
**DRAFT
BUSINESS PLAN**

for

GWITCHYAA ZHEE HEAT UTILITY

**Fort Yukon, Alaska
March 18, 2010**

Note: the following business plan is in draft form only. While the structure of the plan and the financial projections are fairly well formed at this point, not every detail and key decision point have been reviewed, vetted and approved by the management and Board of GZ Corporation, the proposed owner of GZ Heat Utility.

Business Plan developed by:

Alaska Wood Energy Associates
and
Greenstone Growth Partners

EXECUTIVE SUMMARY

Gwitchyaa Zhee Corporation (“GZ” or “the Corporation”) is the Alaska Native Claims Settlement Act (ANCSA) village corporation for the village of Fort Yukon. The Corporation holds full economic use to approximately 214,500 acres of surface estate in the Yukon Flats region of interior Alaska. The Corporation’s expansive forest holdings are largely untapped commercially. Like most of interior Alaska’s forests, little if any portion of it has had an economically viable market for it to supply. Subsistence and cultural values however are highly regarded on these lands.

GZ currently owns and operates Gwitchyaa Zhee Utility Company (“GZUC”), Fort Yukon’s diesel generated electrical power company. This subsidiary constitutes a significant portion of GZ’s business activities. In contrast to the low income per capita, the Yukon Flats area has some of the highest energy costs in North America. Gasoline, fuel oil, and therefore electrical power costs have all seen dramatic increases in recent years. GZUC is in the process of raising the cost of electrical power which has not been done in the recent past.

In an effort to commercially develop its forest holdings and to bring less-expensive heat and energy to its customers (and shareholders) in Fort Yukon, GZ is establishing a new, wholly-owned subsidiary to pursue an opportunity to create commercial-scale heat from woody biomass to be sustainably harvested from GZ lands. This new subsidiary, GZ Heat Utility (“GZHU” or “the Company”) will be organized as a for-profit corporation and will be a vertically integrated heat utility company that will generate income by focusing on three major operational areas:

- A heat capture unit will be responsible for working with GZUC to capture as much “free”/excess heat as possible from GZUC’s generating facility.
- A harvest unit will purchase forest resources from GZ and then harvest and deliver wood chips to a wood yard in Fort Yukon.
- A generation unit will maintain and operate boilers in Fort Yukon, which will sell BTUs (British Thermal Units) to targeted commercial buildings in Fort Yukon.

In the current draft of this business plan, financial projections have assumed minimal profitability for GZHU so that the best-possible price for BTUs can be passed along to GZHU customers. Because of this willingness to focus on minimal profitability, GZHU expects to be able to negotiate flexible but long-term contracts with its customers in regards to pricing for BTUs, particularly in the early years of the GZHU operation as true operating costs are established.

START-UP FUNDING

GZHU has been very fortunate in finding significant financial support for the start-up of its operations from a variety of federal and state agencies, as well as seed capital from GZ Corporation. As of this writing, it is assumed that all funding required for the start-up of the herein described operation of GZHU will be delivered from these channels, and that GZHU will not have any cost of capital associated with the start up of the operation.

Over time, as initial working assets are retired and replaced, this situation will transition into a situation in which GZHU will be responsible for reserving for and/or financing the purchase of replacement operational assets. This business plan assumes that the Company will begin to set aside reserves for these purposes from the outset of the operation so that the ability to finance future assets under normal commercial terms will be likely.

OWNERSHIP AND MANAGEMENT

GZHU will be established as a wholly-owned subsidiary of GZ, which in turn is owned by individual shareholders in Fort Yukon and elsewhere. The Board of Directors of GZHU will be established according to a process identified by GZ and will be responsible for the ongoing administration of GZHU's business.

Given GZ's successful operation of the electrical utility and fuel station in Fort Yukon, GZHU believes that the operation of wood fired boilers fits within its current management capacity.

Development of a commercial level biomass harvest company is a new enterprise which will require new expertise and management of a labor intensive and planning intensive field operation. Extensive harvest plans have already been developed, and a qualified manger has been indentified to manage this portion of the operation.

In addition, the current business calls for the hire of one additional harvester that will work with the manager. Fort Yukon has a good labor pool of equipment operators and labor experienced from work on the North Slope, and it is expected that management will not find it difficult to fill this position with qualified personnel.

Finally, certain amounts of administrative duties (primarily billing) will be required for GZHU's operation; the current business plan calls for these duties to be managed by way of a contractual arrangement with existing GZUC administrative staff.

The following section details the professional experience of key personnel at ZHU.

Key Advisors & Employees

Randy Engler – Mr. Engler will serve as the general manager of GZHU and will have oversight responsibilities for the entire operation. He has nearly a decade of experience in forestland management issues, with specific experience in forestland thinning (as a contractor to the USDA) and wildfire management (as a firefighter for the New Mexico Division of Forestry). His specific skillset and certifications include wildland firefighting red card holder, familiarity with contractor operations and crews using chainsaws, skidders, grinders, chippers and other forest equipment, project oversight experience in forest fuels reduction. Most recently, Mr. Engler ran his own thinning company, giving him direct experience in entrepreneurial and management issues. He also has on-the-ground experience within the Fort Yukon community, having served as Tribal Liaison for the Native Village of Fort Yukon for more than 4 years.

Fannie Carroll – Ms. Carroll has been heavily involved in the creation and start-up of the GZHU operation. Ms. Carroll is the day-to-day manager of the GZ Corporation, and has delivered strategic direction and oversight to its subsidiaries. While Mr. Engler will maintain direct responsibility for GZHU, Ms. Carroll is expected to deliver valuable insights and leadership to him during the crucial start-up phases of the organization.

KEY MILESTONES TO-DATE

GZ has been working with a variety of funding agencies and industry consultants over the past several years to establish the viability of the business case for GZHU. The following is a brief summary of the key findings from these efforts.

- A wood energy supply analysis and a conceptual design analysis has been completed for a district heating loop for downtown Fort Yukon to include the School, Gym, AC Store, School District Office, Water Plant, Post Office, Tribal Office, CATG Clinic, City Offices, CATG Natural Resource building, Yukon Flats College Building, GZ Utility Office, and 1 churches.
 - A side by side analysis of chip boilers (Köb) and stick fired boilers (Garn) with estimated cost analysis and net simple payback for individual buildings was conducted as part of the feasibility assessment. In each case the chip boilers made more economic sense in an integrated model with forest management
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and harvest operations.

- Biomass Resource Assessment was completed by TCC Forestry Department. It that there was at least 3 times the sustainable level of biomass required within a 5-mile circle enclosing Fort Yukon will amply supply GZHU with biomass.
 - At optimized capacity, it is estimated that GZHU's boiler operation can displace approximately up to 150,000 gallons of fuel for an annual cost of approximately \$730,000 or \$43.94 per million BTUs. This cost is based upon an assumed cost per gallon of \$5.50 for the fuel required to run harvesting equipment, etc. This compares favorably to an estimated cost of \$40.74 per million BTUs for energy produced using fuel oil (also at a forecast cost of \$5.50/gal), especially when viewed in relation to the relatively stable costs delivered by GZHU in scenarios where cost for fuel rises. For example, if forecasts incorporate an assumed price for fuel of \$6.50 per gallon, GZHU is forecast to deliver energy at a cost of \$44.39 per million BTUs, while cost under the current approach would be approximately \$48.15 per million BTUs.
 - Optimum installed capacity is based on two factors.
 - Creating an economy of scale for profitable sustainable wood harvest which is 1600 tons or more annually.
 - Displacing a significant amount of fuel oil in commercial buildings.
 - Commercial clients of GZHU are expected to use the concept of "heat integration" for redundancy. Each installation will be designed where GZHU's boiler operation is the primary source of heat and the currently-installed oil boilers are back up sources.
 - One of the primary costs of operation for chip boilers is fuel (wood chips), which has been estimated to cost GZHU between \$175 to \$200 per ton to produce and deliver. Two methods of wood chipping will be employed. Chipping in the woods with delivery to a storage facility in the village or chipping of round material brought into the village.
 - A second significant cost of operation is the labor-hours required to ensure efficient and undisrupted operations. Boilers will operate with automated computerized controls that can be set to be read remotely, but will likely require daily inspection to review basic operation. The Boiler will have automatic de-ashers, but will need to be serviced approximately weekly. Boiler tubes need to be brushed once a month. GZHU expects to operate the boilers from
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September through May depending on weather. The Boiler will need to be cleaned and inspected annually at shut down.

- GZHU intends to develop a maintenance, service, and equipment replacement fund for boiler operations to be derived from BTU sales revenues. The primary area for potential issues is the feed delivery system, but other areas may also require significant maintenance and/or repair once boilers are put into production.

CAPITAL INVESTMENTS REQUIRED

As one of the final phases prior to start-up of GZHU's operations, the Company will need to make significant investments (using already-identified funds) in fixed assets and their installation. Two separate, in-depth studies have been performed in order to determine the optimal investments required. One is a study outlining the boiler system design, the other describes the forestry management plan and the assets needed for harvest operations. Both are attached to this plan for reference.

Assets to be purchased for the Boiler Operation include:

- One commercial-sized chip boiler and one oil fired boiler
- A feeder system for the boilers (to deliver chips to the boilers)
- A piped "loop" delivery system (to deliver heat from boilers to clients)
- A facility for housing the boiler and feeder systems

Assets to be purchased for the Harvest Operation include:

- A facility for wood/chip storage
 - Fecon FTX100L harvesting vehicle
 - Attachments for the FTX100L, including:
 - Bucket
 - Brush Rake
 - Grapple
 - 18,000 # Excavator w/harvester head and guarding
 - Log Grapple for Excavator
 - Arbro Stroke Harvester
 - Hooklift Truck 25,500 GVWR
 - Morooka 1500VD
 - Hooklift Installed on Morooka
 - Hooklift Bins (4)
 - Hooklift Flatbed (2)
 - Hooklift Log Bunks (2)
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- Morbark Typhoon 20" Chipper
 - Firewood Processor Hahn
 - Equipment Prep and Guarding
 - Hooklift Tool Trailer w/assorted tools
 - One pick-up truck

This business plan, and the attached financial projections, was designed to include a relatively conservative plan toward reserving some portion of operational income for the replacement of these assets as they age. This plan makes use of estimates as to the useful life of each of the above assets (from 5 years for the pick-up truck, to 8 years for some of the harvest equipment, up to 40 years for some of the boiler equipment), and sets aside reserves that should make it possible to finance replacements when needed (by using saved reserves as down payments against financing). Reserve percentages were established at 50% of estimated replacement cost for the Boiler Operation assets and at 100% of estimated replacement cost for the Harvest Operation assets.

AVAILABILITY OF PRODUCTION INPUTS

As part of an effort to develop a woody biomass energy system in Fort Yukon, Alaska, a biomass resource assessment has been conducted by Tanana Chiefs Conference and Alaska Village Initiatives. The purpose of the assessment was to build a model that would serve to estimate biomass stocking, growth, sustainability, and cost using a geographic information system (GIS) and relational database technology with available information. Cover type was interpreted from high-resolution satellite imagery for an area within a 5-mile radius of Fort Yukon, and combined with ownership data, interpreted site class information, defined management restrictions, forest inventory information, cost parameters, and an array of parameters and assumptions used to estimate growth.

The model as initially established produced an estimate of 462,958 green tons of woody biomass within the project area, with an estimated annual allowable harvest of 9,517 tons. GZHU estimates that it will require approximately 1,600 tons annually in order to optimize the use of its boiler system.

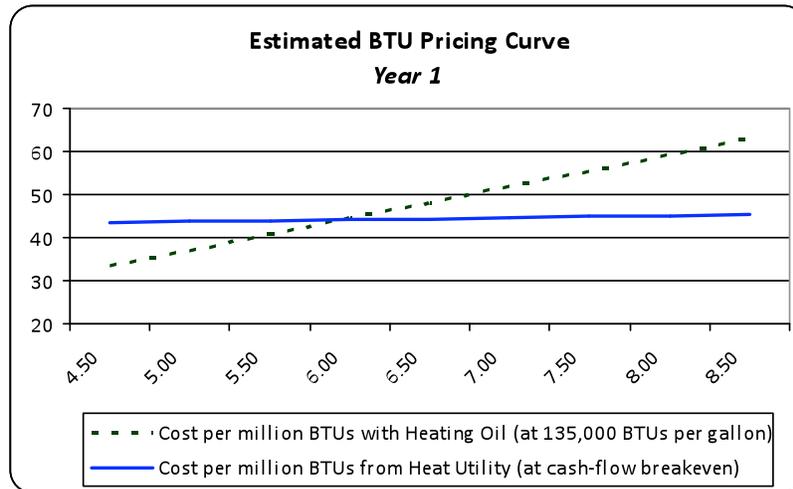
A grant from the US Department of Energy has allowed for the development of a draft stumpage sale agreement. GZ and GZHU will enter into a long-term agreement for the sale and harvest of GZ forest resources.

In addition, the study of the Boiler Operation (cited above) includes a solid estimate for the amount of excess heat that can be captured and purchased from GZUC's electric

plant for use in generating BTUs for sale by GZHU. GZHU and GZUC will enter into a long-term agreement for the transfer of this excess heat from GZUC to GZHU's boiler operation.

SALES AGREEMENTS WITH KEY CLIENTS

A grant from the US Department of Energy has allowed for the development of a draft template BTU purchase agreement. Particularly during the first few years of operation, GZHU hopes to negotiate long-term agreements which contain the ability to be flexible on prices charged while the true costs of running GZHU's operation are discovered and to reflect the fact that changes in fuel prices (primarily diesel) will impact the costs of operation for GZHU. The following chart illustrates the expected price per million BTUs that will need to be charged at varying levels of fuel prices; this chart also illustrates the estimated savings to GZHU's clients relative to the current heating-oil based approach.



As part of the start-up of the operation, GZHU will negotiate and enter into multiple BTU purchase agreements with its key commercial clients, as summarized in the following table.

Client	Price per Million BTUs	Forecast Number of BTUs per Year	Renewal Date	Facilities Covered by Agreement
Fort Yukon School District				School, Gymnasium, District Office, Shop, Voc Ed complex
Alaska Commercial Company				AC Store
US Postal Service				Post Office
City of Fort Yukon				Municipal Water Plant City Offices
Council of Athabascan Tribal Governments				Clinic Natural Resource building
GZ Corporation				Utility office
State of Alaska				State Building
church				Buildings
Yukon Flats College				College building
Gwitchyaa Zhee Gwitch'in Tribal Government				Tribal Offices

OPERATIONAL OVERVIEW

As one of the final phases prior to the start-up of GZHU, a full operational plan will be developed by Mr. Engler with oversight from GZHU's Board and by the project team.

Mr. Engler – as manager of all of GZHU's operation – will be responsible for all facets of the business, including boiler operations and harvest operations. It is expected that Mr. Engler will personally oversee the operation of the boilers, and will be one of the two field operators for the harvest operation. In this way, GZHU will minimize the amount of

management/overhead dollars needed for the operation, as Mr. Engler will be able (based on the established Harvest Plan and the relatively low-labor design of the boiler system) to deliver general management and administrative duties when not otherwise working in the field or in the boiler facility.

PROJECTED FINANCIAL STATEMENTS

The following pages contain detailed financial projections for GZHU, including annual Balance Sheets, Income Statements, and Statements of Cash Flow.

Gwitchyaa Zhee Heat Utility**Forecast Earnings Statement**

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Revenue					
Commercial BTU Sales	729,854	749,726	760,369	771,336	782,636
Round-wood Sales	0	0	0	0	0
Total Revenues	729,854	749,726	760,369	771,336	782,636
Fuel Purchases					
Heat Recovery BTU Purchases	30,692	30,692	30,692	30,692	30,692
Raw Wood Purchases - Boiler	50,247	50,247	50,247	50,247	50,247
Raw Wood Purchases - Round-wood Sales	0	0	0	0	0
Fuel Oil	25,648	25,648	25,648	25,648	25,648
Electricity	83,289	83,289	83,289	83,289	83,289
COGS - Fuel	80,940	80,940	80,940	80,940	80,940
Gross Profit	648,915	668,787	679,430	690,396	701,696
Operating Expense					
Woodcutting labor	99,756	102,790	105,916	109,138	112,458
Delivery labor	33,720	34,746	35,803	36,892	38,014
Chipping labor	5,620	5,791	5,967	6,149	6,336
Woodcutting equipment operating costs	38,325	38,325	38,325	38,325	38,325
Delivery equipment operating costs	8,363	8,363	8,363	8,363	8,363
Chipping equipment operating costs	6,272	6,272	6,272	6,272	6,272
Boiler Labor	42,126	43,407	44,728	46,088	47,490
Equipment Barging / Transport	3,000	3,000	3,000	3,000	3,000
Total Operating Expense	237,182	242,694	248,374	254,226	260,257
Sales, General, and Admin Expenses					
Billing / Bookkeeping	29,254	30,144	31,061	32,006	32,979
Management	72,531	74,737	77,010	79,353	81,766
Rent	17,033	17,551	18,085	18,635	19,202
Forestry Management	27,500	27,500	27,500	27,500	27,500
Professional Fees	16,729	17,238	17,762	18,302	18,859
Office Expenses	4,015	4,137	4,263	4,393	4,526
Board Fees / Misc.	6,692	6,895	7,105	7,321	7,544
Vehicle Expense	3,182	3,279	3,378	3,481	3,587
Liability Insurance	8,922	9,193	9,473	9,761	10,058
Total SG&A Expenses	185,857	190,674	195,637	200,751	206,021
Total Expenses	503,979	514,308	524,951	535,917	547,217
EBITDA	225,875	235,419	235,419	235,419	235,419
Net Income	41,268	47,090	47,090	47,090	47,090

Gwitchyaa Zhee Heat Utility
Forecast Balance Sheets

Assets	2012	2013	2014	2015	2016
Current Assets					
Cash	10,000	10,000	10,000	10,000	10,000
Inventory	12,562	12,562	12,562	12,562	12,562
Accounts Receivable	-	-	-	-	-
Equipment Reserve Accounts	170,312	340,624	510,936	681,248	851,560
Long Term Assets					
Leasehold Improvements / Buildings	500,000	500,000	500,000	500,000	500,000
Boiler(s), Feeders	430,000	430,000	430,000	430,000	430,000
Delivery System	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000
Harvesting Equipment	650,000	650,000	650,000	650,000	650,000
Other Vehicles	40,000	40,000	40,000	40,000	40,000
Installation Expenses	-	-	-	-	-
Accumulated Depreciation	(158,222)	(316,444)	(474,667)	(632,889)	(791,111)
Total Assets	2,754,652	2,766,741	2,778,831	2,790,921	2,803,011
Liabilities					
Current Liabilities					
Accounts Payable	7,903	7,903	7,903	7,903	7,903
Long Term Liabilities					
Bank Loan	-	-	-	-	-
Other	-	-	-	-	-
Total Liabilities	7,903	7,903	7,903	7,903	7,903
Equity					
Owners Equity	2,705,480	2,670,480	2,635,480	2,600,480	2,565,480
Other Equity	0	0	0	0	0
Net Income / Retained Earnings	41,268	88,358	135,448	182,538	229,627
Total Equity	2,746,749	2,758,838	2,770,928	2,783,018	2,795,108
Total Liabilities and Equity	2,754,652	2,766,742	2,778,831	2,790,921	2,803,011

Gwitchyaa Zhee Heat Utility**Cash Flow Statement**

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Cash at beginning of period *	2,740,480	10,000	10,000	10,000	10,000
OPERATING ACTIVITIES					
Ordinary Income / (Loss)	41,268	47,090	47,090	47,090	47,090
Adjustments to reconcile Net Income to Net Cash Provided by Operations:					
Change in Inventory	(12,562)	-	-	-	-
Change in Accounts Receivable	-	-	-	-	-
Change in Accounts Payable	7,903	-	-	-	-
Depreciation	158,222	158,222	158,222	158,222	158,222
Net Cash from Operating Activities	194,832	205,312	205,312	205,312	205,312
INVESTING ACTIVITIES					
Start-up Investments	(2,720,000)	-	-	-	-
Boiler Equipment Reserve	(29,774)	(29,774)	(29,774)	(29,774)	(29,774)
Loop Equipment Reserve	(36,093)	(36,093)	(36,093)	(36,093)	(36,093)
Harvest Equipment Reserve	(94,444)	(94,444)	(94,444)	(94,444)	(94,444)
Other Vehicle Reserve	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
Installation Costs Reserve	-	-	-	-	-
Net Cash from Investing Activities	(2,890,312)	(170,312)	(170,312)	(170,312)	(170,312)
FINANCING ACTIVITIES					
Bank Loan (principal only)	-	-	-	-	-
Dividends to GZ Corp / owner	(35,000)	(35,000)	(35,000)	(35,000)	(35,000)
Net Cash from Financing Activities	(35,000)	(35,000)	(35,000)	(35,000)	(35,000)
Net Cash increase for period	(2,730,480)	0	-	(0)	-
Cash at end of period	10,000	10,000	10,000	10,000	10,000

* For modelling purposes, receipts from grant funding are treated as cash already received, though it is more likely that these funds will be received at the same time as capital investments are completed.
