

FEASIBILITY STUDY												
Bioplastic compound												
		Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
		2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572
INVESTMENT												
Production Equipments												
Shreder and Grinder	300,000							358,216				
Sieving machine	200,000							238,810				
Licensing												
IP	500,000											
Others												
General administration	0											
Re-Investment	0											
Contingency	0											
Total investment (Baht)	1,000,000	0	0	0	0	0	0	597,026	0	0	0	0
Accumulated Investment	1,597,026											
Escalation (%)		3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
DEPRECIATION												
Production Equipments												
Shreder and Grinder	5	60,000	60,000	60,000	60,000	60,000	60,000	71,643	71,643	71,643	71,643	71,643
Sieving machine	5	40,000	40,000	40,000	40,000	40,000	40,000	47,762	47,762	47,762	47,762	47,762
Licensing												
IP	10	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Others												
General administration												
Total Depreciation (Baht)		100,000	100,000	100,000	100,000	100,000	100,000	119,405	119,405	119,405	119,405	119,405
Total Amortisation (Baht)		50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Accumulated depreciation and an		150,000	300,000	450,000	600,000	750,000	919,405	1,088,810	1,258,216	1,427,621	1,597,026	
ASSUMPTIONS												
Operating Day/Year		300	300	300	300	300	300	300	300	300	300	300
Capacity												
Production Capacity (Kg/year)		15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Utilisation (%)		50%	50%	60%	70%	80%	90%	100%	100%	100%	100%	100%
Gross capacity (kg)		7,500	7,500	9,000	10,500	12,000	13,500	15,000	15,000	15,000	15,000	15,000
Loss from the system (%)		20%	20%	15%	10%	10%	5%	5%	5%	5%	5%	5%
Total loss from the system (kg/year)		1,500	1,500	1,350	1,050	1,200	675	750	750	750	750	750
Total Capacity (kg/year)		6,000	6,000	7,650	9,450	10,800	12,825	14,250	14,250	14,250	14,250	14,250
Sales (volume)												
Business customer		6,000	6,000	7,650	9,450	10,800	12,825	14,250	14,250	14,250	14,250	14,250
Total unit (Kg/year)		6,000	6,000	7,650	9,450	10,800	12,825	14,250	14,250	14,250	14,250	14,250
Tariff (Baht)												
Business customer		180	185	191	197	203	209	215	221	228	239	239
Average Tariff		180	185	191	197	203	209	215	221	228	239	239
Tariff Adjustment %	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%	5%
Cost of goods sold (Baht/kg)												
Raw material												
Polylactic acid		42	43	45	46	47	49	50	52	53	56	56
Polybutylene succinate		61	63	65	67	69	71	73	75	77	80	80
Chemical Additives		4	4	4	4	5	5	5	5	5	5	5
Durian bark		4	4	4	4	5	5	5	5	5	5	5
Transportation expenses		5	5	6	6	6	7	7	8	8	8	8
Maintainance		0	0	0	0	0	0	0	0	0	0	0
Wage												
Warehouse operator (*1)		108,000	114,480	121,349	128,630	136,348	144,528	153,200	162,392	172,136	182,464	182,464
Production operator (*2)		216,000	228,960	242,698	257,259	272,695	289,057	306,400	324,784	344,271	364,927	364,927
Incentive		81,000	85,860	91,012	96,472	102,261	108,396	114,900	121,794	129,102	136,848	136,848
Other O&M expenses		20	21	21	22	23	23	24	25	25	26	26
Expenses (Baht/year)												
Office rental		72,000	74,160	76,385	78,676	81,037	83,468	85,972	88,551	91,207	93,944	93,944
Warehouse (30 sq.m)		50,400	53,424	56,629	60,027	63,629	67,447	71,493	75,783	80,330	85,150	85,150
Utilities												
Water		24,000	24,720	25,462	26,225	27,012	27,823	28,657	29,517	30,402	31,315	31,315
Electricity		60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286	78,286
Telecommunication		24,000	24,720	25,462	26,225	27,012	27,823	28,657	29,517	30,402	31,315	31,315
Wages												

Manager (*1)		0	0	0	0	0	0	0	0	0	0	0
Administrators (*1)		180,000	185,400	190,962	196,691	202,592	208,669	214,929	221,377	228,019	234,859	
incentive and allowance		45,000	30,900	31,827	32,782	33,765	34,778	35,822	36,896	38,003	39,143	
Selling & administration												
Marketing		32,400	33,372	34,373	35,404	36,466	37,560	38,687	39,848	41,043	42,275	
Administration		10,800	11,124	11,458	11,801	12,155	12,520	12,896	13,283	13,681	14,092	
Accounting and auditing fees		30,000	30,900	31,827	32,782	33,765	34,778	35,822	36,896	38,003	39,143	
Misc.		0	0	0	0	0	0	0	0	0	0	
Total Expenses (Baht/year)		528,600	530,520	548,038	566,178	584,965	604,422	624,578	645,461	667,098	689,521	
Tax		20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	
Escalation												
Inflation		3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	
Wages		6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	
FINANCIAL STATEMENTS												
BALANCE SHEET												
Cash	200,000	-514,921	-1,206,226	-1,643,239	-1,758,875	-1,615,196	-1,694,112	-924,278	-125,508	676,903	1,523,552	
Short term investment	0	0	0	0	0	0	0	0	0	0	0	
Account Receivable	0	88,767	91,430	120,071	152,772	179,835	219,960	251,732	259,284	267,063	280,416	
Inventory	0	0	0	0	0	0	0	0	0	0	0	
Others	0	0	0	0	0	0	0	0	0	0	0	
Total Current assets	200,000	-426,153	-1,114,796	-1,523,168	-1,606,102	-1,435,361	-1,474,151	-672,546	133,776	943,966	1,803,968	
Land	0	0	0	0	0	0	0	0	0	0	0	
Building and Equipments	500,000	500,000	500,000	500,000	500,000	500,000	1,097,026	1,097,026	1,097,026	1,097,026	1,097,026	
Intangible Assets	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	
Others	0	0	0	0	0	0	0	0	0	0	0	
Accumulated Depreciation & Amorti	0	-150,000	-300,000	-450,000	-600,000	-750,000	-919,405	-1,088,810	-1,258,216	-1,427,621	-1,597,026	
Total Non-Current Assets	1,000,000	850,000	700,000	550,000	400,000	250,000	677,621	508,216	338,810	169,405	0	
Total Assets	1,200,000	423,847	-414,796	-973,168	-1,206,102	-1,185,361	-796,530	-164,330	472,587	1,113,371	1,803,968	
Liabilities												
A/P	0	43,447	43,604	45,044	46,535	48,079	49,679	51,335	53,052	54,830	56,673	
Short-term liability	0	0	0	0	0	0	0	0	0	0	0	
Others	0	0	0	0	0	0	0	0	0	0	0	
Total Current Liabilities	0	43,447	43,604	45,044	46,535	48,079	49,679	51,335	53,052	54,830	56,673	
Contingent Liabilities - Early, Retire	0	0	0	0	0	0	0	0	0	0	0	
Long-term loan	0	0	0	0	0	0	0	0	0	0	0	
Total Non-Current Liabilities	0	0	0	0	0	0	0	0	0	0	0	
Total Liabilities	0	43,447	43,604	45,044	46,535	48,079	49,679	51,335	53,052	54,830	56,673	
Equity												
Registered and Paid Up Capital	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	
Retained Earning												
Appropriated - Reserve		120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	
Unappropriated		-939,600	-1,778,400	-2,338,212	-2,572,638	-2,553,440	-2,166,209	-1,535,665	-900,465	-261,459	427,295	
Accumulated Reserve for Re-Investment		0	0	0	0	0	0	0	0	0	0	
Total Equity	1,200,000	380,400	-458,400	-1,018,212	-1,252,638	-1,233,440	-846,209	-215,665	419,535	1,058,541	1,747,295	
Total Liabilities and Equity	1,200,000	423,847	-414,796	-973,168	-1,206,102	-1,185,361	-796,530	-164,330	472,587	1,113,371	1,803,968	
Check	0	0	0	0	0	0	0	0	0	0	0	
PROFIT/LOSS STATEMENT												
Revenue												
Business customer		1,080,000	1,112,400	1,460,859	1,858,729	2,187,989	2,676,184	3,062,744	3,154,626	3,249,265	3,411,729	
Total Revenue	0	1,080,000	1,112,400	1,460,859	1,858,729	2,187,989	2,676,184	3,062,744	3,154,626	3,249,265	3,411,729	
Cost of Goods Sold												
Raw material												
Polylactic acid		252,000	259,560	267,347	275,367	283,628	292,137	300,901	309,928	319,226	335,187	
Polybutylene succinate		366,000	376,980	388,289	399,938	411,936	424,294	437,023	450,134	463,638	477,547	
Chemical Additives		24,000	24,720	25,462	26,225	27,012	27,823	28,657	29,517	30,402	31,315	
Durian bark		24,000	24,720	25,462	26,225	27,012	27,823	28,657	29,517	30,402	31,315	
Transportation expenses		30,000	31,800	33,708	35,730	37,874	40,147	42,556	45,109	47,815	50,684	
Maintainance		0	0	0	0	0	0	0	0	0	0	
Wage												
Warehouse operator (*1)		108,000	114,480	121,349	128,630	136,348	144,528	153,200	162,392	172,136	182,464	
Production operator (*2)		216,000	228,960	242,698	257,259	272,695	289,057	306,400	324,784	344,271	364,927	
Incentive		81,000	85,860	91,012	96,472	102,261	108,396	114,900	121,794	129,102	136,848	
Other O&M expenses		120,000	123,600	127,308	131,127	135,061	139,113	143,286	147,585	152,012	156,573	
Total Cost of Goods Sold	1,221,000	1,270,680	1,322,633	1,376,975	1,433,827	1,493,318	1,555,581	1,620,760	1,689,005	1,766,860	1,847,295	
Gross Profit		-141,000	-158,280	138,226	481,753	754,162	1,182,867	1,507,163	1,533,866	1,560,260	1,644,869	
Expenses												
Office rental		72,000	74,160	76,385	78,676	81,037	83,468	85,972	88,551	91,207	93,944	
Warehouse (30 sq.m)		50,400	53,424	56,629	60,027	63,629	67,447	71,493	75,783	80,330	85,150	
Utilities		108,000	111,240	114,577	118,015	121,555	125,202	128,958	132,826	136,811	140,916	
Water		24,000	24,720	25,462	26,225	27,012	27,823	28,657	29,517	30,402	31,315	
Electricity		60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286	

