by Manoj Sinha (MBA '09), Chip Ransler (MBA '09), and Elena Loutskina, Assistant Professor of Business Administration. It was written as a basis for class discussion rather than to illustrate effective or ineffective handling of an administrative situation.

Now the owners faced a different dilemma: Did this offer fit their business needs and ability to generate returns? How did it address their concern for potentially unfair company valuation by the investors? Should they take it?

Husk Power Systems

Husk Power Systems began as more of a hobby and a way of giving back to the community than an actual business venture. It was founded in 2007 by three college friends, Manoj Sinha, Gyanesh Pandey, and Ratnesh Yadav (**Exhibit 2**). Growing up in India, they all knew firsthand how uncomfortable it was living in small Indian towns with only 7 to 10 hours of electricity during odd hours (e.g., from 2:00 a.m. to 6:00 a.m.) in a typical day. A strong desire to give back to the communities they grew up in led them to explore ways to provide power to those rural communities. They looked into a variety of potential energy sources. Jatropha biodiesel, a then-popular alternative energy source made from the seeds of the Jatropha plant, created problems related to food versus energy tradeoffs. Solar, wind, and fuel-cell options were too expensive or too difficult to operate and maintain. Finally, they looked into rice husks—a rice milling agricultural waste product—which proved to be a great fuel source (**Exhibit 3**). With a viable source identified, Pandey utilized his electrical engineering background to discover a method for generating electricity from the husks the cleanest possible way.

Although eager to start up their own power plant, the next step was to seek government approval. It turned out that in the Electricity Act of 2003, the Indian government removed the requirement of obtaining a permit to run a decentralized power plant. HPS could start its operations without jumping through bureaucratic hoops. At the same time, if a bigger corporation wanted to operate in the rural markets, it still had to obtain licenses from federal and local authorities. And foreign investors would face full tax implications if they remitted any dividends from India.

With $50,000 in total from all available sources including 401(k) accounts (probably a good investment given the financial meltdown in 2007–08) and several trial-and-error runs, the first power plant went live on August 15, 2007, in the village of Tamkuha in Bihar, India. Despite the nearest town being a mere 10 miles away, limited public transportation and challenging terrain made the village relatively inaccessible. The power plant served approximately 2,000 people (about 500 households) and was only the beginning for HPS.

That fall, Sinha headed to the United States to earn an MBA and partnered with Chip Ransler, a classmate at the influential southern business school they attended. Ransler immediately saw great potential in his friend's hobby business: The market's size and scope were enormous. The energy supply was sustainable and the growth potential was very attractive. Together, Sinha and Ransler created a business plan that portrayed an environmentally conscientious energy company capable of providing electricity to millions of rural Indians in a financially sustainable, scalable, and, most importantly, profitable way. Everything was on their side: the proprietary technology that cost-effectively converted rice husks into electricity, the almost dirt-cheap source of energy, and the underserved and almost unlimited market. This was not to underestimate the enormous business challenges the company faced in recruiting and training the right people and creating the market for electricity in rural areas—communities that had never seen electricity.

GreenPoint Partners

By private equity industry standards, GreenPoint Partners was a middle-aged firm. The firm raised its first fund in 2004, and in early 2009, it was in the stage of deploying the capital of its second fund. Pasternik was one of the firm's founders. Over the previous six years, he had successfully leveraged his investment banking experience, vast rolodex of large potential investors, and passion for the new green sector of the energy industry to invest in highly promising companies. Pasternik viewed HPS as an enormous opportunity albeit in a faraway place—rural India. He knew that to convince his partners and the investment committee that it was a good opportunity, the team needed to dig deeply into the key financial assumptions and see if there were any potential land mines.

Pasternik had seven years' experience working with emerging-market firms. HPS was not the first company in India that GreenPoint had worked with. In fact, for an emerging market, India presented a lot of competition for GreenPoint. All reputable venture capital firms—such as Kleiner Perkins Caufield & Byers, Sequoia Capital, DFJ, New Enterprise Associates, Battery Ventures, and SAIL Venture Partners—had set up offices and were actively investing in India. Even with the global economic slowdown, venture capital flows to India continued to be strong with investments totaling $864 million in 2008, up 3% over 2007.[1] With 1.1 billion consumers and a 450-million-strong middle class, India was a very large, very fast-growing, and hence, very attractive market. With the profitability of foreign investments in India at 19.33% and the GDP expected to grow at an average annual rate of 8%, everyone rushed to find their place in the market. India was expected to move from being the tenth-largest to the third-largest economy in the world by 2020.

Although it had a desire to invest in emerging markets, GreenPoint's main mission was to invest in clean technology (or "cleantech"). The sector had seen a dramatic increase in funding over the previous decade. Since clean technology was a rather broad definition, GreenPoint could invest in a wide variety of businesses: firms focused on new energy sources, energy efficiency, water conservation, and sustainable and innovative business models around energy efficiency for commercial buildings and homes.

[1] Claire Cain Miller, "Venture Investment Climbs in India, China and Israel," *New York Times*, February 18, 2009, http://bits.blogs.nytimes.com/2009/02/18/venture-capital-investment-climbs-in-india-china-and-israel/ (accessed October 28, 2010).

In 2008, cleantech venture investments in China, India, the United States, and Europe totaled a record $8.4 billion, up 38% from the $6.1 billion invested in 2007. It was the seventh consecutive year of growth in cleantech venture investing across the globe. The first quarter of 2009 was not as promising as 2008 had been; but it showed cleantech investments had held their ground during the economic crisis with venture investments of $1.0 billion across 82 companies.[2] Kleiner Perkins, Sequoia Capital, and other prominent venture capital firms created cleantech-specific funds with hundreds of millions under investment. In addition, a new generation of funds was born. Good Energies, Khosla Ventures (led by renowned investor Vinod Khosla), and Climate Change Capital had sprung up to accelerate growth for the sector. GreenPoint featured prominently among these specialized sets of funds.

As of 2009, GreenPoint navigated the crowded waters of cleantech investments in emerging markets with success. With two companies in its portfolio and one successful exit via selling to another private equity fund, GreenPoint was considered an experienced player.

The Pitch

As Ransler and Sinha sought growth capital, they provided potential investors with a thorough overview of resources, opportunities, and innovation. They described their technology, their market, and their alternative revenue streams as clearly as possible.

A unique market

Traditionally, power in India was a complex and surprisingly unprofitable enterprise. In 2009, there was a 40% electricity deficit in India; 480 million citizens (44.5% of the population) were without access to reliable power. Even areas that were on the state electricity grid sometimes had power for only a few hours per day—and customers didn't know when they could expect power in their homes. Mumbai and Delhi were the only cities in a country of 1.1 billion people that had consistent and reliable 24-hour power supply. Indeed, the Earth Institute at Columbia University characterized rural electrification in India as being in an "acute crisis"[3]—125,000 Indian villages were "unelectrified," and not much had changed since that assessment.[4] Indeed, the Indian government had designated 18,000 rural villages as "economically impossible" to reach via conventional means.[5] That left roughly 30 million people without any promise of power and kept them in 18th-century living conditions without

[2] "Clean Technology Venture Investment Falls to $1 Billion in 1Q09," Cleantech Group LLC press release, April 1, 2009.

[3] Vijay Modi, "Improving Electricity Services in Rural India," the Earth Institute at Columbia University, December 2005.

[4] Villages were identified as "unelectrified" if power was either available only to a minority of the population or was inconsistently available.

[5] Sonaton Ghosh, Tuhin K. Das, and Tushar Jash, "Sustainability of Decentralized Woodfuel-Based Power Plant: An Experience in India," School of Energy Studies, Jadavpur University, Calcutta, India, 2001.

televisions, radios, refrigerators, or any other electrical gadgets enjoyed by most U.S. households. Electricity became a highly political issue in India; in an attempt to secure votes, officials frequently promised “free” power to rural customers. This practice led to immense inefficiencies and highly unprofitable electricity distribution even in the smaller metropolitan areas. Trying to reach rural communities was even more difficult.

The worldwide power market was valued at more than $6 trillion and tended to grow faster than the world’s GDP (**Exhibit 9**). India’s power resources were large and growing at 6% annually to support its population. India’s rural power market was valued at $102 billion in early 2009, 98% of which comprised fossil fuel use.[6] Electricity consumption in India had more than doubled since 2000, outpacing economic growth. In 2008, the power sector consumed 40% of primary energy and 70% of coal use. This sector was the single-largest consumer of capital, drawing more than one-sixth of all Indian investments over the previous decade. Despite these huge expenditures, electricity demand continued to outstrip power-generating capacity, leaving a 12% electricity deficit and a 20% peak power shortage.[7] The Indian rural power market (including the “Rice Belt”) represented more than 350 million rural Indians who used $102 billion in power, a number that was growing at approximately 10% annually. Using a conservative estimate and a modest increase in demand, HPS had the potential to claim roughly $15 billion of this market over the following five years.

Government and private-sector attempts to provide electricity to villages had failed. Rural Indian villages were widely spread and small, making large power-plant implementations difficult and uneconomical. Power companies had to run long, inefficient transmission lines from distant coal-fired plants—losing an estimated 25% to 30% of the power generated on its way to small villages of 500 to 3,000 people.

The power options that were available to rural villagers were costly and hence minimally used. Villagers needed power mainly for irrigation, cooking, and lighting. Portable diesel generators were relatively expensive to fuel, resulting in costs of $0.30 to $0.35 per kilowatt-hour and thus confined to critical irrigation needs. Home lighting was limited to kerosene lamps. On average, 30% to 35% of the total power distributed in metropolitan areas was stolen.[8] Once the electricity reached villages, some villagers stole it by “hooking in” to exposed power lines, some did not pay their bills, and some even stole miles of power lines, whose cabling was of high value in the metal commodities market.

[6] Allen Hammond et al., “The Next 4 Billion: Market Size and Business Strategy at the Base of the Pyramid,” World Resources Institute, March 2007, http://www.wri.org/publication/the-next-4-billion (accessed October 28, 2010).

[7] Pew Center on Global Climate Change, “Developing Countries & Global Climate Change: Electric Power Options in India,” October 1999, http://www.pewclimate.org/publications/report/developing-countries-global-climate-change-electric-power-options-india (accessed October 28, 2010).

[8] Mark Gregory, “India Struggles with Power Theft,” BBC News, March 15, 2006, http://news.bbc.co.uk/2/hi/business/4802248.stm (accessed October 28, 2010).

A unique technology

Rice husks were a goldmine. According to the India Department of Agriculture, the amount of rice produced in India in 2007 was estimated to be 93 million metric tons.[9] In order to decrease weight and volume for transporting rice to market, it was milled locally, leaving rice husks in the villages. For a small village of 2,000 people (90% of whom were involved in rice cultivation), 1,500 tons of milled rice produced around 250 to 300 tons of rice husks. Those casings were discarded, either by burning them or leaving them to rot in the fields (which released harmful methane gas). Alternatively, HPS could purchase the waste and potentially secure 20 million to 25 million tons of rice husks every year.

HPS's proprietary technology, developed by Yadav and Pandey and two key suppliers to the firm, converted each ton of rice husks into 760 kilowatts of electricity supply. The process combined two technologies: a biomass gasifier and gas-fired generator set. Effectively, HPS created mini power plants that produced electricity that was then distributed to households and businesses via a small utility power grid. HPS distributed *prepaid* electricity using a point-to-point system that connected each household or business *directly* to the HPS station (**Exhibit 4**). This elaborate delivery system reduced the total default and theft rate to below 5% (compared with India's national average default and theft rate of 25% to 30%).

The HPS model relied significantly on collaboration with local *panchayats* (councils of elderly villagers). The 35- to 100-kilowatt-hour electrical plants were built at no cost to the villages. Relationships with the elders allowed for better fee collection, maintenance, and fraud management. HPS also entered into contracts with farmers to procure rice husks at a fixed rate. The firm employed three villagers at each plant site to operate the power plant, handle the raw materials, and conduct billing and collections. HPS escaped the fate of traditional power companies by providing decentralized power on-site using local labor and feedstock inputs. It targeted its mini power plant technology to villages in India's Rice Belt: the states of Bihar, West Bengal, Orissa, Uttar Pradesh, Madhya Pradesh, Andhra Pradesh, and Tamil Nadu. That represented roughly 25,000 rural villages without power but with a large supply of biomass for HPS. These villages, each with 2,000 to 4,000 people, were large enough to support a minimum of 35 kilowatts of power. That way, HPS optimized village size for power consumption, created jobs, and bought inputs locally—all of which ensured profitability and a welcome market entry with right-size technology.

As of 2009, some of the rice mills and irrigation systems were run on power from small, portable diesel generators. The cost of this power heavily depended on oil prices, and in April 2009, they cost about $0.30 to $0.35 per kilowatt-hour (**Exhibit 5**). HPS offered the same product at $0.25 per kilowatt-hour to farmers and $0.15 per kilowatt-hour to villagers for domestic consumption. The higher power costs farmers and mills paid was offset somewhat by HPS's purchase of biomass from them.

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[9] "Rising Rice Production," Ministry of Agriculture, Government of India press release, November 30, 2007.

There were three main sources of revenue for each power plant. The principal and most stable revenue source was households. HPS provided electricity to each household for only 8 to 10 hours every day during the peak demand time (between 4:00 p.m. and 3:00 a.m.) and charged households $0.15 per kilowatt-hour based on their actual energy use. Although it was much higher than the prevailing wholesale rate of $0.08 per kilowatt-hour, it included all the costs and taxes and did not contain any hidden charges. HPS devised a basic package for each household that included two compact fluorescent lamps and an unlimited number of cell phone chargers (on average, villagers paid $0.25 each time they charged their cell phones). For this package, households paid approximately $1.75 to $2.00 a month and thereby saved approximately $2.00 per month by not having to use kerosene lanterns or diesel generator sets.

HPS also supplied power to small businesses such as video halls, rice mills, and small farms for irrigation. The price for such businesses was $0.25 per kilowatt-hour, which was 20% to 30% less than the total fuel cost for diesel-based generators and pumps. Businesses usually consumed electricity in the morning, while household consumption was concentrated in the second half of the day. HPS's ability to directly provide electricity as needed allowed it to maximize its plant utilization and minimize total capital.

By the end of 2008, a little over a year after launching its first successful plant, HPS designed and built four power plants sized from 35 kilowatts to 100 kilowatts and serviced customers locally with billing, collections, and maintenance. HPS's technological advancements resulted in reducing installation costs for each plant from $35,000 down to $27,000 in two years. The amount of time required to install one plant improved dramatically from three months to just two weeks. Further, refinements to rice husk acquisition, plant installation, payment collection, and accounting processes led to significant cost, resource (full-time manpower), and time savings. The installations of rice-husk gasification plants had gone from a total of three in year one to adding seven more in the first four months of 2009. At that point, Sinha and Ransler believed they had moved from "experimental mode" to "growth mode." They were confident in their Indian partners and their hiring strategies, and they had diversified to a point at which plant operations were averaging out to a fairly profitable enterprise (**Exhibit 6** and **Exhibit 7**).

Market demographics

In the previous decade, India had been growing at a fast pace (6% to 7% GDP growth); however, the growth had not been uniform across different parts of India. Although urban areas (metropolitan cities) experienced job growth and dramatic improvements in infrastructure, the gap between urban and rural areas grew wider in most Indian states. HPS operated in rural areas where roads were almost nonexistent. For example, it took Sinha and Yadav 17 hours to transport power plant equipment from a supplier site to one of the installation sites located only 130 miles away. On the one hand, the lack of infrastructure became an entry barrier to other competitors. Any company with a desire to serve these areas would have to find people motivated enough to withstand harsh conditions. On the other hand, the lack of facilities in the villages created a hurdle for HPS to attract competent people to install and manage new power plants.

Aside from infrastructure issues, there were cultural considerations HPS had to overcome. As a result of 100 years of British rule in India, the Indian social system was very hierarchical. A strict caste system made doing business in rural India complicated because the hierarchical order established a few thousand years earlier was still practiced in some way or another. Hindus were divided into four main castes—Brahmins, Kshatriyas, Vaisyas, and Sudras—and there were more than 10 subcastes. Brahmins were at the top of the hierarchy; people belonging to this caste were typically educated and did not work menial jobs. Such a system stifled any sense of ownership among employees.

To that end, HPS employed a unique strategy to move past recruitment and cultural issues. It recruited and trained local people who were motivated to change the conditions in their hometowns. The management team was innovative in creating job descriptions and selecting employees.[10] In addition, the company's partners visited the power plants regularly and assisted workers in day-to-day operations during these visits. By working together and assigning employees ownership of operational processes, HPS partners inculcated a sense of ownership among employees. Plus the company spent part of its income stream on local social causes such as education for needy children. These types of management practices created a high level of buy-in from employees.

Alternative revenue streams

Though not included in the business plan's financial projections, Ransler and Sinha actively explored alternative revenue streams that HPS could monetize within a couple of years. First, they looked into monetizing the rice husk ash (RHA), a waste product of the husk gasification process. Because gasified rice husks contained high levels of carbon and silica, RHA could be used in various applications including organic fertilizer, replacement for coal in stoves, and material replacement in cement production. In 2009, HPS successfully tested its RHA technology and distributed "incense sticks" (used in Indian households for worship purposes) to commercial operations in local markets. Eventually, Sinha and Ransler expected to sell RHA to concrete manufacturers and generate revenues of $100 to $600 per ton. Indian cement demand had risen 100% over the previous 10 years and was expected to double again within five years. Indian rice production was 93 million tons in 2007, yielding approximately 21 million tons of rice husks, which could amount to 4 million tons of RHA. At a market price of $400 per ton (RHA prices ranged from $200 to $600), RHA represented an annual market opportunity of almost $2 billion.

Sinha and Ransler also recognized their firm's huge potential in the area of carbon offsets. HPS's production process was carbon-negative: The power plants released less carbon

[10] HPS faced a number of unexpected HR management matters. The company defined the operator as a person who not only ran the plant but also kept the equipment and plant area clean. Part of the job was to sweep the plant area with a broom. One of the operators was a Brahmin, so he refused to clean because he considered it to be against his caste conventions.

during operation than if they were not operating at all. The company's power plants used a renewable, sustainable feedstock (rice husks) that took carbon out of the air as it grew. Though the carbon was released back into the atmosphere when the husks were combusted, it still created carbon neutrality; this was preferred to using net-positive fossil fuels such as coal or oil, which only released carbon into the atmosphere. HPS also aided in replacing diesel used to power generators in villages and kerosene used to light homes. In addition, it prevented rice husks from rotting in fields and creating methane gas, which was 21 times more harmful to the atmosphere than carbon dioxide (CO_2). Effectively, the company was converting harmful methane gas to less harmful CO_2. As a result HPS earned carbon credit. With its negative carbon footprint, the firm planned to sell carbon offsets in the active carbon-trading markets.

HPS reduced CO_2 emissions by around 120 tons per plant per year. That reduction could be translated into revenue of $1,350 in the form of carbon credits called certified emission reductions (CERs), which were not subject to any taxes in India. The market for CERs was dramatically increasing. In 2008, $126 billion in CERs were sold, up from $63 billion in 2007, and nearly 12 times the value in 2005. A total 4.8 billion tons of CO_2, the main greenhouse gas blamed for global warming, were traded in 2008, up 61% from the 3.0 billion traded in 2007.

With help from a consulting firm called Emergent Ventures, HPS underwent the Clean Development Mechanism (CDM) certification process. The CDM certification allowed emissions-reducing companies based in developing countries to earn CER credits equivalent to one metric ton of CO_2. The company had to incur a total cost of $30,000 over a period of 15 to 18 months to get a Gold Standard certification. Given that HPS served customers at the bottom of the pyramid, it qualified for the Gold Standard. This certification allowed HPS to sell CERs in the open market at a premium price. The market rate in Europe for selling CERs generated in India ranged from $8 to $11 per CER. HPS qualified for about 100 to 125 CERs per power plant.

Funding Expansion

HPS's partners were concerned that the private equity investors were immediately discounting any numbers, and the firm's locations—in very rural parts of India—exacerbated the discounting. Valuing the firm at this nascent stage depended on a number of factors: growth in the number of power plants, each plant's profitability, the time each plant would take to break even, the increase in energy consumption in each village, the monetization of waste streams from the gasification plants, government subsidies, CER pricing, and the international partnership capabilities of the firm. It was a lot to account for, but the resulting valuation dictated the company share that investors would receive. After a number of attempted pitches and long hours spent with investors and foundations, Sinha and Ransler finally simplified their financial projections. The conservative financial projections (**Exhibit 8**) contained only revenues from the projected plants and excluded any additional revenue streams. This simplified approach biased the bottom-line numbers down but eliminated the upper hand the investors had in arguing that the alternative revenue streams (e.g., carbon credits) were unproven and unlikely to be realized.

The financing structure GreenPoint offered (**Exhibit 1**) resembled a convertible note. Sinha and Ransler now had to carefully evaluate whether this financing structure addressed their concerns. What were the financial implications of this offer? The founders knew this was only the first stage of raising funds for expansion and they planned to draw on them gradually (**Exhibit 8**). Growing the business to its potential would require another $5 million to $10 million in investments in 2012, and subsequent rounds were not out of the question. Were they on their way to diluting themselves out of their own business?

Exhibit 1

HUSK POWER SYSTEMS: FINANCING EXPANSION

Term Sheet

THIS TERM SHEET DOES NOT CONSTITUTE AN OFFER[1]
HUSK POWER SYTEMS, INC.
Memorandum of Terms for Financing
September ____, 2009

This memorandum summarizes the principal terms proposed by Husk Power Systems, Inc., a Delaware corporation (the "**Company**"), with respect to the issuance of convertible promissory notes (the **"Financing"**) to certain accredited investors (the "**Purchasers**").

Note Purchase Agreement	Pursuant to a Note Purchase Agreement, the Purchasers shall purchase, in one or more closings, convertible promissory notes on substantially the terms described below (each, a "**Note**" and collectively, the "**Notes**") in an aggregate principal amount of up to $2,500,000. The notes will be unsecured obligations of the Company for the primary purpose of funding capital equipment purchases.
Timing of Closing	The first closing of the Financing (the "Closing") shall occur on or about ____________________, 2009.
Principal	The principal amount of each Note issued to a Purchaser at any closing shall be the amount invested by such Purchaser at such closing.
Interest	The interest rate of the Notes shall be 11% per annum. Simple interest will accrue on the outstanding principal but will not become payable until the date of maturity. Each Note and the application of payments in respect of each Note shall rank equally without preference or priority of any kind over one another.
Default Interest Rate	Upon any events of default all principal and any other amounts outstanding under the Notes shall become immediately due and payable, and a default interest rate of 14% shall apply to all outstanding amounts until fully paid.
Prepayment	Except with respect to conversion or a sale of the Company, the Notes may not be prepaid without the prior consent of Purchasers holding at least 66% of the aggregate amount of Notes outstanding. If any prepayment of the Notes is authorized, all prepayment will be pro rata among the Purchasers, unless otherwise agreed among each of the Purchasers.

[1] The sheet provided was incomplete and did not present the actual financing terms offered.

Exhibit 1 (continued)

Maturity	The Notes will become due and payable in full on demand from and after the first anniversary of the date of the initial Closing, provided that (a) if any Purchaser demand repayment then the Company will notify all Purchasers and provide equal pro rata rights to repayment from the Company's available resources (b) in the event of a sale of the Company (i.e., a merger or sale of all assets, or sale of equity other than for capital raising purposes, which effects a transfer of majority control of the Company or its assets) before the Maturity Date, an amount equal to 125% of all outstanding principal, as well interest accrued on each Note, shall be immediately due and payable.
Automatic Conversion	Upon the closing by the Company of an equity financing in which the Company receives gross cash proceeds of at least $3,000,000 (a "Qualified Financing") all outstanding principal and interest of the Notes will automatically convert into shares of the equity security sold in such financing at a price per share equal to 75% ("Conversion Ratio") of the price at which the shares issued in such financing are sold to investors generally (the "Issue Price").
Anti-Dilution	If the Company issues additional convertible indebtedness or alternative financing with a conversion ratio more favorable to the holder than that of the Notes, then the Conversion Ratio for outstanding Notes will be adjusted to match the conversion ratio of such additional indebtedness.
Board Rights	The Company will add two directors to the board, one of whom will be designated by vote of holders of a majority in principal outstanding under the Notes. Each Purchaser, so long as at least $100,000 of the principal balance of its Note is outstanding, will be entitled to Board observer rights and will be entitled to participate as an observer at all Board or committee meetings and to receive copies of all materials distributed to the Board or any committee of the Board.
Information Rights	Each Purchaser, so long as at least $100,000 of the principal balance of its Note is outstanding, will be provided with standard audited annual and unaudited quarterly financial statements, unaudited monthly financial statements, annual business plans and budgets of the Company, and any other information, including social metric information, as the Purchasers may request, and will be entitled to inspection rights of the books and registers maintained by the Company, as well as any other records kept by the Company which equity holder are permitted to inspect.
Right of First Refusal	The Company may negotiate with any of the Purchasers and with third parties for the terms of a Qualified Financing or other alternative financing arrangement, provided that in any Qualified Financing, each Purchaser holding greater than $350,000 in initial principal amount of Notes shall have the right, unless waived, to invest up to $1,000,000 (including Note conversion amounts), cut back pro rata if the total amount raised in the Qualified Financing is less than $1,000,000 per Purchaser so qualifying.

Source: Husk Power Systems.

Exhibit 2

HUSK POWER SYSTEMS: FINANCING EXPANSION

Management Team

Manoj Sinha, President
Sinha was a native of Bihar, India. His previous experience was with Intel as a microprocessor designer (he designed the Intel Atom chip that went into Netbooks), leading teams of 15 designers. Sinha held 10 U.S. patents (5 granted and 5 pending). He graduated from the Darden Graduate School of Business Administration with an MBA in 2009 and received Darden's prestigious Genovese Fellowship. He and Chip Ransler were named Pop!Tech Fellows for 2008, Aspen Institute Scholars, and 2008 Social Entrepreneurs of the Year by *Fast Company* magazine.

Gyanesh Pandey, CEO, CTO (in India)
Pandey was a native of Bihar, India. His previous experience was with International Rectifiers, where he was senior project manager on high-voltage semiconductors. He graduated from one of the Indian Institutes of Technology and went to the United States to pursue an MS in electrical engineering from Rensselaer Polytechnic Institute. Pandey led the firm's initiatives on the ground in India.

Charles W. (Chip) Ransler, Chief Strategy Officer
Ransler was the cofounder and CEO of Topik Solutions, Inc., a software firm that created digital publishing and advertising systems for the online content industry. He was also cofounder of the Second Road, a nonprofit working to help millions of Americans with addictions recover together online. Ransler was the recipient of the Batten Foundation Entrepreneurial Scholarship at the Darden Graduate School of Business Administration, where he received his MBA in 2009. He led the business strategy and planning efforts for Husk Power Systems.

Ratnesh Yadav, COO, Upstream Operations (in India)
Yadav was a native of Bihar, India. He received a BA from Delhi University in 1997. He was on ground in India and spearheaded the logistics of plant acquisition, delivery, and supply contracts.

Source: Husk Power Systems.

Exhibit 3

HUSK POWER SYSTEMS: FINANCING EXPANSION

Technology Overview

Biomass was a natural substance, which accumulated solar energy as chemical energy by photosynthesis. Biomass chiefly contained cellulose, hemicellulose, and lignin, having an average composition of $C_6H_{10}O_5$, with slight variations. For the complete combustion of biomass, the theoretical amount of air required (defined as the stoichiometric quantity) was 6 kilograms to 6.5 kilograms of air per kilogram of biomass; and the end products were CO_2 and H_2O. In gasification, biomass was subjected to partial pyrolysis under substoichiometric conditions with the air quantity being limited to 1.5 kilograms—1.8 kilograms of air per kilogram of biomass. The resultant mixture of gases generated during the gasification process was called producer gas, contained CO and H_2, and was combustible. The raw producer gas also contained tar and particulate matter, which had to be removed because they were harmful to the engine. A typical gasifier plant, based on Indian Institute of Sciences technology, consisted of a reactor, which received air and solid fuel and converted them into gas, followed by a cooling and washing train, in which the impurities were removed. The clean combustible gas at a nearly ambient temperature was available for running diesel-generator sets in dual fuel mode or gas engine generator sets suitable for running on producer gas alone.

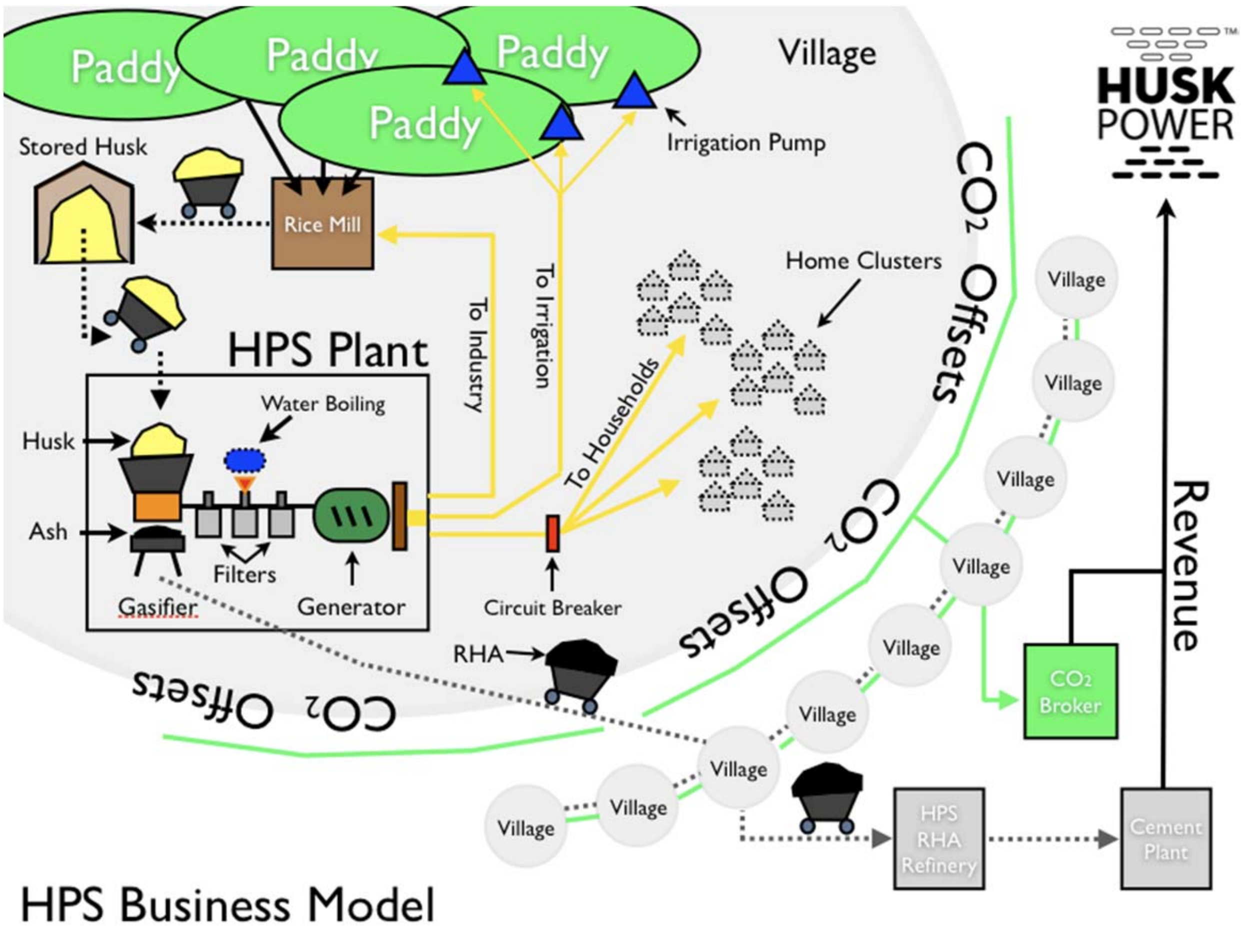
In the downdraft reactor, biomass feedstock underwent drying and devolatilization in the upper zones and produced char. The volatile matters experienced oxidation in the combustion zone, and air was partially drawn from the open top and partially supplied by air nozzles located after the devolatilization zone. The gas then flowed through a hot charcoal bed in which the tar produced earlier was then burnt. This was the special feature of the Indian Institute of Sciences gasification process that enabled the tar in the raw producer gas to be maintained at relatively low levels. Special washing and cleaning systems developed as an integral part of the gasification system further reduced the levels of tar and particles in the cold producer gas to very low levels. These features were responsible for enabling the engines to run for long operating hours with maintenance requirements that were similar to those specified for pure diesel or pure gas firing.

Source: Husk Power Systems.

Exhibit 4

HUSK POWER SYSTEMS: FINANCING EXPANSION

Husk Power System Business Model

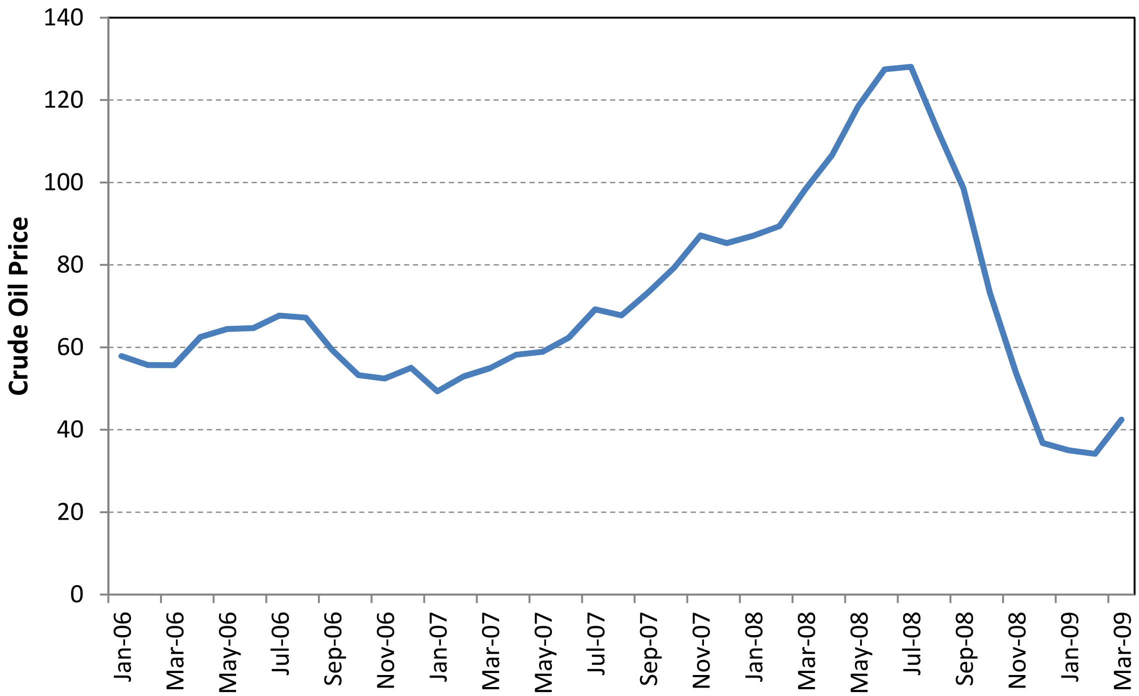


Source: Husk Power Systems.

Exhibit 5

HUSK POWER SYSTEMS: FINANCING EXPANSION

Monthly Oil Prices



Data source: Economagic.com.

Exhibit 6

HUSK POWER SYSTEMS: FINANCING EXPANSION

Plant-Level Income Statement

	1st Year	*2nd Year*	*3rd Year*	*4th Year*	*5th Year*	*6th Year*
Gross Electricity Revenue	$9,792	$13,884	$19,702	$25,316	$30,065	$32,230
COGS (Cost of Husk)	$1,202	$1,815	$2,900	$4,102	$5,099	$5,789
Gross Profit	$8,589	$12,070	$16,802	$21,214	$24,966	$26,441
Total Operating Cost	$4,009	$4,330	$4,677	$4,910	$5,156	$5,414
Total Overhead Cost	$2,029	$2,191	$2,366	$2,556	$2,760	$2,981
EBITDA (Operating Income)	$4,580	$7,740	$12,125	$13,748	$17,050	$18,047
Depreciation	$1,943	$1,943	$1,943	$1,943	$1,943	$1,943
EBIT	$2,638	$5,797	$10,183	$11,806	$15,108	$16,104
Tax	$791	$1,739	$3,055	$3,542	$4,532	$4,831
NOPAT	$1,846	$4,058	$7,128	$8,264	$10,575	$11,273

Data source: Husk Power Systems.

Exhibit 7

HUSK POWER SYSTEMS: FINANCING EXPANSION

Plant-Level Balance Sheet

	1st Year	*2nd Year*	*3rd Year*	*4th Year*	*5th Year*	*6th Year*
Assets						
Current Assets						
Cash	$3,331	$9,135	$17,918	$27,840	$40,119	$53,215
Accounts Receivable	$408	$579	$821	$1,055	$1,253	$1,343
Inventory	$50	$76	$121	$171	$212	$241
Total Current Assets	$3,789	$9,789	$18,860	$29,066	$41,584	$54,799
Gross Fixed Assets	$27,750	$27,750	$27,750	$27,750	$27,750	$27,750
Less: Accumulated Depreciation	$1,943	$3,885	$5,828	$7,770	$9,713	$11,655
Net Fixed Assets	$25,808	$23,865	$21,923	$19,980	$18,038	$16,095
Total Assets	$29,596	$33,654	$40,782	$49,046	$59,622	$70,894
Liabilities						
Current Liabilities						
Accounts Payable	$0	$0	$0	$0	$0	$0
L/C Account						
Total Current Liabilities	$0	$0	$0	$0	$0	$0
Shareholders' Funds						
Share Capital						
Retained Earnings	$1,846	$5,904	$13,032	$21,296	$31,872	$43,144
Preferred Stock	$27,750	$27,750	$27,750	$27,750	$27,750	$27,750
Total Shareholders' Funds	$29,596	$33,654	$40,782	$49,046	$59,622	$70,894
Total Liabilities and Equity	$29,596	$33,654	$40,782	$49,046	$59,622	$70,894

Data source: Husk Power Systems.

Exhibit 8

HUSK POWER SYSTEMS: FINANCING EXPANSION

Projected Company Income Statement
(dollars in thousands)

	2009	*2010*	*2011*	*2012*	*2013*	*2014*
Total Villages	20	70	195	445	695	945
Gross Revenue	$142	$590	$1,875	$4,926	$9,553	$15,970
COGS (Cost of-Husk)	$18	$84	$308	$874	$1,732	$2,967
Gross Profit	$124	$506	$1,567	$4,052	$7,821	$13,003
Overhead						
Maintenance Expense	$38	$144	$432	$1,036	$1,698	$2,424
Technical Operator	$17	$65	$195	$468	$768	$1,097
Raw Material Handler	$11	$43	$128	$307	$503	$718
Billing Accountant	$14	$52	$156	$375	$614	$877
Supervisor	$5	$19	$58	$138	$225	$321
Misc. Expenses	$12	$45	$136	$327	$536	$766
R&D Expenses	$14	$29	$56	$99	$96	$80
Engineers' Salaries	$0	$11	$35	$86	$148	$209
Management Salaries	$40	$100	$180	$390	$546	$573
Legal Expenses	$21	$47	$94	$99	$96	$160
Total Operating Cost	$173	$555	$1,472	$3,323	$5,230	$7,224
EBITDA	($49)	($49)	$95	$729	$2,591	$5,779
Depreciation Expense	$39	$136	$379	$864	$1,350	$1,836
EBIT	($88)	($185)	($283)	($135)	$1,241	$3,943
Tax	$0	$0	$0	$0	$372	$1,183
NOPAT	($88)	($185)	($283)	($135)	$869	$2,760

Data source: Husk Power Systems.

Exhibit 9

HUSK POWER SYSTEMS: FINANCING EXPANSION

Average Annual Growth in World GDP by Selected Countries and Regions (1979–2025)

							Projections	
Region	**1979–2002**	**2002**	**2003**	**2004**	**2005**	***2005–15***	***2015–25***	***2002–25***
Mature Market Economies	2.6	1.4	2.1	3.4	2.8	2.6	2.4	2.5
United States	2.9	1.9	3.0	4.4	3.6	3.1	2.9	3.1
Canada	2.8	3.4	2.0	3.0	3.3	2.8	2.0	2.4
Mexico	2.7	0.7	1.3	4.0	3.7	3.9	4.1	3.9
Japan	2.5	−0.3	2.5	4.1	2.0	1.7	1.2	1.7
Western Europe	2.3	1.1	0.9	2.2	2.1	2.1	2.0	2.0
Australia/New Zealand	3.2	4.0	3.0	3.8	3.2	2.6	2.4	2.6
Transitional Economies	−0.5	4.4	6.6	7.0	6.2	4.5	3.7	4.4
Former Soviet Union	−1.0	5.2	7.9	7.8	6.7	4.6	3.7	4.6
Eastern Europe	0.9	2.7	3.7	5.1	4.9	4.3	3.8	4.1
Emerging Economies	5.0	4.8	5.9	6.4	5.9	5.3	4.7	5.1
Emerging Asia	6.8	5.9	7.3	6.9	6.4	5.7	4.9	5.5
China	9.4	8.0	9.1	8.6	7.2	6.4	5.3	6.2
India	5.6	4.6	8.2	5.7	6.4	5.4	5.2	5.5
South Korea	6.7	6.9	3.1	4.3	5.8	4.8	2.8	3.9
Other Asia	5.4	4.1	4.8	5.8	5.1	4.8	4.3	4.6
Middle East	2.4	4.8	3.1	7.4	6.2	4.4	3.9	4.3
Africa	2.4	3.4	3.9	4.6	5.0	4.2	3.6	4.0
Central and South America	2.2	−0.5	1.2	4.1	3.7	4.0	4.0	3.9
Brazil	2.4	1.9	−0.2	4.3	3.8	3.9	4.0	3.8

Data sources: Alan Heston, Robert Summers, and Bettina Aten, “Penn World Table Version 6.1,” Comparisons at the University of Pennsylvania, October 2002; “Projected GDP Growth Rates: Global Insight, Inc., World Overview,” First Quarter 2005; and U.S. Energy Information Administration, *Annual Energy Outlook*, 2005.