

**Temasek Foundation Ecosperity  
List of Supported Projects**



<b>S/No</b>	<b>Project Title</b>	<b>Description</b>	<b>Partner</b>	<b>Vertical</b>
1	Mobile Garden Bus Revolution	To install green roofs on buses to reduce the buses' interior temperature and energy consumption of their air conditioning system.	GWS Living Art	Air
2	Air+ Smart Mask and Micro Ventilator for Younger Children	To fill market gap by making a new smart mask and micro ventilator for children aged 3-6.	Innosparks Pte Ltd	Air
3	Test-bedding Airbitat Smart Coolers for Air Filtration Capabilities	To extend Airbitat smart cooler functions, such as air filtration, by test-bedding prototypes at various public spaces in Singapore.	Innosparks Pte Ltd	Air
4	Ultra-dry Coating Technology for Reduction of Outdoor Humidity	To develop an operational prototype and test-bed a novel coating composed of a dehumidification material, aimed at reducing the surrounding relative humidity to within the thermal comfort range.	National University of Singapore	Air
5	Singapore Climate Control Bladeless Impeller Fan	To prototype a solid state thermoelectric cooling technology in the form of a bladeless impeller cooling fan to reduce the temperature of outdoor environments.	Phononic, Inc	Air
6	Innovative Ceiling Fan and Ventilator	To use an energy-efficient bladeless fan design for outdoor air cooling in the tropical climate.	Vortec Pte Ltd	Air
7	Dragonfly Research and Species Recovery	To document the effectiveness of dragonflies as a	Garden City Fund	Biodiversity

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		natural predator of urban pests to mitigate the spread of associated infectious diseases, as well as to restore one dragonfly habitat and develop monitoring tools and guidelines to duplicate efforts elsewhere.		
8	Endangered Species Conservation by Assisted Reproduction	To conserve endangered species through assisted reproduction, using induced pluripotent stem cells, and thereby to create sustainable populations of these species.	Mandai Park Development	Biodiversity
9	Productising Quantum Key Distribution	To develop tamper-proof terrestrial Quantum Key Distribution devices, including the key generation source (to be used for encryption), detector module, interface module and associated communication protocol software, and commercialise them for use as turnkey services.	S-Fifteen Pte Ltd	Cybersecurity
10	Project Enershift	To demonstrate for certification purposes an effective energy shift system using renewable energy technologies to store energy from solar panels which can complement the main power grid for Singapore's Housing and Development Board flats.	EPS (S) Pte Ltd	Energy
11	Citizen Farm	To establish a stacked, space-efficient, closed-	Edible Garden City	Food

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		loop urban farm that would use high-yield, high-density farming to grow high-value produce with recycled food waste compost and fertiliser from black soldier flies.		
12	Building and Operating a Sustainable Community Urban Recirculation Aquaculture System	To establish an indoor vertical aquaculture system using a scalable and modular canvas tank with a recirculation system.	Temasek Life Sciences Laboratory	Food
13	Fermenting Food Waste into Functional Aquaculture Feed	To implement and upscale a prototype fermentation process using proprietary strains and methods in order to reduce okara food waste, formulate a functional aquafeed component and deliver product to aquaculture partners.	Temasek Life Sciences Laboratory	Food
14	Bio-based Platforms for Mosquito Vector Control	To isolate effective larvicidal compounds from plants and repression of certain mosquito genes for the purpose of developing alternative bio-pesticides.	Temasek Life Sciences Laboratory	Infectious Disease Management
15	Building a Quick Response to Mass Disease Outbreaks Starting With a Therapeutic for the Zika Virus	To build a quick development capability to produce an initial batch of antiviral agents against the Zika virus before seeking regulatory approval and commercial partner for mass production and deployment.	Tychan Pte Ltd	Infectious Disease Management
16	Insight – Smart Food Waste Tracker	To implement a smart food waste tracker solution, equipped with image recognition	Good For Food Pte Ltd	Waste Management

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		technology to track and identify food waste by weight and identity in large commercial kitchens, and thereby generating data for informed decision-making to reduce food waste.		
17	From Organic Waste to Sustainable Food Production	To bioconvert black soldier flies into animal feed and organic food waste into high-value fertiliser suitable for Singapore aquaculture and other sectors.	National University of Singapore	Waste Management
18	Next Generation Drinking Straws	To produce fully biodegradable straws made out of biopolymers as a replacement of single-use plastic straws.	RWDC Industries Pte Ltd	Waste Management
19	Monthly Fire Activity Analytics for Riau, Jambi and South Sumatra	To generate accurate fire activity reports combining ground information and satellite data in order to provide insights on occurrence and distribution over land use/types.	National University of Singapore's Centre for Remote Imaging, Sensing and Processing	Weather and Climate

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