爱 着 森 ENESOON

Technology Overview & Sample Project

Heat

is a **valuable** and **manipulable** resource with massively untapped economic potential

Core Technologies

Heat Transferring Equipment

High efficiency heat pumps and proprietary transfer medium boasts low energy loss, long lifespan, modularity, scalability, remote operability, among other characteristics that enable system to harvest heat like any other energy resource.

Thermal Energy Storage

Patented low-melting, low-corrosion, and low-cost nano salts store thermal energy when it is plentiful and release when electricity demands rise, vastly reducing system costs, wear & tear, and physical & environmental footprint.

Multi-Energy Management System

Hybrid Smart Energy System ("HSES"), trained on 9+ years of data from 20+ national & provincial projects, manages multiple energy sources while optimizing for efficiency, energy cost, and reliability.

500 million m²

of contracted service area



706 counties

coverage throughout China





\$40mm Net Capital Cost IRR: 13% & NPV:\$10.1mm

Real \$0.065/KWh LCOE

remain NPV positive @ \$.08/kWh PPA

20,000+ Tons of CO₂ Avoided annually compared to oil/gas plants

Sample Project Proposal

CSP @ University of Ghana Medical Center







1.03 MW Cooling Capacity

At reduced cost & high availability



18 Month Completion

With Enesoon's tech & turnkey solution

Based on Operating Project Sugian CSP Research Center

Systems Comparison

	Hses	Solar PV	Oil/Gas	
Cost	\$0.065/KWh	\$0.06/KWh	\$0.08/KWh	
Availability	Constant	Intermittent	Constant	
CO2, NOx + Emissions	Low	Low	High	
Ground Temperature	Decrease	Increase	Unchanged	
Water Intensity	Moderate	Moderate	Varies	

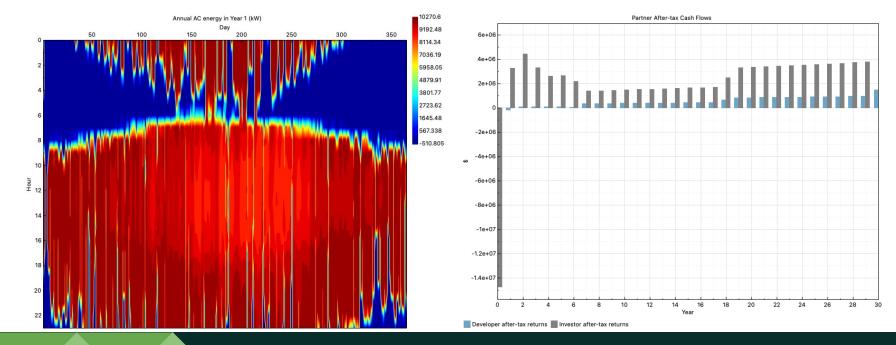
Versatility



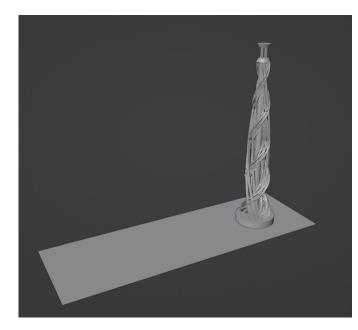
Thank you

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Appendices



Appendices



Metric	
Annual AC energy (year 1)	51,613,2
Capacity factor (year 1)	
Annual Water Usage	7,
PPA price in Year 1	9.0
PPA price escalation	2.3
LPPA Levelized PPA price	
nominal	11.7
LPPA Levelized PPA price real	8.0
LCOE Levelized cost of energy nominal	9.5
LCOE Levelized cost of energy real	6.4
Investor IRR at end of project	
Investor NPV over project life	\$10

Net capital cost Equity Debt Minimum DSCR

Value
613,200 kWh
65.50%
7,581 m^3
9.00 ¢/kWh
2.30 %/year
11.79 ¢/kWh
8.03 ¢/kWh
9.52 ¢/kWh
6.48 ¢/kWh
19.56%
\$10,692,723
\$39,577,376
\$15,032,905
\$24,544,470
2.17





Appendices

	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	30
ENERGY		
Electricity to grid (kWh)	0 52,229,480 52,109,352 51,989,500 51,889,924 51,750,624 51,512,844 51,315,586 51,512,844 51,329,364 51,276,156 51,158,220 51,040,556 50,923,164 50,080,040 50,689,188 50,572,604 50,456,284 40,933,0236 50,224,452 50,108,936 49,930,300 49,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,102 40,103,103,103,103,103,103,103,103,103,10	8,855,660
Electricity from grid (kWh)	0 -816.277 -814.880 -813.446 -612.035 -610.627 -609.222 -607.821 -606.423 -605.029 -603.637 -602.249 -600.863 -599.481 -598.103 -586.727 -585.354 -583.985 -592.619 -591.256 -589.896 -588.539 -587.186 -585.853 -584.488 -583.143 -581.802 -580.464 -579.129 -577.797	-576,468
Electricity to grid net (kWh)	0 51,613,200 51,494,492 51,376,052 51,257,888 51,139,986 51,022,372 50,956,024 50,787,940 50,671,128 50,554,584 50,438,308 50,322,300 50,206,560 50,091,084 49,375,876 49,860,332 49,746,252 49,631,836 49,517,680 49,403,792 49,260,160 49,176,796 49,063,688 48,950,840 48,838,256 48,725,928 48,613,856 48,502,044 48,390,492 48,758,786 49,860,332 49,746,252 49,631,836 51,320,562 51,257,888 51,139,986 51,022,372 50,956,024 50,787,940 50,671,128 50,554,584 50,438,308 50,322,300 50,206,560 50,091,084 49,375,876 49,860,332 49,746,252 49,631,836 49,517,676 49,860,372 49,763,716 49,860,372 49,763,716 49,860,372 49,763,716 49,860,372 49,763,716 49,860,372 49,763,716 49,860,372 49,763,716 49,860,372 49,763,716 49,860,372 49,763,716 49,860,372 49,763,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716,716 49,860,372 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,716 49,71	8,279,192
REVENUE		
PPA price (cents/kWh)	9 9.207 9.41876 9.63539 9.85701 10.0837 10.3156 10.5529 10.7956 11.0439 11.2979 11.5578 11.8236 12.0566 12.3738 12.6583 12.9495 13.2473 13.552 13.8637 14.1826 14.5088 14.8425 15.1839 15.5331 15.8803 16.2558 16.6297 17.0122	17.4035
PPA revenue to project (\$)	0 5,094,142 5,199,322 5,306,672 5,416,240 5,528,070 5,642,208 5,758,703 5,877,604 5,998,959 6,122,820 6,249,238 6,378,268 6,509,960 6,644,372 6,781,559 6,921,578 7,064,489 7,210,350 7,359,223 7,511,170 7,686,254 7,824,540 7,986,064 8,150,983 8,319,277 8,491,046 8,686,382 8,845,297 9,027,927	9,214,327
Salvage value (\$)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,713,841
Total revenue to project (\$)	0 5.094,142 5,199,322 5,306,672 5,416,240 5,528,070 5,842,208 5,758,703 5,877,604 5,998,959 6,122,820 6,249,238 6,378,268 6,509,960 6,644,372 6,781,559 6,921,576 7,064,489 7,210,350 7,358,223 7,511,170 7,686,254 7,824,540 7,986,094 8,150,983 8,319,277 8,481,046 8,686,382 8,045,297 9,027,927 1	0,928,168
Property tax net assessed value (\$)	0 94,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820 34,276,820	4,276,820
OPERATING EXPENSES		
O&M fixed expense (\$)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0
O&M production-based expense (\$)	0 182,803 189,678 196,811 204,213 211,883 219,882 228,131 236,710 245,612 254,849 264,434 274,379 284,697 295,404 306,514 318,041 330,002 342,413 355,290 368,652 382,516 396,902 411,829 427,317 443,387 480,062 477,384 485,317 513,945	533,273
O&M capacity-based expense (\$)	0 594,000 617,760 642,470 668,169 694,896 722,692 751,800 761,664 812,930 845,447 879,265 914,436 951,013 989,054 1,028,616 1,069,760 1,112,551 1,157,053 1,203,335 1,251,468 1,301,527 1,353,588 1,407,732 1,464,041 1,522,803 1,583,507 1,646,847 1,712,721 1,781,230	1,852,479
Electricity purchase (\$)	0 48,159 49,153 50,168 51,204 52,261 53,340 54,441 55,565 56,712 57,883 59,079 60,286 61,543 62,814 64,111 65,435 66,786 68,165 69,572 71,008 72,475 73,971 75,498 77,057 78,648 80,272 81,929 83,621 85,347	87,110
Property tax expense (\$)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0
Insurance expense (\$)	0 68,554 71,296 74,148 77,114 80,198 83,406 86,742 90,212 93,820 97,573 101,476 105,535 109,757 114,147 118,713 123,461 128,400 133,536 138,877 144,432 150,209 156,218 162,467 168,965 175,724 182,753 190,063 197,665 205,572	213,795
Land lease expense (\$)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0
Total operating expenses (\$)	0 893.515 927,887 963,597 1,000,700 1,039,248 1,079,300 1,120,914 1,164,151 1,209,075 1,255,753 1,304,254 1,354,648 1,407,010 1,461,419 1,517,953 1,576,638 1,637,738 1,701,166 1,767,074 1,835,561 1,960,728 1,980,679 2,057,525 2,137,380 2,220,362 2,306,594 2,346,304 2,486,304 2,586,094	2,686,657
EBITDA (\$)	0 4200.626 4271,434 4,343,075 4,415,540 4,488,821 4,562,908 4,637,750 4,713,453 4,789,884 4,867,067 4,944,985 5,023,620 5,102,950 5,182,953 5,263,606 5,344,881 5,426,750 5,509,184 5,567,508 5,759,526 5,543,860 5,928,568 6,013,603 6,098,916 6,184,452 6,270,158 6,355,972 6,441,832	8,241,512