Today, our world faces its most urgent crisis.

**Look** at the melting polar ice caps, weather extremes, floods and droughts.

**Think** what it means if we let our planet go past the tipping point of 1.5 degrees Celsius – we are already one degree warmer, and will soon hit half a degree more if we do nothing.

**Act** boldly and purposefully to reduce pollution and waste, and halve our carbon emissions by 2030.

Temasek stands ready to invest for a cooler, better world – one that is more sustainable for people, lives and livelihoods.

Let's do well, do right, do good.

Now, together... before it’s too late.
The Temasek Charter

An active investor and shareholder

We deliver sustainable value over the long term

A forward looking institution

We act with integrity and are committed to the pursuit of excellence

A trusted steward

We strive for the advancement of our communities across generations

Explore Temasek Review 2019 at temasekreview.com.sg or scan the QR code

Enjoying the lush greenery at Punggol Waterway Park.
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Ten-year Performance Overview

We ended the year with a net portfolio value of S$313 billion\(^1\).

<table>
<thead>
<tr>
<th>Net portfolio value</th>
<th>S$313b</th>
</tr>
</thead>
</table>

**Net Portfolio Value (S$b)**

- 2019: S$313b
- 2018: S$275b
- 2017: S$266b
- 2016: S$242b
- 2015: S$242b
- 2014: S$275b
- 2013: S$266b
- 2012: S$223b
- 2011: S$186b
- 2010: S$198b
- 2009: S$130b

**Invested during the year**

- S$24b

**One-year return to shareholder**

- 1.49%

**S$ Total Shareholder Return (%)**

- Since 1974: 15%
- 40-year: 15%
- 30-year: 12%
- 20-year: 9%
- 10-year: 7%
- 1-year: 1%

**Ten-year return to shareholder**

- 9%

**Rolling S$ Total Shareholder Return (%)**

- 20-year: 9%
- 10-year: 9%
- 1-year: 1%

Read about our Total Shareholder Return at temasekreview.com.sg/tsr or scan the QR code

\(^1\) Equivalent to US$231 billion as at 31 March 2019.

\(^2\) As at 31 March 2019. TSR in US$ terms was -2%, 10%, 9%, 14%, 16% and 16% for 1, 10, 20, 30, 40-year and since inception periods respectively.
Portfolio Highlights

Two thirds of our underlying exposure is in Asia.

(as at 31 March)

<table>
<thead>
<tr>
<th>Geography (%)</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
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<tbody>
<tr>
<td>Singapore</td>
<td>26</td>
<td>27</td>
<td>29</td>
</tr>
<tr>
<td>China</td>
<td>26</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>North America</td>
<td>15</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Asia (ex Singapore &amp; China)</td>
<td>14</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Europe</td>
<td>10</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Australia &amp; New Zealand</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Africa, Central Asia &amp; the Middle East</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Latin America</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sector (%)</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Services</td>
<td>25</td>
<td>26</td>
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<tr>
<td>Telecommunications, Media &amp; Technology</td>
<td>20</td>
<td>21</td>
<td>23</td>
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<tr>
<td>Consumer &amp; Real Estate</td>
<td>17</td>
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<td>Transportation &amp; Industrials</td>
<td>16</td>
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<td>17</td>
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<tr>
<td>Life Sciences &amp; Agribusiness</td>
<td>7</td>
<td>6</td>
<td>4</td>
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<tr>
<td>Energy &amp; Resources</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Multi-sector Funds</td>
<td>8</td>
<td>8</td>
<td>8</td>
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<td>Others (including Credit)</td>
<td>4</td>
<td>4</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Liquidity (%)</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
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<tbody>
<tr>
<td>Liquid &amp; sub-20% listed assets</td>
<td>36</td>
<td>36</td>
<td>33</td>
</tr>
<tr>
<td>Listed large blocs (≥ 20% and &lt; 50% share)</td>
<td>10</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Listed large blocs (≥ 50% share)</td>
<td>12</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Unlisted assets</td>
<td>42</td>
<td>39</td>
<td>40</td>
</tr>
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</table>

Find out more about our portfolio at temasekreview.com.sg/portfoliohighlights or scan the QR code

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3 Distribution based on underlying assets.
4 Exchange rates as at 31 March 2019.
5 Mainly cash and cash equivalents, and sub-20% listed assets.
While equity markets have been volatile over the past year and a half, we may well look back to this year as an inflexion point across several global fronts.

Economically, concerns about premature policy tightening and its implications for global growth gave way to escalating tensions, particularly between the US and China. While the increasingly challenging global environment may dampen business confidence and investment, we expect policymakers to be primed for dovish policies. The low interest rate environment is likely to persist if growth remains weak. This could lower returns expectations into the foreseeable future.

We remain watchful around the risks of a late cycle recession in the US. Brexit and political fragmentation continue to weigh on Europe, while China has yet to move fully to restructure its economy for longer term sustainability. These issues have key repercussions on global sentiments and sustainable growth for the longer term.

Today, climate change is the most critical challenge facing humanity. The Intergovernmental Panel on Climate Change has warned that we have until 2030 to reverse the global carbon and greenhouse gas emissions. We are already one degree warmer, with a margin of only half a degree more before we hit the tipping point of 1.5 degrees Celsius.

**Portfolio Performance**

Our investment focus is driven by structural trends in transformational technologies, sustainable living, longer lifespans and changing consumption patterns.

During the year, we invested S$24 billion and divested S$28 billion, reflecting the deliberate tempering of our investment pace over the year.

As at 31 March 2019, our net portfolio value was S$313 billion. US$231 billion as at 31 March 2019.

We delivered a one-year Total Shareholder Return (TSR) of 1.49%, with three-year TSR at 8.88%. Longer term 10-year and 20-year TSRs were 9% and 7% respectively. TSR since inception in 1974 was 15%.

Our Wealth Added was S$18 billion below our risk-adjusted cost of capital of 7% aggregated across our portfolio.

Dividend income from our portfolio was S$9 billion.

We ended the year in a net cash position. Our cash and bank balances, together with our short term investments, were three times our S$15 billion outstanding debt.
Group Financials

Temasek adopted the International Financial Reporting Standards (IFRS), in line with Singapore's convergence with IFRS, with effect from 2018. This included the new IFRS 9: Financial Instruments standard, which impacts how we report the accounting profits or losses in our group financials.

IFRS 9 requires unrealised mark to market gains or losses of sub-20% investments to be accounted as profits or losses in our income statements, even when no sale has occurred. This will lead to material fluctuations in our reported profits or losses from the year-to-year paper gains or losses. We have provided additional disclosures of our Group net profit, excluding unrealised gains or losses of sub-20% investments, to facilitate comparisons with our past years’ income statements.

To deliver sustainable value over the long term, we focus on the performance of our portfolio over the longer time horizon, and the corresponding risk-adjusted cost of capital. We do not manage for year-to-year accounting profitability.

Navigating a Complex World

Global growth has already begun to moderate. This may be worsened by the growing trade and geopolitical tensions.

The outlook in China may come under more pressure from a prolonged standoff with the US. This is mitigated by room for policy easing and awareness of macro risks. Hence, we remain optimistic on China's trajectory in the medium term, and expect more reform efforts to transit the economy towards a more sustainable growth path.

In the US, we expect the Federal Reserve to ease monetary policy in the near term as growth has already started to slow, and inflation remains below target. While this will reduce the risk of a Fed-induced recession, a slower growth trajectory may leave the economy more vulnerable to a large negative confidence shock, such as a much harder stance on China.

Growth in Europe has slowed over the past year. While the European Central Bank remains accommodative, Europe has little policy space, and will be more vulnerable to shocks.

In Singapore, activity is moderating alongside slowing global growth. There may be further downside risks from the escalation of geopolitical tensions, though Singapore may benefit from increased trade and investment into the ASEAN region. We expect certain segments of the economy, including professional, financial and technology services, to remain resilient.

S$313b

Net portfolio value as at 31 March 2019

We do not manage our portfolio for year-to-year accounting profitability.
We continue to share insights and best practices with our portfolio companies, through forums on reputation issues and crisis communications, and cybersecurity.

We continue to refresh and deepen our bench strength ahead of disruptive challenges and opportunities in an increasingly complex business environment. This includes initiatives in our IT backbone and cybersecurity, as well as two Agile pods in Blockchain and Artificial Intelligence.

In terms of leadership transition, Dilhan Pillay succeeded Lee Theng Kiat as Chief Executive Officer of Temasek International (TI) on 1 April this year. Theng Kiat took over from Ho Ching as Chairman of TI, and is concurrently appointed Executive Director of Temasek Holdings, to support and guide Dilhan and the management team as we continue to build Temasek as a forward looking institution.

I am confident we have a strong team in place, led by Dilhan, to take Temasek forward in the decade ahead.

**In Appreciation**

Temasek’s greatest asset is our people. I thank the many generations of Boards, management and staff, past and present, who have given their time and dedication to shape our common future.

I thank my colleagues on the Temasek Board for their tireless and generous contributions during the year.

We were deeply saddened by the passing of Mr Kua Hong Pak on 31 October 2018. He has been our longest serving Board Director, and was an outstanding Chairman of our Audit Committee. We will always be grateful for his unwavering dedication and guidance over many years.

On 11 February this year, we welcomed Mr Fu Chengyu to our Board.

In October last year, we issued our T2023-S$ Temasek Bond. For the first time, we enabled retail investors in Singapore to participate in the issue. We were very pleased with the take up, and welcomed over 50,000 new Singapore retail investors to our base of stakeholders.

I am thankful to our shareholder, bondholders, co-investors, partners, regulators, philanthropic organisations, and the public, for their guidance and support. We also benefitted from the wisdom of our international and regional advisors, for which I thank them.
Capital with Purpose

In June, we launched the Temasek Shophouse as our gift for social impact in Singapore and beyond. Temasek Shophouse aims to be a convenor for community collaboration and a catalyst for advancing sustainability.

We will continue to work with governments, corporate partners, non-government organisations, multilateral and regional agencies, and individuals to reduce greenhouse emissions and pollution, and invest in solutions for a more sustainable world.

Temasek is an investor, institution and steward.

Our three roles are founded upon our commitment to do well, the determination to do right, and the inspiration to do good. Ultimately, we can thrive over the long term only if our communities do well, and we do right and good for our people, institution and planet.

Everyone can make a real difference if we look with a clear eye at the world around us, think critically about the problems we are facing, and act boldly to develop and implement solutions.

Today, climate change is clearly the most urgent and critical issue confronting the global community. We owe it to future generations to take action, and put our planet on a sustainable footing. Our efforts, no matter how big or small, can make a difference to shape our collective future.

Let us look, think and act – now, together.

LIM BOON HENG
Chairman
July 2019

We owe it to future generations to put our planet on a sustainable footing.
The DNA of Temasek

Contemporaneous records in the 14th century told of an ancient Temasek with historical links to Java, China and Vietnam.

Perhaps rooted in the Javanese word, tasik, for lake, Tumasik was listed as a vassal of the Majapahit empire in a 1365 Javanese court poem, Nagarakretagama. Wang Dayuan of China described two trading settlements in 淡马锡, or Tan-Ma-Si, in a 1349 account of his travels. Vietnamese records noted Malay envoys arriving at their court from Sach-ma-tich in 1330.

These ancient names of Temasek evoke the image of an active sea town, whose fortunes have ebbed and flowed in the centuries since. It re-emerged as a thriving free port and modern Singapore with the arrival of Sir Stamford Raffles in 1819. It achieved local self-government in 1959, and became independent in 1965.

Our DNA of Thrift

The neophyte leaders of Singapore inherited a troubling budget deficit of S$14 million from their colonial masters in their first year. They pruned hard to deliver a S$1 million surplus when the year ended.

This seeded the Singapore DNA of thrift, courage and integrity.

Post-independence in 1965, Singapore grew its assets to S$3.3 billion by 1969, even as she strove mightily to attract investments, create jobs, and build homes for her people.

A Pragmatic Experiment

1974 was nine years after independence – Singapore could breathe a little easier.

The Government carved out an eclectic portfolio of investments, which had been seeded in the fledgling days of economic survival. There was to be a clear division of governance between Government as a policymaker and Temasek as a commercial shareholder and owner.

Temasek was thus born in 1974, with a S$354 million portfolio of 35 diverse commercial businesses, including some cash.

An Active Investor

Temasek was an active investment manager by 1979. The 1980s saw some companies sold off, while others, like Singapore Airlines, were listed. Some, like DBS, still anchor our portfolio.

The 1990s saw some Government monopolies divested to or through Temasek. Some 1.4 million Singaporeans invested in Singtel alongside other investors during its public listing in 1993. These moves were meant to foster a more open and competitive economy, a vibrant private sector, and an active stock market.

Stepping Out

In 2002, Temasek decided to step out to grow with an emerging Asia.

Severe Acute Respiratory Syndrome (SARS) struck in early 2003. Nonetheless, some S$10 billion was invested in the region in 2004.

By 2018, Temasek had become a global investor, with 11 offices in Asia, the Americas and Europe.

See our initial portfolio at temasekreview.com.sg/portfolioatinception or scan the QR code
The DNA of Temasek

Opening Up
Temasek has been sharing our performance in our annual Temasek Review, since 2004.

Moody’s Investors Service and S&P Global Ratings rated Temasek for the first time in 2004. Their respective top ratings of Aaa/AAA set the stage for our inaugural US$ Temasek Bond issuance in 2005, to create a new group of global and Singapore stakeholders. We have issued Temasek Bonds over the years, including most recently to retail investors in Singapore.

Our Temasek Review, Credit Profile and Temasek Bonds are public markers to reinforce our resolve to be a robust and disciplined institution through generations.

Breaking New Ground
Temasek’s early portfolio reflected a spirit of venture and innovation, from a startup airline that came to epitomise innovation and service in the industry, to the creation of a development bank, and the early adoption of shipping containerisation. Indeed, Temasek itself was an untested experiment.

The creation of our Enterprise Development Group in 2013 rekindled this spirit of boldness and innovation, to spur us to invest in early stage ideas, and reprise our early role as an innovative enterprise builder.

Do Well, Do Right, Do Good
The Temasek DNA is to do well, do right and do good, as an investor, institution and steward.

We work to add value to our portfolio companies, foster the right values in our people, and care for our communities and planet.

Temasek and its portfolio companies were tested over the years, most severely when Singapore saw a sharp recession in 1985, the Asian Financial Crisis in 1997, SARS in 2003, and the Global Financial Crisis in 2008.

Temasek senior management led by example, volunteering heftier pay cuts than its junior staff, to encourage its portfolio companies and their workforce to pull through these storms together.

Temasek Trust is the financial custodian of non-profit endowments we had been seeding since 2003. Temasek Foundation is separately entrusted to develop programmes for specific community mandates. Temasek staff also volunteer directly through T-Touch to help those in need, including the elderly and ex-offenders.

Advocating an abc World
Since 2014, Temasek has been promoting the twinning of ecology and prosperity as a sustainable pathway for growth. We want to play our part to create an abc World – of active economies, beautiful societies and a clean Earth.

Governments, businesses, civil societies and individuals – let’s all act now together for a more sustainable and cooler Earth.

This is our common heritage, for humanity now and into the future.
Changes in Accounting Standards

Temasek adopted the International Financial Reporting Standards (IFRS) last year. This includes the new IFRS 9: Financial Instruments standard, which impacts how we report the accounting profits or losses in our group financials.

Adopting IFRS 9

The IFRS 9 accounting standard affects investments where we hold stakes of less than 20%.

Prior to IFRS 9, our income statements will account for any realised gains or losses over the life cycle of our investments whenever we sell any of them. Year-to-year changes in market values of our sub-20% investments are captured in our balance sheet, and have no impact on the reported profits or losses in our income statements.

With IFRS 9, year-to-year changes in the market value of all our sub-20% investments are accounted as profits or losses in our income statements, even when no sale has occurred.

Sub-20% stakes comprised about 40% of our portfolio. Thus, the adoption of IFRS 9 will lead to material fluctuations in our reported profits or losses in our income statements due to the year-to-year paper gains or losses. Such market fluctuations do not reflect the potential gains or losses upon a sale.

<table>
<thead>
<tr>
<th>With IFRS 9, Temasek’s Group net profit now includes:</th>
<th>All Realised Gains or Losses</th>
<th>+ Unrealised Gains or Losses of Sub-20% Investments</th>
</tr>
</thead>
</table>

Did you know?

**Unrealised Gains or Losses**
Share price movements in the market can result in changes in value. These are also known as paper gains or losses, or mark to market gains or losses.

**Sub-20% Investments**
These are minority investments where we have less than 20% shareholding.

Providing Additional Disclosures

To facilitate comparisons with past years’ Group net profits before the adoption of IFRS 9, we have provided additional disclosures in our Group Financial Summary:

i. Unrealised gains or losses of sub-20% investments; and

ii. Group net profit without unrealised gains or losses of sub-20% investments.

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1 See pages 48 to 53 for our Group Financial Summary.
Simulated Impact on Temasek's Group Financials

The solid blue line in the chart below provides the audited Group net profit for the past 10 years, under the Singapore Financial Reporting Standards which do not include mark to market gains or losses.

The dotted pink line provides the simulated Group net profit to include unrealised gains or losses of our sub-20% investments in a simple way.

The dark purple dot of 2019 audited data includes the unrealised gains or losses of our sub-20% investments, based on the IFRS 9 accounting standard.

No Impact on Other Measures

IFRS 9 does not impact the following:

- Net Portfolio Value
- Total Shareholder Return
- Credit Profile

As an investor, we aim to deliver sustainable value over the long term. Hence, we focus on the performance of our portfolio over the longer time horizon, and the corresponding risk-adjusted cost of capital. We do not manage for year-to-year accounting profitability.

2 From financial year ended 31 March 2019, IFRS 9 requires unrealised gains or losses of sub-20% investments to be included in the Group net profit.
Committed to
Do well
(From left) Sng Ren Yeong and his daughter, Sarah, discover how farming innovations contribute to food security at Kok Fah Technology Farm.
How We Invest

We are an active investor and owner, focused on delivering sustainable value over the long term, to ultimately achieve a better world for this and future generations.

Since our inception, we have evolved from a Singapore investor to a global investor. Our investment philosophy has been underpinned over the last 17 years, by four basic investment themes:

- Transforming Economies
- Growing Middle Income Populations
- Deepening Comparative Advantages
- Emerging Champions

These themes find expression in several new trends, such as longer lifespans, sustainable living or a more connected world. We seek out companies that harness technological advancements, to meet the needs of demographic shifts, and other changing consumption patterns. Innovative companies may rapidly disrupt old business models, or create new consumption demand. We expect to reshape our portfolio increasingly in line with these structural trends.

Our investment discipline focuses on intrinsic value and our risk-return framework. We are driven by bottom-up intrinsic value tests for each opportunity, with returns tracked against a risk-adjusted cost of capital.

We have full flexibility as an owner and investor to reshape and rebalance our portfolio, whenever opportunities or challenges arise. We are mostly invested in equities, and based on our risk-return appetite, we invest or divest in line with our outlook and value tests. We may take concentrated positions or remain in cash, and do not set limits for asset classes, countries or sectors. We manage our liquidity and balance sheet for resilience.

We are an active shareholder, seeking to add or create value in our portfolio across all stages of enterprise growth, from early stage to mature companies. We share our perspectives on global or strategic trends frequently with partners, and the boards and management of our portfolio companies. We proactively promote good governance, looking to boards to drive strategy and oversee management, who, in turn, run their respective companies.

Our portfolio comprises both listed and unlisted assets, with the latter consisting of companies and funds. Our unlisted blue chip companies and our portfolio of high quality funds pay steady dividends and distributions.
How We Grew

We grew with Singapore in our early years, and stepped out in 2002 to build a second wing of growth with a transforming Asia. We have since invested into digital and sustainable opportunities around the world.

Our initial portfolio in 1974 reflected Singapore’s early stages of industrialisation. Some of these companies, and others added since, have grown into iconic Singapore brands such as Singapore Airlines and the Singapore Zoo. Others like DBS, Singtel and PSA have transformed into regional and global champions. In recent years, we have been investing in several trends driven by technological advances, demographic shifts, and changing consumption patterns.

We continue to seek innovative companies at the forefront of developing new, and possibly disruptive, solutions that create new opportunities, while addressing the growing needs of the world’s population.

As at 31 March 2019, our net portfolio value was S$313 billion.

Temasek Net Portfolio Value since Inception

See our initial portfolio at temasekreview.com.sg/portfolioatinception or scan the QR code

1 Incorporation of Temasek on 25 June 1974.
3 Financial year-end was changed from 31 December before 1993 to 31 March from 1994 onwards.
4 From the financial year ended 31 March 2006, the accounting standards require sub-20% investments to be marked to market.
The game changers in the digital era are companies that harness technology to increase efficiencies.

We continually review and reshape our portfolio towards our assessment of longer term trends, even as we watch medium term risks.

During the financial year ended 31 March 2019, we invested S$24 billion and divested S$28 billion.

Investment Highlights

In terms of sectors, a key investment focus is technology companies that ride on the long term trends we have identified.

During the year, we invested in UST Global, a digital solutions company providing advanced computing and digital services. Other investments included OlaCabs, an online ride-hailing company in India; DoorDash, a North American online marketplace for restaurant food delivery and takeout services; Zilingo, an e-commerce fashion platform in Singapore; and Bionexo, a Brazilian healthcare e-commerce company.

We remain interested in non-bank financial services such as fintech and payment systems. Investments include Ant Financial that operates the flagship Alipay payments platform; Flywire, a global cross-border payments provider; Pine Labs, a provider of retail point-of-sale solutions; and Global Payments, a global payment technology and software solutions provider.

Our life sciences investments included Aerogen, an innovative global medical device and therapeutics company; Dr. Agarwal’s Healthcare, a private eye care chain in India; Hangzhou Tigermed, a clinical contract research organisation supporting the development of innovative drugs in China; Orchard Therapeutics, a commercial stage biopharma company and global leader in gene therapy for rare diseases; and Surgery Partners, an operator of surgical facilities and ancillary services in the US.

Geographically, other investments in the US included Farmer’s Business Network, an agriculture analytics platform for farmers; and Rent the Runway, an online e-commerce website for renting designer apparel and accessories.

Across the Atlantic, we invested in Safran, an aircraft engine equipment manufacturer based in France.

Our China investments included WeWork China, a co-working space provider; and Gracell Biotechnologies, a next-generation cell therapy company.
We stepped up our divestment pace in cognisance of macroeconomic headwinds. Divestments included Gilead Sciences, Cargill Tropical Palm and Klabin. We continue to maintain significant holdings in Alibaba, CenturyLink and IHS Markit, even as we shed some stakes as part of our rebalancing. Post March 2019, we completed our divestment of Bank Danamon.

Southeast Asia is a growing area of interest in part from its expanding middle income population and thriving Internet economy. We remain invested in Indonesia, ranging from consumer and real estate, to emerging opportunities in technology and financial services.

Investing in Innovation

The game changers in the digital era are companies that harness technology to increase work efficiencies while meeting consumers’ needs in an affordable and convenient way. Artificial Intelligence (AI) solutions, in particular, have the potential to transform a wide range of industries.

During the year, we invested in several innovative early stage AI companies across the world. These included Eigen, an AI company targeting finance, law and professional services sectors; ThinCI, a semiconductor company that produces specialised chips to support AI applications; AirMap, an unmanned traffic management platform for drones; and Zipline, a commercial drone delivery company for medical products in developing countries.

We partnered the National Research Foundation in Singapore to commercialise intellectual property and create spinouts from publicly-funded research. Our joint venture company will invest from the seed and Series A stages through Series B and later rounds of these spinouts. During the year, we invested in Main Sequence Ventures, a platform built by the Australian Government’s science agency, CSIRO, to likewise commercialise innovation from its research ecosystem, including Australian universities.

We continued to invest in several Southeast Asian funds. These included Golden Gate Ventures, Jungle Ventures, Monk’s Hill, Openspace Ventures and Wavemaker Partners.
How We Manage Risks

There are inherent risks whenever we invest, divest, or hold our assets, and wherever we operate.

We adopt a long term view of our investments, with the flexibility to take concentrated positions or have a concentrated portfolio. We invest across all stages of a business life cycle, from early stage and unlisted, to large or listed assets. We do not have predefined concentration limits, or targets for investing by asset class, country, sector, theme or single name.

Our long investment horizon means we have a portfolio of mostly equities, including unlisted assets such as private equity funds, designed to deliver higher risk-adjusted returns over the long term.

Consequently, our portfolio is expected to have higher year-to-year volatility of annual returns, with higher risks of negative returns in any one year.

Our investment posture is to ride out such short term market volatility, and focus on generating sustainable long term returns.

Given the expected volatility, we manage our leverage and liquidity prudently for resilience and investment flexibility, even in times of extreme stress.

Legal & Regulatory

We comply with all obligations under Singapore laws and regulations, including those arising from international treaties and UN sanctions. We also comply with the laws and regulations of jurisdictions where we have investments or operations. Our Temasek Code of Ethics and Conduct (T-Code) and its related policies guide our Board directors and staff in their daily dealings and conduct.

Organisational Risk Management Framework

We track and manage risks proactively, through economic and market cycles, including specific risks at asset level.

To minimise operational risks, we embed risk management in our systems and processes. These include our approval authority delegation, company policies, standard operating procedures and risk reporting to our Board.

We do not manage our portfolio to short term mark to market changes. We evaluate potential sustained loss of our portfolio under various stress scenarios, as part of our intrinsic value discipline.
12-month Returns Outlook

We do not manage our portfolio for annual returns or profits – we share the Monte Carlo simulations of our portfolio to give our stakeholders a sense of the likely range of returns in the coming 12 months.

Applied to our current Temasek portfolio mix, our simulation shows a five-in-six chance that our one-year portfolio returns may range from -13% to +18%. Our annual returns range over -30% to +43% during the last decade or so, reflecting the volatile nature of a mostly equity portfolio.

In the chart below, narrower curves mean less volatility compared to the flatter curves of the 2008/09 Global Financial Crisis years.

(as at 31 March)

Simulation of 12-month Forward Portfolio Returns

We do not manage our portfolio for annual returns or profits – we share the Monte Carlo simulations of our portfolio to give our stakeholders a sense of the likely range of returns in the coming 12 months.

Applied to our current Temasek portfolio mix, our simulation shows a five-in-six chance that our one-year portfolio returns may range from -13% to +18%. Our annual returns range over -30% to +43% during the last decade or so, reflecting the volatile nature of a mostly equity portfolio.

In the chart below, narrower curves mean less volatility compared to the flatter curves of the 2008/09 Global Financial Crisis years.

(as at 31 March)

Simulation of 12-month Forward Portfolio Returns

<table>
<thead>
<tr>
<th>Five-in-six chance range of returns1</th>
<th>Actual TSR (%) a year later</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (%)</td>
<td>High (%)</td>
</tr>
<tr>
<td>20062</td>
<td>-10</td>
</tr>
<tr>
<td>20084</td>
<td>-30</td>
</tr>
<tr>
<td>20094</td>
<td>-30</td>
</tr>
<tr>
<td>20113</td>
<td>-17</td>
</tr>
<tr>
<td>20152</td>
<td>-12</td>
</tr>
<tr>
<td>20163</td>
<td>-21</td>
</tr>
<tr>
<td>20183</td>
<td>-17</td>
</tr>
<tr>
<td>20192</td>
<td>-13</td>
</tr>
</tbody>
</table>

1 Based on Monte Carlo simulation for 12-month forward portfolio returns distribution, assuming no change in market conditions or portfolio mix.
2 Periods of low market volatility.
3 Periods of medium market volatility.
4 Periods of high market volatility.
20-year Returns Outlook

Our T-GEM, or Temasek Geometric Expected Return Model, simulates the range of possible returns for our portfolio over the next 20 years. These simulations are not meant to predict actual outcomes.

20-year Expected Returns for Different Portfolio Mix

As shown in the charts below, the Temasek Portfolio has the highest upside potential at the end of the 20-year period, but also the highest volatility. The Global Bond Portfolio has the lowest upside potential, as compared to the Global Equity and Temasek Portfolios. It also has the least volatility, as shown by its narrower year-to-year annual returns distribution curve.

(as at 31 March 2019)

Likelihood of Geometric Returns (Compounded Annualised) at the End of 20-year Period, by Portfolio Mix

Likelihood of Year-to-year Annual Returns during 20-year Period, by Portfolio Mix

- Lower likelihood of negative returns for Temasek Portfolio
- Higher likelihood of higher positive returns for Temasek Portfolio
- Narrower curve for Global Bond Portfolio means less volatility in year-to-year annual returns
- Wider curve of greater annual volatility for Temasek Portfolio
20-year Expected Returns for Various Temasek Scenarios

The Central Scenario offers the highest expected 20-year returns for the Temasek Portfolio, compared to those under the three alternate scenarios of China Hard Landing, Severe Escalation in Trade and Tech Tensions, and Secular Stagnation.

(as at 31 March 2019)

Likelihood of Geometric Returns (Compounded Annualised) at the End of 20-year Period, by Potential Scenario

Likelihood of Year-to-year Annual Returns during 20-year Period, by Potential Scenario

Central Scenario with slightly higher likelihood of higher returns
Determined to Do right
(From left) Rawson Haverty and Seah Wan Lin discuss Bridge, an e-payments and budgeting app created by student Rafael Soh and his team, under the mentorship of Temasek staff.
The reputation and character of Temasek are shaped by our values and conduct as we strive to do right, as individuals and as a team.

Integrity and Respect for others form the foundation of our character. Meritocracy and Excellence are our guideposts to bring out the best in our people. Teamwork and Trust enable us to deliver with discipline and agility. These MERITT values shape our forward looking stance.

Building a Better, Smarter, More Sustainable World
As a generational investor committed to delivering sustainable value over the long term, sustainability is at the core of everything we do.

As a responsible investor, we look for opportunities to invest in companies addressing global sustainability challenges and we incorporate environmental, social and governance considerations into our investment decision-making and management.

As an owner, we encourage our portfolio companies to adopt policies and practices that safeguard and enhance long term sustainability of their business and the wider community.

As an institution, we seek to build a sustainable organisation by developing people, capabilities and processes around sustainability and good governance.

As a steward, we establish partnerships and seed endowments to build resilience in our communities, and support the sharing of best practices and trends around sustainability and governance through platforms such as Ecosperity and thought leadership forums.

Promoting Good Governance
We advocate good governance and uphold the Santiago Principles for sovereign investments. We supported the International Monetary Fund initiative to frame these principles in 2008.

Our Board and Management
Chaired by Mr Lim Boon Heng, our Temasek Board and management ensure compliance with the rules and regulations wherever we have investments or operations.
Our People and Values

We are a team of 800 people, with some 30 diverse nationalities working across 11 offices, connected by our Temasek Heartbeat.

We are guided by our MERITT values and strive to do well, do right and do good. We are committed to developing and growing our people, to prepare them for the future.

Our people give back to their communities by taking part in activities organised by T-Touch, a volunteer initiative driven by our staff.
Our Temasek Heartbeat

Our staff participate in many outreach programmes with non-profit groups and self-help organisations in countries where we have a presence.

**New York, USA**
Helping the Needy
Distributing food and essential items to the homeless in partnership with Hope for New York

**Mexico City, Mexico**
Supporting Caregivers
Providing food and drinks to the families of patients with chronic medical conditions

**São Paulo, Brazil**
Spreading Joy
Spending a fun-filled day with underprivileged children

**London, UK**
Feeding the Homeless
Packing and delivering food to those living in homeless shelters
Mumbai, India
Empowering the Young
Teaching children about protecting the environment

Shenzhen, China
Promoting Personal Hygiene
Making soap bars for needy children

Singapore
Uplifting Communities
Befriending beneficiaries in the Institute of Mental Health, Surya@SILRA, Bethany Methodist Nursing Home, Christalite Methodist Home, and Singapore Cheshire Home through fun fairs, Lunar New Year celebrations and visits to places of interest
Financial Discipline

We are governed by a set of stringent financial policies and disciplines.

We manage our leverage, liquidity, and balance sheet prudently for resilience and flexibility, even in times of extreme stress. We ensure that our primary sources of cash flows can cover our non-discretionary expenses, such as operating expenses, interest to bondholders, and debt repayments.

Our Board sets our overall debt limit, taking into account our shareholder funds, cash flow and credit profile.

Capital and Liquidity Management
Our primary sources of funds include divestment proceeds, as well as dividends and distributions received from our portfolio. These are supplemented by our Temasek Bonds and Euro-commercial Paper.

We plan proactively for a long dated and well distributed debt maturity profile, and avoid a large debt tower in any one year.

Liability Management
Temasek does not issue any financial guarantees for the obligations of our portfolio companies.

Foreign Exchange Management
Our projected risk-adjusted return for each investment proposal needs to also cover foreign exchange (FX) risk. Where appropriate, we close up our FX exposure using the relevant FX instruments.

(for year ended 31 March)

Key Recurring Income vs Debt Maturity Profile (S$b)

<table>
<thead>
<tr>
<th></th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend income</td>
<td>7.9</td>
<td>7.8</td>
<td>7.0</td>
<td>9.0</td>
<td>8.5</td>
</tr>
<tr>
<td>Divestments</td>
<td>3.8</td>
<td>4.7</td>
<td>5.1</td>
<td>5.1</td>
<td>8.3</td>
</tr>
<tr>
<td>Debt due up to 1 year</td>
<td>5.2</td>
<td>5.4</td>
<td>5.5</td>
<td>8.8</td>
<td>6.9</td>
</tr>
<tr>
<td>Debt due 1 to 3 years</td>
<td>1.3</td>
<td>1.3</td>
<td>2.9</td>
<td>2.9</td>
<td>2.3</td>
</tr>
<tr>
<td>Debt due 3 to 10 years</td>
<td>1.3</td>
<td>1.3</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Debt due after 10 years</td>
<td>1.3</td>
<td>1.3</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
</tbody>
</table>
Our *Temasek Review*, Credit Profile and Temasek Bonds serve as public markers to anchor our commitment as a robust and disciplined institution through generations.

The *Temasek Review* is our annual scorecard to our stakeholders.

Temasek is exempted from disclosing financial information publicly, as a Singapore exempt private company. Nonetheless, we have been publishing our *Temasek Review* annually since 2004 as a public marker of our performance.

Our Credit Profile provides a snapshot of Temasek’s key credit parameters across three dimensions – leverage, interest coverage and debt service coverage. Our Credit Profile reflects the fundamental strength of our financial position as an investment company. The credit ratios facilitate a quantitative assessment of Temasek’s credit quality.

We have received the top ratings of Aaa/AAA by Moody’s Investors Service and S&P Global Ratings respectively since our inaugural ratings in 2004.

We issue Temasek Bonds and Euro-commercial Paper to retail, institutional, accredited and other specified investors as part of our financial discipline. The credit spreads in the market act like canaries in coal mines, to publicly signal market changes in Temasek’s credit quality.

Temasek does not need to borrow or be credit rated in order to invest.

Our public markers instil financial discipline, broaden our stakeholder base, and facilitate our communications with the wider community.

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1. Under the Singapore Companies Act (Chapter 50), an exempt private company (EPC) has no more than 20 shareholders and no corporate shareholder, and a solvent EPC is exempted from filing its audited financials with the public registry.

2. Based on the financial information of Temasek as an investment company, namely Temasek Holdings (Private) Limited (THPL) and its Investment Holding Companies (IHCs). IHCs are defined as THPL’s direct and indirect wholly owned subsidiaries, whose boards of directors or equivalent governing bodies comprise employees or nominees of THPL, wholly owned Temasek Pte. Ltd. (TPL), and/or TPL’s wholly owned subsidiaries. The principal activities of THPL and its IHCs are that of investment holding, financing, and/or the provision of investment advisory and consultancy services.

3. From time to time, rating agencies may modify their rating criteria. Such criteria changes may lead to a revision in the rating assigned to an entity, sometimes even when the entity’s financial position has not materially changed.
Credit Quality

Temasek's Credit Profile provides a quantitative snapshot of our credit quality and the strength of our financial position\(^1\).

<table>
<thead>
<tr>
<th>Description</th>
<th>Formula</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Portfolio Value over Total Debt (x)</td>
<td>21x</td>
<td>19</td>
<td>19</td>
<td>24</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Liquid Assets(^2) over Total Debt (x)</td>
<td>7x</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Dividend Income over Interest Expense (x)</td>
<td>22x</td>
<td>16</td>
<td>19</td>
<td>24</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Recurring Income(^3) over Interest Expense (x)</td>
<td>96x</td>
<td>54</td>
<td>86</td>
<td>69</td>
<td>68</td>
<td>96</td>
</tr>
<tr>
<td>Recurring Income(^3) over Total Debt due in One Year (x)</td>
<td>9x</td>
<td>7</td>
<td>27</td>
<td>21</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>Liquidity Balance(^4) over Total Debt due in next 10 Years (x)</td>
<td>4x</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

\(^1\) Based on the financial information of Temasek as an investment company, namely Temasek Holdings (Private) Limited (THPL) and its Investment Holding Companies (IHCs). IHCs are defined as THPL’s direct and indirect wholly owned subsidiaries, whose boards of directors or equivalent governing bodies comprise employees or nominees of THPL, wholly owned Temasek Pte. Ltd. (TPL), and/or TPL’s wholly owned subsidiaries. The principal activities of THPL and its IHCs are that of investment holding, financing, and/or the provision of investment advisory and consultancy services.

\(^2\) Mainly cash and cash equivalents, and sub-20% listed assets.

\(^3\) Divestments, dividend income, income from investments and interest income.

\(^4\) Cash and cash equivalents, and short term investments.
### Key Credit Parameters (in S$ billion)

<table>
<thead>
<tr>
<th>For year ended 31 March</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divestments</td>
<td>19</td>
<td>28</td>
<td>18</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td>Dividend income</td>
<td>7.9</td>
<td>7.8</td>
<td>7.0</td>
<td>9.0</td>
<td>8.5</td>
</tr>
<tr>
<td>Income from investments</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Interest income</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Interest expense</td>
<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Net portfolio value</td>
<td>266</td>
<td>242</td>
<td>275</td>
<td>308</td>
<td>313</td>
</tr>
<tr>
<td>Liquid assets(^2)</td>
<td>90.6</td>
<td>74.3</td>
<td>91.1</td>
<td>110.3</td>
<td>112.2</td>
</tr>
<tr>
<td>Liquidity balance(^4)</td>
<td>26.7</td>
<td>27.1</td>
<td>37.6</td>
<td>33.2</td>
<td>44.2</td>
</tr>
<tr>
<td>Total debt(^6)</td>
<td>13.8</td>
<td>12.9</td>
<td>12.8</td>
<td>12.8</td>
<td>15.1</td>
</tr>
</tbody>
</table>

### Temasek Bonds – Maturity Profile and Coupon

- USD Bond: 2.0% (2019), 1.0% (2020), 1.0% (2022), 0.9% (2023), 0.7% (2024), 1.0% (2025), 0.5% (2026), 0.5% (2027), 0.3% (2028), 0.3% (2029), 0.8% (2030), 0.1% (2031)
- SGD Bond: 1.0% (2019), 1.0% (2020), 1.0% (2022), 1.0% (2023), 0.7% (2024), 0.7% (2025), 0.5% (2026), 0.5% (2027), 0.5% (2028), 0.5% (2029), 0.5% (2030), 0.5% (2031)
- GBP Bond: 3.7500% (2019), 2.7000% (2020), 1.5000% (2022), 4.3000% (2023), 4.2000% (2024), 4.2000% (2025), 5.3750% (2026), 5.1250% (2027), 3.3750% (2028), 3.3750% (2029), 4.0475% (2030), 4.0475% (2031)

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\(^5\) As at 31 March 2019, comprised Temasek Bonds totalling S$13.8 (US$10.2) billion, with a weighted average maturity of over 10 years, issued under our US$20 billion Guaranteed Global Medium Term Note (MTN) Programme and S$5 billion Guaranteed MTN Programme; and Temasek Euro-commercial Paper (ECP) totalling S$1.3 (US$0.9) billion, with a weighted average maturity of above two months, issued under our US$5 billion ECP Programme. All Temasek Bonds are rated Aaa/AAA by Moody's Investors Service (Moody's) and S&P Global Ratings (S&P) respectively. Our ECP Programme has short term ratings of P-1/A-1+ by Moody's and S&P respectively.

\(^6\) Exchange rates as at 31 March 2019.
Instilling Ownership

Our ownership ethos puts the institution above the individual, emphasises long term over short term, and aligns employee and shareholder interests over economic cycles.

Our compensation framework aims to foster a high performing and responsible culture where our employees think and act as owners, sharing gains and pains alongside our shareholder. It balances reward for short term performance and long term value creation.

Longer term incentives can be deferred up to 12 years, and are subject to market risks and clawbacks, to account for the sustainability of returns over market cycles.

Deferred incentives and clawbacks are integral to our remuneration. In the last decade, we had five clawback pools when Wealth Added (WA) for prior years was negative. Out of these five, there were four instances we had to carry forward clawback balances, when the deferred WA incentives were not enough to clear the clawback pools from prior years.

We share risks and rewards based on our returns. If our returns are negative, clawbacks will be triggered against bonuses deferred from prior years, and if needed, from future year bonuses too.

Annual Cash Bonuses – Our Short Term Incentives

Annual cash bonuses are driven by company-wide, team and individual performances, and capped within budgeted limits.

WA Bonus Bank – Our Medium Term Incentives

Returns above our risk-adjusted cost of capital will see WA bonuses added to individual notional WA bonus bank accounts, with payouts of one third for senior management and up to two thirds for junior staff. Retained balances are at risk of clawbacks in the future should returns be negative.

Co-ownership Grants – Our Long Term Incentives

Co-investment grants may be awarded. These vest according to performance or time-based conditions, and lapse after 12 years.

Co-ownership Alignment in Practice

For the year ended 31 March 2019, we will not have positive WA incentives to share. There will be no clawback on our employees’ retained bank balances.

This framework for sharing gains and the associated risks and pains through market cycles has been tested, thereby reaffirming our ownership ethos.
WA Incentives of Key Team

Wealth Added & Total Dollar Return

Relative WA Incentives

- Wealth Added (WA) in dollars
- Total Shareholder Return in dollars (Total Dollar Return or TDR)
- Paid-out portion of WA Bonus earned for prior year’s performance
- Deferred portion of WA Bonus earned for prior year’s performance, with future clawback risks
- Co-investment units which grow or shrink with total returns to shareholder, and are subject to performance and time-based conditions
- Clawback of deferred WA Bonus from prior years
- Clawback balances carried forward for future bonus offset
- Part of earned WA Bonus used to offset the clawback balances brought forward from prior year

1 WA incentives awarded in the year were for WA performance in the prior year.
2 Relative WA incentives of key management team which includes CEOs, Presidents, Senior Managing Directors, Managing Directors, as well as management Directors.
3 No new T-Scope pool was generated due to negative WA in the prior year.
4 Excludes two tranches of deferred bonus from Alibaba’s WA, to be allocated in years ending 31 March 2017 and 2018, subject to sustained performance.
5 WA Bonus due to deferred bonus from Alibaba’s WA allocated in the year ended 31 March 2017, post clawback for negative return on the investment.
6 Includes WA Bonus due to deferred bonus from Alibaba’s WA allocated in the year ended 31 March 2018.
Inspired to
Do good
Boovanesh Rajendran and physiotherapist Yap Thian Yong assist Kooi Yok Meng (centre) with the use of an exoskeleton, funded by Temasek Foundation, to accelerate stroke recovery.
Temasek is an investor with an institutional conscience, and a duty towards present and future generations.

Our Temasek Charter defines who we are and what we do as an investor, institution and steward.

Temasek\(^1\) is an exempt private company\(^2\) under the Singapore Companies Act. Our Board has a fiduciary duty towards Temasek as a Company, with the full discretion and flexibility to guide the management of our portfolio as a long term investor and owner, and a responsible institution and trusted steward.

Under the Singapore Constitution, Temasek is a Fifth Schedule entity\(^3\) with a constitutional responsibility to safeguard our Company’s past reserves.

Temasek does not manage Singapore’s Central Provident Fund (CPF) savings; the budget surpluses or foreign exchange reserves of Singapore; or the reserves of any other Fifth Schedule entity. These are independently managed by the relevant Fifth Schedule entities themselves.

Temasek’s past reserves are those accumulated by the Company before the current term of Government.

Neither the President of Singapore\(^4\) nor the Singapore Government is involved in our investment or other business decisions, except in relation to the protection of our past reserves.

Relating to the President of Singapore

The Board and CEO of Temasek have the responsibility under the Singapore Constitution to protect our Company’s past reserves.

The Board and CEO of Temasek have a duty to seek the President’s approval before any draw occurs on our past reserves. There is no draw on our past reserves if our total reserves equal or exceed our past reserves. Mark to market declines on existing investments are not a draw on past reserves. We have a duty to ensure every disposal of investment is transacted at fair market value\(^5\). A realised loss arising from such disposals at fair market value is not a draw on past reserves.

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1. Temasek Holdings (Private) Limited.
2. Under the Singapore Companies Act (Chapter 50), an exempt private company (EPC) has no more than 20 shareholders and no corporate shareholder, and a solvent EPC is exempted from filing its audited financials with the public registry.
3. Fifth Schedule entities under the Singapore Constitution include GIC Private Limited, which manages the reserves of the Singapore Government; the CPF Board; the Monetary Authority of Singapore; Housing and Development Board; and Jurong Town Corporation.
Relating to Our Shareholder

Incorporated on 25 June 1974, Temasek is wholly owned by the Singapore Minister for Finance\(^6\). As a commercial investment company, we are the owner of our assets – we are not a fund manager on behalf of our shareholder.

Temasek declares dividends annually in accordance with our dividend policy. Our Board ensures that our dividend policy balances the sustainable distribution of profits as dividends to our shareholder with the retention of profits for reinvestment to generate future returns. The policy also takes into account our constitutional responsibility to protect Temasek's past reserves. Our Board recommends the dividends for our shareholder’s acceptance at the annual general meeting.

Relating to Our Portfolio Companies

We hold the boards and management accountable for the activities of their companies, and support the formation of high calibre, experienced and diverse boards to guide and complement management leadership.

Companies in our portfolio are guided and managed by their respective boards and management. Temasek does not direct their business decisions or operations. We expect our portfolio companies to comply with all laws and regulations of jurisdictions in which they have investments or operations. We do not guarantee the obligations of our portfolio companies.

Relating to Our Communities

We gift endowments for our communities based on the twin pillars of sustainability and good governance. These are funded by a share of our net positive returns above our risk-adjusted cost of capital.

These philanthropic endowments focus on building people, building communities, building capabilities and rebuilding lives. Their outcome-focused programmes enable individuals, families and communities to achieve sustainable improvements and progress in their lives.

We support improvements in social policies through evidence-based results from pilot programmes, and sustainable long term solutions.

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\(^4\) The Singapore President has an independent custodial role under the Singapore Constitution to safeguard the respective past reserves of the Singapore Government and the Fifth Schedule entities, including those of Temasek.

\(^5\) Fair market value is the price agreed between a willing buyer and a willing seller on an arm's length basis.

\(^6\) Under the Singapore Minister for Finance (Incorporation) Act (Chapter 183), the Minister for Finance is a body corporate.
Sustaining Our Planet

Climate change is the most urgent and critical global issue of our time. We must act now, together, to sustain our planet for future generations.

The Earth is being pushed to the tipping point. Last year, the Intergovernmental Panel on Climate Change warned that we have barely 10 years to reverse the global carbon and greenhouse gas emissions or face catastrophic consequences sooner than we think. Climate change is already bringing destructive hurricanes and weather extremes. Consequences include forest fires, floods, and crop damage. Lives are being lost, and livelihoods already impacted.

Governments, businesses, civil societies and individuals must work together to reverse the harm to our planet, and ultimately our people, lives, and livelihoods. We support the United Nations Sustainable Development Goals (SDGs) as one framework for us to work towards a better and more sustainable world.

Since 2014, we have been promoting *Ecosperity* – the twinning of ecology and prosperity as a sustainable pathway for growth. Together now, we can achieve an *abc World* of active and productive economies, beautiful and inclusive societies, and a clean, cool Earth.

We are alert to the issues of climate change, and address these in our investment theses. We share our perspectives with our portfolio companies and stakeholders.

**Catalysing Solutions**

Temasek seeks to invest in companies and ideas that deliver better lives for more people. Solutions to overcome food, energy, waste and water challenges are key areas of focus.

We worked with the Economic Development Board and the Singapore Food Agency to commission a study on insect production as a form of protein. We partnered ST Engineering to design the “Airbitat Oasis Smart Bus Stop”, a low-impact solution to help commuters in Singapore beat heat and pollution.

Together with Singapore Power, we co-funded a waste treatment system at Gardens by the Bay to repurpose unsorted waste into hot water for food & beverage outlets, and biochar for soil remediation. Further afield, we invest in environmentally friendlier solutions developed by companies such as Impossible Foods and Perfect Day.

**Engaging with our Partners**

For our 6th *Ecosperity* event in 2019, over 3,000 global business leaders, policymakers, scientists and innovators participated, and focused on action to achieve a low carbon and resource efficient future. Discussions explored the themes of the circular economy, energy transition and water management.

Partner events included the World Bank Group’s *Innovate4Climate*, Business China’s *FutureChina Global Forum*, Temasek Foundation’s *The Liveability Challenge*, and *Singapore International Water Week Spotlight*.

Our newly established *Ecosperity* Advisory Group taps on its members’ expertise on wide-ranging sustainability issues, to help sharpen our institutional approach towards sustainability.

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1 Visit www.un.org/sustainabledevelopment/sustainable-development-goals/ for more information on the SDGs.
An active, robust economy delivers good jobs and creates opportunities. It is the foundation of stable, secure and sustainable societies. Productive workers have a sense of pride and dignity, provide for their loved ones and themselves, and look to the future with confidence.

A beautiful and inclusive society fosters peace and justice, and enables individuals to reach their fullest potential. Shared values that embrace justice and equality, and expand our common spaces, will strengthen our tolerance, mutual respect, and the ties that bind us together.

A clean, cool Earth is our home, a common space and heritage. We must act today to preserve our living space for ourselves and our future generations. Fresh air, clean water and a cool world are Earth’s natural gifts, which we must treasure and protect as our legacy.

Find out more about our sustainability journey at temasekreview.com.sg/sustainability or scan the QR code.
TEMASEK and other donors

Staff Volunteer Initiative

Matching grants and volunteer leave scheme

Pro-bono Seed Funding

Knowledge Centres

Gifted by Temasek to Nanyang Technological University in 2017

Endowments and Gifts

Co-investment with Temasek

TEMASEK TRUST

Financial Oversight and Governance

Temasek Trust financially manages 19 philanthropic endowments and gifts from Temasek and other donors.

It provides a steady and sustainable 4% endowment funding rate for Temasek Foundation and others, such as the Stewardship Asia Centre, to carry out their programmes to uplift people, communities, capabilities and to rebuild lives.

Endowment spending at rates above 4% and up to 10% will be at the discretion of Temasek Trust. Spending above 10% will be subject to the approval of Temasek as the endowment sponsor.

The Trust provides governance and financial oversight for the endowment beneficiaries. It also serves as a convenor for philanthropic and community dialogue, and serves to create new pathways for sustainable philanthropy and to inspire and enable giving.
Temasek Foundation delivers community programmes through six thrusts to strengthen social resilience, foster international exchange and regional capabilities, and advance science and nature.

**Strengthening Social Resilience and Uplifting Lives**

Temasek Foundation helps to build a more resilient, harmonious and inclusive society.

Its outcome-focused programmes help to enhance our social fabric by uplifting individuals to lead active and fulfilling lives, strengthening families and advancing communities.

Through its network of partners, the Foundation pilots programmes and supports research that benefits current and future generations.

Temasek Foundation also helps young people reach their potential in music, arts, sports, mathematics and science.

**Fostering International Exchange and Enhancing Regional Capabilities**

The wider community succeeds when ideas, experiences and support networks are shared.

Temasek Foundation supports programmes in Singapore and beyond that connect people, and enhance capability and capacity, in areas such as healthcare, education, public administration, urban management, and disaster response.

Through Stewardship Asia Centre, we also promote effective stewardship and governance for responsible value creation among corporate organisations.

**Advancing Science and Nature for a Sustainable World**

We champion sustainability and innovative solutions to improve liveability in an abc World of active and productive economies, beautiful and inclusive societies, and a clean and cool Earth.

Temasek Foundation supports research and education in science, technology, engineering and mathematics. It also supports solution-oriented development projects, including the global Liveability Challenge.

These programmes strengthen research capabilities and promote cross-functional collaboration among institutions, agencies and academia in areas such as climate change, wildlife conservation and the circular economy.

Temasek Foundation Management Services develops human resources for, and provides corporate services to, Temasek Foundation.

It also facilitates the sharing of best practices and collaboration between Temasek Foundation and the wider philanthropy sector to improve support to the community.
At Temasek, we lend a helping hand whenever we can, through our community efforts, supported by our staff and philanthropic endowments.

**A Listening Ear**

About 15 years ago, former prison officer Patrick Raeburn found himself all alone when his mother passed away from old age.

Mr Raeburn, who is single, would stare at the four walls of his two-room rental flat in Marine Parade. He grew depressed and dark thoughts crept in.

Although he eventually adjusted to living alone, and his spirits lifted, loneliness sets in sometimes.

Two years ago, his days grew a little brighter after he was introduced to CareLine, a 24-hour telephone service that the elderly can call for help if they fall ill, or simply want to chat.

“I thought of hanging myself in my room. I just felt so alone.”

– Patrick Raeburn

By the end of the year, about 1,000 seniors will be provided with smartphones, which come with the CareLine app installed.

“CareLine staff respect me and call me Uncle Patrick. I see them as my siblings.”

– Patrick Raeburn

CareLine was launched by Changi General Hospital in 2016 to lend a listening ear to the growing number of seniors in Singapore who lack family support.

The number of elderly in Singapore spending their twilight years alone is expected to increase from 47,000 in 2016 to 83,000 in 2030. Research has shown that these seniors are prone to depression and suicide.

To make the hotline more easily accessible to the elderly wherever they are, Temasek Foundation sponsored smartphones, which come with the CareLine app installed. In the first phase of the roll-out, about 120 phones have been distributed. By the end of 2019, around 1,000 seniors will be provided with these phones.
Stylish and Sustainable

Leeanne aims to make sustainable fashion popular through her designs.

“Taking part in Trash to Fash pushed me to tell more people to stop buying fast fashion.”

– Leeanne O’Donnell

Fashion design student, Leeanne O’Donnell, 20, cried when she saw a video of Rana Plaza collapsing and killing over 1,100 workers.

The 2013 disaster in Bangladesh was one of the world’s deadliest industrial accidents. Commentators have cited pressures from the global ‘fast fashion’ industry to produce garments as a contributing factor in a litany of actions and practices that led to the collapse.

“I saw crushed limbs and so much pain. My heart just broke,” said the diploma student at LASALLE College of the Arts.

Leeanne started reading up on apparel manufacturing processes, and was shocked at the massive amount of waste produced, and factory workers’ conditions.

Keen to make a difference through her designs, Leanne joined Trash to Fash, a competition organised by Temasek to inspire young people to join the sustainable fashion movement.

Participants were tasked with designing outfits from recycled PET (rPET) fabric and materials such as plastic bags and bottle caps. More than 40 teams participated in the competition.

Participants collected plastic bottles to exchange for the rPET fabric. They were also mentored by industry experts on sustainable fashion trends.

Leeanne said taking part in the competition encouraged her to spread the word on sustainable fashion.

Kai Xuan (right) and Qian Yu’s avant-garde design won first place at the Trash to Fash competition.

“It was quite shocking to see the amount of waste we produce each day without even thinking about it.”

– Kee Kai Xuan

For the winners of the competition, Teh Qian Yu, 21, and Kee Kai Xuan, 20, the process of collecting the plastic bottles was especially memorable. They collected more than 70 plastic bottles from classrooms at their school, the Nanyang Academy of Fine Arts, in just half a day.

Watch young Singaporeans design sustainable fashion at temasekreview.com.sg/trashtofash or scan the QR code
Group Financial Summary
(From left) Alison Lim and her sons, Lester and Kevan, have fun while learning basic coding with an interactive tool.

*Temasek Group Financials are a consolidation of financial information of Temasek and its operating subsidiaries, such as Singtel, Singapore Airlines, PSA and ST Engineering.*
Statement by Auditors


We are the auditors of Temasek Holdings (Private) Limited (“Temasek”). We have audited the statutory consolidated financial statements of Temasek and its subsidiaries (the “Group”) for the financial years ended 31 March 2010 to 2019 and have issued unmodified audit reports¹.

Under the Singapore Companies Act, Chapter 50, Temasek is an exempt private company and is not required to publish its statutory consolidated financial statements.


Management is responsible for the preparation and presentation of the Group Financial Summary for the financial years ended 31 March 2010 to 2019. The Group Financial Summary consists of the Group Income Statements, Group Balance Sheets and Group Cash Flow Statements as at and for the financial years ended 31 March 2010 to 2019 and Group Statements of Changes in Equity for the financial years ended 31 March 2018 and 2019, which is derived from the statutory consolidated financial statements that were prepared in accordance with applicable financial reporting standards, for inclusion in the Temasek Overview. The Group Financial Summary does not contain all the disclosures required by the applicable financial reporting standards applied in the preparation of the statutory consolidated financial statements. Reading the Group Financial Summary, therefore, is not a substitute for reading the statutory consolidated financial statements.

Our responsibility is to express an opinion on whether the Group Financial Summary for the financial years ended 31 March 2010 to 2019 is consistent, in all material respects, with the statutory consolidated financial statements based on our procedures, which were conducted in accordance with Singapore Standard on Auditing (SSA) 810 (Revised) – Engagements to Report on Summary Financial Statements.

In our opinion, the accompanying Group Financial Summary for the financial years ended 31 March 2010 to 2019 is consistent, in all material respects, with the statutory consolidated financial statements for each of the respective years.

KPMG LLP
Public Accountants and Chartered Accountants
Singapore
1 July 2019

¹ Audit reports for each of the financial years were dated 1 July 2010, 29 June 2011, 27 June 2012, 26 June 2013, 30 June 2014, 29 June 2015, 27 June 2016, 3 July 2017, 2 July 2018 and 1 July 2019 respectively.
Our auditors, KPMG LLP, have expressed unmodified opinions on the statutory consolidated financial statements of Temasek Holdings (Private) Limited and its subsidiaries for the financial years ended 31 March 2010 to 2019.

On behalf of the directors

LIM BOON HENG
Chairman
1 July 2019

HO CHING
Executive Director & Chief Executive Officer
1 July 2019
## Group Income Statements

In S$ billion

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<tr>
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<tr>
<td><strong>Revenue</strong></td>
<td>76.7</td>
<td>83.5</td>
<td>83.5</td>
<td>94.3</td>
<td>92.4</td>
<td>101.6</td>
<td>101.5</td>
<td>97.0</td>
<td>107.4</td>
<td><strong>114.6</strong></td>
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<td><strong>Cost of sales</strong></td>
<td>(50.7)</td>
<td>(53.0)</td>
<td>(56.3)</td>
<td>(64.5)</td>
<td>(63.7)</td>
<td>(70.4)</td>
<td>(73.3)</td>
<td>(68.6)</td>
<td>(74.7)</td>
<td><strong>(85.0)</strong></td>
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<td><strong>Gross profit</strong></td>
<td>26.0</td>
<td>30.5</td>
<td>27.2</td>
<td>29.8</td>
<td>28.7</td>
<td>31.2</td>
<td>28.2</td>
<td>28.4</td>
<td>32.7</td>
<td><strong>29.6</strong></td>
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<td><strong>Other income</strong></td>
<td>4.5</td>
<td>4.9</td>
<td>6.3</td>
<td>5.5</td>
<td>6.0</td>
<td>9.2</td>
<td>11.0</td>
<td>10.0</td>
<td>13.3</td>
<td><strong>7.2</strong></td>
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<td><strong>Expenses:</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Selling &amp; Distribution</strong></td>
<td>(5.3)</td>
<td>(5.8)</td>
<td>(5.6)</td>
<td>(5.2)</td>
<td>(4.7)</td>
<td>(5.0)</td>
<td>(4.4)</td>
<td>(3.7)</td>
<td>(3.3)</td>
<td><strong>(3.4)</strong></td>
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<tr>
<td><strong>Administrative</strong></td>
<td>(8.7)</td>
<td>(7.3)</td>
<td>(8.0)</td>
<td>(8.7)</td>
<td>(8.9)</td>
<td>(9.6)</td>
<td>(8.0)</td>
<td>(8.4)</td>
<td>(8.7)</td>
<td><strong>(8.4)</strong></td>
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<td><strong>Finance</strong></td>
<td>(2.4)</td>
<td>(2.6)</td>
<td>(2.6)</td>
<td>(2.3)</td>
<td>(2.1)</td>
<td>(2.7)</td>
<td>(2.8)</td>
<td>(3.2)</td>
<td>(3.2)</td>
<td><strong>(3.7)</strong></td>
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<tr>
<td><strong>Other expenses</strong></td>
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<td>(6.2)</td>
<td>(7.1)</td>
<td>(6.7)</td>
<td>(7.5)</td>
<td>(8.1)</td>
<td>(16.0)</td>
<td>(8.9)</td>
<td>(9.5)</td>
<td><strong>(7.4)</strong></td>
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<td><strong>Profit before share of results of associates and joint ventures</strong></td>
<td>4.1</td>
<td>13.5</td>
<td>10.2</td>
<td>12.1</td>
<td>11.3</td>
<td>15.6</td>
<td>8.1</td>
<td>14.6</td>
<td>21.3</td>
<td><strong>13.9</strong></td>
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<tr>
<td><strong>Share of results of associates</strong></td>
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<td>2.6</td>
<td>3.0</td>
<td>2.5</td>
<td>4.3</td>
<td>3.5</td>
<td>4.4</td>
<td>3.3</td>
<td>6.8</td>
<td><strong>2.6</strong></td>
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<tr>
<td><strong>Share of results of joint ventures</strong></td>
<td>2.0</td>
<td>1.7</td>
<td>1.6</td>
<td>1.9</td>
<td>1.9</td>
<td>2.1</td>
<td>2.2</td>
<td>2.4</td>
<td>2.3</td>
<td><strong>2.2</strong></td>
</tr>
<tr>
<td><strong>Profit before income tax</strong></td>
<td>8.5</td>
<td>17.8</td>
<td>14.8</td>
<td>16.5</td>
<td>17.5</td>
<td>21.2</td>
<td>14.7</td>
<td>20.3</td>
<td>30.4</td>
<td><strong>18.7</strong></td>
</tr>
<tr>
<td><strong>Tax expense</strong></td>
<td>(1.7)</td>
<td>(2.0)</td>
<td>(1.4)</td>
<td>(2.0)</td>
<td>(2.3)</td>
<td>(2.5)</td>
<td>(2.1)</td>
<td>(2.6)</td>
<td>(2.8)</td>
<td><strong>(2.8)</strong></td>
</tr>
<tr>
<td><strong>Profit for the year</strong></td>
<td>6.8</td>
<td>15.8</td>
<td>13.4</td>
<td>14.5</td>
<td>15.2</td>
<td>18.7</td>
<td>12.6</td>
<td>17.7</td>
<td>27.6</td>
<td><strong>15.9</strong></td>
</tr>
<tr>
<td><strong>Less: Non-controlling interest</strong></td>
<td>(2.2)</td>
<td>(3.1)</td>
<td>(2.7)</td>
<td>(3.8)</td>
<td>(4.3)</td>
<td>(4.2)</td>
<td>(4.2)</td>
<td>(3.5)</td>
<td>(5.9)</td>
<td><strong>(4.1)</strong></td>
</tr>
<tr>
<td><strong>Group net profit</strong></td>
<td><strong>4.6</strong></td>
<td><strong>12.7</strong></td>
<td><strong>10.7</strong></td>
<td><strong>10.7</strong></td>
<td><strong>10.9</strong></td>
<td><strong>14.5</strong></td>
<td><strong>8.4</strong></td>
<td><strong>14.2</strong></td>
<td><strong>21.7</strong></td>
<td><strong>11.8</strong></td>
</tr>
</tbody>
</table>

### Additional Information:

- **Group net profit, including unrealised mark to market losses of sub-20% investments**
  - **11.8**
- **Group net profit, excluding unrealised mark to market losses of sub-20% investments**
  - **12.8**

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1. On 1 April 2018, the Group adopted International Financial Reporting Standards (IFRS). The Group also adopted new and amended IFRS and Interpretations of IFRS that were mandatory for application for the financial year ended 31 March 2019, which included IFRS 1: First-time adoption of IFRS, IFRS 9: Financial Instruments and IFRS 15: Revenue from Contracts with Customers. Changes in accounting policies as a result of IFRS 1 and IFRS 15 were applied retrospectively to the Group financial statements for the year ended 31 March 2018. The effects of adoption of IFRS 9 were recognised in the shareholder equity as at 1 April 2018. Comparative financial statements for the years ended 31 March 2010 to 2017 were prepared based on Singapore Financial Reporting Standards.
## Group Balance Sheets

### In S$ billion

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<tr>
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</thead>
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<tr>
<td><strong>Shareholder equity excluding cumulative mark to market gains of sub-20% investments</strong></td>
<td>127.8</td>
<td>134.6</td>
<td>146.4</td>
<td>156.0</td>
<td>172.5</td>
<td>188.0</td>
<td>198.2</td>
<td>210.7</td>
<td>227.4</td>
<td><strong>246.3</strong></td>
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<tr>
<td><strong>Cumulative mark to market gains of sub-20% investments</strong></td>
<td>21.9</td>
<td>20.9</td>
<td>11.8</td>
<td>13.2</td>
<td>14.9</td>
<td>30.6</td>
<td>19.9</td>
<td>28.2</td>
<td>44.7</td>
<td><strong>37.2</strong></td>
</tr>
<tr>
<td><strong>Shareholder equity</strong></td>
<td><strong>149.7</strong></td>
<td><strong>155.5</strong></td>
<td><strong>158.2</strong></td>
<td><strong>169.2</strong></td>
<td><strong>187.4</strong></td>
<td><strong>218.6</strong></td>
<td><strong>218.1</strong></td>
<td><strong>238.9</strong></td>
<td><strong>272.1</strong></td>
<td><strong>283.5</strong></td>
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<tr>
<td><strong>Non-controlling interests</strong></td>
<td>23.5</td>
<td>24.0</td>
<td>23.5</td>
<td>35.2</td>
<td>34.8</td>
<td>37.8</td>
<td>40.6</td>
<td>43.1</td>
<td>47.1</td>
<td><strong>47.7</strong></td>
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<td><strong>Property, plant and equipment</strong></td>
<td>68.0</td>
<td>66.8</td>
<td>67.8</td>
<td>73.8</td>
<td>59.5</td>
<td>67.5</td>
<td>69.9</td>
<td>70.8</td>
<td>73.2</td>
<td><strong>78.5</strong></td>
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<td><strong>Intangibles</strong></td>
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<td>18.9</td>
<td>17.9</td>
<td>18.2</td>
<td>16.4</td>
<td>20.0</td>
<td>20.5</td>
<td>22.6</td>
<td>27.9</td>
<td><strong>27.7</strong></td>
</tr>
<tr>
<td><strong>Biological assets</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1.3</td>
<td>1.4</td>
<td>0.5</td>
<td>0.5</td>
<td><strong>0.5</strong></td>
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<td><strong>Investments in associates and joint ventures</strong></td>
<td>44.6</td>
<td>42.1</td>
<td>49.5</td>
<td>50.3</td>
<td>56.7</td>
<td>70.2</td>
<td>80.1</td>
<td>83.5</td>
<td>84.8</td>
<td><strong>85.0</strong></td>
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<td>65.3</td>
<td>60.7</td>
<td>70.3</td>
<td>81.4</td>
<td>101.3</td>
<td>88.4</td>
<td>98.3</td>
<td>132.0</td>
<td><strong>134.0</strong></td>
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<td>7.3</td>
<td>8.3</td>
<td>19.9</td>
<td>22.4</td>
<td>25.5</td>
<td>36.3</td>
<td>40.0</td>
<td>46.3</td>
<td><strong>56.3</strong></td>
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<td><strong>Deferred tax assets</strong></td>
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<td>1.7</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.0</td>
<td><strong>0.8</strong></td>
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<td><strong>Other non-current assets</strong></td>
<td>10.2</td>
<td>11.3</td>
<td>10.7</td>
<td>12.4</td>
<td>10.9</td>
<td>13.0</td>
<td>13.1</td>
<td>12.8</td>
<td>11.8</td>
<td><strong>7.4</strong></td>
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<td><strong>Net current assets</strong></td>
<td>22.0</td>
<td>27.6</td>
<td>32.8</td>
<td>34.0</td>
<td>35.9</td>
<td>31.8</td>
<td>31.5</td>
<td>41.3</td>
<td>38.2</td>
<td><strong>44.0</strong></td>
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<td><strong>Current assets</strong></td>
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<td>84.5</td>
<td>86.2</td>
<td>95.2</td>
<td>95.3</td>
<td>105.6</td>
<td>104.7</td>
<td>117.7</td>
<td>113.1</td>
<td><strong>118.8</strong></td>
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<tr>
<td><strong>Current liabilities</strong></td>
<td><strong>(48.2)</strong></td>
<td><strong>(56.9)</strong></td>
<td><strong>(53.4)</strong></td>
<td><strong>(61.2)</strong></td>
<td><strong>(59.4)</strong></td>
<td><strong>(73.8)</strong></td>
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<td><strong>(76.4)</strong></td>
<td><strong>(74.9)</strong></td>
<td><strong>(74.8)</strong></td>
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<td><strong>Non-current liabilities</strong></td>
<td><strong>(63.4)</strong></td>
<td><strong>(61.5)</strong></td>
<td><strong>(67.5)</strong></td>
<td><strong>(75.9)</strong></td>
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<td><strong>(89.2)</strong></td>
<td><strong>(96.5)</strong></td>
<td><strong>(103.0)</strong></td>
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<td><strong>Net current assets</strong></td>
<td>173.2</td>
<td>179.5</td>
<td>181.7</td>
<td>204.4</td>
<td>222.2</td>
<td>256.4</td>
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<td>282.0</td>
<td>319.2</td>
<td><strong>331.2</strong></td>
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<td><strong>Net debt</strong></td>
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<td>9.5</td>
<td>16.1</td>
<td>19.6</td>
<td>9.0</td>
<td>32.6</td>
<td>44.4</td>
<td>39.3</td>
<td>49.7</td>
<td><strong>51.9</strong></td>
</tr>
</tbody>
</table>

---

2 From the financial year ended 31 March 2019, IFRS 9 requires unrealised mark to market gains or losses of sub-20% investments to be included in the Group net profit.

3 The accounting standards require sub-20% investments to be marked to market from the financial year ended 31 March 2006. To provide additional information on shareholder equity excluding market volatility on sub-20% investments, unrealised mark to market gains or losses are separately disclosed.

4 Total debt less cash and cash equivalents.
## Group Cash Flow Statements

In S$ billion

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating cash flow before working capital changes</td>
<td>16.4</td>
<td>20.2</td>
<td>16.8</td>
<td>20.1</td>
<td>20.0</td>
<td>20.3</td>
<td>18.4</td>
<td>18.7</td>
<td>20.8</td>
<td><strong>19.7</strong></td>
</tr>
<tr>
<td>Change in working capital</td>
<td>(4.1)</td>
<td>(2.9)</td>
<td>(1.6)</td>
<td>(4.0)</td>
<td>(1.5)</td>
<td>(3.2)</td>
<td>(5.1)</td>
<td>(2.3)</td>
<td>(3.8)</td>
<td><strong>(1.7)</strong></td>
</tr>
<tr>
<td>Cash generated from operations</td>
<td>12.3</td>
<td>17.3</td>
<td>15.2</td>
<td>16.1</td>
<td>18.5</td>
<td>17.1</td>
<td>13.3</td>
<td>16.4</td>
<td>17.0</td>
<td><strong>18.0</strong></td>
</tr>
<tr>
<td>Income tax paid</td>
<td>(1.3)</td>
<td>(1.3)</td>
<td>(2.0)</td>
<td>(1.8)</td>
<td>(2.3)</td>
<td>(2.0)</td>
<td>(2.1)</td>
<td>(2.4)</td>
<td>(2.2)</td>
<td><strong>(2.2)</strong></td>
</tr>
<tr>
<td>Net cash inflow from operating activities</td>
<td>11.0</td>
<td>16.0</td>
<td>13.2</td>
<td>14.3</td>
<td>16.2</td>
<td>15.1</td>
<td>11.2</td>
<td>14.0</td>
<td>14.8</td>
<td><strong>15.8</strong></td>
</tr>
<tr>
<td>Net cash outflow from investing activities</td>
<td>(5.3)</td>
<td>(4.9)</td>
<td>(14.8)</td>
<td>(15.3)</td>
<td>(19.2)</td>
<td>(22.6)</td>
<td>(14.7)</td>
<td>(7.2)</td>
<td>(23.0)</td>
<td><strong>(13.5)</strong></td>
</tr>
<tr>
<td>Net cash inflow/(outflow) from financing activities</td>
<td>(0.2)</td>
<td>(1.7)</td>
<td>(1.4)</td>
<td>4.0</td>
<td>1.0</td>
<td>1.1</td>
<td>2.4</td>
<td>2.7</td>
<td>2.5</td>
<td><strong>11.0</strong></td>
</tr>
<tr>
<td>Net increase/(decrease) in cash and cash equivalents held</td>
<td>5.5</td>
<td>9.4</td>
<td>(3.0)</td>
<td>3.0</td>
<td>(2.0)</td>
<td>(6.4)</td>
<td>(1.1)</td>
<td>9.5</td>
<td>(5.7)</td>
<td><strong>13.3</strong></td>
</tr>
</tbody>
</table>

---

1 On 1 April 2018, the Group adopted International Financial Reporting Standards (IFRS). The Group also adopted new and amended IFRS and Interpretations of IFRS that were mandatory for application for the financial year ended 31 March 2019, which included IFRS 1: First-time adoption of IFRS, IFRS 9: Financial Instruments and IFRS 15: Revenue from Contracts with Customers. Changes in accounting policies as a result of IFRS 1 and IFRS 15 were applied retrospectively to the Group financial statements for the year ended 31 March 2018. The effects of adoption of IFRS 9 were recognised in the shareholder equity as at 1 April 2018. Comparative financial statements for the years ended 31 March 2010 to 2017 were prepared based on Singapore Financial Reporting Standards.
## Group Statements of Changes in Equity

In S$ billion

<table>
<thead>
<tr>
<th></th>
<th>Share Capital and Other Reserves</th>
<th>Revenue Reserve</th>
<th>Currency Translation Reserve</th>
<th>Non-controlling Interests</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance at 31 March 2017 As previously reported</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>98.3</td>
<td>143.8</td>
<td>(3.2)</td>
<td>43.1</td>
<td>282.0</td>
</tr>
<tr>
<td><strong>Effects of adoption of IFRS 1 and IFRS 15</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(1.7)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.9)</td>
<td></td>
<td>(0.8)</td>
<td></td>
</tr>
<tr>
<td><strong>Balance at 1 April 2017</strong></td>
<td>98.3</td>
<td>142.9</td>
<td>(3.2)</td>
<td>42.3</td>
<td>280.3</td>
</tr>
<tr>
<td><strong>Profit for the year</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Others, net</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20.5</td>
<td>(4.0)</td>
<td>(4.1)</td>
<td>(1.1)</td>
<td>11.3</td>
</tr>
<tr>
<td><strong>Balance at 31 March 2018</strong></td>
<td>118.8</td>
<td>160.6</td>
<td>(7.3)</td>
<td>47.1</td>
<td>319.2</td>
</tr>
<tr>
<td><strong>Effects of adoption of IFRS 9</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.3)</td>
</tr>
<tr>
<td></td>
<td>(44.5)</td>
<td>44.3</td>
<td></td>
<td>(0.1)</td>
<td></td>
</tr>
<tr>
<td><strong>Profit for the year</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Others, net</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.1</td>
<td>(5.5)</td>
<td>1.2</td>
<td>(3.4)</td>
<td>(3.6)</td>
</tr>
<tr>
<td><strong>Balance at 31 March 2019</strong></td>
<td><strong>78.4</strong></td>
<td><strong>211.2</strong></td>
<td><strong>(6.1)</strong></td>
<td><strong>47.7</strong></td>
<td><strong>331.2</strong></td>
</tr>
</tbody>
</table>

2 Comprise movements during the financial year including but not limited to:
- Issuance of ordinary shares;
- Change in fair value of financial assets;
- Dividends to shareholder;
- Share of associates and joint ventures' reserves; and
- Currency translation differences.
Major Investments at a Glance

Our portfolio companies have added much to the strength, reputation, and potential of Temasek.

<table>
<thead>
<tr>
<th>Financial Services</th>
<th>Shareholding(^3) (%) as at 31 March 2019</th>
<th>Currency</th>
<th>2019</th>
<th>2018</th>
<th>TSR(^1) (%)</th>
<th>Market Capitalisation or Shareholder Equity(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>adyen</strong> Adyen N.V.</td>
<td>7 EUR'm NA(^4)</td>
<td>20,658</td>
<td>NA(^4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AIA Group Limited</strong></td>
<td>3 HKD'm 19.5</td>
<td>944,410</td>
<td>801,780</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>China Construction Bank Corporation</strong></td>
<td>3 HKD'm (12.3)</td>
<td>1,695,986</td>
<td>2,030,754</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DBS Group Holdings Ltd</strong></td>
<td>29 SGD'm (2.6)</td>
<td>64,545</td>
<td>70,506</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Industrial and Commercial Bank of China Limited</strong></td>
<td>2 HKD'm (10.2)</td>
<td>2,255,351</td>
<td>2,637,696</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Ping An Insurance (Group) Company of China, Ltd.</strong></td>
<td>2 HKD'm 13.3</td>
<td>1,631,407</td>
<td>1,479,164</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PT Bank Danamon Indonesia Tbk(^5)</strong></td>
<td>34^ IDR'b 35.3</td>
<td>89,137</td>
<td>65,894</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Standard Chartered PLC</strong></td>
<td>16 GBP'm (14.9)</td>
<td>19,573</td>
<td>23,534</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Telecommunications, Media &amp; Technology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CenturyLink, Inc.</strong></td>
<td>9 USD'm (19.0)</td>
<td>13,074</td>
<td>17,722</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Singapore Technologies Telemedia Pte Ltd</strong></td>
<td>100 SGD'm (5.1)</td>
<td>3,250</td>
<td>5,267*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Alibaba Group Holding Limited</strong></td>
<td>1 USD'm (0.6)</td>
<td>471,728</td>
<td>471,602</td>
<td></td>
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<td></td>
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<tr>
<td><strong>Singapore Telecommunications Limited</strong></td>
<td>52 SGD'm (5.3)</td>
<td>49,288</td>
<td>55,002</td>
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<tr>
<td><strong>Consumer &amp; Real Estate</strong></td>
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<tr>
<td><strong>A.S. Watson Holdings Limited</strong></td>
<td>25 HKD'm 30.4</td>
<td>31,832</td>
<td>29,453</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CapitaLand Limited(^6)</strong></td>
<td>40 SGD'm 5.6</td>
<td>15,239</td>
<td>15,065</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Olam International Limited</strong></td>
<td>54 SGD'm (12.5)</td>
<td>6,301</td>
<td>7,424</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ascendas-Singbridge Pte. Ltd.(^6)</strong></td>
<td>51^ SGD'm 18.9</td>
<td>2,121</td>
<td>1,783*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mapletree Investments Pte Ltd</strong></td>
<td>100 SGD'm 15.8</td>
<td>14,592</td>
<td>12,786</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SATS Ltd.</strong></td>
<td>40 SGD'm 3.2</td>
<td>5,694</td>
<td>5,724</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1. Total Shareholder Return (TSR): For listed companies, source is Bloomberg. Period for one-year TSR is from 31 March 2018 to 31 March 2019. For unlisted companies, shareholder equity is used in the computations. TSR is based on shareholder equity as at their respective financial year-ends.

2. Market Capitalisation or Shareholder Equity: For listed companies, 2019 refers to positions as at 31 March 2019. For unlisted companies, 2019 refers to positions as at 31 March 2019 or 31 December 2018, in accordance with their respective financial year-ends. Similarly for 2018.

3. Percentages rounded to the nearest whole number.

4. Information not available.

5. Fully divested in April 2019.
### Major Investments

![QR Code](temasekreview.com.sg/majorinvestments)

<table>
<thead>
<tr>
<th>Transportation &amp; Industrials</th>
<th>Shareholding(^1) (%) as at 31 March 2019</th>
<th>Currency</th>
<th>1</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keppel Corporation Limited</td>
<td>20</td>
<td>SGD(^\text{m}) (16.8)</td>
<td></td>
<td>11,302</td>
<td>14,111</td>
</tr>
<tr>
<td>PSA International Pte Ltd</td>
<td>100</td>
<td>SGD(^\text{m}) 8.0</td>
<td></td>
<td>11,344</td>
<td>11,080</td>
</tr>
<tr>
<td>Sembcorp Industries Ltd</td>
<td>49</td>
<td>SGD(^\text{m}) (16.9)</td>
<td></td>
<td>4,557</td>
<td>5,558</td>
</tr>
<tr>
<td>Singapore Technologies Engineering Ltd</td>
<td>51</td>
<td>SGD(^\text{m}) 8.8</td>
<td></td>
<td>11,675</td>
<td>11,202</td>
</tr>
<tr>
<td>Singapore Airlines Limited</td>
<td>56</td>
<td>SGD(^\text{m}) (7.4)</td>
<td></td>
<td>11,434</td>
<td>12,819</td>
</tr>
<tr>
<td>Singapore Power Limited</td>
<td>100</td>
<td>SGD(^\text{m}) 7.4</td>
<td></td>
<td>10,555</td>
<td>10,214*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Life Sciences &amp; Agribusiness</th>
<th>Shareholding(^3) (%) as at 31 March 2019</th>
<th>Currency</th>
<th>1</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayer Aktiengesellschaft</td>
<td>4</td>
<td>EUR(^\text{m}) (34.7)</td>
<td></td>
<td>56,457</td>
<td>80,305</td>
</tr>
<tr>
<td>Celltrion, Inc.</td>
<td>10</td>
<td>KRW(^\text{b}) (40.4)</td>
<td></td>
<td>22,955</td>
<td>38,545</td>
</tr>
<tr>
<td>WuXi AppTec Co., Ltd.</td>
<td>8(^\text{##})</td>
<td>HKD(^\text{m}) NA(^4)</td>
<td></td>
<td>126,656</td>
<td>NA(^4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy &amp; Resources</th>
<th>Shareholding(^3) (%) as at 31 March 2019</th>
<th>Currency</th>
<th>1</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavilion Energy Pte Ltd</td>
<td>100</td>
<td>USD(^\text{m}) 2.3</td>
<td></td>
<td>1,635</td>
<td>1,599</td>
</tr>
</tbody>
</table>

---

\(^6\) In June 2019, CapitaLand Limited acquired Ascendas Pte Ltd and Singbridge Pte. Ltd. from CLA Real Estate Holdings Pte. Ltd. (formerly known as Ascendas-Singbridge Pte. Ltd.).

\(^\text{^\text{^\text{'}}\text{\text{\text{'}}}}\) Held indirectly by Fullerton Financial Holdings Pte. Ltd.

\(\text{^\text{^\text{^\text{'}}\text{\text{\text{'}}}}\text{\text{\text{'}}}}\) Restated or reclassified, which includes effects of changes to accounting standards.

\(^\#\) Comprises 51% of ordinary shares held through a wholly owned subsidiary, TJ Holdings (III) Pte. Ltd.

\(^\#\#\) Comprises an 8% stake held through various holding companies.

\(\text{^\text{\text{\text{\text{'}}\text{\text{\text{'}}}}\text{\text{\text{'}}}}\text{\text{\text{'}}}}\) For year ended December 2018/2017.

\(\text{^\text{\text{\text{\text{'}}\text{\text{\text{'}}}}\text{\text{\text{'}}}}\text{\text{\text{'}}}}\) For year ended March 2019/2018.
Our Contact Points

Contact us via temasek.com.sg/contacts, or across our social media channels.

**Singapore**
Temasek Holdings (Private) Limited
Temasek International Pte. Ltd.
60B Orchard Road
#06-18 Tower 2
The Atrium@Orchard
Singapore 238891
Tel: +65 6828 6828

**People’s Republic of China**
Singapore Temasek International Pte. Ltd.
Beijing Representative Office
F732 Winland International Finance Center
No. 7 Financial Street Xicheng District
Beijing 100033
Tel: +86 10 5930 4901

**United States of America**
Temasek International (USA) LLC
375 Park Avenue
14th Floor
New York, NY 10152
Tel: +1 212 593 8880

**Brazil**
Temasek Brasil Consultoria E Participações Ltda.
Rua Iguatemi, 151/18 andar
Itaim Bibi, 01451-011
São Paulo, SP
Tel: +55 11 3636 7575

**India**
Temasek Holdings Advisors India Private Limited
12, 3 North Avenue
Maker Maxity
Bandra Kurla Complex
Bandra (East) Mumbai
400 051
Tel: +91 22 6654 5500

**Mexico**
TH Inversiones Mexico, S.A. de C.V.
Ruben Dario 281 – 1303
Bosque de Chapultepec
Mexico City 11580
Tel: +52 55 4335 3050

**Vietnam**
Temasek International Pte. Ltd.
Hanoi Representative Office
Unit 406, Level 4
Hanoi Towers,
49 Hai Ba Trung Street
Hanoi
Tel: +84 24 3936 9069

**United Kingdom**
Temasek International (Europe) Limited
23 King Street
London
SW1Y 6QY
Tel: +44 20 7747 5040

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The Temasek Overview and Temasek Review Highlights publications use Grandeur Zen White paper, of which 20% of the pulp is sourced from pre-consumer waste and is bleached using an elemental chlorine-free process.

The Temasek in Brief publication uses Exel Satin paper, which contains fibres from sustainable and controlled sources.

Grandeur Zen White and Exel Satin are environmentally friendly and contain wood pulp from well managed forests. Both paper types conform to ISO9706 standards.

Design of master concept and publications: Black Sun Plc, UK

Printing: Colourscan Print Co. (Pte.) Ltd., Singapore

Photography: Shooting Gallery Asia

Digital Imaging: Wishing Well Asia

Cover, Inside Front Cover:
Fleur and her mother, Sumei Loh-Anand, do their part for the environment by clearing litter at Changi Beach Park.

Locations:
Cover, Inside Front Cover: Changi Beach Park
Pages 2-3: Punggol Waterway Park
Pages 14-15: Kok Fah Technology Farm
Pages 24-25: Raffles Institution
Pages 36-37: St Luke’s Hospital
Pages 46-47: Temasek Shophouse, featuring a Kano Computing® tablet

We thank those who agreed to the use of their photos and provided assistance at the various locations photographed for our annual disclosure exercise.