



Smart Energy, Sustainable Future

# SMART ENERGY SUSTAINABLE FUTURE

ENERGY MARKET AUTHORITY  
ANNUAL REPORT  
FY2021/22



# About Us

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The Energy Market Authority (EMA) is a statutory board under the Ministry of Trade and Industry. Our main goals are to ensure a reliable and secure energy supply, promote effective competition in the energy market and develop a dynamic energy sector in Singapore. Through our work, EMA seeks to forge a progressive energy landscape for sustained growth.



# Our Vision

## Smart Energy, Sustainable Future

"Smart Energy" describes how EMA seeks to harness, deliver and utilise energy in an innovative and efficient way.

"Sustainable Future" highlights the need to develop robust energy solutions that endure over time.

# Our Mission

## To Forge a Progressive Energy Landscape for Sustained Growth

EMA seeks to develop, in partnership with all stakeholders, an energy landscape that is forward-looking, innovative and vibrant. Our aim is to create an energy sector that contributes to sustained growth, for the benefit of all Singaporeans.

We will achieve our Vision and Mission through:

- **A Secure Energy Supply**

We operate the power system and promote the safe use of electricity and gas to ensure that the supply of energy is reliable and secure.

- **A Competitive Energy Market**

We promote effective competition with a sound regulatory framework that encourages investment and prevents the exercise of market power.

- **A Dynamic Energy Sector**

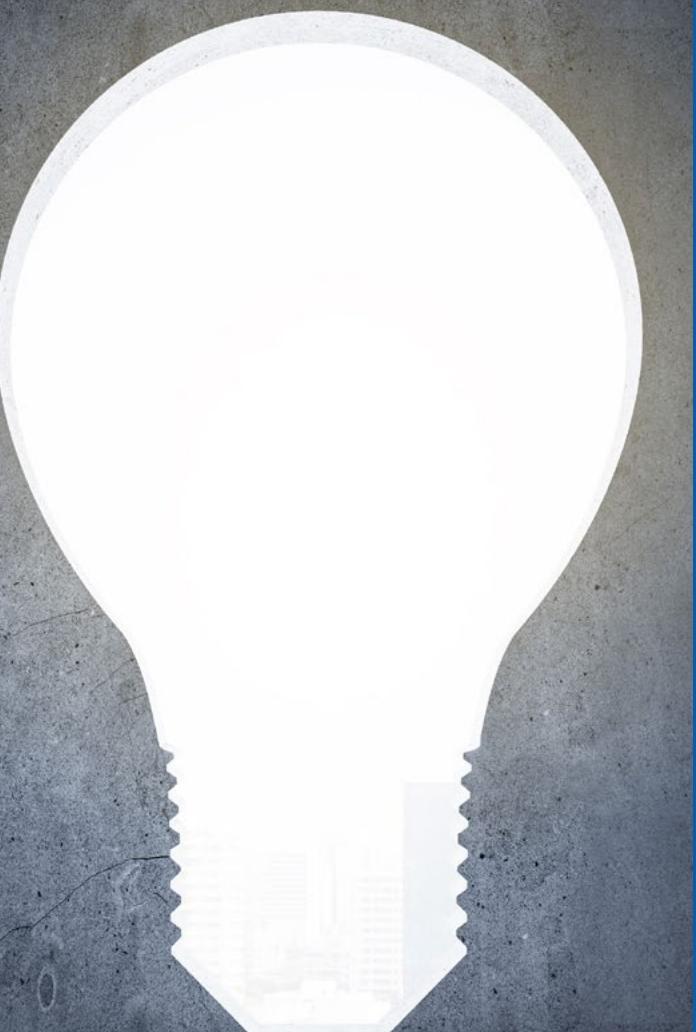
We develop and promote the energy industry, facilitate the efficient use of energy, and support R&D efforts to secure our energy future.

- **A High Performance Organisation**

We embrace change and seek continuous improvements in our systems, processes and people.

These four goals reflect the key areas of EMA's work, that is system operation, market and industry regulation, industry development and promotion, as well as our own internal drive for organisational excellence.





# Authority Members

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## Chairman:

- **Mr Richard Lim Cherng Yih**

Chairman,  
ST Logistics

## Members:

- **Mr Ngiam Shih Chun**

Chief Executive,  
Energy Market Authority

- **Professor Chua Kee Chaing**

President,  
Singapore Institute of Technology

- **Ms Paula Conboy**

Senior Counsel, Sussex Strategy Group and  
Board Member, PJM Interconnection

- **Professor Liew Ah Choy**

Chief Executive Officer, EquiVolt Pte Ltd and  
Emeritus Professor, Department of Electrical  
& Computer Engineering,  
National University of Singapore

- **Ms Lim Pek Suat**

Group Chief Financial Officer,  
PSA International Pte Ltd

- **Mr Ngien Hoon Ping**

Group CEO,  
SMRT Corporation Ltd

- **Mr Tan Chuan Thye**

Senior Counsel, Partner,  
Rajah and Tann Singapore LLP

- **Mr Wong Hong Kuan**

Deputy Secretary (Development),  
Ministry of National Development

- **Professor Julian Wright**

Lim Chong Yah Professor,  
Department of Economics,  
National University of Singapore

## IN APPRECIATION

We would like to express our appreciation to our former Authority members — **Mr Kon Yin Tong**, **Ms Quah Ley Hoon** and **Mr Zia Zaman** — for their guidance and contributions to EMA.

# Senior Management

- **Mr Ngiam Shih Chun**  
Chief Executive
- **Mr Kng Meng Hwee**  
Deputy Chief Executive,  
Industry Regulation
- **Mr Ralph Foong**  
Deputy Chief Executive,  
Energy Planning & Development,  
Corporate Services Group
- **Mr Soh Yap Choon**  
Deputy Chief Executive,  
Power System Operation
- **Mr Soh Sai Bor**  
Assistant Chief Executive,  
Economic Regulation

# Organisation Structure

## Chief Executive's Office

- Energy Demand Office
- Human Resource & Organisational Development Department

## Corporate Services Group

- Corporate Communications Department
- Finance Department
- Information Technology Department
- Legal & Administration Department

## Economic Regulation Division

- Economic Regulation & Licensing Department
- Market Development & Surveillance Department

## Energy Planning & Development Division

- Energy Connections Office
- Energy Technology & Data Department
- External Relations Department
- Industry Development Department
- National Energy Transformation Office
- Policy & Planning Department

## Industry Regulation Division

- Electricity System Department
- Gas System Department
- Generation Development Department
- Inspectorate Department

## Power System Operation Division

- Energy Management Systems Department
- Gas System Supervision Department
- System Control Department
- System Stability & Planning Department



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# **INTRODUCTION: A MORE SUSTAINABLE ENERGY FUTURE**

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## Our Sustainability Journey

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Net-zero. That is Singapore's climate ambition by or around 2050.

With the power sector accounting for about 40% of our carbon emissions, there is a need to change the way we produce and use energy.

Find out more about Singapore's energy transition towards a more sustainable future.



## A More Resilient Energy Sector

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The recent energy crisis and volatility of the global energy market have created a pressing need to strengthen our move to a low-carbon energy system. This is to shape a more secure, resilient and well-functioning energy market in the coming decades.

That is why we commissioned the Energy 2050 Committee to deliberate on the long-term future of Singapore's energy sector. Their report affirmed that net-zero emissions from Singapore's power sector by 2050 is challenging but achievable.

With the Four Switches of energy supply, we are pressing on to meet our sustainability goals.

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# FOUR SWITCHES FOR SINGAPORE'S ENERGY TRANSITION





## Green Possibilities

From natural gas that powers around 95% of our electricity needs to maximising solar energy across the island, our decarbonisation efforts go beyond our borders. This is done by tapping on low-carbon electricity through regional power grids. By exploring emerging low-carbon alternatives, we are also opening new avenues of green possibilities.

These are the Four Switches powering Singapore's Energy Story for a greener tomorrow.

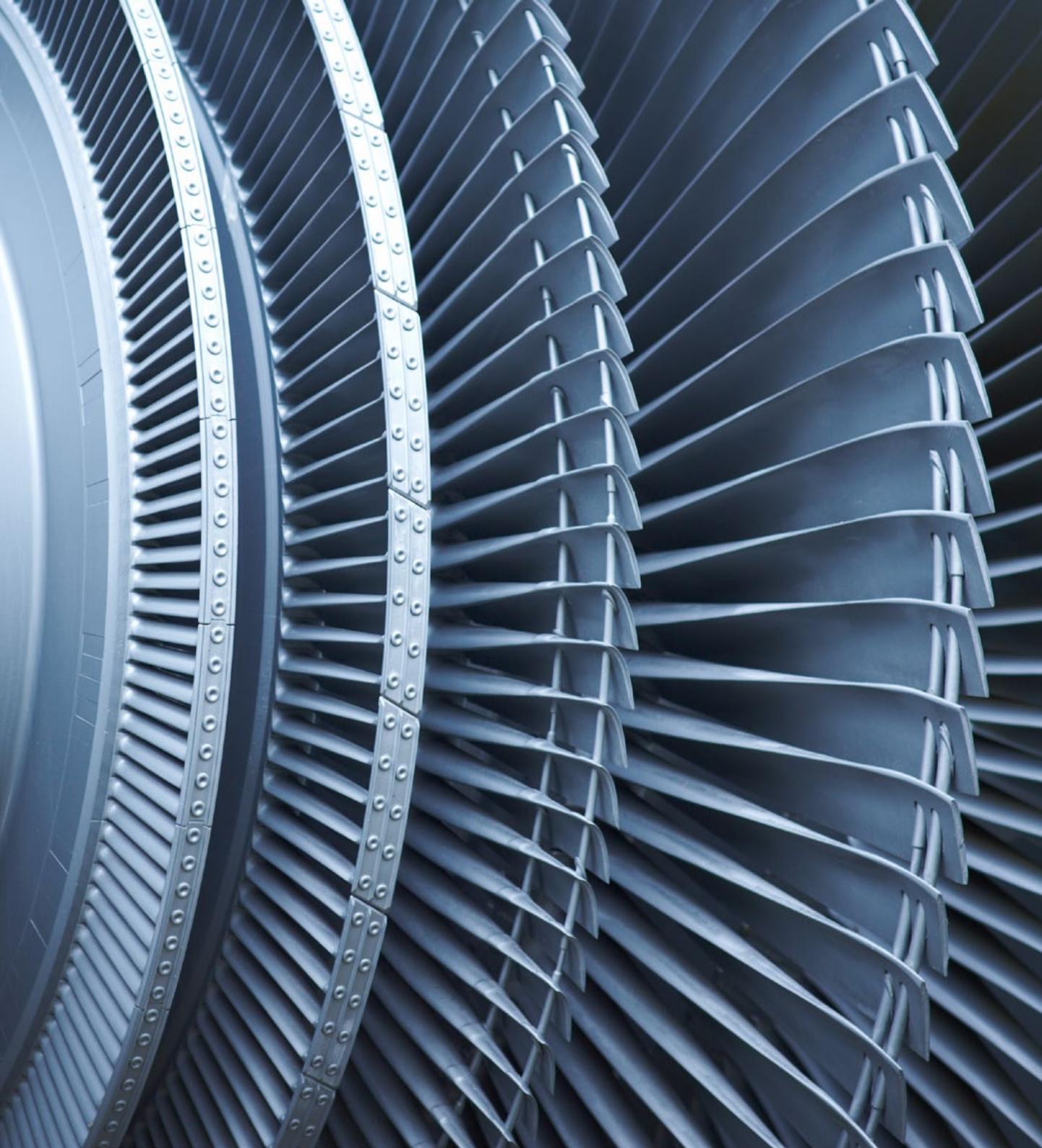
# Natural Gas: Our Reliable Source Made Cleaner

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Singapore's transition from fuel oil to natural gas since the early 2000s has paved a cleaner way of electricity generation. Now, we are making it even more so.

Since January 2022, amendments to the Electricity Act have empowered EMA to be able to require power generation companies to reduce their greenhouse gas emission standards. With this change, we can encourage more generation companies to use energy-efficient technologies to reduce carbon emissions from power generation.

We also launched the second Energy Efficiency Grant Call in January 2021. This is to encourage power generation companies to improve their generation efficiency and reduce the carbon emissions of existing power plants.



# Solar Energy: Our Renewable Ambition

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Year-round sunshine makes solar energy the most promising renewable energy source for Singapore. Over the years, we have turned Singapore's land constraints into opportunities with innovative solar deployments.

Solar panels are no longer confined to rooftops. They are on water, temporary vacant land and sheltered walkways. Going beyond the conventional has made Singapore one of the most solar-dense cities in the world today.





## Solar Energy: A Bright Future

With over 630 megawatt-peak of solar capacity installed as of 2021, Singapore is on track to meet our target of 1.5 gigawatt-peak by 2025. Singapore aims to deploy at least 2 gigawatt-peak of solar by 2030 which could generate enough energy to meet the annual electricity needs of 350,000 households.



Total installed solar capacity:  
(as of 2021)

**632.4MWP**



No. of grid-connected solar  
installations: (as of 2021)

**5,191**

# Solar Energy: Energy Storage for Grid Resilience

In Singapore's tropical climate, rain and cloudy weather can cause solar power generation to fluctuate throughout the day — posing a challenge to the reliability of our power grid.

This is where energy storage systems (ESS) work as batteries to store excess energy when it is sunny and dispense it when needed. In tandem with our solar ambition, we are deploying 200 megawatts/200 megawatt-hour of ESS to address solar intermittency and enhance grid resilience.

Just like solar, we are on the lookout for innovative energy storage solutions. By the end of 2022, three of Shell's service stations will be powered by solar panels onsite and integrated with ESS to mitigate intermittency.

This is one of several partnerships under EMA's ACCElerating Energy Storage for Singapore (ACCESS) programme, where we partner industry stakeholders, such as Shell, to pilot ESS innovations for the future.



**Right:** Singapore's first ESS to enable more energy-efficient port operations at PSA Corporation's Pasir Panjang Terminal.



## Regional Power Grids: New Green Opportunities

Singapore's ability to green its energy mix is limited by land and natural resource constraints. Regional power grids will allow us to overcome these constraints and access cleaner energy sources beyond our borders. Regional power grids can accelerate the development of green energy projects and bring economic growth to the region.

Small-scale import trials are ongoing to refine the technical and regulatory frameworks for cross-border power trading. To ensure that large-scale power imports are secure, affordable and reliable, EMA will work closely with potential importers to provide sufficient safeguards and backups.



## In Brief: Singapore's Electricity Imports October 2021 — July 2022

2021

October

Singapore announced its target to have an import capacity of up to 4 gigawatts of low-carbon electricity by 2035, which could make up around 30% of Singapore's projected electricity supply then. EMA announced two small-scale trial imports of electricity: 100 megawatts from Peninsular Malaysia and 100 megawatts from a solar farm in Pulau Bulan, Indonesia, in addition to the Lao PDR-Thailand-Malaysia-Singapore Power Integration Project (LTMS-PIP).

November

EMA issued the first Request for Proposal to have an import capacity of around 1.2 gigawatts of low-carbon electricity from 2027, for stakeholders to import and sell low-carbon electricity in Singapore.

2022

April

Submissions for the initial bids of the first Request for Proposal to appoint electricity importers closed. EMA received 20 proposals to import electricity from four countries — Indonesia, Lao PDR, Malaysia and Thailand.

May

EMA issued the first electricity importer licence to Keppel Electric for the LTMS-PIP.

June

Singapore's first cross-border import with a capacity of up to 100 megawatts of hydropower from Lao PDR via Thailand and Malaysia using existing interconnections commenced. This is part of the LTMS-PIP and supports the ASEAN Power Grid vision of multilateral electricity trading across the region.

July

EMA issued the second Request for Proposal to have an import capacity of around 4 gigawatts of low-carbon electricity by 2035, for stakeholders to import and sell low-carbon electricity in Singapore. The first Request for Proposal was merged with this Request for Proposal.

# Low-Carbon Alternatives: Shrinking Our Carbon Footprint

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We are thinking long-term with our forays into low-carbon alternatives such as hydrogen and carbon capture, utilisation and storage (CCUS). These complement the other three Switches to reduce Singapore's carbon footprint.

The Government awarded \$55 million to support 12 research projects under the Low-Carbon Energy Research Funding Initiative in October 2021 to improve the technical and economic feasibility of hydrogen and CCUS.

Following new developments in geothermal technology, EMA is also researching the feasibility of harnessing geothermal energy locally. This could serve as a new and additional source of clean energy for power generation in Singapore. In April 2022, we issued a Request for Information to facilitate a geophysical investigation.



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# SAFE AGAINST THE STORM: BUFFERING SINGAPORE'S ENERGY SECURITY

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## Enhancing Singapore's Energy Security and Reliability

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A secure and reliable energy supply is critical to Singapore's survival and economic competitiveness. Geopolitics and the global energy crunch have seen gas prices increasing and heightened the risk of disruptions in energy supply chains.

With Singapore importing almost all its energy needs, EMA has been working to enhance Singapore's energy security and reliability.



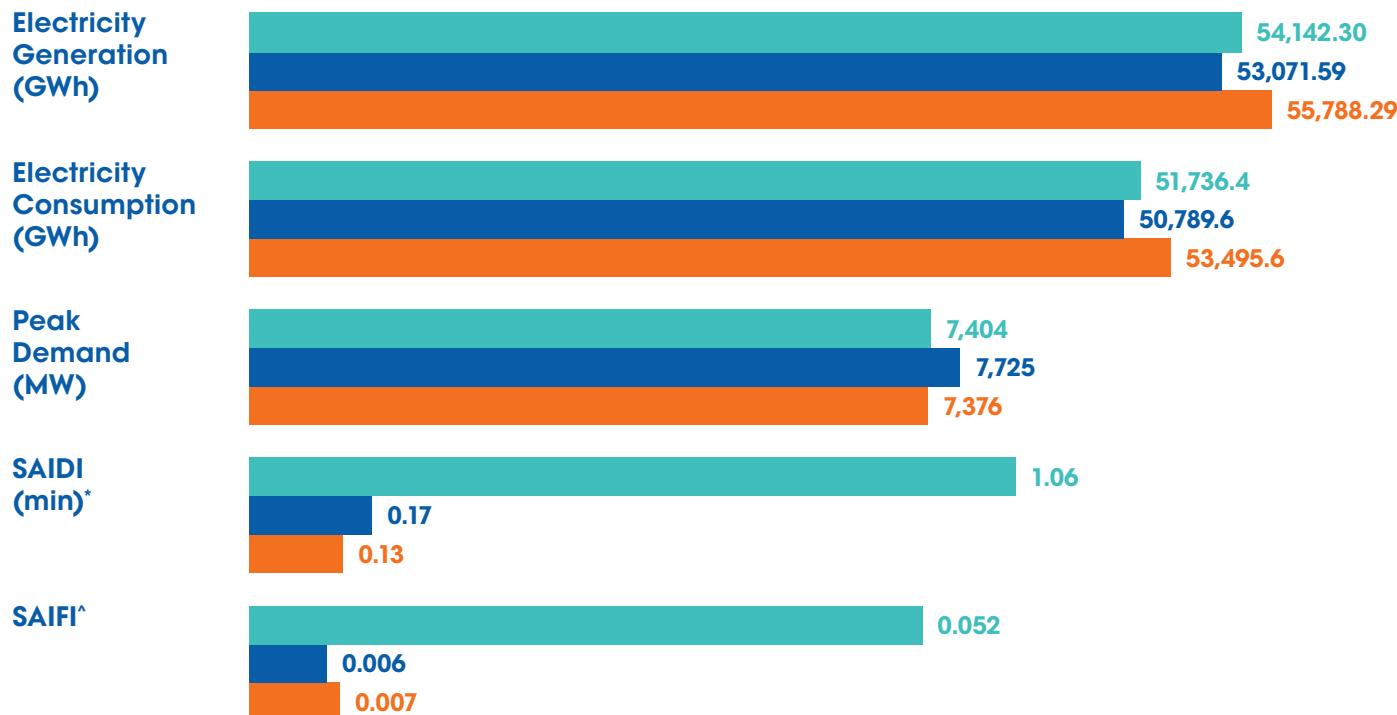
## At a Glance: Singapore's Power Generation Statistics

With increasing electrification in sectors such as transport and agri-tech, Singapore's electricity demand is expected to increase in the next decade.

In 2021, Singapore's total electricity generation and peak demand increased by 5.1% and 4.7% respectively. Our total electricity consumption also increased by 5.3% over the previous year.

On average, each customer experienced an average of 0.007 interruptions lasting 0.13 minute in 2021. These figures have continually decreased since 2019. Singapore continues to maintain one of the most reliable power grids in the world.

### Singapore's Power Generation



\* SAIDI (System Average Interruption Duration Index) measures the average interruption time per customer in minutes

^ SAIFI (System Average Interruption Frequency Index) measures the average number of interruptions per customer

2019  
2020  
2021

# Securing Singapore's Energy Supply

In the face of the global energy supply crunch since October 2021, EMA has put in place measures to ensure sufficient fuel supplies to meet Singapore's energy demand.

For example, EMA set up a Standby Liquefied Natural Gas Facility that power generation companies can draw from to generate electricity if their natural gas supplies are disrupted.

EMA has also directed power generation companies to maintain sufficient fuel for power generation. This quantity is above and beyond the existing requirement of having fuel reserves that they must maintain under their existing licences.

On the regulatory front, EMA has established new performance standards on piped natural gas importers to ensure stable gas delivery pressure. We also worked closely with the gas transporter to introduce operational and technical measures to better manage gas network pressure.





## Promoting Market Competition

Beyond looking at the security of Singapore's fuel supplies, EMA also promotes gas market competition to drive greater efficiencies to benefit consumers.

In May 2022, we issued a Request for Proposal to appoint up to two additional term Liquefied Natural Gas importers for Singapore, to give gas buyers more supply options.

# Supporting the Electricity Contracting Needs of Businesses

With the global energy crunch, the Singapore Wholesale Electricity Market saw volatility in the Uniform Singapore Energy Price.

Since January 2022, EMA has worked with electricity retailers and power generation companies to offer retail contracts with significant fixed price components through the Temporary Electricity Contracting Support Scheme (TRECS). This helps large businesses and consumers to have greater certainty in their electricity bills.

In view of the uncertainty of this global energy crunch, worsened by the Russia-Ukraine conflict, energy security measures including TRECS will be extended till end-March 2023.



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# A LIVING LAB FOR INNOVATION

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A photograph showing two people's hands shaking over a desk. On the desk, there is a smartphone, a laptop screen displaying a line graph, several white lightbulbs, a power strip, and a power outlet. This imagery represents the theme of innovation and energy transition.

## Innovation with Co-creation

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Singapore's energy transition will require transformational efforts across the entire energy value chain.

EMA continues to engage stakeholders both locally and internationally, and forge partnerships to accelerate new innovations on Singapore's home ground.

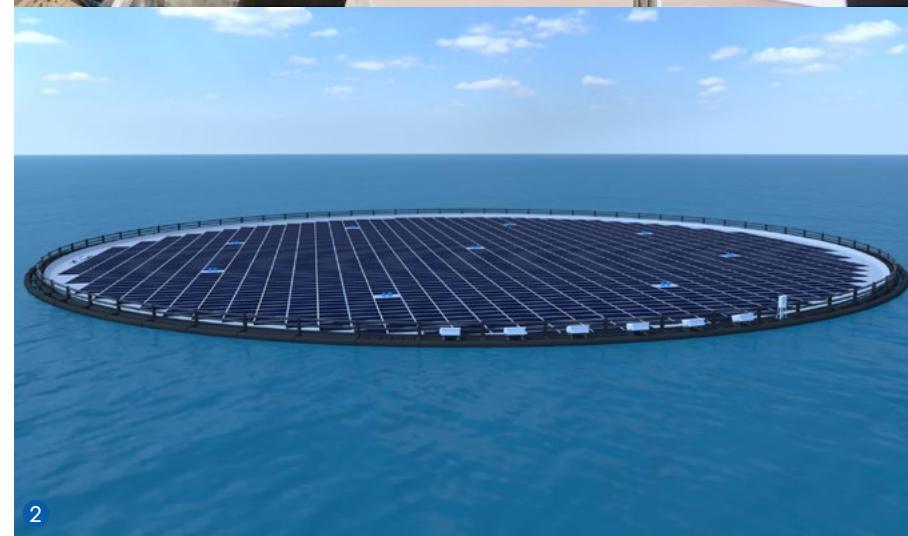
# Bolstering Energy Innovation Locally

Innovation is at the heart of the energy transition.

Singapore's first digital twin for the power grid was announced in October 2021 to enhance grid resilience and support cleaner energy sources through asset optimisation and network planning analysis. EMA, SP Group and the Public Sector Science and Technology Policy and Plans Office under the Prime Minister's Office worked together to support this research track.

Being at the forefront of new energy opportunities also requires close partnerships with the industry and other government agencies. In 2021, \$14 million was committed in our R&D partnerships with Envision Digital International, Shell Singapore and JTC.

These funds will catalyse the development of innovative energy solutions through competitive grant calls, such as the \$6 million open call by EMA and JTC to test-bed new renewable energy, energy storage systems and low-carbon technologies on Jurong Island.



**1:** Connecting with industry partners on Shell Startup Demo Day 2022, **2:** An example of the innovative near-shore floating solar photovoltaic system, **3:** Electrolyser used in a virtual green ledger to produce hydrogen

# Singapore International Energy Week 2021

EMA organised the 14<sup>th</sup> Singapore International Energy Week (SIEW) from 25-29 October 2021, bringing together energy professionals, policymakers and commentators across the global energy spectrum. There, they shared key insights for "Advancing the Energy Transition".

EMA also had the privilege of chairing the Asia Pacific Energy Regulatory (APER) Forum from 27-28 October 2021. Conducted and hosted in Singapore during SIEW, APER united energy regulators from 12 countries in discussing global energy developments and the key challenges faced by energy regulators.

## SIEW 2021 Engagements



Over  
**4,000**  
onsite participants



Over  
**20,000**  
online viewers



Over  
**30**  
Ministerial speakers



Over  
**480**  
global speakers throughout the week



# In Brief: International Collaborations for a Low-Carbon Future

EMA actively promotes public-private partnerships and international cooperation in developing low-carbon technologies.

## 2021

**May:** Hosted inaugural energy dialogues with Malaysia's Energy Commission and Hong Kong SAR's Electrical and Mechanical Services Department.

**July:** Singapore and New Zealand signed an Arrangement to cooperatively develop low-carbon hydrogen interventions.

**July:** Co-organised the Singapore-IEA Regional Training Programme on Low Carbon Buildings, upskilling over 200 participants from 17 countries.

**October:** Co-hosted the inaugural Singapore-IRENA High-Level Forum at the 14<sup>th</sup> Singapore International Energy Week (SIEW).

**November:** Joined the Regulatory Energy Transition Accelerator (RETA) as a founding member.

## 2022

**January:** Singapore signed a Memorandum on Energy Cooperation with Indonesia and a Memorandum to Cooperate on Low-Emissions Solutions with Japan.

**March:** Co-hosted the Singapore-United States Third Country Training Programme on renewable energy, which was attended by over 30 participants from eight ASEAN member states.

**Right:** Energy Regulators and Partner Organisations of the Regulatory Energy Transition Accelerator (RETA)



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# **ENGAGING YOUTHS, CAREGIVING FOR THE COMMUNITY**

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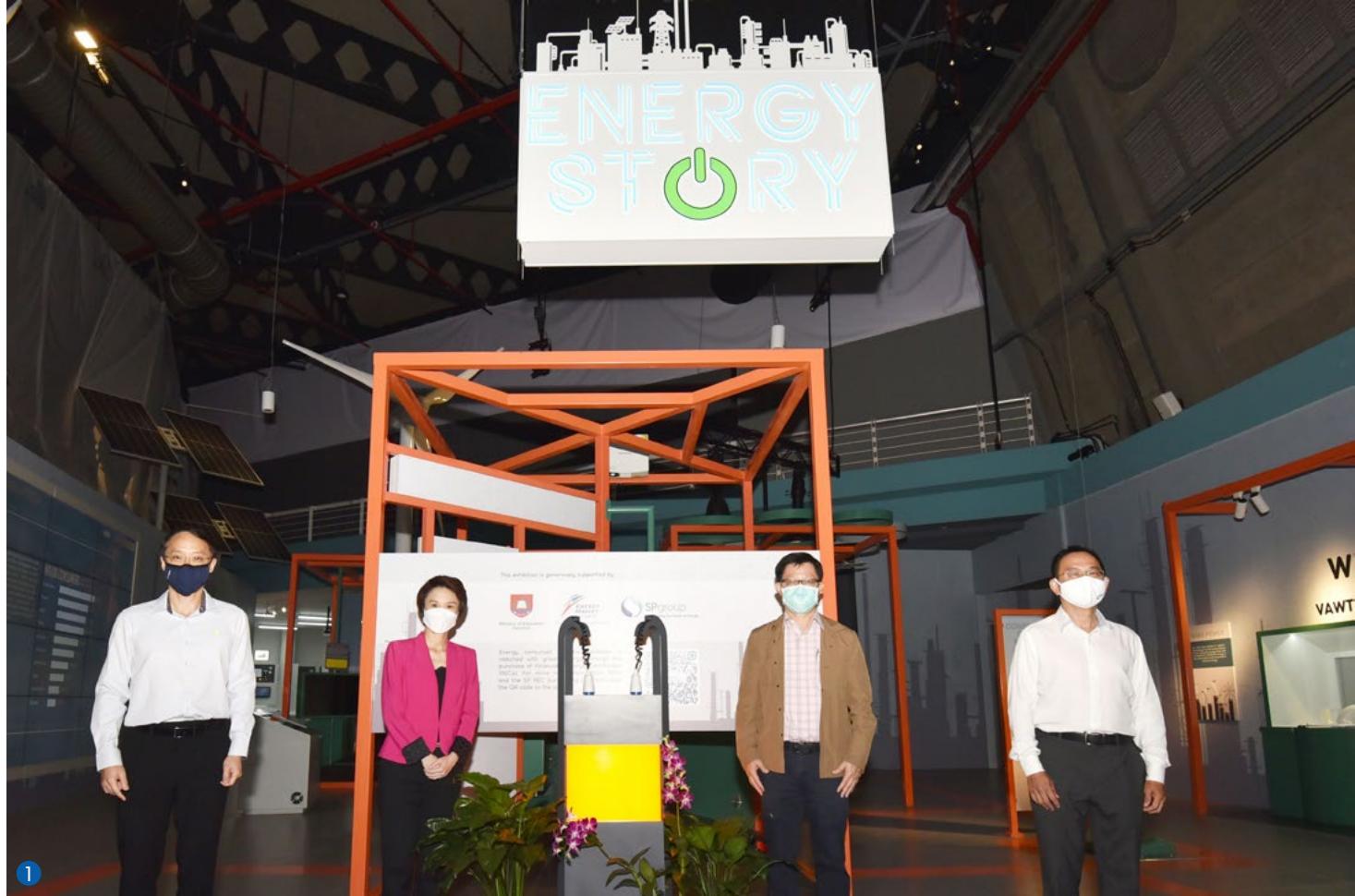


# Empowering Youths Towards a Future-Ready Workforce

As Singapore innovates towards a low-carbon future, EMA works closely with industry, academia, other government agencies and the Union of Power and Gas Employees, to build a steady pipeline of future-ready talents for the energy sector.

The Energy-Industry Scholarship for Institute of Technical Education and polytechnic students is one such initiative. Keppel Merlimau Cogen, Senoko Energy and Tuas Power sponsored three students in 2021. We also welcomed clean energy companies such as EDPR Sunseap and Eigen Energy as new sponsors from 2022.

Our Energy Ambassadors Programme nurtures youths with a keen interest in energy sector developments through outreach events like Youth@SIEW. Eleven students were appointed in 2021 under the programme's second run.



1: Opening of the Energy Story Exhibition at Science Centre Singapore  
2-3: Energy Ambassadors at the Sembcorp Tengeh Floating Solar Farm

# Caregiving for Singapore's Senior Community

Over Christmas and Lunar New Year, EMA distributed giftpacks of essential provisions to the elderly and caregivers of our adopted charity, the Caregiving Welfare Association.

We also raised more than \$16,000 during our annual donation drive in 2021. This helps to fund enrichment activities for caregivers and gives homecare necessities to homebound seniors.



**Left:** EMA volunteers distributing giftpacks to the elderly and caregivers over Christmas and Lunar New Year

# FINANCIAL HIGHLIGHTS & STATEMENTS



For the year ended 31 March 2022, EMA recorded a net deficit of \$0.621 million.

### Financial results

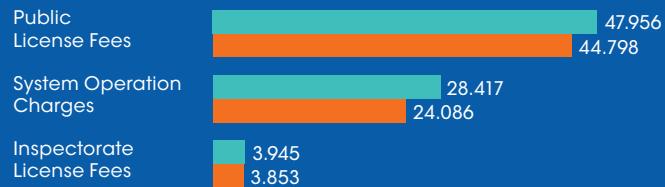
	FY2021/22 (\$ Million)	FY2020/21 (\$ Million)
Operating revenue	80.318	72.737
Less: Operating expenses	105.629	73.806
Operating (deficit) before grant	(25.311)	(1.069)
Government grant	22.906	4.427
Non-operating revenue	1.784	3.167
(Deficit)/surplus before contribution to Government Consolidated Fund ("GCF")	(0.621)	6.525
Less: Contribution to GCF	-	1.111
Net (deficit)/surplus for the year	(0.621)	5.414

### Capital expenditure

EMA spent \$4.066 million on computer systems, hardware and software (\$3.888 million), furniture and fittings (\$0.078 million) and office equipment (\$0.100 million) in FY2021/22.

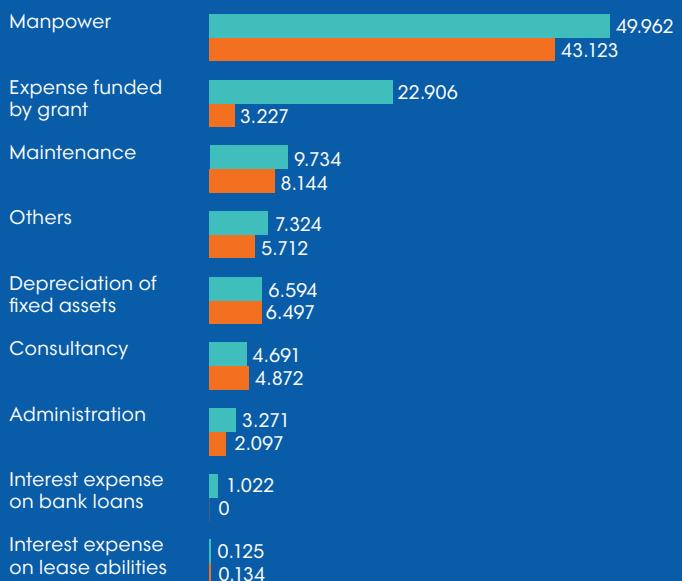
### Operating revenue

Operating revenue for EMA was \$80.318 million for FY2021/22 (breakdown as shown below).



### Operating expenses

Operating expenses for EMA totalled \$105.629 million for the year (breakdown as shown below).



FY 2021/22 (\$ Million)

FY 2020/21 (\$ Million)

# Financial Highlights

for FY2021/22



# Annual Financial Statements

for the financial year ended  
31 March 2022

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## INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ENERGY MARKET AUTHORITY OF SINGAPORE

### Report on the Audit of the Financial Statements

#### *Opinion*

We have audited the financial statements of Energy Market Authority of Singapore (the "Authority"), which comprise of the statement of financial position as at 31 March 2022, and the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements are properly drawn up in accordance with the provisions of the Public Sector (Governance) Act 2018, Act 5 of 2018 (the "Public Sector (Governance) Act"), the Energy Market Authority of Singapore Act, Chapter 92B (the "Act") and Statutory Board Financial Reporting Standards ("SB-FRSs") so as to present fairly, in all material respects, the state of affairs of the Authority as at 31 March 2022 and of the results, changes in equity and cash flows of the Authority for the financial year ended on that date.

#### *Basis for Opinion*

We conducted our audit in accordance with Singapore Standards on Auditing ("SSAs"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Authority in accordance with the Accounting and Corporate Regulatory Authority ("ACRA") *Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities* ("ACRA Code") together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### *Responsibilities of Management and Those Charged with Governance for the Financial Statements*

Management is responsible for the preparation and fair presentation of the financial statement in accordance with the provisions of the Public Sector (Governance) Act, the Act and SB-FRSs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

A statutory board is constituted based on its constitutional act and its dissolution requires Parliament's approval. In preparing the financial statements, management is responsible for assessing the Authority's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless there is intention to wind up the Authority or for the Authority to cease operations.

Those charged with governance are responsible for overseeing the Authority's financial reporting process.

**INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF  
ENERGY MARKET AUTHORITY OF SINGAPORE (continued)**

*Auditor's Responsibilities for the Audit of the Financial Statements*

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Authority's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Authority to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

**INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF  
ENERGY MARKET AUTHORITY OF SINGAPORE (continued)**

**Report on Other Legal and Regulatory Requirements**

*Opinion*

In our opinion:

- (a) the receipts, expenditure, investment of moneys and the acquisition and disposal of assets by the Authority during the year are, in all material respects, in accordance with the provisions of the Public Sector (Governance) Act, the Act and the requirements of any other written law applicable to moneys of or managed by the Authority; and
- (b) proper accounting and other records have been kept, including records of all assets of the Authority whether purchased, donated or otherwise.

*Basis for Opinion*

We conducted our audit in accordance with SSAs. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Compliance Audit* section of our report. We are independent of the Authority in accordance with the ACRA Code together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on management's compliance.

*Responsibilities of Management for Compliance with Legal and Regulatory Requirements*

Management is responsible for ensuring that the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the Public Sector (Governance) Act, the Act and the requirements of any other written law applicable to moneys of or managed by the Authority. This responsibility includes monitoring related compliance requirements relevant to the Authority, and implementing internal controls as management determines are necessary to enable compliance with the requirements.

*Auditor's Responsibilities for the Compliance Audit*

Our responsibility is to express an opinion on management's compliance based on our audit of the financial statements. We planned and performed the compliance audit to obtain reasonable assurance about whether the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the Public Sector (Governance) Act, the Act and the requirements of any other written law applicable to moneys of or managed by the Authority.

Our compliance audit includes obtaining an understanding of the internal control relevant to the receipts, expenditure, investment of moneys and the acquisition and disposal of assets; and assessing the risks of material misstatement of the financial statements from non-compliance, if any, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Because of the inherent limitations in any accounting and internal control system, non-compliances may nevertheless occur and not be detected.



**KLP LLP**  
Public Accountants and Chartered Accountants  
Singapore,

**ENERGY MARKET AUTHORITY OF SINGAPORE**

**STATEMENT OF COMPREHENSIVE INCOME**

*For the financial year ended 31 March 2022*

	Notes	2021/22 \$'000	2020/21 \$'000
Operating revenue	3	<b>80,318</b>	72,737
Operating expenses	4	(105,629)	(73,806)
<b>Operating deficit</b>		(25,311)	(1,069)
Government grant	5	<b>22,906</b>	4,427
<b>Operating (deficit)/surplus after grant</b>		(2,405)	3,358
Non-operating revenue	5	<b>1,784</b>	3,167
<b>(Deficit)/surplus before contribution to Government Consolidated Fund ("GCF")</b>		(621)	6,525
Contribution to GCF	6	-	(1,111)
<b>(Deficit)/surplus for the year and total comprehensive (loss)/income</b>		<b>(621)</b>	<b>5,414</b>

The financial statements as set out on pages 4 to 40 have been authorised for issue by the Authority.

RICHARD LIM CHERNG YIH  
CHAIRMAN

NGIAM SHIH CHUN  
CHIEF EXECUTIVE

**ENERGY MARKET AUTHORITY OF SINGAPORE**

**STATEMENT OF FINANCIAL POSITION**

*As at 31 March 2022*

	Notes	2021/22 \$'000	2020/21 \$'000
<b>EQUITY</b>			
Capital account	13	<b>86,674</b>	86,674
Accumulated surplus		<b>98,262</b>	104,297
<b>Total equity</b>		<b>184,936</b>	190,971
<b>Represented by:</b>			
<b>ASSETS</b>			
<b>Non-current assets</b>			
Fixed assets	7	<b>19,794</b>	21,212
Other receivables	10	<b>1,004</b>	1,063
Loan receivables	15	<b>118,721</b>	208,631
Interest receivables	16	-	4,749
		<b>139,519</b>	235,655
<b>Current assets</b>			
Other receivables and prepayments	10	<b>62,825</b>	16,304
Cash and cash equivalents	11	<b>346,746</b>	154,389
Loan receivable	15	<b>330,482</b>	321,181
Interest receivables	16	<b>51</b>	9,015
		<b>740,104</b>	500,889
<b>Total assets</b>		<b>879,623</b>	736,544
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Other payables and provisions	12	<b>32,394</b>	27,157
Contract liabilities	3	-	2,851
Lease liabilities		<b>3,977</b>	3,920
Provision for contribution to Government Consolidated Fund ("GCF")		-	1,111
Loan payables	15	<b>530,482</b>	321,181
Interest payables	16	<b>272</b>	9,015
		<b>567,125</b>	365,235
<b>Non-current liabilities</b>			
Loan payables	15	<b>118,721</b>	168,631
Lease liabilities		<b>7,286</b>	11,196
Provision for office reinstatement		<b>1,555</b>	511
		<b>127,562</b>	180,338
<b>Total liabilities</b>		<b>694,687</b>	545,573
<b>Net assets</b>		<b>184,936</b>	190,971

*The accompanying notes form an integral part of these financial statements.*

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**ENERGY MARKET AUTHORITY OF SINGAPORE**

**STATEMENT OF CHANGES IN EQUITY**

For the financial year ended 31 March 2022

	Capital account (Note 13) \$'000	Accumulated surplus \$'000	Total equity \$'000
<b>At 1 April 2020</b>	<b>86,674</b>	<b>107,214</b>	<b>193,888</b>
Total comprehensive income for the year	-	5,414	5,414
Dividends paid to the Government (Note 14)	-	(8,331)	(8,331)
<b>At 31 March 2021 and at 1 April 2021</b>	<b>86,674</b>	<b>104,297</b>	<b>190,971</b>
Total comprehensive loss for the year	-	(621)	(621)
Dividends paid to the Government (Note 14)	-	(5,414)	(5,414)
<b>At 31 March 2022</b>	<b>86,674</b>	<b>98,262</b>	<b>184,936</b>

**ENERGY MARKET AUTHORITY OF SINGAPORE**

**STATEMENT OF CASH FLOWS**

For the financial year ended 31 March 2022

	Notes	2021/22 \$'000	2020/21 \$'000
<b>Cash flows from operating activities</b>			
(Deficit)/surplus before contribution to Government Consolidated Fund ("GCF")		<b>(621)</b>	6,525
Adjustments for:			
- Depreciation of fixed assets	7	6,594	6,497
- Grants from the Government	5	(22,906)	(4,427)
- Interest income	5	(858)	(2,556)
- Interest expense	4	1,147	134
		<b>(16,644)</b>	6,173
Changes in working capital:			
- Other receivables and prepayments		<b>(46,400)</b>	(11,167)
- Other payables and provisions		6,947	11,145
- Contract liabilities		(2,851)	2,851
<b>Cash (used in)/generated from operations</b>		<b>(58,948)</b>	9,002
Payment to GCF		<b>(1,111)</b>	(1,708)
<b>Net cash (used in)/provided by operating activities</b>		<b>(60,059)</b>	7,294
<b>Cash flows from investing activities</b>			
Purchase of fixed assets		<b>(4,732)</b>	(1,219)
Repayment of loan from SLNG Corp		<b>240,000</b>	-
Interest received on loans		4,922	-
Interest income received from funds managed under Centralised Liquidity Management		623	3,347
<b>Net cash provided by investing activities</b>		<b>240,813</b>	2,128
<b>Cash flows from financing activities</b>			
Payment of dividends to the Government		<b>(5,414)</b>	(8,331)
Grants received from the Government		22,906	4,427
Payment of principal portion of lease liabilities		(4,963)	(3,873)
Interest paid on loans		(801)	-
Interest paid on lease liabilities		(125)	(134)
<b>Net cash provided by/(used in) financing activities</b>		<b>11,603</b>	(7,911)
<b>Net increase in cash and cash equivalents</b>		<b>192,357</b>	1,511
Cash and cash equivalents at beginning of year		154,389	152,878
<b>Cash and cash equivalents at end of year</b>	11	<b>346,746</b>	154,389

**Reconciliation of liabilities arising from financing activities**

	Non-cash changes					
	1 April \$'000	Principal and interest payments \$'000	Rent concession \$'000	Interest expense \$'000	Addition - new leases \$'000	31 March \$'000
<b>FY2021/22</b>						
Lease liabilities	<b>15,116</b>	<b>(5,088)</b>	-	<b>125</b>	<b>1,110</b>	<b>11,263</b>
<b>FY2020/21</b>						
Lease liabilities	5,996	(3,934)	(73)	134	12,993	15,116

The accompanying notes form an integral part of these financial statements.

The accompanying notes form an integral part of these financial statements.

These notes form an integral part of and should be read in conjunction with the accompanying financial statements.

## 1. General information

Energy Market Authority of Singapore (the "Authority") is a statutory board established in the Republic of Singapore under the Energy Market Authority of Singapore Act (Chapter 92B) and has its registered office at 991G Alexandra Road, #01-29, Singapore 119975.

The principal activities of the Authority are to create and regulate a competitive market framework for the electricity and gas industries as well as district cooling in designated areas. It also undertakes the system operation function of the electricity industry and energy development of Singapore.

## 2. Significant accounting policies

### 2.1 Basis of preparation

The financial statements of the Authority are prepared in accordance with the provisions of the Public Sector (Governance) Act 2018, Act 5 of 2018 (the Public Sector (Governance) Act), the Energy Market Authority of Singapore Act (Cap. 92B) and Statutory Board Financial Reporting Standards ("SB-FRSs") prepared under historical cost convention, except as disclosed in the account policies below.

The preparation of these financial statements in conformity with SB-FRSs requires management to exercise its judgement in the process of applying the Authority's accounting policies. It also requires the use of certain critical accounting estimates and assumptions. There are no areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements.

#### *Interpretations and amendments to published standards effective in 2021*

On 1 April 2021, the Authority adopted the new or amended SB-FRSs and Interpretations of SB-FRSs ("INT SB-FRSs") that are mandatory for application for the financial year. Changes to the Authority's accounting policies have been made as required, in accordance with the transitional provisions in the respective SB-FRSs and INT SB-FRSs.

The adoption of these new or amended SB-FRSs and INT SB-FRSs did not result in substantial changes to the Authority's accounting policies and had no material effect on the amounts reported for the current or prior financial years, except for the following:

## 2. Significant accounting policies (continued)

### 2.1 Basis of preparation (continued)

#### *Interpretations and amendments to published standards effective in 2021 (continued)*

##### Amendments to SB-FRS 116 Leases: Covid-19-Related Rent Concessions beyond 30 June 2021

The Authority has adopted the amendments to SB-FRS 116 which introduced a practical expedient for a lessee to elect not to assess whether a rent concession is a lease modification, if all the following conditions are met:

- (a) the change in the lease payments results in revised consideration for the lease that is substantially the same as, or less than, the consideration for the lease immediately preceding the change;
- (b) any reduction in lease payments affects only payments originally due on or before 30 June 2022; and
- (c) there is no substantive change to other terms and conditions of the lease.

The Authority has elected to apply this practical expedient to all property leases. As a result of applying the practical expedient, rent concessions of \$73,000 was recognised within "Non-operating revenue" (Note 5) in the profit or loss during the prior financial year 2020/21.

##### Amendments to SB-FRS 109, SB-FRS 107 and SB-FRS 116: Interest Rate Benchmark Reform – Phase 2

The Authority adopted the amendments to SB-FRS 109, SB-FRS 107 and SB-FRS 116: *Interest Rate Benchmark Reform – Phase 2* effective 1 April 2021. In accordance with the transition provisions, the amendments shall be applied retrospectively to financial instruments. Comparative amounts have not been restated, and there was no impact on the current period opening reserves amounts on adoption.

#### *Financial instruments measured at amortised cost and lease liabilities*

Phase 2 of the amendments require that, for financial instruments measured using amortised cost measurement, changes to the basis for determining the contractual cash flows required by interest rate benchmark reform (IBOR reform) are reflected by adjusting their effective interest rate. No immediate gain or loss is recognised.

The expedient is only applicable to changes that are required by IBOR reform, which is the case if, and only if, the change is necessary as a direct consequence of IBOR reform and the new basis for determining the contractual cash flows is economically equivalent to the previous basis immediately preceding the change.

For lease liabilities where there is a change to the basis for determining the contractual cash flows, as a practical expedient the lease liability is remeasured by discounting the revised lease payments using a discount rate that reflects the change in the interest rate where the change is required by IBOR reform. If lease modifications are made in addition to those required by IBOR reform, the Authority applies the relevant SB-FRS 16 requirements to account for the entire lease modification, including those changes required by IBOR reform.

## 2. Significant accounting policies (continued)

## 2.1 Basis of preparation (continued)

*Interpretations and amendments to published standards effective in 2021 (continued)*Amendments to SB-FRS 109, SB-FRS 107 and SB-FRS 116: Interest Rate Benchmark Reform – Phase 2 (continued)

For the year ended 31 March 2022, the Authority has applied the practical expedients provided under Phase 2 on its interest-bearing financial instruments measured at amortised cost and lease liabilities. No effects on its loan receivables and loan payables were noted as all loans which are referenced to Singapore Swap Offer Rate ("SOR") are yet transitioned to the alternative benchmark rate, Singapore Overnight Rate Average ("SORA"). For lease liabilities, the discount rate used by the management in determination of the lease liabilities is based on the imputed 3-year Singapore Government Security (SGS) benchmark yields, where SGS benchmark yields at 2-year and 5-year terms were extrapolated. Hence, the IBOR reform does not lead to modification of lease liabilities as the underlying discount rate is not based on SOR.

*Effect of IBOR reform*

Following the global financial crisis, the reform and replacement inter-bank offered rates ("IBOR") has become a priority for global regulators. The Authority's risk exposure that is directly affected by the IBOR reform predominantly comprises its variable rate loan receivables and loan payables that are linked to the Singapore Swap Offer Rate ("SOR").

SOR will cease publication after 30 June 2023, and it is expected to be replaced by the Singapore Overnight Rate Average ("SORA"). The Authority has variable rate SGD loan receivables and loan payables which references to SOR and matures after 30 June 2023. The Authority's communication with its debt counterparties is ongoing, but specific changes required by IBOR reform have not yet been agreed. The expected transition from SOR to SORA had no effect on the amounts reported for the current and prior financial years.

The following table contains details of all the financial instruments that the Authority holds at 31 March 2022 which are referenced to SOR and have not yet transitioned to SORA:

	<u>SOR</u>		<u>Of which:</u> <u>Not yet</u> <u>transited to</u> <u>SORA</u>	
	<u>Carrying</u> <u>amount</u> \$'000	<u>transited to</u> <u>SORA</u> \$'000		
<b>31 March 2022</b>				
<i>Assets</i>				
Loan receivables	159,741	159,741		
<i>Liabilities</i>				
Loan payables	(559,741)	(559,741)		
<b>Total</b>	<b>(400,000)</b>	<b>(400,000)</b>		

## 2. Significant accounting policies (continued)

## 2.2 Revenue

Revenue is recognised when the Authority satisfies their performance obligation by transferring a promised good or service to a customer. Performance obligation can either be satisfied at a point in time, or over time, depending on the nature of the good or service to be transferred. Revenue of the Authority is recognised as follows:

- (a) Licence fees from public licensees are recognised over the year;
- (b) Licence fees from inspectorate licensees are recognised as income upon issuance of licence (i.e. at a point in time);
- (c) System operation charges are recognised as income over the year;
- (d) Penalty revenue is recognised at the point of settlement (i.e. at a point in time);
- (e) Interest income is recognised on an accrual basis; and
- (f) Sponsorship revenue is recognised on an accrual basis.

## 2.3 Employee compensation

Employee benefits are recognised as an expense.

(a) *Defined contribution scheme*

The Authority makes contributions to the Central Provident Fund ("CPF") scheme in Singapore, as required by law. Contributions to national pension schemes are recognised as an expense in the period in which the related service is performed.

(b) *Employee leave entitlement*

Employee entitlements to annual leave are recognised when they accrue to the employees. A provision is made for the estimated liability for annual leave as a result of services rendered by employees up to the reporting date.

**2. Significant accounting policies (continued)****2.4 Leases**

## (a) When the Authority is the lessee

At the inception of the contract, the Authority assesses if the contract contains a lease. A contract contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Reassessment is only required when the terms and conditions of the contract are changed.

- Right-of-use assets

The Authority recognises a right-of-use asset and lease liability at the date which the underlying asset is available for use. Right-of-use assets are measured at cost which comprises the initial measurement of lease liabilities adjusted for any lease payments made at or before the commencement date and lease incentive received. Any initial direct costs that would not have been incurred if the lease had not been obtained are added to the carrying amount of the right-of-use assets.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

Right-of-use assets are presented within "Fixed assets" (Note 7).

- Lease liabilities

Lease liability is measured at amortised cost using the effective interest method. Lease liability shall be remeasured when:

- There is a change in future lease payments arising from changes in an index or rate;
- There is a change in the Authority's assessment of whether it will exercise an extension option; or
- There is modification in the scope or the consideration of the lease that was not part of the original term.

Lease liability is remeasured with a corresponding adjustment to the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

**2. Significant accounting policies (continued)****2.4 Leases (continued)**

## (a) When the Authority is the lessee (continued)

- Short term and low value leases

The Authority has elected to not recognise right-of-use assets and lease liabilities for short-term leases that have lease terms of 12 months or less and leases of low value leases, except for sub-lease arrangements. Lease payments relating to these leases are expensed to profit or loss on a straight-line basis over the lease term.

## (b) When the Authority is the lessor

The accounting policy applicable to the Authority as a lessor in the comparative period were the same under SB-FRS 116 except when the Authority is an intermediate lessor.

In classifying a sub-lease, the Authority as an intermediate lessor classifies the sub-lease as a finance or an operating lease with reference to the right-of-use asset arising from the head lease, rather than the underlying asset.

When the sub-lease is assessed as a finance lease, the Authority derecognises the right-of-use asset relating to the head lease that it transfers to the sub-lessee and recognises the net investment in the sub-lease within "Other receivables and prepayments". Any differences between the right-of-use asset derecognised and the net investment in sub-lease is recognised in profit or loss. Lease liability relating to the head lease is retained in the balance sheet, which represents the lease payments owed to the head lessor.

When the sub-lease is assessed as an operating lease, the Authority recognise lease income from sub-lease in profit or loss within "Non-operating revenue". The right-of-use asset relating to the head lease is not derecognised.

**2. Significant accounting policies (continued)****2.5 Fixed assets**

On 1 April 2001, with the establishment of the Energy Market Authority, the fixed assets of the former Regulation Department of the Public Utilities Board were vested in the Authority at net carrying amounts.

Fixed assets are recognised at cost less accumulated depreciation and accumulated impairment losses.

Subsequent expenditure relating to fixed assets that has already been recognised is added to the carrying amount of the asset only when it is probable that future economic benefits associated with the item will flow to the Authority and the cost of the item can be measured reliably. All other repair and maintenance expenses are recognised in profit or loss when incurred.

Depreciation is calculated using the straight-line method to allocate their depreciable amounts over their estimated useful lives as follows:

	<u>Useful lives</u>
Leasehold properties	1 to 6 years
Computer systems, hardware and software	1 to 5 years
Vehicles	10 years
Office setup/furniture and fittings	2 to 7 years
Office/work equipment	3 to 7 years

Project-in-progress relate to capital expenditure for projects which are under construction as at financial year-end. Depreciation will commence upon the completion of the project with the asset used in operation.

The residual values, estimated useful lives and depreciation method of fixed assets are reviewed, and adjusted as appropriate, at each reporting date. The effects of any revision are recognised in profit or loss when the changes arise.

The cost of an item of fixed assets initially recognised includes its purchase price and any cost that is directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

**2. Significant accounting policies (continued)****2.6 Impairment of non-financial assets**

Fixed assets and right-of-use assets are tested for impairment whenever there is any objective evidence or indication that these assets may be impaired.

For the purpose of impairment testing, the recoverable amount (i.e. the higher of the fair value less cost to sell and the value-in-use) is determined on an individual asset basis unless the asset does not generate cash inflows that are largely independent of those from other assets. If this is the case, the recoverable amount is determined for the cash-generating unit (CGU) to which the asset belongs.

If the recoverable amount of the asset or CGU is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount.

The difference between the carrying amount and recoverable amount is recognised as an impairment loss in profit or loss.

An impairment loss for an asset is reversed only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. The carrying amount of this asset is increased to its revised recoverable amount, provided that this amount does not exceed the carrying amount that would have been determined (net of accumulated depreciation) had no impairment loss been recognised for the asset in prior years.

A reversal of impairment loss for an asset is recognised in profit or loss.

**2.7 Financial assets**

The Authority classifies its financial assets as held at amortised cost.

The classification of debt instruments depends on the Authority's business model for managing the financial assets as well as the contractual terms of the cash flows of the financial assets.

The Authority reclassifies debt instruments when and only when its business model for managing those assets changes.

**2. Significant accounting policies (continued)****2.7 Financial assets (continued)**

## (i) At initial recognition

At initial recognition, the Authority measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss.

## (ii) At subsequent measurement

*Debt instruments*

Debt instruments of the Authority mainly comprise of cash and cash equivalents, other receivables (excluding prepayments), interest receivables and loan receivables.

Debt instruments that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. A gain or loss on a debt instrument that is subsequently measured at amortised cost and is not part of a hedging relationship is recognised in profit or loss when the asset is derecognised or impaired. Interest income from these financial assets are recognised using the effective interest rate method.

## (iii) Impairment

The Authority assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortised cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For cash and cash equivalents, other receivables (excluding prepayments), interest and loan receivables, the general 3 stage approach is applied. Credit loss allowance is based on 12-month expected credit loss if there is no significant increase in credit risk since initial recognition of the assets. If there is a significant increase in credit risk since initial recognition, lifetime expected credit loss will be calculated and recognised.

## (iv) Derecognition

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Authority has transferred substantially all risks and rewards of ownership.

**2. Significant accounting policies (continued)****2.8 Payables**

Other payables represent liabilities for goods and services provided to the Authority prior to the end of financial year which are unpaid. They are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business, if longer). Otherwise, they are presented as non-current liabilities.

Other payables are initially recognised at fair value, and subsequently carried at amortised cost using the effective interest method.

**2.9 Loan payables**

Loans are presented as current liabilities unless the Authority has an unconditional right to defer settlement for at least 12 months after the balance sheet date, in which case they are presented as non-current liabilities.

Loans are initially recognised at their fair values (net of transaction costs) and subsequently carried at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption value is recognised in profit or loss over the period of the loans using the effective interest method.

**2.10 Provisions**

Provisions are recognised when the Authority has a present legal or constructive obligation as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation and the amount has been reliably estimated.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of economic resources will be required to settle the obligation, the provisions are reversed.

**2.11 Cash and cash equivalents**

For the purpose of presentation in the statement of cash flows, cash and cash equivalents consist of cash on hand and at banks and cash with Accountant-General's Department ("AGD"), which are subject to an insignificant risk of changes in value. Cash with AGD refers to cash that are managed by AGD under Centralised Liquidity Management ("CLM") as set out in the Accountant-General's Circular No. 4/2009 CLM for Statutory Boards and Ministries.

**2. Significant accounting policies (continued)****2.12 Currency translation**

The financial statements are presented in Singapore Dollar, which is the functional currency of the Authority.

Transactions in a currency other than the functional currency ("foreign currency") are translated into the functional currency using the exchange rates at the dates of the transactions. Currency exchange differences resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at the closing rates at the reporting date are recognised in profit or loss.

**2.13 Capital**

Ordinary shares issued are classified in capital account.

**2.14 Dividends**

Dividends to the Government are recognised when the dividends are approved for payment.

**2.15 Government grants**

Grants from the Government are recognised as a receivable at their fair value when there is reasonable assurance that the grant will be received and the Authority will comply with all the attached conditions.

Government grants receivable are recognised as income over the periods necessary to match them with the related costs which they are intended to compensate, on a systematic basis. Government grants relating to expenses are shown separately in the Statement of Comprehensive Income.

Government grants relating to assets are deducted against the carrying amount of the assets.

**2.16 Borrowing costs**

Borrowing costs are recognised in profit or loss using the effective interest method.

**3. Revenue from contracts with customers**

## (a) Disaggregation of operating revenue

	At a point in time \$'000	Over time \$'000	Total \$'000
<b>2021/22</b>			
Public licence fees	-	47,956	47,956
Other licence fees	3,945	-	3,945
System operation charges	-	28,417	28,417
	<b>3,945</b>	<b>76,373</b>	<b>80,318</b>

**2020/21**

Public licence fees	-	44,798	44,798
Other licence fees	3,853	-	3,853
System operation charges	-	24,086	24,086
	<b>3,853</b>	<b>68,884</b>	<b>72,737</b>

## (b) Contract liabilities

	31 March <b>2022</b> \$'000	1 April <b>2021</b> \$'000	2020 \$'000
<b>Contract liabilities</b>			
- Public licence fees	-	2,851	-

## (i) Unsatisfied performance obligations

	2021/22 \$'000	2020/21 \$'000
Aggregate amount of the transaction price allocated to contracts that are partially or fully unsatisfied as at 31 March	-	-
- Public licence fees	-	2,851

The Authority expects that the transaction price allocated to unsatisfied performance obligations as at 31 March 2022 will be recognised as revenue in the next financial reporting period.

**ENERGY MARKET AUTHORITY OF SINGAPORE**

**NOTES TO THE FINANCIAL STATEMENTS**

*For the financial year ended 31 March 2022*

**4. Operating expenses**

	Notes	2021/22 \$'000	2020/21 (Reclassified) \$'000
<b>Operating expenses</b>			
Manpower	4a	<b>49,962</b>	43,123
Administration		3,271	2,097
Depreciation of fixed assets	7	6,594	6,497
Maintenance		9,734	8,144
Consultancy		4,691	4,872
Interest expense on loan payables		1,022	-
Interest expense on lease liabilities	8	125	134
Expenses funded by grant		22,906	3,227
Grant expense to SLNG Corp		389	-
Others		<b>6,935</b>	5,712
		<b>105,629</b>	73,806

(a) Manpower expenses include the following:

	2021/22 \$'000	2020/21 \$'000
Salaries and salary related expenses	<b>42,556</b>	36,431
CPF contributions	<b>5,594</b>	4,139

**5. Other income**

	2021/22 \$'000	2020/21 \$'000
Interest earned from deposits with AGD# and loan	<b>854</b>	2,550
Interest income on sub-leases	4	6
Sponsorship for event	<b>766</b>	509
Other receipts*	<b>160</b>	102
Non-operating revenue	<b>1,784</b>	3,167
Government grant income	<b>22,906</b>	4,427

# Deposits managed by Accountant-General's Department ("AGD") under Centralised Liquidity Management.

\* Included COVID-19 related rent concessions of Nil (FY2020/21: \$73,000) which the Authority applied the practical expedient as disclosed in Note 2.1.

**ENERGY MARKET AUTHORITY OF SINGAPORE**

**NOTES TO THE FINANCIAL STATEMENTS**

*For the financial year ended 31 March 2022*

**6. Contribution to Government Consolidated Fund ("GCF")**

In lieu of income tax, the Authority is required to make contribution to the GCF in accordance with the Statutory Corporations (Contributions to Consolidated Fund) Act. The contribution is based on 17% (FY2020/21: 17%) of the surplus of the Authority for the financial year.

The Authority has incurred a deficit for the financial year 2021/22 and is not required to make any contribution to the GCF.

**7. Fixed assets**

	Leasehold properties \$'000	Computer systems, hardware and software \$'000	Vehicles \$'000	Office setup/ furniture and fittings \$'000	Office/work equipment \$'000	Project-in-progress \$'000	Total \$'000
<b>2021/22</b>							
<b>Cost</b>							
Beginning of financial year	18,904	28,316	140	4,184	958	361	52,863
Additions	1,110	2,004	-	78	100	1,884	5,176
Written off	(44)	(543)	-	(146)	(21)	-	(754)
Reclassifications	-	-	-	258	-	(258)	-
End of financial year	<b>19,970</b>	<b>29,777</b>	<b>140</b>	<b>4,374</b>	<b>1,037</b>	<b>1,987</b>	<b>57,285</b>
<b>Accumulated depreciation</b>							
Beginning of financial year	4,002	23,118	39	4,061	431	-	31,651
Depreciation charge for the financial year	3,962	2,329	14	139	150	-	6,594
Written off	(44)	(543)	-	(146)	(21)	-	(754)
End of financial year	<b>7,920</b>	<b>24,904</b>	<b>53</b>	<b>4,054</b>	<b>560</b>	-	<b>37,491</b>
<b>Net book value</b>							
End of financial year	<b>12,050</b>	<b>4,873</b>	<b>87</b>	<b>320</b>	<b>477</b>	<b>1,987</b>	<b>19,794</b>
	Leasehold properties \$'000	Computer systems, hardware and software \$'000	Vehicles \$'000	Office setup/ furniture and fittings \$'000	Office/work equipment \$'000	Project-in-progress \$'000	Total \$'000
<b>2020/21</b>							
<b>Cost</b>							
Beginning of financial year	9,888	27,814	140	4,386	925	245	43,398
Additions	13,035	879	-	88	69	424	14,495
Disposals	(4,019)	(685)	-	(290)	(36)	-	(5,030)
Reclassifications	-	308	-	-	-	(308)	-
End of financial year	<b>18,904</b>	<b>28,316</b>	<b>140</b>	<b>4,184</b>	<b>958</b>	<b>361</b>	<b>52,863</b>
<b>Accumulated depreciation</b>							
Beginning of financial year	4,161	21,053	25	4,252	337	-	29,828
Depreciation charge for the financial year	3,860	2,394	14	99	130	-	6,497
Disposals	(4,019)	(392)	-	(290)	(36)	-	(4,737)
Reclassifications	-	63	-	-	-	-	63
End of financial year	<b>4,002</b>	<b>23,118</b>	<b>39</b>	<b>4,061</b>	<b>431</b>	-	<b>31,651</b>
<b>Net book value</b>							
End of financial year	<b>14,902</b>	<b>5,198</b>	<b>101</b>	<b>123</b>	<b>527</b>	<b>361</b>	<b>21,212</b>

**8. Leases – The Authority as a lessee**Nature of the Authority's leasing activities**Leasehold properties**

The Authority leases office space for its operations.

There are no externally imposed covenants on these lease arrangements.

## (a) Carrying amounts

ROU assets classified within fixed assets

	31 March 2022 \$'000	31 March 2021 \$'000
Leasehold properties (Note 7)	<u>12,050</u>	14,902
(b) Depreciation charge during the year	2021/22 \$'000	2020/21 \$'000
Leasehold properties (Note 7)	<u>3,962</u>	3,860
(c) Interest expense	2021/22 \$'000	2020/21 \$'000
Interest expense on lease liabilities (Note 4)	<u>125</u>	134
(d) Lease expense not capitalised in lease liabilities	2021/22 \$'000	2020/21 \$'000
Low-value lease expense	<u>341</u>	294
(e) Total cash outflow for all leases in FY2021/22 was \$5,429,000 (FY2020/21: \$4,301,000).		
(f) Addition of ROU assets during FY2021/22 was \$1,110,000 (FY2020/21: \$13,035,000).		
(g) There were no future cash outflows which are not capitalised in lease liabilities.		

**9. Leases – The Authority as an intermediate lessor**

The Authority's sub-lease of its right-of-use of the office space is classified as finance lease because the sub-lease is for the entire remaining lease term of the head lease.

ROU assets relating to the head leases with sub-leases classified as finance lease is derecognised. The net investment in the sub-lease is recognised as "Lease Receivables" under "Other receivables and prepayments" (Note 10).

Finance income on the net investment in sub-lease during the financial year is \$4,344 (FY2020/21: \$5,702), which has been recognised under "Other income" (Note 5).

The following table shows the maturity analysis of the undiscounted lease payments to be received:

	31 March 2022 \$'000	31 March 2021 \$'000
Less than one year	67	66
Two to five years	122	183
<b>Total undiscounted lease payments</b>	<b>189</b>	249
Less: Unearned finance income	(5)	(10)
<b>Net investment in finance lease</b>	<b>184</b>	239

There were three (FY2020/21: Nil) new sub-lease arrangements during the current financial year ended 31 March 2022. Included in the net investment in finance lease as at 31 March 2022 is \$6,000 arising from the three new sub-lease arrangements.

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**10. Other receivables and prepayments**

	<b>2021/22</b> \$'000	2020/21 \$'000
<b><i>Non-current assets:</i></b>		
Lease receivables	120	179
Deposits	884	884
<b>Total other receivables</b>	<b>1,004</b>	<b>1,063</b>
<b><i>Current assets:</i></b>		
Accrued interest income	440	382
Grant receivables	40,894	10,844
Other receivables	20,420	3,972
Lease receivables	64	60
Deposits	2	2
Prepayments	1,005	1,044
<b>Total other receivables and prepayments</b>	<b>62,825</b>	<b>16,304</b>

**11. Cash and cash equivalents**

	Note	<b>2021/22</b> \$'000	2020/21 \$'000
Cash with AGD	11(a)	346,746	154,388
Cash and bank balances		-	1
<b>Cash and cash equivalents per statement of financial position</b>		<b>346,746</b>	<b>154,389</b>

- (a) Cash with the Accountant-General's Department ("AGD") refers to cash that are managed by AGD under Centralised Liquidity Management as set out in the Accountant-General's Circular No. 4/2009 Centralised Liquidity Management for Statutory Boards and Ministries; and
- (b) The interest rate of cash with AGD, defined as the ratio of the interest earned to the average cash balance ranges from 0.28% to 0.41% per annum (FY2020/21: 0.28% to 1.52% per annum).

**12. Other payables and provisions**

	2021/22 \$'000	2020/21 (Reclassified) \$'000
Other creditors and accruals	28,638	20,479
Accrued capital expenditure	180	846
Accrual for employee expenses	538	2,423
Provision for unutilised leave	2,984	3,119
GST payables	54	290
<b>Total</b>	<b>32,394</b>	<b>27,157</b>

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**13. Capital account**

The capital account comprises the accumulated reserves transferred from the Public Utilities Board ("PUB") to the Authority for its establishment and for the financing of fixed and development assets acquisitions and injection by the Government.

***Capital management***

The Authority's policy is to maintain a strong capital base so as to maintain market confidence and to sustain future development. There were no changes in the Authority's approach to capital management during the financial year.

**14. Dividends**

	<b>2021/22</b> \$'000	2020/21 \$'000
<b><i>Ordinary dividends</i></b>		
Dividends paid in respect of the financial year	5,414	8,331

**15. Loan receivables and loan payables**

	2021/22 \$'000	2020/21 \$'000
<b><i>Loan receivables</i></b>		
<b>Current</b>		
Loan receivable from SLNG Corp (a)	200,000	147,615
Loan receivable from SPS – FSC (b)	41,020	28,117
Loan receivable from SPS – MDRS (c)	89,462	145,449
	<b>330,482</b>	<b>321,181</b>
<b>Non-Current</b>		
Loan receivable from SLNG Corp (a)	-	40,000
Loan receivable from SPS – FSC (b)	118,721	158,124
Loan receivable from SPS – MDRS (c)	-	10,507
	<b>118,721</b>	<b>208,631</b>
<b>Total loan receivables</b>	<b>449,203</b>	<b>529,812</b>

**15. Loan receivables and loan payables (continued)**

## (a) Loan receivable from SLNG Corp

	2021/22 \$'000	2020/21 \$'000
As at 1 April	<b>187,615</b>	226,639
Loan drawdown during the year	<b>400,000</b>	-
Loan repayment during the year	<b>(387,615)</b>	(39,024)
As at 31 March	<b>200,000</b>	187,615
Current	<b>200,000</b>	147,615
Non-current	<b>-</b>	40,000

In prior financial year as at 31 March 2021, the Authority had two outstanding back-to-back loan agreements signed between April 2014 to November 2014 with Singapore LNG Corporation Pte Ltd ("SLNG Corp") and the Government. Of these two loans, one loan facility of \$281 million was to fund the costs for the SLNG terminal while the other loan facility of \$300 million was for general working capital. The two loan facilities were unsecured and carried a fixed interest rate that approximated prevailing market rates at the time of issue. During the current financial year ended 31 March 2022, SLNG Corp had fully repaid the loan facility of \$281 million while the other loan facility of \$300 million was terminated.

The Authority had separately granted a direct loan facility of \$40 million to SLNG Corp in February 2013. This loan, fully drawn as at 31 March 2021, was unsecured and carried a fixed interest rate that approximated prevailing market rates at the time of issue. SLNG Corp had fully repaid the loan during the current financial year ended 31 March 2022.

The Authority had separately granted a bridging loan facility of \$480 million to SLNG Corp in October 2021. This loan was fully drawn, is unsecured and interest-free. Partial repayment was made during the financial year, the outstanding amount outstanding as at 31 March 2022 is \$200 million. To partially finance the loan to SLNG Corp, the Authority obtained two unsecured bank loan facilities of \$200 million each, totaling \$400 million at floating interest rates (Note 15 (g)).

**15. Loan receivables and loan payables (continued)**

## (b) Loan receivable from SPS – FSC

	2021/22 \$'000	2020/21 \$'000
As at 1 April	<b>186,241</b>	203,160
Loan drawdown during the year	<b>-</b>	-
Loan repayment during the year	<b>(26,239)</b>	(17,061)
Loan extension fees	<b>(568)</b>	-
Amortisation of upfront and extension fees	<b>307</b>	142
As at 31 March	<b>159,741</b>	186,241
Current	<b>41,020</b>	28,117
Non-current	<b>118,721</b>	158,124

On 21 June 2016, the Authority also granted to SP Services Limited ("SPS") a loan facility of \$250 million to fund the settlement of payments, collections and associated costs relating to the Forward Sales Contract Scheme (FSC). The loan is unsecured and carries floating interest rate. As at 31 March 2022, the net loan balance was \$160 million (31 March 2021: \$186 million) after amortisation of upfront and loan extension fees which were netted against the carrying amount of the loan at the inception of the loan and carrying amount of the loan upon approval of loan extension, respectively.

To finance the loan to SPS, the Authority obtained an unsecured bank loan facility of up to \$228 million. The option of a 3-year extension was exercised to extend the loan facility and the extension fee was paid in April 2021. The net loan balance was \$160 million (after amortisation of upfront and extension fees which were netted against the carrying amount of the loan at the inception of the loan and carrying amount of the loan upon approval of loan extension, respectively) as at 31 March 2022 (31 March 2021: \$186 million).

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**15. Loan receivables and loan payables (continued)**

(c) **Loan receivable from SPS – MDRS**

	<b>2021/22 \$'000</b>	2020/21 \$'000
As at 1 April	<b>155,956</b>	-
Loan drawdown during the year	83,170	155,956
Loan repayment during the year	(149,664)	-
As at 31 March	<b>89,462</b>	155,956
 Current	 <b>89,462</b>	 145,449
Non-current	-	10,507

On 3 July 2020, the Authority granted SPS a new loan facility of up to \$250 million to fund the Market Development and Resilience Scheme (MDRS), a voluntary scheme to incentivise participating GENCOs (otherwise known as power generation companies) to ensure high operational reliability and develop the capabilities of their employees and adopt good labour management practices. The loan facility is unsecured and carry a fixed interest rate that approximated prevailing market rates at the time of issue.

To finance the loan to SPS, the Authority obtained an unsecured loan facility of up to \$250 million from the Government at a fixed interest rate which approximated to prevailing market rates at the time of issue. This is a back-to-back loan arrangement with SPS and the Government.

**Loan payables**

Current

Loan payable to the Government – SLNG Corp (d)

	<b>2021/22 \$'000</b>	2020/21 \$'000
Loan payable to the Government – SLNG Corp (d)	-	147,615

Loan payable to the Government – MDRS (e)

	<b>2021/22 \$'000</b>	2020/21 \$'000
Loan payable to the Government – MDRS (e)	89,462	145,449

Loan payable to the Bank - FSC (f)

	<b>2021/22 \$'000</b>	2020/21 \$'000
Loan payable to the Bank - FSC (f)	41,020	28,117

Loan payable to the Bank – Uncommitted Loans (g)

	<b>2021/22 \$'000</b>	2020/21 \$'000
Loan payable to the Bank – Uncommitted Loans (g)	400,000	-

	<b>2021/22 \$'000</b>	2020/21 \$'000
	<b>530,482</b>	321,181

Non-Current

Loan payable to the Government – MDRS (e)

	<b>2021/22 \$'000</b>	2020/21 \$'000
Loan payable to the Government – MDRS (e)	118,721	158,124

	<b>2021/22 \$'000</b>	2020/21 \$'000
	<b>118,721</b>	168,631

**Total loan payables**

	<b>2021/22 \$'000</b>	2020/21 \$'000
	<b>649,203</b>	489,812

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**15. Loan receivables and loan payables (continued)**

(d) **Loan payable to the Government – SLNG Corp**

	<b>2021/22 \$'000</b>	2020/21 \$'000
As at 1 April	<b>147,615</b>	186,639
Loan drawdown during the year	-	-
Loan repayment during the year	(147,615)	(39,024)
As at 31 March	-	147,615

Current

(e) **Loan payable to the Government – MDRS**

	<b>2021/22 \$'000</b>	2020/21 \$'000
As at 1 April	<b>155,956</b>	-
Loan drawdown during the year	83,170	155,956
Loan repayment during the year	(149,664)	-
As at 31 March	<b>89,462</b>	155,956

Current

Non-current

(f) **Loan payable to the Bank - FSC**

	<b>2021/22 \$'000</b>	2020/21 \$'000
As at 1 April	<b>186,241</b>	203,160
Loan drawdown during the year	-	-
Loan repayment during the year	(26,239)	(17,061)
Loan extension fees	(568)	-
Amortisation of upfront and extension fees	307	142
As at 31 March	<b>159,741</b>	186,241

Current

Non-current

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**15. Loan receivables and loan payables (continued)**

(g) Loan payable to the Bank – Uncommitted Loans

	<b>2021/22 \$'000</b>	2020/21 \$'000
As at 1 April	-	-
Loan drawdown during the year	<b>400,000</b>	-
As at 31 March	<b>400,000</b>	-
Current	<b>400,000</b>	-

As all the financing charges related to the Government and bank loans, with the exception of uncommitted loan from the bank, are recovered from SLNG Corp and SPS at cost, the expenses and revenue related to the three loan facilities are netted off in the statement of comprehensive income. Financing charges related to uncommitted loans from banks are recognised as interest expense under "Operating expenses" (Note 4).

**16. Interest receivables and interest payables**

	<b>2021/22 \$'000</b>	2020/21 \$'000
<b>Interest receivables</b>		
<u>Current</u>		
Interest receivable from SLNG Corp (a)	-	8,917
Interest receivable from SPS – FSC (b)	<b>51</b>	98
	<b>51</b>	<b>9,015</b>
<u>Non-Current</u>		
Interest receivable from SLNG Corp (a)	-	4,749
<b>Total interest receivables</b>	<b>51</b>	<b>13,764</b>
<b>Interest payables</b>		
<u>Current</u>		
Interest payable to the Government – SLNG Corp (c)	-	8,917
Interest payable to the Bank – FSC (d)	<b>51</b>	98
Interest payable to the Banks – Uncommitted Loans (e)	<b>221</b>	-
<b>Total interest payables</b>	<b>272</b>	<b>9,015</b>

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**16. Interest receivables and interest payables (continued)**

(a) Interest receivable from SLNG Corp

	<b>2021/22 \$'000</b>	2020/21 \$'000
As at 1 April	<b>13,666</b>	15,759
Interest charged during the year	864	5,766
Interest repayment during the year	(14,530)	(7,859)
As at 31 March	-	13,666
Current	-	8,917
Non-current	-	4,749

(b) Interest receivable from SPS – FSC

	<b>2021/22 \$'000</b>	2020/21 \$'000
As at 1 April	98	58
Interest charged during the year	993	1,131
Interest repayment during the year	(1,040)	(1,091)
As at 31 March	<b>51</b>	98
Current	<b>51</b>	98

(c) Interest payable to the Government – SLNG Corp

	<b>2021/22 \$'000</b>	2020/21 \$'000
As at 1 April	<b>8,917</b>	11,890
Interest charged during the year	815	4,886
Interest repayment during the year	(9,732)	(7,859)
As at 31 March	-	8,917
Current	-	8,917

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**16. Interest receivables and interest payables (continued)**

(d) Interest payable to the Bank – FSC

	<b>2021/22</b> \$'000	2020/21 \$'000
As at 1 April	98	58
Interest charged during the year	993	1,131
Interest repayment during the year	(1,040)	(1,091)
As at 31 March	<b>51</b>	98

Current

**51**

98

(e) Interest payable to the Banks – Uncommitted Loans

	<b>2021/22</b> \$'000	2020/21 \$'000
As at 1 April	-	-
Interest charged during the year	1,022	-
Interest repayment during the year	(801)	-

As at 31 March

**221**

-

Current

**221**

-

**17. Contingent liabilities**

On 26 October 2021, the Authority appointed SLNG Corp as Standby Liquified Natural Gas (“LNG”) Manager for the Standby LNG Facility (“SLF”) that EMA is implementing as a pre-emptive measure to secure Singapore’s gas and electricity supply. As the appointed Standby LNG Manager, SLNG Corp inter alia procures, manages and facilitates the drawdown and replenishment of LNG supplied to Gencos under the SLF, and coordinates with the appointed Standby LNG Facilitator, the Gencos and the Gas Transporter to send out and convey gas as instructed by the Authority to the relevant Gencos under the SLF. The SLF is currently expected to be in place until 31 March 2023.

The Authority has undertaken to keep SLNG Corp financially whole and shall indemnify SLNG Corp on demand against any and all incremental costs, expenses, losses, liabilities or penalties incurred by SLNG Corp arising from SLNG Corp fulfilling its role as a reasonable and prudent Standby LNG Manager, when such circumstances arise. As at the date of these financial statements, the Authority is of the view that it is not probable that any significant liability will arise as a result of this undertaking as there is no actual or potential claims by SLNG Corp arising from this undertaking. Furthermore, such claims are part of the cost of enhancing energy supply security and recoverable from energy consumers.

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**18. Outstanding capital and loan commitments**

The Authority has procurement commitments for fixed assets incidental to its ordinary course of business. The outstanding capital commitments as at 31 March 2022 for the Authority amounted to \$7.5 million (31 March 2021: \$3.0 million).

The Authority has entered into loan agreements with SLNG Corp and SPS. The outstanding undrawn loan commitment amounted to Nil (31 March 2021: \$394.0 million) which pertains to back-to-back agreements which the Authority signed with the Government of the Republic of Singapore (“the Government”).

**19. Financial risk management**

The Authority is exposed to financial risks arising from its operations and the use of financial instruments. The financial risks include interest rate risk, credit risk and liquidity risk. The Authority has established processes to monitor and manage these risks in a timely manner.

The following section provides details regarding the Authority's exposure to the above-mentioned financial risks and the objectives, policies and processes for the management of these risks.

There has been no change to the Authority's exposure to these financial risks or the manner in which it manages and measures the risks.

(a) Interest rate risk

At the end of the reporting period, the interest rate profile of the interest-earning financial instruments were:

	<b>2021/22</b> \$'000	2020/21 \$'000
<b>Variable rate instruments</b>		
Cash with AGD	346,746	154,388
Loan payable to Bank – Uncommitted Loans	<b>400,000</b>	-

Surplus cash are placed with AGD (under CLM as set out in the Accountant-General's Circular No. 4/2009 Centralised Liquidity Management for Statutory Boards and Ministries).

**19. Financial risk management (continued)**

## (a) Interest rate risk (continued)

*Sensitivity analysis for interest rate risk*

The interest rates for Cash with AGD are based on deposit rates determined by the financial institutions with which the cash are deposited and are expected to move in tandem with market interest rate movements. If the variable interest rates had been 48 (FY2020/21: 115) basis points or 0.48% per annum (FY2020/21: 1.15% per annum) higher/lower at the end of the reporting period with all other variables held constant, the Authority's net deficit before GCF (FY2020/21: net surplus before GCF) would have been lower/higher by about \$1.7 million (FY2020/21: higher/lower by about \$1.8 million). The assumed movement in basis points for interest rate sensitivity analysis is based on the currently observable market environment.

The interest rates for loan payable to banks – uncommitted loans are based on variable borrowing rates determined by the financial institutions and are expected to move in tandem with market interest rate movements. If the variable interest rates had been 3 (FY2020/21: Nil) basis points or 0.03% per annum (FY2020/21: Nil) higher/lower at the end of the reporting period with all other variables held constant, the Authority's net deficit before GCF (FY2020/21: net surplus before GCF) will be higher/lower by about \$138,000 (FY2020/21: lower/higher by Nil). The assumed movement in basis points for interest rate sensitivity analysis is based on the currently observable market environment.

At the end of the reporting period, the following loan pertains to FSC floating rate loan (Note 15(b) and 15(f)):

	2021/22 \$'000	2020/21 \$'000
Loan payable	<b>(159,741)</b>	(186,241)
Loan receivable	<b>159,741</b>	186,241

As all financing costs related to the loan payable to bank are recovered from SPS, there is no interest rate risk impact on the net deficit/surplus for the current and prior financial years.

## (b) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Authority.

The Authority's major classes of financial assets are cash and cash equivalents, other receivables, interest receivables and loan receivables.

**19. Financial risk management (continued)**

## (b) Credit risk (continued)

For other receivables, interest receivables and loan receivables, the borrowers, SLNG Corp and SPS, are established corporations with good financial standing. Management believes that these receivables are exposed to immaterial credit risks.

For cash and cash equivalents, these are placed with AGD. Management believes that minimal credit risks exist with respect to the funds placed with AGD.

The carrying amount of other receivables, loan receivables, interest receivables and cash and cash equivalents represent the Authority's maximum exposure to credit risk. No other financial assets carry a significant exposure to credit risk.

## (c) Liquidity risk

Liquidity risk is the risk that the Authority will encounter difficulty in meeting obligations due to shortage of funds. The Authority's exposure to liquidity risk arises primarily from mismatches of the maturities of non-derivative financial liabilities. To manage liquidity risk, the Authority monitors its net operating cash flows and maintains an adequate level of cash and cash equivalents.

*Analysis of financial instruments by remaining contractual maturities*

The table below summarises the maturity profile of the Authority's financial liabilities at the end of the reporting period based on contractual undiscounted repayment obligations:

	Less than 1 year \$'000	Between 2 to 5 years \$'000
<b>2021/22</b>		
Interest payable to bank	3,426	2,446
Loan payable to bank <sup>#</sup>	<b>441,342</b>	119,123
Interest payable to the Government	358	-
Loan payable to the Government	89,462	-
Lease liabilities	4,066	7,351
Other payables*	29,356	-
<b>Total net undiscounted financial liabilities</b>	<b>568,010</b>	128,920
<b>2020/21</b>		
Interest payable to bank	1,665	3,290
Loan payable to bank <sup>#</sup>	28,260	158,445
Interest payable to the Government	12,529	15
Loan payable to the Government	293,064	10,507
Lease liabilities	4,045	11,349
Other payables*	23,748	-
<b>Total net undiscounted financial liabilities</b>	<b>363,311</b>	183,606

<sup>#</sup> Excludes amortised upfront and extension fee

\* Excludes provision and GST payables

**19. Financial risk management (continued)**

## (d) Fair value measurements

The carrying amounts of cash and cash equivalents, other current receivables, current loan receivables and interest receivables, other current payables, current loan payables and interest payables approximate their respective fair values due to the relatively short-term maturity of these financial instruments.

Fair value of fixed-rate loans is calculated based on the present value of future cash flows, discounted at rates of 0.50% (FY2020/21: 1.12%, 1.29% and 1.45%) per annum, which are determined based on 1 year (FY2020/21: 1 year, 2 years and 3 years) swap offer rates respectively at the end of the reporting period plus an adequate credit spread.

The Authority classifies fair value measurements using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The fair value hierarchy has the following levels:

- (i) quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1);
- (ii) inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices) (Level 2); and
- (iii) inputs for the asset or liability that are not based on observable market data (unobservable inputs (Level 3)

The fair values are within level 2 of fair value hierarchy:

	Level 2 \$'000
<b>2021/22</b>	
Fixed rate loan due from SPS, including accrued interests	<b>89,718</b>
Fixed rate loan due to Government, including accrued interests	<b>(89,718)</b>
<b>2020/21</b>	
Fixed rate loan due from SLNG Corp, including accrued interests	202,283
Fixed rate loan due from SPS, including accrued interests	239,677
Fixed rate loan due to Government, including accrued interests	<b>(396,585)</b>

**19. Financial risk management (continued)**

## (e) Financial instruments by category

The carrying amounts of the different categories of financial instruments are as follows:

	2021/22 \$'000	2020/21 \$'000
<b>Financial assets at amortised cost</b>		
Other receivables*	62,824	16,323
Cash and cash equivalents	346,746	154,389
Interest receivables	51	13,764
Loan receivables	<b>449,203</b>	529,812
	<b>858,824</b>	714,288

**Financial liabilities at amortised cost**

	2021/22 \$'000	2020/21 \$'000
<b>Financial liabilities at amortised cost</b>		
Other payables*	29,356	23,748
Contract liabilities	-	2,851
Lease liabilities	11,263	15,116
Interest payables	272	9,015
Loan payables	<b>649,203</b>	489,812
	<b>690,094</b>	540,542

# Excludes prepayments

\* Excludes provision and GST payables

**20. Related party transactions**

Some of the Authority's transactions and arrangements are with related parties and the effect of these on the basis determined between the parties is reflected in these financial statements. The balances are unsecured, interest-free and repayable on demand unless otherwise stated.

The Authority had the following significant transactions with its related parties during the year:

	2021/22 \$'000	2020/21 \$'000
<i>Ministry of Trade and Industry</i>		
Operating Grant	<b>22,906</b>	4,427
<i>Singapore LNG Corporation Pte Ltd</i>		
Public Licence Fees	<b>3,477</b>	3,189

## 20. Related party transactions (continued)

Key management personnel compensation

	2021/22 \$'000	2020/21 \$'000
Authority members' allowance	167	152
Salaries, bonuses and allowances	2,357	2,500
CPF contributions	74	83
	<b>2,598</b>	<b>2,735</b>

## 21. Events occurring after the reporting period

On 16 June 2022, the Authority had incorporated a wholly owned subsidiary, Meranti Power Pte. Ltd., with a share capital of \$1.

The Authority had determined that this event is a non-adjusting subsequent event. Accordingly, these financial statements for the financial year ended 31 March 2022 do not reflect the Authority's investment in a subsidiary, which will be accounted for in the financial year ending 31 March 2023.

## 22. Comparative information

## (a) Operating expenses

During FY2021/22, the Authority has reclassified certain expenses presented under operating expenses in Note 4 of the financial statements from 'administration' to 'manpower' and 'others'. Comparative amounts in Note 4 operating expenses were reclassified for consistency purposes.

	Before reclassification 31.03.2021	Reclassification made	After reclassification 31.03.2021
	\$'000	\$'000	\$'000
<b>Operating expenses</b>			
Manpower	42,773	350	43,123
Administration	3,036	(939)	2,097
Others	5,123	589	5,712

## 22. Comparative information (continued)

## (b) Fixed assets

During FY2021/22, the Authority has modified the fixed assets' classification of 'computer systems' and 'micro-computer and software' and presented as 'computer systems, hardware and software' in Note 7 of the financial statements. Comparative amounts in Note 7 fixed assets were reclassified for consistency purposes.

	Before reclassification 31.03.2021	Reclassification made	After reclassification 31.03.2021
	\$'000	\$'000	\$'000

**Fixed assets***Computer systems*

Cost	27,821	(27,821)	-
Accumulated depreciation	22,651	(22,651)	-

*Micro-computer and software*

Cost	495	(495)	-
Accumulated depreciation	467	(467)	-

*Computer systems, hardware and software*

Cost	-	28,316	28,316
Accumulated depreciation	-	23,118	23,118

## (c) Other payables and provisions

During FY2021/22, the Authority has reclassified GST payables presented under other payables and provisions in Note 12 of the financial statements from 'other creditors and accruals' to 'GST payables'. Comparative amounts in Note 12 other payables and provisions were reclassified for consistency purposes.

	Before reclassification 31.03.2021	Reclassification made	After reclassification 31.03.2021
	\$'000	\$'000	\$'000

**Other payables and provisions**

Other creditors and accruals	20,769	(290)	20,479
GST payables	-	290	290

**23. New or revised accounting standards and interpretations**

Below are the mandatory standards, amendments and interpretations to existing standards that have been published, and are relevant for the Authority's accounting periods beginning on or after 1 April 2022 and which the Authority has not early adopted.

[Amendments to SB-FRS 1 \*Presentation of Financial Statements: Classification of Liabilities as Current or Non-current\* \(effective for annual periods beginning on or after 1 January 2023\)](#)

The narrow-scope amendments to SB-FRS 1 *Presentation of Financial Statements* clarify that liabilities are classified as either current or non-current, depending on the rights that exist at the end of the reporting period. Classification is unaffected by the expectations of the entity or events after the reporting date (e.g. the receipt of a waiver or a breach of covenant). The amendments also clarify what SB-FRS 1 means when it refers to the 'settlement' of a liability. The amendments could affect the classification of liabilities, particularly for entities that previously considered management's intentions to determine classification and for some liabilities that can be converted into equity. The Authority does not expect any significant impact arising from applying these amendments.

[Amendments to SB-FRS 16 \*Property, Plant and Equipment: Proceeds before Intended Use\* \(effective for annual periods beginning on or after 1 January 2022\)](#)

The amendment to SB-FRS 16 *Property, Plant and Equipment* prohibits an entity from deducting from the cost of an item of any proceeds received from selling items produced while the entity is preparing the asset for its intended use. It also clarifies that an entity is 'testing whether the asset is functioning properly' when it assesses the technical and physical performance of the asset. The financial performance of the asset is not relevant to this assessment.

Entities must disclose separately the amounts of proceeds and costs relating to items produced that are not an output of the entity's ordinary activities. The Authority does not expect any significant impact arising from applying these amendments.

**24. Authorisation of financial statements**

The financial statements of the Authority for the financial year ended 31 March 2022 were authorised for issue in accordance with a resolution of the Authority on 1 July 2022.

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