

## LCQ2: Human resources planning for innovation and technology

Following is a question by the Hon Wong Kwok-kin and a reply by the Secretary for Innovation and Technology, Mr Alfred Sit, in the Legislative Council today (October 27):

Question:

The National 14th Five-Year Plan puts forward supporting Hong Kong's development into an international innovation and technology (I&T) hub. In the Policy Address delivered early this month, the Chief Executive proposes to develop a Northern Metropolis, which includes a San Tin Technopole with an estimated capacity of accommodating some 150 000 jobs in I&T industries. Regarding I&T human resources planning, will the Government inform this Council:

(1) whether it has conducted surveys and studies on Hong Kong's demand for and supply of I&T manpower for the coming two decades, so as to facilitate the formulation of relevant human resources policies; if so, of the details; if not, whether it will do so expeditiously;

(2) whether it has formulated programmes for nurturing local I&T talents; if so, of the implementation timetables and other details; if not, whether it will do so expeditiously; and

(3) whether it will assign the Human Resources Planning Commission led by the Chief Secretary for Administration to co-ordinate the surveys and studies as well as the formulation of policies in respect of I&T human resources; if so, whether it will let the non-official members of the Commission participate more actively in the formulation of the relevant policies, instead of only consulting them on those policies put forward by the Government?

Reply:

President,

The National 14th Five-Year Plan expresses clear support for Hong Kong's development into an international innovation and technology (I&T) hub, which fully demonstrates the importance the Central Government attaches to Hong Kong's I&T. Since the Chief Executive set forth eight major areas for developing I&T in the 2017 Policy Address, the current-term Government has unprecedentedly invested over \$130 billion, and the measures are gradually bearing fruits. In terms of talent, Hong Kong was ranked second worldwide in terms of readiness in the World Talent Ranking 2020. The I&T ecosystem in Hong Kong has also become increasingly vibrant; for example, the number of start-ups increased from around 1 000 in 2014 to around 3 800 in 2021, and that of their employees rose significantly from around 2 400 to around 14 000

in the same period. In addition, there is satisfactory growth in the number of employees in the I&T sector from around 35 000 in 2014 to around 45 000 in 2019, as well as the number of research and development (R&D) personnel from around 29 000 to around 36 000 in the same period. Without doubt, the categories of industries covered by these statistics may be subject to change, having regard to the times and technological development.

The Government strongly agrees that talent is an essential propeller for I&T development. With regard to human resources planning for I&T, our consolidated reply in consultation with relevant bureaux/ departments (B/Ds) is as follows:

The Report on Manpower Projection to 2027 (MP2027) released in end-2019 has indicated that Hong Kong has a keen demand for I&T talent, which surpasses that of other industries. That said, we are aware that relevant projections only assess general trends in manpower demand and supply at the macro level. More importantly, with rapid technological advancement, the projection of long-term I&T manpower demand and supply needs to be constantly updated in view of circumstances in social, national and international development.

Indeed, with the popularisation of I&T, various industries also need to recruit a large number of I&T talent. In addition, as set out in the Policy Address this year, I&T land and infrastructure will be substantially expanded. We believe that Hong Kong's long-term demand for I&T manpower will increase further.

The Government has been adopting a multi-pronged approach in enlarging the local I&T talent pool by nurturing, retaining and attracting talent.

In order to nurture students' interest in I&T from a young age, the Government is committed to promoting Science, Technology, Engineering and Mathematics (STEM) education in multiple dimensions. Beyond the regular curriculum, the IT Innovation Lab in Secondary Schools and Knowing More About IT Programmes subsidise secondary and primary schools respectively to organise extra-curricular activities related to information technology.

In addition, universities will incorporate technologies such as artificial intelligence, blockchain, etc., in their curricula as appropriate. Over the past five academic years, around 9 800 students in STEM-related disciplines have graduated from University Grants Committee-funded universities on average each year, some 1 700 of whom are postgraduates. In order to attract university students to explore opportunities in I&T, the STEM Internship Scheme enables more university students in STEM disciplines to experience I&T-related work during their studies, and over 4 100 university students have benefitted from the scheme since 2020. The Hong Kong Science and Technology Parks Corporation and Cyberport also provide the youth with internship and training opportunities through various schemes. The Innovation and Technology Scholarship subsidises university students to take part in overseas exchange, local internships, mentorship programmes, etc. The Government also launches different schemes to assist the youth in pursuing a

career in I&T after graduation; for instance, the Research Talent Hub funds enterprises and research institutions to recruit university graduates to conduct R&D work, having provided around 5 400 research positions over the past four years.

Furthermore, the Reindustrialisation and Technology Training Programme funds local enterprises on a matching basis for their staff to receive training in advanced technologies. The Vocational Training Council has also organised around 260 STEM-related training programmes involving some 7 700 participants over the past three years or so, as well as worked in close collaboration with the industry to incorporate workplace learning and assessment in its curricula and enhance training for I&T talent through the Innovation and Technology Co-creation Centre, Cybersecurity Centre, etc.

In terms of pooling talent, opportunities for entrepreneurship and employment supported by a vibrant I&T ecosystem are the most effective means of attracting I&T talent. With a view to facilitating talent admission to Hong Kong, the Technology Talent Admission Scheme handles applications that involve the admission of non-local talent to undertake R&D work in Hong Kong expeditiously, covering 13 technology areas. The Global STEM Professorship Scheme supports universities in attracting world-renowned I&T scholars and their teams to undertake teaching and research work in Hong Kong.

Moreover, the Government has just completed reviewing the Talent List, setting out more explicitly the scope of some professions to include experts of medical and healthcare sciences, microelectronics, integrated circuit design, arts technology, etc. The Government will also double the annual quota of the Quality Migrant Admission Scheme to 4 000 to attract talent from all over the world to work in Hong Kong, as well as explore the extension of the Immigration Arrangements for Non-local Graduates to cover graduates of Hong Kong universities' Greater Bay Area campuses. Various B/Ds also promote Hong Kong's strong suit in I&T development, business environment, etc., to overseas talent regularly.

The Human Resources Planning Commission (HRPC) is a high-level policy consultation platform chaired by the Chief Secretary for Administration to offer comments to the Government on relevant policies and measures to develop Hong Kong further into a high value-added and more diversified economy.

The HRPC examined the major findings of the Report on MP2027 at its meeting in May 2019 and offered comments on the directions to enhance the workforce in the future. In addition, the HRPC proactively offered many valuable comments on matters related to the enhancement of the quality and increase in the quantity of local I&T talent at different meetings, including the various training and talent attraction measures introduced by the Innovation and Technology Bureau as well as other bureaux and organisations, to complement the active promotion of the development of Hong Kong's I&T by the Government.

Multiple B/Ds are involved in surveys and studies as well as policy formulation in respect of I&T human resources. They will continue to review

existing policies and measures, closely monitor the latest developments of Hong Kong's economy, as well as consult the HRPC and relevant stakeholders on their work as appropriate.

In conclusion, the Government will work in partnership with different sectors of society on an ongoing basis to enhance the I&T ecosystem in Hong Kong, thereby leveraging our unique strengths and better integrating our city into the national development.

Thank you, President.