



THE GOVERNMENT INITIATIVES IN ACCELERATING THE COMMERCIALISATION FOR INNOVATION IN MALAYSIA

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UNIVERSITI KEBANGSAAN MALAYSIA (UKM)

2nd MARCH 2023

“SUPPORT FOR UNIVERSITIES AND SMES”



MOSTI

About National Technology & Innovation Sandbox (NTIS)

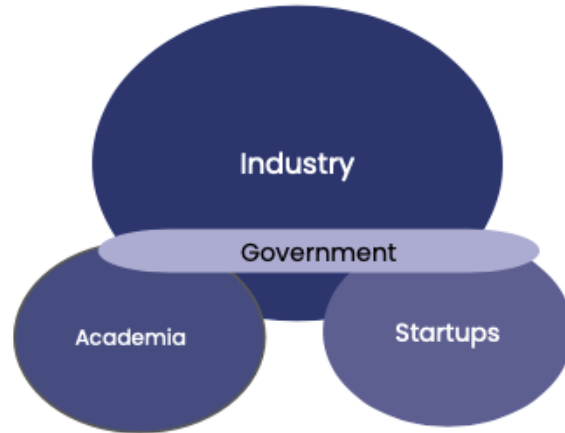


NATIONAL TECHNOLOGY & INNOVATION SANDBOX

OBJECTIVES

- Accelerate Innovation Adoption
- Build Engines Of Growth
- Boost Public Sector Efficiency

PARTICIPATING PARTIES



NTIS SANDBOX



A **"safe place"** to test solutions in a live controlled environment with relaxed regulations.

Opened for application on 15 July 2020, officially launched by YAB PM on 19 Aug 2020.



KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI
MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION



MAGiC

TECHNOLOGY PARK MALAYSIA

Lead Secretariat



01 Commercialisation

- Accelerate solution commercialisation
- Engage corporates to work with early stage solutions by providing market access
- Build structured commercialisation path for solutions
- Assist with IP Audit & Valuation

02 Regulations

- Knowledge partners to maneuver regulatory challenges in advanced technology adoption
- Assist NTIS to better understand the gaps to be addressed and ensure the NTIS initiative is seamless for applicants

03 Funding

- Provide funding to successful NTIS applicants



Technology & Innovation: Focus Sectors

Based on the **10x10 MySTIE framework** by Akademi Sains Malaysia

SocioEconomic Sectors:



Energy



Business
Financial
Services



Culture,
Arts &
Tourism



Medical &
Healthcare



Smart
Engineering &
Manufacturing



Smart Cities &
Transportation



Water &
Food



Agriculture &
Forestry



Education



Environment
& Biodiversity

Technology Drivers:



5G / 6G



Sensor
Technology



4D / 5D
Printing



Advanced
Materials



Advanced
Intelligence
Systems



Cyber Security
& Encryption



Augmented
Analytics &
Data
Discovery



Blockchain



Neuro
Technology



Bioscience
Technology

Four NTIS Sandbox **Funding Schemes** via MTDC

Sandbox Type	(1) Single Site	(2) Multiple Sites	(3) Commercialisation	(4) Matching Fund
Funding Amount (Maximum)	RM 250,000 (100%)	RM 500,000 (70%)	RM 4,000,000 (70%)	RM 5,000,000 (1:1 Matching fund per company)
Funding Instrument	Grant	Grant	Grant & CPN*	Subject to discussion between MTDC, Investor and Applicant
Funding Disbursement	Milestone achievement basis	Milestone achievement basis	Matching payment on claim basis	Subject to discussion between MTDC, Investor and Applicant
Project Duration	6 months	6 months	18 months	6 - 18 months
Type of Eligible Costs for Sandbox 1,2,3 & 4	<ul style="list-style-type: none"> ● Technology licensing / Consultation fees ● Product registration / Regulatory compliance costs ● Production cost ● IP registration ● Technology & market validation activities ● Operational expenditures (Staff allowance, rental, accomodation, utilities, transportation) <p>For Sandbox 3 & 4, additional eligible costs are:</p> <ul style="list-style-type: none"> ● Purchase of equipment / machinery ● Marketing & promotional cost (electronic media, printed media, website etc) 			

NTIS Achievements To-Date (as of 30 July 2022)

9 NTIS Industry Sandboxes



Agriculture Sandbox:
Impacting FELDA Settlers & Communities Via Tech-Driven Solutions.



Robotics & Automation Sandbox:
Drone & Robotics Zone (DRZ) - Becoming Regional Growth Engine, Technology Leader, Investment & Talent Hub.



Logistics Sandbox:
Harnessing Innovative Logistics Solution for E-Commerce, Healthcare & Mobility.



DroneTech Sandbox:
Integrated Ecosystem as Research-to-Commercialisation Centre of Excellence.



High-Tech Education Sandbox:
Maximize technology's potential for transforming the way of teaching and learning among educators in the country.



SportsTech Sandbox:
Improve the performance of national athletes and sports as well as to ensure our national athletes continue to excel and succeed in the sports industry through advanced technology



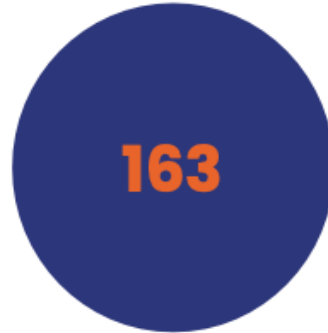
Smart Highway Sandbox:
Expedite innovative approach for highway operations and preventive maintenance works through technology adoption



Digital IoT Sandbox:
Boost innovation -driven economic development in Sabah



Sustainable Smart Cities Sandbox:
Creates real market opportunities for startups to test and validate their product, build traction and scale with Sunway as a lighthouse partner

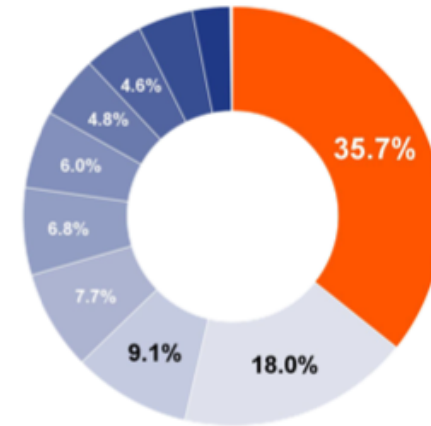


Successful Applications
(Application opened 15th July)



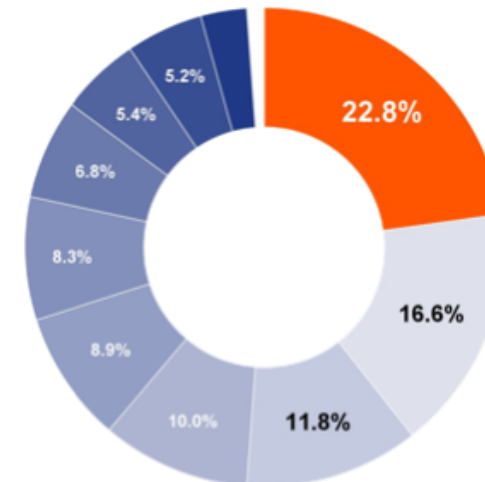
IAN Partners
(Innovation Acceleration Network)

Technology Drivers



- Advanced Intelligence Systems
- Others
- Bioscience Technology
- Augmented Analytics & Advanced Materials
- 5G / 6G
- Blockchain
- Sensor Technology
- 4D/5D Printing
- Cyber-Security & Neuro Technology

SocioEconomic Drivers



- Medical & Healthcare
- Agriculture & Forestry
- Business Financial Services
- Smart Engineering & Manufacturing
- Smart Cities & Transportation
- Education
- Others
- Energy
- Environment & Biodiversity
- Culture Arts & Tourism
- Water & Food



MASTIC

Technology Acceleration & Commercialisation Scheme (MDV-TACT)

Scope of Funding

MDV Technology Acceleration and Commercialisation Scheme (MDV-TACT) is part of the Government's initiatives under RMK-11 to promote the development and adoption of new technologies and increase the success rate of commercialising new technologies. MDV TACT is meant for companies that have developed their products and services, and seeking to accelerate its growth and market competitiveness.

Why MDV-TACT?

1. Hybrid solution of equity and/or debt financing.
2. Financing size up to RM 5.0 million
3. Targeted at young and emerging startups with innovative and disruptive products with compelling business plans
4. Attractive profit rate
5. Up to 5 years tenure



MRANTI

Enabling Transformational Growth

R&D&C&I Value Chain / Stages

Early: Ideation & Applied Research

Mid: Prototyping & Viability Testing

Late: Scaling Up & Commercialisation

Ecosystem Building



We are here to build a strong community through the **Quadruple Helix Model** (Public Sector, Private Sector, Academia and Civil Society) to inspire, enculturate and catalyse market-driven innovations

World-Class Infrastructure



With our strong roots in technology park management, we are able to provide a range of world-class facilities for **prototyping, fabrication, testing, development, collaboration** to nurture the growth of innovation

Developmental Programmes



Navigating technological and obstacles can be challenging. We are here to support technology seekers and providers with the necessary and wide range of **programmes** and interventions to **accelerate commercialisation.**

Research & Development Centres



Facilities:

A certified facility for Traditional Medicine, HACCP, MeSTI and HALAL premises status. Full-suite laboratory - **Product Development and Formulation Lab, Analytical Biochemistry & Molecular Biology Lab and Agrobio Lab** (Agriculture Biotechnology).

Services include:

- Regulatory and Product Registration Services
- Product Packaging, Design & Printing
- Herbal Product CMO (OEM Services)



Facilities:

For product development and bio-processing of innovative health supplements, herbal-based products. A 20-acres area with **precision agriculture, smart farming and precision manufacturing technologies**

Services include:

- Formulation and laboratory analysis
- Product registration
- Consultancy in Biotechnology
- Project management



Facilities:

Precision manufacturing hub and R&D for high-tech military and engineering products. Provides the application of scientific and engineering knowledge and methods.

Services include:

- Digitisation & Engineering
- Metrological Services
- Rapid Prototyping
- Design & Product Development

Access to World Class Infrastructure

by 2025

BioScience Tech Living Lab - BioIndustry

by 2025

Catalyse Malaysia's bio-economy growth through incubator and bionexus-certified facility equipped with various certifications including GMP and HALAL

Makerslab

by 2022

Create, experiment, and realise ideas through the usage of new age technologies and tools & facilities with assistance from subject matter experts

4IR Flexible Manufacturing System Living Lab

by 2025

Support tech-driven product development from large-scale rapid prototyping to manufacturing with advanced engineering facilities

Autonomous Vehicles (AV) Living Lab

by 2023

Testbed across MRANTI Park to accelerate AV technologies & innovations

BioScience Tech Living Lab - Healthcare Tech

Test-bed, translate, and manufacture innovations in healthcare & wellness technology towards widespread adoption

by 2023

5G Living Lab

Spearhead the development of 5G-enabled innovations across 686 acres of MRANTI Park

by 2024

BioScience Tech Living Lab - AgriTech

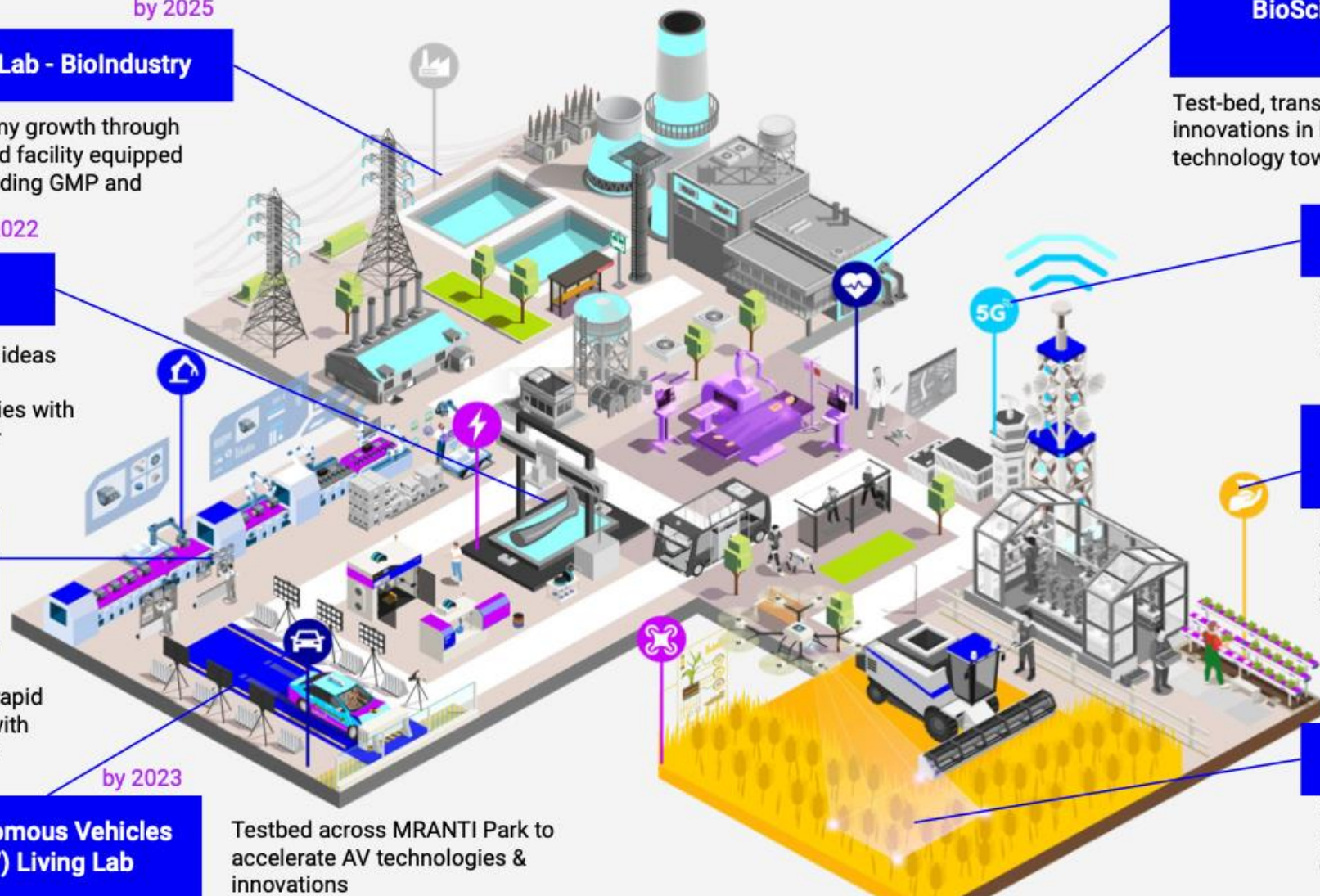
Develop and commercialise frontier technologies for urban farming and agriculture including food insecurity

AREA57

by 2023

DroneTech Living Lab

5-acres integrated ecosystem as research-to-commercialisation centre of excellence for dronetech



Mid - Late Stage Programmes (1/2)



Sustainability Challenges & Accelerator

Impact-driven Challenges and Accelerator curated to **address corporate problem statements** in delivering **Sustainable Development Goals (SDGs)** by sourcing and accelerating innovative solutions.



Industry Based Accelerator (Global Accelerator Programme: Thematic Edition)

2-months thematic programme to **accelerate the growth** of local and international companies to **scale and commercialise products and services** by being investment-ready. Focus industries are Business & Financial Services, Water & Food And Medical & Healthcare



Corporate Innovation & Commercialisation

Educate and encourage private sector, mainly **large corporates to adopt technology and business model innovation** in their daily operations.



APEX Incubator

4th Generation Technology Business Incubator with the mandate to **nurture technology based incubatees/start-ups/SMEs through business intervention and hand-holding**. Open to innovators, researchers, graduates, lecturers, startups and SMEs.

Mid - Late Stage Programmes (2/2)



Product Market Fit & Validation Techniques

Educate researchers on the innovation trends/ space that is required/ in demand by the industry and community. Allows them to better map their R&D and projects to align to the demand and increase commercialisation opportunities.



Global Market-Fit Programme (GMP)

A platform for high growth innovative companies to explore cultures, understand ways of business and **gain international market access in Southeast Asia and beyond.** This includes accelerating companies growth with new product/solution market-fit strategies.



MyStartup Hub (MSH)

A **soft-landing programme** for innovative global companies from all over the countries to **establish a business hub in Malaysia.** Provides assistance in company incorporation, local talent acquisition, and Malaysia's market access.



National Technology & Innovation Sandbox (NTIS)

An initiative that allows researchers, innovators, start-ups and high-tech entrepreneurs to **test** their products, services, business models and delivery mechanisms **in a live controlled environment, known as 'Sandbox'.**



MTDC



CATEGORIES

CATEGORIES OF CRDF	FOCUS GROUP
CRDF 1	For the commercialisation of R&D output from public and private University (PPU) / Government Research Institute (GRI) by a Spin-off company (STU).
CRDF 2	For the commercialisation of R&D output from Public and Private University (PPU) / Government Research Institute (GRI) by a Start-up company
CRDF 3 (a)	For the commercialisation of any local R&D by SME
CRDF 3 (b)	For the commercialisation of public sector R&D by a non-SME.



ADDITIONAL ELIGIBILITY CRITERIA

	CRDF 1	CRDF 2	CRDF 3 (a)	CRDF 3 (b)
Company Category	Spin-off	Start-up	SME	Non-SME
Source of Technology	Public & Private University (IHL) / Government Research Institute (GRI)	IHL / GRI	IHL / GRI / In-House	Public Sector R&D
Quantum of Funding	90% of eligible expenses, capped at RM500k	70% of eligible expenses, capped at RM500k	70% of eligible expenses, capped at RM4.0 mil.	50% of eligible expenses, capped at RM4.0 mil.



Eligible Activities

- Funding types
 - i. Cost of Technology Acquisition; or
 - ii. Cost of Technology Acquisition + Acquisition of M&E
- Cost of Technology Acquisition



Funding Structure

- i. Cost of Technology Acquisition; or
 - Quantum Funding of up to of 70% or RM2.8million, whichever is lower
- ii. Cost of Technology Acquisition + Acquisition of M&E

	IP	M&E
Ratio is set to allow higher funding be given to IP	60%	40%
Maximum quantum of RM4.0mil for approval	RM2.4mil	RM1.6mil

*Maximum quantum to be approved for IP is capped at RM 2.4mil as 70% and M&E is capped at RM 1.6mil as 50% grant.

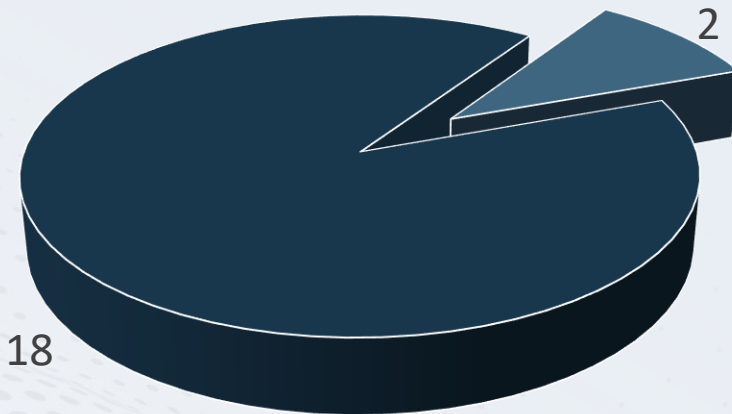


UKM

ACHIEVEMENT IN 2021/2022

FUND/GRANT MANAGEMENT (ACTIVE PROJECTS)

UKM INTERNAL FUND



■ DANA INOVASI (DI) ■ LAB2MARKET (L2M)

ALLOCATION OF AMOUNT

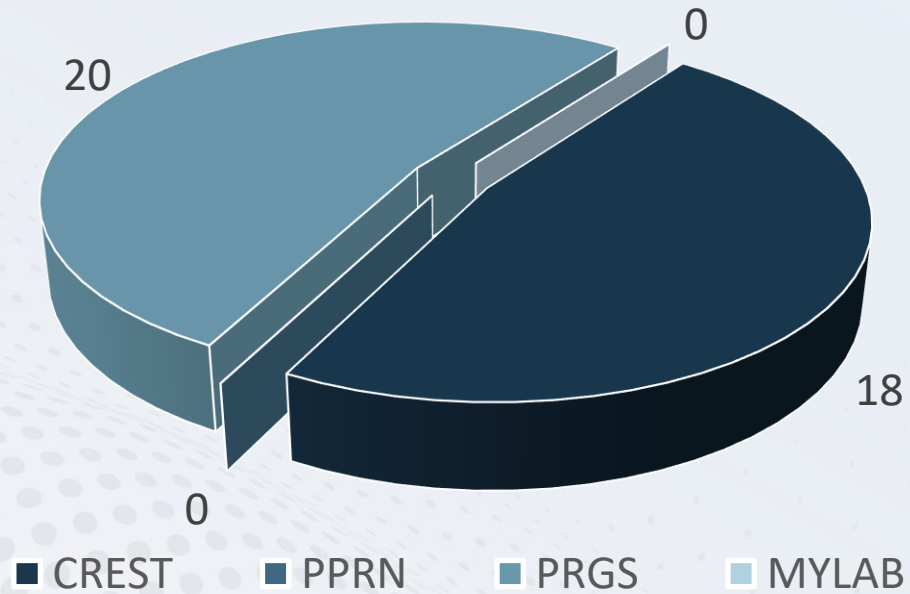
RM 1.7 MIL
INOVATION FUND

RM 1.5 MIL
LAB2MARKET (L2M)
GRANT

ACHIEVEMENT IN 2021/2022

FUND/GRANT MANAGEMENT (ACTIVE PROJECTS)

UKM EXTERNAL GRANT



ALLOCATION OF AMOUNT

RM 1.7 MIL

GERAN R&D CREST

RM 3.5 MIL

PROTOTYPE DEVELOPMENT RESEARCH GRANT
SCHEME (PRGS)

NO ALLOCATION GRANT FOR

PPRN & MYLAB



THANK YOU