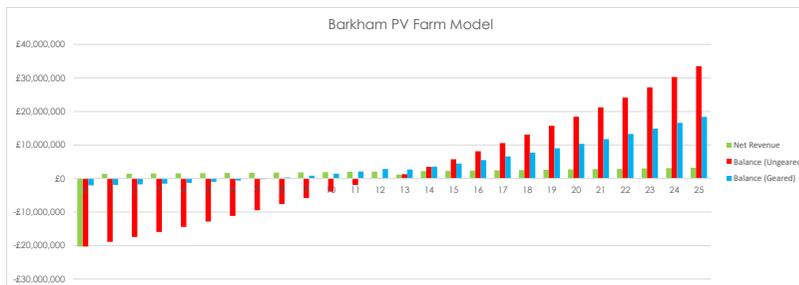


Barkham 36.6MWp PV Farm

Assumptions	
Size of system	36,610.00 kWp
Imported Energy overnight	154,827 kWh
Generation (kWh/kWp)	943
Exported Energy	34,523,230 kWh
Module degradation	0.40% Per annum
Import electricity price	£ 0.120 pence per kWh
Power Purchase Agreement Export Price	£ 0.045 pence per kWh
EPC Contractor Cost / kWp	£ 400
O&M Costs / kWp per annum	£ 5
Retail Price Inflation (RPI)	2.49%
Annual Fuel Price inflation	3.5%
Year 1 ROI	6.9%
Ungeared IRR	6.3%
Cost of Capital	1.0%
Amount of Loan %	90.0%
Length of loan	25.00 years
Geared IRR	18%



101

Year	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	
Output kWh (including module degradation & module mismatch)		34,523,230	34,350,614	34,178,861	34,007,966	33,837,927	33,668,757	33,500,393	33,332,891	33,166,227	33,000,396	32,835,394	32,671,217	32,507,861	32,345,321	32,183,595	32,022,677	31,862,563	31,703,251	31,544,734	31,387,011	31,230,076	31,073,925	30,918,556	30,763,963	30,610,143	
Annual Revenue																											
Revenue from Export		£1,553,545	£1,607,919	£1,664,197	£1,722,443	£1,782,729	£1,845,125	£1,909,704	£1,976,544	£2,045,723	£2,117,323	£2,191,429	£2,268,129	£2,347,514	£2,429,677	£2,514,715	£2,602,730	£2,693,826	£2,788,110	£2,885,694	£2,986,693	£3,091,227	£3,199,400	£3,311,400	£3,427,299	£3,547,254	
Imported Electricity (Overnight transformers)		-£18,579	-£19,230	-£19,903	-£20,599	-£21,320	-£22,066	-£22,839	-£23,638	-£24,465	-£25,322	-£26,208	-£27,125	-£28,075	-£29,057	-£30,074	-£31,127	-£32,216	-£33,344	-£34,511	-£35,719	-£36,969	-£38,263	-£39,602	-£40,988	-£42,423	
Inverter Replacement Year 13 (3p/w)														-£954,783													
DNO Application		£ 3,000																									
Tender Costs																											
Planning		-£ 100,000																									
Professional Fees (SPV, Planning & Technical)		-£ 100,000																									
EPC Cost of PV Farm including fencing, Client substations		-£14,644,000																									
Grid Connection Cost at 33kV		-£4,470,000																									
Contingency		-£965,850																									
Business Rates (Assumed Zero Sum)																											
Insurance		-£144,000	-£147,874	-£151,851	-£155,936	-£160,131	-£164,438	-£168,862	-£173,404	-£178,069	-£182,859	-£187,778	-£192,829	-£198,014	-£203,343	-£208,813	-£214,430	-£220,198	-£226,121	-£232,204	-£238,450	-£244,864	-£251,451	-£258,215	-£265,161	-£272,294	
3rd Party Asset manager		£36,610	-£37,595	£38,406	£39,845	£40,711	£41,806	£42,931	£44,086	£45,272	£46,489	£47,740	£49,024	£50,343	£51,697	£53,088	£54,514	£55,983	£57,488	£59,035	£60,623	£62,253	£63,928	£65,648	£67,414	£69,227	
Operational costs (rates, ins, O&M contract) ***		-£163,050	-£167,974	-£173,031	-£178,223	-£183,555	-£189,031	-£194,654	-£200,428	-£206,358	-£212,447	-£218,699	-£245,120	-£251,714	-£258,485	-£265,438	-£272,579	-£279,911	-£287,441	-£295,173	-£303,113	-£311,267	-£319,640	-£328,238	-£337,068	-£346,135	
Costs																											
Total Revenue		-£20,282,850	£1,390,966	£1,440,816	£1,492,443	£1,545,908	£1,601,278	£1,658,620	£1,718,003	£1,779,501	£1,843,188	£1,909,142	£1,977,444	£2,048,175	£1,166,641	£2,197,277	£2,275,829	£2,357,174	£2,441,412	£2,528,645	£2,618,979	£2,712,524	£2,809,394	£2,909,706	£3,013,583	£3,121,150	£3,232,538
UNGEARED MODEL																											
Cash flow (£)		-£20,282,850	£1,390,966	£1,440,816	£1,492,443	£1,545,908	£1,601,278	£1,658,620	£1,718,003	£1,779,501	£1,843,188	£1,909,142	£1,977,444	£2,048,175	£1,166,641	£2,197,277	£2,275,829	£2,357,174	£2,441,412	£2,528,645	£2,618,979	£2,712,524	£2,809,394	£2,909,706	£3,013,583	£3,121,150	£3,232,538
Balance - Ungeared		-£20,282,850	£18,891,884	£17,451,066	£15,958,625	£14,412,717	£12,811,439	£11,152,819	£9,434,816	£7,655,314	£5,812,126	£3,902,983	£1,925,540	£122,635	£1,289,276	£3,486,555	£5,762,381	£8,119,555	£10,560,967	£13,089,612	£15,708,591	£18,421,114	£21,230,510	£24,140,216	£27,153,799	£30,274,948	£33,507,486
GEARED MODEL																											
Borrowings																											
Equity (Capital Outlay)		£18,254,565																									
Annual Costs																											
Loan Repayment		£730,182.4	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	£730,183	
Interest		£182,546	£175,244	£167,942	£160,640	£153,338	£146,037	£138,735	£131,433	£124,131	£116,829	£109,527	£102,226	£94,924	£87,622	£80,320	£73,018	£65,716	£58,415	£51,113	£43,811	£36,509	£29,207	£21,905	£14,604	£7,302	
Operational costs (rates, ins, O&M contract)		£363,660	£373,442	£383,488	£393,804	£404,397	£415,275	£426,446	£437,918	£449,698	£461,795	£474,217	£486,973	£500,073	£513,525	£527,339	£541,524	£556,091	£571,050	£586,411	£602,186	£618,385	£635,019	£652,101	£669,643	£687,656	
Total Annual Costs		-£2,028,285	-£1,278,388	-£1,278,869	-£1,281,613	-£1,284,627	-£1,287,918	-£1,291,495	-£1,295,364	-£1,299,533	-£1,304,011	-£1,308,806	-£1,313,927	-£1,319,382	-£1,325,179	-£1,331,329	-£1,337,841	-£1,344,725	-£1,351,990	-£1,359,647	-£1,367,707	-£1,376,179	-£1,385,074	-£1,394,409	-£1,404,189	-£1,414,429	
Revenues		£1,390,966	£1,440,816	£1,492,443	£1,545,908	£1,601,278	£1,658,620	£1,718,003	£1,779,501	£1,843,188	£1,909,142	£1,977,444	£2,048,175	£1,166,641	£2,197,277	£2,275,829	£2,357,174	£2,441,412	£2,528,645	£2,618,979	£2,712,524	£2,809,394	£2,909,706	£3,013,583	£3,121,150	£3,232,538	
Cash flow (£)		-£2,028,285	£114,578	£161,947	£210,830	£261,281	£313,360	£367,125	£422,640	£479,968	£539,177	£600,336	£666,517	£728,794	£1,158,539	£865,947	£937,987	£1,012,449	£1,089,422	£1,168,998	£1,251,273	£1,336,345	£1,424,318	£1,515,297	£1,609,394	£1,706,721	£1,807,397
Balance - Geared		-£1,913,707	-£1,751,760	-£1,584,930	-£1,427,648	-£1,279,648	-£1,140,288	-£984,288	-£839,163	-£694,524	-£550,845	-£408,622	-£268,474	-£129,957	£142,957	£2,106,474	£2,835,268	£3,545,676	£4,248,663	£4,933,112	£5,598,534	£6,245,800	£6,875,512	£7,488,158	£8,083,149	£8,654,879	
Outstanding loan		£18,254,565	£17,524,382	£16,794,200	£16,064,017	£15,333,835	£14,603,652	£13,873,469	£13,143,287	£12,413,104	£11,682,922	£10,952,739	£10,222,556	£9,492,374	£8,762,191	£8,032,009	£7,301,826	£6,571,643	£5,841,461	£5,111,278	£4,381,096	£3,650,913	£2,920,730	£2,190,548	£1,460,365	£730,183	

This page is intentionally left blank