Transcript: Temasek Review 2022 Media Conference

12 July 2022

The following is transcript of the Presentation of the Temasek Review 2022. The text should be read in conjunction with the slides shown in this transcript. It has been edited from delivery only for readability.



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STEPHEN FORSHAW:

Good afternoon, ladies and gentlemen, welcome back. After three years, it's nice to have everyone back in a room for the release of our Temasek Review 2022. My name is Stephen Forshaw from Temasek, I'm going to be your emcee for today. In a few moments I'm going to ask my colleagues to start the presentation but before I do, if I can just spend a few minutes on some housekeeping matters.

Today our Temasek Review is for the financial year ending 31 March 2022. All of our reported numbers are in Singapore dollars unless indicated otherwise. We report all of our portfolio value and all of our financials in Singapore dollars.

The format for this afternoon is that we'll have a video introduction of our Temasek Review, that will be followed by a presentation by my colleague Lim Ming Pey, who is the Deputy Head of our Organisation and People team, and also Managing

Director of our Strategy office. Ming Pey will have a couple of videos during her presentation as well.

We'll then move to a Q&A where Ming Pey will be joined by fellow panellists, Rohit Sipahimalani, our Chief Investment Officer, Russell Tham, the Joint Head of our Enterprise Development Group and Head of Strategic Development, and Martin Fichtner, the Head of our US West Coast office and the Deputy Head of our Technology and Consumer team. They will join Ming Pey on stage for the Q&A.

When we get to questions, could I ask that you indicate to me that you have an interest in asking a question, just raise your hand or catch my attention. I will get to you as quickly as I can. We also have some people online who are joining us on Zoom so I will also have the opportunity for them to ask questions. At the start of your question, if you could indicate your name and organisation for the benefit of our panellists so they know who you are and try and keep the questions succinct and tight so that we can have as much time for questions as possible.

For those on-site, just raise your hand. If you're on Zoom, if you can use the raised hand function, I will see then that you have a question to ask. If you're on Zoom today, could you keep your camera on but mute yourselves at all times until we get to your question. And when I call on you, just give it a moment so that we can spotlight you for the benefit of the panellists so that they can see you and then they will be able to hear your question properly.

So if there are any technical disruptions on Zoom, I think those of you who are on the call will have a WhatsApp number. We will be able to communicate with you via that, and likewise if you have any technical issues you can communicate to us.

The embargo time this afternoon, as you're aware, is 3pm Singapore time. We'll have a recording of this session made available online later in the day today. But, please, we ask you to observe the embargo time of 3pm exactly.

So, without any further ado, let me introduce Temasek Review 2022, *So Every Generation Prospers*, and that will then be followed by Ming Pey's presentation.

(Link to 'Temasek's Year in Review 2022')







LIM MING PEY:

Good afternoon everyone. My name is Ming Pey.

This year the theme for our Temasek Review is 'So Every Generation Prospers'.

This is also our Purpose statement – and a commitment to keep working towards a better tomorrow for today's and future generations.

Even as the world around changes rapidly, we remain anchored in our three roles



as an Active Investor, Forward looking Institution, and Trusted Steward –

to do well, do right and do good.



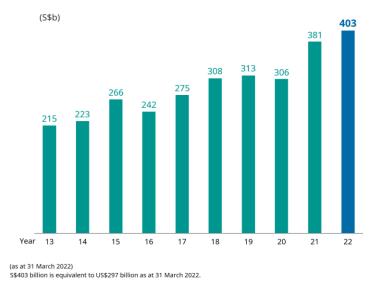
As an active investor and shareholder, Temasek is committed to delivering sustainable value over the long term.

Let me now take you through our performance.

Despite volatile market conditions, we continue to build a resilient portfolio.

Building a Resilient Portfolio





S\$403 billionNet Portfolio Value

n as at 31 March 2022. TEMASEK 4

We ended the financial year with a Net Portfolio Value or NPV of 403 billion dollars.

Active Year for Investment and Divestment





\$\$315 billionInvested over the decade

S\$81 billionNet investment over the decade

\$\$234 billionDivested over the decade

(as at 31 March 2022) ${\sf TEMASEK}_{5}$

This chart shows our investment activity over the decade.

Last year was a very active year for us.

We invested 61 billion dollars and divested 37 billion, resulting in a net investment of 24 billion dollars.

Over the last decade, we had invested 315 billion and divested 234 billion, representing a net investment of 81 billion over the past 10 years.

Now as you may know, we focus our investments on four structural trends:

Investing into the Four Trends Longer Lifespans **Future of Consumption** Sustainable Living Anticipating consumers' behaviour in an Transitioning to a Transforming business Focusing on life cycle models and operations low carbon and needs as we live omnichannelworld sustainable economy longer and fuller lives bill.com PIVOT BIO BIONTECH Solugen 3 **Forge** RØBLOX TEMASEK 6

Digitisation, Future of Consumption, Sustainable Living, and Longer Lifespans.

The first trend, Digitisation, covers technologies which enable the transformation of business models and operations.

In this space, we have invested in

Bill.com – a provider of cloud-based software which digitises business financial processes;

and Forge - a provider of marketplace infrastructure and data solutions for private market participants.

The next trend, Future of Consumption.

This anticipates how consumer behaviour will change in an omnichannel world.

Here, we've invested in companies such as

Lenskart – a multi-channel eyewear retailer, and

Roblox – an online gaming and games creation platform.

The third trend is Sustainable Living.

This supports the transition to a low carbon and sustainable economy.

We have invested in

Pivot Bio – an agri-tech company developing microbes which can turn atmospheric nitrogen into sustainable nutrients for crops,

and Solugen – a chemicals manufacturing platform which aims to decarbonise the chemicals industry.

And finally, the Longer Lifespans trend. Here the focus is on the life cycle needs of people and society as we all live longer and fuller lives.

Some of our investments in this space include BioNTech – which develops immunotherapies to treat diseases in patients, and

Verily Life Sciences – which develops machine-learning enabled healthcare solutions for the prevention and management of chronic diseases.



Now, over the last 6 years since we have identified these trends, we have been increasingly deploying capital into innovative companies and solutions underpinned by the trends.

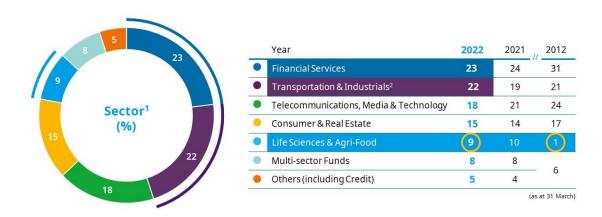
You can see that in 2016, these trends comprised only 13% of our portfolio.

Since then, our exposure to the trends has grown to 30% today.

Here's an overview of our portfolio composition by sector.

Composition of Our Portfolio by Sectors





Distribution based on underlying assets.
 The Transportation & Industrials sector includes investments in Energy & Resources.

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You can see from the table on the right that our two largest sectors this year are Financial Services and Transportation & Industrials.

In Transportation & Industrials, our exposure has increased.

We invested in LG Energy Solution

a global supplier of rechargeable lithium-ion batteries for electric vehicles.

We also made follow-on investments in Singapore Airlines and Sembcorp Marine.

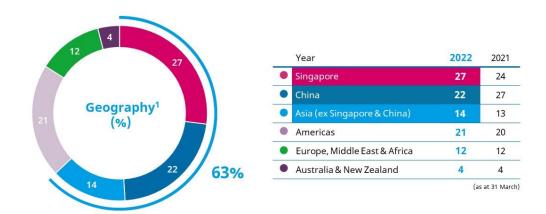
If you were to compare this with our 2012 numbers, you will see that our sectoral composition has evolved over the decade.

Our Life Sciences & Agri-Food portfolio, in particular, has grown from 1% to 9% reflecting our greater focus in these sectors.

Let's now look at our portfolio by geography.

Portfolio Remains Anchored in Asia





¹ Distribution based on underlying assets.

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We remain anchored in Asia, with 63% of our portfolio based in the Asian markets.

Singapore and China are our two largest countries of exposure by underlying assets.

In Singapore,

we increased our investment activity by participating in Singapore Airlines' bond issue and Sembcorp Marine's rights issue.

This helped to strengthen their balance sheets and help them prepare for a post-COVID world, and accelerate their transition into the green economy.

For China,

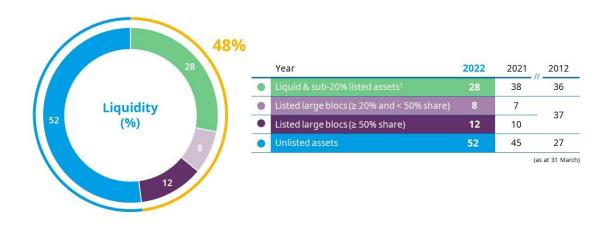
our exposure has decreased.

And this is due to the drop in market value of our China portfolio.

But China has consistently performed well for us over the decade and we remain confident in its fundamentals and longer term outlook. So we will continue to invest into China, as guided by our structural trends.

A Liquid Portfolio





¹ Mainly cash and cash equivalents, and sub-20% listed assets.

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This pie chart shows the liquidity profile of our portfolio.

As you can see, our portfolio remains highly liquid, we have 48% of the portfolio invested in liquid and/or listed assets.

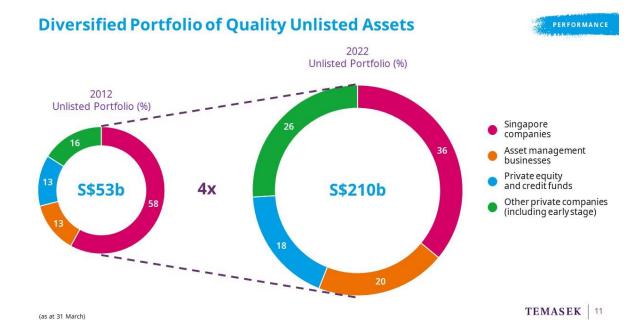
Now, you may have noticed our holdings in unlisted assets have grown over the years

And that is because we have been investing in attractive opportunities in the private markets.

We have also benefitted from the increase in value of these unlisted assets.

I know quite a few of you are interested in our unlisted portfolio,

So let me share a little more on this.



Here you see
a breakdown of our unlisted assets, between
one, the Singapore companies highlighted in pink,
next, the assets management businesses in orange,
our private equity and credit funds in blue,
and finally, in green,
other direct investments into private companies,
such as those in the early stage.

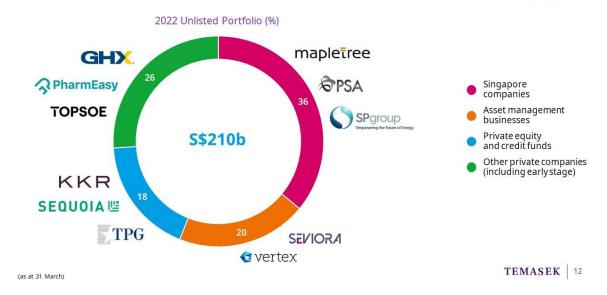
You will see from the chart on the right,

that the value of our unlisted assets have grown by about four times from a decade ago.

Now, let's dive a little deeper into the specific composition of this unlisted portfolio and more importantly, what they do for us.

Diversified Portfolio of Quality Unlisted Assets





Over the years, we have built up a portfolio of high quality unlisted assets.

Our unlisted Singapore companies constitute just over a third of this portfolio.

This includes mature companies such as Mapletree, PSA, and the SP Group,

which offer us liquidity in the form of steady dividends.

We have also expanded and scaled our asset management businesses, which you see in the orange segment.

These companies also help to catalyse Singapore's asset management ecosystem,

and today they comprise about one-fifth of our unlisted portfolio.

You will see companies such as Seviora Holdings and Vertex Holdings included in here.

In the blue segment, we have our investments in private equity and credit funds.

These funds help us gain deeper insights into new markets and specialised sub-sectors;

They have also provided co-investment opportunities for us.

These include funds such as KKR, Sequoia Capital and TPG, which make up slightly less than a fifth of our unlisted portfolio.

And finally, the last segment in green, covers our investments into other private companies - such as Global Health Exchange, PharmEasy, and Topsoe,

which make up about a quarter of our unlisted portfolio.

Now the next question on your mind, is probably how have the unlisted assets performed, say versus the listed assets?

We have that coming up next.

Unlisted Assets Outperformed Listed Assets





(as at 31 March 2022)

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Here, you can see the internal rate of return, or IRR, of both our listed assets in green and our unlisted assets in blue, over a 20-year period.

First, let me start by sharing how we value our unlisted assets.

Our unlisted investments are valued at book value less impairment.

And the returns include one, the returns when the unlisted investments are listed or sold, and two, also the strong performance and cash distributions from the underlying companies.

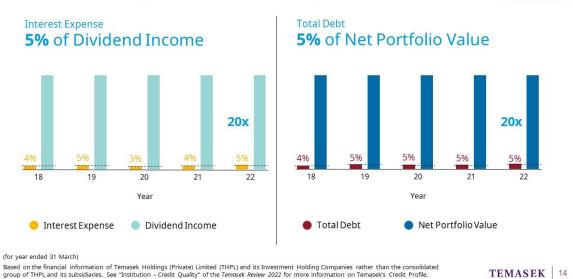
Now, as you can see, our unlisted portfolio has generated a higher rate of return and delivered an illiquidity premium to us.

Just a note on the performance of our listed assets, while we do not measure our portfolio returns by public market benchmarks, we have generally outperformed the global market indices over longer timeframes.

¹ IRR is the money weighted returns of our invested portfolio and its sub-portfolios and takes into account the timing and size of our cashflows with investees, whereas TSR is a time weighted returns of the total portfolio level, after considering effects of cashflow between Temasek and its shareholder.

Our Credit Quality and Financial Strength





Now, even with our changing portfolio, we have maintained a strong credit profile.

Our Interest Expense constituted 5% of our Dividend Income

This means that our dividend income alone could cover our interest expense by 20 times.

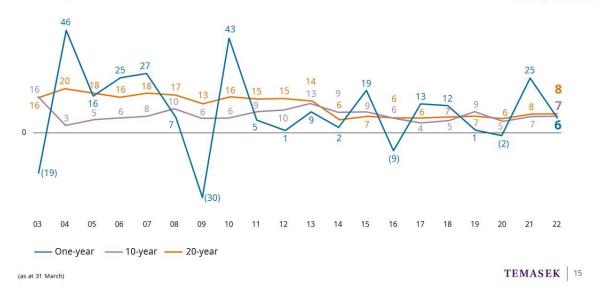
Looking at it from another perspective, Our Total Debt was 5% of our Net Portfolio Value; similar to previous years.

This means that our Net Portfolio Value was 20 times larger than all our outstanding debt.

Again, this speaks to the quality of our credit profile and the financial strength of our portfolio.

Rolling S\$ Total Shareholder Return (%)





And finally, to bring it all together, this chart shows our total shareholder return, or TSR, since 2003.

As shown by the blue line, our one-year TSR as at March 2022 was 6%.

Correspondingly, the purple line shows our 10-year TSR at 7%.

And the orange line shows our 20-year TSR at 8%.

The longer-period TSRs are more representative of our performance as a long term investor.

And you can see that our longer-period TSRs are more stable.

So that's the performance for the past financial year.



Now, let's look ahead, at our Global Outlook.



We believe the global economy is in a fragile state.

Geopolitical tensions have intensified.

The Russia-Ukraine conflict has brought about a more polarised world, with greater economic uncertainty.

We are seeing movements in commodity prices and fractured supply chains.

Central banks have tightened their monetary policies to curb the strong inflationary pressures,

So growth is slowing down, and the risk of a recession is rising in key developed markets.

Let's take a closer look at each of our key markets.



Starting off with the US, The labour market remains tight and inflationary pressures continue to be strong.

We expect the Fed to continue tightening monetary policy to manage inflation expectations.

With the tightening financial conditions, negative fiscal impulse and elevated geopolitical uncertainty,

growth is likely to slow down meaningfully, increasing the risk of a recession as we head into 2023.

However, a recession, if it occurs, is likely to be relatively mild.

Private sector balance sheets are healthy and should ride out the downturn.



Over in China, we expect it will be a challenge for the economy to meet its growth target of 5.5%.

Even though growth has been weak so far this year, the policy agencies are likely to remain supportive.

This will help buffer headwinds from softer property activity, pandemic restrictions, and US-China tensions.



In Europe,

we expect a meaningful slowdown in the second half of 2022 as the Russia-Ukraine conflict take its toll on consumer income and business confidence.

With inflationary pressures compounded by rising energy costs, the ECB is likely to normalise monetary policy and exit negative rates by the end of this quarter.

And when this happens, a combination of increased interest rates and slowing growth, could lead to a recession.



Here in Singapore, we expect a stronger recovery with the continued loosening of COVID-19 restrictions, and reopening of borders.

However, despite MTI's growth forecast of between 3 to 5% for the year, our externally-oriented economy means that Singapore will remain vulnerable, should a recession occur in other key markets.



So, what does this mean for our Investment Stance?

Against these global uncertainties, our investment approach remains cautious.

Our stance for the rest of the year will be guided by what the market is pricing in and the Fed's posture.

Generally speaking, in view of the current environment, we expect to slow down our investment pace this financial year.

Overall, we remain focused on constructing a resilient portfolio underpinned by our structural trends, while keeping a close eye on geopolitical developments.



With the global landscape becoming more complex and challenging,

We have identified 6 top-of-mind issues, which have to be addressed by governments, businesses and society.

Navigating a Complex World





First, I've already spoken about the macroeconomic landscape of rising inflation and higher interest rates, and hence lower growth and returns;

Next, rising geopolitical tensions and decoupling, as seen in the US-China relations;

Three, the proliferation of foreign investment regimes and restrictions;

Four, the climate crisis and increasing urgency for businesses to pivot towards sustainability;

Five, the importance of cybersecurity resilience in an increasingly digitised world;

And lastly, the advent of Industry 4.0 which requires businesses and their workforce to transform themselves.

Now, all these top-of-mind issues can impact our investment and operating environment. So amidst these challenges and uncertainties, it is important that we chart a steady course for Temasek in the decade ahead.

And how are we doing this?

Towards 2030



There are three key pillars in our strategic roadmap towards 2030:

First, we continue to work on building a resilient and forward looking portfolio,

We keep sustainability at the core of all that we do, from the way we invest to how we operate as an institution.

The third and perhaps most important pillar is our people. We are building a team with the right capabilities to tackle the challenges of tomorrow.

For us to succeed across all these pillars, we cannot be a mere provider of capital.

We must be a provider of catalytic capital – our investments must catalyse value and generate returns in the form of not just financial capital, with you also human, social and natural capital.

And we will not be able to do it all alone.

The problems of tomorrow are complex,

We need to operate as a networked organisation, Harness the collective capabilities of our partners, portfolio companies, and other stakeholders in the Temasek ecosystem to find and create the right solutions.

We will also equip our workforce with a clear sense of purpose, and a strong set of values and cultures to help us navigate the challenges and uncertainties ahead.

Now let me spend a little more time on the first pillar on this page.



How are we building a resilient and forward looking portfolio?

We have three growth engines to help us do this.

Our Investment Engine

- delivers sustainable returns over the long term;

The Partnership Engine

- comprises our strategic platforms and partnerships;

And Development Engine,

- which identifies and builds future-centric capabilities.



How does our investment engine enable us to deliver sustainable long term returns?

First, we continue to extend our global footprint by investing in leading international companies – some of which you see listed here.

We also undertake early stage investments to help catalyse innovations and new business models.

At the same time, we also actively partner our local companies in their transformation journeys

Here, our investments allow them to strengthen their balance sheets

and strategically pivot their business models.

As shared before, our investment direction will continue to be underpinned by the 4 structural trends which you see below.



Our second growth engine is our Partnership Engine

Here, we look to strategic partnerships to catalyse growth and build scalability.

On the left, we have our Solutions Platforms.

These are partnerships forged with like-minded investors, to scale feasible and novel solutions in areas such as energy, food, mobility, built environment and manufacturing.

On the right, we have our Asset Management Businesses, which continue to grow their businesses and deliver strong returns in an increasingly competitive environment.



Our third portfolio engine is our Development Engine.

Here, we see an opportunity for Temasek to be an Enterprise Builder to catalyse ecosystems in Singapore and beyond.

Through our efforts in upstream Innovation and R&D, and our investments into emerging areas such as AI & Digitisation, Blockchain, Cybersecurity, and Sustainable solutions, we will identify disruptive technologies to create the next generation of Leading Companies.

And with that, I've just covered our strategic roadmap for 2030,

and in particular, the three growth engines which help us construct our resilient and forward looking portfolio.

Here's a video about one of our agri-food investments, called eFishery, which shows our growth engine at work.

(Link to 'Feeding Fish, Feeding Generations')



What we've just seen, shows us that striving to do well as an investor can also allow us to do right and do good for the community and the planet.

And that is why sustainability is very much at the core of all that we do.

Here are the focus areas in this space for us.

Enabling a Sustainable Organisation





1 tCO₂e refers to tonnes of carbon dioxide equivalent, a standard unit used in greenhouse gas emissions accounting and reporting.

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As you may already know, as a company we have maintained carbon neutrality for the third year running.

To manage our carbon emissions we have internalised the cost of carbon in our investment decision making.

We have implemented an internal carbon price, starting initially with 42 US dollars per tonne of carbon dioxide equivalent and increasing it to 50 US dollars this financial year.

We expect this number to increase over the decade to 100 US dollars.

Institutionally, we are also setting aside a sustainability-linked component in the long term incentives for all our employees.

And for our portfolio, our 2030 target is to reduce the net carbon emissions attributable to our portfolio to half the 2010 levels, and aiming towards net zero by 2050.



This chart illustrates the pathway for our net portfolio emissions as we strive towards net zero.

By 2030, we are aiming for our total net portfolio emissions to reach 11 million tonnes of carbon dioxide equivalent, so as to achieve net zero by 2050.

How can we aim towards this?



To progress towards our climate targets, we are adopting a three-pronged strategy:

Firstly, we invest in companies that are aligned with the focus on climate change and solutions.

Next, we enable carbon-negative solutions, such as technologies for Carbon Capture, Utilisation and Storage as well as nature-based solutions.

And finally, we also encourage and support ongoing decarbonisation efforts by our companies.

Developing Human Capital













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I've spoken about our portfolio and sustainability focus areas, Now let's move on to the last pillar of our 2030 strategy, our people.

Talent development is a key area of focus for us in our strategic roadmap.

And we have many ongoing initiatives to help grow our people and teams for the future.

Such as the "Make-A-Difference", or MAD Programme, which rewards employees for achieving non-financial goals such as in the areas of community work, sustainability and institutional initiatives.

Also, launched this year, is the Inclusivity@Temasek initiative which reinforces our culture of belonging, and strengthens our diversity practices.

Then there's the Temasek Women's Network – with mentorship programmes and leadership sharing sessions to support our female colleagues in their career journeys.

As we enter the era of Industry 4.0, our Tripartite Conversations help to prepare and align our ecosystem partners for changes ahead.

When our staff leaves the firm, our alumni network helps them to stay connected with us.



We also look out for our broader community.

And here, there are two parts to Temasek's role as a Trusted Steward.

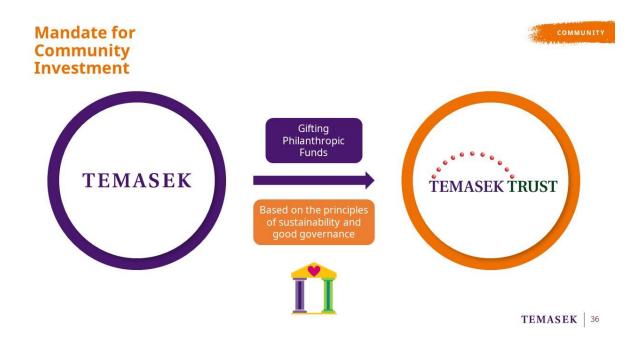
First, Temasek has a constitutional responsibility to safeguard our past reserves.

Second, we believe it is important to do good and contribute to the well-being of our current and future generations.

Let me share more about how we are fulfilling our role as a Trusted Steward.

Since 2003,

whenever we achieve net positive returns above our overall risk-adjusted cost of capital, the Temasek Board would approve the gifting of philanthropic funds to Temasek Trust.



And Temasek Trust will in turn oversee the financial management and sustainable disbursements of these philanthropic gifts to support community initiatives,

based on the principles of sustainability and good governance.



Our philanthropic gifts to the community are guided by four outcomes:

They are advancing capabilities, connecting people, uplifting communities, and protecting our planet.

I'm really proud of how our funds are used to advance these outcomes. Here are some examples.



Over the last two years, you would have seen various COVID support initiatives which Temasek Foundation, or TF, has been involved in – this is part of our focus to help uplift lives and help communities.

In Singapore,

TF distributed disposable and reusable masks, oximeters, and povidone-iodine mouth gargles to Singapore households.

In the region,

TF donated reusable adult and children's masks, as well as tentages to Johor over the past year.

They also donated oxygen concentrators to Indonesia.



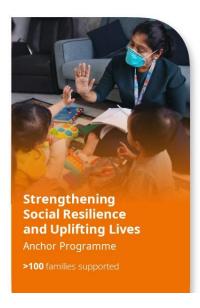
Globally,

TF has provided COVID-related supplies to some 40 countries.

Their donations included PCR test kits, oxygen and ventilation equipment, as well as millions of masks to healthcare and frontline workers, and also the community.

Temasek Foundation's Programmes









Beyond its COVID-19 initiatives, Temasek Foundation has also spearheaded many different programmes to connect people and strengthen social resilience.

For example, they have customised a programme called Anchor to provide support to children who have undergone trauma.

And so far, over 100 families have been supported by this programme.

To foster international exchange and build capabilities, Temasek Foundation organised the inaugural Philanthropy Asia Summit last year.

Bringing together global and regional philanthropists and helping to catalyse partnerships for climate action, inclusive education, and pandemic security.

Lastly, to advance science, and protect the planet, they have also been organising an annual Liveability Challenge. Last year's winner was SeaChange, a start-up developing novel solutions to reduce global warming by draining carbon dioxide from seawater. It is now working to develop the world's first carbon extracting desalination plant.



Another group which is also helping to advance capabilities and protect the planet, is Temasek Life Sciences Laboratory, or TLL.

They are undertaking biomolecular science research and developing applications to benefit people across the world.

One of their research projects aims to suppress mosquito population and so reduce mosquito-borne diseases.

Another programme of theirs is a partnership with MIT to develop sensor technologies for the digitalisation of food production.



To protect our planet, Mandai Nature was jointly established by Temasek and Mandai Park Holdings.

This serves to advance efforts to prevent species extinction, protect habitats and benefit people in Asia.

Today, they support over 40 conservation projects in Southeast Asia, including the Coffee and Primate Conservation Project in Indonesia to promote and cultivate shade-grown coffee.

This not only helps to conserve the habitats of the endangered Javan Gibbons, but also provides alternative sustainable livelihoods for the local community.

Mandai Nature also works with the Wildlife Conservation Society Indonesia Programme on conservation efforts for the critically endangered Roti Snake-necked Turtle. And they do this through species protection, habitat selection, and community engagement measures.



Last but not least, to advance and build up our capabilities, the Stewardship Asia Centre (SAC) was set up to activate steward leadership and leading governance practices within our business communities.

In March this year, SAC, introduced the second edition of the Singapore Stewardship Principles (SSP) for Responsible Investors, this outlines key practices and actions for good investment stewardship.

They also launched Steward Leadership 25, an annual listing of the 25 best corporate examples and stories which have demonstrated steward leadership excellence in the Asia-Pacific region.

SAC and SMU also jointly designed an executive education programme – which aims to enable both personal leadership development and organisational growth, while addressing the existential threats facing humanity today.







I began my presentation by introducing to you Temasek's Purpose statement: 'So Every Generation Prospers'.

Let me now share more about how we derived this statement.

Over the past year, we have been engaging our staff in many discussions and conversations.

And the goal was this – to look deep into what we were doing as a firm, and find the words to articulate our collective purpose and flesh out the values, cultures and beliefs which we stand for as an institution.

And the outcome was unanimous, our Purpose is defined in a simple statement which you see here today.

This serves as a single, unifying pledge which encapsulates the reasons for our being - who we are and why we do what we do... 'So Every Generation Prospers'.

As we venture into the coming decade, may we always carry with us the spirit of doing things today with tomorrow in mind. To conclude, let us watch a video about how an Al-enabled programme supported by Temasek Foundation is helping to enhance the mental well-being of our seniors.

Thank you.

(Link to 'Facing the Unseen')