



Environment and Conservation Fund Environmental Research, Technology Demonstration and Conference Projects

**Briefing on
2022 Invitation for Applications
12 August 2022**



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Welcoming Remarks

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Chairman,
Research Projects Vetting Subcommittee



Environment and Conservation Fund



- Established in 1994
- To promote individual behavioural and lifestyle changes to protect the environment and achieve sustainable development
- Develop or introduce innovative technologies and practices to improve the environment and conserve resources



Environment and Conservation Fund



Environmental Education and
Community Action Projects

Community Waste
Reduction Projects

Waste Separation Projects to pave the
path for Municipal Solid Waste Charging

**Environmental Research,
Technology
Demonstration and
Conference (RTDC)
Projects**

- Local non-profit making organisations are eligible to apply

RTDC Projects

Research and Technology Demonstration Projects



- Contribute in a **direct and practical way** towards environmental improvement and conservation of the local environment
- Promote and encourage adoption of technologies by different sectors in Hong Kong

Conference Projects

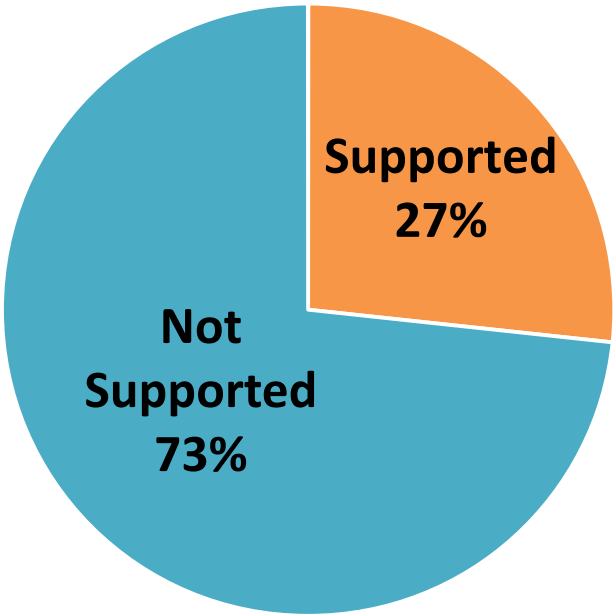
- Facilitate the exchange of best practices, expertise and experience on environmental and conservation issues
- Raise Hong Kong's profile as a leading green city



2021 Application Assessment

Results of 2021 invitation exercise :

Total no. of applications received	161
No. of projects supported	43
No. of projects not supported	118
Approved amount	\$29.89 M





2022 Invitation for Applications

Application Period

- From 29 July to 28 September 2022 (deadline at 6 p.m.)

Budget

- \$35 million in total, including \$3.5 million for Conference projects

Notification of Results

- By March 2023 (tentative)





Priority Research Topics



Priority Research Topics

- Please refer to Appendix 1 of the Guide to Application for details

Climate Change – Mitigation, Adaptation and Resilience

Biodiversity and Conservation

Waste Management, Reduction and Recycling

Air Quality

Water Quality and Water Pollution

Construction Noise – Prevention and Mitigation

Climate Change – Mitigation, Adaptation and Resilience

- Technologies for promoting cost effective applications of net-zero electricity generation, renewable energy, energy conservation and green building, green transport and waste reduction and management
- Smart technologies which promote adoption of low-carbon living in Hong Kong
- Development and adoption of low carbon business practices for SMEs in Hong Kong
- Smart data management on carbon emissions
- Innovative education technology (EdTech) to promote public education on climate change and low-carbon lifestyle or to provide capacity building
- Technologies and smart data management for green finance

Biodiversity and Conservation

- Regional environmental management planning (REMP) for maintaining marine or terrestrial ecosystem balances
- Urban biodiversity and application of innovative nature-based solutions in urban and coastal environments
- Baseline studies on understudied taxa groups of potential conservation concern; studies on threatened/ecologically important/keystone species and their conservation; ecological connectivity
- Wildlife management
- Invasive alien species
- Impact of climate change, human recreational activities and mercy release
- Development of new tools to identify difficult taxa groups or aid enforcement on wildlife crime
- Sustainable consumption of biological resources

Waste Management, Reduction and Recycling

- Development of advanced sustainable “plastic-free” alternatives that can functionally and affordably replace the disposable plastic tableware being widely used in the catering business and/or food packaging
- Development of advanced technology in handling and recycling mixed waste plastics
- Economic studies on the effectiveness of Product Responsibility Scheme on waste reduction and recycling
- Engineering studies on innovative and environmentally-friendly packaging materials for large electrical appliance
- Effective recycling / treatment technology for printed circuit board (PCB) applicable to Hong Kong
- Optimised design for improved reparability of electrical appliances
- Treatment and beneficial use of incineration bottom ash and/or fly ash to achieve zero landfilling
- Food waste and yard waste management
- Animal waste treatment technologies
- Efficient collection of food waste from small eateries and households
- Circular Economy and Reverse Logistics, application of big data and AI
- To explore technologies including Augmented Reality and AI to assist source separation and on-site sorting of common recyclables and construction waste

Air Quality

- Development and application of technologies for Greenhouse gas monitoring
- Development and application of technologies for monitoring and improving indoor air quality

Water Quality and Water Pollution

- Sewage treatment technology for lowering the risk of antimicrobial resistance in environmental waters
- Smart technologies for monitoring of floating refuse in watercourses
- Application of optical and electron microscopy in digital imaging methodology for identification and enumeration of marine phytoplankton species to detect community pattern dynamics
- Near real time water quality modelling technique
- Innovative treatment technology for leachate
- Odour mitigation technology for sewerage facilities and sewage-polluted storm drains
- Innovative technology for preventing microplastics from entering the water environment; and for assessment of their ecological and human health risks
- On-line real-time water quality monitoring technology for inland, near-shore and open waters
- Satellite imagery and remote sensing applications for wide-area marine water monitoring and environmental incident remediation

Construction Noise – Prevention and Mitigation

- Mobile construction noise barriers
- Quieter construction equipment; quieter methods for general construction and building demolition works
- Domestic renovation noise reduction;
- Traffic noise mitigation designs and measures for incorporation in residential developments
- Acoustic materials and active noise cancellation devices to enhance the performance of noise mitigation design
- Light-weight materials for retrofitting noise barriers/enclosures on existing road structures;
- Low noise road surfacing for local roads
- Technology for real-time detection of modified and noisy vehicles



Application – Basic Information



Application – Basic Information

- **Project duration:** normally not more than 36 months
- **No. of application:** each Principal Investigator (**PI**) can submit **one** application for conference project and **one** application for research or technology demonstration (RTD) project
- **No. of approved projects:** each PI can concurrently hold **one** conference and **two** RTD projects



Application – Basic Information (Cont'd.)

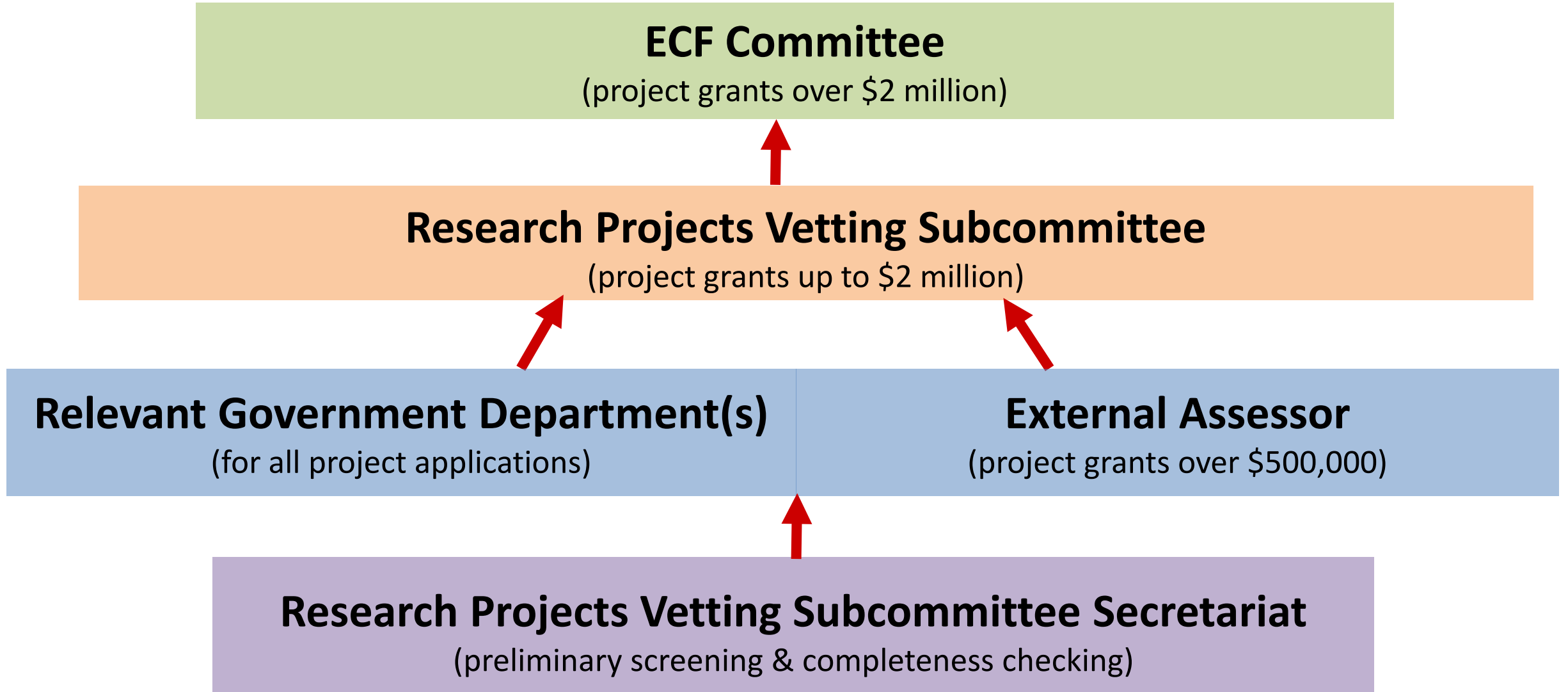
- **Applications** from Universities/THEi must be submitted **through the respective Research Offices (ROs)**
- ROs must confirm **the eligibility of the PIs** (see section 3.2.1.2 of the Guide to Application)
- If the current appointment of the PI cannot cover the whole project period, the project must include at least one eligible Co-Investigator from the same institution proper.



Vetting Procedures



Vetting Procedures



Marking Scheme

Competition-based Vetting Mechanism

Assessment Criteria	Weighting
(a) Merits and contributions to environmental protection and conservation, including the deliverables and outcomes expected to be derived from the project	60%
(b) Project feasibility and track record of applicant	40%

Reasons for NOT Supporting Past Applications



Not suitable for ECF



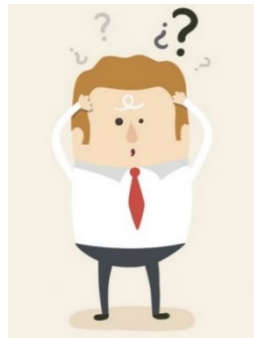
Too theoretical



Low application / practical values



No imminent need



Low project feasibility



Similar research already
conducted



Application Submission



Application Methods

1

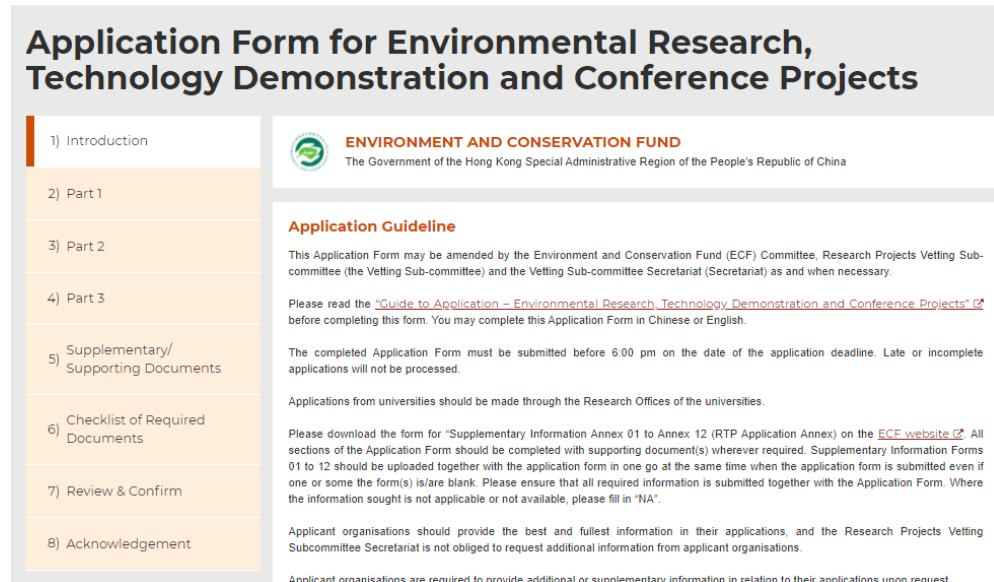
Electronic application form

(at the GovHK website:

<https://eform.one.gov.hk/form/epd006/en/>)

- Upload deadline (with supplementary documents):

6 p.m. on 28 September 2022



Application Form for Environmental Research, Technology Demonstration and Conference Projects

ENVIRONMENT AND CONSERVATION FUND
The Government of the Hong Kong Special Administrative Region of the People's Republic of China

Application Guideline

This Application Form may be amended by the Environment and Conservation Fund (ECF) Committee, Research Projects Vetting Sub-committee (the Vetting Sub-committee) and the Vetting Sub-committee Secretariat (Secretariat) as and when necessary.

Please read the ["Guide to Application – Environmental Research, Technology Demonstration and Conference Projects"](#) before completing this form. You may complete this Application Form in Chinese or English.

The completed Application Form must be submitted before 6:00 pm on the date of the application deadline. Late or incomplete applications will not be processed.

Applications from universities should be made through the Research Offices of the universities.

Please download the form for 'Supplementary Information Annex 01 to Annex 12 (RTP Application Annex)' on the [ECF website](#). All sections of the Application Form should be completed with supporting document(s) wherever required. Supplementary Information Forms 01 to 12 should be uploaded together with the application form in one go at the same time when the application form is submitted even if one or some of the form(s) is/are blank. Please ensure that all required information is submitted together with the Application Form. Where the information sought is not applicable or not available, please fill in "NA".

Applicant organisations should provide the best and fullest information in their applications, and the Research Projects Vetting Subcommittee Secretariat is not obliged to request additional information from applicant organisations.

Applicant organisations are required to provide additional or supplementary information in relation to their applications upon request.

2

Applications submitted by email

(Application form available on ECF website:

<https://www.ecf.gov.hk/en/application/index.html#rtdcp>)

- Completed application form ("word" format) with supplementary documents must be returned before **6 p.m. on 28 September 2022** to:

rtdc@epd.gov.hk

Application Methods

3

Paper-based form (by post or in person)

(Application form available on ECF website: <https://www.ecf.gov.hk/en/application/index.html#rtdcp>)

Completed application form with supplementary documents (both original hard copy and soft copy) must be returned by post or in person before **6 p.m. on 28 September 2022** to the addresses below:

Research Projects Vetting Subcommittee Secretariat

**5/F, Southorn Centre, 130 Hennessy Road, Wan Chai,
Hong Kong**

If the application is submitted by post, the postmark should be dated on or before the application closing date. Please ensure payment of sufficient postage.

Enquiries

ECF Research Projects Vetting Subcommittee Secretariat



2835 2308



rtdc@epd.gov.hk



<http://www.ecf.gov.hk>

