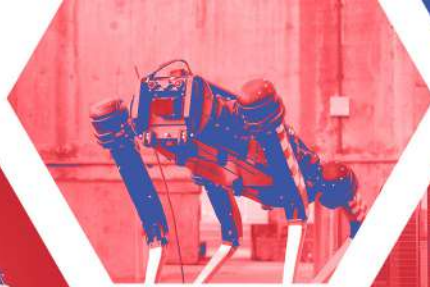


# ANNUAL REPORT

2022/23



**SCDF**  
The Life Saving Force

... for a safer Singapore

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# CONTENTS

## COMMISSIONER'S FOREWORD

### OPERATIONAL EXCELLENCE

- 13 SCDF Marine Division's 10-Year Anniversary Celebration:  
A Decade of Transformation
- 14 Equipping Frontliners and Enforcement Officers with  
Body-Worn Cameras
- 15 Celebrating 25th Anniversary of SCDF Emergency Medical Services
- 16 Increase in EMS calls due to the emergence of COVID-19 variants
- 17 Opening of Joo Seng Fire Post
- 18 High Level Articulated Appliance
- 19 Operation Lionheart Deployment to New South Wales, Australia
- 21 Operation Lionheart Deployment to Adana, Türkiye
- 26 Exercise Northstar XI

### MAJOR INCIDENTS 2022

- 29 Road Traffic Accident at junction of Lok Yang Way and  
First Lok Yang Road
- 30 Fire on Kusu Island
- 31 Fire at 31 Benoi Lane
- 32 Fire at 409 Bedok North Avenue 2
- 33 Vessel Fire at 2 Keppel Bay Vista
- 34 Fire at 23 Gul Drive
- 35 Fire at 10 Tuas View Square
- 36 Fire at 236 Jurong East Street 21
- 37 Fire at 66 Woodlands Industrial Park
- 38 Height Rescue at 104 Teck Whye Lane
- 39 Fire at 451 Yishun Ring Road
- 40 Fire at 108 Bedok North Road
- 41 Fire at 28 Tuas South Avenue 8

### PUBLIC PROTECTION

- 43 Fire Safety Managers Briefing 2022
- 44 Product Listing Scheme for the Industry
- 45 Joint Inspection with Police at Public Entertainment Outlets
- 46 Revised Fire Certificate Audit Inspection Regime

## COMMUNITY PREPAREDNESS

- 48 Fire Station Open House
- 49 Volunteer Engagement through the Lifesavers' Connect Hub
- 50 Community Resilience Day
- 51 AED-on-Wheels Programme
- 52 Shelter Open House 2022 at Gardens by the Bay MRT  
CD Shelter

## ORGANISATIONAL EXCELLENCE

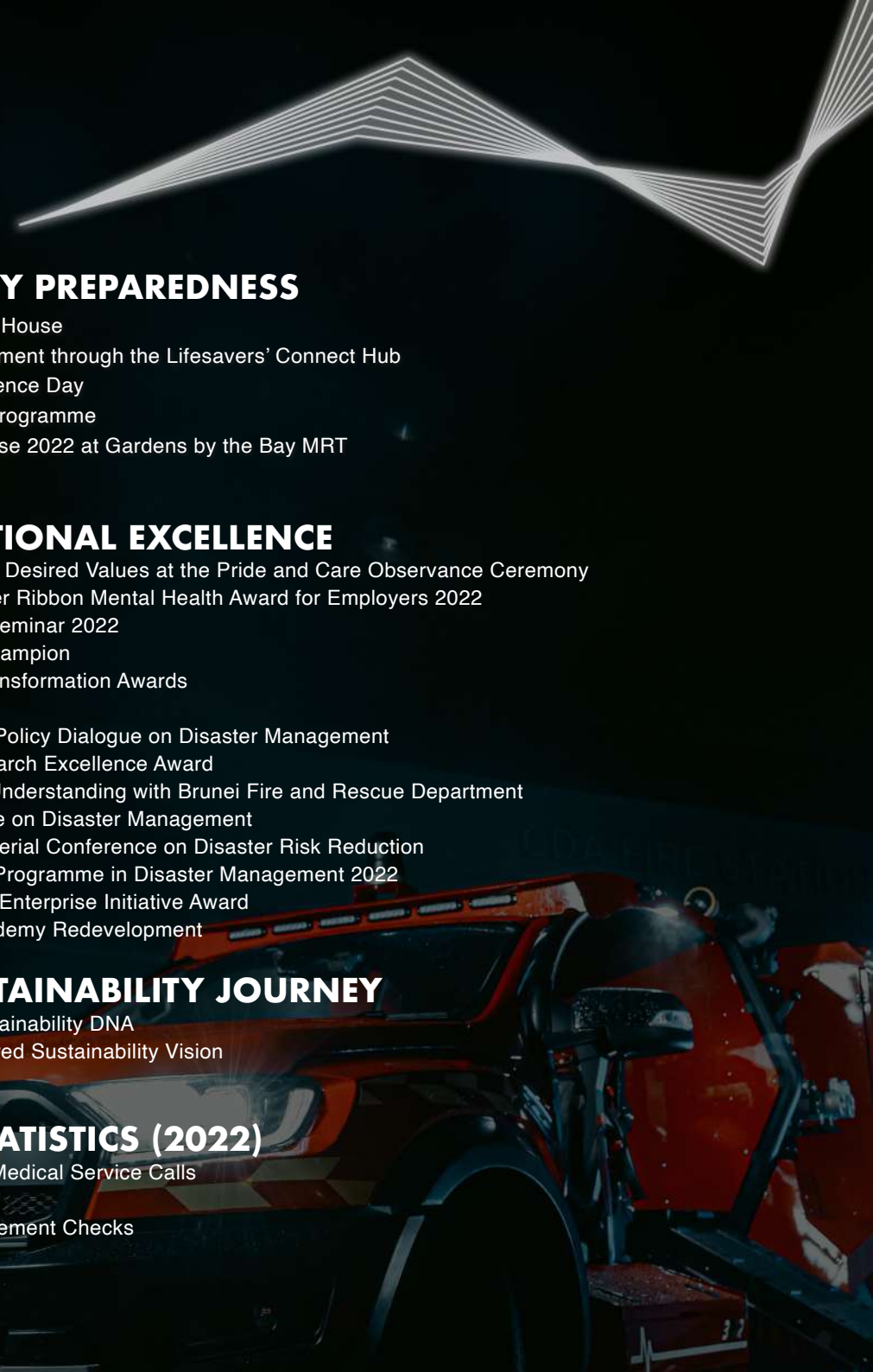
- 54 Launch of SCDF's Desired Values at the Pride and Care Observance Ceremony
- 55 Clinching the Silver Ribbon Mental Health Award for Employers 2022
- 56 SCDF Workplan Seminar 2022
- 57 SCDF - A Care Champion
- 58 Public Service Transformation Awards
- 59 SCDF on TikTok
- 60 ASEAN Strategic Policy Dialogue on Disaster Management
- 61 Home Team Research Excellence Award
- 62 Memorandum of Understanding with Brunei Fire and Rescue Department
- 63 ASEAN Committee on Disaster Management
- 64 Asia-Pacific Ministerial Conference on Disaster Risk Reduction
- 65 Senior Executive Programme in Disaster Management 2022
- 66 Public Sector Pro-Enterprise Initiative Award
- 67 Civil Defence Academy Redevelopment

## SCDF'S SUSTAINABILITY JOURNEY

- 70 Developing a Sustainability DNA
- 71 Developing a Shared Sustainability Vision
- 73 A Greener SCDF

## ANNUAL STATISTICS (2022)

- 78 Total Emergency Medical Service Calls
- 79 Total Fire Calls
- 82 Fire Safety Enforcement Checks





# COMMISSIONER'S FOREWORD

As an organisation, we have made significant progress towards our Transformation 2025 vision of becoming A Nation of Lifesavers. Community participation in emergency preparedness has been increasing, with encouraging numbers of sign-ups as Community First Responders (CFRs). By the same token, the pervasive adoption of science, technology, and innovation to enhance our delivery of emergency services to the public is making an impact.

## **Reimagining the Future: Breakthroughs with Innovation and Technology**

### Redevelopment of the Civil Defence Academy

Our numerous breakthroughs would not have been possible without the resourcefulness, commitment, and imagination of our people. The redevelopment of the Civil Defence Academy (CDA) is an excellent example. Last year, we unveiled the Emergency Responders' Fitness Conditioning and Enhancement Lab (EXCEL) with the opening of Phase 1 of the redeveloped CDA. EXCEL demonstrated how science, technology, and data analytics could enhance responder performance and maximise the potential of our officers through an evidence-based approach.

This year, the completion of Phase 2 will bring about more exciting developments in CDA. For example, the Fire Research Centre will push the limits of fire science and research in the SCDF, while the National EMS Training Centre will develop leadership and expertise in our delivery of pre-hospital emergency care.

Realistic and multifaceted simulators such as the mixed-use premises, road tunnels, and an underground MRT CD Shelter, will form the comprehensive suite of new training facilities in Phase 2. Together, they will allow SCDF personnel to benefit from customised training and learning opportunities. When Phase 3 is completed next year, the iconic Furnace building will feature the latest commercial, industrial, and residential layouts, which will bring a new level of realism to high-rise firefighting training. The latest safety features will also be incorporated within the Furnace building, allowing us to monitor the safety and performance of our trainees in real time.

### Enhanced Capabilities for an Edge in Operations

Unmanned ground vehicles have been complementing firefighters for operations ranging from moderate to large scale fires. After comprehensive reviews and trials, SCDF has introduced its Unmanned Ground Vehicle (UGV) strategy, with a two-tiered deployment approach when responding to major fire incidents. Tier 1 comprises firefighting UGV platforms, such as the Red Rhino Robots (3R) and Pumper Firefighting Machines, that are readily available in all new fire engines and 6th Generation Light Fire Attack Vehicles (LF6G) for immediate deployment at any fire scene. Tier 2 UGVs, which are higher powered robots, will be strategically placed in every Division to augment Tier 1 UGVs. The new Unmanned Firefighting Machine 3.0 will work as a pair with the High Mobility Modular Machine (H3M), in response to complex and prolonged operations. Both the UFM 3.0 and the H3M will be unveiled later this year.

We have recently operationalised two of our newest aerial appliances, the High-Level Articulated Appliance (HLA90). The HLA90 will augment SCDF's current fleet of aerial appliances and provide a reach of up to 30 storeys, which is much higher than any of our existing aerial appliances. Based at Kallang Fire Station and Punggol Fire Station, these new assets will enhance the SCDF's response to high-rise fires and give our ground commanders more tactical options.

## Taking Pride in our Achievements

Over the past year, SCDF has attained many significant milestones in both organisational and operational excellence.

### Organisational Excellence

In August 2022, the SCDF and the Home Team Science and Technology Agency (HTX) jointly won the Home Team Research Excellence Award, for the design of the LF6G and the 3R. This new 3-crew plus 3R concept demonstrates the successful integration of robotics into our frontline operations.

SCDF's pro-enterprise journey began in 1998. Since then, we have been working closely with other government agencies and private enterprises to streamline rules and processes. This has helped to create an environment for enterprises to thrive, without compromising SCDF's effective fire safety standards. We are pleased that these efforts have borne fruit in recent years, with the SCDF being recognised with the prestigious Public Service Transformation Awards in 2022 for its efforts in organisational transformation and service excellence.

### Operational Excellence

SCDF led in the planning and coordination of Exercise Northstar XI, which was held on Jurong Island in March 2023. The scenario involved a simulated armed attack, a chemical pipeline rupture, and two large oil tank fires. A coordinated multi-agency response, involving more than 300 officers from over 30 national agencies and strategic partners, was mounted. Organising an exercise of this scale, particularly in the midst of a pandemic, was a massive endeavour that started in late 2021. Exercise Northstar XI was a major success, thanks to the concerted efforts of our officers, partner agencies and stakeholders.

As a proud member of the United Nations International Search and Rescue Advisory Group (INSARAG), SCDF stands ready to contribute to international humanitarian assistance and disaster relief efforts. Our Operation Lionheart contingent was deployed to assist with the floods in New South Wales, Australia in November 2022 and the Türkiye-Syria earthquake in February 2023. Despite the challenging winter temperatures in Türkiye, the contingent steadfastly carried out their mission. Working closely with other international rescue teams and the local authorities in Türkiye, they worked against time to save a 12-year-old boy and a man from beneath the rubble of collapsed structures. Our officers have touched many lives overseas and done Singapore proud.

## Developing Valued Partnerships

As SCDF reflects on its significant milestones over the past year, we understand that strong partnerships with our international counterparts and community partners have played a vital part in our success.

### Forging Strong International Partnerships

With the gradual resumption of international travel in 2022, we were pleased to host our international counterparts in-person for flagship events such as the Strategic Policy Dialogue on Disaster Management (SPDDM) in August, the Senior Executive Programme in Disaster

Management (SEPDM) as well as the Fire Safety Asia Conference & Exhibition (FiSAC) in November. These events helped to position SCDF as a thought-leader in our field of expertise and strengthen working relations with our international partners.

At the Singapore-Indonesia Leaders' Retreat, held at the Istana in March 2023, both countries reaffirmed their excellent state of relations and signed several Memorandums of Understanding (MOUs). Among these was an MOU between the SCDF and the National Search and Rescue Agency of Indonesia (BASARNAS), which paves the way for a new level of cooperation and exchanges. Within the same month, we also renewed our MOU with the Department of Fire and Emergency Services (DFES), Western Australia and reaffirmed our shared commitment in upkeeping the professionalism of emergency services.

### SCDF's Commitment to Sustainability

The SCDF recognises the risks and challenges associated with climate change and environmental degradation, and how this will directly impact our mission to protect and save lives and property. This has strengthened our commitment to sustainability. Through various initiatives in operations, resource management and governance, SCDF is doing its part to help reduce carbon footprint. For instance, emissions from the new Fire Research Centre and Compartment Fire Behaviour Training (CFBT) simulators in CDA are channelled through a wet scrubber system. As the SCDF carries out its lifesaving mission, it will strive to be an environmentally conscious member of the community.

### Community First Response

Our growing pool of CFRs continue to play an important role in complementing SCDF's emergency response. We currently have a network of over 141,000 CFRs and they contribute significantly every day to the safety of our community. For instance, since the launch of the SCDF 'myResponder' app in 2015, to date, CFRs have assisted in over 14,000 incidents of suspected cardiac arrest and minor fires, with 53 lives saved. This is significant and we must continue to build on the momentum to realise the powerful vision of A Nation of Lifesavers.

### Strategic Partner in Fire Safety and Emergency Preparedness

The National Fire and Emergency Preparedness Council (NFEC) celebrated its 35th anniversary last year. Since its inception, NFEC has worked tirelessly with the SCDF to help engage the community, industries, and schools, to strengthen their awareness on fire prevention and emergency preparedness. We are grateful for their support and certainly looking forward to more fruitful collaborations for many more years to come!

There is no doubt that we are living in dynamic and challenging times, with unique challenges emerging every now and then. As an emergency response organisation that is entrusted to manage life-threatening emergencies, we are confident that our very committed and passionate workforce can navigate all uncertain situations successfully.

Finally, we would like to thank our partners in the Home Team, related agencies, and the community for being an important part of our lifesaving journey to keep Singapore safe and secure.

Eric Yap  
Commissioner SCDF  
July 2023

# SENIOR MANAGEMENT



**COMR Eric Yap**  
Commissioner  
Singapore Civil Defence Force



**DC Daniel Seet Siew Teck**  
Deputy Commissioner  
Operations & Resilience



**DC Teong How Hwa**  
Deputy Commissioner  
Strategy & Corporate Services



**DC Ling Young Ern**  
Deputy Commissioner  
Future Technology & Public Safety

# SENIOR MANAGEMENT



**SAC Lian Wee Teck**  
Senior Director  
Fire Safety Department



**SAC Abdul Razak  
Bin Abdul Raheem**  
Director  
Planning & Organisation  
Department



**SAC Yong Meng Wah**  
Director  
Emergency Medical Services  
Department



**AC Michael Chua**  
Director  
Operations Department



**AC Francis Ng  
How Juah**  
Director  
Training & Professional  
Development Department



**MX Kristy Ng**  
Director  
Human Resource Department



**MX Wang Heh**  
Director  
Finance Department



**AC Ng Chee Kiang**  
Director  
Service Excellence Department

# SENIOR MANAGEMENT



**AC Leow Chew Hong**  
Director  
Transformation & Future  
Technology Department



**AC Wesley Ho**  
Director  
Logistics Department



**AC Lim Han Chee**  
Director  
Risk Management &  
Audit Office



**AC Leslie Thevanesar  
Williams**  
Director  
Corporate Communications  
Department



**COL Lim Chern  
Choong Wesley**  
Director  
Volunteer & Community  
Partnership Department



**COL Shaiful Herman  
Bin Shali**  
Director  
Hazardous Materials  
Department



**COL (Dr) Hong Dehan**  
Chief Medical Officer



# COMMANDERS



**AC Alan Toh**

Commander  
Corporate Services Hub (East)



**AC Alan Chow**

Director  
Civil Defence Academy



**AC Lim Boon Hwee**

Commander  
Corporate Services Hub (West)



**AC Goh Boon Han**

Commander  
4th SCDF Division



**COL Chew Keng Tok**

Commander  
2nd SCDF Division



**COL Ryan Ong**

Commander  
SCDF Marine Division



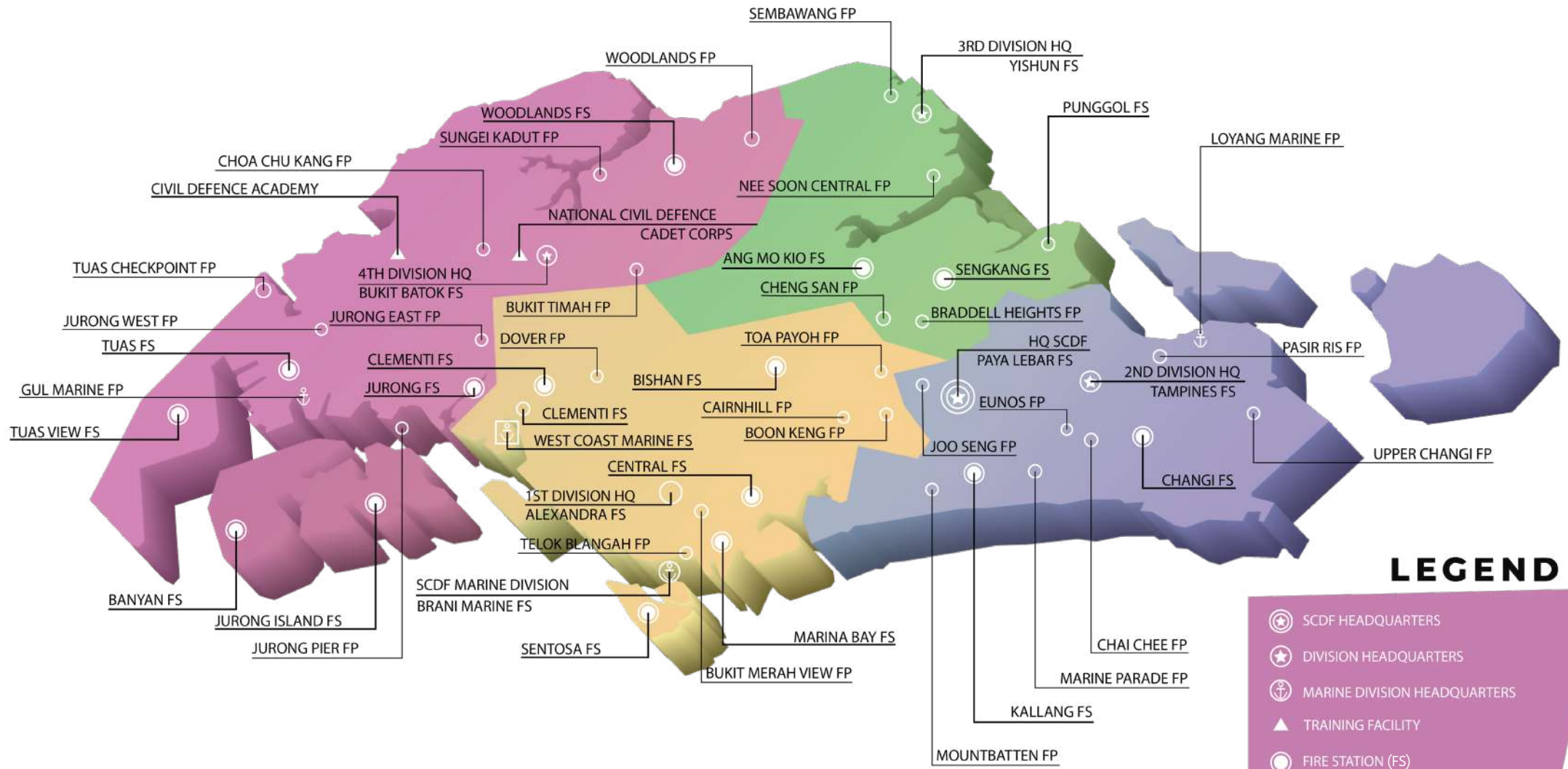
**COL Lim Beng Hui**

Commander  
3rd SCDF Division



**COL Mohamed  
Firoz Bin Ramjan**

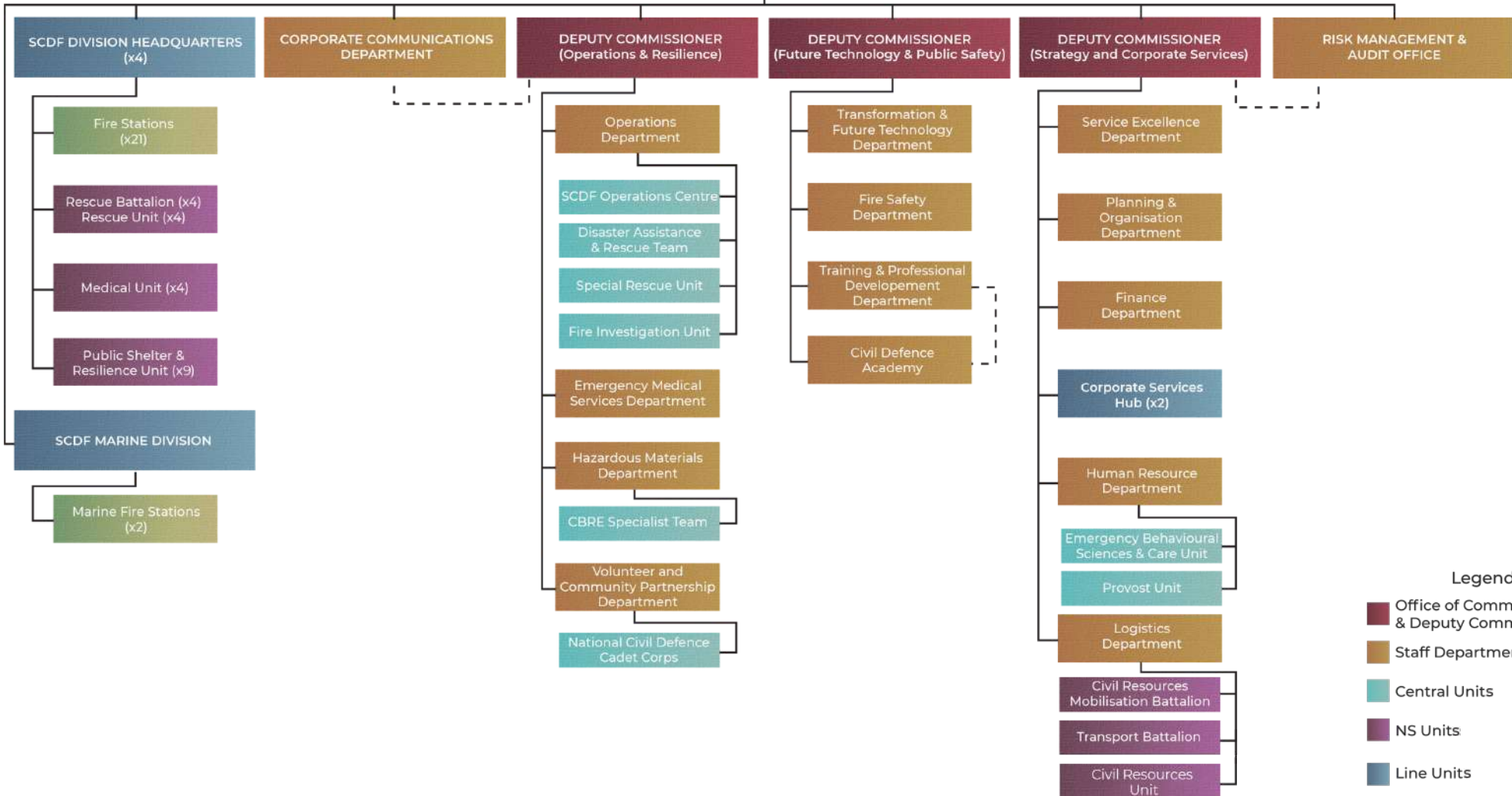
Commander  
1st SCDF Division



# LEGEND

- SCDF HEADQUARTERS
- DIVISION HEADQUARTERS
- MARINE DIVISION HEADQUARTERS
- TRAINING FACILITY
- FIRE STATION (FS)
- MARINE FIRE STATION
- FIRE POST (FP)
- MARINE FIRE POST

COMMISSIONER



Legend:

- Office of Commissioner & Deputy Commissioners
- Staff Departments
- Central Units
- NS Units
- Line Units
- Sub Units
- Staff Supervisory Link

# OPERATIONAL EXCELLENCE



# SCDF MARINE DIVISION'S 10-YEAR ANNIVERSARY CELEBRATION: A DECADE OF TRANSFORMATION

SCDF Marine Division celebrated its 10-Year Anniversary since it took over marine firefighting and rescue function from the Maritime and Port Authority (MPA) on 1 April 2012. The Division has enhanced its capabilities over the past decade, including the establishment of two Marine Fire Stations, two Marine Fire Posts and acquiring six state-of-the-art firefighting and rescue vessels. The new vessels and Marine bases have enhanced the overall operational response and coverage for incidents within Singapore's territorial waters. The pride of the SCDF Marine Division is its flagship vessel, the Heavy Fire Vessel (HFV), also known as the Red Sailfish. The HFV is equipped with an external firefighting system with a total output of 240,000 litres of water per minute, as well as a Dynamic Positioning system and Chemical, Biological and Radiological (CBR) capabilities. The full operationalisation of the HFV on 1 April 2022 marked a significant milestone in a decade of transformation for the unit.



# EQUIPPING FRONTLINERS AND ENFORCEMENT OFFICERS WITH BODY-WORN CAMERAS

Since 15 April 2022, SCDF frontliners and enforcement officers have begun wearing body-worn cameras (BWCs) when on duty, for greater transparency and accountability. The BWCs were issued to several categories of officers, including fire and rescue specialists, hazardous materials specialists, paramedics, and enforcement officers. With BWCs attached to the officers' uniforms or personal protective equipment, recorded footage can be used for training and coaching purposes, with strict controls to prevent misuse. In the future, SCDF aims to livestream footage from the BWCs to the Operations Centre to enhance situational awareness and improve decision-making during ongoing incidents.



# CELEBRATING 25TH ANNIVERSARY OF SCDF EMERGENCY MEDICAL SERVICES

SCDF's Emergency Medical Services (EMS) celebrated its 25th anniversary in May 2022, having provided quality pre-hospital care to the public since its inception in 1996. To commemorate the milestone, the inaugural SCDF EMS Week was held from 23 to 25 May 2022. A range of enriching activities, including an innovation and technology symposium, an EMS Leaders' Forum, and an EMS skills competition were organised for EMS staff. A commemorative publication titled "Beyond the Rumbles & Sirens" was also given to all EMS staff in July, so that the stories and experiences of Paramedics and EMTs could be shared with current and future generations of EMS personnel.





# INCREASE IN EMS CALLS DUE TO THE EMERGENCE OF COVID-19 VARIANTS

SCDF's daily EMS call load increased with the emergence of more transmissible COVID-19 variants. In July 2022, the daily average rose to 769 calls, with the highest being 843, a 25% increase compared to the pre-pandemic average daily call load. To manage the increased call load, SCDF implemented measures, such as prioritising responses to life-threatening emergencies, adjusting ambulance deployment, and working with healthcare institutions to moderate demand. The public were also advised to avoid calling 995 for non-emergency medical conditions, so that life-threatening emergencies could receive prompt medical attention.





# OPENING OF JOO SENG FIRE POST

Joo Seng Fire Post (JSFP) officially began operations on 20 September 2022. Apart from providing emergency services to the public, the Fire Post will also feature the Lifesavers' Connect Zone (LCZ) by September 2023. The LCZ will complement the Lifesavers' Connect Hub at Kallang Fire Station, allowing the public to refresh their CPR and Improvised First Aid Skills, at their own convenience. Based on a self-directed learning model, the public can use the interactive and hands-on booths and learn to be Emergency Prepared Citizens, who can help themselves and their families during emergencies. The concept of the LCZ will be gradually extended to selected fire posts in the near future. With the opening of JSFP, Geylang East Fire Post ceased its operations, with Kallang Fire Station providing operational coverage for the area.



## LIFESAVERS' CONNECT

# HIGH LEVEL ARTICULATED APPLIANCE

In November 2022, SCDF unveiled the High Level Articulated Appliance (HLA90) during the Fire Safety Asia Conference (FISAC) at the Singapore EXPO, which was officially launched by Associate Professor Muhammad Faishal Ibrahim, Minister of State (MOS), Ministry of Home Affairs and Ministry of National Development. During the event, MOS Faishal emphasised the importance of ensuring fire safety during Singapore's green economy transition and acknowledged SCDF's efforts in leveraging technology to enhance its delivery of emergency services.

The HLA90 augments SCDF's existing fleet of Combined Platform Ladders (34 metres and 60 metres) and Aerial Ladders (56 metres). The HLA90 is capable of reaching 90 metres, equivalent to a 30-storey building. It will provide SCDF commanders more tactical options for high-rise firefighting and rescue operations. SCDF has two HLA90 and they are stationed at Kallang Fire Station and Punggol Fire Station.



# OPERATION LIONHEART DEPLOYMENT TO NEW SOUTH WALES, AUSTRALIA

On 16 November 2022, a 16-member SCDF team was dispatched to New South Wales, Australia, to assist in the flood rescue efforts together with rescuers from the Fire and Rescue New South Wales. Led by LTC Lok Wee Keong, Commander DART, the team comprised 12 DART officers, as well as an operations support officer. The team was sent off by Associate Professor Muhammad Faishal Ibrahim, Minister of State, Ministry of Home Affairs & Ministry of National Development, at Changi Airport. Throughout their two-week deployment, the contingent conducted search operations, secured hazardous debris that was drifting dangerously in the floodwaters, and delivered flood protection supplies to the locals.





# OPERATION LIONHEART DEPLOYMENT TO ADANA, TÜRKIYE

An advance team of 20 SCDF officers from the Operations Lionheart (OLH) contingent, led by LTC Lok Wee Keong, Commander DART, departed for Adana, Türkiye on 8 February 2023 to assist in the disaster rescue efforts in the aftermath of the Türkiye-Syria earthquake. The team comprised 14 DART rescuers, four paramedic specialists and a Full-time National Serviceman (NSF) doctor. They brought along portable Urban Search and Rescue (USAR) equipment such as cutting, breaking and lifting equipment, life detection devices and fibre-optic scopes. Associate Professor Muhammad Faishal Ibrahim, Minister of State for the Ministry of Home Affairs and Ministry of National Development, was present at Changi Airport to send the team off. Earlier that evening, His Excellency Mehmet Burçin Gönenli, Ambassador of the Republic of Türkiye to Singapore, also saw the team off at HQ SCDF.





### Boy Rescued from a Collapsed Building in Dulkadirođlu

On 8 February 2023, the advance team successfully landed in Adana, Türkiye and swiftly proceeded to Dulkadirođlu, Kahramanmaraş to commence search and rescue operations.

Despite the frigid temperatures of about 2°C, the advance team conducted search and rescue operations with utmost diligence and professionalism, rescuing a boy from a collapsed 3-storey building.

The Spanish rescue team had deployed their search canine to locate the boy's position, while the SCDF team utilised an advanced fibre-optic scope to confirm his location. Working together, they used their cutting and breaking equipment to create an access through the rubble to reach the trapped boy.

After a 3-hour rescue operation, the boy was successfully rescued from the collapsed building. The collaborative effort of the multi-national rescue team demonstrates the importance of international collaboration in disaster management and relief operations.



Scan the QR code to watch  
SCDF's DART rescuers and search  
canines during their Operation  
Lionheart deployment



Scan here to watch

## SCDF Deploys Main Team to Assist with Quake Rescue Efforts in Türkiye

On 10 February 2023, an additional 48 SCDF personnel and four canines from the SCDF K-9 unit were deployed to Adana, Türkiye, to support the disaster rescue efforts. The second team was sent off by Associate Professor Muhammad Faishal Ibrahim, Minister of State for the Ministry of Home Affairs and Ministry of National Development and His Excellency Mehmet Burçin Gonenli, Ambassador of the Republic of Türkiye to Singapore, at HQ SCDF.

Upon arrival, the team travelled to Kahramanmaraş, located approximately 180km from Adana airport, to link up with the advance team. The 68-member contingent was led by COL Chew Keng Tok, Commander 2nd SCDF Division, and included 37 DART officers, two operations officers, two full-time NSF medical doctors, four paramedics, four HazMat assessment officers, 13 support officers, one ASEAN Emergency Response and Assessment Team (ASEAN-ERAT) officer, four search specialists, and four canines. The canines, with their superior sense of smell, allowed for a more efficient search of the affected areas, complementing the search equipment used by our rescuers.

The officers were divided into various teams to manage operations, planning, logistics, and search and rescue functions, in support of the disaster rescue efforts in the area.





### Emotional Homecoming as SCDF Officers Return from Türkiye

The 68-member Operation Lionheart contingent returned safely to Singapore on 18 February 2023, to a warm welcome. Apart from their families and loved ones, Mr K Shanmugam, Minister for Home Affairs and Minister for Law; Associate Professor Muhammad Faishal Ibrahim, Minister of State (MOS) for the Ministry of Home Affairs and Ministry of National Development; and His Excellency Mehmet Burçin Gönenli, Ambassador of the Republic of Türkiye to Singapore, were also at Changi Airport to welcome them back. Members from the local Turkish community had also gathered at the airport to show their appreciation to the OLH contingent.

Minister K Shanmugam praised the OLH contingent for their dedication, resilience, and courage when conducting extensive search and rescue operations across multiple sites in Türkiye. He expressed gratitude to their families and loved ones for their unwavering support.

His Excellency Mehmet Burçin Gönenli thanked the OLH contingent for their valuable assistance to the communities affected by the earthquake.





## SCDF conferred Medal of Appreciation by the Republic of Türkiye

SCDF was conferred the Medal of Appreciation by the Vice President of the Republic of Türkiye, H.E. Fuat Oktay on 25 April 2023. The Medal of Appreciation recognises SCDF's search and rescue efforts following an earthquake in Türkiye in February 2023. LTC Lok Wee Keong, Commander of the Disaster Assistance and Rescue Team, received the award on behalf of SCDF at the Presidency of the Republic of Türkiye in Ankara, Türkiye.

*"The SCDF is honoured to be conferred with the Medal of Appreciation from the Vice President of the Republic of Türkiye, H.E. Fuat Oktay. The medal recognises the search and rescue efforts by SCDF's Operation Lionheart Contingent that was deployed to Türkiye in February this year as part of Singapore's humanitarian assistance and disaster relief efforts. The SCDF values the strong friendship and bonds forged with our Türkiye counterparts during the deployment. The people of Türkiye have demonstrated admirable resilience and fortitude, and we are confident they would emerge much stronger as they rebuild their lives and homes."*

— Commissioner Eric Yap, Commissioner SCDF



# EXERCISE NORTHSTAR XI

On 22 March 2023, Exercise Northstar XI was held on Jurong Island. Over 300 personnel from various key agencies and strategic partners, including the SCDF, Singapore Police Force, Singapore Armed Forces, JTC Corporation, ExxonMobil Asia Pacific Pte Ltd, Keppel Energy Nexus Pte Ltd, Jurong Port Universal Terminal, Maritime & Port Authority of Singapore, Ministry of Health, and Home Team Science and Technology Agency were involved in the exercise.

Initiated in 1997, Exercise Northstar validates multi-agency emergency response plans, fosters coordination among national agencies and promotes public awareness and vigilance on terrorism and public safety threats. The Whole-of-Government response framework, established to safeguard national security and ensure the nation's rapid recovery from crises, was tested and validated during Exercise Northstar XI.





The exercise scenario simulated a terrorist incident on Jurong Island, where an attack by armed adversaries led to a HazMat incident from a chlorine pipeline rupture and two large storage oil tank fires. Exercise Northstar XI successfully showcased the strength of multi-agency coordination and response for a terror threat.

The exercise was observed by Prime Minister Lee Hsien Loong and a few Cabinet Ministers. At the conclusion of Exercise Northstar XI, PM Lee highlighted the importance of such exercises in ensuring that key agencies remain primed and ready to react to various threats. PM Lee also emphasised the importance of national unity in the face of terror threats.

Scan the QR code to watch highlights of  
Exercise Northstar XI!



Scan here to watch





# MAJOR INCIDENTS 2022

# ROAD TRAFFIC ACCIDENT AT JUNCTION OF LOK YANG WAY AND FIRST LOK YANG ROAD

SCDF responded to a road traffic accident at the junction of Lok Yang Way and First Lok Yang Road, on 1 April 2022. The incident involved two passenger buses. One of them had overturned and the other rammed into a fence. Firefighters from Jurong Fire Station used hydraulic rescue equipment to free a man who was trapped in the driver's seat of the overturned bus, but he was pronounced dead on the scene by an SCDF paramedic.

SCDF paramedics established a triage area, prioritising the casualties for treatment and conveyance based on the severity of their injuries. Additional ambulances and medical resources were dispatched to support the operation.

A Mass Decontamination Vehicle (MDV) from the Special Response Unit was configured into a casualty conveyance vehicle. The MDV conveyed 14 casualties to Ng Teng Fong General Hospital. A total of 37 casualties were conveyed by SCDF to Ng Teng Fong General Hospital and the National University Hospital. Apart from its primary function of performing decontamination for large numbers of casualties, the MDV also functions as a troop and equipment carrier to enhance operational effectiveness.



## FIRE ON KUSU ISLAND

On 17 April 2022, SCDF's marine and land-based firefighting forces responded to a fire on Kusu Island. SCDF dispatched a Marine Rescue Vessel (MRV) from Brani Marine Fire Station and a Rapid Response Fire Vessel (RFV) from West Coast Marine Fire Station. An additional firefighting crew from Marina Bay Fire Station responded aboard the RFV to support the firefighting operation.

The fire involved a cluster of shrines at the hilltop of the island. Using the MRV as a water pump, firefighters laid numerous hoses from the jetty to the hilltop, covering a distance of more than 500 metres. Due to the constant joint training and contingency planning between SCDF's Land and Marine fire stations, the fire was extinguished with two water jets within an hour. There were no reported injuries.





## FIRE AT 31 BENOI LANE

On 23 April 2022, SCDF deployed 14 emergency vehicles and around 80 firefighters to extinguish a fire at a waste oil processing plant at 31 Benoi Lane. A Rapid Response Fire Vessel (RFV) from West Coast Marine Fire Station was also deployed to the incident.

Firefighters used foam to control the fire at the front of the premises, before moving in for offensive firefighting in the interior of the plant. Handheld jets and the RFV's monitor were deployed at the side and rear of the premises, to prevent the fire from spreading.

During the operation, five foam jets and two water jets were deployed for offensive firefighting in the interior of the plant. Six persons had evacuated the premises before SCDF's arrival. No injuries were reported.



## FIRE AT 409 BEDOK NORTH AVENUE 2

On 13 May 2022, SCDF responded to a fourth-floor unit fire at Block 409 Bedok North Avenue 2. SCDF arrived at the scene within six minutes and extinguished the fire in the living room with one water jet.

During the operation, firefighters had to conduct forcible entry into the unit, where they found four unconscious persons, including a toddler.

The three persons found in the bedroom were conveyed to Changi General Hospital, while the person found in the living room was pronounced dead at the scene by an SCDF paramedic.

SCDF also rescued three persons from an adjacent residential unit. They were assessed for minor injuries but declined to be sent to the hospital. A total of 60 persons were evacuated from neighbouring units as a precautionary measure.





## VESSEL FIRE AT 2 KEPPEL BAY VISTA

On 30 May 2022, SCDF responded to a fire involving a berthed vessel at Keppel Bay Vista.

Firefighters from Marina Bay Fire Station and Alexandra Fire Station, with assistance from premises staff, immediately deployed three water jets and three hose reels from the pier to prevent the fire from spreading to other vessels. Firefighters from Brani Marine Fire Station and a vessel from the Maritime and Port Authority of Singapore were also involved in the firefighting operation. The fire was extinguished within an hour.



## FIRE AT 23 GUL DRIVE

On 18 June 2022, SCDF responded to a fire involving a warehouse with waste materials. Thirteen emergency vehicles and about 50 firefighters from Tuas Fire Station, Jurong Fire Station, Jurong Island Fire Station, and the Special Response Unit, were deployed for the operation.

At the onset of the fire, firefighters deployed water and foam jets to contain the fire and prevent it from spreading. An Unmanned Firefighting Machine and five foam jets were later deployed, bringing the fire under control within two hours.



# FIRE AT 10 TUAS VIEW SQUARE

On 4 July 2022, SCDF responded to a fire involving wastepaper and electronic products on the third floor of a waste recycling workshop. A total of 17 emergency vehicles and about 80 firefighters were deployed for the operation.

Firefighters used four water jets to prevent the spread of the fire, before moving into the building to extinguish the fire within 90 minutes. Nine persons had safely evacuated the premises before SCDF's arrival and there were no reported injuries.



## FIRE AT 236 JURONG EAST STREET 21

On 16 August 2022, SCDF responded to a ninth-floor unit fire at Block 236 Jurong East Street 21. Firefighters penetrated the smoke-logged unit to conduct the firefighting operation. A Combined Platform Ladder was also deployed for external firefighting. The fire was extinguished with three water jets. One occupant had evacuated the affected unit before SCDF's arrival, while another was pronounced dead by an SCDF paramedic.

Firefighters also conducted forcible entry and rescued three occupants from the adjacent unit.





## FIRE AT 66 WOODLANDS INDUSTRIAL PARK

On 17 September 2022, SCDF responded to a warehouse fire at 66 Woodlands Industrial Park. The fire was extinguished by SCDF firefighters within 3 hours, using two foam jets, two water jets and an Unmanned Firefighting Machine.

A total of 10 emergency vehicles and about 70 firefighters were deployed for the firefighting operation. 25 workers had evacuated the premises before SCDF's arrival. As a precautionary measure, the Police and SCDF evacuated about 90 persons from the neighbouring premises.





## HEIGHT RESCUE AT 104 TECK WHYE LANE

On 30 September 2022, SCDF responded to a height rescue incident at 104 Teck Whye Lane, involving a worker who was stranded on a gondola between the eighth and ninth floor. First to arrive were the firefighters from Bukit Batok Fire Station, who assessed the gondola's stability and the worker's condition. DART Specialists brought the worker to the ground safely, using a lowering system from the rooftop.

Scan the QR code to watch the height  
rescue operations!



Scan here to watch



## FIRE AT 451 YISHUN RING ROAD

On 1 October 2022, SCDF was alerted to a fifth-floor unit fire at 451 Yishun Ring Road. Firefighters entered the smoke-logged unit to conduct the firefighting and rescue operation. The fire, which involved the living room and part of the kitchen, was extinguished by SCDF using a water jet.

SCDF rescued five persons from the bedrooms of the affected unit. They were assessed by SCDF paramedics for smoke inhalation and minor burn injuries. All five persons were conveyed by SCDF ambulances to Singapore General Hospital.

Hamsters found in multiple pet cages in the service yard of the affected unit were also brought out to safety. Approximately 100 residents from the third to seventh floor were evacuated by the Police as a precautionary measure.



## FIRE AT 108 BEDOK NORTH ROAD

On 23 October 2022, SCDF was alerted to a second-floor unit fire at Block 108 Bedok North Road. Firefighters from Changi Fire Station extinguished the fire, which was caused by a power-assisted bicycle left charging in the bedroom. One person was conveyed to Singapore General Hospital for smoke inhalation. Approximately 50 residents from the third to sixth floor were evacuated as a precautionary measure.





## FIRE AT 28 TUAS SOUTH AVENUE 8

On 13 March 2023, SCDF was alerted to a fire involving a warehouse at 28 Tuas South Avenue 8. The fire was about the size of one and a half football fields. It involved chemical solvents and flammable construction materials stored in the building. At the height of the firefighting operation, SCDF deployed eight water jets and an Unmanned Firefighting Machine. The fire was brought under control within two hours. Two workers were assessed by an SCDF paramedic for blisters on their hands and heads, but declined to be sent to the hospital.





# PUBLIC PROTECTION

# FIRE SAFETY MANAGERS BRIEFING 2022

About 2,000 Fire Safety Managers (FSM) attended the annual FSM Briefing on 28 July 2022. During the briefing, SCDF shared with FSMs new initiatives such as the self-regulatory approach for Temporary Change-of-Use Permit (TP) and the FSM certification criteria. The FSMs were also encouraged to download the myResponder app and sign up as Community First Responders.





# PRODUCT LISTING SCHEME FOR THE INDUSTRY

SCDF has been actively engaging the building and construction industry to share the latest developments in the Product Listing Scheme (PLS). Industry partners were briefed on how to verify the validity of the Certificate of Conformity (CoC), ensure compliance of the installed product to the CoC and maintain records of label issuance.

The engagement efforts began with a webinar for the Association of Consulting Engineers Singapore on 27 May 2022. This was followed by Continuing Education Workshops for Registered Inspectors (RIs) on 13 July and 19 October 2022, where the responsibilities of Qualified Persons (QPs) and RIs in supervising fire safety works were discussed.

On 13 September 2022, SCDF also shared updates on the Fire Code amendments for wall-mounted photovoltaic panels with the Housing and Development Board. A refresher session on the PLS requirements was also conducted on 17 October 2022 for SCDF staff and assessors from the Singapore Accreditation Council.



# JOINT INSPECTION WITH POLICE AT PUBLIC ENTERTAINMENT OUTLETS

With the gradual lifting of COVID-19 measures, nightlife entertainment establishments have also reopened and ramped up their business operations. From August to October 2022, the Fire Safety Department's (FSD) Enforcement Branch, together with various fire stations, and the Police, conducted joint inspection operations at Public Entertainment outlets. FSD will continue to work closely with the Police and other Home Team Departments on joint enforcement operations.





# REVISED FIRE CERTIFICATE AUDIT INSPECTION REGIME

In line with SCDF's commitment to ensuring public safety and reducing compliance costs for the industry, FSD has proposed a revised Fire Certificate audit inspection regime to enhance our regulatory regime and uphold fire safety standards.

FSD will fully optimise the existing Professional Engineer (PE) inspection without duplication of efforts. By aligning FSD's inspection schedules with the PE inspection, a separate PE inspection will no longer be necessary. The building owners will also not be required to make additional arrangements for audit inspections. These enhancements will achieve greater efficiency in SCDF's regulatory function as well as greater business friendliness.



# COMMUNITY PREPAREDNESS





## FIRE STATION OPEN HOUSE

SCDF resumed its in-person Fire Station Open House on 30 April 2022, after a two-year hiatus due to the COVID-19 pandemic. On the first weekend of the resumption, more than 6,000 visitors attended the Fire Station Open House. This unprecedented turnout was three times the attendance before the pandemic. Traditionally, the Fire Station Open House was an opportunity for the public to know more about the daily operations of a fire station. Since the resumption of the Fire Station Open House, additional information on emergency preparedness, such as first aid, CPR, the Public Warning System and Civil Defence Shelters has been shared with the visitors. The Saturday Fire Station Open House had attracted over 88,000 visitors from April to December 2022. Many of them appreciated it as an enjoyable and educational family activity.





# VOLUNTEER ENGAGEMENT THROUGH THE LIFESAVERS' CONNECT HUB

The Lifesavers' Connect Hub (LCH) was launched on 31 May 2022 by Associate Professor Muhammad Faishal Ibrahim, Minister of State for Ministry of Home Affairs and Ministry of National Development. Based at Kallang Fire Station, the LCH will facilitate volunteer leadership programmes and dialogues to garner greater support among volunteers towards SCDF's lifesaving mission. The LCH will also serve as a central location for volunteer engagement activities and team-building events. The LCH will be complemented by the online Lifesavers' Connect Portal, the Lifesavers' Connect Zones at fire posts and the Lifesavers' Connect Centres at the Division Headquarters.





# COMMUNITY RESILIENCE DAY

To build a resilient, well-prepared, and ready community, SCDF has worked closely with the People's Association and Community Emergency and Engagement (C2E) Committees to organise a series of physical Community Resilience (CR) Day activities. Starting from the Marymount CR Day on 5 June 2022, a total of 14 in-person CR Day events were organised, equipping participants with essential lifesaving skills, including first aid, CPR and the use of AED. The participants also learnt how to respond during a National Emergency and where to find the nearest Civil Defence Public Shelters when the Public Warning System is activated. Many enthusiastic participants registered themselves as Community First Responders after attending these sessions.



# AED-ON-WHEELS PROGRAMME

Over the past year, SCDF welcomed two new partners onboard the AED-on-Wheels Programme. Ninja Van joined the programme on 7 July 2022, becoming the first company in the courier and logistics sector to participate in the programme, with COSEM Safety and Security Services Pte Ltd sponsoring AEDs for 50 Ninja Van delivery vehicles. Ninja Van also took the initiative to equip these vehicles with fire extinguishers and first aid kits. Ms Sun Xueling, Minister of State, Ministry of Home Affairs and Ministry of Social and Family Development was present to witness the launch of the collaboration between SCDF and Ninja Van.

In March 2023, SingPost joined the AED-on-Wheels Programme, by equipping its vans and three-wheeler bike fleet with fire extinguishers and AEDs. The launch was witnessed by Associate Professor Muhammad Faishal Ibrahim, Minister of State, Ministry of Home Affairs and Ministry of National Development. There are now a total of five companies in the courier and logistics sector participating in the AED-on-Wheels Programme. As their drivers have an extensive presence on the roads, they can play a critical life-saving role in the community.



## AED ON WHEELS with ninjavan

Thursday, 7 July 2022

Guest-of-Honour  
**Ms Sun Xueling**  
Minister of State, Ministry of Home Affairs  
& Ministry of Social and Family Development





## SHELTER OPEN HOUSE 2022 AT GARDENS BY THE BAY MRT CD SHELTER

On 11 November 2022, SCDF organised the Shelter Open House (SOH) 2022 at Gardens by the Bay MRT Civil Defence (CD) Shelter, to promote public awareness on CD shelter locations and shelter occupation procedures. SCDF also used Facebook Live to conduct an interactive Virtual Tour of the MRT CD Shelter, educating the public on its various features, as well as the procedures for shelter occupation.

The SOH event attracted around 17,000 members of the public, who had the rare opportunity to see the various shelter provisions, such as the entrance blast door, decontamination process, and dry toilet system. Attendees also learned important lifesaving skills such as first aid, CPR, the use of AED and Improvised First Aid Skills through engaging hands-on sessions. MediaCorp artiste, Mr Tyler Ten, was also present to promote the myResponder app and Virtual Tour.



# ORGANISATIONAL EXCELLENCE





## LAUNCH OF SCDF'S DESIRED VALUES AT THE PRIDE AND CARE OBSERVANCE CEREMONY

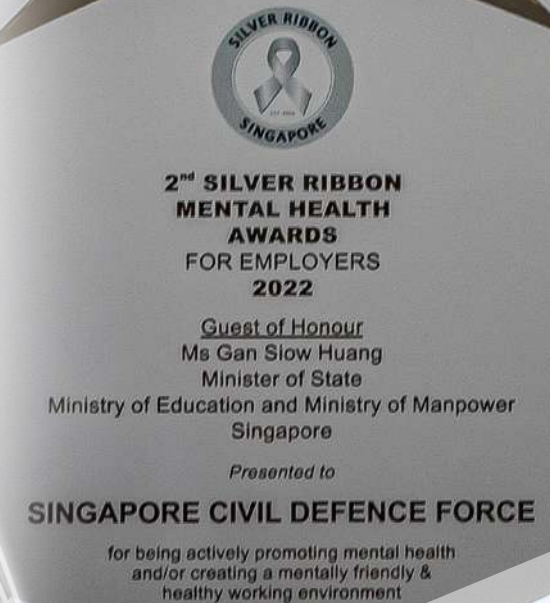
On 14 April 2022, SCDF held a virtual Pride and Care Observance Ceremony, attended by over 1,000 individuals and graced by Mr K Shanmugam, Minister for Home Affairs and Minister for Law. A total of 62 SCDF staff were presented the Pride and Care Star Awards for upholding SCDF's core values of Pride and Care beyond their duties. In addition, the 4th SCDF Division was also awarded the Unit Pride and Care Award for the third consecutive year. SCDF also launched "The Heart of SCDF 2022," an e-book highlighting the desired core values of Pride and Care and showcasing SCDF's award recipients in 2022.



# CLINCHING THE SILVER RIBBON MENTAL HEALTH AWARD FOR EMPLOYERS 2022

On 5 May 2022, SCDF was conferred the Silver Ribbon Mental Health Award for Employers in recognition of our efforts in promoting mental well-being in the workplace. This marks the second consecutive year that SCDF has received this award. The Guest-of-Honour for the virtual award ceremony was Ms Gan Siow Huang, Minister of State, Ministry of Education and Ministry of Manpower. DC Teong How Hwa, Deputy Commissioner (Strategy & Corporate Services), received the award on behalf of SCDF.

In his address on SCDF's mental well-being initiatives, DC Teong emphasised how SCDF's core values of Pride and Care put the people we serve at the heart of everything we do. Care, which underscores the importance of compassion, benevolence, and respect, has been integral to our attainment of the Silver Ribbon Mental Health Award. This award demonstrates SCDF's commitment to building a caring and supportive workplace.



# SCDF WORKPLAN SEMINAR 2022

On 10 June 2022, SCDF held its annual Workplan Seminar at the Civil Defence Academy. The theme for SCDF Workplan Seminar 2022 was “A Nation of Lifesavers: The Future is Here.” During the event, SCDF unveiled the Emergency Responders’ Fitness Conditioning and Enhancement Lab (ExCEL), a purpose-built facility comprising five labs that enhance the physical and mental performance of emergency responders. As part of SCDF’s transition to a three-crew section concept of operations from 1 June 2022, the 6th generation Light Fire Attack Vehicle (LF6G), and the Red Rhino Robot (3R), were also launched. The seminar was attended by staff, strategic partners and community partners, who were able to view the latest initiatives and Ops-Tech projects.







## SCDF - A CARE CHAMPION

On 4 July 2022, SCDF was recognised as a Care Champion by the Institute of Human Resource Professionals - a tripartite set up comprising the Ministry of Manpower, National Trades Union Congress and Singapore National Employers Federation. This award acknowledges SCDF's proactive efforts in promoting resilience, mental health, and well-being in the workplace. The Staff Engagement and Welfare Committee has implemented various welfare initiatives, such as leadership ground engagement sessions, healthy lifestyle and well-being workshops, and the establishment of peer supporter groups. These efforts have brought about increased employee engagement and well-being. SCDF will continue to foster a strong and caring culture for all staff.



# PUBLIC SERVICE TRANSFORMATION AWARDS

On 6 and 29 July 2022, SCDF was recognised with eight awards at the Public Service Transformation (PST) Awards Ceremonies, which recognise public agencies for organisational excellence at the Whole-of-Government level. The ceremonies were graced by Mr Lawrence Wong, Deputy Prime Minister and Minister for Finance, and Mr Chan Chun Sing, Minister for Education and Minister-in-charge of the Public Service.

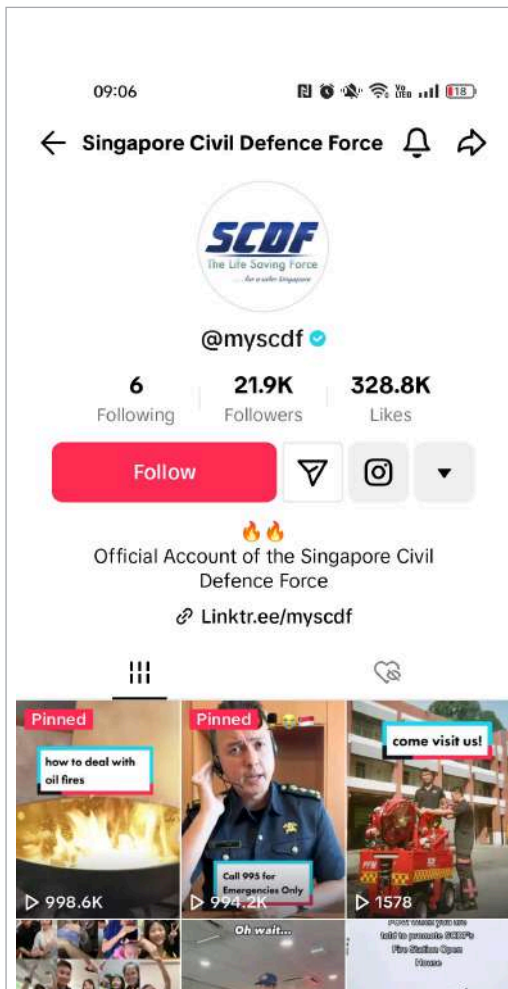
SCDF was awarded the Business Transformation Award, a first for the Force since the award was introduced at the PST Awards Ceremony in 2019. As the sole winner of this award in 2022, SCDF gained recognition for transforming its services and operations to be more citizen-centric and resource-effective. It is also testament to SCDF's transformation journey towards building *A Nation of Lifesavers*.

Since 2015, SCDF has been empowering the community and transforming its business model with innovative use of technology. Some milestones in our transformation journey include the introduction of Community First Responders, building state-of-the-art facilities to enhance responders' performance, and the implementation of the Operational Medical Networks Informatics Integrator to digitise Pre-Hospital Emergency Care services.



# SCDF ON TIKTOK

On 7 August 2022, SCDF made its debut on TikTok, an emerging social media platform, to better engage the Millennial and Gen Z audiences. SCDF recognises the need to expand its presence on various digital platforms and engage the younger audience, so that SCDF's content can better resonate with them. Within the first 3 months of the launch, SCDF's TikTok garnered more than 3 million views and more than 16,000 follower across 17 videos. SCDF now has an extensive presence on six social media platforms - Facebook, Instagram, Twitter, LinkedIn, YouTube and TikTok.



# ASEAN STRATEGIC POLICY DIALOGUE ON DISASTER MANAGEMENT

On 19 August 2022, SCDF jointly organised the annual Singapore-ASEAN Strategic Policy Dialogue on Disaster Management Symposium (SPDDM) with the ASEAN Secretariat and the ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre) at Mandarin Oriental Hotel, Singapore. The event aimed to sharpen ASEAN's disaster management policies for the long-term. Gracing the event, Mrs Josephine Teo, Minister for Communications and Information and Second Minister for Home Affairs, delivered the opening speech and emphasised the importance of investing in disaster resilient infrastructure, having close cooperation among stakeholders at the national and regional level, and building an ASEAN that is resilient against disasters.

Based on the theme of "The Future of Disaster Resilience is Now: Are We Ready?", about 130 international and local participants discussed ideas that could potentially enhance disaster resilience. The event was also attended by His Excellency Ekkaphab Phanthavong, Deputy Secretary-General of ASEAN for ASEAN Socio-Cultural Community, and Ms Barbara Gonzenbach, Deputy Head of Mission of the Embassy of Switzerland in Singapore. An official dinner for the SPDDM delegates was held at the Skai Suites @ Swissotel the Stamford, which was graced by Associate Professor Muhammad Faishal Ibrahim, Minister of State, Ministry of Home Affairs and Ministry of National Development.



# HOME TEAM RESEARCH EXCELLENCE AWARD

The annual Home Team Research Excellence Award (HT REA) is organised by MHA's Research & Statistics Division to recognise outstanding research efforts by our Home Team (HT) research community. The HT REA saw the submission of 13 entries, of which five were shortlisted as finalist projects. The winner was decided by a panel of MHA judges and votes from a live audience on 30 August 2022.

The winner of the HT REA was a joint study to design the 6th generation of the Light Fire Attack Vehicle (LFAV) - LF6G by SCDF and the Home Team Science and Technology Agency (HTX). The team conducted a study, utilising agile prototyping, rigorous physical testing and the gathering of feedback from the ground. They successfully designed the LF6G and the Red Rhino Robot to complement SCDF's 3-crew concept of operations. This helps to enhance SCDF's response capabilities and reduce the risk of frontline responders.

Through a 20-month trial, the study showcased how the iterative design process had built stakeholders' trust in the design philosophy of implementing human factors technologies to alleviate manpower constraints, and allowed SCDF to adjust to the changing operational environment. This project is a testament to SCDF's commitment to operational excellence and staying ahead of the curve in delivering life-saving services to the community.



# MEMORANDUM OF UNDERSTANDING WITH BRUNEI FIRE AND RESCUE DEPARTMENT

On 5 September 2022, a Memorandum of Understanding (MOU) was signed between SCDF and Brunei Fire and Rescue Department (BFRD) at the Ministry of Home Affairs. The signing ceremony was graced by Mr K Shanmugam, Minister for Home Affairs and Minister for Law, and Dato Seri Setia Awang Haji Ahmaddin Bin Haji Abd Rahman, Minister of Home Affairs, Brunei Darussalam.

The MOU signifies the formalisation and enhancement of the cooperation between SCDF and BFRD, specifically in the areas of urban firefighting, Urban Search and Rescue (USAR), Hazardous Materials (HazMat) incident management, fire safety and investigation. This partnership also enables both agencies to exchange expertise and experiences in training and skills development. This MOU signing is a significant milestone in the partnership between both organisations, building on successful professional exchanges, such as the participation of BFRD trainees in the SCDF's Rota Commander Course.



# ASEAN COMMITTEE ON DISASTER MANAGEMENT

SCDF participates in the ASEAN Committee in Disaster Management (ACDM) meetings, which are held twice a year. The meetings focus on enhancing disaster management and resilience across ASEAN nations.

The ACDM is divided into three working groups to implement the activities under the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Work Programme 2021-2025, and SCDF co-chairs two of these groups.

In 2022, Thailand and Vietnam were the Chair and Vice Chair of the ACDM. The 41st Meeting of the ACDM, 10th ASEAN Ministerial Meeting on Disaster Management and its related meetings were held in person from 17 to 21 October 2022 in Thailand. SAC Abdul Razak Bin Abdul Raheem, Director Planning & Organisation Department, represented SCDF during the meeting, while Associate Professor Muhammad Faishal Ibrahim, Minister of State, Ministry of Home Affairs and Ministry of National Development, delivered the country statement for Singapore.



# ASIA-PACIFIC MINISTERIAL CONFERENCE ON DISASTER RISK REDUCTION

Commissioner Eric Yap led a delegation to the Asia-Pacific Ministerial Conference on Disaster Risk Reduction (APMCDRR) 2022, held from 19 to 22 September 2022 in Brisbane, Australia. The theme of the conference was 'From Crisis to Resilience: Transforming the Asia-Pacific Region's future through disaster risk reduction.' As a regional platform convened by the United Nations Office for Disaster Risk Reduction, the APMCDRR promotes coordination and cooperation on Disaster Risk Reduction (DRR) and implementation of the Sendai Framework for DRR. The conference brought together UN Member States, intergovernmental organisations, international and national organisations, and stakeholder groups, aiming to accelerate progress in DRR matters.

During the conference, the SCDF delegation participated in meetings on the sideline with His Excellency Ekkaphab Phanthavong, Deputy Secretary-General of ASEAN for ASEAN Socio-Cultural Community, as well as delegations from Maldives, South Australia and New Zealand to strengthen ties and reaffirm friendships.





# SENIOR EXECUTIVE PROGRAMME IN DISASTER MANAGEMENT 2022

The Senior Executive Programme in Disaster Management (SEPDM) continues to be SCDF's flagship leadership course in disaster management since its inaugural run in 2015. The SEPDM is a collaboration between SCDF, the ASEAN Secretariat and the Swiss Agency for Development and Cooperation (SDC). The in-person course was held at the Civil Defence Academy from 7 to 11 November 2022, and it provided a valuable platform for senior leaders in the ASEAN National Disaster Management Organisations to discuss the latest developments in the disaster management landscape and find common ground for collaboration.

The SEPDM 2022 programme was centred around three distinct pillars, namely Disaster and Crisis Leadership, Technology and Innovation for Disaster Management, and Current Trends in Disaster Management. Distinguished speakers from the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), ASEAN Secretariat, ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre), SDC, Japan International Cooperation Agency (JICA), Coventry University and Lee Kuan Yew School of Public Policy (LKYSPP) shared their valuable insights and perspectives during the event.

At the end of SEPDM 2022, a Memorandum of Understanding was signed between SCDF and Republic Polytechnic (RP). Dr Michael Koh, Deputy Principal (Academic Services), represented RP and DC Ling Young Ern, Deputy Commissioner (Future Technology and Public Safety) represented SCDF. With the MOU, SCDF and RP can discuss, develop, and execute collaborative research and activities to optimise responder performance and safety management.





## PUBLIC SECTOR PRO-ENTERPRISE INITIATIVE AWARD

The Pro-Enterprise Panel - Singapore Business Federation (PEP-SBF) Awards Ceremony was held on 29 November 2022 at Conrad Centennial Singapore, with Mr Gan Kim Yong, Minister for Trade & Industry as the Guest-of-Honour. SCDF is proud to be the sole recipient of the highest Public Sector PEI Award (Gold) for 2022, among the six public agencies awarded with the PEI Award. The award recognises proactive public sector officers who have initiated pro-enterprise changes, improved service delivery, reduced business compliance costs, and enabled more businesses to participate in the market. SCDF received the prestigious award for its efforts in streamlining regulations for the installation of Electric Vehicle (EV) charging stations that are located outside petrol stations. This effort has played a significant role in promoting the adoption of EVs in Singapore.

In addition, SCDF was also awarded the Pro-Enterprise Suggestion (Supporting Agency) Award for providing fire safety advice for a new business concept proposed by the Ministry of Trade & Industry.



# CIVIL DEFENCE ACADEMY REDEVELOPMENT

SCDF has committed to the redevelopment of the Civil Defence Academy (CDA) in three phases, to ensure that training infrastructure and people development can keep pace with the future.

Phase 1 of the redevelopment works was successfully completed in April 2021, while Phase 2 will be launched at the SCDF Workplan Seminar 2023. This phase of the redevelopment will feature a total of three purpose-built facilities offering enhanced training realism for emergency responders. The new National EMS Training Centre offers a suite of comprehensive training and learning infrastructure from on-site medical intervention to end-to-end clinical care systems through the integrated Emergency Department training. This replicates the real-world pre-hospital emergency care environment. In addition, Phase 2 will also feature live training simulators that replicate contemporary operating environments such as MRT stations, road tunnels, industrial and mixed-use buildings, conservation premises, and electric vehicle charging stations. Our emergency responders will be able to realistically practise their firefighting and rescue skills, including joint training, in various safe training settings.

The Fire Research Centre is a purpose-built environment for burn testing and enhanced fire modelling capability. It will facilitate evidence-based formulation of fire code requirements and fire safety solutions. Data from the burn tests can also aid SCDF in developing improved firefighting techniques. Burn tests can be carried out to assess new products and various green building initiatives that may pose challenges to existing building codes and regulations. Burn tests can also be used to validate fire propagation hypotheses in fire investigation.

Phase 3 of the redevelopment project, which will focus on upgrading the existing Furnace building and external fire simulators, is expected to be completed by the end of FY2023.

By investing in our training infrastructure and people development, we are confident that we can achieve our strategic objectives and continue to deliver high-quality services that meet the needs of the public and the evolving operating environment.





4TH SCDF DIVISION HQ



**SCDF**  
The Life-Saving Force

4TH SCDF DIVISION HQ  
BUKIT BATOK FIRE STATION

Cross  
Barrier  
In Operation  
Please Wait  
At Stoppage  
Cross Barrier  
In Operation

4TH SCDF  
DIVISION

LIFESAVERS

# SCDF'S SUSTAINABILITY JOURNEY

# SCDF'S SUSTAINABILITY JOURNEY

At the heart of SCDF's mission to protect and save lives and property for a safe and secure Singapore, lies a deep commitment to the tenets of sustainability. In a world of energy and climate insecurity, SCDF is in a prime position to embrace sustainable and environmentally friendly practices. Apart from keeping our community safe, our fire stations also serve as spaces for public education and interaction. This presents an excellent opportunity for SCDF to be an innovative leader in green practices for the community and the nation.

This section showcases SCDF's sustainability journey, through the integration of sustainable practices into our daily operations and workflows. Promoting resource efficiency and reducing wastage will not only reduce our environmental impact, but also enhance our resilience to environmental challenges. Through infrastructural developments, collaborative partnerships, innovation and a steadfast commitment to shaping a culture of sustainability, we aspire to be responsible stewards of our environment, preserving it for our present and future generations as we fulfil our life saving mission.

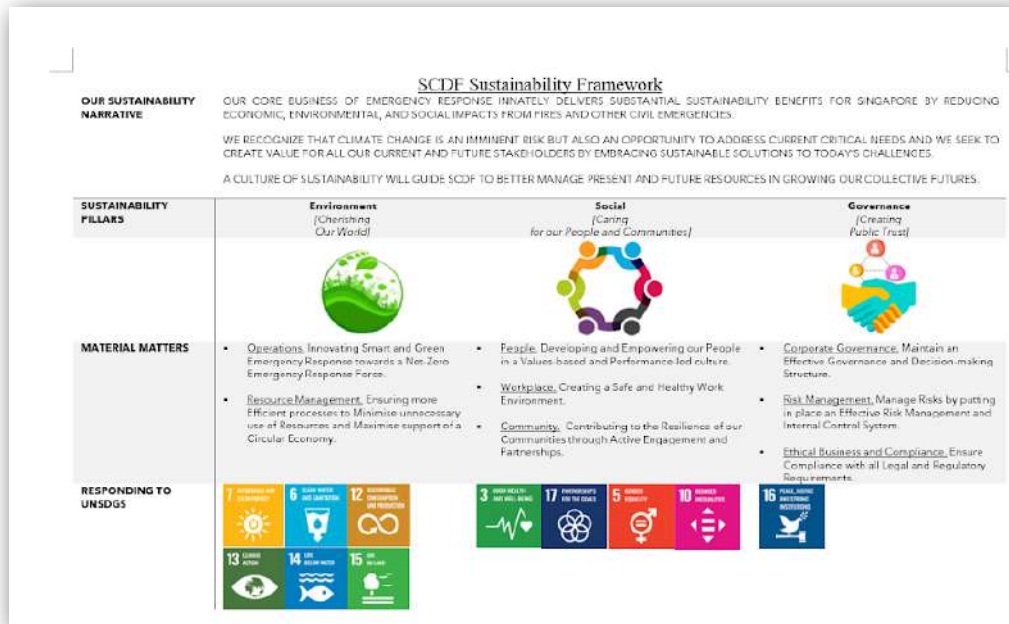


# DEVELOPING A SUSTAINABILITY DNA

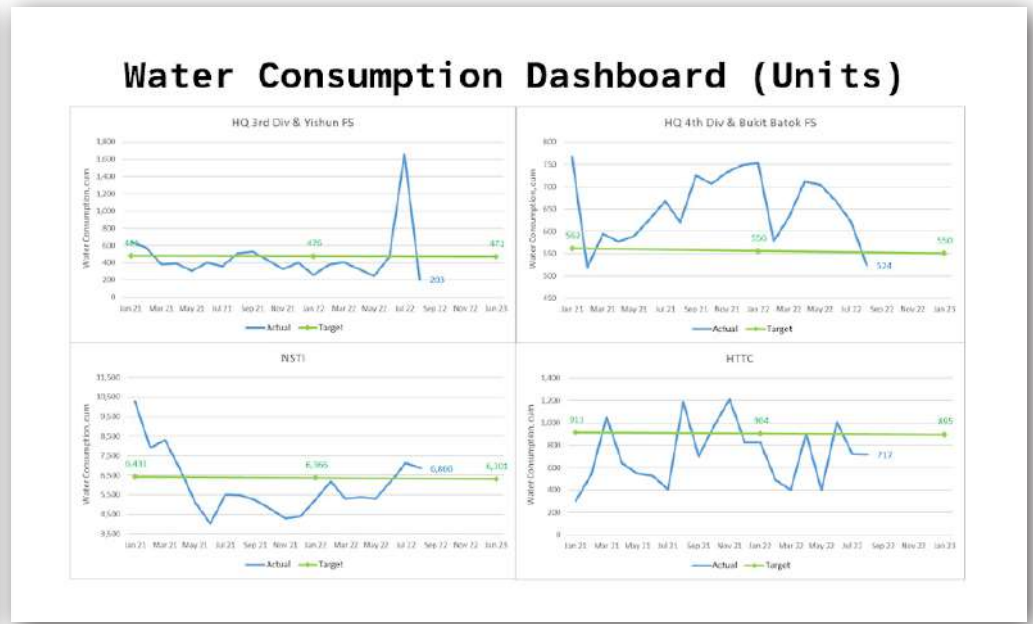
Building a culture of sustainability is a collective and sustained effort which brings about positive impact for SCDF and its officers in the long run. By embracing sustainable practices, SCDF aims to be a positive enabler of green efforts and contribute to a resilient and sustainable community. SCDF's sustainability journey will be achieved through the following initiatives:

## COMMITMENT TO GREENGOV.SG TARGETS

As a Home Team Department under the Ministry of Home Affairs, SCDF is committed to supporting the National Sustainability Agenda, as mapped out in the Singapore Green Plan 2030 via the GreenGov.SG initiative. Under GreenGov.SG, SCDF will strive to achieve ambitious targets in carbon abatement, from peak carbon emissions by 2025 to net zero emission by 2045. SCDF will also make advancements in resource efficiency, improving our energy utilisation and water efficiency indices by 10%, becoming a positive influencer and enabler of green efforts. To encourage SCDF units to take ownership of their own green efforts, the data to be tracked under GreenGov.SG has been reviewed and refined into unit-level dashboards, which help the units to monitor their own progress towards meeting these targets.



SCDF's Sustainability Framework and the 3 key pillars behind the sustainability initiatives.



Unit level Dashboards to facilitate tracking and monitoring of GreenGov targets.

# DEVELOPING A SHARED SUSTAINABILITY VISION

A Sustainability Taskforce led by DC Teong How Hwa, Deputy Commissioner (Strategy & Corporate Services), also SCDF's Chief Sustainability Officer, was established in 2022. Responsible for formulating a sustainability framework, developing a shared vision and driving sustainability efforts within SCDF, the taskforce also tracks progress on indicators, implements sustainability practices and reaches out to potential sustainability partners for collaboration.

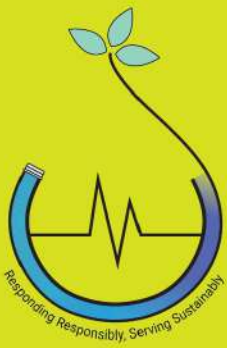
## GENERATING AWARENESS FOR THE SUSTAINABILITY IMPERATIVE

A targeted internal communications effort was launched to educate officers on sustainability-related topics and showcase SCDF's sustainability efforts. Apart from electronic digital mailers, a sustainability corner was also set up at HQ SCDF to showcase innovative upcycling projects and initiatives. With plans to incorporate sustainability into training and learning throughout an officer's career, greater awareness and ownership of sustainability will be nurtured throughout SCDF.

## MOTIVATING SUSTAINABLE BEHAVIOUR

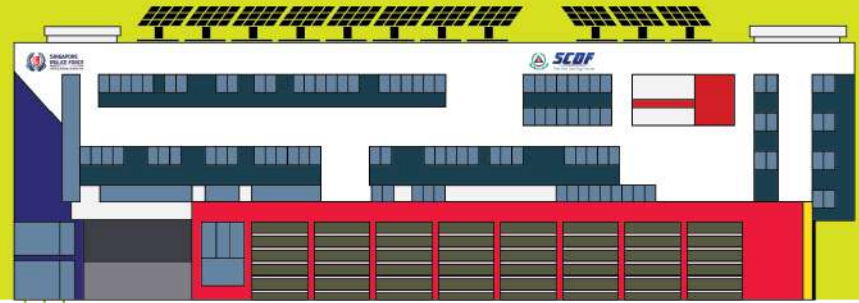
SCDF recognises the necessity of aligning our sustainability vision with the personal beliefs of our officers, giving each officer a deeper sense of purpose and commitment in sustainability efforts. A network of Unit Sustainability Advocates has been established across the SCDF units to champion ground-up initiatives and lead sustainability activities and campaigns.



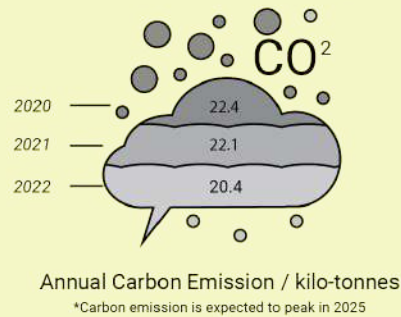
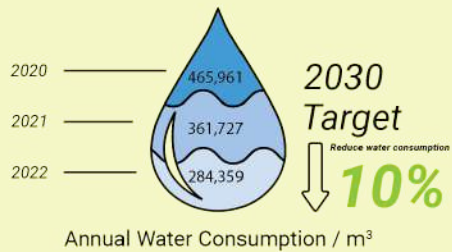


# Responding Responsibly, Serving Sustainably

In a world facing increasing environmental challenges, SCDF is committed towards responsible actions and sustainable practices. With our tagline, we embody a commitment to not only protect and save lives and property, but also minimize our ecological footprint and contribute to a greener future.



## Environmental Stewardship



## Green Infrastructure

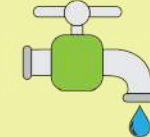
### Building related green initiatives



Setting aircon to 25°



Light sensors in toilets



Installation of water efficient taps



Use energy efficient electrical fitting

### Achievements

#### GreenMark (GM) Certification



SCDF HQ & CDA certified GreenMark Platinum  
7 Fire Stations certified GreenMark Gold or equivalent

#### Solar Energy



220,000 kWh of electricity generated annually from Solar Panels installations.

### Smart and Green Fire Station

Punggol Fire Station is the first Smart and Green Fire Station with a large landscape area spanning 2,500sqm. It also comes with integrated building management system (IBMS) which provides automated control of the building's sub-systems such as air-conditioning, mechanical ventilation fans, and lighting to achieve cost savings. The IBMS also optimises energy consumption, one of the key thrusts of what makes this fire station environmentally sustainable.

## Cultivating a Sustainability DNA



### Sustainability Taskforce

Chaired by DC S&CS, the taskforce provides policy and strategic guidance to drive Sustainability across SCDF.



### Unit Sustainability Advocates

Over 30 Sustainability Advocates appointed to drive initiatives across all SCDF units.



### Training and Learning

-13 Sustainability eDMs disseminated  
-25 officers trained in GRI Sustainability Reporting.  
-7 Sustainability Learning Journeys organized.



### Campaigns and Activities

-200 officers attended Upcycling workshops.  
-6 Sustainability Campaigns + Activities.  
-Est. 2,000 pairs of used shoes collected for upcycling since Feb 2023.



### Collaborations

- Upcycled hoses into fences, furniture and enrichment devices for animals (NParks, Resorts World Sentosa & Wildlife Reserves Singapore)  
- Upcycling booth at Choa Chu Kang & Punggol Libraries (National Library Board).



# A GREENER SCDF

Apart from the initiatives discussed earlier, SCDF continuously seeks opportunities to embed sustainable practices within our core business. Through sustainability-driven innovation, SCDF is keen to explore new technologies and solutions that will not only maintain our world-class emergency response, but also minimise our environmental impact.

## SUSTAINABLE OPERATIONS AND TRAINING

By implementing energy-efficient measures and adopting clean technologies, SCDF aims to minimise our carbon footprint and play a part in preserving the environment. As firefighting operations may bring about unintended environmental impact, clean technologies for operations can go a long way in reducing these negative externalities. Examples of recent green initiatives and innovation efforts include:

- Use of Compressed Air Foam and water mist technologies to enhance firefighting capabilities while reducing water usage and water damage;
- Implementation of fire blankets to reduce water usage when mitigating vehicle fires;
- Transition toward electric-powered firefighting and rescue equipment to reduce reliance on fossil fuels;
- Deployment of Extended Reality training systems at the Civil Defence Academy to reduce water usage and wastage (e.g. less scrapped cars are needed for training in road traffic accident extrication );
- Progressive transition of SCDF's vehicle fleet (administrative and emergency) towards cleaner energy /electric models, with the first fully electric fire engine to be on trial by mid 2024;
- Inclusion of environmental features for new Fire Stations; and
- Attainment of BCA's Green Mark Platinum Award for HQ SCDF and Civil Defence Academy.

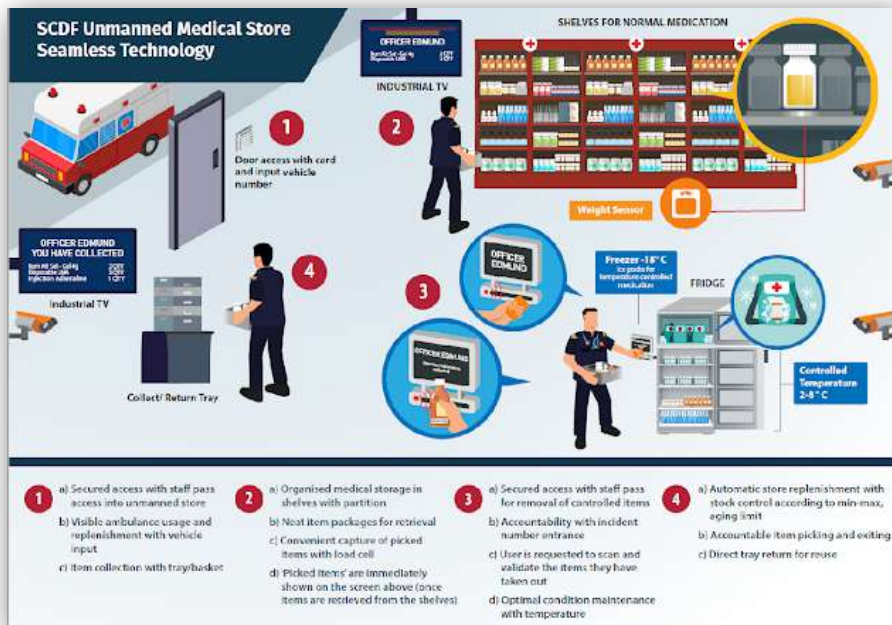


The Unmanned Firefighting Machine and the Fire Blanket are among the many technologies SCDF has deployed to reduce our reliance on water during firefighting operations.

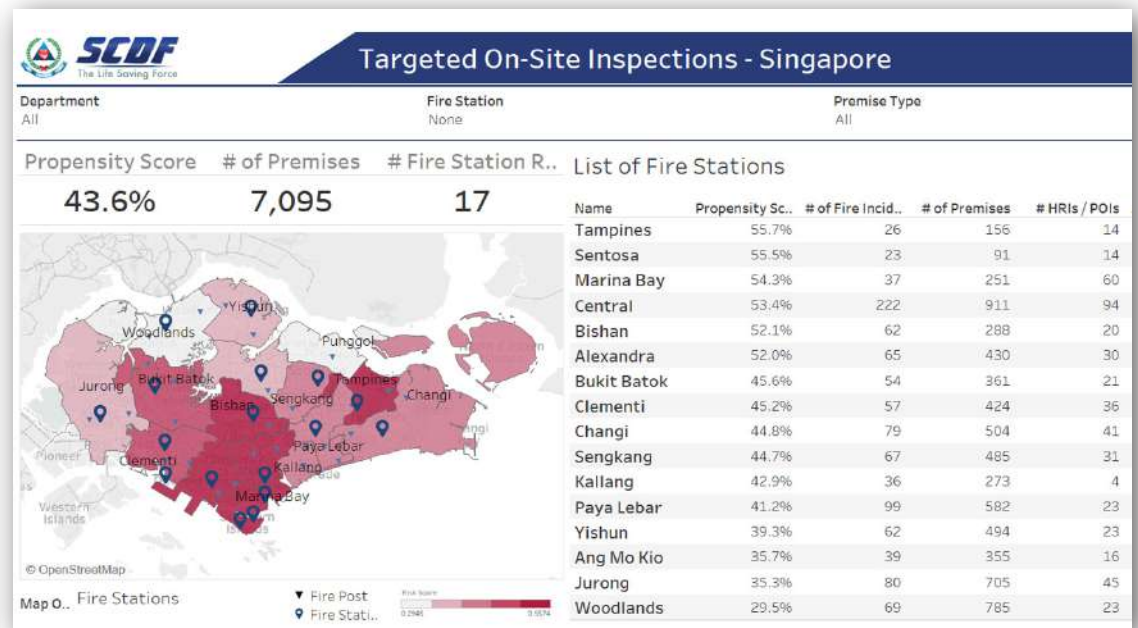
# OPTIMISING RESOURCES

Leveraging data allows SCDF to make informed decisions, optimise resource allocation and enhance operational effectiveness. Apart from helping SCDF in its core mission, data and technology also helps SCDF to operate more sustainably, by optimising the consumption of resources, identifying risk areas for targeted interventions, and streamlining workflows for enhanced efficiency. Relevant examples include:

- Leveraging data-driven insights for optimal resource placement island-wide, achieving better response times while reducing the environmental impact of fires and severity of damage;
- Pilot trial of Automated Medical Store that manages inventory through trend analysis, ensuring adequate supplies without overstocking; and
- Data-driven enforcement tools to identify higher risk premises for regulatory inspections and targeted interventions, enhancing public safety.



The Automated Medical Store will reduce the costs of holding medical inventory and minimise wastages from overstocking.



Targeted Onsite Inspection Tool (TOIT) schedules enforcement checks based on the profile and history of fire safety violations in individual premises, to improve enforcement outcomes.

## MINIMISING WASTAGE

SCDF has been actively incorporating upcycling practices to repurpose damaged or retired equipment. This not only helps to minimise waste, but also inculcates a sense of environmental responsibility. In 2021, a project team from 1st SCDF Division started a ground-up initiative, exploring the upcycling potential of retired fire hoses and personal protective gears. Over time, exquisite, handcrafted products such as wallets, luggage tags and pouches were born out of their sheer creativity and passion for sustainability. Today, these products are given a second lease of life and gifted to delegates and guests of SCDF from all over the world. The team has since conducted introductory workshops to over 200 participants, spreading the sustainability message and imparting practical skills across the organisation.

In addition to the inhouse upcycling initiatives, SCDF has actively collaborated with both local and overseas organisations, to give a second lease of life for its decommissioned fire hoses. These hoses have been repurposed into park fences and enrichment devices for animals. SCDF's partners in this initiative include National Parks Board, S.E.A. Aquarium at Resorts World Sentosa, Wildlife Reserves Singapore and the Sumatran Orangutan Conservation Programme.



Products such as pouches, wallets, keychains, laptop sleeves etc, made by the SCDF project team from decommissioned firefighting hoses and old uniforms.



SCDF collaborated with NParks to build a 60m long fence in Coney Island Park using decommissioned firefighting hoses.





# THE JOURNEY AHEAD

SCDF's foray into the domain of sustainability demonstrates our dedication towards creating a sustainable future. SCDF is always eager to explore new avenues to embrace sustainability in its operations and organisational culture. In doing so, SCDF is confident in making significant progress towards becoming a Net-Zero Emergency Response Force.

**SCDF**  
The Life Saving Force

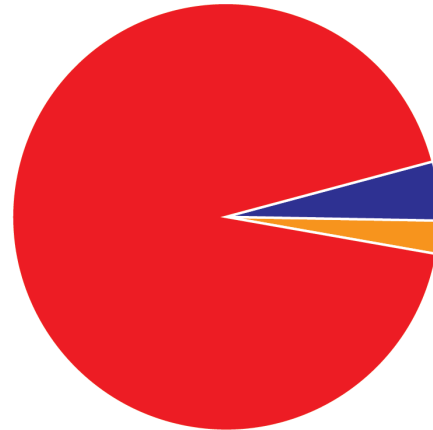


# **ANNUAL STATISTICS (2022)**

# TOTAL EMS CALLS



↑ 20.2%

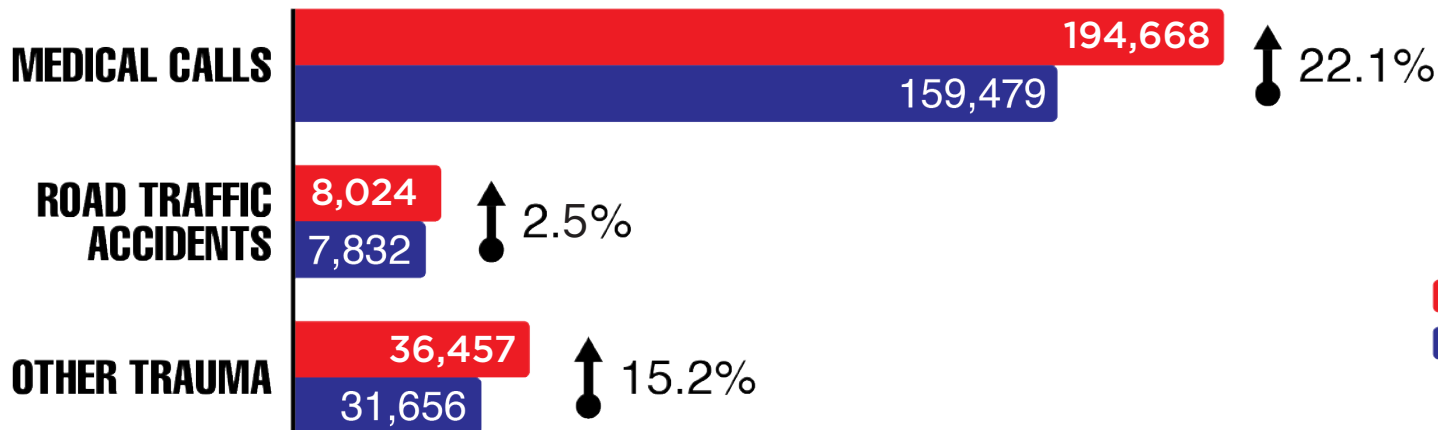


**EMERGENCY CALLS**  
(239,210) 93.1%

**NON-EMERGENCY CALLS**  
(11,538) 4.5%

**FALSE ALARMS**  
(6,089) 2.4%

## BREAKDOWN OF EMS CALLS



■ 2022  
■ 2021



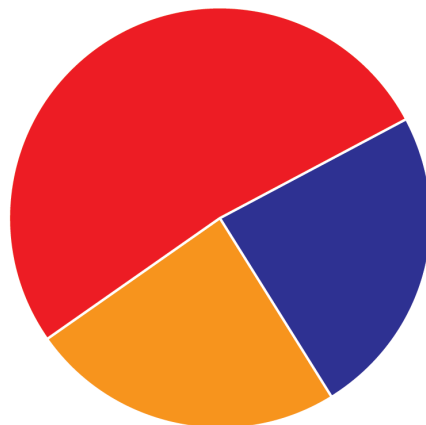
# TOTAL FIRE CALLS



↑ -2.4%



## BREAKDOWN OF FIRE CALLS

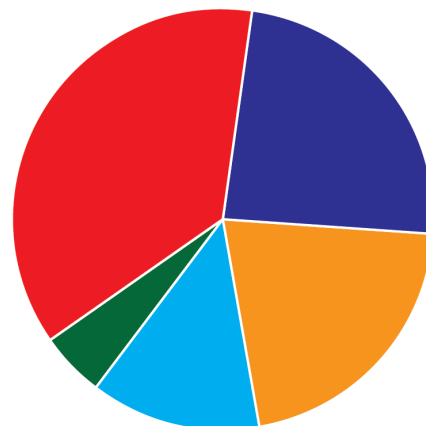


**RESIDENTIAL BUILDINGS**  
(935) 52%

**NON-RESIDENTIAL BUILDINGS**  
(434) 24.1%

**NON-BUILDING PREMISES**  
(430) 23.9%

## BREAKDOWN OF FIRE CAUSES IN RESIDENTIAL BUILDINGS



**UNATTENDED COOKING**  
37%

**ELECTRICAL**  
24%

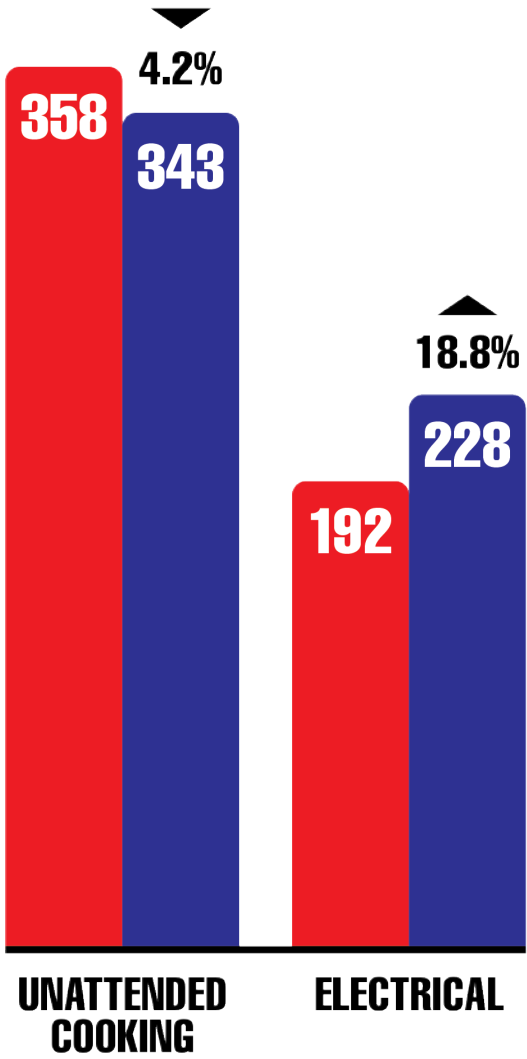
**NAKED LIGHT**  
21%

**DROPPED LIGHT**  
13%

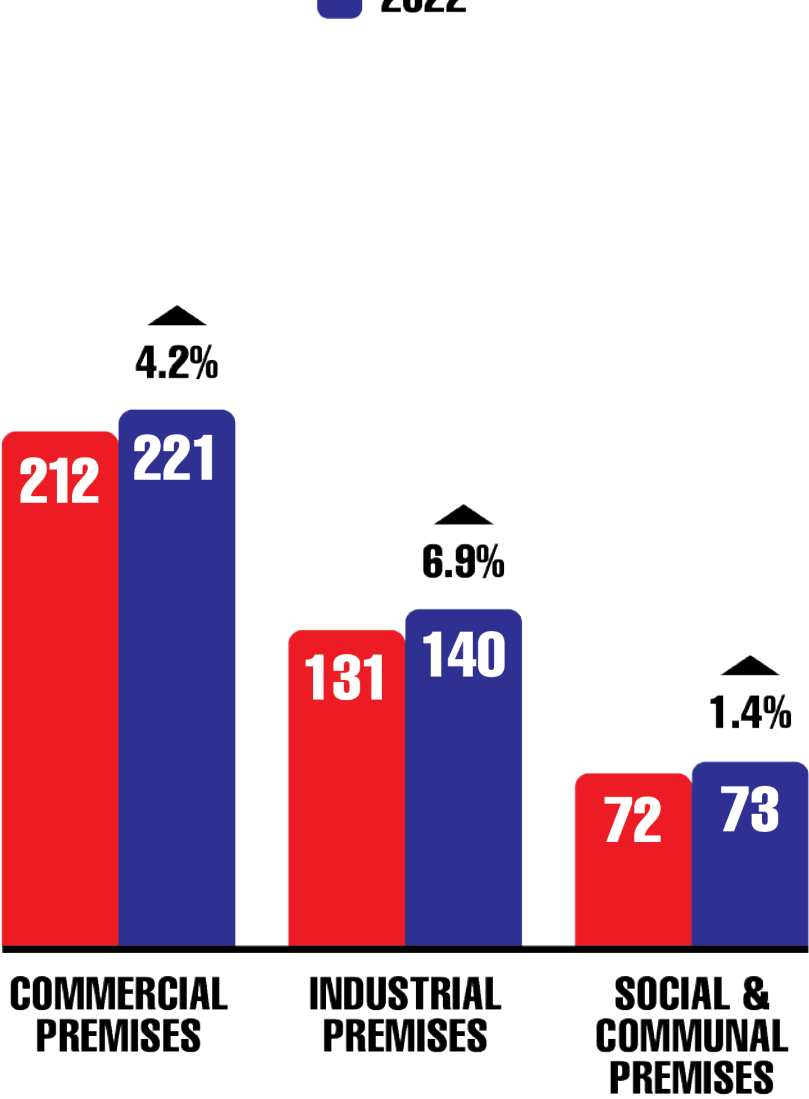
**OTHERS**  
5%



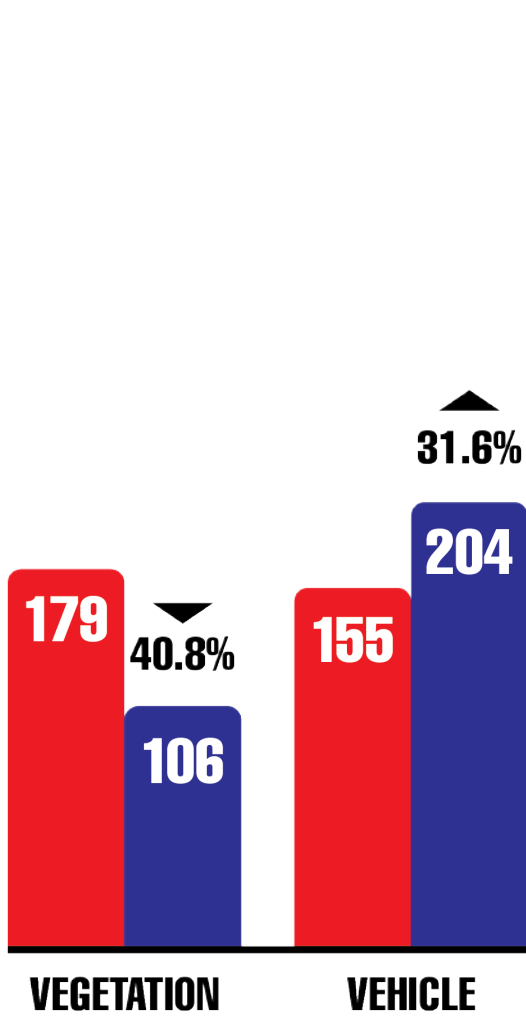
2021  
2022



### FIRES IN RESIDENTIAL BUILDINGS



### FIRES IN NON-RESIDENTIAL BUILDINGS

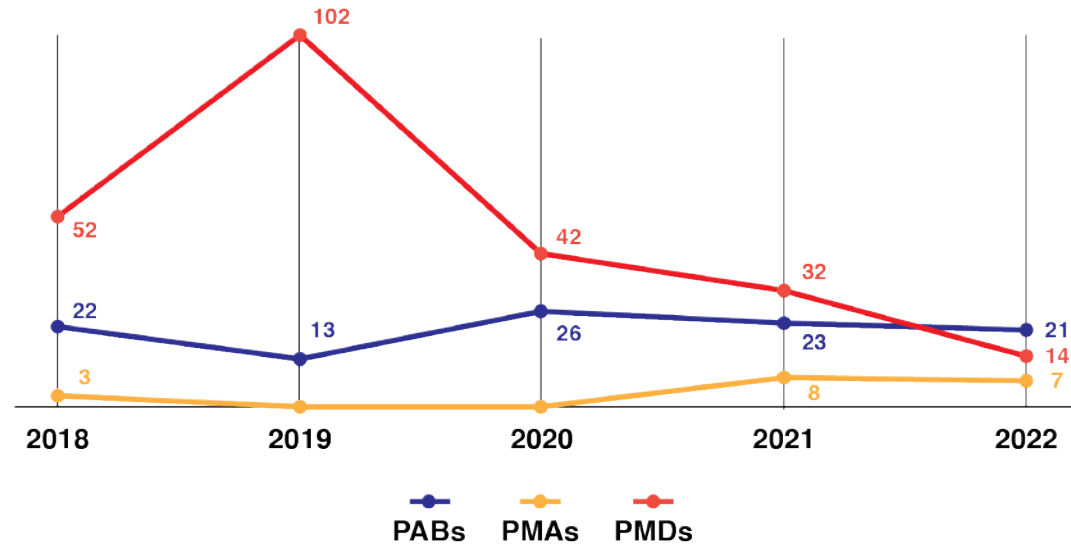


### FIRES IN NON-BUILDING PREMISES

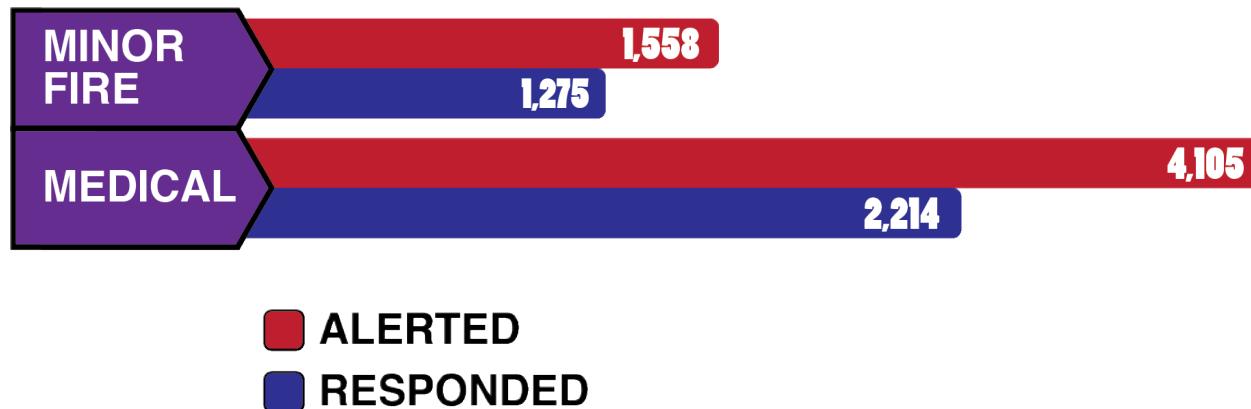




# PAB, PMD & PMA FIRES OVER THE LAST 5 YEARS (2018 - 2025)



## COMMUNITY FIRST RESPONDERS



# SCDF CONDUCTED 12,792 ENFORCEMENT CHECKS

2,330

**FHANS  
ISSUED**  
FIRE HAZARD  
ABATEMENT NOTICE

1,252

**N00s (FSo)  
ISSUED**  
NOTICE OF OFFENCE  
(FIRE SAFETY OFFENCE)

94

**COURT  
ACTION**

## TOP 3 FHANS ISSUED

493

Obstruction to means of escape  
or fire engine access

473

Exit sign / Emergency light  
not illuminated

404

Non-maintenance of  
firefighting equipment

## TOP 3 N00s (FSo) ISSUED

525

Unauthorised change of use  
of premises

397

Carrying out fire safety works  
without approval

95

Storage/ transportation of  
petroleum & flammable material  
without licence

## COURT ACTION: TOP 2 VIOLATIONS

34

Unauthorised change of use

29

Unauthorised fire safety works



An in-house production



# SCDF

## The Life Saving Force

*... for a safer Singapore*

