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MINISTRY OF SUSTAINABILITY AND THE ENVIRONMENT

OVERVIEW

Mission Statement

To ensure a clean and sustainable environment, with resilient supplies of safe food and water for Singapore.

FY2023 EXPENDITURE ESTIMATES

Expenditure Estimates by Object Class

Code	Object Class	Actual FY2021	Estimated FY2022	Revised FY2022	Estimated FY2023	Change Over FY2022	
	TOTAL EXPENDITURE	\$2,736,953,240	\$2,958,293,200	\$2,726,411,600	\$3,446,042,800	\$719,631,200	26.4%
	Main Estimates						
	OPERATING EXPENDITURE	\$1,831,976,299	\$1,988,856,700	\$1,829,424,300	\$2,432,046,200	\$602,621,900	32.9%
	<i>RUNNING COSTS</i>	<i>\$1,816,236,915</i>	<i>\$1,978,092,200</i>	<i>\$1,818,773,700</i>	<i>\$2,421,465,600</i>	<i>\$602,691,900</i>	<i>33.1%</i>
	Expenditure on Manpower	\$33,562,574	\$39,878,100	\$40,385,400	\$43,153,900	\$2,768,500	6.9%
1200	Political Appointments	1,558,622	2,042,100	2,700,900	2,589,600	-111,300	-4.1
1500	Permanent Staff	31,970,169	37,788,500	37,637,000	40,516,800	2,879,800	7.7
1600	Temporary, Daily-Rated & Other Staff	33,783	47,500	47,500	47,500	0	0.0
	Other Operating Expenditure	\$27,037,127	\$57,900,700	\$53,524,500	\$465,747,500	\$412,223,000	770.2%
2100	Consumption of Products & Services	21,618,200	49,306,700	47,656,800	458,513,900	410,857,100	862.1
2300	Manpower Development	421,336	630,900	589,000	874,500	285,500	48.5
2400	International & Public Relations, Public Communications	4,854,186	7,844,500	5,193,000	6,308,400	1,115,400	21.5
2700	Asset Acquisition	143,405	118,600	85,700	50,700	-35,000	-40.8
	Grants, Subventions & Capital Injections to Organisations	\$1,755,637,214	\$1,880,313,400	\$1,724,863,800	\$1,912,564,200	\$187,700,400	10.9%
3100	Grants, Subventions & Capital Injections to Statutory Boards	1,755,637,214	1,880,313,400	1,724,683,200	1,912,378,200	187,695,000	10.9
3200	Grants, Subventions & Capital Injections to Educational Institutions	0	0	180,600	186,000	5,400	3.0
	<i>TRANSFERS</i>	<i>\$15,739,384</i>	<i>\$10,764,500</i>	<i>\$10,650,600</i>	<i>\$10,580,600</i>	<i>-\$70,000</i>	<i>-0.7%</i>
3600	Transfers to Institutions & Organisations	5,977,473	420,600	465,600	393,000	-72,600	-15.6
3800	International Organisations & Overseas Development Assistance	9,761,911	10,343,900	10,185,000	10,187,600	2,600	0.0
	OTHER CONSOLIDATED FUND OUTLAYS	\$0	\$34,000	\$34,000	\$34,000	\$0	0.0%
4600	Loans and Advances (Disbursement)	0	34,000	34,000	34,000	0	0.0

Code	Object Class	Actual FY2021	Estimated FY2022	Revised FY2022	Estimated FY2023	Change Over FY2022	
	Development Estimates						
	DEVELOPMENT EXPENDITURE	\$904,976,942	\$969,436,500	\$896,987,300	\$1,013,996,600	\$117,009,300	13.0%
5100	Government Development	856,900,591	906,120,400	861,308,500	966,720,900	105,412,400	12.2
5200	Grants & Capital Injections to Organisations	48,076,351	63,316,100	35,678,800	47,275,700	11,596,900	32.5
	OTHER DEVELOPMENT FUND OUTLAYS	\$35,753,155	\$43,090,100	\$70,169,300	\$42,921,700	-\$27,247,600	-38.8%
5500	Land-Related Expenditure	35,753,155	43,090,100	70,169,300	42,921,700	-27,247,600	-38.8

Establishment List

Category/Personnel	Actual FY2021	Estimated FY2022	Revised FY2022	Estimated FY2023
POLITICAL APPOINTMENTS	3	3	4	4
Minister	1	1	1	1
Senior Minister of State	1	1	2	2
Minister of State	1	1	0	0
Senior Parliamentary Secretary	0	0	1	1
PERMANENT STAFF	208	218	216	219
Accounting Profession (2008)	5	5	5	5
Administrative	8	8	8	8
Economist Service	4	4	4	4
Information Service (2008)	7	7	5	5
Management Executive Scheme (2008)	167	177	177	180
Management Support Scheme (2008)	14	14	14	14
Operations Support	3	3	3	3
OTHERS	5,799	5,583	5,690	5,690
National Environment Agency	4,496	4,270	4,418	4,418
Public Utilities Board	440	479	400	420
Singapore Food Agency	863	834	872	852
TOTAL	6,010	5,804	5,910	5,913

FY2022 BUDGET

The Ministry of Sustainability and the Environment's (MSE) revised FY2022 total expenditure is \$2.73 billion. This is a decrease of \$10.54 million or 0.4% compared to the actual FY2021 total expenditure. Of the total expenditure, \$1.83 billion or 67.1% is for operating expenditure and \$896.99 million or 32.9% is for development expenditure.

Operating Expenditure

The revised FY2022 operating expenditure of \$1.83 billion is \$2.55 million or 0.1% lower than the actual FY2021 operating expenditure of \$1.83 billion.

Development Expenditure

The revised FY2022 development expenditure of \$896.99 million is \$7.99 million or 0.9% lower than the actual FY2021 development expenditure of \$904.98 million.

Other Development Fund Outlays

The revised FY2022 other development fund outlays of \$70.17 million comprises Land-Related Expenditure for the development of drainage and sewerage networks in Changi East and National Environment Agency's (NEA) exhumation projects at Choa Chu Kang.

FY2023 BUDGET

The total expenditure for MSE in FY2023 is projected to be \$3.45 billion, an increase of \$719.63 million or 26.4% from the revised FY2022 total expenditure. Of the total expenditure, \$2.43 billion or 70.6% is for operating expenditure and \$1.01 billion or 29.4% is for development expenditure.

Operating Expenditure

The provision of \$2.43 billion for FY2023 operating expenditure represents an increase of \$602.62 million or 32.9% over the revised FY2022 operating expenditure. This is mainly due to higher operating grants to the Administration Programme and NEA. Out of the total operating expenditure, \$2.42 billion or 99.6% is for Running Costs and \$10.58 million or 0.4% is for Transfers.

The major share of the operating budget, \$1.29 billion or 52.9% will go towards the National Environment Agency Programme. This is followed by the Administration Programme with \$514.91 million or 21.2%, the Public Utilities Board Programme with \$456.11 million or 18.7%, and the Singapore Food Agency Programme with \$174.69 million or 7.2%.

National Environment Agency Programme

The NEA's mission is to promote and sustain a clean, green, and sustainable environment for Singapore. For FY2023, NEA is allocated an operating grant of \$1.29 billion. This grant is mainly for the implementation of key programmes to ensure that Singapore continues to have high standards of public health, a clean and sustainable environment, timely and reliable meteorological services, and to promote resource efficiency and conservation in collaboration with NEA's partners and the community.

Administration Programme

An operating budget of \$514.91 million has been allocated to MSE HQ Administration Programme in FY2023. Under this programme, MSE HQ sets the overall policy direction for the Statutory Boards, supports services to the departments of MSE, and advances Singapore's interests and international standing on matters related to the environment, water and food policies, management and technology. The budgeted \$514.91 million is an increase of \$415.11 million or 415.9% from the revised FY2022 expenditure of \$99.80 million. The higher budgetary requirement for FY2023 is due to the transfer of food resilience function from the Ministry of Trade and Industry.

Public Utilities Board Programme

The Public Utilities Board's (PUB) mission is to supply good water, reclaim used water, tame storm water, and resist rising seas. For FY2023, PUB is allocated an operating grant of \$456.11 million mainly for the operations and maintenance of drainage systems, the Active, Beautiful, Clean (ABC) Waters Programme, coastal protection, and water infrastructure projects.

Singapore Food Agency Programme

The Singapore Food Agency's (SFA) mission is to ensure and secure a supply of safe food for Singapore. For FY2023, SFA is allocated an operating grant of \$174.69 million to implement key programmes to strengthen the resilience of Singapore's food supply and strengthen food safety assurance in partnership with industry and consumers.

Other Consolidated Fund Outlays

Advances for FY2023 are projected to be \$0.03 million, catered for officers on overseas work trips.

Development Expenditure

Development expenditure in FY2023 is expected to be \$1.01 billion, an increase of \$117.01 million or 13.0% from the revised FY2022 figure of \$896.99 million. The higher expenditure in FY2023 is mainly due to expenditure on drainage projects.

Major PUB sewerage projects to be funded in FY2023 include: Deep Tunnel Sewerage System Phase 2 (\$513.74 million), Proposed Sewerage Infrastructure at Pulau Punggol Barat (\$21.51 million), Proposed Expansion of Sewerage Networks in Sengkang and Punggol Areas (\$17.02 million) and Proposed Sewers in North Woodlands (\$16.76 million).

Major PUB drainage projects to be funded in FY2023 include: 6th Roadside Drains Improvement Programme (\$21.00 million), Improvement to Sungei Selarang (\$15.00 million), Improvement to Benoi Road Outlet Drain (\$11.72 million) and Engineering Services for Improvement to Siglap Canal (Marine Parade Road to East Coast Park) (\$11.55 million).

Major NEA projects to be funded in FY2023 include: Development of New Crematorium at Mandai (\$61.64 million), NEA's Proposed Engagement of Design & Build Contractor for Land Preparation Works (\$27.0 million) and Construction of Mt Vernon Funeral Parlour Complex (\$13.58 million).

Major SFA projects to be funded in FY2023 include: Agri-Food Cluster Transformation Fund (\$9.23 million), Strategic Initiatives to Strengthen Singapore's Food Security (\$3.64 million) and Development works for farm sites in Lim Chu Kang and Sungei Tengah (\$3.60 million).

Other Development Fund Outlays

The other development fund outlays of \$42.92 million for FY2023 relates to Land-Related Expenditure for the development of drainage and sewerage networks in Changi East and NEA's exhumation projects at Choa Chu Kang.

Development Expenditure by Project

Project Title	Total Project Cost	Actual Expenditure Up to end of FY2020	Actual FY2021	Estimated FY2022	Revised FY2022	Estimated FY2023
DEVELOPMENT EXPENDITURE	...	...	\$904,976,942	\$969,436,500	\$896,987,300	\$1,013,996,600
<i>GOVERNMENT DEVELOPMENT</i>	...	...	<i>856,900,591</i>	<i>906,120,400</i>	<i>861,308,500</i>	<i>966,720,900</i>
Administration Programme						
Multi-Disciplinary Consultancy Services for Office Development	26,000,000	0	0	1,216,000	1,484,000	5,688,900
Minor Development Projects	...	...	4,165,597	2,967,100	1,046,000	4,696,800
Public Utilities Board Programme						
Improvement to Bukit Timah First Diversion Canal	335,100,000	279,502,491	0	0	0	1,000
Improvement to Outlet Drain from Sin Ming Road to Braddell Road	26,089,000	21,618,504	0	0	0	1,000
Relief Sewers within Marina Reservoir Catchment	8,000,000	5,183,734	1,277	97,000	97,300	84,000
Improvement to Old Roadside Drains 5-Year Programme FY2006-FY2010	138,000,000	134,880,675	0	0	0	30,000
New Projects	...	...	0	6,135,800	1,597,800	21,116,200
Active, Beautiful And Clean Waters Programme	101,980,000	91,259,651	104,597	5,000	150,000	5,000
Improvement to Geylang River Phase 1 - From Dunman Road to Guillemard Road	49,700,000	37,143,429	0	0	0	10,000
Sewer Schemes to Serve Marina South and Pasir Ris/Tampines Areas and Phase Out Nee Soon Pumping Station	287,700,000	255,809,203	9,783,342	7,561,000	7,528,400	2,681,000
Improvement to 4 Outlet Drains in Central Singapore	30,200,000	24,897,108	0	0	0	1,000
Relief and Replacement Sewers for Jalan Senang, Siglap and Jalan Leban Areas	4,500,000	3,005,577	0	7,000	6,600	66,000
Minor Development Projects	...	...	511,150	1,118,500	1,168,900	3,366,600
Improvement to Rochor Canal (between Jalan Besar and Crawford Street)	42,000,000	38,124,099	0	0	0	1,000
Sewer Extensions to Phase Out Sewage Treatment Plants Phase 2	47,800,000	25,378,778	2,777,285	463,000	2,833,400	377,000
Improvement to Drains in Syed Alwi Road Area	27,200,000	20,994,309	0	0	0	10,000
Sewerage Development at Jurong Eastern Catchment and Jurong Lake District	184,200,000	171,365,082	1,189,811	556,000	1,054,100	64,400
Improvement to Roadside Drains in Batch 6 of the Estate Upgrading Programme	80,000,000	60,114,341	0	0	0	50,000
Improvement to Old Roadside Drains 5 Year Programme (FY2010-FY2014)	303,800,000	266,189,254	0	0	0	700,000
Expansion of Sewerage Network in Geylang, Jalan Wangi, Woodlands Industrial Park	16,123,800	13,887,792	54,109	65,000	55,400	54,000
Expansion of Sewerage Networks in Siglap Road, Whampoa East/Towner Road and Kaki Bukit Areas and Upgrading of Mugliston Park Pumping Station	26,140,000	14,654,449	2,336,679	871,000	976,400	445,000
Expansion of Sewerage Networks in Jalan Rajah/Sungei Whampoa area	29,000,000	3,329,053	730,046	5,374,000	5,249,300	7,248,000
Improvement to Old Roadside Drains in Batch 7 of the Estate Upgrading Programme	100,200,000	72,230,946	0	0	0	10,000
Proposed Expansion of Sewerage Network in Mandai Road Area	25,000,000	15,954,707	1,750,184	862,000	614,200	431,000
Proposed Expansion of Sewerage Network in Kranji Area	26,400,000	22,515,249	123,663	118,000	0	54,000
Improvement to Alexandra Canal Subsidiary Drain F (Between Tiong Bahru Rd and Havelock Rd)	28,200,000	24,943,561	0	0	0	10,000

Project Title	Total Project Cost	Actual Expenditure Up to end of FY2020	Actual FY2021	Estimated FY2022	Revised FY2022	Estimated FY2023
Proposed Diversion Canal and Detention Tank to Enhance Flood Protection of Stamford Canal Catchment	306,400,000	235,827,639	0	0	0	1,000
Expansion of Sewerage Networks in Marina Central Area	35,200,000	8,700,904	325,864	355,000	581,100	215,000
Expansion of Sewerage Networks in Amber Road, Meyer Road and Playfair Road Areas	42,830,000	2,746,872	151,763	2,477,000	429,700	3,877,000
Expansion of Sewerage Networks in Yishun Avenue 7, Sembawang Road and Gambas Avenue Areas	30,300,000	23,707,005	1,173,098	0	107,700	52,600
Implementation of 16 Projects under Phase 2 of Active, Beautiful and Clean Waters (ABC Waters) Programme	16,311,600	9,368,477	876,878	1,687,000	1,050,200	1,181,600
Improvement to Kallang River (Between Bishan Road and Braddell Road)	112,000,000	88,380,605	0	0	0	1,000
Expansion of Sewerage Networks in Sembawang Road and Sembawang Avenue Areas	26,977,000	22,089,006	362,792	524,000	325,500	646,000
Improvement to Bedok Canal (Between Upper Changi Rd East and Bedok Junction and Between East Coast Parkway and the Sea)	148,800,000	115,326,873	0	0	0	2,000,000
Proposed Expansion of Sewerage Networks in Sophia Road and Middle Road Areas	6,120,000	366,473	121,377	641,000	762,000	1,077,400
Improvement to Four Outlet Drains in Singapore	61,200,000	31,985,469	0	0	0	4,022,000
DTSS Phase 2-Engineering Services for Feasibility Study/Preliminary Design and Programme Management	71,300,000	45,163,678	5,679,398	5,452,300	5,752,300	3,570,000
Improvement to Sungei Pandan Kechil - Temp Replacement of Pedestrian Bridge and Vehicular Bridge and Temp Tidal Gate	61,400,000	38,469,026	0	0	0	1,000
5th Roadside Drains Improvement Programme	227,600,000	155,631,709	0	0	0	5,500,000
Improvement to Old Roadside Drains in Batch 8 of the Estate Upgrading Programme	74,500,000	46,970,683	0	0	0	100,000
Drainage Improvement Works at Chai Chee Road/ New Upper Changi Road Junction	8,500,000	5,116,928	0	0	0	150,000
Improvement to Sunset Way Outlet Drain (Between PIE and Sungei Ulu Pandan)	16,900,000	15,043,558	0	0	0	5,000
Marina South Drainage Scheme	57,690,000	16,430,100	0	0	0	9,000,000
Proposed Sewerage Scheme to Serve Holland Plain and Holland Woods Areas	16,700,000	14,264,172	126,530	0	73,200	26,000
Expansion of Sewerage Networks in Loyang Avenue and Upper Changi Road East Areas	135,110,000	73,160,365	5,527,343	4,443,000	4,848,700	3,339,000
Improvement to Bukit Timah Canal (Between Rifle Range Road and Jalan Kampong Chantek)	79,200,000	9,987,370	0	0	0	10,000,000
Urgent Flood Alleviation Programme	77,300,000	55,065,319	0	0	0	9,000
Drainage Improvement Works in Tandem with LTA's Rail and Road works	48,500,000	12,449,693	0	0	0	72,000
Expansion of Sewerage Networks in East Coast Road and Mountbatten Road Areas	14,610,000	3,018,601	1,617,097	3,619,000	3,301,000	2,369,000
Proposed Expansion of Sewerage Networks in Bukit Batok East Ave 3 Area	44,900,000	28,696,292	3,619,438	1,785,000	1,659,900	490,900
Proposed Sewerage Scheme to Serve Sungei Tengah Agrotechnology Park Area	50,360,000	23,887,945	117,575	162,000	790,900	395,000
Proposed Sewers in North Woodlands	387,500,000	106,328,376	16,416,193	21,947,000	20,067,000	16,757,000
Improvement to Sungei Pandan Kechil (West Coast Road to the Sea)	54,200,000	36,939,657	0	0	0	1,000
Proposed Sewerage Scheme to Serve Lim Chu Kang Area	74,370,000	41,674,356	6,803,307	2,142,000	2,623,200	638,200
Proposed Stormwater Retention Pond for Bidadari Estate	40,400,000	6,349,990	0	0	0	5,000,000
Proposed Expansion of Sewerage Networks in Stevens Road Area	8,510,000	2,907,558	186,002	114,000	120,900	29,000

Project Title	Total Project Cost	Actual Expenditure Up to end of FY2020	Actual FY2021	Estimated FY2022	Revised FY2022	Estimated FY2023
Proposed Expansion of Sewerage Networks in Merpati Road Area	12,090,000	5,182,037	322,776	219,000	250,500	28,000
Proposed Expansion of Sewerage Networks in Sengkang and Punggol Areas	212,100,000	64,190,498	13,073,788	11,320,000	11,680,100	17,023,800
Expansion of Sewerage Networks along LTA's Proposed Thomson-East Coast Line and North-South Expressway	40,500,000	4,272,095	1,478,726	3,726,000	3,586,400	2,517,000
Improvement to Sungei Tampines (Tampines Avenue 7 to Tampines Expressway)	72,000,000	35,148,949	0	0	0	5,400
Proposed Sewerage Infrastructure at Pulau Punggol Barat	119,700,000	17,256,151	3,058,462	16,845,000	21,616,200	21,510,000
Expansion of Sewerage Networks in Pasir Ris Drive 3/12 and Jalan Kembangan Areas and Demolition of Pasir Ris and East Coast Parkway Pump Sumps	18,900,000	994,746	3,333,684	3,360,000	3,898,700	1,259,300
Outlet Drains Improvement Programme	90,500,000	27,475,533	0	0	0	2,944,200
Phase 3 of the Active, Beautiful, and Clean Waters (ABC Waters) Programme	17,860,000	6,527,883	2,706,335	728,000	1,015,100	609,400
Proposed Expansion of Sewerage Networks at Yuan Ching Road	2,410,000	1,519,897	64,968	0	0	23,000
Deep Tunnel Sewerage System (DTSS) Phase 2- Land Cost	90,000,000	287,556	3,434,535	7,289,200	4,244,200	2,928,600
Deep Tunnel Sewerage System (DTSS) Phase 2- Construction Cost	4,198,000	1,359,503,594	669,302,300	628,856,500	587,197,600	507,236,800
Improvement to Airport Road Outlet Drain (Between Tai Seng Avenue to Pelton Canal)	13,300,000	2,311,381	0	0	0	10,000
Improvement to Old Roadside Drains in Batch 9 of the Estate Upgrading Programme (EUP 9)	65,000,000	29,756,074	0	0	0	1,500,000
Rehabilitation of Sewerage Network System - Phase 5	127,100,000	48,092,440	12,781,448	12,000,000	11,999,000	4,667,000
Upgrading of Sewage Pumping Installations	19,020,000	2,342,971	2,723,177	3,931,000	3,543,300	2,596,000
Engineering Services for the Proposed Sewers to Serve Tengah New Town	15,820,000	1,045,985	626,922	565,000	474,000	210,000
Proposed Sewer along Future Road in Punggol North	6,330,000	1,355,944	793,830	686,000	800,200	55,000
Engineering Services for the Proposed Expansion of Sewerage Network in Ang Mo Kio Avenue 3 and Phasing Out of Thomson Hill Pump Sump	13,740,000	210,819	76,301	1,714,000	1,669,400	3,317,000
Improvement to PA Camp Outlet Drain (Between East Coast Parkway and the Sea)	19,600,000	818,856	0	0	0	4,211,000
Consultancy Services for the Implementation of a Detention Tank cum Pumping Facility for Syed Alwi Catchment	42,800,000	640,033	0	0	0	6,800,000
Engineering Services for Improvement of Benoi Road Outlet Drain	51,100,000	290,945	0	0	0	11,720,000
Improvement of Parbury Outlet Drain (Between East Coast Parkway and the Sea)	22,700,000	652,911	0	0	0	2,057,000
Improvement of Drains at Pulau Punggol Barat	51,000,000	270,580	0	0	0	10,000,000
Engineering Services for Proposed Expansion of Sewerage Networks in Senoko Way, Woodlands Avenue 6 and Upper Bukit Timah Areas	3,900,000	317,382	212,543	53,000	274,600	166,000
Engineering Services for the Improvement of Sungei Selarang and Sungei Selarang Subsidiary Drain A	57,300,000	226,882	0	0	0	15,000,000
Improvement of Drains at Admiralty Road West	20,000,000	47,925	0	0	0	2,750,000
Engineering Services for Proposed Sewers in Tuas View Area	9,880,000	335,487	628,185	139,000	265,800	748,200
Improvement of West Coast Road Outlet Drain No. 6 (West Coast Road to the Sea)	16,100,000	165,634	0	0	0	720,000
Construction to Upgrade Drainage Capacities at Poole and Wimborne Pumping Stations	35,500,000	4,119,500	0	0	0	10,850,000
Renewal of Water Reclamation Network Supervisory Control and Data Acquisition System	7,740,000	116,130	38,710	4,919,000	578,400	1,628,900

Project Title	Total Project Cost	Actual Expenditure Up to end of FY2020	Actual FY2021	Estimated FY2022	Revised FY2022	Estimated FY2023
6th Roadside Drain Improvement Programme	235,160,000	52,321	0	0	0	21,000,000
Engrg Svcs for Expansion of Sewers in Bishan Park/Sin Ming Avenue/Tampines Road/Crane Road/River Valley Road Areas and Proposed Laying of Sewer at Bishan Park	4,410,000	0	84,126	30,000	447,100	357,500
Engineering Services for Improvement Works along Siglap Canal (between Marine Parade Road and East Coast Parkway)	78,300,000	11,051	0	0	0	11,548,000
Phase 4 of the Active, Beautiful, Clean waters Programme	4,140,000	0	0	88,200	38,400	389,100
Rehabilitation of Sanitary Drain-Lines for Western Catchment	36,400,000	0	1,303,174	4,000,000	3,995,700	5,008,000
Improvement to Old Roadside Drains in Batch 10 of the Estate Upgrading Programme	122,830,000	0	278,578	3,000,000	500,000	4,000,000
Replacement of Mechanical & Electrical Equipment at Jurong Island Sewage Treatment Plants No.1 and 2	15,900,000	0	574,000	5,600,000	5,600,000	5,100,000
Improvement to Playfair Outlet Drain & Jalan Bunga Rampai Outlet Drain	2,420,000	0	0	0	0	476,300
Renewal&Upgrading of Equipment at 8 Sewage Pumping Installations and additional Pumping Mains for Kallang Park Pumping Station and Mount Palmer Pumping Station	10,430,000	0	0	603,000	0	1,239,000
Engineering Services for the Improvement to Ulu Pandan Canal (Commonwealth Avenue West to Clementi Road) with ABC Waters Enhancements	15,800,000	0	0	0	0	3,279,400
Professional Engineering Services to conduct Site Specific Study for Climate Change Adaptation Measures at Southeast Coast of Singapore	25,500,000	0	1,435,704	5,748,200	4,039,600	4,067,600
Engineering Services for the Improvement to Sungei Serangoon Eastern and Western Subsidiary Drain with ABC Waters Enhancements	42,900,000	0	0	0	0	1,000,000
Engineering Services for the Improvement to Opera Estate Outlet Drain (Siglap Link to Sea) with ABC Waters Enhancement	3,300,000	0	0	0	0	432,000
Engineering Services for the Improvement to Yishun Avenue 3 Outlet Drain (Yishun Ring Road, Yishun Avenue 3 and Yishun Central)	3,500,000	0	0	0	0	600,000
Professional Engineering Services to conduct Site Specific Study for Climate Change Adaptation Measures at Northwest Coast (Coastal Reservoirs) of Singapore	16,474,500	0	0	0	0	2,806,600
Rehabilitation of Sewerage Network System - Phase 6	158,470,000	0	0	0	1,975,800	9,922,000
Proposed Improvement Works to the Active, Beautiful, Clean Waters (ABC Waters) Facilities at Pandan Reservoir and MacRitchie Reservoir Park	4,700,000	0	0	0	120,000	2,605,000
Engineering Services for Improvement of Bedok First Subsidiary Drain (Bedok Reservoir Road to Bedok North Avenue 3) with ABC Waters Enhancements	4,900,000	0	0	0	0	2,545,000
Professional Engineering Services to Conduct Site Specific Study for Climate Change Adaptation Measures at Northwest Coast of Singapore	16,540,000	0	0	0	0	1,368,500
Engineering Services for the Proposed Expansion of Sewers in Sin Ming Road and Braddell Road Areas	1,740,000	0	0	0	44,000	498,000
Reconstruction of Alexandra Canal Phase 1	104,200,000	97,930,162	0	0	0	1,000
National Environment Agency Programme						
Minor Development Projects	...	...	2,693,968	88,000	773,200	700,000
New Projects	...	...	0	22,703,000	20,808,700	19,466,100

Project Title	Total Project Cost	Actual Expenditure Up to end of FY2020	Actual FY2021	Estimated FY2022	Revised FY2022	Estimated FY2023
Development of New Hawker Centres at Woodlands, Sengkang, Pasir Ris, Jurong West, Yishun and Sembawang	108,200,000	82,965,268	4,743,124	5,609,300	5,183,600	5,046,600
Development of Replacement Hawker Centre at Woodlands St 12	24,300,000	18,369,295	398,877	3,272,300	350,000	11,000
Development of New Crematorium at Mandai	220,800,000	53,221,884	8,007,921	16,680,900	40,000,000	61,640,300
Development of New Hawker Centres at Dawson and Bidadari	26,500,000	10,245,518	1,922,497	1,536,600	1,672,500	1,561,600
Development of New Hawker Centres at Fernvale, Choa Chu Kang, Bukit Panjang North and Anchorvale	59,275,000	32,976,612	9,662,254	5,127,600	8,150,000	4,868,600
Redevelopment of Choa Chu Kang Cemetery (CCKC) Phase 3	118,240,000	55,707,577	21,722,637	19,000,000	22,000,000	1,700,000
Fitting-out Works for New Hawker Centre at Punggol Digital District	5,059,500	0	158,150	1,024,600	73,800	1,080,900
Productive Hawker Centres Programme	17,179,300	923,627	177,239	3,231,300	393,400	2,746,100
Development of New Hawker Centre at Bukit Batok West Avenue 6	1,217,000	0	0	243,400	243,400	547,600
Consultancy Services for NEA's Waste Resource Management Project	2,893,200	499,159	521,445	1,157,900	441,500	425,800
Consultancy Services for Funeral Parlour Complex	3,563,000	1,681	0	1,787,000	1,254,500	338,000
Development of a New Hawker Centre at Bukit Batok West Avenue 6	7,330,000	0	0	460,700	460,700	1,672,300
Services Diversion works for Funeral Parlour Complex	2,706,000	0	0	1,846,600	1,370,200	1,335,800
Reconfiguration Works at Jurong West Hawker Centre (JWHC)	5,562,000	0	0	4,384,000	3,800,000	1,662,000
Hawker Centres Transformation Programme (HTP) Pilot for Existing Centres	5,780,000	0	0	0	29,700	141,000
NEA's Proposed Engagement of Design & Build (D&B) Contractor for Land Preparation Works	27,200,000	0	0	0	0	27,000,000
Singapore Food Agency Programme						
Development Works for Farm Sites in Lim Chu Kang and Sungei Tengah	25,597,500	6,754,077	1,511,641	12,058,800	4,886,500	3,600,000
Development of the local aquaculture sector	16,380,000	0	0	0	88,000	115,000
Completed Projects	...	...	20,416,172	17,723,600	13,119,600	0
<i>GRANTS & CAPITAL INJECTIONS TO ORGANISATIONS</i>	...	...	48,076,351	63,316,100	35,678,800	47,275,700
Public Utilities Board Programme						
New Projects	...	...	0	0	0	855,000
Flood Model Development	7,270,000	0	976,497	1,005,000	1,075,000	1,309,000
Smart Drainage System Phase 2	2,127,500	0	0	291,800	351,100	134,800
National Environment Agency Programme						
New Projects	...	...	0	5,051,000	200,000	6,120,800
Establishment of the NEA Scheme for Technology Translation	4,600,000	2,508,610	612,886	165,600	182,600	137,000
Productive Hawker Centres Programme	10,094,700	0	0	1,835,400	0	980,700
Development of NEA Business Intelligence System	3,140,000	1,882,255	133,841	500,000	0	500,000
Energy Efficiency Fund (E2F) – Energy Efficient Technologies	19,164,700	334,573	81,269	235,900	180,400	499,300
Minimum Energy Performance Standard (MEPS) for Common Industrial Equipment and Systems	151,000	0	0	0	30,400	120,600
Implementation of Meteorological Service Singapore's capability building projects	1,668,600	126,426	25,285	341,900	166,900	1,350,000

Project Title	Total Project Cost	Actual Expenditure Up to end of FY2020	Actual FY2021	Estimated FY2022	Revised FY2022	Estimated FY2023
Integrated Programme to Combat Antimicrobial Resistance in Environment Sector	1,523,700	0	0	903,700	1,464,200	59,500
Energy Efficiency Fund (E2F) - Energy Management Information System (EMIS)	7,700,000	0	0	1,107,800	828,300	1,000,000
Large-scale Field Trial of Wolbachia-Aedes Technology for Dengue Reduction	1,958,200	0	496,531	953,000	958,100	503,600
Hydrofluorocarbons (HFC) Mitigation Measures in the Refrigeration and Air-Conditioning (RAC) Application	1,440,300	0	0	265,100	79,000	520,300
Capacity and Capability Building for Wastewater Surveillance and Environmental Mitigation of COVID-19 and other dangerous pathogens	12,142,500	1,077,823	2,164,780	139,100	566,200	1,947,400
Hazard Prediction Modelling System Phase 2	25,691,300	0	0	0	0	3,853,700
Improving Ventilation and Indoor Air Quality for Mitigation of SARS-CoV-2 Airborne Risk	2,107,900	0	99,382	164,400	900,100	1,108,400
Surge Capacity For National COVID-19 Wastewater Surveillance Programme	6,711,700	0	3,112,994	2,936,400	1,891,600	1,707,200
Hawker Centres Transformation Programme (HTP) Pilot for Existing Centres	2,700,000	0	0	0	23,300	84,700
Trial of New Concept of Ops (CONOPS) for Self-testing of Polluting Motorcycles at Woodlands Checkpoint	525,000	0	0	0	75,000	450,000
Development and Operation of Singapore's International Carbon Credits (ICC) Registry	1,954,000	0	0	0	0	611,100
Singapore Food Agency Programme						
National Food Safety Ecosystem Digitalisation Plan	9,880,000	1,350,563	886,141	3,087,000	548,300	609,000
Strategic Initiatives to Strengthen Singapore's Food Security	5,310,000	680,477	85,199	2,282,600	903,900	3,640,400
Food Handlers Digital Data Hub	880,000	0	84,795	740,000	322,500	417,500
Agri-food Cluster Transformation (ACT) Fund	59,900,000	0	0	3,500,000	2,708,100	9,230,000
SFA Channel Digitalisation and Informational Transformation	190,000	0	11,128	0	60,000	118,900
Development of the local aquaculture sector	12,290,000	0	0	0	320,000	2,941,000
Technological Transformation at the National Centre for Food Centre (NCFS)	1,286,000	0	0	0	359,000	927,000
Enhanced Visitor Management System for Fishery Ports and Pasir Panjang Warehouse Centre	520,600	0	0	0	0	520,600
Project Enigma to leverage technology and data for adaptive operations	1,401,000	0	0	0	90,700	1,264,900
SFA's Regulatory Science to support Singapore's National Foodborne Illness Reduction Strategy	2,833,300	0	0	0	0	2,833,300
New Projects	...	...	0	2,350,300	0	920,000
Completed Projects	...	...	39,305,624	35,460,100	21,394,100	0

Other Development Fund Outlays

Project Title	Total Project Cost	Actual Expenditure Up to end of FY2020	Actual FY2021	Estimated FY2022	Revised FY2022	Estimated FY2023
OTHER DEVELOPMENT FUND OUTLAYS	...	...	\$35,753,155	\$43,090,100	\$70,169,300	\$42,921,700
<i>LAND-RELATED EXPENDITURE</i>	...	...	<i>35,753,155</i>	<i>43,090,100</i>	<i>70,169,300</i>	<i>42,921,700</i>
Public Utilities Board Programme						
Sewer Network for Changi East Area	149,800,000	21,987,933	26,549,819	30,013,000	48,544,000	23,314,000
Drains at Changi East	0	471,328	3,433,513	4,700,000	6,400,000	150,000
Sludge-soil mix remediation works to support relocation of Paya Lebar Airbase (PLAB)	28,000,000	0	0	0	700,000	5,200,000
National Environment Agency Programme						
New Projects	...	...	0	0	0	10,951,400
Exhumation Programme Phases 6 and 7 and Related Works	30,810,000	11,959,532	4,375,431	5,147,000	9,650,600	605,000
Exhumation Programme Phase 8	5,756,700	0	991,756	807,000	4,834,000	2,145,900
Consultancy services for works at Choa Chu Kang Cemetery (CCKC)	856,700	0	0	0	0	555,400
Completed Projects	...	...	402,636	2,423,100	40,700	0

KEY PERFORMANCE INDICATORS

Desired Outcomes

- A liveable and endearing home
- A smart, resilient and sustainable water system
- Food safety and security achieved sustainably
- A zero waste nation and circular economy
- Climate change resilience and transition to a low-carbon future
- Advancement of Singapore's strategic and economic interests relating to the environment, water and food

Key Performance Indicators

Desired Outcome	Performance Indicator ¹	Actual FY2020	Actual FY2021	Revised FY2022 ²	Estimated FY2023 ³
A liveable and endearing home	% of days in a year where Pollutant Standards Index (PSI) is in the "Good" & "Moderate" range	100	99.5	95.0	95.0
	No. of local Dengue Fever cases per 100,000 population	620	96	571	571
	No. of air pollution incidents per million population ⁴	0.2	0.4	0.7	2.0
	No. of water pollution incidents per million population ⁵	1.2	1.1	1.5	1.5
	Accuracy of Nowcast (%) ⁶	90.4	90.7	90.0	90.0
A smart, resilient and sustainable water system	% of tests meeting World Health Organisation (WHO) drinking water quality guidelines	100	100	100	100
	Distribution Losses	8.0	8.2	7.9	8.0
	No. of leaks per 100km of potable water mains per year	3.8	4.2	4.5	≤5.0
	No. of service disruptions per 1,000 km of sewers (monthly average over the year)	10.0	10.1	10.0	10.0
	Size of flood prone area (ha)	28.0	28.0	27.0	27.0
	Per capita household water consumption (litres/day)	154	157.7	149	146
Food safety and security achieved sustainably	No. of the 5 most commonly consumed food items (seafood, eggs, chicken, pork and vegetables) that has less than 50% of supply from a single country ⁷	4/5 ⁸	4/5	3/5 ⁸	4/5
	Foodborne illness cases related to foodborne outbreaks ⁹ per 100,000 population	7.8	25.6	23.9 ¹⁰	≤38.8 ¹¹

¹ All data are reported on calendar year basis.

² Data for "Revised FY2022" column refers to projected figures for 2022.

³ Data for "Estimated FY2023" column refers to targets for 2023.

⁴ Pollution incidents only include substantiated air pollution cases which have significant impacts on the environment and/or public health.

⁵ Pollution incidents refer to substantiated water pollution cases which have resulted in significant water pollution in open drains and/or waterways.

⁶ Nowcast is a short-term forecast of 2 hours. Weather systems in the tropics are dynamic in nature and can develop and dissipate within a short span of time, typically around an hour.

⁷ "Seafood" and "vegetables" have replaced "fish" and "leafy vegetables" respectively to better reflect the range of food items with the most commonly consumed ones in Singapore.

⁸ The 4 food items are Seafood, Chicken, Pork and Vegetables for 2020 and 2021. The 3 food items are Seafood, Pork and Vegetables for 2022.

⁹ An outbreak is defined as ≥15 people affected by food poisoning incidents that have triggered One Health joint investigations.

¹⁰ As of 23 Nov 2022, there are 21 reported foodborne outbreak incidents in the period April to November 2022 that are being investigated and pending conclusion. Depending on investigations outcome, the performance for 2022 (as of 23 Nov 2022) will be in the range of 4.7 to 21.4. Using linear projection based on 21.4 for the period Jan to 23 Nov 2022, the projected figure for 2022 is about 23.9.

¹¹ As this is a relatively new indicator, the target has been set by referencing the FY2018 actual figure of 38.8 per 100,000 population. SFA is monitoring the trend in foodborne illness outbreaks, and will benchmark against other urban cities before revising the target.

Desired Outcome	Performance Indicator ¹	Actual FY2020	Actual FY2021	Revised FY2022 ²	Estimated FY2023 ³
A zero waste nation and circular economy	Total domestic waste disposed of per capita (kg/day/person)	0.75	0.81	0.80	0.78
	Total non-domestic waste disposed of (tonnes per day / \$billion GDP)	7.9 ¹²	8.7	8.9	8.8
	Recycling rate (%)	52	55	55	55
Climate change resilience and transition to a low-carbon future	Total Greenhouse Gas (GHG) Emissions (million tonnes of CO ₂ -equivalent; MtCO ₂ e) ¹³	49.7	NA ¹⁴	NA	NA

¹² Figure was adjusted based on the revised 2020 GDP.

¹³ The GHG inventory is refined regularly, in accordance with the Intergovernmental Panel on Climate Change (IPCC) Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories.

¹⁴ Data will be available in 2023, due to the lag time for external organisations/agencies to submit their data to NEA.

Desired Outcome	Performance Indicator ¹	Revised FY2022	Estimated FY2023
Advancement of Singapore's strategic and economic interests relating to the environment, water and food	Fulfil Singapore's obligations to regional and international agreements and conventions	<p>Ensured that international commitments are fulfilled to uphold Singapore as a responsible global environmental citizen.</p> <p>Ensured that international obligations are not inimical to Singapore, with regard to our environmental, water and food interests.</p>	<p>Ensure that international commitments are fulfilled.</p> <p>Ensure that international obligations are not inimical to Singapore, with regard to our environmental, water and food interests.</p>
	Advance Singapore's strategic and economic interests relating to the environment, water and food through bilateral, regional and international platforms	<p>Engaged bilateral partners to pursue strategic interests in addressing environmental, water, food and other transboundary environmental issues.</p> <p>Pursued collaborations with international partners on environment, water and food issues.</p> <p>Profiled Singapore's efforts and achievements in sustainable development, water management and food security.</p> <p>Leveraged various platforms to strengthen global awareness on Singapore's environmental, water and food issues, including transboundary ones.</p>	<p>Engage bilateral partners to pursue strategic interests in addressing environmental, water, food and other transboundary environmental issues.</p> <p>Pursue collaborations with international partners on environment, water and food issues.</p> <p>Profile Singapore's efforts and achievements in sustainable development, water management and food security.</p> <p>Leverage various platforms to strengthen global awareness on Singapore's environmental, water and food issues, including transboundary ones.</p>