



**DC** DEFENCE  
COLLECTIVE  
SINGAPORE

**ANNUAL REPORT 2022**





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## Mission

WE CHAMPION OUR DEFENCE STORY  
TO INSPIRE EVERYONE TO DEFEND  
WHAT IT MEANS TO BE SINGAPOREAN;  
OUR HOME, OUR IDENTITY AND OUR WAY OF LIFE.





# Chairman's Message

## A Momentous Step

Singapore Discovery Centre (SDC) has continued to deliver exceptional visitor experiences and impactful National Education (NE) programmes, inspiring and captivating generations of audiences. Building on SDC's successes, we have taken a momentous step to formally establish the Defence Collective Singapore (DCS). This brings together SDC, the Navy Museum, Air Force Museum, Army Museum of Singapore, and the NS Gallery at the new NS Square complex in Marina Bay, into a single collective of defence galleries and museums.

## Championing our Defence Story

DCS will champion our defence story to inspire everyone to defend what it means to be Singaporean: our home, our identity and our way of life. The ongoing Russia-Ukraine war serves as a powerful reminder of the paramount importance of Total Defence and DCS' role in inspiring everyone to defend Singapore. Other threats such as transnational terrorism, cyber-attacks, disinformation campaigns and climate change also continue to threaten our national security and are becoming more salient. It is thus increasingly critical for Singaporeans to cultivate a deep understanding of our historical context, our complex threat environment, our national identity, our future possibilities and the significance of our collective resolve to safeguard our nation. DCS must therefore play a key role in enhancing our sense of reality, sense of belonging, sense of hope and the will to act.

## Enhancing the Visitor Experience

DCS will enhance the visitor experience by making our galleries and museums more accessible, appealing and immersive. We will leverage synergies across our galleries and museums to establish a strong network that fosters collaboration, innovation and mutual support within the wider museum industry. DCS will tap on

SDC's experience and expertise and work closely with MINDEF/SAF to progressively onboard and refresh the service museums, starting with the Navy Museum.

Building on the momentum of digital engagement during the COVID-19 pandemic, DCS will further harness the digital space to widen our reach and tell our stories beyond our physical museum spaces. By offering a rich blend of engagement through both physical and digital platforms, we will establish a multichannel opportunity to better connect with different audiences. DCS will become a driving force in nurturing a sense of national pride, as a powerful storyteller of Singapore's defence story.

Besides enhancing the physical and digital infrastructure for our galleries and museums, DCS will also tailor programmes that will resonate with our diverse audiences. To strengthen corporate stewardship and build organisational excellence, we will implement a robust impact measurement framework centred around visitor experience and the impact of our NE programmes.

## Developing our People

Our people are a key ingredient of success. We will focus on attracting, training, and retaining a core group of museum professionals to support SDC as well as DCS' content, collections and conservation efforts to elevate our brand and engagement. Working in close partnership with National Heritage Board, the local museum community and our overseas museum partners, we will learn best practices and enhance professional capabilities, especially in new areas such as museum-related skillsets. Collectively, we will provide new learning opportunities, develop our people as well as raise the quality and skills of our people.



## Forging New Paths

I am proud of SDC's achievements which stand as a testament to the unwavering dedication of our remarkable staff, valued stakeholders and partners over the last 26 years. My heartfelt gratitude to the outgoing members of the SDC Board for their invaluable past contributions and commitment. Their exemplary leadership and commitment have been instrumental in shaping SDC's journey and setting the foundation for the establishment of DCS.

Moving forward, I warmly welcome the newly formed DCS Board comprising distinguished individuals with diverse expertise and insights from the private sector, industry and government. I appreciate their commitment in taking on additional roles in the newly formed sub-board committees and look forward to learning fresh perspectives. The formation of DCS opens up many exciting possibilities for enhanced collaborations, visitor experience, and people development. As we embrace the future and continue forging new paths together, I am confident that we will "**champion our defence story to inspire everyone to defend what it means to be Singaporean; our home, our identity and our way of life**".

## BG Kelvin Fan

Chairman  
Defence Collective Singapore

# Chief Executive's Message

## Thriving Amidst Challenges

2022 was a challenging yet exciting year. It was also a memorable year for Singapore Discovery Centre (SDC) as we witness the end of the COVID-19 pandemic, with SDC being awarded the President's Certificate of Commendation for our contributions to the national COVID-19 operations.

As we transitioned back to pre-pandemic normalcy, we saw intensive competition in the market as borders reopen and learning journey providers and attractions push out new offerings. The pandemic accelerated the adoption of new digital technologies and reshaped our social norms and visitors' expectations. Despite the new challenges, we adapted to this new normal and successfully engaged existing and new audiences through a wide range of new product offerings too. The result was an increase in visitorship by more than 75% this year.

Our continued engagement with our Public-Private-People (P-P-P) partners helped SDC gain mindshare and further cement our role in National Education (NE) and Total Defence. National Day celebrations returned to the heartlands this year and SDC, as one of the key partners, brought our interactive exhibitions to 5 locations across Singapore's heartlands. Efforts to deepen partnerships with the Ministry of Education (MOE) and Institutes of Higher Learning (IHL) have also resulted in more cohort-based NE engagement and IHL collaborations on youth-centric projects.

With the growth of hybrid learning and new innovative technologies such as ChatGPT, the education landscape has been rapidly transforming. It is imperative for us to work in close collaboration with our partners to stay attuned to emerging trends and continually reinvent ourselves to stay relevant. The increasing emphasis on active citizenship also prompted us to review our engagement strategy to focus on driving community impact and co-creation. On that note, our Friends of SDC programme has gained much

traction since its pilot run last year and it is very encouraging to see students, working adults and retirees joining us as volunteers. We will continue to create more platforms to encourage ground-up initiatives aimed at building up a community with a strong sense of ownership towards contributing to Singapore's future.

## Last Mile towards Net-Zero

Sustainability remains our key focus as SDC steadily advances towards our goal of attaining the Green Mark Zero Energy Building certification by FY2023. By leveraging on smart energy management systems, we were able to better monitor our energy consumption and adopt a data-driven approach to further reduce wastage. We also continue to develop sustainability programmes to educate our staff and visitors on green practices to contribute to the Singapore Green Plan 2030.

In recognition of our efforts in promoting sustainability awareness to schools, organisations and the community, SDC was awarded the Sustainable South West Award 2022. Our sustainability efforts have also garnered international recognition with invitations for SDC to share our sustainability journey at local and international platforms. In the upcoming year, we are excited to welcome more of such opportunities as we embark on our solar carpark project, set to propel us towards our net-zero target.

## Enhancing our Impact as a Museum Collective

As we transform into the larger Defence Collective Singapore (DCS), we will build on our commitment to curate immersive experiences and develop effective programmes. New programmes have already been introduced for the Navy Museum. We are also mapping out new capabilities such as curatorial and collections to enhance our existing competencies and will actively engage the wider museum community to elevate DCS' stature locally and internationally.



To kick off our international engagement efforts, DCS participated for the first time in the International Council of Museums (ICOM) Annual Conference held in Prague in 2022 and we also co-organised with Nexus/MINDEF the first seminar which brought overseas museums representatives from the International Advisory Panel for MINDEF museums to SDC.

## Looking Ahead

I would like to express my appreciation to our committed staff, partners and stakeholders who have helped propel us towards our achievements. I would also like to extend my deepest gratitude to the outgoing SDC Board for their immeasurable contributions which have been integral in SDC's success and for their faith in the DCS transformation.

As we begin our new DCS journey, I am excited about the many opportunities that lie ahead. I look forward to working with our partners, stakeholders and the new DCS Board to amplify our efforts in shaping the Singapore Story. Together, we will continue to chart new horizons and broaden our impact.

## Mr Joseph Tan

Chief Executive  
Defence Collective Singapore

## Board of Directors



**BG Kelvin Fan**  
Chairman  
Defence Collective Singapore;  
Deputy Secretary [Policy]  
Ministry of Defence



1. **Mr Joseph Tan**  
Chief Executive  
Defence Collective Singapore

2. **COL Goh Jerica**  
Director  
Nexus  
Ministry of Defence

3. **SLTC (NS) Melvin Kwek**  
Managing Director  
Vantage Point  
(Private Limited)



4. **Mr Jeffrey Seah**  
Partner  
Mettle & Salt Partners Pte Ltd

5. **Ms Loh Wee Cheng**  
Divisional Director  
Student Development Curriculum  
Division 1  
Ministry of Education

6. **Mr Leonard Tan Bahroocha**  
Director, Head of Product Innovation  
Team (SEA & Oceanic)  
Samsung Electronics



7. **BG Frederick Choo**  
Chief of Staff – Joint Staff  
Singapore Armed Forces  
Ministry of Defence

8. **Ms Chung May Khuen**  
Director  
National Museum of Singapore

9. **Ms May Tan**  
Director, Education & Development  
National Arts Council



10. **Dr Ang Cheng Guan**  
Associate Dean & Professor  
International History of Southeast Asia,  
S Rajaratnam School of International  
Studies (RSIS)  
Nanyang Technological University

11. **Mr Muhamad Imaduddin**  
Director (Crime Division)  
Attorney-General's Chambers

12. **Ms Huang Shao-Ning**  
Founder & Partner  
AngelCentral

## Sub-Committees

### Audit Committee

SLTC (NS) Melvin Kwek  
BG Frederick Choo  
COL Goh Jerica

### Compensation Committee

Mr Jeffrey Seah  
COL Goh Jerica  
Mr Muhamad Imaduddin

### Business Committee

Ms Huang Shao-Ning  
SLTC (NS) Melvin Kwek  
Ms May Tan

### Experience Committee

Ms Loh Wee Cheng  
Ms Chung May Khuen  
Mr Leonard Tan Bahroocha  
Dr Ang Cheng Guan

## Meeting Attendance

(Apr 2022 – Mar 2023)

### Board Member

Mr Teo Eng Dih (till 15.8.22)  
BG Kelvin Fan (fr 15.8.22)  
Mr Joseph Tan  
COL Goh Jerica  
SLTC (NS) Melvin Kwek  
Mr Chia Tze Yee (till 20.1.23)  
Ms Kit Chan (till 9.3.23)  
Mr Jeffrey Seah  
Mr Ng Kin Yi (till 20.1.23)  
COL Lim Han Yong (till 20.1.23)  
Ms Loh Wee Cheng  
BG Tan Tiong Keat (fr 7.7.22 till 20.1.23)  
Mr Leonard Tan Bahroocha (fr 15.9.22)  
BG Frederick Choo (fr 1.3.23)  
Ms Chung May Khuen (fr 1.3.23)  
Ms May Tan (fr 1.3.23)  
Dr Ang Cheng Guan (fr 1.3.23)  
Mr Muhamad Imaduddin (fr 1.3.23)  
Ms Huang Shao-Ning (fr 1.3.23)

### No. of Meetings Attended

1  
3  
4  
4  
3  
2  
1  
2  
3  
1  
3  
1  
3  
-  
-  
1  
1  
1  
1

### No. of Meetings Held

4  
\*19 Jan: SDC - DCS Transition  
\*29 Mar: 1st meeting with new DCS board

## Management Team



**Mr Joseph Tan**  
Chief Executive



**Mr Leong Yue Weng**  
Deputy Chief Executive;  
Executive Director,  
Singapore Discovery Centre



**Ms Soo Hui Wah**  
Director, Partnership



**Ms Peh Yee Joo**  
Director, Exhibition &  
Volunteer Management



**Ms Sally Yeo**  
Director, Finance &  
Procurement



**Mr Yap Chee Wee**  
General Manager,  
Singapore Discovery Centre;  
Director, Marcom & Business  
Development



**Mr Aw Young Gan Juen**  
Director, Corporate  
Development & Human  
Resources



**Mr Lim Chin Seang**  
Director, Infrastructure  
& Sustainability;  
Director, Centre  
Management



**Ms Rosedini Binte Abdul Rahim**  
General Manager, Navy  
Museum



**Ms Hairaini Joshi**  
Director, Curatorial &  
Collections



# At a Glance



**Total Engagement**  
633,275

In-Centre  
259,935

Outreach Programmes  
333,287

Digital Engagement  
40,053



**Schools Engaged**  
409

Preschool  
43

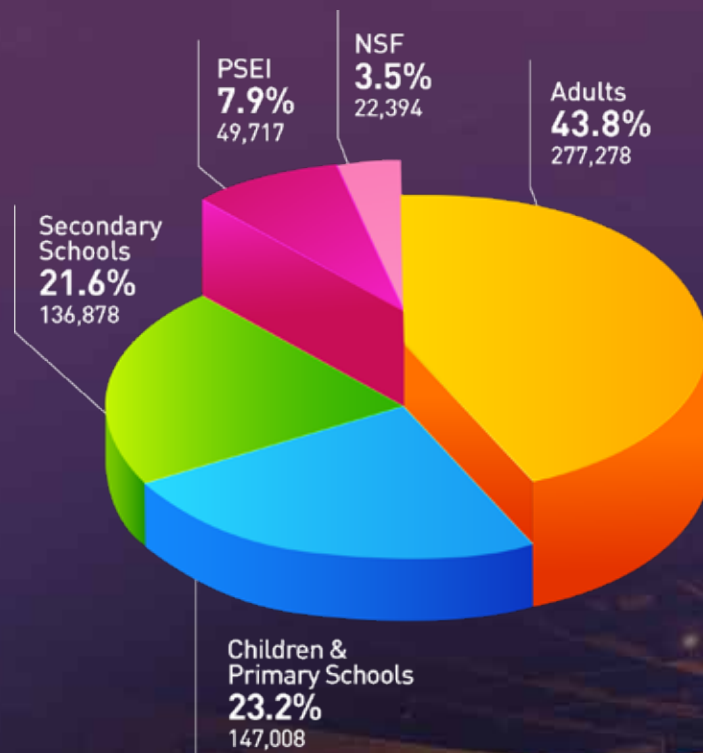
Secondary  
148

Primary  
182

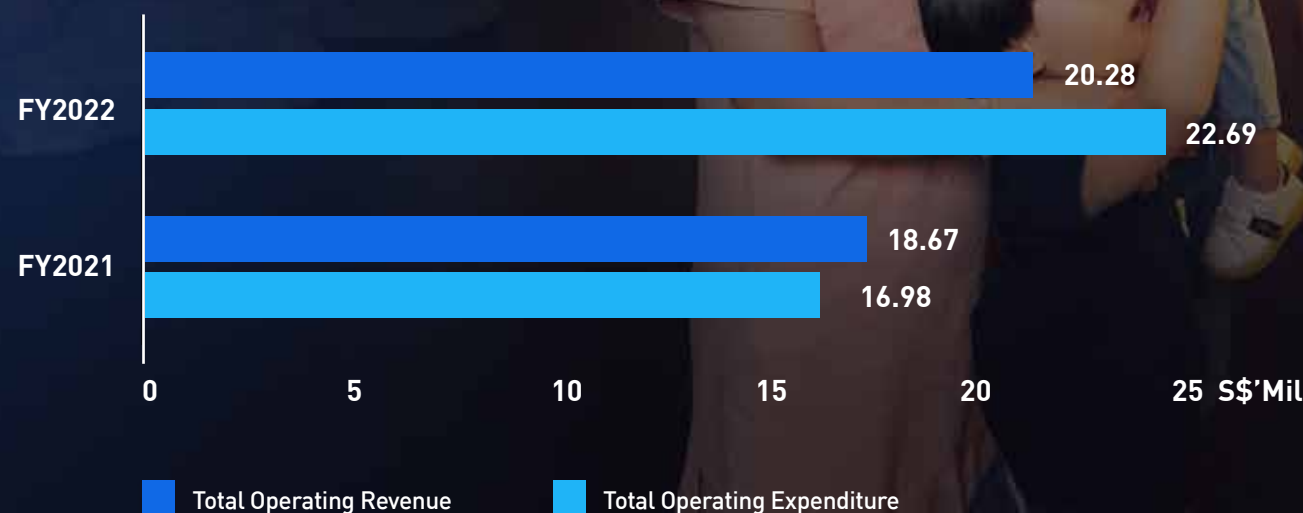
Post-Secondary  
36



**Active Memberships**  
1,404



## Financial Highlights – Defence Collective Singapore Ltd (Formerly known as Singapore Discovery Centre Ltd)



## Awards & Accolades

### NS Mark (Gold)



SDC was accredited with NS Mark (Gold) in recognition of exemplary support to Total Defence and National Service.

### bizSAFE STAR



SDC successfully maintained its bizSAFE STAR certification.

### ISO 45001:2018



SDC obtained the ISO 45001:2018 certification, for occupational health and safety management systems for the provision of services for exhibits and attractions, organised tours and education programmes, and organised events.

### Sustainable South West Awards 2022 (Corporate Organisation Category)



SDC was awarded the Sustainable South West Awards 2022. This award recognises schools, community and corporate organisations which have displayed exemplary contributions towards environmental sustainability in the South West District and to the Sustainable South West Masterplan.

### BCA Green Mark Award Platinum, Super Low Energy



SDC was awarded the BCA Green Mark Award Platinum, Super Low Energy.

### Tripadvisor Travellers' Choice 2022



An annual award in recognition of the very best tourism establishments in terms of service, quality, customer satisfaction and more, across a range of categories.

### The National Awards (COVID-19)

SDC was awarded the National Awards, which is presented to organisations which had responded comprehensively during the pandemic.

### The President's Certificate of Commendation (COVID-19)

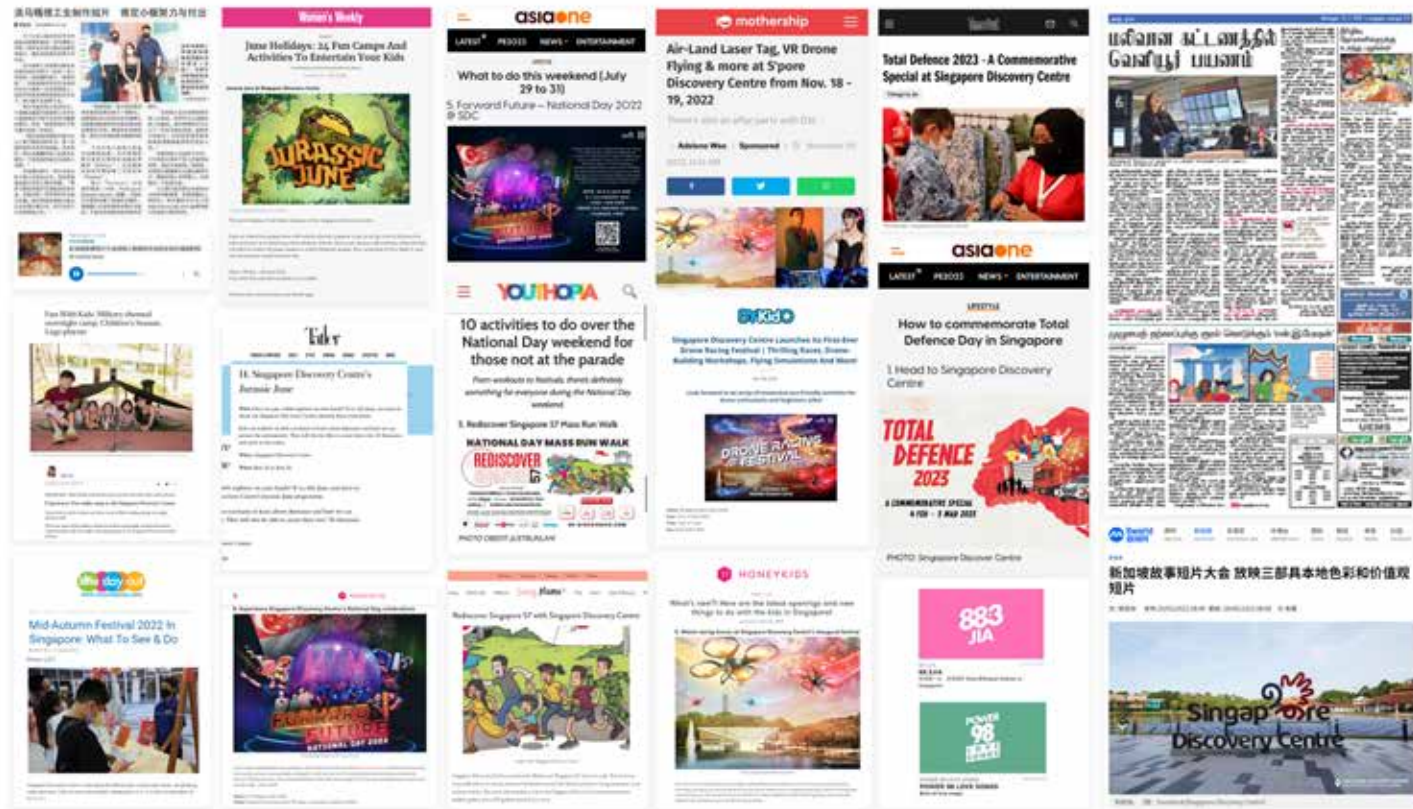
SDC received the Certificate of Commendation from the President of Singapore. This award recognises organisations for their exceptional efforts which had significant impact in Singapore's fight against COVID-19.



## Media Coverage

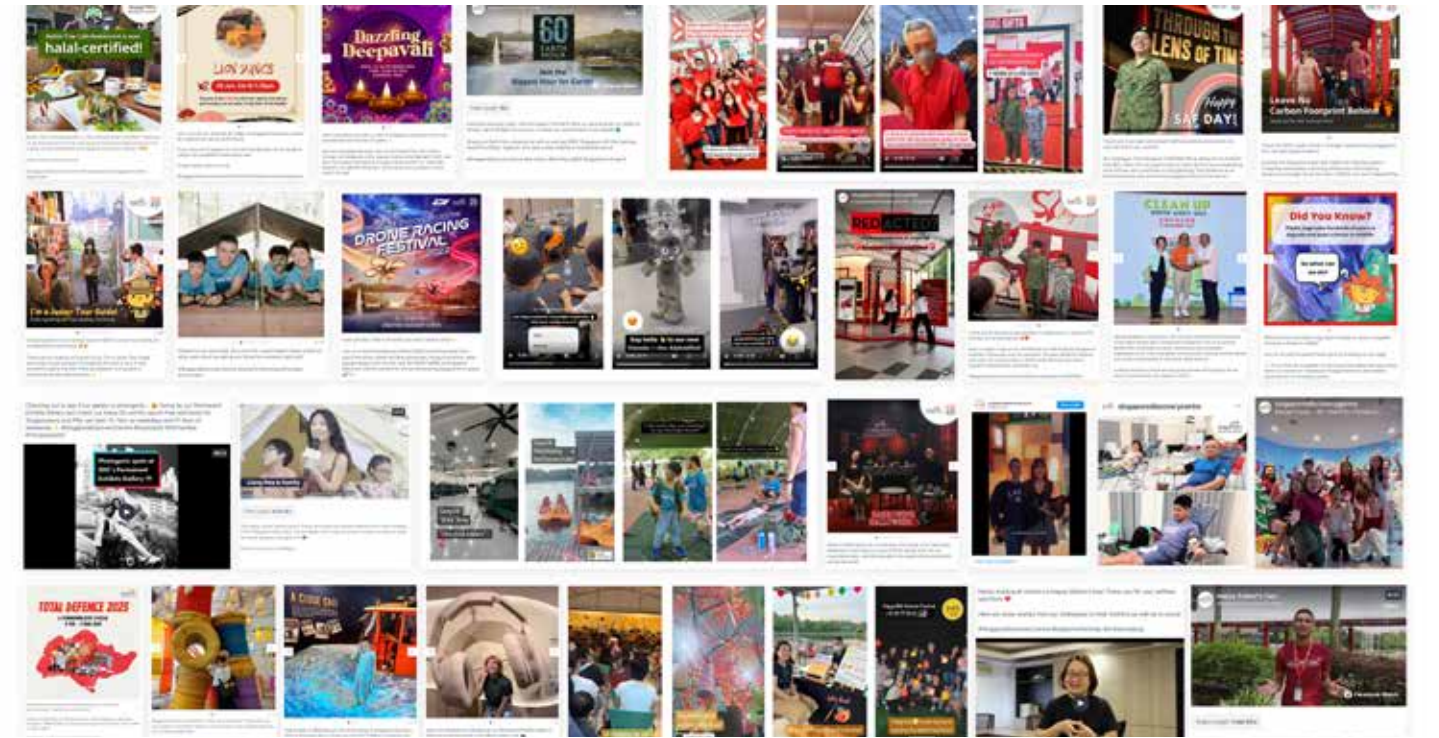
Throughout FY2022, media coverage continued to be a key contributor in bringing awareness, presence and calls to action to participate in SDC's wide range of programmes. Some of the programmes included exhibitions, school and public programmes and activities for visitors across all ages and walks of life. Special shout-out for SDC's key commemorative events such as National Day and Total Defence, as well as marquee events like Camp1N and Harrowing Halloween were spread across an array of media platforms: namely broadcast, print, and digital.

With the recent establishment of Defence Collective Singapore (DCS), there are plans to publicise the role of DCS while leveraging on the strong presence of SDC. There will be publicity plans on the latest developments of the various service museums which have been or are going to be on-boarded to DCS Family: firstly, the current revamp of the Navy Museum and redevelopment of the Army Museum and the Air Force Museum, as well as the exciting plans for the future NS Gallery @NS Square.



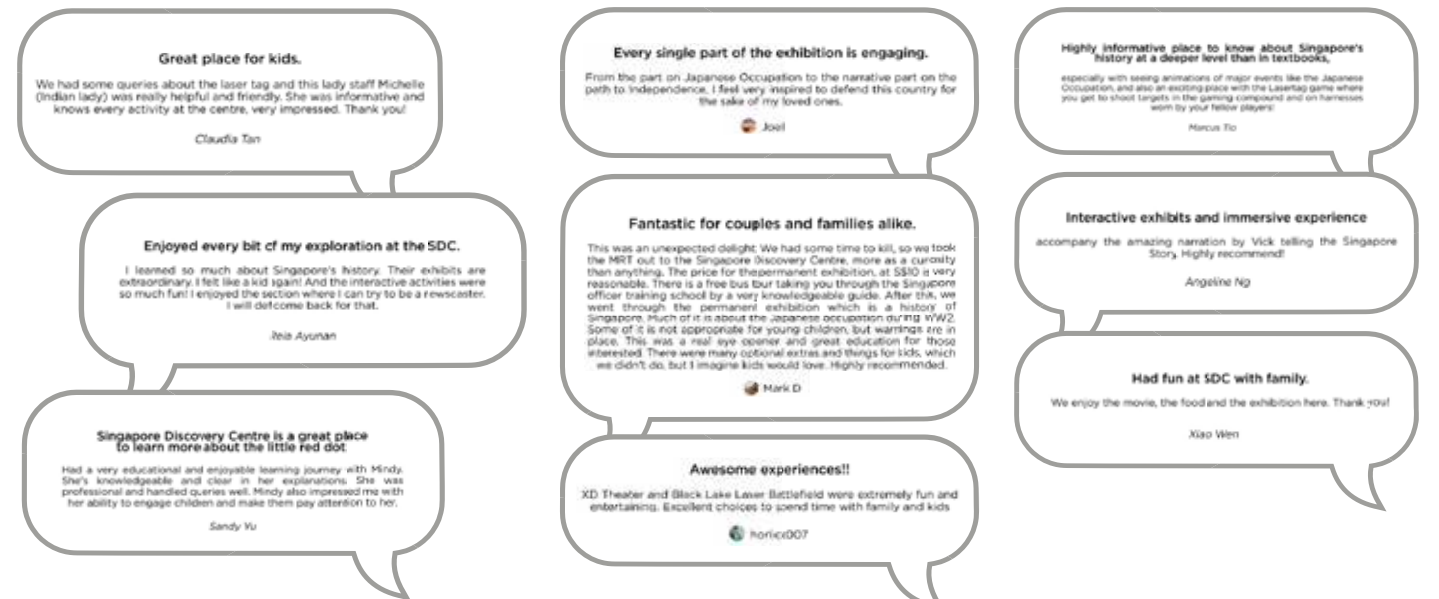
## Social Media

SDC stays connected with its visitors through a range of social media content for various target audience groups. From leveraging on Tiktok content trends, to educational trivia quizzes and live updates on marquee events, over the past year, SDC intensified its efforts to expand its online presence and has grown its follower base across various social media platforms.



## Online Reviews

SDC is heartened to receive many positive reviews from its visitors and programme participants, highlighting their enjoyment of immersive experiences, engaging events, and commendable customer service from its dedicated staff. Building on last year's success, SDC won the 'Trip Advisor Travellers' Choice: 'Best of the Best' Award again in 2022. This reaffirms SDC's exceptional status as a top destination in Singapore, driven by consistent service quality and customer satisfaction through travellers' recommendations and feedback.





# FY2022 Highlights

- 14 Establishment of Defence Collective Singapore (DCS)
- 16 Onboarding of Singapore Navy Museum
- 17 International Partnerships



# FY2022 Highlights

## Defence Collective Singapore

### Establishment of Defence Collective Singapore 9 Dec 2022

Since embarking on its rejuvenation in 2020, SDC has welcomed many visitors to enjoy its refreshed exhibition galleries and new attractions. Apart from the immersive exhibitions covering Singapore's past, present and future, SDC also incorporated its sustainability initiatives into its programmes.

In August 2022, SDC saw a change in leadership and underwent a re-organisation as part of its transition to Defence Collective Singapore (DCS) which was established on 9 December 2022. This new entity includes Singapore Discovery Centre (SDC), three service museums (Army Museum, Air Force Museum and the Navy Museum) and the future NS Gallery @NS Square.

### Changes in Leadership Aug 2022

In August 2022, with Mr Teo Eng Dih stepping down as SDC Chairman, BG Kelvin Fan, Deputy Secretary (Policy), MINDEF, took over as the new Chairman of SDC Board. Subsequently, he assumed the role of Chairman of the new DCS Board, with Mr Joseph Tan as DCS Chief Executive.



### “Organising Our Defence Museums to tell the Singapore Story

To bring our Singapore defence story to life and better preserve our heritage, we have set up the Defence Collective Singapore (DCS) to oversee all our defence and military museums. We have also been refreshing our museums to ensure that the exhibition content is up-to-date, and that the visitor experience is interactive and educational.”

- Extract from Senior Minister of State, Mr Zaqy Mohamad's Speech during Committee of Supply February 2023

### Transition: Appreciation to outgoing SDC Board and Welcoming new DCS Board

### DCS Board Meeting at Navy Museum Jan 2023

DCS Chairman thanked former SDC Board members for their contributions at the meeting, followed by a special preview of the refurbished Navy Museum led by the new Navy Museum team and Navy Information Centre (NIC) representatives.



### New DCS Board Mar 2023

A new DCS Board was constituted with public and private sector representatives, and some SDC Board members continued to serve. Orientation and onboarding of DCS Board members took place in March 2023.





# FY2022 Highlights Singapore Navy Museum



## Onboarding of Singapore Navy Museum

The revamped Navy Museum marked an exciting development for the Republic of Singapore Navy (RSN) as it aimed to highlight Singapore's fundamental identity as a maritime nation and to promote a better understanding of Singapore's maritime defence needs and its capabilities. Today, the museum hopes to widen its appeal to engage not only servicemen, but also school, grassroots and corporate groups, families and the public as well as foreign visitors.

In December 2022, the Navy Museum became the first service museum to join the DCS Family. From sharing of SDC's experience and expertise in exhibition and programme development to synergised efforts and optimisation of resources, DCS is working closely with the RSN, Nexus and the newly formed Navy Museum team to get the museum ready for its reopening in 2023. Key areas included upgrading of exhibition galleries, research, artefact collection and programme development.



Courtesy of Navy Museum



As part of the museum's revamp and preparations for the official opening, the Navy Museum held various activities to engage key stakeholders and gather their feedback.

## Singapore Navy Museum's participation in Navy Family Day 28 Nov - 2 Dec 2022

The first event which DCS and the RSN worked together was the Navy Family Day 2022 which saw over 10,000 Navy personnel and their families visiting the newly refurbished Museum and the Changi Naval Base.



## Visit by past and current RSN Chiefs of Navy 10 Mar 2023

The Navy Museum hosted a special visit of past and current RSN Chiefs of Navy who offered encouraging feedback and recommendations for the museum's further improvement.



(From left to right: Chief of Defence, Vice Admiral Aaron Beng, Past Chiefs of Navy: Ronnie Tay, James Leo, Kwek Siew Jin and current Chief of Navy, Rear Admiral Sean Wat)

## Navy Museum's first public programme: 'Battle for Singapore Tour' 25 Feb 2023

For the first time, the Navy Museum took part in the Battle for Singapore Campaign (organised by the Museum Roundtable, National Heritage Board) by hosting two special tours which were well received.



## International Partnerships

In FY2022, SDC and the newly established DCS not only attended overseas seminars, but also gave presentations to international audiences for the first time. These served to elevate DCS' reputation and placed Singapore on the world map.

International relationships will be one of DCS' key strategic thrusts and new initiatives will be launched to build and brand DCS as a reputable museum collective. DCS intends to actively engage and explore collaborations with overseas museums in areas such as collections, research, training, conferences and IP shows.

## 'The Power of Museums' International Museum Day (IMD) Singapore Symposium 2022 [virtual] 18 May 2022

Mr Joseph Tan, former Executive Director of SDC, was invited to present at the virtual IMD Singapore Symposium 2022, which was organised by the National Heritage Board and the International Council of Museums (ICOM) Singapore Secretariat in May 2022. Ministry of Communications and Information (MCI)'s Gov.sg featured SDC as part of the IMD publicity. This symposium helped profile SDC to the international museum community for the first time. Many found SDC's sharing inspiring and informative and since then, SDC has received many requests from local and overseas organisations to share its sustainability efforts.



## 26<sup>th</sup> ICOM General Conference, Prague 21-27 Aug 2022

Leveraging on its ICOM (International Council of Museums) membership, DCS embarked on its international partnership engagement by taking part in ICOM Prague - General Assembly Conference for the first time. This helped to profile DCS and build connections with overseas museums. DCS delegation gained insights on the latest developments in museum education, sustainability and immersive experiences. The delegation also went on study visits to the National Museum of Prague and various military museums. Moving forward, DCS plans to be more active in ICOM especially in the ICOMAM (International Committee for Museums and Collections of Arms and Military History) to promote DCS museums.



## 'Transforming Our Museums: Conversations on Innovations, New Technologies and Best Practices For Museum Development' Seminar in SDC 22 Jul 2022

Jointly organised by Nexus/MINDEF and SDC, about 100 people attended the seminar where museum specialists from MINDEF's International Advisory Panel (IAP) touched on engagement and museum collection policy, while SDC's former Executive Director, Mr Joseph Tan shared on SDC's latest sustainability initiatives.





## Vision

- To our Guests, Excellent Customer Service
- To our Staff, a Preferred Employer
- To our Business Associates, a Professional Relationship
- To our Stakeholders, an Enriching Partnership

## Mission

To share the Singapore Story and inspire a desire to contribute to Singapore's future

## Programmes & Events

20	NE Commemorative Days
24	School Engagement
30	Defence Programmes
32	Public Programmes / Signature Events
34	Friends of SDC
35	Key MINDEF, Corporate and Community Events





# Programmes & Events

## NE Commemorative Days

SDC engages visitors from various target groups through a wide range of thematic and experiential activities in support of National Education (NE) Commemorative Days (Total Defence, International Friendship Day, Racial Harmony Day, and National Day). Moving forward, DCS continues to explore innovative ways to share the Singapore Story and the defence narrative through centre-based programmes (across all DCS museums), outreach and online platforms.

### Racial Harmony Programme Jul - Aug 2022

Since 2021, the interactive virtual programme aims to foster a deeper awareness of the significance of racial harmony in Singapore. The social experiment-style videos encouraged participants to ponder how they would react in certain circumstances.

**Digital: 5,400 pax**



### SDC's National Day Travelling Exhibitions @ 5 NDP Heartland Events 6 - 7 Aug 2022

SDC's National Day (ND) travelling exhibitions have helped SDC to gain support from strategic partners and stakeholders and bring ND messages closer to the people. In 2022, SDC worked with the National Day Parade (NDP) Exco and supported the NDP Heartland Celebrations at five different locations around Singapore to engage Singaporeans, their families and communities. The five locations were Bishan-Ang Mo Kio Park, Star Vista, Punggol, Sun Plaza and Wisma Geylang Serai. SDC's special ND exhibition entitled 'We Ado[re] Singapore' featured 20 uniquely designed doors, each representing a Singaporean value from multiculturalism to globalism. This outreach also provided a platform to promote teamwork across all SDC departments.

**Outreach: about 80,000 pax  
across 5 heartlands**





# Programmes & Events

## NE Commemorative Days

### National Day School Engagement

#### A Quilted Nation's Trail 18 Jul - 26 Aug 2022

Students took on the role as Singapore's safekeeping agents who pledged to protect Singapore's past, present and future and learnt about how Singapore overcame challenges over the years. Long time school partner, Millennia Institute's 741 students also participated in the ND programme. The school also held its National Day Observance Ceremony for their staff and students at SDC.

**In-centre: 1,363 students from all school levels**



### SDC's First Feature Exhibition: 'REDacted? An Uncensored Look At Our Home', Total Defence 2023 to National Day 2023

'REDacted? An Uncensored Look At Our Home' is a feature exhibition designed with changing themes and programming for Total Defence and National Day. The exhibition featured contemporary issues like cyber security, marginalised communities, and climate change. During Total Defence 2023, SDC partnered with new partners: Singapore Police Force (SPF) for their vehicular display and Singapore Red Cross Society for a blood donation drive. Visitors were also engaged through self-exploratory activities around the centre.



### Total Defence School Programme 2023

#### Operation Redline

A new interactive TD programme which students played the role as 'redline warriors' to determine the demise or survival of the nation by defending the redlines. Students overcame multiple challenges together in teams while participating in various army-like training activities that encompassed the six pillars of Total Defence.

**In-centre: 4,020 students**



#### SG Unite! Card Game - Total Defence Special Project for Primary Six Students Feb 2023

Since 2017, SDC has been in partnership with the Character and Citizenship Education Branch (CCEB), MOE to develop a Total Defence Card Game as a TD cohort experience for primary six students. With each new edition of the card game, content will be updated with the most recent TD-related issues. Some cards designed by former primary six students were also included in the card game.

**Outreach: 42,680 Primary Six cohort (card game distribution)**



#### Total Defence 23 Digital Engagement - 'Access Denied Virtual Escape Room'

CCEB/MOE and SDC launched a pilot programme, 'Access Denied Virtual Escape Room' in which PSEI students learnt about the threats from digital domain and the impact on individuals, community and the nation and what individuals can do to safeguard Singapore against the invisible digital threat.

**Digital: 258,349 Junior College students**





# Programmes & Events School Engagement

SDC has been MOE and schools' choice National Education (NE) partner and continues to reinvent itself to meet changing needs of diverse target groups and latest developments in curriculum. SDC has gained much traction with Post-Secondary Education Institutions (PSEIs) and educators through customised programmes and MOU partnerships.

As Singapore emerged from the COVID-19 pandemic, physical programmes are back in demand. Digital programming and resources continue to be an important outreach platform to widen its audience groups including overseas educators and students. With the onboarding of the Navy Museum to DCS, DCS team has already started to develop and will be piloting interesting programmes for schools when the refurbished museum opens in 2023.

## Guardians of the City (GOTC) II Physical Tournament 17 Nov 2022

SDC, supported by CCEB/MOE and Nexus/MINDEF distributed GOTC II card game packs to secondary two cohort, including uniformed groups.

### Outreach: 48,000 Secondary Two Cohort (GOTC card game distribution)

GOTC II tournament aims to help participants develop a deeper understanding of Singapore's security threats and reflect how they can do their part in Total Defence. Teams competed against each other and strategised how to best use the TD cards to deal with counter attacks and defend their city. The tournament was well-received and garnered positive feedback from schools.

### Outreach: 20 Secondary Schools 159 students



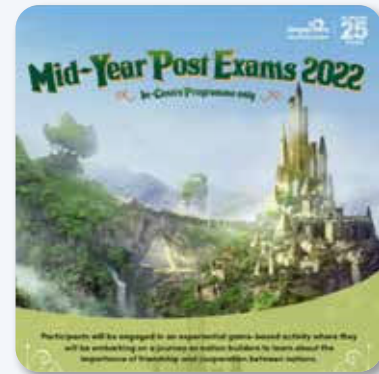
## Post-Examination School Programmes



### ALTERA- Mid Year Post-Exams Programme 18 Apr - 27 May 2022

Students participated in an experiential game-based activity where they embarked on a journey as nation builders to learn about the importance of friendship and cooperation between nations.

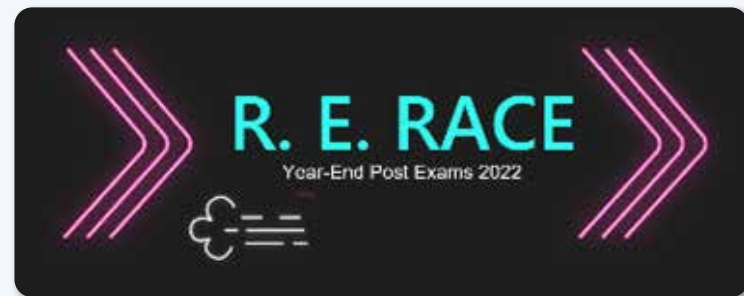
### In-centre: 3,190 Primary and Secondary students



### R.E. Race: Year End Post-Exams Programme 10 Oct - 18 Nov 2022

Students participated in the interactive SDC's Renewable Energy Race (R.E. Race) to learn about the different types of renewable energy and how everyone can do their part to fight climate change.

### In-centre: 3,825 students



## Core Programmes (Key Highlights)

### Customised Programme for Henry Park Primary School Students 29 - 30 Sep 2022

Students learnt about Total Defence and active citizenry through interactive activities such as heartwarming NE films and 'Ready, Set, Home' board games.

### In-centre: 600 Primary One and Two students



### SIMSG Cohort Programme for Secondary Schools

Adapted from a CCEB/MOE and SDC's Secondary three cohort game, SDC updated and created its very own 'SIMSG Express' board game-based programme. The programme provides an authentic environment for students to learn about trade-offs in governance and decision-making through role playing as mayors of Singapore districts.

### Outreach: 1,143 Secondary School students



### 'What's Your Story' - Youth Day Assembly Programme 1 Jul 2023

Delta Senior School students celebrated Youth Day through a fun and engaging digital programme where they learnt about contributions of youth in Singapore and how everyone including students with special needs, can positively contribute to Singapore.

### Digital: 20 classes, 247 students



### Eco-Sustainability Champs

Students underwent an eco-trail where they learnt about SDC's sustainability initiatives and brainstormed ideas to implement in their school or community.

### In-centre: 498 students





# Programmes & Events

## School Engagement

### Preschool Programme

#### Oh What Farm!

Piloted in 2021, this programme invites children to meet and go on a tour led by Farmer Herb, SDC's 'Head Farmer' about urban farming and reducing food waste. The programme has proven to be popular.

**In-centre: 3,097 Preschool children**



### Post-Secondary Education Institutions (PSEIs) Engagement

#### TP's Online Teambuilding Oct 2022 - Apr 2023

SDC organised a virtual amazing race game which "brought" Temasek Polytechnic (TP) students around Singapore's cultural districts. They learnt about the importance of trust and communications through solving a series of puzzles.

**Digital: 3,797 PSEI students**



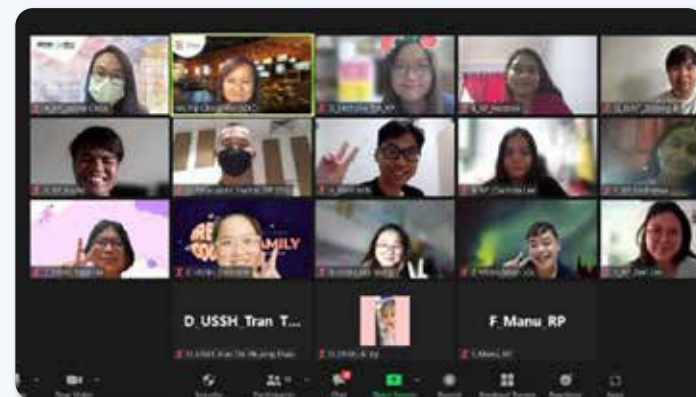
#### Young Ethnographers' Trail for NUS High School 18 May 2022

7 classes of NUS High School students embarked on an outdoor exploratory trail, assuming the role of young ethnographers to conduct fieldwork in HDB heartlands and discussed about the issue of inclusivity within public spaces.

#### Customised Learning Journey for RP 25 Mar 2022

Participants in a customised virtual learning journey designed for Republic Polytechnic (RP) students and their partner overseas institutions learnt about Singapore's past and present challenges via a virtual tour of SDC's exhibition galleries and a facilitated discussion on foreign influences affecting Singapore's diverse cultural landscape.

**Digital: 154 PSEI students**



#### Learning Journey to SDC for SMU Youth Ecosperity Dialogue 7 Jun 2022

Singapore Management University (SMU)'s Youth Ecosperity Dialogue (YED) 2022 provided a forum for student leaders from Institutes of Higher Learning (IHL) throughout Asia and Singapore to explore sustainability concerns and interact with business leaders and industries for conversations. Through a customised programme, SMU YED delegates learnt about SDC's sustainability initiatives and how they can contribute to climate change including proposing "Green" business/projects.

**In-centre: 100 PSEI students**



#### Poly Forum 2022 - Day Zero

SDC collaborated with Nanyang Polytechnic, the chairman of Poly Forum 2022, to organise the Day Zero Programme for the first time, where participants learnt fundamental facilitation skills to prepare for the Poly Forum discussions. The students enjoyed the gallery tours and team building sessions.

**In-centre: 289 PSEI students**



#### ITE College West Orientation 1<sup>st</sup> session: 12 - 13 Jan 2023

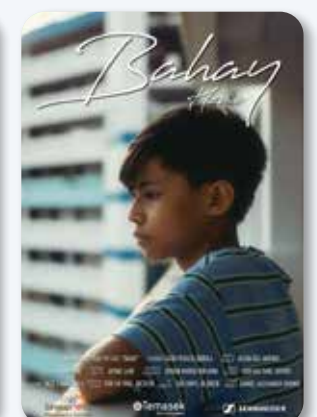
SDC was appointed by ITE College West to organise a 2-day customised orientation programme covering Singapore's history and current affairs. A total of 3,056 participants would be engaged over FY2022-23. The programme's objective is to encourage student collaboration and strengthen the bond between educators and students.

**In-centre: 1,961 ITE students**



#### Singapore Stories Film Premiere 2022 in collaboration with TP 19 May 2022

SDC and Temasek Polytechnic (TP) School of Design's Diploma in Digital Film & Television have been working together since 2014 to inspire young people to make short films that are motivated by local content and national ideals. The films strive to instill virtues such as resilience, adaptability and community while evoking emotions on family and cultural tradition. The 3 new films, 'Pesanan (Order)', '(Made with Passion)' and 'Bahay (Home)', were screened at the Singapore Stories Film Premiere. About 150 people attended the event which included TP school community, SDC staff and strategic partners.





# Programmes & Events

## School Engagement



### N.E.mation! 2023

Organised by SDC, supported by Nexus/MINDEF, N.E.mation!, an annual national digital animation competition for students and youths to express their thoughts in putting Total Defence into action through short animation clips, is back! This season introduced a new Open Category for members of the public to participate, conducted three animation talks with industry experts and brought back the in-person partner immersion visits and the animation hackathon. The competition was supported by Nexus/MINDEF, MOE, various Total Defence industry partners and prize sponsors, Nanyang Polytechnic, Wacom Singapore and Ink Fusion.

**675 Participants across 32 schools**  
**333 submissions**  
**20 N.E.mation! clips made**



### Locations for Partner Immersion Trip

Changi Experience Studios hosted by Changi Airport Group

ISD Heritage Centre hosted by Internal Security Department

Cashew Downtown line hosted by Land Transport Authority

The Sustainability @ Tampines Park hosted by Singapore Food Agency and Otolith

Sea Tour by Maritime and Port Authority of Singapore



5-day Animation Hackathon for School Category Participants held at Nanyang Polytechnic.

### N.E.mation! 2023 Awards Ceremony

BG Kelvin Fan, Deputy Secretary (Policy), MINDEF and Chairman of Defence Collective Singapore, graced the N.E.mation! 2023 Awards Ceremony on 19 March 2023. He highlighted that *"Total Defence continues to be relevant and in fact, even more important, as we need to be more aware and better prepared for the complex challenges and unpredictable disruptions that we will face."*



Top: Team WeeWooWeeWoo from School of the Arts Singapore emerged as the Champion team for Student Category, and Bottom: Team Dontsweatit emerged as the Champion team for the Open Category.

## Educator Engagement

### Start Small Dream Big (SSDB) 28 Feb 2023

In view of the successful partnerships since 2021, SDC participated as an education partner in SSDB 2023 which was organised by the Early Childhood Development Agency (ECDA). It helped to publicise SDC's programmes and reached out to about 200 educators which has helped to increase bookings.

## Educators' Engagement

### NYP NE Educators Workshop 23 Jun 2022

SDC hosted Nanyang Polytechnic (NYP) lecturers from the Centre for Foundation and General Studies for a NE educators' workshop. During the session, SDC shared on how to design engaging programmes with key NE outcomes in mind for different target audience groups.



### Staff Retreat for Millennia Institute 24 Jun 2022

Participants worked in groups to complete several challenges that tested their teamwork and creative abilities. The tasks were themed after the Singapore Story, paying homage to the pioneers of Singapore.

**In-centre: 101 teachers**





# Programmes & Events

## Defence Programmes



### SAF & School Engagement

SDC manages the Commitment to Defence Ambassadors (C2DAs) activities for the Singapore Armed Forces (SAF) units and schools. C2DAs is made up of a group of SAF veterans who have served through operations such as overseas deployment and peacekeeping. C2DAs engage and inspire the next generation to increase community support for defence and security by sharing their personal stories and experiences.

**26, 845 students across 110 schools**  
(Primary and Secondary)  
**4,000 servicemen across 21 SAF units**



### National Education Facilitators' (NEF) Engagement Programme

In-service personnel share their experience in serving the nation and facilitate conversations on defence and security issues to help students understand National Service and the importance of a strong and effective SAF. SDC also partnered with MOE to draw the expertise of NE facilitators to engage JC students taking General Paper on issues such as hybrid warfare.

**14 schools**  
**8,000 students and teachers across Primary to Tertiary level**



### NE Activities for MINDEF & SAF

Since April 2021, SDC has been appointed to handle the administration of NE programmes for MINDEF units and strives to develop new and interesting programmes to engage SAF units.

#### Quest on Wheels Bus Tour 15 Jul 2022

A game-based bus tour focused on racial harmony was introduced with the first run on 15 July 2022 conducted for participants from the Naval Military Expert Institute. They visited various ethnic enclaves and learnt how early immigrants co-existed harmoniously in multi-cultural Singapore.

**Outreach: 500 servicemen**



### Operation Triple Threat (OTT)

A game-based walking trail explores places that are significant to Singapore's defence history and encourages participants to understand the evolving nature of security threats and how every Singaporean has the responsibility to defend Singapore.

**Outreach: 2,206 in-service personnel and 182 pax from schools**

### Konfrontasi Memorial Ceremony 10 Mar 2023

10 March marks the anniversary of the MacDonald House bombing during Konfrontasi in 1965. DCS was appointed to oversee the planning and execution of the ceremony, while the annual ceremony was organised by Nexus/MINDEF and SAF Veterans League. 139 people attended the ceremony at the Konfrontasi Memorial which included representatives from MINDEF, DCS, veterans, families of victims and currently serving NSmen.



### NE POC Connect 12 Jul 2022

SDC in partnership with Nexus/MINDEF, initiated a sharing session for Unit NE Coordinators/Point Of Contact (POC) for them to learn more about SDC's offerings of NE activities.

**12 Jul 2022: 72 pax**  
**25 Jan 2023: 64 pax**





# Programmes & Events

## Public Programmes / Signature Events

### Moon-LIT Mid-Autumn Festival 3 - 10 Sep 2022

SDC organised its second instalment of MAF during the September school holidays. Visitors were treated to a variety of activities: from Singapore Chinese Orchestra (SCO) performance (1<sup>st</sup> time partnership), Chinese tea demonstration, painting workshop, interactive Lantern Walk to carnival games.

**864 pax engaged**



### Harrowing Halloween 2 1 - 30 Oct 2022

SDC continued its successful engagement with youths through its IHL MOU partner, Singapore Polytechnic (SP) School of Architecture and the Built Environment for the second instalment of Harrowing Halloween. The youths learnt event management experiences while working alongside with the SDC team. More than 9,000 people attended the event, which doubled last year's attendance, proving its success.

#### Special Exhibit Showcase - 'Does It Bug You?'

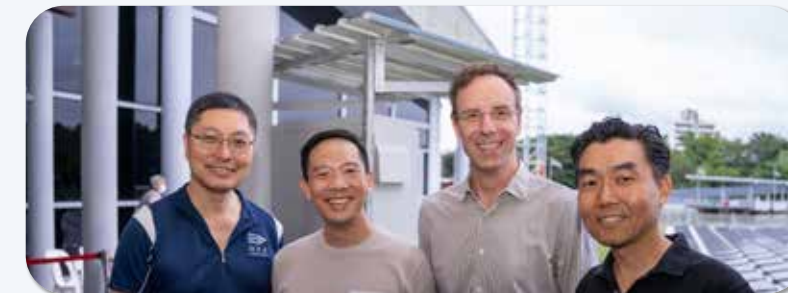
A special showcase for Harrowing Halloween, 'Does it Bug You?' was a collaboration with Asia Insect Farms Solutions and Insectta. Visitors had the chance to feed live maggots and learnt about their many uses in various industries: key component in disinfectants and low-carbon feed for fisheries.

**Over 10 nights  
Close to 9,000 pax engaged**



### Pilot Run of SDC's Drone Racing Festival 18 - 19 Nov 2022

SDC organised its first Drone Racing Festival in November 2022 as a platform to work with various partners to pilot new and exciting ideas to engage its visitors. The activities included Hype Drive drone race simulator, drone-making activities using recyclable materials, flying of sensor-equipped drones at the Air-Land Laser Tag to workshops conducted by its IHL Partners (Republic Polytechnic and ITE College West). There was also a mesmerising drone racing display over SDC Lake. The event saw about 80 guests from Public-Private-People (3P) partners who gave positive feedback.



### CAMP1N Jun and Dec 2022

After two successful runs of CAMP1N in 2021, the highly rated 'camp-cation' made a return during the June and December school holidays in 2022. SDC partnered KKDay for a December run of CAMP1N which saw more than 85% occupancy rate for the event.

**173 families  
723 pax  
>95% would recommend CAMP1N to friends/other families**



### Imperfect Sustainability Mar 2023

SDC embarked on a month-long sustainability-themed campaign in support of SDC's Greenest Plan. Through engaging activities including an online trail, interactive kiosks, and special exhibit displays made of recycled materials, visitors learnt about UN sustainability goals and how everyone can contribute to support Singapore's Green Plan.





# Programmes & Events

## Friends of SDC

### Friends of SDC (FoSDC) Volunteer Programme

Friends of SDC (FoSDC) is a volunteer programme started in mid-2022 as part of SDC's community engagement efforts to promote active citizenry. Training is provided to prospective volunteers to equip them with the knowledge and skills needed to take on various jobs such as Volunteer Gallery Host, Volunteer Guide, and Event Volunteer. Some volunteer-led tours were piloted and since early 2023, SDC took steps to organise volunteer-led experiential programmes with a charity to reach out to underserved communities.

The FoSDC volunteer management team works to improve volunteer experiences and to create connections with community organisations such as Social Service Agencies (SSAs), student organisations, and corporate groups. FoSDC is supported by a committee of representatives across SDC departments, and its purpose is to encourage more volunteers to join and support SDC and its causes.



# Programmes & Events

## Key MINDEF, Corporate and Community Events



With the lifting of COVID-19 restrictions in February 2023, SDC saw an increase for in-person bookings from organised corporate groups, MINDEF, community groups and private events, which contributed to an increase in overall engagement. SDC also took the opportunity to develop new packages to target tourist markets, including overseas student groups. Staff also attended travel trade shows to promote SDC and upcoming DCS museums to the regional and international markets.

### MINDEF EVENTS

#### SAFVC 17 Sep 2022

50 new recruits attended the first SAF Weapon Ceremony held in SDC. They were presented with their rank and weapon.



### SPECIAL SCHOOL EVENTS

#### Carpe Diem Educate P/L 29 Jun 2022

1<sup>st</sup> preschool buyout event at SDC, where preschoolers enjoyed the exclusive run of SDC's holiday programme, Dino Show and hands-on activities.

**In-centre: 150 students**



### CORPORATE EVENTS

#### NERF Tactical eXperience

SDC's newly improved NERF Tactical eXperience's game play takes the conventional 5 vs 5 NERF battles to the next level. More scenarios and restrictions are added requiring participants to strategise and be more tactical in order to win. The game plays can be customised for different group sizes and age groups with debriefing points to ensure links to Singapore's National Education values.

**In-centre: 100 pax**

#### Father & Child Overnight Camp 17 - 19 Mar 2023

The camp was organised for St. Hilda Primary School and their partner organisation, Dads For Life to promote bonding and interaction between father and child aged 7 to 12 through interactive activities. These included escape room, scavenger hunt and an army experiential programme.

**In-centre: 146 pax**



# Programmes & Events

## Key MINDEF, Corporate and Community Events

### Crash Landing on SG! For Jeju-Singapore Global Exchange Programme

20 Nov 2022

A group of Jeju High School students participating in a global exchange programme appreciated the immersive learning experience at SDC, where they learnt about various facets of Singapore through exhibition gallery tours and hands-on activities.

**In-centre: 69 students**



### HCI International

5 - 6 Jan 2023

The overnight camp for HCI International was the first to be held in SDC since the pandemic. Over 100 students (local and overseas) participated.

**In-centre: over 100 local and overseas students**



### Escape Quest

Participants are tasked for a special mission that put their cognitive skills and determination to the test. Players overcome a series of challenges and puzzles to find out that the special mission is a mystery recruitment for highly intelligent individuals.

**In-centre: 3,600 pax**

## GRASSROOTS AND COMMUNITY EVENTS

### Work Plan Retreat for Boon Lay Community Club

21 Aug 2022

Boon Lay Community Club organised a workplan retreat in SDC which was graced by Minister for National Development, Mr Desmond Lee. Grassroot leaders took the opportunity to experience SDC's escape room, XD Theatre ride and visit the galleries.

### Moon-LIT event for Queenstown Community Centre

3 Sep 2022

Queenstown Community Centre organised a visit for its residents and enjoyed the Moon-LIT event, including various workshops.

**In-centre: 45 pax**

## CORPORATE EVENTS

### IFF

2 Feb 2023

The International Flavors & Fragrances (Greater Asia) Pte Ltd engaged SDC to organise a Chinese New Year (CNY) lunch celebration for its employees, who enjoyed a wide array of activities from game booths, snack booths to a CNY buffet lunch.

**In-centre: 210 pax**

### Health Science Authority (HSA) Family Day

4 Mar 2023

HSA management and staff enjoyed their Family Day at SDC, participating in carnival activities, snack booths and in-house programmes, including Eco Workshops.

**In-centre: 400 pax**



### NTUC First-Campus Preschool Family Day

11 Mar 2023

The Family Day for preschool educators and their families was held in March 2022 and will continue to run for 3 sessions in May, July and August of 2023. Participants enjoyed a series of activities such as the Army Experiential programme. The event was organised by their appointed Event Management Company, Lollibox, supported by SDC.

**In-centre: 450 pax**



### SIM

17 Sep 2022

Singapore Institute of Management (SIM) hosted their Corporate Social Responsibility (CSR) event, Tale-ing the Moon at SDC, engaging 40 elderly from the community.

**In-centre: 80 pax**

## Reaching out to tourist markets

Since its reopening, SDC has been proactively engaging Singapore Tourism Board (STB) and leveraging on STB's extensive network to reach out to tourist markets in the region such as ASEAN, China and India. With DCS museums such as the Navy Museum coming on board, marketing efforts will be extended to promote the new DCS branding to both local and overseas markets.

### ITB Asia

19 - 21 Oct 2022

This is the first time that SDC took part in ITB Asia, Asia's leading travel trade show which was held at Marina Bay Sands. As one of the exhibitors under STB's Singapore Pavilion, it helped to reach 13,000 international attendees from different countries and industries. SDC was also featured in ITB Asia's newsletter which further promoted SDC to all participants.



### STB Road Shows to India

31 Jul - 8 Aug 2022

STB invited SDC to join their road shows in 5 cities in India. This presented an opportunity to reach out to new tourist markets and promoted SDC to about 200 travel agents.





An aerial photograph of Marina Bay Sands in Singapore. The image shows the iconic three-tower hotel complex with its infinity pool, surrounded by modern skyscrapers and greenery. In the foreground, a large, modern building complex is under construction or recently completed, featuring a prominent red and white circular logo with the letters 'SG'. The water of Marina Bay is visible, with several boats and a bridge in the distance.

# Transition to Defence Collective Singapore

The NS Gallery will be located at the new NS Square complex in Marina Bay. An artist impression of the NS SQ by WOHA. Photo Courtesy of MINDEF



# Transition to Defence Collective Singapore (DCS)

DCS demonstrated resilience and a can-do attitude amongst its staff in the face of COVID-19 challenges and the entire team united and emerged stronger. Beyond adapting to the post-COVID-19 landscape, DCS expedited its digitalisation efforts to enhance work efficiency, strive for organisational excellence and corporate governance. With the ERP system for cashless procurement in place, regular training is conducted to keep staff updated. DCS adopted a new HRMS system to enhance payroll management, leave administration and digital processing of HR claims.

## Strategic Planning for Defence Collective Singapore

The management team took efforts to share the key objectives for the establishment of DCS and involved staff in the naming of the new entity. DCS has embarked on recruitment drive to attract people from the museum and attraction sectors. New departments such as Curatorial and Collections and Navy Museum were formed, while some departments were reorganised to optimise resources to align with DCS' strategic thrusts. The first DCS management retreat was held in December 2022 to discuss priority areas to better prepare for DCS' new role and to propose new workplans. Moving forward, DCS is facilitating a smooth onboarding process for the many DCS museums in stages, including staff dialogues and change management.

DCS remains committed to maintaining and enhancing its infrastructure to serve internal and external stakeholders while maintaining the highest quality of professionalism and customer service. These include office upgrades, improvements to the centre's lobby and the construction of a new Survival Village.



## Study Visits

Besides encouraging staff to attend training courses and seminars, SDC also encouraged its staff to participate in conferences and organised study visits to local and overseas museums and attractions to be updated on the latest industry trends and best practices.



SDC management team's study visits to National Museum of Singapore and Home Team Gallery.

## Overseas Conferences and Study Visits



SDC delegation attended the World Expo in Dubai. The team was inspired by the latest exhibition design ideas from international exhibitors and overseas museums.

SDC delegation participated in IAAPA Expo Europe 2022 in London to learn about the latest developments in the attraction industry and had study visits to UK museums.

## Employee Engagement



With COVID-19 restrictions lifted, employee engagement activities such as town halls, Workplace Health Programme and F.I.S.H. activities, and the first DCS staff retreat in Desaru were held in-person and gave an excellent opportunity to develop communications through team cohesion. DCS People Development Strategy was approved by DCS Board to encourage employees to participate in learning and development programmes to foster professionalism and build competencies.

## Digital Transformation

DCS accelerated its digital transformation journey and continues to create significant improvements in terms of innovation, productivity and customer experience. During this transition phase, the website domain was changed to defencecollectivesg.com, and a study on customer user journey was undertaken, with useful comments integrated in the redesign of the website to improve the UI/UX experience for users. Plans are in the works to assist the entire DCS branding and marketing strategy, including the onboarding of DCS museums, beginning with the Navy Museum.

DCS continues to improve its digital engagement and enrich its digital offerings by incorporating immersive learning experience in exhibition galleries and digital programmes. Riding on the success of the pilot run of Virtual Escape Room, an enhanced version was launched to improve the game play to make it more appealing. myDCS App was updated for visitors to explore SDC using the AR Wayfinding. A pilot run of Temi Robot has been well received by visitors as it interacts with visitors and serves as a 'virtual guide' in the centre.





# Strategic Partnerships & Engagement

SDC forms strategic partnerships to increase outreach, cross-promotion, and engagement with existing and new target audience groups. These collaborations also look at new business opportunities and exciting collaborations. With the formation of Defence Collective Singapore (DCS), efforts will be made to build and brand DCS through partnerships and priority will be given to international and new partners. SDC will work with its current partners to promote DCS museums across the board for greater impact and reach.

Since its reopening, SDC's proactive efforts to reach out to partners across the 3P sectors (Public-Private-People) have resulted in an increase in partner-related events and projects, as well as increased mindshare. SDC has hosted several official visits from local and overseas organisations and received many invitations to share its transformation and sustainability activities, these have helped to position DCS as a choice NE partner and an innovative organisation.

## Strengthening Engagement with MINDEF & MINDEF Related Organisation (MRO) Family

DCS works closely with MINDEF to leverage on its extensive network to facilitate resource sharing, cross-marketing and partnerships within the MINDEF family. SDC co-hosted many important visits, including foreign delegates, as part of military diplomacy in FY2022, and supported a number of key MINDEF activities and meetings, all of which were well-received. DCS is also working with SAFRA (Singapore Armed Forces Reservists Association) to promote SDC's latest offerings and cross-marketing through SAFRA's e-NSman newsletter to reach out to a wider community.

Moving forward, DCS will work closely with Nexus/MINDEF and the three services (Army, Navy and Air Force) to support key MINDEF events and projects, and relevant MINDEF departments, MROs and other defence-related organisations to strengthen its defence narrative and promote Commitment to Defence messages through Whole-Of-Government efforts.

## MINDEF External Advisory Panel for Environmental Sustainability (EAPES) Meeting at SDC 9 Jun 2022

Former SDC Executive Director Joseph Tan presented SDC's Greenest Plan to EAPES, followed by a guided tour to showcase SDC's sustainability initiatives to the panel members.

## MINDEF-UK Delegation's Visit to SDC 13 Jun 2022

Former SDC Chairman/Deputy Secretary (Policy), MINDEF, Mr Teo Eng Dih hosted the UK delegation's visit during the Shangri-la Dialogue.



## MINDEF-Canadian Armed Forces' Visit to SDC 30 Aug 2022

Nexus/MINDEF and SDC co-hosted Canadian Armed Forces Director-General Public Affairs and Strategic Planning, BG Richard Perreault's visit.



## MINDEF-Lithuanian Visit to SDC 28 Feb 2023

DCS hosted the Head of Defence Policy Group, Andrius Vaivada and Head of Hybrid Threats Resilience Policy Group, COL Arturas Jasinskas' visit to SDC.



## MINDEF-Swedish Delegation's Visit to SDC 21 Mar 2023

Led by Special Advisor, Swedish Ministry of Defence, BG Rikard Askstedt.



## Army Open House (AOH) 2022, F1 Pit Building 25 - 30 May 2022

SDC's booth at the Army Open House 2022 managed to engage over 10,000 people with its interactive activities and informative displays about its latest offerings and memberships.

## Nexus/MINDEF's Pilot 'Capture your NS Memories' Collaboration 28 - 29 May 2022

SDC and Nexus/MINDEF successfully piloted the 'Capture your National Service (NS) Memories' project where 14 Singapore Polytechnic volunteers were trained to conduct interviews to collect NS stories during NS55 Showcase and Army Open House. They interviewed many NSmen across different age groups, including Defence Minister Ng Eng Hen. This project will be extended to more IHLs to encourage more youth volunteers to come onboard.



## International Outreach

DCS continues to engage existing and new embassy partners, external organisations which are hosting overseas conference delegates and will also reach out to foreigners who are studying or working in Singapore.

## South African Embassy Visit to SDC 30 Jun 2022

SDC hosted the South Africa's Minister of Health Dr Joe Phaahla and South African High Commissioner (Singapore) Ms Madiepetsane Charlotte Lobes.



## Overseas delegates from Centinel Counter Terrorism Forum's visit to SDC 27 Feb 2023

Led by Centinel Executive Director Jolene Jerard (formerly from S. Rajaratnam School of International Studies (RSIS), SDC's partner), delegates learnt about Singapore's defence and security.



## Museum Partners National Heritage Board (NHB) & Museum Roundtable (MR)

Through its long-standing partnership with the NHB and MR, SDC has been a prominent supporter of Singapore's museum culture. To foster a museum-going culture in Singapore, SDC has participated in MR workshops and initiatives such as Children's Season. SDC and the recently onboarded Navy Museum supported the annual Battle for Singapore campaign in February 2023 with customised tours that engaged over 700 people.

Moving forward, DCS will continue to work closely with NHB and MR community to learn best practices. Thus far, SDC has hosted MR Secretariat meetings and MR partners' study visits with partners such as Singapore Chinese Cultural Centre, Internal Security Department Gallery and Science Centre Singapore. While Nexus/MINDEF and SDC organised a study visit to Heritage Conservation Centre to learn about conservation and collection policy – a new area for DCS. There are plans to explore exciting collaborations with relevant MR members based on defence-related narratives and latest NE-related themes.



Top: MOE and Science Centre Board's study visit to SDC

Bottom: Nexus/MINDEF and SDC's study visit to Heritage Conservation Centre



# Strategic Partnerships & Engagement

## National Education (NE) and community partnerships

SDC hosted many visits from NE-related and community organisations which provided a platform to share its NE engagement efforts and transformation journey, especially with new partners, they included National Community Leadership Institute, and Singapore Federation of Chinese Clans Association. SDC also hosted visits from National Volunteer and Philanthropy Centre and Temasek International to learn about volunteer management and sponsorships.



## SDC's Exhibition Resources in MOE's Mother Tongue Curriculum Materials for Primary Five Cohort

For the first time, SDC's exhibition resources (video clip in WW2 bunker) were translated and incorporated into CCEB/MOE's Mother Tongue Curriculum materials and made accessible in MOE's Students Learning Space for Primary five cohort.



## Briefing for National Institute of Education (NIE) Student Teachers 19 May - 21 Nov 2022

For the first time, SDC was invited by NIE Student Development Office to share its NE offerings to graduating student teachers across all courses, besides Humanities and Social Studies Education, SDC's long time partner, as part of educator engagement.

19 May session: 141 attendees  
21 Nov session: 460 attendees

## MOE Psychological Services Branch's Transformation Journey & Innovation Learning Journey 29 Aug 2022

For the first time, SDC was invited to share its transformation journey and discuss areas to promote 'growth mindset' with 133 officers from MOE Psychological Services Branch. The session also explored potential collaborations to promote SDC to more schools, including special needs schools.



## NE Sharing for MOE West 3 Zonal Cluster 16 Feb 2023

SDC was invited to share its latest developments with school leaders and NE co-ordinators from 11 schools in MOE West 3 Zonal Cluster and explored new areas such as volunteer and community engagement, besides booking of SDC programmes.



## SDC Partners' Connect Sessions 2022

In view of the positive feedback in 2021, SDC organised 2 SDC Partners' Connect Sessions to reach out to targeted audience groups to promote its latest offerings and they were well received. They engaged: 20 educators from 8 foreign system schools (27 May) and 40 educators and school leaders from MOE HQ departments (such as Career and Guidance, Science Department) and MOE West Zonal Cluster schools (29 July).



## IHL Partnership Engagement and New Initiatives

With the signing of MOUs with various ITEs, polytechnics and universities since SDC's re-opening, DCS has taken proactive efforts to broaden areas of collaboration. Besides an increase in the number of interns in various SDC departments, new areas included Republic Polytechnic's plan to incorporate SDC visits into its new Diploma in Sustainability and Technology. DCS will be extending its IHL MOU partnerships across the other DCS museums, starting with the Navy Museum.



## Collaboration with IHLs and Various Partners for SDC's Pilot Drone and Sustainability Project Nov 2022

SDC worked with various partners to pilot a new project in November 2022. This included Singapore Food Agency and National Parks Board for content resources. During SDC's Drone Racing Festival, Xingnan Primary School and ITE College West's showcases and workshops engaged visitors in SDC's X-Lab, while Republic Polytechnic's drone display and workshops were at SDC concourse. Millennia Institute's student volunteers also helped out with the event's publicity efforts as part of their youth activation projects.



ITE College West's robotics demo/workshops



RP's UAV Centre drone display and workshops



Xingnan Primary School's "Green" showcase

## Support of Partners' Events

### 2<sup>nd</sup> Partnership for POSB 'Run for Kids' at SDC 13 Nov 2022

In November, SDC saw another successful partnership with POSB Bank and People's Association for the annual POSB PAssion 'Run for Kids'. Participants enjoyed visiting the exhibition galleries and taking part in the various activities in X-Lab and around the centre to learn about sustainability messages.



## Rediscover Singapore: 57<sup>th</sup> ND Celebrations by Checkpoint B 7 Aug 2022

In support of inclusive society, SDC collaborated with a ground-up initiative, Checkpoint B, recreational community group for runners, hikers and cyclists to co-organise a 'Rediscover Singapore'. Participants including the beneficiary, MINDS enjoyed the gallery visits and the eco-sustainability activities in SDC as part of their National Day celebrations.



## Infocomm Media Development Authority (IMDA) Digital For Life (DFL) Appreciation Event 4 Nov 2022

SDC was acknowledged as a partner of DFL partners which encourages Singaporeans from all ages and walks of life to embrace digital learning as a lifelong pursuit. IMDA was also invited as one of SDC's N.E.mation! partners to share about DFL, including digital security to students.





# Sustainability Report





# Sustainability Report

## Updates on SDC's 'Greenest Plan' and Sustainability Initiatives

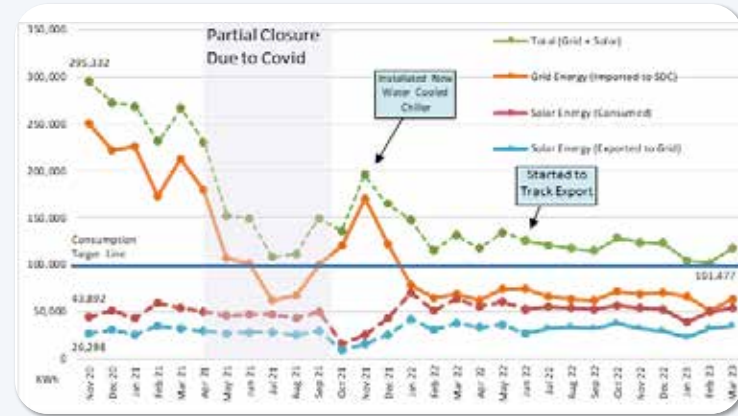
As part of its ongoing commitment to sustainability and addressing climate change, Singapore Discovery Centre (SDC) has continued to take substantial strides in integrating green technologies and climate-conscious initiatives into its operational practices, which are part of SDC's 'Greenest Plan'. SDC's strategic integration of technology and behavioural change programmes underscore its dedication to adopting a comprehensive and informed approach to sustainability. Through various ongoing efforts and new initiatives by the key departments and SDC Sustainability Committee, SDC reaffirms its pledge towards a greener future, leading the way in environmental conservation while delivering enriching experiences to its visitors.

Moving forward, Defence Collective Singapore (DCS) has also shown its commitment to environmental sustainability. SDC will share its expertise and lessons from its 'Greenest Plan' journey with various DCS museums and key elements to be incorporated into their museum's operations and redevelopment plans where feasible.

## Resource Management

Solar Photovoltaic (PV) systems have been installed at various centre locations, especially rooftops and the lake. They catered for 65% of SDC's energy needs in FY2022. With 2,874 solar panels, they generated 1 Giga Watt-hour, equivalent to powering 249 HDB flats for a year or offsetting 439 tonnes of CO2e.

In its pursuit of Net-Zero Energy, SDC launched further energy-saving measures. An additional water-cooled chiller has been integrated with its 200 RT system, enhancing cooling efficiency and lessening strain on the original chiller. These initiatives cut its energy consumption by 60% since November 2020, a 10% improvement from the previous year. Monthly, this means 124,000 kilowatt-hours on average, a 36% drop in grid consumption. Since May 2022, SDC monitored the electricity its solar system exports to the grid.



Visual: Artist impression of the solar-powered carpark shelter

## Energy Management & Green Mark Platinum SLE

Recognising its sustainability efforts, SDC received the Green Mark Platinum/Super Low Energy Building Certification in October 2022. SDC is targeting the Green Mark Zero Energy Building Certification by FY2023.

In FY2022, SDC intensified its energy efficiency efforts. Collaborating with its vendor, SDC aims for a deeper understanding of its energy consumption. SDC will install 20 energy meters in key areas for real-time monitoring over FY2022-2023, tracing daily usage patterns. The Resync platform offers comprehensive data, integrating with the Building Management System (BMS), Solar PV dashboard, and footfall data. The BMS observes data from the chiller, AHUs, and water devices. These steps empower SDC with strategic energy management, advancing its sustainability mission.

In 2023, SDC is probably the first centre/attraction to embark on an exciting project – installation of Solar PV system for SDC carpark shelter, which will provide additional capacity 0.46MWp. This dual-purpose installation will provide shade for vehicles and visitors, while simultaneously generating additional electricity and will go a long way to help SDC to achieve its Net Zero goal by the end of FY2023.

## Water Management

SDC is harnessing technology for sustainable water management and has introduced 18 water meters at high-consumption points. These meters guide its data-driven approach, pinpointing and addressing excessive usage. They will underpin future behavioural change programmes. SDC also uses rainwater from its lake for irrigation, significantly reducing potable water needs in landscaping. These steps showcase SDC's leadership in water sustainability, echoing its Greenest Plan and integrating data into its IoT system. In FY2022, SDC's water consumption was 12,045m<sup>3</sup>, marking a 23% year-on-year reduction. This significant decrease resulted primarily from identifying and sealing leaks in the supply network. However, with the introduction of a water-cooled chiller, SDC anticipates a minor rise in water usage.

SDC continues to maintain its 7 hydroponic systems, which is an innovative method to meet 30% of Singapore's nutritional needs. SDC's vertical farming approach saves up to ten times the water compared to traditional methods and all produce is shared among its staff. This is used as part of its eco sustainability tours.

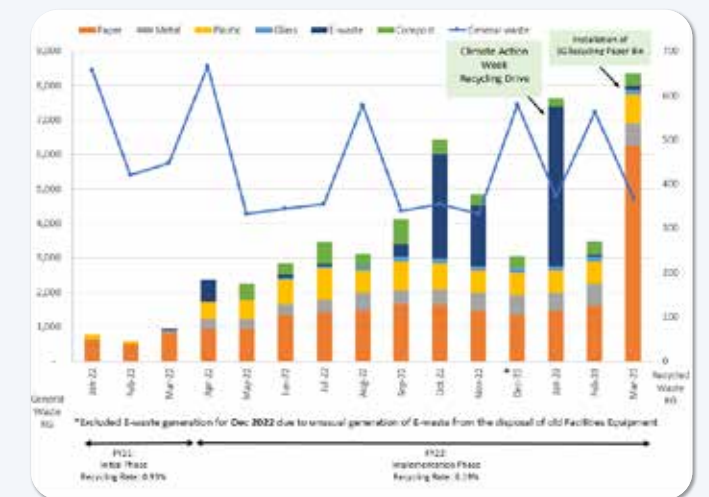


## Circularity & Waste Management

SDC values circular economy practices for sustainability and reduced environmental impact. To uphold this commitment, several waste management and recycling initiatives are undertaken for a sustainable future. In 2022, SDC began tracking waste data, pivotal for monitoring trends and strategising waste reduction. In FY2022, SDC's recycling rate rose to 6.19% from a 0.93% baseline. Paper and electronic waste constituted 2.55%\* and 0.8%\* respectively.

SDC's waste strategies involve composting, notably diverting horticultural waste and have composted 365.8kg, 8.9% of its recycled waste. SDC is considering food composters for further waste reduction and has implemented recycling for paper, plastic, metal, glass, and electronics. Partnering with SGRecycle in 2022, a paper recycling machine was placed in SDC's lobby, emphasising its importance. Additionally, SDC is enhancing recycled waste collection accessibility and capturing accurate on-site weight data.

\*Sembwaste provides SDC's monthly Waste Report, which has estimates for its various waste streams.





# Sustainability Report

## Engagement Efforts



SDC Sustainability Committee, representing all departments, promoted sustainability and environmental responsibility among staff and the wider community. Updates on SDC's sustainability efforts, best practices for recycling, energy, and water reduction were shared via the intranet, EDMs, the SDC website, and social media.

SDC's sustainability practices led to waste management improvements; the recycling rate increased from 0.93% to 6.19% last year. Motivated by progress towards its Greenest Plan's targets, SDC aims for consistent annual improvements.

In April 2022, SDC staff attended a virtual Sembwaste Recycling Talk, learning about the entire recycling process and how everyone has a part to play in recycling. For staff training, Sustainability Committee members attended BCA's 'Sustainability in Singapore' workshop, enhancing their skills for designing and assessing behavioural change programmes.

## Community Engagement

During the Climate Action Week 2022, SDC participated in Clean up South West 2022 initiative where recycled paper and clothing collected were exchanged for packets of noodles and rice to be distributed to disadvantaged communities in South West.



In recognition of SDC's commitment to sustainability, SDC won the Sustainable South West Award 2022 (Corporate) by South West CDC for the first time. This highlights SDC's role in reaching out to engage schools, community and corporate entities in the South West District through its wide range of sustainability programmes.

During Climate Change Week, SDC's partnership with South East CDC helped to organise E-Waste Recycling Drive and collected an impressive 235kg of electronic waste.



Every year, SDC shows its commitment to global sustainability efforts by participating in Earth Hour in partnership with the World Wide Fund for Nature (WWF). As part of this symbolic initiative, all lights at the centre were turned off for an hour in March 2022, reflecting SDC's collective support for environmental conservation.

## Sharing SDC's 'Greenest Plan' with External Partners

Besides staff and internal stakeholders, proactive engagement with external partners is an integral part of SDC's strategy to broaden the impact of its sustainability efforts and promote dialogues on sustainability. With SDC's sharing of its sustainability efforts, it aims to promote a collective effort towards environmental stewardship by creating collaboration opportunities.

Since launching its Greenest Plan, SDC has become a sustainability leader, hosting study visits from respected organisations like MINDEF's Environmental Advisory Panel, National Heritage Board, Gardens By the Bay, SAFRA, MOE, and Science Centre Singapore. Additionally, SDC collaborates with institutions like ITEs, Polytechnics, NTU, and NUS, including welcoming a Temasek Polytechnic intern to its Sustainability Department. Schools, from preschools to IHLs, are also engaged in SDC's sustainability programmes.



During these partners' engagement sessions, SDC shares its 'Greenest Plan' – an overview of where SDC currently stands in terms of sustainability, alongside its aspirations and targets for the future. These presentations reflect SDC's unwavering commitment to environmental sustainability and desire to inspire partners to support SDC in the shared quest for a greener future and also to explore potential collaborations.

## Sustainability Projects with Partners

SDC prioritises meaningful partnerships to further sustainability goals. Collaborations span academic, research, and community sectors, enhancing sustainable practice knowledge. These alliances highlight its dedication to sustainability, blending research, education, and community for a greener future.

SDC maintains a strong partnership with Solar Energy Research Institute of Singapore (SERIS). SDC provides sites for solar panels in projects like agrivoltaics, bifacial photovoltaic fencing, and mobile walkways, enhancing SDC's educational content.

In FY2022, SDC partnered with ITE College West for a waste audit session under the National Youth Achievement Award Programmes (NYAA). Phase 1 assessed SDC's waste disposal and recyclable streams. Phase 2 will study visitor behaviour, propose strategic bin placements, and new recycling bin designs. The project will conclude with an audit assessing the impact and recycling enhancements at SDC.





