Green Tech Fund approves another six projects

The Secretariat of the Green Tech Fund (GTF) said today (December 17) that another six projects have been approved in the first round of applications to help Hong Kong decarbonise and enhance environmental protection as the city strives towards its goal of carbon neutrality before 2050. These latest applications involve a grant of around $30 million. Together with the eight projects approved earlier, a total of 14 projects from local universities and private enterprises have been approved in the first round of applications, involving a total grant of around $70 million. The GTF is open for the second round of applications from today to February 25, 2022.

Over 190 applications have been received in the first round of applications. The six research and development (R&D) projects approved in the latest batch cover a wide range of topics, including the development of new energy technologies, promotion of transport electrification, smart waste management, and real-time air quality monitoring:

* New energy technologies: Development of hydrogen storage and release technology involving the use of stable solid-state materials for hydrogen storage to enhance safety and reduce potential risks associated with hydrogen transport and storage; and the development of high performance and long-life hydrogen fuel cells suitable for wide application to electric vehicles (EVs) that can facilitate large-scale application of fuel cells and help promote the popularisation of EVs and low-carbon transformation.

* Promotion of transport electrification: Development of technologies that can control power quality and grid stability by storing the energy generated by a photovoltaic power generation system and analysing the utilisation of the charging stations with the use of software to improve the stability and reliability of the power grid, thereby supporting the popularisation of EVs; and development of a smart energy storing power regulator with retired EV batteries to control and improve the power quality and grid stability, improve the charging infrastructure for EVs, and facilitate the application of second-life EV batteries with a view to achieving the goal of waste reduction and decarbonisation.

* Smart waste management: Development of a smart garbage bag assessment system by using artificial intelligence technologies, together with positioning system data analysis to optimise waste management processes and facilitate effective implementation of municipal solid waste charging.

* Real-time air quality monitoring: Development of low-cost portable sensors for real-time concentration monitoring of the most common air pollutants that lead to the formation of ozone in Hong Kong. The development of the sensors will help identify the sources of ozone formation.

The list of the six approved R&D projects is in the Annex. Relevant details are published on the GTF webpage (www.gtf.gov.hk/en/project_information/approved_projects.html). These projects will help promote the R&D as well as application of green technologies in the areas of new energy application, green transport, waste management, and air quality, etc, thereby expediting the low-carbon transformation in Hong Kong in a bid to strive towards the goal of carbon neutrality. The Government set up a $200 million fund in 2020 to provide better and more focused funding support for R&D projects that support this goal.

The GTF is open for the second round of applications from today to February 25, 2022. R&D projects that fall into the four areas, namely net-zero electricity generation, energy saving and green buildings, green transport, and waste reduction will be accorded priority. The GTF welcomes applications from local public research institutions, R&D centres and private companies to develop low-carbon and green technologies that cater for the needs of Hong Kong's environment and market. The GTF Secretariat will organise a webinar on January 17, 2022, to introduce the application procedures and priority themes of the GTF. Details are available on the GTF website (www.gtf.gov.hk).