

Building your Financial Model

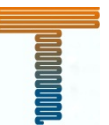
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KEEP IT SIMPLE

$$**1+1 = 2**$$



Format

Assumptions Page

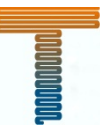
Working sheets

Profit and Loss account

Cashflow

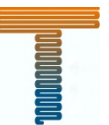
IRR value

Balance sheet (if required)



Assumptions

- Heat loads
- Tariffs
- Input energy rates – variable and fixed
- Maintenance
- RHI etc
- Loan interest
- Capital values
- Overheads
- Network losses



Working Sheets

Assumptions			Include Yes/	Rate p/kWh	Heat load	Boiler gas	CAPEX	Stdg chg	Connections	Boilers	0 bed	1 bed	2 bed
Phase 1	Residential Property 1	Council residential	Yes	4.788	1,286,000	650,596	0	0	111	0	0	73	38
	Residential Property 2	Council residential	Yes	4.788	5,675,000	2,871,021	0	0	109	0	0	72	37
	Residential Property 3	Council residential	Yes	4.788	2,784,000	1,408,445	0	0	0	0	0	0	0
	Residential Property 4	Council residential	No	4.788	0	0	0	0	0	0	0	0	0
	Residential Property 5	Council residential	Yes	4.788	756,000	382,466	0	0	0	0	0	0	0
	Residential Property 6	Council residential	Yes	4.788	1,560,000	789,215	0	0	0	0	0	0	0
	Public building 1	Non-residential	Yes	2.90	115,000	58,179	0	5,244	0	0	0	0	0
	Public building 2	Non-residential	Yes	2.90	23,000	11,636	0	1,049	0	0	0	0	0
Phase 2	Public building 3	Non-residential	Yes	2.90	675,000	341,487	0	30,782	0	0	0	0	0
	Residential Property 6	Council residential	Yes	4.788	8,084,000	4,089,751	0	0	0	0	0	0	0
	Residential Property 7	Council residential	No	4.788	0	0	0	0	0	0	0	0	0
	Residential Property 8	Council residential	Yes	4.788	248,000	125,465	0	0	0	0	0	0	0
	Residential Property 9	Council residential	Yes	4.788	411,000	207,928	0	0	0	0	0	0	0
	Residential Property 10	Council residential	Yes	4.788	170,000	86,004	0	0	109	0	0	71	38
	Private Development	Private residential	Yes	5.30	170,000	86,004	0	0	107	0	0	70	37
	Public building 4	Non-residential	Yes	2.90	2,542,000	1,286,015	0	115,924	0	0	0	0	0
	Residential Property 11	Council residential	Yes	4.788	419,000	211,975	0	0	0	0	0	0	0
Phase 3	Residential Property 12	Council residential	Yes	4.788	452,000	228,670	0	0	0	0	0	0	0
	Residential Property 13	Council residential	Yes	4.788	1,711,000	865,607	0	0	0	0	0	0	0
	Residential Property 14	Council residential	Yes	4.788	38,000	19,224	0	0	0	0	0	0	0
		Gas kWh	Electricity	Electricity		Hours		Gas	Electricity				
			import kWh	export kWh		operational							
Energy Centre	Gas CHP	37,586,934	54,238	12,528,978		6,005		300%	0%				



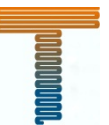
Income

- Domestic Heat
- Commercial Heat
- Domestic Maintenance
- Commercial Maintenance
- Electricity sales to National Grid
- Private wire electricity
- Embedded benefits e.g. GDuoS, Triad, BSuoS
- RHI/FiT – if applicable
- Release of grants in line with depreciation
- Interest received



CAPEX

- Generators
- Boilers
- Distribution Heat Mains
- Domestic Maintenance
- Energy Centre Building
- Energy Centre Plant
- Internal Wet Systems
- Project Management
- Cyclical replacement



OPEX

- Gas/ Woodchip
- Electricity inc Metering charges
- Generator Maintenance
- Internals Maintenance
- Heat Metering Costs
- Business Rates
- Plant Monitoring Fees
- Insurance
- Overheads
- Interest
- Heat Trust Membership Fees
- Depreciation



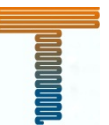
Profit & Loss

		Year 0 2017	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Year 5 2022	Year 6 2023	Year 7 2024	Year 8 2025
Sales										
Heat			1,491,021	1,543,207	1,597,219	1,653,122	1,710,981	1,770,865	1,832,845	1,896,995
Electricity			255,325	264,261	273,510	283,083	292,991	303,246	313,860	324,845
Private wire			898,603	930,054	962,606	996,297	1,031,168	1,067,259	1,104,613	1,143,274
Embedded benefits			173,089	179,147	185,418	191,907	198,624	205,576	212,771	220,218
		0	2,818,038	2,916,670	3,018,753	3,124,409	3,233,764	3,346,945	3,464,089	3,585,332
Costs										
Gas - Energy Centres	50%		1,401,380	1,450,428	1,501,193	1,553,735	1,608,116	1,664,400	1,722,654	1,782,947
Gas - Boilers	18%		511,521	529,424	547,954	567,132	586,982	607,526	628,790	650,797
Electricity	0%		7,063	7,311	7,567	7,831	8,105	8,389	8,683	8,987
Generator & boiler mtce	5%		153,000	158,355	163,897	169,634	175,571	181,716	188,076	194,659
Metering	0%		8,560	8,860	9,170	9,491	9,823	10,167	10,522	10,891
30yr cyclical replacement	0%		6,767	7,004	7,249	7,502	7,765	8,037	8,318	8,609
			2,088,291	2,161,381	2,237,030	2,315,326	2,396,362	2,480,235	2,567,043	2,656,889
Gross Profit			729,747	755,288	781,723	809,084	837,402	866,711	897,046	928,442
Gross margin			26%	26%	26%	26%	26%	26%	26%	26%
Other costs/income										
Invest to Save' interest		45,431	45,431	45,431	45,431	45,431	45,431	45,431	45,431	45,431
Invest to Save' return		245,327	245,327	245,327	245,327	245,327	245,327	245,327	245,327	245,327
Internal management costs		0	50,000	51,750	53,561	55,436	57,376	59,384	61,463	63,614
		290,758	340,758	342,508	344,320	346,194	348,135	350,143	352,221	354,372
Net profit		-290,758	388,989	412,780	437,404	462,890	489,267	516,568	544,825	574,070
Cumulative		-290,758	388,989	801,769	1,239,173	1,702,062	2,191,329	2,707,898	3,252,722	3,826,792
Cash summary										
Operating Cash		-290,758	388,989	412,780	437,404	462,890	489,267	516,568	544,825	574,070
Capital repayments		363,448	363,448	363,448	363,448	363,448	363,448	363,448	363,448	363,448
Net cash movement	Capital	-12,114,933	-654,206	25,541	49,332	73,956	99,442	125,819	153,120	181,377
Cumulative		-654,206	25,541	74,873	148,829	248,270	374,089	527,210	708,586	919,208
IRR										2.84%



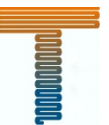
Sensitivity/ Scenario Analysis

- Heat load – connections
- Heat load – heat usage
- Connection phasing
- Gas/ woodchip purchase price
- Electricity sale price



Summary

- Keep it simple
- Remember it is only an estimate
- Better to be roughly right than accurately wrong
- Don't get bogged down in minor detail
- Sense check the results



Contact

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