Head 42 — ELECTRICAL AND MECHANICAL SERVICES DEPARTMENT

Controlling officer: the Director of Electrical and Mechanical Services will account for expenditure under this Head.

Estimate 2020–21	\$1,518.4m
Establishment ceiling 2020–21 (notional annual mid-point salary value) representing an estimated 551 non-directorate posts as at 31 March 2020 rising by 25 posts to 576 posts as at 31 March 2021	\$426.6m
In addition, there will be an estimated 18 directorate posts as at 31 March 2020 rising by one post to 19 posts as at 31 March 2021.	
Commitment balance	\$4,277.7m

Controlling Officer's Report

Programmes

Programme (1) Energy Supply; Electrical, Gas and Nuclear Safety	This programme contributes to Policy Area 9: Internal Security (Secretary for Security) and Policy Area 23: Environmental Protection, Conservation, Power and Sustainable Development (Secretary for the Environment).		
Programme (2) Mechanical Installations Safety	This programme contributes to Policy Area 5: Travel and Tourism (Secretary for Commerce and Economic Development), Policy Area 18: Recreation, Culture, Amenities and Entertainment Licensing (Secretary for Home Affairs), Policy Area 21: Land and Waterborne Transport (Secretary for Transport and Housing) and Policy Area 22: Buildings, Lands, Planning, Heritage Conservation, Greening and Landscape (Secretary for Development).		
Programme (3) Energy Efficiency and Conservation, and Alternative Energy	This programme contributes to Policy Area 23: Environmental Protection, Conservation, Power and Sustainable Development (Secretary for the Environment).		
Programme (4) Centralised Services and Special Support	This programme contributes to Policy Area 27: Intra-Governmental Services (Secretary for Development).		

Head 42 does not include expenses attributable to the Electrical and Mechanical Services Trading Fund (EMSTF) established in August 1996, other than EMSTF's share of the common administrative expenses provided by the Electrical and Mechanical Services Department (EMSD). Such expenses will be reimbursed to Government through General Revenue.

Detail

Programme (1): Energy Supply; Electrical, Gas and Nuclear Safety

	2018–19 (Actual)	2019–20 (Original)	2019–20 (Revised)	2020–21 (Estimate)
Financial provision (\$m)	161.8	171.9	179.6 (+4.5%)	188.4 (+4.9%)
				(or +9.6% on 2019–20 Original)

Aim

2 The aim is to safeguard the public through implementation of a set of comprehensive regulatory frameworks and systems on the safety of electrical and gas applications and work closely with the community on education, to monitor the operation of utility companies and development of electricity supply, and to provide professional support and advice on nuclear-related matters.

Brief Description

3 For the regulatory functions, the Department is responsible for the administration and enforcement of the Electricity Ordinance (Cap. 406) (EO), the Gas Safety Ordinance (Cap. 51) (GSO) and the Oil (Conservation and Control) Ordinance (Cap. 264). The work includes:

Gas safety

- administration and enforcement of the GSO, including registration of gas supply companies, installers and contractors; monitoring gas distributors and contractors; and approval and inspection of gas appliances, tubing and installations including those in maintenance workshops for liquefied petroleum gas (LPG) vehicles;
- risk assessment of potentially hazardous installations relating to gas supply and land use planning aspects;
- assessment, approval and monitoring of natural gas supply projects;
- enlistment of competent persons for maintenance of LPG vehicles and approval of fuel tank of LPG vehicles;
- approval and monitoring of the operation of LPG filling stations;
- investigation of gas incidents;
- initiating prosecution and taking disciplinary actions;
- promotion of gas safety;
 - Electrical safety
- administration and enforcement of the EO, including registration of electrical workers, contractors and competent persons, recognised certification bodies, recognised manufacturers and generating facilities; and inspection of electrical installations and products;
- investigation of electrical incidents;
- initiating prosecution and taking disciplinary actions;
- promotion of electrical safety;
 - Monitoring of electricity utilities (Scheme of Control Agreements)
- annual auditing review of technical performance of electricity utilities;
- assessment of development plans submitted regularly by electricity utilities;
- provision of technical advice relating to monitoring of electricity utilities;
 Oil and gas supply
- administration and enforcement of the Oil (Conservation and Control) Ordinance;
- compilation of statistics on oil and gas supply;

Nuclear safety

- reviewing and implementing departmental plans in preparedness for nuclear emergencies;
- responding immediately to initial alert, and interpreting and assessing engineering information received;
- planning and participating in exercises and drills in response to nuclear emergencies; and
- giving professional advice on matters relating to nuclear power and associated emergency preparedness.
- 4 The key performance measures are:

Targets

	Target	2018 (Actual)	2019 (Actual)	2020 (Plan)
Gas safety				
registration of installers within				
12 working days (%)	100	100	100	100
registration of contractors within				
38 working days (%)	100	100	100	100
approval for construction of notifiable				
gas installations (NGIs) within				
30 working days (%)	100	100	100	100
approval for use of NGIs within				
12 working days (%)	100	100	100	100
approval for use of equipment/materials				
within 26 working days (%)	100	100	100	100

		2018	2019	2020
	Target	(Actual)	(Actual)	(Plan)
scheduling and inspection of LPG road tankers and cylinder wagons within				
18 working days (%) investigation of reports of illegal	100	100	100	100
installations within ten working days (%) response to complaints of excessive	100	100	100	100
storage of LPG within two working days (%)	100	100	100	100
enlistment of competent persons for LPG installations/gasholders within 25 working days (%)	100	100	100	100
25 working days (76)	100	100	100	100
LPG vehicle safety enlistment of competent persons for maintenance of fuel systems within				
25 working days (%) approval for use of LPG fuel tanks in	100	100	100	100
vehicles within 26 working days (%) approval for construction of filling stations	100	100	100	100
within 30 working days (%) approval for use of filling stations within	100	100	100	100
12 working days (%)	100	100	100	100
<i>Electrical safety</i> registration of electrical workers/ contractors/competent persons within	00	00	00	00
13 working days (%) registration of generating facilities within	99 95	99	99 96	99 95
40 working days (%)@ registration of recognised certification bodies and manufacturers within	95		90	33
17 working days (%) endorsement of testing certificate of	100	100	100	100
electrical installations within 13 working days (%) investigation of incidents/complaints	99	100	100	99
related to electrical installations/ products within ten working days (%)	100	100	100	100
Monitoring of electricity utilities conducting an annual technical performance audit on each of the two power companies under the Scheme of Control A gramants				
Scheme of Control Agreements within 102 working days (%) providing technical input in the financial	100	100	100	100
auditing review of capital expenditure variances within 55 working days (%) providing technical advice related to electricity utilities matters within	100	100	100	100
13 working days (%)	100	100	100	100

Nuclear safety

The target is to ensure the availability of fully-trained and competent officers round the clock to provide immediate response to initial alerts, and to provide professional advice to the Government on matters relating to nuclear power and nuclear emergencies.

Indicators

	2018 (Actual)	2019 (Actual)	2020 (Estimate)
Gas safety audit inspections to gas supply companies, contractors and distributors	1 376	1 347	1 400
NGIs and related inspections	1 228	1 263	1 200

Head 42 — ELECTRICAL AND MECHANICAL SERVICES DEPARTMENT

	2018 (Actual)	2019 (Actual)	2020 (Estimate)
follow-up inspections and quality assurance visits	2 149	2 250	2 100
applications processed for equipment approval and registration of gas contractors/installers LPG road tankers and cylinder wagons inspected	220 483	272 479	235 500
NGIs approved gas incidents investigated	23 251	28 237	22 250
prosecutions/disciplinary actions conducted/improvement notices served competent persons (for LPG installations/gasholders)	78	89ε	90e
enlistment applications processed	4 2 597	^{8β} 2 415	5β 2 500
<i>LPG vehicle safety</i> competent persons enlistment applications processed	12ρ	6р	7ρ
LPG fuel tanks in vehicles approved and revalidatedinspections of vehicles and filling stations (all before grant	4 685	5 035	7 500#
of approval) inspections of approved filling stations	35 249 3	36 250 3	35 240 3
filling stations approved enquiries/complaints handled	960	951	950
<i>Electrical safety</i> site inspections on electrical installations	9 308	9 093	8 500
site inspections on electrical products electrical workers/contractors/competent persons registration applications processed (including renewals)	3 908 23 469A	3 955 41 342∆	3 900 35 000
generating facilities registration applications processed@ recognised certification bodies and manufacturers	_	144	3 000a
applications processed periodic testing certificates of electrical installations	5 10 967	9 11 035	8 11 000
processed reported electrical incidents investigated reported unsafe electrical installations/products	382	485	420
investigated prosecutions/disciplinary actions conducted	893 521	648 505	730 510
electrical products tested enquiries handled	63 32 867	62 14 051	60 14 000
<i>Monitoring of electricity utilities</i> technical indicators assessed in the annual auditing review to monitor the technical performance of electricity			
utilities projects assessed relating to technical input in the financial	62	62	62
auditing review of capital expenditure variances enquiries handled	41 109	40 110	40 110
<i>Nuclear safety</i> technical co-operation or exchanges participated	3	3	3
exercises and drills participated	2	2	2

@ New target and indicator as from 2020 to monitor the processing of the applications for generating facilities registration.

ε The increase in the number of prosecutions conducted and improvement notices served in 2019 was attributable to stepping up of the enforcement actions for import of gas appliances with valid type approval. It is estimated that the figure in 2020 will be comparable to that in 2019.

β The increase in the number of applications in 2019 was mainly due to the enhanced promotion of competent person requirements. It is expected that the number of applications in 2020 will resume to its normal level similar to that in 2018 as the total number of competent persons could generally meet the market need.

ρ The increase in the number of applications in 2018 was mainly due to the enhanced promotion of competent person requirements. The number of applications in 2019 resumed to its normal level as the total number of competent persons could generally meet the market need. It is expected that the number of applications will remain at a similar level in 2020.

The LPG taxi incentive scheme was launched in 2000. The number of LPG fuel tanks due for the fourth five-yearly revalidation is expected to increase in 2020.

- Δ Registered electrical workers/contractors/competent persons are required to have their registration renewed every three years. Due to the uneven distribution of renewal registrations for these persons, a cyclical peak appears once every three years. The number of three-yearly renewal applications of electrical workers/ contractors/competent persons showed a cyclical trough in 2018 and a cyclical peak in 2019.
- α The Government and the power companies have since 2018 introduced the Feed-in Tariff (FiT) Scheme. It is expected that the number of applications for generating facilities registration will further increase in 2020 when more solar lighting generating facilities are installed under the FiT Scheme.

Matters Requiring Special Attention in 2020–21

- 5 During 2020–21, the Department will:
- continue to monitor the operation and maintenance of LPG storage installations;
- continue the stepped-up inspection of vehicle maintenance workshops in relation to LPG vehicles and education for the trades on gas safety measures;
- monitor the development and application of new refrigerants of low global warming potential in the air conditioning and refrigeration market;
- review the Code of Practice for the Electricity (Wiring) Regulations; and
- continue to provide technical support to the Environment Bureau on matters relating to the future development of the electricity market and the implementation of the Scheme of Control Agreements.

Programme (2): Mechanical Installations Safety

	2018–19 (Actual)	2019–20 (Original)	2019–20 (Revised)	2020–21 (Estimate)
Financial provision (\$m)	157.8	412.2	418.7 (+1.6%)	628.6 (+50.1%)
				(or +52.5% on 2019–20 Original)

Aim

6 The aim is to safeguard the public through implementation of a set of comprehensive regulatory frameworks and systems on the safety of lifts, escalators, builders' lifts, tower working platforms, aerial ropeways, amusement rides, railways, tramway, peak tramway and other mechanical installations; and working closely with the community on public education.

Brief Description

7 The Department is responsible for the administration and enforcement of various safety ordinances, including the Lifts and Escalators Ordinance (Cap. 618) (LEO), the Amusement Rides (Safety) Ordinance (Cap. 449), the Aerial Ropeways (Safety) Ordinance (Cap. 211), the Builders' Lifts and Tower Working Platforms (Safety) Ordinance (Cap. 470), certain provisions of the Mass Transit Railway Ordinance (Cap. 556) and the Mass Transit Railway Regulations (Cap. 556A), the Airport Authority (Automated People Mover) (Safety) Regulation (Cap. 483C), the Tramway Ordinance (Cap. 107) and the Peak Tramway (Safety) Regulations (Cap. 265A). The Department is also responsible for the development and implementation of the voluntary registration schemes for vehicle mechanics and vehicle maintenance workshops. For ease of reference, the above activities, which are under different policy areas, are reported under this programme. The work includes:

- administration and enforcement of the above ordinances and regulations on mechanical safety and railway safety;
- registration of contractors, engineers, workers, examiners, surveyors and competent persons and inspection of installations;
- approval of design and construction of aerial ropeways, amusement rides, builders' lifts and tower working platforms, new brands/models of lift and escalator equipment, new railways and major railway modifications;
- preparation of codes of practice;
- investigation of incidents;
- initiating prosecution and taking disciplinary actions;
- implementation of the voluntary registration schemes for vehicle mechanics and vehicle maintenance workshops; and
- provision of expert advice.

The key performance measures are: 8

Targets

	Target	2018 (Actual)	2019 (Actual)	2020 (Plan)
applications of new or major modified	U	× ,	()	
railway facilities/systems processed				
within 25 working days (%)¤	99	99	99	99
registration of				
lift/escalator contractors within				
40 working days (%)	100	100	100	100
lift/escalator engineers within				
40 working days (%)	100	100	100	100
lift/escalator workers within				
40 working days (%)	100	100	100	100
periodic testing certificates for				
lifts and escalators processed within				
13 working days (%)Ψ	100	100	100	100
builders' lifts and tower working				
platforms processed within	100	100	100	100
12 working days (%)δ	100	100	100	100
issue of permits to use for				
lifts and escalators within	100	100	100	100
13 working days (%)	100	100	100	100
builders' lifts and tower working				
platforms within 12 working days (%)	100	100	100	100
amusement rides within	100	100	100	100
13 working days (%)	100	100	100	100
approval of design and construction of	100	100	100	100
amusement rides (capacity ≤ 20				
persons) within				
34 working days (%)	100	100	100	100
amusement rides (capacity ≥ 21	100	100	100	100
persons) within				
48 working days (%)	100	100	100	100
builders' lifts and tower working				
platforms within				
34 working days (%)	100	100	100	100

Ø

Ψ

Revised description of the previous target "processing of applications of new or major modified railway facilities/systems within 25 working days" as from 2019. Revised description of the previous target "processing of periodic testing certificates for lifts and escalators within 13 working days" as from 2019. Revised description of the previous target "processing of periodic testing certificates for builders' lifts and tower working platforms within 12 working days" as from 2019. δ

Indicators

	2018	2019	2020
	(Actual)	(Actual)	(Estimate)
applications processed new brands/models of lift and escalator equipment design and construction of builders' lifts and tower	394	579‡	500‡
working platforms	31	32	30
new or major modified railway facilities/systems	575	506η	506
certificates processed lifts and escalators builders' lifts and tower working platforms amusement rides	88 456 277 338	89 654 188^ 318	90 800 190 320

Head 42 — ELECTRICAL AND MECHANICAL SERVICES DEPARTMENT

	2018 (Actual)	2019 (Actual)	2020 (Estimate)
inspections			
lifts and escalators	15 409	29 101γ	28 900
percentage of existing lifts and escalators (%)	19.8	36.8y	36.1
builders' lifts and tower working platforms	301	303	300
amusement rides	1 894	1 883	1 850
railway facilities/systems	348	350	390τ
peak tramway	13	14	14
tramway	170	170	170
aerial ropeways	93	91	90
incidents investigated			
lifts and escalators	273	276	276
aerial ropeways	3	3	3
amusement rides	16	16	16
peak tramway	2	1	1
tramway	10	12	12
railways	110	113	113
builders' lifts and tower working platforms,			
and others	4	2Φ	4
incidents/1 000 registered lifts	6.0	5.30	5.7
incidents/100 registered escalators	17.1	17.9	17.5
enquiries/complaints handled	3 872	4 075	4 000

- [‡] The increase in 2019 was attributed to the need for new brands/models of lift equipment to comply with the new design standard made effective in September 2019. It is expected that the number of applications would drop gradually in 2020.
- η The decrease in 2019 was attributed to a reduction in the number of applications related to new railway projects.
- A The decrease in 2019 was mainly attributed to fewer number of active construction sites.
- γ The number of inspections in 2019 was increased due to strengthening the surveillance of maintenance works carried out by registered contractors for enhancing the safety of aged lifts.
- τ The number of inspections in 2020 is expected to increase due to strengthening the audits of existing railway facilities/systems.
- Φ The decrease was due to lower number of builder's lift and tower working platform incidents in 2019.
- ♦ The decrease in 2019 was attributed to stepped-up inspection and safety publicity.

Matters Requiring Special Attention in 2020–21

- 9 During 2020–21, the Department will continue to:
- monitor the operation and maintenance of the aerial ropeways of Ngong Ping 360 and Ocean Park, and amusement rides in Hong Kong Disneyland, Ocean Park and other venues;
- promote and administer the voluntary registration schemes for vehicle mechanics and vehicle maintenance workshops, including stepping up inspection of vehicle mechanics and vehicle maintenance workshops under the voluntary registration schemes, as well as examine the introduction of a mandatory registration system for both vehicle mechanics and vehicle maintenance workshops;
- step up public education and publicity efforts to enhance the safety of lifts and escalators;
- step up inspection of registered contractors' maintenance works for aged lifts and escalators;
- implement the LEO and publicise the requirements to relevant stakeholders;
- provide support to the Urban Renewal Authority for implementation of the Lift Modernisation Subsidy Scheme; and
- monitor the safety performance of railway service provided by the MTR Corporation Limited (MTRCL), in particular to enhance monitoring by conducting thorough and systematic audit of the MTRCL's asset management system and safety management system.

Programme (3): Energy Efficiency and Conservation, and Alternative Energy

	2018–19 (Actual)	2019–20 (Original)	2019–20 (Revised)	2020–21 (Estimate)
Financial provision (\$m)	446.9	492.4	391.0 (-20.6%)	594.3 (+52.0%)
				(or +20.7% on 2019–20 Original)

Aim

10 The aim is to promote energy efficiency and conservation and application of alternative energy.

Brief Description

11 The Department is responsible for the development, promotion and implementation of energy efficiency and conservation; and providing professional support to the Government on the promotion and use of new and renewable energy. The work includes:

- administration and enforcement of the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598);
- administration and enforcement of the Buildings Energy Efficiency Ordinance (Cap. 610) (BEEO);
- provision of professional support and advice to relevant bureaux and the Energy Advisory Committee on matters in relation to energy efficiency and conservation as well as adoption of renewable energy;
- planning for and implementation of district cooling systems;
- preparation and review of codes of practice and technical guidelines;
- development and implementation of energy saving, energy efficiency and conservation as well as renewable energy programmes and projects;
- research and development on application of innovative energy efficiency and renewable energy technologies;
- establishment and updating of the energy end-use database;
- promotion of public awareness and application of energy efficiency and conservation measures, equipment and systems and the use of renewable energy; and
- liaison with the Mainland, regional and international organisations such as the Asia-Pacific Economic Cooperation on energy-related issues.
- 12 The key performance measures are:

Targets

	Target	2018 (Actual)	2019 (Actual)	2020 (Plan)
registration under the voluntary Energy Efficiency Labelling Scheme (EELS)	00	100	00	00
within 17 working days (%) processing of product submissions under the mandatory EELS within	99	100	99	99
17 working days (%)approval of applications under the	99	100	99	99
voluntary water-cooled air-conditioning system scheme for the design or operation of the				
evaporative cooling towers within 17 working days (%)	99	100	100	99
registration under the voluntary Energy Efficiency Registration Scheme for	00	100	100	00
Buildings within 17 working days (%) annual updating of Hong Kong Energy	99	100	100	99
End-use Database (% completed) registration of Registered Energy Assessors under the Mandatory Building Energy Code (REC) Scheme	100	100	100	100
Building Energy Code (BEC) Scheme within 40 working days (%)	99	100	100	99

Indicators

	2018 (Actual)	2019 (Actual)	2020 (Estimate)
Mandatory EELS product submissions processed site inspections on prescribed products	505 683	1 425μ 866μ	600µ 700µ
Voluntary EELS energy labels developed energy labels implemented energy labels issued	0¶ 0¶ 261	0¶ 0¶ 201¢	0¶ 0¶ 200ф
Mandatory BEC Scheme sampling inspections for submissions relating to new buildings, major retrofitting works and energy audit sampling inspections of buildings	23 982	24 984	24 980
Voluntary Energy Efficiency Registration Scheme for Buildings certificate issued	20	23	20
<i>Energy consumption study</i> studies completed energy consumption indicators developed/updated	1 1	1 1	1 1
Voluntary water-cooled air-conditioning system scheme applications received and processed installations completed	68 48	56 54	55 45
Research and development on the application of innovative energy efficiency technologies studies completed	3	3	3
<i>Energy efficiency and conservation promotion</i> talks delivered/visits organised for organisations/schools enquiries handled	506 3 026	415ə 3 852	450 2 200

 μ The upsurge in the number of product submissions and site inspections in 2019 was due to the increase in the number of submissions of new prescribed products and site inspections arising from the full implementation of the third phase of the mandatory EELS in 2019. The number in 2020 is expected to level gradually.

There was no new energy label under the voluntary EELS in recent years as it has already covered 22 types of electrical appliances, office equipment and gas appliances.

- There was a decrease in the number of energy labels in 2019 as some products under the voluntary EELS were covered by the mandatory EELS Phase III. The figure in 2020 will be comparable to that in 2019.
- Some school visits to the EMSD exhibition gallery and outreach talks at schools were cancelled due to transportation situations and school suspension.

Matters Requiring Special Attention in 2020–21

- **13** During 2020–21, the Department will:
- continue to implement the mandatory EELS, conduct studies on the expansion of the scope to cover more appliances under the fourth phase of the scheme, and continue to implement the voluntary EELS;
- continue to implement the BEEO and the associated codes of practice, and to promote building energy efficiency among stakeholders in the built environment;
- administer and promote the updated voluntary Hong Kong Energy Efficiency Registration Scheme for Buildings to encourage outperforming the statutory requirements through recognition of high building energy efficiency;
- continue the development of the district cooling system at the Kai Tak Development and the planning and design
 of the proposed district cooling systems in the Tung Chung New Town Extension (East) and Kwu Tung North
 New Development Areas, and conduct feasibility studies on the provision of district cooling systems in new
 development areas;
- continue research and development works on the application of new energy efficiency and renewable energy technologies;
- continue to promote public awareness of best practices in energy efficiency and conservation as well as renewable energy through publicity and public education programmes;

- provide professional support to encourage the development of renewable energy in the private and public sectors and to facilitate research and development in relation to renewable energy;
- provide technical advice and support to government bureaux and departments on energy saving through organising seminars, experience sharing workshops and other channels;
- promote retro-commissioning to the relevant trades and professions;
- continue to promote and provide technical advice relating to the implementation of energy-saving measures in government and public venues;
- oversee energy audit, energy saving projects and retro-commissioning projects in government buildings and facilities; and
- implement energy saving projects and renewable energy projects as appropriate in schools and welfare non-government organisations.

Programme (4): Centralised Services and Special Support

	2018–19 (Actual)	2019–20 (Original)	2019–20 (Revised)	2020–21 (Estimate)
Financial provision (\$m)	92.2	99.6	103.2 (+3.6%)	107.1 (+3.8%)
				(or +7.5% on 2019–20 Original)

Aim

14 The aim is to provide efficient and cost-effective centralised services and specialist support to other departments.

Brief Description

15 The Department is responsible for providing common administrative support to EMSTF. The common administrative expenses shared by EMSTF will be reimbursed to the Government.

16 The Department is also responsible for the regulatory control of fresh water cooling towers under the Public Health and Municipal Services Ordinance (Cap. 132).

Prog	gramme	2018–19 (Actual) (\$m)	2019–20 (Original) (\$m)	2019–20 (Revised) (\$m)	2020–21 (Estimate) (\$m)
(1)	Energy Supply; Electrical, Gas and				
	Nuclear Safety	161.8	171.9	179.6	188.4
(2)	Mechanical Installations Safety	157.8	412.2	418.7	628.6
(3)	Energy Efficiency and Conservation,				
	and Alternative Energy	446.9	492.4	391.0	594.3
(4)	Centralised Services and Special				
	Support	92.2	99.6	103.2	107.1
		858.7	1,176.1	1,092.5	1,518.4
				(-7.1%)	(+39.0%)
					(or +79 1% on

ANALYSIS OF FINANCIAL PROVISION

(or +29.1% on 2019–20 Original)

Analysis of Financial and Staffing Provision

Programme (1)

Provision for 2020–21 is \$8.8 million (4.9%) higher than the revised estimate for 2019–20. This is mainly due to the increased provision for the net increase of four posts and the increased cash flow for the non-recurrent item for the intelligent detection system for solar photovoltaic panels.

Programme (2)

Provision for 2020–21 is \$209.9 million (50.1%) higher than the revised estimate for 2019–20. This is mainly due to the increased cash flow for the non-recurrent item for Lift Modernisation Subsidy Scheme.

Programme (3)

Provision for 2020–21 is \$203.3 million (52.0%) higher than the revised estimate for 2019–20. This is mainly due to the increased provision for capital non-works projects, promoting energy efficiency and conservation, recurrent consequence of the development of the district cooling system at the Kai Tak Development, and the net increase of 20 posts.

Programme (4)

Provision for 2020–21 is \$3.9 million (3.8%) higher than the revised estimate for 2019–20. This is mainly due to the increased provision for the net increase of two posts and operating expenses.



Changes in the size of the establishment (as at 31 March)



Sub- head (Code)		Actual expenditure 2018–19 \$'000	Approved estimate 2019–20 \$'000	Revised estimate 2019–20 \$'000	Estimate 2020–21 \$'000
	Operating Account			·	
	Recurrent				
000	Operational expenses	528,286	647,821	644,050	722,858
	Total, Recurrent	528,286	647,821	644,050	722,858
	Non-Recurrent				
700	General non-recurrent	2,191	249,688	249,638	465,677
	Total, Non-Recurrent	2,191	249,688	249,638	465,677
	Total, Operating Account	530,477	897,509	893,688	1,188,535
	Capital Account				
	Plant, Equipment and Works				
661 696	Minor plant, vehicles and equipment (block vote) Energy saving projects in government buildings	34,195	38,000	32,160	211,500
090	(block vote)	294,045	240,593	166,661	118,351
	Total, Plant, Equipment and Works	328,240	278,593	198,821	329,851
	Total, Capital Account	328,240	278,593	198,821	329,851
	Total Expenditure	858,717	1,176,102	1,092,509	1,518,386

Details of Expenditure by Subhead

The estimate of the amount required in 2020–21 for the salaries and expenses of the Electrical and Mechanical Services Department is \$1,518,386,000. This represents an increase of \$425,877,000 over the revised estimate for 2019–20 and \$659,669,000 over the actual expenditure in 2018–19.

Operating Account

Recurrent

2 Provision of \$722,858,000 under *Subhead 000 Operational expenses* is for the salaries, allowances and other operating expenses of the Electrical and Mechanical Services Department. The increase of \$78,808,000 (12.2%) over the revised estimate for 2019–20 is mainly due to the net increase of 26 posts in 2020–21, and the increased provision for recurrent consequence of the development of the district cooling system at the Kai Tak Development and promoting energy efficiency and conservation.

3 The establishment as at 31 March 2020 will be 569 posts. It is expected that there will be a net increase of 26 posts in 2020–21. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2020–21, but the notional annual mid-point salary value of all such posts must not exceed \$426,633,000.

4 An analysis of the financial provision under *Subhead 000 Operational expenses* is as follows:

	2018–19 (Actual) (\$'000)	2019–20 (Original) (\$'000)	2019–20 (Revised) (\$'000)	2020–21 (Estimate) (\$'000)
Personal Emoluments				
- Salaries	370,320	437,814	426,426	473,851
- Allowances	6,273	6,541	6,219	6,437
- Job-related allowances	9	1	1	1
Personnel Related Expenses				
- Mandatory Provident Fund				
contribution	867	1,568	1,406	1,531
- Civil Service Provident Fund				
contribution	18,913	21,550	22,605	25,208
Departmental Expenses				
- General departmental expenses	131,904	180,347	187,393	215,830
	528,286	647,821	644,050	722,858

Capital Account

Plant, Equipment and Works

5 Provision of \$211,500,000 under *Subhead 661 Minor Plant, vehicles and equipment (block vote)* represents an increase of \$179,340,000 (557.6%) over the revised estimate for 2019–20. This is mainly due to the increased requirement for projects.

6 Provision of \$118,351,000 under *Subhead 696 Energy saving projects in government buildings (block vote)* is for acquisition and replacement of plant and equipment for government buildings for the purpose of energy saving, up to a limit of \$10 million for each project. The decrease of \$48,310,000 (29%) against the revised estimate for 2019–20 is mainly due to the reduced requirement for projects.

Commitments

Sub- head (Code)	Item (Code)	Ambit	Approved commitment \$'000	Accumulated expenditure to 31.3.2019 \$'000	Revised estimated expenditure for 2019–20 %'000	Balance
Opera	ting Acc	count				
700		General non-recurrent				
	806	Intelligent detection system for solar photovoltaic panels	5,000	_	_	5,000
	807	Lift Modernisation Subsidy Scheme Ω	4,508,400Ω	2,191	248,688	4,257,521
	808	Consultancy studies on multi-storey vehicle maintenance workshop buildings	2,100	_	950	1,150
	809	Energy-cum-carbon audit on government premises§	14,000§	—		14,000
		Total	4,529,500	2,191	249,638	4,277,671

 Ω The approved commitment for the item was \$2,500 million. An increase in commitment of \$2,008.4 million is sought in the context of the Appropriation Bill 2020.

S This is a new item, funding for which is sought in the context of the Appropriation Bill 2020.