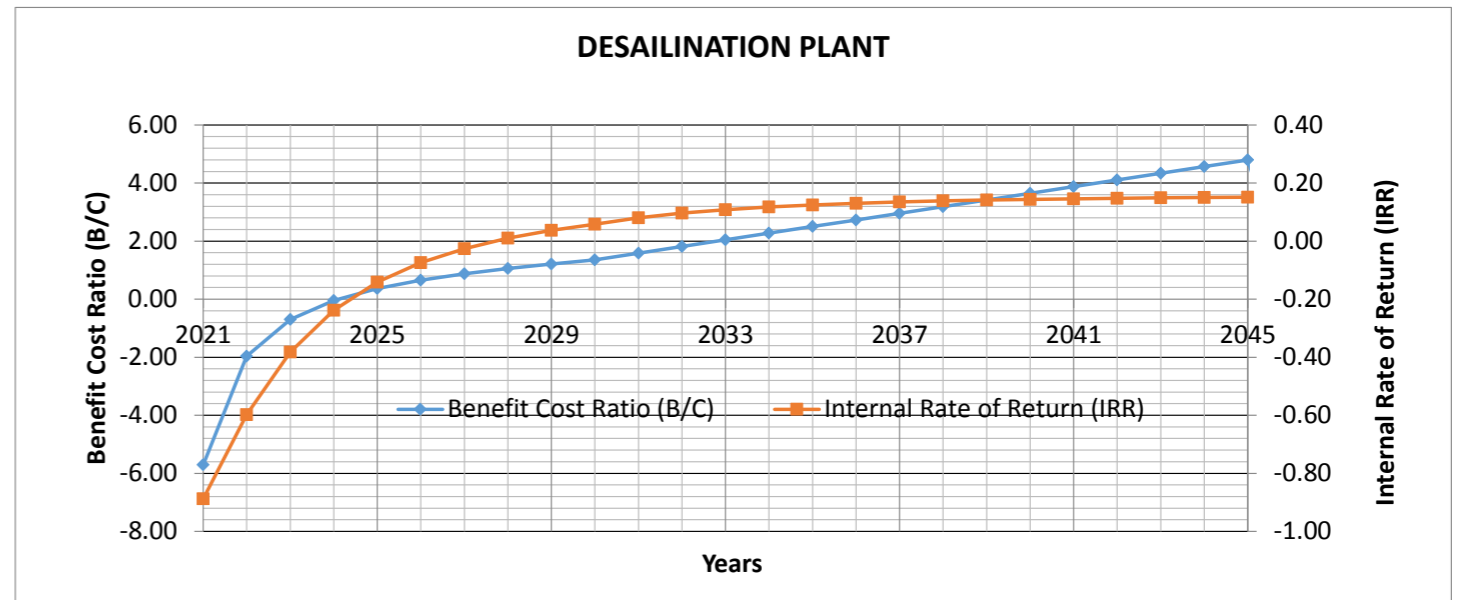


**Bangladesh Green Field MSF Desalination Plant for 12,000 m<sup>3</sup>/day**

Description	Values	Unit
Work Start Year	2018	Years
Operating Year	2021	Years
Location of Desalination Plant	Green Field	<--Green Field, Brown Field
Site and Contry for Project	Bangladesh	
Type of Desalination Plant	MSF	<--MSF,MED-TVC,SWRO,Hybrid MSF/MED ,Hy
Intake Flow Rate	12,000	m <sup>3</sup> /day
Recovery of Product Water	75	%
Sale for Average Product Unit Price	2.2	USD/m <sup>3</sup>
Yearly Sale for Average Product Cost	7,231,950.0	USD/Year
Product Water Flow Rate	9000	m <sup>3</sup> /day
Required Electric Power	1597	kWh/h(including Intake Pump)
CAPEX of Desalination Plant	25,200,000	USD - 이천오백이십만달러
CAPEX for Transmission Line Length is	15km	1,546,517 USD -6.5Kv --Single Circu 1 - Circuit
Acquisition Land Area	23,794	m <sup>2</sup>
Unit Space Acquisition Cost	10	USD/m <sup>2</sup> in Bangladesh
CAPEX of Area Acquisition Cost	237,937	USD
Total CAPEX for Fabrication and Installation	26,984,453	USD - 이천육백구십팔만사천사백오십삼
Construction and Fabrication Period	3	Years
Interest FEE during Construction and Fabrication	2,630,984	USD
TOTAL CAPEX AND INTREST FEE DURING CONSTRUCTION	29,615,438	USD - 이천구백육십일만오천사백삼십팔
OPEX of Desalination Plant	1,994,265	USD/Year
Fund Intrest	6.5	%
Return rate on investment of Net Profit, r	0	%
Operating Periods	25	Years
Project Design Life	50	Years
Benefit Cost Ratio (B/C)	4.79	≥ 1.1 GOOD For 25Years Operating
IRR(Internal Rate of Return)	15.13%	> 0 GOOD For 25Years Operating
NPV(Net Present Value)	514,644,174	USD with Asset value of Project for 25Years
Product Water Sale	from 2021Years to 2023 Years	0 % from 1Years to 3 Years
Price Inflation to be considered in	from 2024Years to 2027 Years	0 % from 4Years to 7 Years
years(Increased	from 2028Years to 2030 Years	0 % from 8Years to 10 Years
Previous Inflation)	from 2031Years to 2035 Years	0 % from 11Years to 15 Years
Income tax rate for government	20	%
Inflation of Space Acquisition	1	%
First Project residual value	17,137,280	USD after 10 Years
Second Project residual value	7,030,903	USD after 30 Years
Final residual value on Design Life	3,062,096	USD after 50 Years
<b>Net Payback Turn Over Periods</b>	<b>7.016</b>	<b>Years</b>



Actual Payback turn Over Years	10Years	10Years	해 찾기
Initial Value(min 0%, max 10%)	7.167%	7.167%	0 Good
Limit of Initial Value	≤ 10%	≤ 10%	

End of Year	①% of Return of Equity	②% of Return of FUND	③Return of Equity (USD) 20% of Equity	④Return of FUND(USD) 80% of FUND	⑤Remain Cost(USD)	⑥Fund Interest 6.5%(USD)	⑦OPEX(USD)	⑧Yearly Revenue(USD) W/ Inflation	⑨(순이익)Net Profit(USD)	⑩(현재 자산가치)Asset value=Residual Value(USD)	⑪(순현재가치)Net Present Value	⑫Benefit Cost Ratio (B/C)	⑬(내부수익률)Internal Rate of Return (IRR)
2021	7.17%	7.17%	424,512	1,698,047	29,615,438	1,925,003	1,994,265	7,231,950	952,098	25,787,819	-26,302,756	-5.71	-0.89
2022	7.80%	7.80%	461,800	1,847,200	27,492,878	1,787,037	1,994,265	7,231,950	913,318	24,635,542	-22,852,108	-1.97	-0.60
2023	8.43%	8.43%	499,088	1,996,353	25,183,878	1,636,952	1,994,265	7,231,950	884,233	23,541,362	-19,251,375	-0.70	-0.38
2024	9.06%	9.06%	536,376	2,145,506	22,688,437	1,474,748	1,994,265	7,231,950	864,843	22,500,700	-15,488,439	-0.05	-0.24
2025	9.69%	9.69%	573,665	2,294,659	20,006,555	1,300,426	1,994,265	7,231,950	855,149	21,513,555	-11,551,180	0.36	-0.14
2026	10.31%	10.31%	610,953	2,443,811	17,138,231	1,113,985	1,994,265	7,231,950	855,149	20,553,181	-7,427,480	0.65	-0.07
2027	10.94%	10.94%	648,241	2,592,964	14,083,467	915,425	1,994,265	7,231,950	864,843	19,646,325	-3,105,220	0.87	-0.03
2028	11.57%	11.57%	685,529	2,742,117	10,842,262	704,747	1,994,265	7,231,950	884,233	18,766,241	1,427,718	1.05	0.01
2029	12.20%	12.20%	722,817	2,891,270	7,414,616	481,950	1,994,265	7,231,950	913,318	17,939,675	6,183,453	1.21	0.04

2030	10	12.83%	12.83%	760,106	3,040,423	3,800,528	247,034	1,994,265	7,231,950	952,098	17,139,882	11,174,104	1.35	0.06	
2031	11	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	16,393,608	18,406,054	1.58	0.08	
2032	12	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	15,674,107	25,638,004	1.81	0.10	
2033	13	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	14,981,378	32,869,954	2.04	0.11	
2034	14	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	14,315,423	40,101,904	2.27	0.12	
2035	15	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	13,676,242	47,333,854	2.50	0.12	
2036	16	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	13,090,581	54,565,804	2.73	0.13	
2037	17	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	12,531,694	61,797,754	2.96	0.13	
2038	18	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	11,972,835	69,029,704	3.19	0.14	
2039	19	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	11,440,751	76,261,654	3.42	0.14	
2040	20	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	10,935,442	83,493,604	3.65	0.14	
2041	21	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	10,456,908	90,725,554	3.88	0.15	
2042	22	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	10,005,149	97,957,504	4.11	0.15	
2043	23	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	9,580,167	105,189,454	4.34	0.15	
2044	24	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	9,155,214	112,421,404	4.57	0.15	
2045	25	0.00%	0.00%	0	0	0	0	0	7,231,950	5,785,560	8,757,037	119,653,354	4.79	0.15	
2046	26	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2047	27	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2048	28	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2049	29	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2050	30	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2051	31	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2052	32	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2053	33	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2054	34	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2055	35	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2056	36	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2057	37	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2058	38	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2059	39	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2060	40	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2061	41	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2062	42	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2063	43	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2064	44	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2065	45	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2066	46	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2067	47	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2068	48	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2069	49	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
2070	50	0.00%	0.00%	0	0	0	0	0	0	0	0	0	0.00	0.00	
	Summation	100%	100%	5,923,088	23,692,350	178,266,290	11,587,309	19,942,650	180,798,750	95,722,683	394,990,820	514,644,174	4.79	0.15	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14