# A resource guide on Workplace Safety and Health Technology GRANTS AND INNOVATION CHALLENGES



#### **Jointly Compiled By:**

Workplace Safety and Health Institute (WSHI), Ministry of Manpower (MOM) Workplace Safety and Health Council (WSHC)

#### With Info By:

Building and Construction Authority (BCA)

Enterprise Singapore (EnterpriseSG)

Housing & Development Board (HDB)

Infocomm Media Development Authority (IMDA)

JTC Corporation (JTC)

Maritime and Port Authority of Singapore (MPA)

NTUC Hospitality & Consumer Business Cluster

Port Innovation Ecosystem Reimagined @ BLOCK71 (PIER71™)

Singapore Tourism Board (STB)

### **About this resource guide**

In 2019, the Workplace Safety and Health (WSH) 2028 was launched to guide medium term WSH strategies, where both workplace safety and workforce health are of equal importance, and reaffirms Singapore's aspiration to be a global leader in WSH practices.

Along with Strengthening WSH Ownership and Enhancing Focus on Workplace Health, one of the key strategies in the WSH 2028 is to Promote Technology-Enabled WSH. There is immense potential for technology to transform the practice of WSH. They can come in various forms, from sensors, wearables, Artificial intelligence (AI), Augmented Reality (AR) / Virtual Reality (VR) to robotics, and centralized dashboard and data analytics to support operations and decision making to improve WSH.

Adoption of new technology can be challenging and tedious for some companies. This is especially so for SMEs with limited awareness and resources. This resource guide aims to provide guidance on some of the government funding support and programmes that the industry can tap on for test-bedding and adoption of WSH Tech solutions.

Please note that the information contained in this resource guide is compiled by WSH Institute, with input from WSH Council. While we strive to ensure information is accurate, please refer to the respective links provided to access further information and latest updates.

Updated as at 1 Apr 2025



























## Overview of grants and innovation challenges for WSH Tech

## **Grants (all sectors)**

Company Training Committee (CTC) Grant Pg 4 Productivity Solutions Grant (PSG) Pg 5 Enterprise Development Grant (EDG) Automation <u>Pg 6</u> Process Redesign Pg 7 Advanced Digital Solutions (ADS) Pg 8 Lorry Crane Stability Control System Pg 9

# **Grants (sector specific)**

Business Improvement Fund (BIF) Pg 10 Productivity Innovation Project (PIP) Pg 11

**Innovation challenges (all sectors)** Open Innovation Platform (OIP)

Innovation challenges (sector specific)

Built Environment Accelerate to Market Pg 13

Programme (BEAMP)

Cool Ideas Enterprise Pg 14

PIER71™ Smart Port Challenge (SPC) Pg 15



Grant (SCSG)

Incentive Scheme

























Pg 12

Overview	The Company Training Committee (CTC) Grant of \$100 million supports entities that have formed CTC to implement transformation plans that would lead to better worker and business outcomes.
Eligibility	<ul> <li>You need to:</li> <li>Be legally registered or incorporated in Singapore</li> <li>Have set up a CTC and developed a CTC-endorsed transformation plan</li> <li>CTC Grant project should lead to a) enterprise transformation – enhanced business capabilities or innovation and/or productivity, and b) workforce transformation – improved employment outcomes for local workers (SC/PRs) through efforts such as job redesign, and commit to the following worker outcomes: wage increment; and/or implemented career development plan (CDP) that is communicated to all staff, and/or skills allowance.</li> </ul>
Support level	<ul> <li>Funding Support:</li> <li>CTC Grant provides funding support of up to 70% of qualifying cost for each project, and other funding caps/conditions where applicable</li> <li>Funding quantum will be assess based on strength of project from business transformation perspective and cost of project from worker outcomes perspective (i.e., applicants will have to commit a minimum number of local workers to be impacted and meet at least that minimum stated in the NTUC CTC Grant's Letter of Award (LOA) for claim disbursement.).</li> <li>Qualifying costs:</li> <li>Items/training relevant and tied to transformation plans that lead to worker and business outcomes. E.g. Equipment/Software and related OEM/software training, consultancy, in-house or external non SSG-supported training courses needed to effect the transformation project.</li> </ul>
Grant period	The grant is available from 1 Aug 2022 till 31 July 2026, subject to fund utilisation and availability.
Relevance to WSH Tech	From 1 Aug 2024, projects that enhance workplace safety and health are recognised as enhancements to business capabilities, fulfilling the enterprise transformation criteria of the CTC Grant. Companies seeking to improve safety through technology adoption plans may apply for the grant if their transformation project leads to enterprise and workforce transformation.
Useful links	For more details about the grant: CTC Grant

Overview	The Productivity Solutions Grant (PSG) supports the adoption of pre-st the industry roadmaps such as the Industry Transformation Maps (ITM	coped IT solutions, equipment and consultancy services that improves productivity, aligned to s) and Industry Digital Plans (IDPs).
Eligibility	<ul> <li>You are:</li> <li>A local Small and Medium Enterprise (SME) looking to continue you</li> <li>You need to:</li> <li>Be registered and operating in Singapore.</li> <li>Have a least 30% local shareholding¹ (for selected solutions only).</li> <li>Purchase/lease/subscribe the IT solution(s) or equipment(s) to be unable of the selected solution.</li> <li>1. Have at least 30% local equity held directly or indirectly by Singapore.</li> </ul>	
Support level	Solutions that cut across industries such as customer management.	ies such as Enterprise Singapore (EnterpriseSG), Building and Construction Authority (BCA)
WSH Tech solutions pre-approved on PSG	For Building & Construction  • E-Permit-to-Work (ePTW)  • Integrated and Smart Worksite Monitoring and Inspection  For Advanced Manufacturing  • Autonomous Mobile Robot  For All Sectors  • Fleet Safety Management Systems (FSMS)  More will be added progressively	For Marine & Offshore  • Autonomous Mobile Robot  Precision Engineering  • Autonomous Mobile Robot  For Food Services  • Autonomous Robotic Servers
Useful links	For more details about the grant: Productivity Solutions Grant	

Overview	The Enterprise Development Grant (EDG) helps Singapore companies to upgrade, innovate, grow and transform. Companies would need to submit individual project proposals with details on their business plans and project outcomes for evaluation. This EDG component provide support to company's usage of automation and technology which can result in tangible benefits and significant growth.
Eligibility	You are: <ul><li>Looking to adopt/develop sophisticated hardware/software solutions to improve your company's productivity.</li></ul>
	<ul> <li>You need to:</li> <li>Be registered and operating in Singapore.</li> <li>Have a minimum of 30% local shareholding<sup>1</sup>.</li> <li>Be in a financially viable position to start and complete the project.</li> </ul>
	<sup>1.</sup> Have at least 30% local equity held directly or indirectly by Singaporean(s) and/or Singapore PR(s), determined by the ultimate individual ownership.
Support level	<ul> <li>Support level:</li> <li>Small and Medium Enterprises (SMEs): Up to 50% support for EDG (sustainability-related projects may be supported at up to 70% from 1 April 2023 to 31 March 2026).</li> <li>Note: There are no pre-approved vendors for the EDG.</li> <li>Qualifying costs:</li> <li>Adoption/development of sophisticated hardware and/or software solutions.</li> <li>Development of solutions that involve purchase of machinery and integration of systems.</li> <li>Training of staff to deploy solutions.</li> <li>What is not covered:</li> <li>Set-up costs that are essential to starting a business.</li> <li>Cost of equipment and gadgets, such as copiers, laptops, tablets and mobile phones.</li> </ul>
	<ul> <li>Equipment and software costs that are supported under the Productivity Solutions Grant (PSG).</li> </ul>
Relevance to WSH Tech	Companies seeking to adopt tech solutions involving robotics and IT to improve WSH and productivity.
Useful links	For more details about the grant: <u>EDG – Project Categories – Innovation &amp; Productivity</u>

## **Grants – Enterprise Development Grant (EDG) – Process Redesign**



Overview	The Enterprise Development Grant (EDG) helps Singapore companies to upgrade, innovate, grow and transform. Companies would need to submit individual project proposals with details on their business plans and project outcomes for evaluation. This EDG component helps companies review existing processes and identify areas for efficiency, before the introduction of automation or technology.
Eligibility	<ul> <li>You are:</li> <li>Looking to improve your company's operational efficiency.</li> <li>You need to:</li> <li>Be registered and operating in Singapore.</li> <li>Have a minimum of 30% local shareholding<sup>1</sup>.</li> <li>Be in a financially viable position to start and complete the project.</li> <li>Engage management consultant(s) with the <u>Singapore Accreditation Council</u> -accredited TR 43 or SS 680 certification, if you are applying for support for consultancy-related costs.</li> <li>Have at least 30% local equity held directly or indirectly by Singaporean(s) and/or Singapore PR(s), determined by the ultimate individual ownership.</li> </ul>
Support level	<ul> <li>Support level:</li> <li>Small and Medium Enterprises (SMEs): Up to 50% of support for EDG (sustainability-related projects may be supported at up to 70% from 1 April 2023 to 31 March 2026).</li> <li>Note: There are no pre-approved vendors for the EDG.</li> <li>Qualifying costs:</li> <li>Review and streamlining of workflow and processes to reduce or remove redundant processes.</li> <li>Explore the use of technology to automate processes.</li> <li>Review and/or development of performance measures.</li> <li>Development of tracking and measurement system.</li> <li>Development of detailed roadmap of actions for further improvement.</li> </ul>
Relevance to WSH Tech	Companies seeking to optimize processes and explore the use of tech to reduce or replace risky work activities.
Useful links	For more details about the grant: <u>EDG – Project Categories – Innovation &amp; Productivity</u> To see a list of available centres: <u>Productivity Centres</u>

Overview	The Advanced Digital Solutions (ADS) was announced during the Resilience Budget 2020 to help enterprises deepen their digital capabilities, strengthen business continuity measures and build longer term resilience. ADS is an initiative under the SMEs Go Digital programme in collaboration with the ITM Lead Agencies. It supports the adoption of advanced technologies (e.g., AI, Robotics, Blockchain and Internet of Things) and integrated solutions (e.g., B2B solutions that integrate inventory management, e-invoicing, and e-payments) that address common enterprise-level challenges at scale.
Eligibility	<ul> <li>You need to:</li> <li>Be registered and operating in Singapore.</li> <li>Have a minimum of 30% local shareholding¹.</li> <li>Group sales turnover less than S\$100 million per annum, or group employment less than 200 employees.</li> <li>Enterprises can contact the project leads of the ADS projects they are interested in. More will be added progressively.</li> <li>1. Have at least 30% local equity held directly or indirectly by Singaporean(s) and/or Singapore PR(s), determined by the ultimate individual ownership.</li> </ul>
	<ul><li>Support level:</li><li>Enterprises can receive up to 70% funding support for the qualifying costs of digital solutions.</li></ul>
Support level	<ul> <li>Qualifying costs:</li> <li>Funding support can cover the costs for hardware, software, infrastructure, connectivity, cybersecurity, integration, development, enhancement and project management. The programme will also cover the cost of deploying these solutions (e.g. acquisition, subscription, lease, transaction, training and professional services like programmers and project managers).</li> </ul>
Support level  WSH Tech solutions listed on ADS	• Funding support can cover the costs for hardware, software, infrastructure, connectivity, cybersecurity, integration, development, enhancement and project management. The programme will also cover the cost of deploying these solutions (e.g. acquisition, subscription, lease, transaction, training

## **Grants – Lorry Crane Stability Control System Grant (SCSG)**

Overview	The lorry crane stability control system grant (SCSG) has been extended to continue supporting local business entities in their adoption of SCS to enhance safety during lifting operations.
Eligibility	<ul> <li>You need to:</li> <li>Be a business entity registered and operating in Singapore.</li> <li>Purchase and install SCS on new or existing lorry cranes that fulfil all of the following conditions: <ul> <li>Lorry cranes under Lifting Equipment classification codes 631, 632, 633, 638 or 639</li> <li>Lorry cranes aged 17 years or less from year of manufacture to calendar year of application</li> <li>Acceptable SCS from the crane manufacturer or authorised agents based on the brand of lorry crane</li> </ul> </li> <li>Purchase SCS only after grant approval.</li> <li>Use the SCS in Singapore.</li> </ul>
Support level	<ul> <li>Funding Support:</li> <li>Lorry crane owners can claim up to 50% of the qualifying costs on a reimbursement basis. The grant is capped at \$5,000 per lorry crane and \$20,000 per business entity.</li> <li>Qualifying costs:</li> <li>The purchase and installation of SCS hardware and software.</li> <li>What is not covered:</li> <li>Administrative fees/charges relating to the purchase and installation of the SCS, including charges for repair/replacement of the defective SCS, design fees, freight charges, Goods and Services Tax (GST), shipping charges, port charges, bank charges, charges for assembly and dismantling, service charges and maintenance fees.</li> </ul>
Grant period	The grant will be extended until 31 March 2027 for owners of lorry cranes, subject to fund utilisation and availability.
Relevance to WSH Tech	Companies seeking to enhance the safety of lorry crane lifting operations with the installation of SCS.
Useful links	For more details about the grant: <u>SCSG</u>

# **Grants – Business Improvement Fund (BIF)**

Overview	The Business Improvement Fund (BIF) aims to encourage technology innovation and adoption, redesign of business model and processes in the tourism sector to improve productivity and competitiveness.
Eligibility	The BIF is open to all Singapore-registered businesses/companies embarking on projects with a clear tourism focus.  You are: A Small Medium Enterprise (SME) or non-SME. A tourism company taking on capability development initiatives. A technology company that create innovative technology products and services for tourism businesses.
Support level	<ul> <li>Support level:</li> <li>Funding support varies for Small Medium Enterprise (SME) and non-SME.</li> <li>Successful applicants will receive funding support for qualifying costs, subject to STB's evaluation of the scope and merits of the project.</li> <li>Check if your project met the eligibility conditions with the <u>Grant Eligibility checker</u></li> <li>Funding support for qualifying 3<sup>rd</sup> Party project-related cost</li> <li>Consultancy fees (which can include costs involved in sustainability certification)</li> <li>Hardware/equipment and software</li> <li>Materials and consumables</li> <li>Training costs (if training is an intrinsic component of the project)</li> <li>Travel costs associated with the project</li> </ul>
Relevance to WSH Tech	<ul> <li>Companies seeking to optimise processes and explore the use of tech to improve WSH and productivity.</li> <li>Companies seeking to develop WSH tech solutions for the hospitality sector.</li> </ul>
Useful links	For more details about the grant: <u>Business Improvement Fund</u> Interested applicants are advised to declare if they are SME or non-SME and provide an executive summary of the proposed project to <u>STB_Incentives@stb.gov.sg</u> . (Download executive summary template <u>here</u> .) An STB officer will be in touch to assist you further. The STB officer incharge of your project will advise if your proposed project is eligible for BIF support and to proceed with the application.

#### Overview

The Productivity Innovation Project (PIP) incentive scheme co-funds up to 70% of the costs for technology adoption and innovations that improve productivity at construction sites.

#### Eligibility

#### You need to:

- Be legally registered or incorporated in Singapore
- Be a construction-related company.

Area	Productivity innovation	Level of co-funding support
Technologies and Innovations	30-40% productivity improvement at trade level	Up to 70% of the qualifying cost, capped at \$1 million per application
	> 40% productivity improvement at trade level	Up to 70% of the qualifying cost, capped at \$10 million per application
Design for Manufacturing and	Integrated Construction and Prefabrication Hubs (ICPH)	Up to 70% of the qualifying cost, capped at \$10 million per application
Assembly (DfMA) Manufacturing Facilities	Other manufacturing facilities	Up to 70% of the qualifying cost, capped at \$3 million per application
	Support for Digital Solutions (IDD)	Up to 70% of the qualifying cost, capped at \$300,000 per application
Integrated Digital Delivery (IDD)	IDD 3 stage digitalisation	Up to 70% of the qualifying cost, capped at \$600,000 per application
	IDD 4 stage digitalisation	Up to 70% of the qualifying cost, capped at \$700,000 per application

## Support level

#### **Grant period**

The grant is available till 31 March 2025, all submissions must be submitted before 31 December 2024.

# Relevance to WSH Tech

- Companies seeking to optimise processes and explore the use of tech to improve WSH and productivity.
- Companies seeking to develop WSH tech solutions for the construction sector that would reduce site workers and improve productivity.

#### **Useful links**

For more details about the grant: PIP scheme

Overview	The OIP is a crowd-sourcing platform that connects and matches real business challenges or digitalisation opportunities of Problem Owners to Problem Solvers. IMDA will launch Innovation Calls on the OIP every few months. Each Innovation Call comprises a set of challenges from different Problem Owners from different sectors. Each challenge is accompanied with prize monies for the best solutions that are selected based on the criteria of Problem Owners. The aim of OIP is to bring tech solutions to more businesses quickly and enable digital transformation on a greater scale.
Eligibility	<ul> <li>You are:</li> <li>All Enterprises, Infocomm Media (ICM) start-ups and innovators are eligible to participate in OIP as Problem Owners, Problem Solvers, or Both.</li> <li>Problem Owners should have an unsolved business challenge, and be willing to put up prize money for quality and innovative ideas.</li> <li>Problem Solvers should have digital technology expertise and innovation capabilities, and an interest to co-innovate with potential customers or partners in Singapore.</li> </ul>
Benefits	Problem Owners on the OIP benefit from gaining access to a large community of Solvers with multi-disciplinary expertise, and can crowdsource for innovative ideas to support their digitalisation needs. A structured and iterative open innovation process facilitated by IMDA reduces their search costs and expands overall innovation capacity.  Problem Solvers who are part of the OIP benefit from having visibility of potential customers and curated problem statements. They have opportunity to apply to challenges, win prize monies, and co-innovate with Problem Owners to develop, validate and test their solutions. If successful, winning Solvers are also able to go on to commercialise and go to market jointly with Problem Owners, who may serve as reference customers for Singapore or the region.
Relevance to WSH Tech	Companies seeking innovative digital solutions to WSH-related problem statements
Useful links	For more details about the programme: Open Innovation Platform

## **Innovation Challenge – Cool Ideas Enterprise**

Overview	Cool Ideas Enterprise is an open innovation platform for innovators to co-develop solutions that improve the living environment and residents' quality of life. Solutions that focus on these 5 areas (Energy, Urban Greenery, Living Environment, Water and Waste, and Building Technology) can be piloted in HDB's Living Labs island wide. Participants can also benefit from funding support, mentorship, and access to facilities.
Eligibility	<ul> <li>Be a business entity that is registered / incorporated in Singapore;</li> <li>Be physically present in Singapore;</li> <li>Be financially able to see a project through completion</li> </ul>
Benefits	<ul> <li>Support level: Funding support by Enterprise Singapore (EnterpriseSG)</li> <li>All successful applicants will receive funding support of up to 70% of their development cost, including: manpower costs, hardware/software, materials and consumables, testing &amp; certification, intellectual property registration. There is no cap on the funding quantum.</li> <li>Mentorship</li> <li>Be mentored by experts in technical and regulatory fields.</li> <li>Testbed opportunities</li> <li>Tap on facilities at HDB's Centre of Building Research, including: access to various test-bedding sites, co-workspace, meeting rooms Industry showcase</li> <li>Pilot test solutions across HDB estates.</li> </ul>
Relevance to WSH Tech	Companies seeking to develop WSH tech solutions for the construction and built environment industry.
Useful links	For more details about the programme: Cool Ideas Enterprise For more queries, please write to HDB_CoolideasENT@hdb.gov.sg.

## Innovation Challenge – Built Environment Accelerate to Market Programme (BEAMP)



Overview	The Built Environment Accelerate to Market Programme (BEAMP) was set up to bring inventors and companies together to fast-track the innovation process to solve real world industry challenges. This programme was launched by Building and Construction Authority (BCA), JTC Corporation (JTC) and Enterprise Singapore (EnterpriseSG) on 22 February 2019.  Using a two-phase approach, each BEAMP cycle starts with the launch of industry challenge statements. Networking sessions are planned accordingly to allow innovators the opportunity to better understand the needs of industry stakeholders and for industry stakeholders to assess capabilities of potential innovators. Depending on the technical maturity of the solution proposed, shortlisted innovators will be channeled through the <b>Accelerate Solutions Development Phase</b> or the <b>Market Development Phase</b> , where appropriate.
Eligibility	Please refer to terms and conditions under <u>BEAMP</u> .
Benefits	<ul> <li>BEAMP supports innovation under the seven tracks of:</li> <li>Advanced Construction Materials</li> <li>Advanced Design and Fabrication</li> <li>Automation and Robotics</li> <li>Building Inspection, Maintenance and Facility Management</li> <li>Digital Asset Delivery and Project Management</li> <li>Construction Site Safety</li> <li>Smart Estate Management</li> </ul> Support level: <ul> <li>For industry players, BEAMP assists in problem statement curation, launch on the BEAMP platform and tapping on a wide network for greater exposure.</li> <li>Funding for solution developers supports up to 70% of qualifying costs, capped at \$\$30,000 for the Accelerate Solution Development (ASD) phase and \$\$250,000 for the Market Development (MD) phase.</li> </ul>
Relevance to WSH Tech	Companies seeking innovative technology solutions to WSH-related problem statements
Useful links	For more details about the programme: BEAMP For more queries, please write to beamp@padang.co

## **Innovation Challenge – PIER71™ Smart Port Challenge (SPC)**

Overview	PIER71™ was established in 2018 jointly by the Maritime and Port Authority of Singapore (MPA) and NUS Enterprise, the entrepreneurial arm of the National University of Singapore. It aims to be a catalyst for acceleration of digital transformation within Singapore maritime industry.  Smart Port Challenge (SPC) is an annual competition that calls for ideas and solutions from the global start-up community to address innovation opportunities from maritime corporates in Singapore. Shortlisted start-ups undergo a market validation and customer discovery programme called PIER71™ Accelerate and the top teams go through to a Grand Final for a chance to win cash prizes. All teams that complete PIER71™ Accelerate with secured letters of intent (LOI) with corporates are eligible to apply for a grant from MPA to further develop solution.
Eligibility	<ul> <li>You are:</li> <li>A business owner¹ who is able to make a call to steer their business directions. The business owned should be at the seeding stage before series A.</li> <li>An interested participant who do not own a business but are close to setting one up are welcome to participate.</li> <li>Participants do not have to be based in Singapore at the point of submission. However physical presence is required when they reach certain points of progress.</li> <li>1. You need to:</li> <li>Be registered for less than 5 years for start-ups.</li> <li>Have group sales turnover less than \$\$100 million per annum, or group employment less than 200 employees.</li> </ul>
Benefits	<ul> <li>Support level:</li> <li>Participants of PIER71™ Accelerate can get connected to industry partners and mentors to validate their solutions. They can also get connected to investment partners from PIER71™ Venture Capital Network to seek for potential investments.</li> <li>Participants are eligible to apply for the MPA grant with quantum up to SGD50,000 per project. Separate terms and conditions will be applicable for the grant.</li> </ul>
Relevance to WSH Tech	Companies seeking innovative technology solutions to WSH-related problem statements
Useful links	For more details about the programme: <u>PIER71™</u> For more queries, please write to <u>enquiries@pier71.sg</u>