University Accountability Agreement (UAA) for 2022-25 Triennium

Institution-specific Key Performance Indicators (KPIs) (as at December 2023)

The Hong Kong University of Science and Technology (HKUST)

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Domain 1: Quality of Student Experience of Teaching and Learning

KPI 1 Language improvement based on English proficiency assessment criteria

Objective:

To measure the language proficiency improvement of HKUST Ug students by comparing their proficiency in English at the start and end of Year One.

Methodology and data source:

Students' English proficiency is measured by the HKUST-developed English Language Proficiency Assessment (ELPA) criteria, which have been benchmarked against IELTS to allow comparison with an internationally recognised measure. Students' English proficiency improvement is expressed in terms of the IELTS bands improved during the first year of study.

Same as 2021/22, the data collection method for this triennium no longer uses DSE English results as the starting point for comparison. Instead, students' performance in coursework is used to measure students' growth in proficiency over Year One.



Academic Year	2019/20		2020/21		2021/22		2022/23	
Improvement equivalent to IELTS band score	No. of students	%						
-0.5	26	1.6%	24	1.5%	89	5.4%	82	5.0%
0	439	26.4%	429	27.6%	447	27.3%	405	24.8%
0.5	875	52.6%	821	52.8%	606	37.1%	658	40.3%
1.0	229	13.8%	187	12.0%	344	21.0%	358	21.9%
+1.5 of above	95	5.7%	95	6.1%	149	9.1%	131	8.0%
Total	1,664	100%	1,556	100%	1,635	100%	1,634	100%
% of students improved	1,199	72.1%	1,103	70.9%	1,099	67.2%	1,147	70.2%
% of students improved by 1 band or above	324	19.5%	282	18.1%	493	30.2%	489	29.9%

Note: The sum of figures may not add up to total due to rounding.

Summary:

Compared with the patterns of language improvement in the last triennium, the results in 2022/23 show the same pattern as 2021/22: a noticeable increase in the number of students (29.9%) attaining improvement by 1.0 or more IELTS band score equivalent.

From 2021/22 onwards, students' English proficiency improvement is captured based on criterion-referenced attainment of transferable competences in coursework rather than task-dependent performance in a given language test previously. The data from this year and last suggest that the competency-based coursework seems to be more sensitive in capturing incremental and longitudinal language improvement achieved by students as learners than the one-off test performance of students as test-takers under anxiety-provoking testing conditions. In the exam room, students demonstrate their proficiency by answering the set questions. In a language classroom however, students could benefit enormously from the feedback-rich learning environment to improve their performance. For those who are motivated to learn and/or work hard, it is reasonable to expect more noticeable proficiency gains in coursework than their improvement in scores of a language test.

Domain 1: Quality of Student Experience of Teaching and LearningKPI 2Proportion of courses with active learning components

Objective:

To provide an objective indicator in terms of active learning components, which is important for improving student's in-class engagement.

Methodology and data source:

This KPI refers to, out of all credit-bearing courses offered, the percentage of courses having at least 50% structured face-to-face active learning components, including in-class small group discussions, small group problem solving sessions, presentations with peer evaluations, hands-on prototype building and design, and other learning activities where students are engaged in very active learning modes while instructor(s) and TA(s) play the facilitator role.

Credit-bearing courses having at least 50% structured active learning components										
	2019/202020/21Academic YearAcademic Year		2021/22 Academic Year	2022/23 Academic Year						
(a) No. of courses offered	537	507	489	556						
(b) Total no. of courses	1,312	1,323	1,302	1,340						
(c) Percentage of these courses = $(a) / (b)$	40.9%	38.3%	37.6%	41.5%						

Summary:

In 2022/23 academic year, after fully recovering from the pandemic, the on-campus engagement is fully resumed. The University continues to encourage instructors to enhance active teaching by introducing new tools and technology, such as ChatGPT and Mentimeter among others in curriculum planning and teaching methods. Workshops are regularly held to showcase innovative teaching pedagogy. Instructors are encouraged to adopt an active teaching and learning approach to interact with students and keep improving the teaching and learning experience. The positive outcome of these efforts is reflected in the growth of courses incorporating at least 50% structured active learning components.

Domain 1: Quality of Student Experience of Teaching and LearningKPI 3Number of students engaged in career education initiatives

Objective:

To provide an indicator from the perspective of student's career supports.

Methodology and data source:

The figures are counted based on the total number of show-up at each face-to-face / virtual session of career education initiatives (e.g. career consultation, recruitment talk, job fair, career development program, creditbearing career courses, etc.), irrespective of whether the same student was joining the session for once or multiple times. It is derived from the actual or estimated student attendance of various career education initiatives.

	2019/20 Academic Year	2020/21 Academic Year	2021/22 Academic Year	2022/23 Academic Year
(a) No. of student engagement in career consultation	2,280	1,462	1,458	1,580
(b) No. of student engagement in recruitment talk (RT), career development program (CDP), career building course (CBC), Designing Your Life (DYL) and career development module (CDM)	RT: 4,785 CDP: 5,827 CBC: 146 <u>CDM: 3,383</u> Total: 14,141	RT: 3,284 CDP: 6,540 CBC:193 <u>CDM: 3,046</u> Total: 13,063	RT: 2,308 CDP: 7,453 CBC: 158 <u>CDM: 2,611</u> Total: 12,530	RT: 3,522 CDP: 4,707 CBC & DYL: 165 <u>CDM: 2,647</u> Total: 11,041
(c) No. of student engagement in job fair	In person: 6,500 <u>Virtual: 9,409</u> Total: 15,909	<u>Virtual (annual)</u> Total: 6,630	<u>Virtual (annual)</u> Total: 584	<u>In person</u> (biannual) Total: 18,000
(d) Total no. of student engagement in career education initiatives = (a) + (b) + (c)	32,330	21,155	14,572	30,621

Note: Part (b) in above table has been enriched by additional breakdown of activity types (i.e. CBC, DYL and CDM) and part (c) has been newly added after submission of last UAA Annual Report.

Summary:

During the pandemic period (2020/21-2021/22), there was a notable decline in student engagement in career education initiatives. Students shifted to online channels to obtain recruitment information as companies were actively providing such information online during the pandemic.

Nevertheless, students' interest in participating in career education initiatives rebounded and continued to grow in 2022/23 after the pandemic. The biannual job fair remains one of the most popular and effective channels in engaging students.

Domain 2: Research Performance and Research Postgraduate ExperienceKPI 1Success rate of competitive grants

Objective:

The KPI success rate of competitive grants reflects the performance of the University in securing competitive grants for research projects. This KPI measures the effectiveness of the University's grant application process by indicating the percentage of proposals that are successfully approved out of the total number of applications submitted. In general, a higher success rate is considered desirable as it signifies a higher level of competitiveness and success in securing grant funding, which demonstrates the University's strong research capabilities, the quality of proposals, and ability to effectively compete for grants.

The success rate of competitive grants complements the respective performance measures of the value of total research income within the same activity domain by providing additional insights into the University's grant acquisition efforts. While the value of total research income measures the overall financial income of the University's research activities, the success rate of competitive grants offers a more specific evaluation of the University's ability to secure external funding through competitive grant applications. By considering the success rate alongside the value of total research income, a deeper understanding was gained pertaining to the University's grant acquisition efforts and their impact on the University's overall performance within the activity domain. This holistic assessment enables the University to identify strengths and areas for improvement, strategically allocate resources, and enhance competitiveness in securing competitive grants.

Methodology and data source:

The Grant Management System implemented by the University serves as the primary data source for recording the applications and their outcomes, including the number of proposals submitted and approved. It serves as the foundation for calculating and tracking the success rate of competitive grants. In addition, for the General Research Fund (GRF) and Early Career Scheme (ECS), the funding results published on the Research Grants Council (RGC) website serve as the data source for calculating the success rate at each participating university. These published results provide the necessary information to assess the success rate of GRF and ECS and track the performance of universities in these funding schemes.

Success rate of competitive grants:

Success Rate =	No.of Approved projects
	No.of Applications with result (ie.No.of Applications – Awaiting result)

Funding Source	Awaiting	No. of	No. of	Success rate #					
	result "	Approved projects [#]							
UGC/RGC									
UGC Central allocation	0	9	46	19.6%					
UGC Other specific funds/earmarked grants	0	13	33	39.4%					
RGC General Research Fund (GRF) *	0	488	1,085	45.0%					
RGC Collaborative Research Fund	0	21	92	22.8%					
RGC Theme-based Projects	0	4	19	21.1%					
RGC Early Career Scheme (ECS) *	0	57	107	53.3%					
RGC Prestigious Fellowship Scheme	0	1	3	33.3%					
RGC Other funds	0	43	156	27.6%					
Overall	0	636	1,541	41.3%					
Gove	ernment + HI	X Private							
HK Government	0	151	461	32.8%					
Government related organisations	0	4	15	26.7%					
HK charities/foundations	0	23	70	32.9%					
HK others	0	4	5	80.0%					
Overall	0	182	551	33.0%					
Non-HK									
Non-HK	1	256	881	29.1%					
	Overall								
All competitive grants	1	1,074	2,973	36.1%					

Period: Average Success Rate of Competitive Grants submitted from 2017/18 to 2019/20

Bench (2017-	<u>marking data</u> -20)	HKUST	HKU	CUHK	PolyU	CityU	HKBU	LU	EduHK	Sector-wide average
GRF	Success Rate*	45%	33%	35%	33%	33%	26%	21%	22%	34%
ECS	Success Rate*	58%	42%	39%	36%	42%	30%	60%	33%	40%
Overa	ll Success Rate*	46%	34%	35%	33%	34%	27%	27%	25%	34%

Funding Source	Awaiting	No. of	No. of	Success rate #
	result #	Approved	applications	
		projects [#]	#	
	UGC/RG0	C		
UGC Central allocation	0	6	42	14.3%
UGC Other specific funds/earmarked grants	0	20	53	37.7%
RGC General Research Fund (GRF) *	0	474	1,084	43.7%
RGC Collaborative Research Fund	0	24	95	25.3%
RGC Theme-based Projects	0	4	18	22.2%
RGC Early Career Scheme (ECS) *	0	61	123	49.6%
RGC Prestigious Fellowship Scheme	0	2	4	50.0%
RGC Other funds	0	37	155	23.9%
Overall	0	628	1,574	39.9%
Gove	ernment + HH	K Private		
HK Government	1	157	527	29.8%
Government related organisations	0	6	15	40.0%
HK charities/foundations	1	16	63	25.8%
HK industries	0	1	5	20.0%
HK others	0	3	4	75.0%
Overall	2	183	614	29.9%
	Non-HK			
Non-HK	2	250	839	29.9%
	Overall			
All competitive grants	4	1,061	3,027	35.1%

Period: Average Success Rate of Competitive Grants submitted from 2018/19 to 2020/21

Bench (2018-	<u>marking data</u> -21 <u>)</u>	HKUST	HKU	CUHK	PolyU	CityU	HKBU	LU	EduHK	Sector-wide average
GRF	Success Rate*	45%	36%	35%	32%	34%	30%	19%	24%	35%
ECS	Success Rate*	55%	47%	40%	34%	39%	30%	45%	35%	40%
Overa	ll Success Rate*	46%	37%	36%	32%	35%	30%	24%	26%	35%

Funding Source	Awaiting result [#]	No. of Approved projects [#]	No. of applications #	Success rate #						
UGC/RGC										
UGC Central allocation	1	4	34	12.1%						
UGC Other specific funds/earmarked grants	0	32	84	38.1%						
RGC General Research Fund (GRF) *	0	481	1,075	44.7%						
RGC Collaborative Research Fund	0	27	100	27.0%						
RGC Theme-based Projects	0	5	24	20.8%						
RGC Early Career Scheme (ECS) *	0	54	142	38.0%						
RGC Prestigious Fellowship Scheme	0	2	3	66.7%						
RGC Other funds	0	38	178	21.3%						
Overall	1 643 1,640			39.2%						
Gove	ernment + Hk	K Private								
HK Government	12	129	498	26.5%						
Government related organisations	2	6	20	33.3%						
HK charities/foundations	1	17	54	32.1%						
HK industries	0	2	8	25.0%						
HK others	0	2	2	100.0%						
Overall	15	156	582	27.5%						
	Non-HK									
Non-HK	2	274	932	29.5%						
	Overall									
All competitive grants	18	1,073	3,154	34.2%						

Period: Average Success Rate of Competitive Grants submitted from 2019/20 to 2021/22

Bench (2019-	<u>marking data</u> -22 <u>)</u>	HKUST	HKU	CUHK	PolyU	CityU	HKBU	LU	EduHK	Sector-wide average
GRF	Success Rate*	44%	37%	36%	33%	35%	30%	24%	24%	35%
ECS	Success Rate*	51%	50%	42%	33%	40%	33%	30%	34%	41%
Overa	ll Success Rate*	45%	38%	36%	33%	36%	30%	25%	26%	36%

Funding Source	Awaiting	No. of	No. of	Success rate
	result	nrojects	applications	
	UGC/RGC	projects		
UGC Central allocation	4	2	33	6.9%
UGC Other specific funds/earmarked grants	0	31	80	38.8%
RGC General Research Fund (GRF)*	0	445	1,047	42.5%
RGC Collaborative Research Fund	22	15	114	16.3%
RGC Theme-based Projects	0	6	29	20.7%
RGC Early Career Scheme (ECS)*	0	62	158	39.2%
RGC Prestigious Fellowship Scheme	0	2	5	40.0%
RGC Other funds	38	29	203	17.6%
Overall	64	592	1,669	36.9%
Gove	rnment + Hk	X Private		
HK Government	101	93	501	23.3%
Government related organisations	6	11	37	35.5%
HK charities/foundations	4	14	35	45.2%
HK industries	3	3	12	33.3%
HK others	0	3	3	100.0%
Overall	114	124	588	26.2%
	Non-HK			
Non-HK	38	184	718	27.1%
	Overall			
All competitive grants	216	900	2,975	32.6%

Period: Average Success Rate of Competitive Grants submitted from 2020/21 to 2022/23

Bench (2020-	<u>nmarking data</u> -23)	HKUST	HKU	CUHK	PolyU	CityU	HKBU	LU	EduHK	Sector-wide average
GRF	Success Rate*	45%	39%	37%	33%	38%	31%	28%	23%	36%
ECS	Success Rate*	40%	46%	43%	29%	37%	27%	27%	33%	37%
Overa	ll Success Rate*	45%	40%	37%	32%	37%	30%	28%	24%	37%

Notes:

[#] Some of the figures in the first table have been updated as the result of the applications was changed from "awaiting" to "approved" and also a few proposals were backdated to previous years after submission of last UAA Annual Report.

* The GRF and ECS success rate across sector (as presented in second table) is based on the applications and projects approved by program year, therefore the data may vary from the GRF and ECS success rates in the first table, which were calculated based on the submission year.

Summary:

The University has achieved an impressive success rate in competitive research funding schemes, with an overall success rate of 32.6%. In terms of the RGC GRF and ECS schemes, the University has consistently maintained a success rate exceeding 40%, which is the highest among all Hong Kong institutions and significantly surpasses the sector-wide average.

Domain 2: Research Performance and Research Postgraduate ExperienceKPI 2Number of institutional publication citations in a year

Objective:

To provide an objective indicator in recognition of the University's research performance through academic publications and citation counts.

Methodology and data source:

- (i) Publication refers to published items with publication stage of "Final" and "Article in Press" in Scopus.
- (ii) Citation count refers to citations received over a period of 6 years. For example, in reporting publications in 2018-22, it refers to the citations of output published in that time window over the period of 2018-23.
- (iii) Average citation count per publication published within the 5-year period over a period of 6 years = Citation count of publications published within the 5-year period over a period of 6 years / No. of publications within the 5-year period.
- (iv) Open Access refers to publications regarded as "All Open Access" in Scopus.
- (v) The census date is Nov 2023.

	Year of Publication							
	2015-2019	2016-20	2017-21	2018-22				
No. of publications within the 5- year period	14,649	15,431	16,513	17,915				
Citation count of publications published within the 5-year period over a period of 6 years	274,775	317,421	370,589	403,383				
Average citation count per publication published within the 5- year period over a period of 6 years	18.8	20.6	22.4	22.5				
Open Access % of publications in the past 5 years	4,815/14,649 (32.9%)	5,426/15,431 (35.2%)	6,216/16,513 (37.6%)	7,082/17,915 (39.5%)				

Note: Figures in above table have been refreshed based on the latest data available as of Nov 2023.

Summary:

All measures are on the rise, demonstrating the University's strength in both research quantity and quality, as well as commitment to scientific knowledge discovery. Although not shown here, an emerging metric of publications quality is field-weighted citation impact (FWCI) which takes publication nature such as subject area, age etc into account. The University has consistently maintained around the FWCI 2.0 level over the years, meaning its publications are cited twice as much as world's expected average (source: SciVal).

Domain 2: Research Performance and Research Postgraduate Experience

KPI 3 Research postgraduate student experience based on end-of-program survey results

Objective:

To provide an indicator from the perspective of RPg students' view on their program learning experience, pertaining to i) Thesis supervision and support; and ii) Learning outcomes, which is crucial for improving and enhancing the program quality.

Methodology and data source:

The RPg end-of-program survey is conducted annually. The University invites all graduating RPgs within each academic year to complete the survey to provide systemic feedback on various aspects of their study experience. Standard questionnaire has been designed for collecting feedback from graduates. The questions are rated based on a 5-point scale ($5 - Very \ satisfied$; 4 - Satisfied; 3 - Neutral; 2 - Dissatisfied; $1 - Very \ dissatisfied$; $0 - Not \ available \ (i.e. \ no \ response)$).

All data are collected online, and the mean scores of each question are presented in the table below. Response rate of the RPg end-of-program survey is 100% in 2019/20, 98.6% in 2020/21, 91.9% in 2021/22, and 85.5% in 2022/23.

	2019/20		2020/21		2021/22		2022/23	
	MPhil	PhD	MPhil	PhD	MPhil	PhD	MPhil	PhD
My supervisor(s) stimulated my lateral and critical thinking and enabled me to create new knowledge and new discoveries.	4.44	4.69	4.66	4.80	4.72	4.77	4.67	4.76
My supervisor(s) stated to me clearly the standard of work expected.	4.40	4.63	4.70	4.78	(Note 1)	(Note 1)	(Note 1)	(Note 1)
My supervisor(s) stated to me clearly the standard of research and coursework expected.	(Note 1)	(Note 1)	(Note 1)	(Note 1)	4.68	4.77	4.62	4.78
My supervisor(s) provided helpful feedback on my progress.	4.44	4.64	4.61	4.75	4.69	4.71	4.61	4.73
I learned much about research skills from my supervisor(s).	4.41	4.59	4.61	4.78	4.70	4.71	4.56	4.68
Members of the Thesis Supervision Committee were	4.54	4.59	4.63	4.71	(Note 2)	(Note 2)	(Note 2)	(Note 2)

i) Thesis Supervision and Support (Mean in 5-point scale)

accessible when I								
needed their advice.								
I received sufficient								
support from my	(Note 2)	(Note 2)	(Note 2)	(Note 2)	156	151	1 25	1 63
Department Head and	(10010 2)	(10010 2)	(10010 2)	(10010 2)	4.50	4.94	4.55	4.05
PG Coordinator.								
Overall, I am happy								
with the thesis	1 15	1.68	1.68	176	1 67	4 70	1 57	172
supervision received	4.43	4.00	4.00	4.70	4.07	4.70	4.37	4.75
at HKUST.								

ii) Learning Outcomes (Mean in 5-point scale)

	2019/20		2020/21		2021/22		2022/23	
	MPhil	PhD	MPhil	PhD	MPhil	PhD	MPhil	PhD
I have developed sound research skills through my training at HKUST.	4.69	4.85	4.51	4.74	4.63	4.71	4.47	4.74
I have developed new knowledge and created new theories, methodology, or other research output in my field of study through my training at HKUST.	4.64	4.85	4.55	4.74	4.62	4.74	4.48	4.73
I become a critical thinker through my training at HKUST.	4.63	4.85	4.54	4.69	4.61	4.71	4.46	4.73
I am able to conduct enquiries in my area of specialisation in a professional, expert and ethical manner.	4.66	4.86	4.49	4.73	4.60	4.70	4.48	4.72
I am prepared to embark on an academic career, and to teach university- level courses in my area of specialisation.	4.20	4.68	4.16	4.51	4.43	4.47	4.13	4.53

Notes:

- 1. The question "My supervisor(s) stated to me clearly the standard of work expected." has been replaced by "My supervisor(s) stated to me clearly the standard of research and coursework expected." since 2021/22 academic year.
- 2. The question "Members of the Thesis Supervision Committee were accessible when I needed their advice." has been replaced by "I received sufficient support from my Department Head and PG Coordinator." since 2021/22 academic year.

Summary:

On the 5-point scale, the responses represented consistently positive ratings toward thesis supervision and support, and the learning outcomes, though there are slight variations in different areas.

The high ratings on thesis supervision and support by both MPhil and PhD students attest to faculty members' efforts and dedication to supervising students. As for the learning outcomes, the overall high ratings suggested that our 2022/23 RPg graduates, in particular PhD students, were satisfied with the training they received in the respective academic fields which prepared them for future career pursuits.

Domain 3: Knowledge Transfer and Wider EngagementKPI 1Technology transfer and commercialisation by number of(a) Patents filed,(b) Patents granted, and(c) Patents used

Objective:

To accentuate the University's excellence in innovation in terms of the quantity and quality of the patents. The focus on patents serves as a tangible demonstration of the University's commitment to generating valuable intellectual property and fostering the innovation culture. It complements the sector-wide performance measures by incorporating a patent indicator as an additional metric.

Methodology and data source:

This KPI measures the University's achievements in knowledge transfer in terms of patents filed, granted and used. Higher number suggest better performance.

- (i) <u>Number of patents filed and granted:</u> The figures are counted based on the actual number of patents filed and granted according to the official filing date and issue date of the application with the respective patent office.
- (ii) <u>Number of patents used based on new contracts (according to contract date)</u>: The figure is counted based on the number of patents utilized by means of licensing during the reporting period, including rights granted as background Intellectual Property (IP) in newly signed contracts with value according to the contract date. All used patents only counted once if it is included in more than one contract.
- (iii) <u>Number of active patents used (by the end of the reporting year)</u>: The figure is counted based on the number of active patents utilized at least once by means of licensing in the current and past reporting periods, including rights granted as background IP in signed contracts with value. All used patents are only counted once even if it is included in more than one contract.

Type / Financial Year	2019/20	2020/21	2021/22	2022/23
Number of patents filed (according to filing date)	286	287	305	352
Number of patents granted (according to issue date)	74	121	125	167
Number of patents used based on new contracts (according to contract date)	20	91	85	85
Number of active patents used (by the end of the reporting year)*	375	464	513	553

Note:

* "Number of patents used based on active contracts (according to contract period)" has been replaced by "Number of active patents used (by the end of the reporting year)", which is considered as a more indicative and qualitative parameter, to better reflect the quality of HKUST patent portfolio.

Summary:

Owing to the simplified provisional patent filing program and engagement of external consultants with extensive industry experience, the University has made significant progress in patent generation, with a 23% increase in patents filed and a 126% increase in patents granted from 2019/20 to 2022/23. The University has consistently increased the number of patents filed and granted over the years, surpassing 300 patents filed for two consecutive years from 2021/22 to 2022/23. The University was ranked No.1 in China and No.33 globally under the Nature

HKUST Domain 3 - KPI 1

Index (2022)'s patent influence metric. In 2023, after review referencing relevant laws and regulations in Hong Kong and the Mainland, the HKUST IP Policy 3.0 came into effect, aiming to facilitate seamless knowledge transfer between HKUST Clear Water Bay Campus and Mainland platforms, ultimately fostering impactful university-wide knowledge transfer activities and promoting further innovation in Hong Kong and the Greater Bay Area.

The University has experienced significant growth in patent utilization, with a 47% increase in active patent used from 2019/20 to 2022/23, which demonstrates the University's success to encourage the industry partners and start-ups to adopt HKUST technologies. The University has maintained its performance in the number of patents used through new contracts, reflecting the University's commitment to active industrial engagement. This is achieved by strengthening support for Joint Research Institutes/Centers, improving the quality of the IP portfolio and licenses, supporting start-up companies with multiple patents, actively incubating start-ups through funding programs, engaging capable venture capitals, and cultivating a strategic license portfolio. Together with a series of flagship events, including the HKUST Industry Engagement Day series, HKUST Unicorn Day and iNNOTECH Day, the University's research achievements have garnered significant recognition from society, leading to the University's top ranking in the industry income index in Hong Kong (THE ranking 2023)

Domain 3: Knowledge Transfer and Wider Engagement

KPI 2 Entrepreneurship –

(a) Number of start-up and spin-off companies funded or incubated by HKUST programs on entrepreneurship

Objective:

To demonstrate the University's leading role in cultivating entrepreneurship and the outcomes of its robust efforts in innovation and entrepreneurship development. It complements the sector-wide performance measures by incorporating an entrepreneurship indicator as an additional metric.

Methodology and data source:

The KPI is expressed as the number of economically active spin-off and start-up companies being funded or incubated by the HKUST entrepreneurship programs located in the Clear Water Bay Campus and Mainland platforms. Companies admitted to HKUST entrepreneurship programs within the reporting period are counted, regardless of their establishing year. Companies funded or admitted to more than one program or having offices in more than one location are only counted once. Higher number suggest better performance.

The entrepreneurship programs include:

- HKUST Entrepreneurship Program (EP)
- Technology Start-up Support Scheme for University (TSSSU) Program
- HKUST Entrepreneurship Fund (E-Fund)
- U*STAR Award
- Yeung Wing Yee Entrepreneurs Fund (YWYEF)
- HKUST Entrepreneurship Acceleration Fund (EAF)
- Alumni Endowment Fund (AEF) Student Start-up Grants
- HKUST One-Million-Dollar Entrepreneurship Competition (regional competitions inclusive)
- MentorHUB
- HKUST Dream Builder Incubation Program
- Entrepreneurship Development Fund
- HKUST Greater Bay Area Youth Entrepreneurship Fund
- HackUST
- Tech-Ship Program
- The BASE facility user
- Companies under InnoHK
- Programs under the Blue Bay Incubator, Blue Bay X of HKUST R and D Corporation (Shenzhen) Ltd. (RDCSZ) and HKUST Shenzhen Hong Kong Collaborative Innovation Research Institute (SHCIRI) in Shenzhen
- Programs under the Guangzhou HKUST Fok Ying Tung Research Institute (FYTRI) in Nansha
- Programs under HKUST LED-FPD Technology R&D Center at Foshan (FSC) in Foshan.

Category / Calendar Year	2019	2020	2021	2022
Number of start-up companies	87	162	182	232
Number of spin-off companies	142	128	329	312
Total	229	290	511	544

Summary:

The University's entrepreneurial efforts have yielded remarkable results, as evidenced by a 138% increase in the number of start-up and spin-off companies from 229 in 2019 to a record-breaking 544 in 2022, surpassing its own records for four consecutive years.

This significant growth reflects the successful entrepreneurial efforts of the University, driven by its diverse range of funding programs, as well as comprehensive entrepreneurship education and training. These initiatives have played a pivotal role in enabling a considerable number of start-up companies, empowering young entrepreneurs to unlock their potential and pursue their dreams in the realm of entrepreneurship.

Notably, the University's steadfast support for deep technologies (DeepTech) incubation and entrepreneurship development has fostered fruitful collaborations with industry, government, and social organizations, resulting in groundbreaking innovations with far-reaching social implications. These accomplishments underline the University's profound impact on society, as it persistently propels transformative change by fostering innovation and an entrepreneurial mindset.

Additional 2 Initial Public Offerings (IPO) lead totalling 11 successful exits (9 IPOs, 2 acquisitions) overall, along with 9 unicorns with HKUST DNA. A series of flagship events, such as the HKUST Unicorn Day, provided a platform to showcase the achievements and cutting-edge technology of HKUST start-up and spin-off companies. The establishment of the HKUST Founder's Club has helped to bond the University's alumni entrepreneurs and provide necessary support in their business journeys.

While the University will continue to work closely with stakeholders in the Hong Kong start-up ecosystem to incubate more start-ups, the University has also targeted the development of entrepreneurship beyond Hong Kong as an important objective to spur regional economic and social development and draw top overseas talents to increase the Greater Bay Area's profile as an international innovation hub.

Domain 3: Knowledge Transfer and Wider EngagementKPI 2Entrepreneurship –(b) Number of entries in HKUST-supported competitions

Objective:

To demonstrate the University's dedicative commitment to engaging the wider community by organizing or coorganizing competitions to promote knowledge transfer and entrepreneurship. It complements the sector-wide performance measures by incorporating an indicator of the number of entries in HKUST-supported competitions as an additional metric.

Methodology and data source:

The KPI is expressed as the number of teams and participants of HKUST-supported competitions. The intended competition participants are the general public; the participants are not limited to our students, staff and alumni. Competitions which are organized solely for HKUST community were excluded. Higher number suggest better performance.

Period: 2019/20 Academic Year

Name of Competition	Number of	Number of
	Teams	Participants
Bizkathon@HKUST - Virtual Banking Hackathon	25	120
H ² Innovation Challenge	83	299
HKUST One Million Dollar Entrepreneurship Competition	1,443	3,948
STEM+E Consortium 2020	16	76
Hong Kong Techathon 2020	55	260
2019 CyCore IEEE Electronic Endeavour Match	12	300
Total	1,634	5,003

Period: 2020/21 Academic Year

Name of Competition	Number of	Number of
	Teams	Participants
Hack Viral	20	121
hackUST 2021	207	860
HKUST x HashKey Blockchain Business Model Challenge	20	80
Hong Kong Physics Olympiad	-	470
Hong Kong Techathon 2021	159	938
HKUST One Million Dollar Entrepreneurship Competition	1,256	3,062
Social Entrepreneurship Challenge: Innovating for Social Good!	30	93
STEM+E Competition 2021	66	343
16th Pan Pearl River Delta Physics Olympiad	-	466
17th Pan Pearl River Delta Physics Olympiad	_	536
Total	1,758	6,969

Period: 2021/22 Academic Year

Name of Competition	Number of	Number of
	Teams	Participants
18th Pan Pearl River Delta Physics Olympiad	-	386
4th Social Innovation Community 4.0 Competition	15	100
hackUST 2022	154	760
HKUST International Case Competition 2022	8	32
HKUST One Million Dollar Entrepreneurship Competition	1,274	2,939
HKUST Social Entrepreneurship - Climate Challenge 2022	34	105
Hong Kong Physics Olympiad	-	555
Hong Kong Techathon 2022 - Tech Your Way To Business	99	589
Magnetic Levitation Competition 2021	-	45
SmartBot Arena	11	85
STEM+E Competition 2022	92	420
The First Robot Explorer Cup	16	80
UnderWater Robot Competition 2022	-	230
Total	1,703	6,326

Period: 2022/23 Academic Year

Name of Competition	Number of	Number of
	Teams	Participants
5th Social Innovation Community 4.0 Competition	16	100
HKUST Million Dollar International Entrepreneurship Competition	810	2,735
The 34th International Biology Olympiad (2023) - Hong Kong Contest		1.012
& Student Training Program	-	1,015
Hong Kong Economic Policy Challenge (HKEPC) 2023	16	40
第二屆「中國航天夢」全港徵文比賽 2022	-	1,200
HKUST x SOW Asia Social Good Entrepreneurship Case Competition	40	141
Hong Kong Techathon 2023	181	945
HackUST	191	695
HKUST-Sino One Million Dollar Entrepreneurship Competition 2023	240	866
Clean Air Challenge Awards Ceremony and Exhibition	28	113
The 9th Annual International Mathematical Modelling Challenge	52	200
(IMMC2023) Greater China Final Presentation Competition	32	200
The 48th International Exhibition of Inventions Geneva	19	35
International Physics Olympiad (IPhO) 2022	-	5
Chinese Physics Olympiad (CPhO) 2022	-	15
Hong Kong Physics Olympiad	-	1,928
Pan Pearl River Delta and Chinese Elite Schools Physics Olympiad	-	1,700
Asian Physics Olympiad (APhO) 2022	-	8
HKUST Fintechstic 2022	50	170
Total	1,643	11,909

Note: The list mentioned above comprises a selection of representative competitions based on their nature to promote entrepreneurship or transfer knowledge from the University to the broader community.

Summary:

To foster community engagement, the University has taken the initiative to orchestrate competitions that aim to cultivate knowledge transfer and entrepreneurship. These competitions are designed to provide participants with a valuable experiential learning opportunity, allowing them to delve into the intricacies of establishing and evaluating new businesses. Moreover, the competitions equip students with the skills and mindset necessary for pursuing a successful entrepreneurial career.

By steadfastly pursuing these endeavors, the University has witnessed a remarkable surge of 138% in participant number between 2019/20 and 2022/23, underscoring the expanding influence of the University's community-focused initiatives. Notably, the widely recognized HKUST One Million Dollar Entrepreneurship Competition has emerged as a shining exemplar, serving as a flagship event for the University's Entrepreneurship Development efforts.

The University will proactively reinforce partnerships with other local and overseas collaborators to organize and co-organize more competitions that are open to the public to continue promoting knowledge transfer and entrepreneurship in Hong Kong and the Greater Bay Area.

Domain 3: Knowledge Transfer and Wider Engagement

KPI 3Other societal contribution: number, participant size and diversity of community
engagement projects, social service events, art related functions

Objective:

To demonstrate the University's commitment to knowledge dissemination to the public by organizing diverse public engagement activities. It complements the sector-wide performance measures with an indicator of the number of community engagement projects, social service events, and art-related functions.

Methodology and data source:

The KPI is expressed as the number of public engagement activities organized by the University for the external community, including public lectures, performance arts, exhibitions, public, community and social services and other events, as well as the corresponding number of attendees. Higher number suggest better performance.

Financial Year	201	9/20	202	2020/21 202		1/22	2022/23	
Total number of community engagement projects, social service events, art related functions	No. of activities	No. of attendees						
Public lectures	300	2,514,732	326	973,513	306	464,872	238	1,224,068
Performance arts	29	7,892	26	2,046	8	3,610	36	13,328
Exhibitions	10	25,337	7	12,970	11	229,669	32	1,016,403
Public, community, and social services	119	1,875,542	113	554,037	107	676,363	80	839,831
Other public engagement activities	81	128,405	125	6,865,522	151	2,078,030	310	839,312
Total	539	4,551,908	597	8,408,088	583	3,452,544	696	3,932,942

Summary:

With the resumption of normalcy in 2023, the University had organized an array of events upon the complete release of social distancing measures. Besides, the public showed increased willingness to participate in various activities. Moreover, by utilizing both virtual and face-to-face communication channels, the University expanded its knowledge dissemination efforts internationally, reaching industry practitioners, the private sector, and people of different ages and nationalities.

As a result, in 2022/23, there was a notable 19% increase in the number of public engagement activities and a 14% increase in attendees compared with 2021/22, marking the highest number of such activities in the past four years.

Domain 4: Enhanced Internationalisation and Engagement with the Mainland

KPI 1Percentage of faculty members with non-local university awarded Doctor of Philosophy
degrees

Objective:

This KPI aims to demonstrate the academic diversity of the University.

Methodology and data source:

- (i) Substantiation-track faculty, teaching-track faculty, research-track faculty, and visiting/adjunct faculty are covered.
- (ii) In cases where a faculty member holds more than one PhD, both regions are included in the count.
- (iii) The census date is October 2023.

	Academic year								
	2020/21		2021/22		2022/23		2023/24		
Region	HC	%	НС	%	HC	%	HC	%	
Hong Kong	109	15.8%	116	16.2%	130	17.3%	150	18.5%	
Mainland China	36	5.2%	43	6.0%	49	6.5%	54	6.7%	
Asia (excl. Mainland & HK)	21	3.0%	23	3.2%	26	3.5%	32	4.0%	
North America	424	61.4%	432	60.2%	439	58.5%	466	57.5%	
Europe	85	12.3%	90	12.5%	92	12.3%	95	11.7%	
Australia & New Zealand	15	2.2%	13	1.8%	14	1.9%	12	1.5%	
Africa	1	0.1%	1	0.1%	1	0.1%	1	0.1%	
Total	691	100.0%	718	100.0%	751	100.0%	810	100.0%	
Faculty with PhD (awarded from all places outside of HK)	582	84.2%	602	83.8%	621	82.7%	660	81.5%	
Faculty with PhD (awarded from all places outside of HK & Mainland)	546	79.0%	559	77.9%	572	76.2%	606	74.8%	

Note: The sum of figures may not add up to total due to rounding. Those without declaration are omitted.

Summary:

The majority of faculty members obtained their PhD from non-local / non-Mainland institutions, reflecting the University's commitment to maintain a high level of diversity in academic talents.

Domain 4: Enhanced Internationalisation and Engagement with the Mainland

KPI 2 Formal joint offering of courses / programs with non-local educational organisations

Objective:

To provide an objective indicator for international engagement from the perspective of formal joint offering of courses / programs with non-local educational organisations.

Methodology and data source:

The number of agreements pertaining to the joint programs/ courses as collaborated with non-local educational organisations is measured and tracked across years. Collaborations under the category of Massive Open Online Courses (MOOCs) refers to total number of unique courses offered in Coursera and edX.

Type of Collaboration	2019/20	2020/21	2021/22	2022/23
Joint Programs / Courses	36	23	24	24
Massive Open Online Courses (MOOCs)	60	57	67	63
Total	96	80	91	87

School	2019/20	2020/21	2021/22	2022/23
School of Science	9	11	15	15
School of Engineering	34	26	33	24
School of Business and Management	21	20	20	18
School of Humanities and Social Science	23	20	20	20
Academy of Interdisciplinary Studies				
(renamed from Interdisciplinary Programs	6	0	0	6
Office since July 2023)				
Joint Schools	3	3	3	4
Total	96	80	91	87

Summary:

The University has been actively collaborating with various non-local educational organizations to offer joint courses and programs. These collaborations enable the University to leverage the expertise and resources of partner institutions and provide students with access to a wider range of educational opportunities.

Domain 4: Enhanced Internationalisation and Engagement with the MainlandKPI 3Substantial global study experience

1) Substantial Global Study Experience on Campus

Metric A: Percentage of Ug students on campus being non-local / international

Objective:

The University believes that campus internationalization could empower students with intercultural competencies and global perspectives.

Methodology and data source:

Non-local refers to Ug degree-seeking and inbound exchange/visiting students from all places outside Hong Kong. International refers to Ug degree-seeking and inbound exchange/visiting students from places outside Hong Kong, Mainland, Taiwan and Macau.

	No. of students in 2019/20	No. of students in 2020/21	No. of students in 2021/22	No. of students in 2022/23
Non-local	2,240 (22.0%)	1,871 (18.3%)	1,979 (19.2%)	2,241 (21.5%)
International	1,279 (12.5%)	902 (8.8%)	925 (9.0%)	1,197 (11.5%)

Ug student type	No. of students in 2019/20	No. of students in 2020/21	No. of students in 2021/22	No. of students in 2022/23
Local degree-seeking	7,954 (78.0%)	8,343 (81.7%)	8,347 (80.8%)	8,197 (78.5%)
Local inbound exchange/visiting	3 (0.0%)	2 (0.0%)	2 (0.0%)	3 (0.0%)
Non-local (Mainland, Taiwan & Macau) degree- seeking	868 (8.5%)	969 (9.5%)	1,035 (10.0%)	1,014 (9.7%)
Non-local (Mainland, Taiwan & Macau) inbound exchange/visiting	93 (0.9%)	0 (0.0%)	19 (0.2%)	30 (0.3%)
Non-local (Other places) degree-seeking	856 (8.4%)	902 (8.8%)	920 (8.9%)	884 (8.5%)
Non-local (Other places) inbound exchange/visiting	423 (4.1%)	0 (0.0%)	5 (0.0%)	313 (3.0%)
Total	10,197	10,216	10,328	10,441

Note: Students studying off-campus such as exchange-out or on study leave are excluded. World Bachelor in Business students on HKUST campus are included. Data cut-off dates are 30 Sep 2019, 2020, 2021 and 2022.

Summary:

The number of on-campus undergraduate students being non-local and international in 2020/21 - 2021/22 was affected by the travel restrictions during the pandemic. With the lifting of travel restrictions, an upward trend in number of non-local and international undergraduate students on campus is observed.

Metric B: Percentage of Ug graduates who completed a substantial study experience abroad since admission

Objective:

The University believes that a study abroad experience at 3 weeks or above provides students with a more substantial development. This KPI complements PM4.3 which measures every outside Hong Kong experience with no minimum duration requirement.

Methodology and data source:

Substantial study experience includes:

- (i) In accordance with definition in CDCF, "student exchange" is defined as students studying at an institution outside of Hong Kong under a reciprocal exchange agreement for at least one term (for summer term: at least 4 weeks).
- (ii) "One-way study/research abroad programs" refers to programs at universities that last 3 weeks or above; participation is nominated/endorsed/registered with HKUST; programs are credit-bearing and/or with academic transcripts issued by the host university.
- (iii) "3 weeks" is defined as 15 weekdays.

Experience type (with duration of 3 weeks or	No. of Ug Graduates with substantial study experience since admission						
above)	Graduating Cohort						
	2019/20	2020/21	2021/22	2022/23			
1 - Exchange	894	745	221	460			
2 - Visiting	313	263	208	172			
3 - Internship	302	240	154	71			
4 - Study/Field trip	20	28	19	3			
5 - Experiential learning experience	41	22	14	28			
6 - International events	1	1	5	5			
7 - Others	0	0	0	0			
No. of Ug Graduates with at least one of the above non- local learning experience since admission (Metric B)	1,243 / 2,322 (53.5%)	1,057 / 2,484 (42.6%)	534 / 2,436 (21.9%)	652/ 2,393 (27.2%)			

Summary:

The COVID-19 pandemic and the related travel restrictions posed great impact on the percentage of Ug Graduates with substantial study experience abroad. Experiences available to 2022/23 Graduates (i.e., admitted in 2019/20) were limited as travel restrictions were only lifted in Spring 2023. However, compared to the 2021/22 Graduates, the percentage has improved in the 2022/23 graduating cohort.

Domain 4: Enhanced Internationalisation and Engagement with the MainlandKPI 4Global presence

Objective:

The number of international alliances that the University holds membership reflects the University's extensive network that supports academic and teaching partnerships such as exchange and study abroad programs with other world-class universities around the world. A higher number of alliances indicates a stronger performance in 'Global Presence'.

Methodology and data source:

The number of University and School-level international alliances that the University holds membership is measured. Data is sourced from internal survey targeted at University-level offices and Schools.

Level	2019/20	2020/21	2021/22	2022/23
University Level (VPIA, VPRD, DSTO)	18	19	20	20
School of Engineering	3	3	3	3
School of Business	14	15	16	18
School of Humanities & Social Science	-	-	1	1
Academy of Interdisciplinary Studies (renamed from Interdisciplinary Programs Office since July 2023)	5	4	3	4
HKUST Fok Ying Tung Graduate School	-	-	1	1
Institute for Advanced Study	1	1	1	1
Total	41	42	45	48

Academic Year 2019/20 to 2022/23

List of International Alliances

University level

- 1. Asian Science and Technology Pioneering Institutes of Research and Education (ASPIRE League)
- 2. Asian Universities Alliance (AUA)
- 3. Association of Pacific Rim Universities (APRU)
- 4. Association of Sino-Russian Technical Universities (ASRTU)
- 5. Beijing-Hong Kong Universities Alliance (BHUA)
- 6. C9 League + HK3
- 7. Council for Advancement and Support of Education (CASE)
- 8. Guangdong-Hong Kong-Macao University Alliance (GHMUA)
- 9. HKUST-MIT Research Alliance Consortium
- 10. Innovation & Entrepreneurship Education Alliance of China (IEEAC)
- 11. Shanghai-Hong Kong University Alliance (SHUA)
- 12. Silk-road Universities Network (SUN) (from 2019/20 Academic Year)
- 13. The Global Artificial Intelligence Academic Alliance (GAIAA) (from 2020/21 Academic Year)
- 14. The Association of East Asian Research Universities (AEARU)
- 15. The Association of Southeast Asian Institutions of Higher Learning (ASAIHL)
- 16. University Alliance of Belt & Road
- 17. University Alliance in Talent Education Development (UAiTED) (from 2019/20 Academic Year)
- 18. University Consortium of the 21st Century Maritime Silk Road (UCMSR)

- 19. World Economic Forum (WEF) Global University Leaders Forum (GULF)
- 20. Jiangsu-Hong Kong-Macau University Alliance (from 2021/22 Academic Year)

School level

School of Engineering:

- 1. Asia-Oceania Top University League on Engineering (AOTULE)
- 2. Asian Deans' Forum
- 3. The Global Engineering Deans Council (GEDC)

School of Business:

- 1. Association to Advance Collegiate Schools of Business (AACSB)
- 2. Association of Asia-Pacific Business Schools (AAPBS)
- 3. CEMS The Global Alliance in Management Education
- 4. China Construction Bank (CCB) New Financial Talent Education Alliance
- 5. CISCO Networking Academy
- 6. European Foundation for Management Development (EFMD)
- 7. Future of Management Education (FOME) (from 2020/21 Academic Year)
- 8. Global Business School Network (GBSN)
- 9. Global Network for Advanced Management (GNAM)
- 10. Graduate Management Admission Council (GMAC)
- 11. Information Systems Audit and Control Association (ISACA)
- 12. Kellogg Executive MBA Global Network
- 13. MBA Career Services & Employer Alliance (CSEA)
- 14. Partnership in International Management (PIM)
- 15. The International University Consortium for Executive Education (UNICON)
- 16. Principles for Responsible Management Education (re-activated from 2021/22 Academic Year)
- 17. Global Research Alliance for Sustainable Finance and Investment (from 2022/23 Academic Year)
- 18. Climate Governance Initiative Hong Kong Chapter (from 2022/23 Academic Year)

School of Humanities & Social Science:

1. The National Humanities Centre

Academy of Interdisciplinary Studies (renamed from Interdisciplinary Programs Office since July 2023)

- 1. Asia Pacific Public Policy Network
- 2. Centers for Sustainability Across the Curriculum (through the Association for the Advancement of Sustainability in Higher Education (AASHE))
- 3. Individualized Major Programs Network
- 4. International Sustainable Campus Network (ISCN) (from 2022/23 Academic Year)
- 5. Network of Schools of Public Policy, Affairs, and Administration (*withdrawal since Academic Year* 2022/23)

HKUST Fok Ying Tung Graduate School:

1. Council of Graduate Schools (CGS) (withdrawal on 1 January 2023)

Institute for Advanced Study

1. ATLAS Experiment at CERN

Summary:

The University has been actively expanding its international connections to promote global presence and cooperation with renowned partners across the world. The number of alliances in which we are a part of, has increased almost 20% since 2019. This has been achieved by becoming a co-founding member of new alliances and by taking up an active role in a range of international and regional networks at both University and School level.

Domain 5: Financial Health, Institutional Social Responsibilities and SustainabilityKPI 1Environmental responsibility

Objective:

To provide an objective indicator to demonstrate our commitment to sustainability and evaluate the University's risk and vulnerability to future costs and regulations regarding waste to the landfill and greenhouse gas charges.

(a) Net energy consumption per gross floor area of campus facilities

Methodology and data source:

- (i) Follow the WRI Greenhouse Gas Protocol for establishing scope and boundaries for reporting. Adopted the "Equity" approach, meaning all buildings and spaces that are owned by the University are counted for energy and GHG reporting purposes. Leased spaces (e.g., Business School Central) are not counted, but spaces owned by the University and leased to commercial entities (e.g., Starbucks) are counted.
- (ii) Total purchased electricity refers to the total consumed electricity, including renewable energy produced on-site. The electricity consumed on HKUST campus is purchased from CLP. The electricity consumption on the bill is divided into Group A, which includes teaching buildings, public facilities and student hostels, while Group B includes staff quarters and commercial outlets.
- (iii) Renewable energy refers to on-site power generated without the consumption of fossil fuels and used within our buildings. Currently all renewable energy generated by the University is from a large-scale solar power system developed in 2020. The system has been accepted into CLP's Renewable Energy Feed-in Tariff (FiT) Scheme, whereby electricity generated by solar panels is purchased by CLP on a monthly basis and reflected through electricity bills.
- (iv) Gross floor area (m2) refers to the area with occupation permit or in use.
- (v) Energy consumption per unit of gross floor area is calculated by the formula total purchased electricity (kWh)/gross floor area of campus facilities (m2).
- (vi) The reporting period is from July of each year to June of the following year.

	2019/20	2020/21	2021/22	2022/23
(a) Electricity generated by renewables (in kWh)	5,840	782,886	1,912,724	2,319,773
(b) Total purchased electricity (in kWh)	87,353,244	88,318,175	89,692,408	93,923,338
(c) Gross floor area of campus facilities	515,000m ²	563,595m ²	578,007m ²	578,007m ²
(d) Energy consumption per unit of gross floor area [(b)/(c)]	170kWh/m ²	157kWh/m ²	155kWh/m ²	162kWh/m ²

Note: Figures in above table have been updated based on the latest data made available after submission of last UAA Annual Report.

Summary:

The overall electricity consumption rose by nearly 5% in the 2022/23 academic year reflecting full occupancy of the campus after the covid-restricted years. The increase mainly came from (1) the increased energy consumption in student halls as they filled back to capacity, and (2) the greater energy intensity of research as reflected in the increase in volume and energy demands of the data centers. Energy from on-campus canteens increased slightly as well, but the majority of all other buildings remained largely constant. While overall consumption is growing, the increase in the energy generated by renewables helps draw down the more carbon-intensive on-grid power.

(b) Total annual waste to the landfill (in tons)

Methodology and data source:

- (i) Total waste to the landfills refers to the waste that cannot be reused, recycled, or repurposed for other priorities.
- (ii) The major types of recyclables include paper (confidential paper, carton box), metal (aluminium cans, metal skip), plastic (plastic bottles and polyfoam), food waste, and landscape wastes. The University also collects specialty wastes from specific use categories, including glass, clothes, fluorescent light tubes, rechargeable batteries, toner and ink cartridges, electronic appliances, wood pallets and broken furniture, animal bedding from laboratories, and beverage carton boxes.
- (iii) Total waste to the landfill is determined by including general waste from buildings and bulky waste that is collected in large yellow skips. All the waste generated on campus is tagged and weighed in LG7 garbage chamber for accurate data by location, and then placed into a compactor. The compactor is taken to the landfill and weighed as it arrives and a second time after it empties its contents so that the accurate weight can be recorded.

	2019/20	2020/21	2021/22	2022/23
(a) Total waste to the landfill (in tons)	1,790	1,440	1,575	1,828
(b) Total waste recycled (in tons)	897	1,031	1,120	1,078

Summary:

The return to full occupancy and programs during the 2022/23 academic year following the covid-restricted years led to a 16% increase in overall waste going to the landfill. Recognising the unusual circumstances of the past few years, the best year-on-year comparison is with the last full year of operations (2018/19) which recorded 2,323 tons of waste to the landfill. Comparatively, this recent year was 21% lower and indicates that the overall trajectory is heading in the right direction.

Domain 5: Financial Health, Institutional Social Responsibilities and Sustainability

KPI 2Social responsibility

(a) Number of Student Volunteer Service Hours

Objective:

To provide an objective indicator to demonstrate the University's social responsibilities in terms of student engagement in volunteer and public services.

Methodology and data source:

- (i) The number of students participating in volunteer service is measured. The students who have involved in more than one volunteer service are counted once.
- (ii) Volunteer service hours refers to time involved in direct service, briefing and debriefing, and preparation time (if any). The figure does not account for course-related volunteer activities or volunteer work arranged by external parties.
- (iii) Data is sourced from the internal system called "HKUST Engage" which keeps records of student's out-of-class activities.

	Academic Year					
	2019/20	2020/21	2021/22	2022/23		
No. of students involved in volunteer service	252	307	265	460		
Average volunteer service hours per student	19	8	5.5	16		

Summary:

Among the 460 student volunteers in 2022/23, close to 40% of them have volunteered more than once over the year. With the lifting of the limitations related to COVID, more in-depth and meaningful interactions become feasible between student volunteers and recipients. Below is a summary of observations pertaining to students' volunteer service experiences after the pandemic:

- (i) The volunteer services helped students to gain deeper understanding to the communities they served, as well as the social issues within the community. They were impressed and found it a novel experience.
- (ii) Prior to the volunteer services, students in general appeared less willing to show their emotions or thoughts. It could be a lack of similar experience throughout the past few years due to the pandemic. Students noted that it required deliberate effort for them to take their first step to interact with others and get involved in volunteer service. As they took the leap, they had a unique sense of joy and satisfaction.
- (iii) The volunteer service and training guided students to become more confident to take on leadership roles. Students were able to quickly adapt and pick up the essential skills to fulfil their leading role throughout the volunteering service journey.

HKUST Domain 5 – KPI 2 (b) Number of Faculty Staff Engaged as Members of External Advisory Bodies Including Professional, Industry, Government, Statutory or Non-statutory Bodies

Objective:

To provide an objective indicator to demonstrate the University's social responsibilities in terms of faculty engagement in public services. It supplements the sector-wide performance measures with an indicator of faculty staff engagement as members of external advisory bodies.

Methodology and data source:

The KPI is expressed as a percentage of HKUST faculty engaged as members of external advisory bodies including professional, industry, government, statutory or non-statutory bodies. Higher percentage suggests better performance.

	2019/20	2020/21	2021/22	2022/23
Number of faculty staff engaged as members of external advisory bodies including professional, industry, government, statutory or non-statutory bodies	485 / 693 (70%)	500 / 710 (70.4%)	509 / 713 (71.4%)	525 / 725 (72.4%)

Summary:

The engagement of HKUST faculty in various external advisory bodies has demonstrated a consistent upward trend, with a percentage increase from 70% in 2019/20 to 72.4% in 2022/23. This indicates the active involvement of faculty in contributing to society to create impact and reflects the University's sustained commitment to promoting institutional social responsibilities and fostering faculty's engagement in public service.

Domain 5: Financial Health, Institutional Social Responsibilities and Sustainability

KPI 3 Dollar value of uncommitted UGC and non-UGC reserves

Objective:

This KPI provides an objective indicator to demonstrate the financial sustainability of the University through its uncommitted UGC/non-UGC reserves.

Methodology and data source:

- (i) This KPI is to ascertain if the University has sufficient reserves to support its future development.
- (ii) The uncommitted non-UGC reserves is calculated after all approved large capital projects with amount over \$50m.

						(HK\$'M)
	Actual figures				Proje	ctions
	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Uncommitted UGC reserves	2,384	3,211	3,167	3,399	3,236	3,223
Uncommitted non-UGC reserves	1,185	3,356	3,447	3,308	3,587	3,956

Summary:

The uncommitted non-UGC reserves stood at \$3.3b in 2022/23 and is assumed to report an increase in 2023/24 and 2024/25. The reserves are assumed to support long term development of the University including capital projects.