COMBAT CLIMATE CHANGE WITH BAYANNUR

An innovative optimization of tax equity financing for biomass project



 Ω OMEGA



Since 2006, China has been emitting more CO2 than any other country

CO₂ Emissions of China, US, EU, India



Annual Fossil CO₂ Emissions in China







2015 Overall Groundwater Quality

Source: China Water Risk, MEP State of Environment Report various years

Groundwater Quality Deterioration 2011-2015





Resulting in ...





These problems can be mitigated by our biomass project















Our project will be executed in Bayannur





- Inner Mongolia Hetao Plain
- Advantageous environment for agriculture and animal husbandry
- Yellow River irrigation area
 - Asia's largest gravity irrigation area
- One of China's green program project areas





With an innovative capital structure optimization





Execution Roadmap





Providing strong environmental impact



52,449 tons/year CO₂ reduction



49,587,892 pounds of coal burned



55,999 acres of U.S. forests in one year



850 tons/year NO_x reduction



755 tons/year phosphorus reduction



20,980 tons/year agriculture waste reduction







Key issues have been identified and mitigated

	Risk	Mitigation
	Governance & Polices	 Credit enhancement in the form of guarantees by Inner Mongolia Agricultural and Animal Husbandry Financing Independent oversight institutions in collaboration with PBOC
	Jurisdictional Approval	 Positive feedback from Bayannur government as well as their financial and legal advisor Focus on partnership with local government
<u>~</u>	Low Return	 Tax equity is a relatively low risk investment Partnership buyout gets postponed
⊡	Low Market Demand	 Strong drive of Chinese government regarding green development, started implementing plans to fully replace fertilizer by organic fertilizer Government is an off-taker in the form of subsidies Local demand within 1-100 km is high
	High Operating Expenses	 Transportation railway is being constructed Proximity of the Yellow River Existing elaborate highway system, factories are being constructed at critical intersection of farmland and transportation routes



Investment Key Details and Expected IRR





Strong potential to scale





Gianni De Bruyn



Financial Vehicle & Legal





Seohee Choi



Financial Planning & Legal





Sustainability & Government





Support & Research









HIBC

Start your empire here



Thank you to all our advisors

Academic & Professionals

Finance and Economics

Dean Hai Wen, Vice Chairman of Peking University Council

Alan Snoddy, MBA, Finance

Chang Y. Ha, Ph.D, Finance/Economics

David Lander, Ph.D, Economics

Srinivasan Selvam, Ph.D, Finance

Urias Marshall, Ph.D, Economics

August Rodermans, Former Engineer at Shell

Ning Ding, Financial Media Local Expert

Wang Qi, Finance

Charles Yonts, CLSA Hong Kong

Francois Perrin, East Capital Hong Kong

Qi Sun, Ph.D, Qianhai Financial Holdings **Jessica Zhang**, Assistant Vice President at Shenzhen Stock Exchange

Karra Sanghamitra, Managing Director at Morgan Stanley

Accounting

Naqiong Tong, Ph.D, Accounting Gina Van Moere, CFO Isuzu Motors Jingyi Wang, Ph.D, Transnational Law





Morgan Stanley

Bayannur

Government

Xiaobing Zhang, Mayor of Bayannur Municipal Government **Yongming Li**, Director of Agriculture and Animal Husbandry Finance Department **Lei He**, Manager in Foreign Affairs Office

Financial Advisors

Jianguo Niu, Investment Manager of Shanghai Boning Capital Zhihan Zhang, Investment Manager of Shanghai Boning Capital Weiming Yin, Investment Director of Shanghai Boning Capital

Biomass Project Stakeholders

Fenze Liu, CEO of Fuchuan Feed Science & Technology **Bin Li**, CEO of Runze Biotechnology and Sciences, Inc.







THANK YOU

Q&A



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Tax Investor: After-Tax	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Equity Investment	(2,411,451)					
Dividend		13,269	16,194	19,265	22,490	25,876
Sale of Shares	0	0	0	0	0	416,112
Total Cash	(2,411,451)	13,269	16,194	19,265	22,490	441,988
Investment Tax Credit	612,432					
Share of Project Tax Benefit	526,327	692,639	341,466	116,977	71,310	(109,228)
Total	(1,272,692)	705,908	357,660	136,243	93,800	332,760
Cumulative IRR		-45%	-12%	-4%	1%	12%



	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
Sponsor: After-Tax	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Taxable Income	(526,327)	(692,639)	(341,466)	(116,977)	(83,191)	96,452	1,389,143	1,584,080	1,788,557	2,003,045	2,228,041	2,464,063	2,711,658	2,971,398	3,243,886	3,529,751	3,819,316	4,123,360	4,442,605	4,777,813	5,129,781
Tax Expenses (Benefits)					(160,537)	15,250	190,785	234,759	262,905	292,433	323,409	355,907	390,001	425,770	463,298	502,672	542,689	584,708	628,828	675,154	723,796
Net Income	(526,327)	(692,639)	(341,466)	(116,977)	77,345	81,202	1,198,358	1,349,321	1,525,652	1,710,613	1,904,631	2,108,156	2,321,657	2,545,628	2,780,588	3,027,080	3,276,627	3,538,651	3,813,777	4,102,659	4,405,985
Depreciation																					
/Amortization	500,718	801,149	480,689	288,414	288,414	144,207															
Change in NWC																					
CAPEX	12,517,950																				
Mandatory Debt																					
Payment	285,624	292,764	300,083	307,585	315,275	739,269	331,236	339,517	348,005	356,705	365,622	374,763	384,132	393,735	403,579						
Total																					
(Levered Free Cash																					
Flow)	(12,829,183)	(184,255)	(160,860)	(136,149)	50,484	(513,860)	867,122	1,009,805	1,177,647	1,353,908	1,539,009	1,733,393	1,937,525	2,151,893	2,377,009	3,027,080	3,276,627	3,538,651	3,813,777	4,102,659	4,405,985
Cumulative IRR							-41%	-28%	-20%	-14%	-10%	-6%	-4%	-2%	0%	2%	3%	5%	6%	6%	7%



% Change in Variable	Revenue	Op. Expense (Except Dep)	Tax Credit Base	WB Loan Interest Rate
Base Value	2,925,000	1,125,749	765,540	2.50%
-8%	13.08%	10.24%	9.56%	10.76%
-6%	12.68%	9.88%	10.04%	10.54%
-4%	12.29%	9.65%	10.52%	10.41%
-2%	11.90%	9.54%	11.01%	10.34%
0%	11.51%	9.54%	11.51%	10.34%
2%	11.12%	9.65%	12.02%	10.41%
4%	10.74%	9.86%	12.53%	10.53%
6%	10.35%	10.20%	13.06%	10.74%
8%	9.98%	10.69%	13.60%	11.02%



Appendix: Sales-Lease Back

DIAGRAM OF STRUCTURE





Partnership Flip

PROs

- Well understood / Common
- Buy out is at reasonable cost
- No fixed payment for sponsor, therefore if project underperforms, worst case is delay of the flip

CONs

- Requires sponsor to invest own capital
- < 100% of tax benefits are transferred, which might be inefficient if sponsor can't use remainder
 - High legal and accounting cost

Sales-Lease back

PROs

- Simplest structure
- 100% transfer of credits
- Minimal financing capital for developer (20% FMV in the form of rental payments)
- Basis for ITC and depreciation is transaction price, which may be higher than developer's cost

CONs

- Cost of capital from TE investor maybe higher
- Developer must meet fixed rent schedule, which is difficult if underperforms.
- Purchase price for developer after ITC is FMV at lease-end
- Lease structure: at leaseend FMV > 20% of initial value



- 1. The project period is 20 years + 1 year of construction.
- 2. Annual growth rate of net revenue is 5%.
- 3. The interest rate for World Bank loan is 2.5%.
- 4. 30% of total investment is Chinese government grant.
- 5. Exempt for VAT, Construction tax, Educational tax, Income Tax for the first three years and half of their original rate for the following three years.
- 6. The project is eligible for investment tax credit of 10% for the purchasing price of all the equipment that need to be purchased.
- 7. Tax equity investors have large enough taxable income to apply all the tax benefit they get from tax equity investment.



Tax Equity

- Lowers EBITDA and reduces future tax liabilities
- No long term ownership required
- Sponsor buys out tax equity for fair market value
- Worst case scenario for the sponsor is delay in buy out period due to lower than expected returns
- Proven concept with 9 15% returns in the United States

Government Funding

- Government involvement adds credibility as they have "skin in the game"
- Backed by bonds so lower returns is required
- Already funded, so risk is reduced

World Bank Loan

- Already in talks about loan for Bayannur at low cost of debt
- Can easily be replaced for other projects by either Tax Equity or another form of funding



- Article 100 of the Implementation Regulations of the Enterprise Income Tax Law: The tax credit referred to in Article 34 of the Corporate Income Tax Law refers to the enterprise purchase and actual use of "Environmental Protection Special Equipment Enterprise Income Tax Preferential Catalogue", the "Energy Saving and Water Saving Special Equipment Enterprise Income Tax Preferential Catalogue" and the "Safe Production Special Equipment Enterprise". If the special equipment for environmental protection, energy conservation water conservation, and safe production specified in the Income Tax Preferential Catalogue (hereinafter referred to as the "Catalogue"), 10% of the investment amount of the special equipment may be offset from the taxable amount of the enterprise in the current year; If you credit, you can transfer the credit in the next five tax years.
- About issuing enterprise income tax on energy saving, water saving and environmental protection Special equipment Notice of Offer Catalog (2017 edition): In the course of implementing the preferential tax policy, the tax department can not accurately determine whether the special equipment purchased by the enterprise conforms to the conditions stipulated in the relevant technical indicators and other tax preferential policies, and may draw the departments at the municipal level (including) above the development reform, industry and informationization, environmental protection and so on, which shall entrust the professional institutions to issue technical appraisal opinions Relevant departments should actively cooperate.
- Article 98 of the Implementation Regulations of the Enterprise Income Tax Law: The fixed assets which may be depreciated over shorter periods or under accelerated depreciation methods as prescribed in Article 32 of the Enterprise Income Tax Law include:
- (1) Fixed assets that need to be replaced due to advancement of technology and fast upgrading of products; and
- (2) Fixed assets that suffer from constant vibration or severe corrosion throughout years.
- Where the shorter depreciation period method is applied, the minimum depreciation period shall not be less than 60% of the minimum
 depreciation period as prescribed in Article 60 of The Regulations; where accelerated depreciation method is applied, the double declining
 balance method or the sum-of-years-digits method may be used.



Appendix: China's Tax Laws

- Document No. 68 & 106: EIT Policies relating to accelerated depreciation of fixed assets.
 - Machinery
- Document No. 36 (Circular 36) changed sales-lease back from 17% to 6% VAT tax
- HNTE Document 32 & 195 Guokefahuo
- Minimum depreciation shall not be less than 60% of period specified in article 60 of the implementing regulations
 - Double declining or sum of the years digit method
- If unit price is below CNY1 mio, entire cost can be deducted on a one-off basis in calculating taxable income (for SME, if after the facts income is above, there will be no backdated adjustments and they are still able to benefit from the one-off)
- If not able to accurately determine if purchased equipment qualifies, they will leave the decision to the department of development and reform (which we visited)
- Tax incentives:
 - 15% preferential tax rate for applicable high-net technology enterprises
 - 50%-75% super deduction for qualifying R&D expenditures



China Quic	k Facts for Companies
Corporate income tax rate	25%
Branch tax rate	25%
Capital gains tax rate	25%
Basis	Worldwide
Participation exemption	No
Loss relief	
Carryforward	5 years
Carryback	No
Double taxation relief	Yes
Withholding tax	
• Dividends	10%
• Interest	10%
VAT	0%, 6%, 11% and 17% (13% bracket is abolished as from 1 July 2017); a 3% and 5% rate apply under the simplified VAT calculation method
VAT grouping	No
Consumption tax	1%-56%
City maintenance and construction tax	1%, 5%, 7%
Education surcharge	3% (national), 2% (local)

China Quick Facts for Individuals				
Income tax rates	3%-45% (wages/salaries), up to 35% (business profits)			
Capital gains tax rates	0%/20%			
Basis	Worldwide income			
Double taxation relief	Yes			
Tax year	Usually calendar year			
Return due date	Within three months of end of the calendar year (business profits tax return and return for individuals whose annual income exceeds RMB 120,000); within 30 days of end of the calendar year (foreign-source income tax return); and within 15 days of the month following the month in which income is earned (wages/salaries withholding return)			
Withholding tax				
Dividends	20%/0%			
Interest	20%			
Rovalties	20%			



Value Added Tax

General VAT payers (17%):

If annual sales are below 5mil RMB they can apply for this

Sales-and-leaseback structure changed from 17% to 6% VAT tax, indicated in circular 36

Small-scale VAT payers (3%):

Entities engaged in: manufacturing, processing, repair and replacement services

Sales do not exceed 0.5 mil RMB per year or 0.8 mil if wholesale or retail.

VAT incurred on the purchase or construction of fixed assets may be credited against output VAT Construction tax = 5% of VAT

Educational tax = 5% of VAT



Individual Tax

= employment income, production and business income, income derived from contracting for, or leasing of operations of, enterprises or institutions, dividends and bonuses, interest income (except interest from bank deposits), ...

7 progressive tax rates ranging from 3% - 45% levied on wages and income.

A separate tax schedule applies to income from the operation of a private business (including on a contractual or lease basis). For a private business, taxable income is defined as total revenue net of costs, expenses and losses incurred. For a business operating on a contractual or lease basis, taxable income is total revenue net of necessary expenses.

Progressive tax rates apply to such income: 5% on the first RMB 15,000; 10% on the next RMB 15,000; 20% on the next RMB 30,000; 30% on the next RMB 40,000; and 35% on income exceeding RMB 100,000.

Dividends, interest, royalties, income from the leasing of property, income from the transfer or assignment of property, income from manuscripts and contingency income are taxed at a rate of 20%. Interest on bank deposits temporarily is exempt from individual income tax (previously it was taxed at 5%). Income from personal services is subject to progressive rates ranging from 20% to 40%.

<Tax incentives and environmental protection: evidence from China's taxpayer-level data>, Mao and Wang, China Finance and Economic Review, 2016

"There are two factors that may explain unpopularity of the tax incentives. One is <mark>lack of support from taxpayers</mark>; the other is short of related public services from local governments."

"Compared to SOEs who have to consider some social goals, non-SOEs like foreign and private domestic enterprises or even incorporated firms mainly pursue maximization of profits rather than social welfare, they are reluctant to be beneficiaries of the tax policies that may erode their capacity of making profits."

High Collection and transportation cost, which our circular economy solves

Difficulty of storage

Lack of enthusiasm: Through government support and subsidies a change is occurring with the population. In addition, new regulations are being formed in order to aid the transition

Farmers think short term rather than long term, regular fertilizer produces slightly more crops initially. However, this is not sustainable for multiple years and production decreases. With organic fertilizer the land can be farmed for a longer period of time.



Why we are innovative



NEW WAYS TO DRIVE RETURNS

Utilizing tax credit and tax deduction



RECONSTRUCTION & OPTIMIZATION Mandatory buyout clause Tax benefit allocation rate and cash distribution rate



UNIQUE CAPITAL STRUCTURE

Tax Equity + Government Grant + World Bank Loan



TARGETING Partnership with SOE rather than private firm to mitigate risks



CIRCULAR ECONOMY Creating circular economy between stakeholders



Appendix: Why Biofuel in Bayannur

What is Biofuel

- Combustible mixture of gases (mainly methane and carbon dioxide)
- Preferably high fat content inputs for high methane production
- Biogas aids climate change, therefore we need to collect it and store for use of fuel

What are the Benefits

- CO₂ neutral (does not add)
- Reduction of CO₂ if Biofuel is used to replace oil based fuel.
- Reduction of Nitrous oxide (310 x the effect CO₂ has on climate change) through use of organic fertilizer instead of regular fertilizer
- Reduction of Phosphorus than to optimal levels in organic fertilizer
- Change in structure of N that allows for more efficient use of fertilizer
- Digested slurry reduces the amount of odor points





Appendix: Comparable Waste Projects in China



UNDER SAVED BY THE KITCHEN WASTE TREATMENT FACILITY BY 2019

- Changing attitudes with improved waste management
- Circular economy that separates the waste at its source
- Recycled waste is converted into energy at anaerobic facilities
- Public-private partnership
- Produces natural gas

🕈 Social

Community workshops are designed to educate citizens and improve waste segregation at the source. In 2014-2017, more than 1,750 training sessions have been organized, engaging 108,000 citizens

Economic

Increasing recycling rates provides access cheaper resources, and separating organic waste allows for harvesting of natural gas for energy and heat



Environment

This project will improve solid waste collection and separation at the household level in six urban districts in Ningbo, reducing the amount of waste sent to the existing landfill and incineration facilities



Appendix: Comparable Waste Projects in China



165.6M TONS OF INDUSTRIAL WASTE CAN

BE RECYCLED WHEN THE PROJECT IS RUNNING AT FULL CAPACITY

- Turning waste into walls
- Low-carbon building boards for prefab buildings
- Saves 18,000 tons of cement in 2016
- Further development is focusing on 3D printing

🕈 Social

When the full production capacity of the project is realized, it will provide 2,000 jobs for local residents

Economic

The project used 80,000 tons of waste in 2016, saving approximately 18,000 tons of cement for producing building boards. This resulted in significant savings for purchasing or producing cement



Environment

This project reduces environmental pollution caused by disposal and storage of solid waste, and could also reduce NO_x , SO_2 , and dust emissions caused by cement production



Appendix: Comparable Waste Projects in China



U12K TONS OF CO₂ ABATEMENT IN THE FIRST YEAR

- Extracting energy from sludge cuts coal and pollution
- Circular economy
- Process 200 tons of sludge every day
- Prevents sludge to be dumped into landfills where it pollutes its environment
- Avoids 11,500 tons of CO₂ emissions each year

Health

Through the improved processing of sludge, water quality and odors are controlled, safeguarding the local population's health

Economic

By fully embracing circular economy, much value can be gained from the sludge, estimated to be CNY2.3 per annum



Environment

Better sludge management prevents the release of methane to the environment and more coal being burned for energy generation, as well as reducing heavy metal pollution



Appendix: Proof of Concept





They offer a variety of services including consulting, advisory, development, and lending expertise in renewable energy, energy efficiency and consolidated energy service solutions.

Red Stone Equity Partners' Acquisition Department and Investor Relations Department are trained in all aspects of the tax credit syndication business. This includes, but is not limited to, origination, underwriting/structuring, financial analysis, and real estate analysis, all to optimize investor returns and reduce long-term portfolio risk.



An institutional investment management firm founded in 1983 that has deployed over \$5 Billion in tax credit equity investments to date.



Tesla uses tax equity to fund their solar panel projects.



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