

Strategy and Performance Dialogue 2018 – 2021 HEI Self Evaluation Report on Progress 1 September 2018 – 31 August 2021

Section A: Summary Information

| Name of Institution | Institute of Technology Carlow |
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| Date of submission | 8 April 2022 |

Please note that character limits will be strictly enforced. Additional material will not be reviewed or considered.

Section B: Overview of Institutional Strategic Development and Performance

Critical Reflection

Max. 5,600-character limit (750-800 words approx.)

The challenges of the COVID-19 pandemic, together with significant progress on the process to establish a unitary multicampus technological university for the south east of Ireland, has seen the three years of this Compact reporting period being like no other period in the 51-year history of Institute of Technology Carlow. The Institute's community not only responded admirably to overcome the difficulties presented by the pandemic but did so whilst continuing to keep our strategic focus to ensure that we continued to deliver across all areas of our strategy and vision. The key to our success over this period has been continuing to be values led with the learner experience at our core, sustained and enriched by our commitment to knowledge and the achievement of excellence; to the principles and practice of connectedness; to creativity and innovation; and to ensuring high standards of integrity and ethical behaviour. This lived student centred culture together with a strong financial management discipline, an effective risk management strategy and effective use of high-quality data intelligence allowed us to successfully navigate the challenges of this Compact reporting period.

The authenticity of our values-based culture was commended by the CINNTE Institutional Review 2020 review team following the successful completion of the first 'virtual' institutional review in Europe in June 2020. Other commendations cited by the review team included the strong quality and student-centred culture, our strong commitment to student support and engagement, our strong commitment to our national and international collaborative and access partners, and robust management and governance structures. Through the broad and inclusive self-evaluation exercise that underpinned this process the Institute has identified additional strategic initiatives across various thematic areas that we are now implementing. These include the new Academic Delivery Framework (ADF), which provided the basis for the cross institutional Programmatic Review completed in 2021. Implementation of the ADF commenced in September 2021.

Other achievements include our new Research and Innovation Impact Strategy 2020-2025, and a high level of new programme development, validation and delivery across CAO, postgraduate studies, HEA Springboard+, the Human Capital Initiative and other national competitive stimulus programmes. In September 2021, our nationally leading work in providing third level education to underrepresented and 'non-standard' cohorts of students was acknowledged by the HEA when the Institute received a €1 million HEA award for the impact assessment case study on the work of the Faculty of Lifelong Learning with Family Carers Ireland. Significant progress on the Institute's €150 million capital development programme has been made over the last three years with the completion of the South Sports Campus, the acquisition and demolition of the former Carlow VEC school, the completion of the planning and detailed design of the Advanced Science and Technology Building, and the commencement of construction of the Corporate Support Services Building.

The Institute's placement in the top five Irish universities for performance in the 2021 U-Multirank World University Rankings was a welcome international vote of confidence for the Institute. The Institute achieved the highest grade across a total of ten

performance metrics when benchmarked against almost 2,000 universities from over 90 countries, with particularly strong performances in regional engagement and teaching and learning.

The Institute continues to be at the forefront of the sector in terms of equality, diversity and inclusion. In 2019, the Institute was the first Athena SWAN Bronze Award holder under the Expanded Charter in the Irish technological higher education sector. Additionally, in 2021 the Institute was the first HEI across the Irish technological sector to achieve faculty and departmental Athena Swan Bronze Awards across all computing and engineering departments.

This Compact reporting period also saw significant progress on the technological university project, paving the way for a formal joint application in April 2021 for merger and redesignation as a technological university with our partner, Waterford Institute of Technology. Following an evaluation by an International Advisory Group in July 2021, the Minister for Further and Higher Education, Research, Innovation and Science announced the establishment of the South East Technological University in May 2022. This represents a very positive milestone for the south east – the first university for the region. This success is a further testament to the ambition of all in the communities of both institutions to bring together two well-established HEIs into a fully unified multi-campus organisation with the scale, breadth, and performance of a university of the highest international standing; a university grounded on impactful connectivity with staff, students, and external stakeholders, while drawing strength from regional and international collaborations. The new technological university has strong foundations developed over five decades and the Institute looks forward to the new and significant national and international opportunities that lie ahead for us as a unitary multi-campus university. The establishment of the South East Technological University on 1 May 2022 will be a significant step in realising our vision to become a leading European technological university by 2030.

Section C: Key System Objectives (KSOs)

KSO 1

Providing a strong talent pipeline combining knowledge, skills & employability which responds effectively to the needs of our enterprise, public service and community sectors, both nationally and regionally, and maintains Irish leadership in Europe for skill availability

KSO 1 Summary Statement

Max. 4,200-character limit (550-600 words approx.)

Over the period of this Compact, progress of the Institute has been significant in growing its full-time student numbers by 5.5% from 4,670 in 2017/2018 to 4,928 in 2020/2021 (Source: SRS). However, the Institute's lifelong learning provision has seen almost 10 times more growth with numbers of part-time learners increasing by 54% from 3,705 in 2017/2018 to 5,719 in 2020/2021 (Source: SRS and July Stimulus programme). The Institute had more than twice the mean percentage of lifelong learners in 2020/2021 with 26.7% of whole time equivalent learners compared to a mean of 13.1% for the technological higher education sector (Source: HEA RGAM 2022). We have also increased opportunities for apprentices and enhanced flexibility across all our provision over the last 3 years.

The Institute is dedicated to the creation of an environment where our learners can achieve their full potential, and one in which our graduates are fully equipped to achieve the highest personal and professional standards. During the review period, all programmes have developed employability statements and incorporated work integrated learning, such as placement opportunities. The programmatic review process, which was completed in June 2021, was central to these developments and also allowed for further embedding of the Institute's Graduate Attributes Framework in all programmes. Our graduate attributes are the ultimate learning outcomes for all our students, and they represent the values that we engender in our graduates.

One of the challenges that we have faced over the period of the Compact is securing enough funded places from Springboard+, HCI Pillars and July Stimulus calls to satisfy the demand from students. The Institute have actively explored alternative sources of funding for life-long learning places. For example, the funding to establish the Certificate in Family Caring project was obtained from the Dormant Accounts Fund, which is administered via Pobal.

Another challenge over the Compact period has been to ensure that the quality of the educational experience of lifelong learners has not been compromised as numbers have increased so significantly. As a result, the Faculty of Lifelong Learning have invested significantly in the appointment of additional academic and professional staff. Additionally, the Institute appointed a dedicated Lifelong Learning Librarian in May 2019 to support this cohort of students. This librarian supports lifelong learners in information literacy via in-person and online classes, email and the new online self-directed PACE Programme. The Library has also invested heavily in the last 3 years in additional e-books, e-journals and other e-resources.

In order to maintain our position as one of the leaders in lifelong learning, we have engaged with industry and communities to identify gaps in the graduate stream and have subsequently co-designed new programmes with our stakeholders. We continue to seek out

opportunities to co-create new, relevant and flexible programmes for non-traditional students with new partners such as NGOs and other regional and national stakeholders.

Many of the lifelong learning programmes that we have created can be classified as micro-credentials, which have seen a significant European and national focus since 2020. An analysis of micro-credentials was published in September 2021 by QQI and showed that the Institute had the highest number of micro-credential programmes in Ireland with 469, which was more than the next seven highest ranked awarding bodies combined.

The most critical risk during this Compact period was the disruption caused by the COVID-19 pandemic in the last two academic years. However, the Institute, as it always does, embraced the opportunities presented by technology to deliver our programmes and support our students so that in the future world of work and society, they are proficient in emergent technologies. The Institute continued to expand its programme provision and strengthened its digital infrastructure throughout the pandemic developing effective testing methods and establishing even more robust quality assurance mechanisms.

| Strategic Priority 1.1 | Key Performance Indicators | Pre-compact Baseline 2018 | Overall Target 2018-2021 | August 2021 KPI Value Max. 210-character limit (30 words approx.) |
|--|----------------------------|---|-------------------------------|--|
| Maintain our position as market leader of lifelong learning WTE student numbers to 2020 to the needs of our enterprise, public service and community sectors; to enhance the skill base of the workforce and | # of Springboard + places | 386 places allocated across 17 programmes | No specific target provided | 600 places allocated across 25 programmes in 2020/2021, which is more than double the programmes (12) and a 76% increase in places (340) compared to 2019/2020 (Source: IT Carlow Faculty of Lifelong Learning). |
| extend our opportunities for Springboard participants | # of apprentices | 143 | Increase – no specific target | 218 apprentices were enrolled in 2020/2021, which included 23 on the new geo drilling apprenticeship (Source: SRS). This is a 52% increase on the |

| Strategic Priority 1.2 | - | re-compact Baseline 018 | Overall Ta | rget 2018-2021 | August 2021 KPI Value |
|---|--|---|------------|---|--|
| | Our apprentice numbers have period to 2020/2021 (Source: 5 the launch of the new apprent 85% of apprentices in 2020/20 | | | | |
| | The Institute has a very strong successfully applying for alloca provide a strong talent pipeling we have allocated over 1,600 S 2015/2016 to 2017/2018. | | | | |
| limit (200 words approx.) | The Institute had the second h technological and university se percentage of life-long learner the national average of 19.9% | _ | | | |
| SP 1.1 Commentary Max. 1,400-character | The Institute's total enrolment (Source: SRS and July Stimulus Whole Time Equivalent (WTE) learning programmes. | Programme). The 2020/20 | 21 enrolme | • | Colour rating for this Strategic Priority: Green |
| | % of learners that are part-tim | e 38.5% of learners are p (HEA, 2016/17) | oart-time | Maintain this % (38.5% of learners are part-time) | 53.7% (5,719 of 10,647) of learners were part-time learners in 2020/2021 (Source: SRS and July Stimulus Programme). |
| | | | | | 143 apprentices in the baseline year of 2017/2018. |

| To optimise the | | | | Max. 210-character limit (30 words approx.) |
|--|--|--|--|---|
| learner experience and prioritise the development of Graduate Attributes that meet the needs of learners, social innovation, public and private enterprise, nationally and globally | % of programmes providing placement opportunities | 90% of undergraduate major awards have incorporated work-based learning. | 95% of programmes will provide student placement opportunities either through volunteering activities, international placement or work placement | Following programmatic review in 2020/2021, all major awards provide work based experiential learning opportunities via e.g. volunteering, international or work placement, work simulated or community projects. |
| | Roll out of Employability statements | N/a | Employability statement for all disciplines | For 2020/2021, employability statements have been published for all major programmes in our three Faculties and the Wexford Campus. See https://www.itcarlow.ie/study/employment-employability-guide.htm |
| SP 1.2 Commentary Max. 1,400-character limit (200 words approx.) | Supporting the learner on their path to employment includes providing both scope and opportunity for individual learners to reach their full potential and to be able to articulate this through their graduate attributes. As part of the 2020/2021 programmatic review, all programmes, across all campuses and faculties, identified specific areas/aspects within the programme which support the attainment of key identified attributes. All programmes now provide students with a range of opportunities to develop, practice and be assessed on an agreed range of key employability skills and graduate attributes. | | | Colour rating for this Strategic Priority: Green |

The programmatic review process also saw all major award programmes provide work based experiential learning opportunities either through volunteering activities, international placement, work simulated projects, community projects or work placement.

Employability statements were also updated as part of programmatic review, and are now available for all major programmes.

In addition, the Graduate Attributes Framework continues to be embedded in new curriculum design and development activities including sporting, social, community-based and voluntary activities. In recent years, the Institute has made significant investment in student and sport facilities such as the 31 acre South Sports Campus completed in 2021, which includes six playing pitches, 400m athletics track and a pavilion.



Creating rich opportunities for national and international engagement which enhances the learning environment and delivers a strong bridge to enterprise and the wider community

KSO 2 Summary Statement

Institute of Technology Carlow has performed well under KSO2 despite the major challenges and restraints imposed by the COVID-19 pandemic from March 2020.

Max. 4,200-character limit (550-600 words approx.)

In June 2021, the Institute became only the third Irish HEI to receive approval from the Chinese Ministry of Education to establish a joint institute in China, following similar approvals obtained by UCD and Maynooth University. Carlow International College of Technology, which will run in partnership with Henan University of Animal Husbandry and Economy (HUAHE), has been approved for an annual intake of 280 students and a total learner population of 1,120 from September 2022. Carlow International College of Technology is the culmination of a three-year due diligence process that saw a series of site visits by senior academics between HUAHE and the Institute.

The Institute is also currently collaborating with another Chinese education partner regarding the BA (Hons) Visual Communications and Design taught at its Wexford Campus School of Art and Design. Some 200 students are enrolled at this course in North East China, while approval is also pending from the National Accreditation Board in Ghana of a collaboration with the Institute's Department of Computing.

Institute of Technology Carlow is a member of a European University Initiative application titled EU GREEN, which brings together nine universities from nine countries. EU GREEN is built on a commitment to sustainability, encompassing the economic, societal, cultural and environmental dimensions of the term and their impact on one another. Our approach is closely aligned with the UN Sustainable Development Goals (SDGs) across all four of our core missions: education, research, innovation and service to society. Prior to approval of the application we have signed new bilateral agreements with the partners and have already commenced the process of applying

for research funding with the University of Magdeburg in Germany in biomedical engineering and University of Gavle in Sweden in access and lifelong learning. The alliance collectively achieved 37 'A's in the 2021 U-Multirank World University Rankings.

The Institute employs a high quality knowledge transfer model, which allows us to pro-actively develop and support opportunities with industry. The Institute continues to expand and enhance its engagement with enterprise and the wider community through successful initiatives. This is illustrated by the increased number of innovation vouchers and spin-in/incubation companies over the last 3 years.

In 2019, the Institute established the Insurtech Network Centre DAC (INC) with UNUM, Sun Life, Wexford and Carlow County Councils among our partners. TEaM Rural, an Institute strategic entity, commenced in 2021 and is focused initially in Laois working on entrepreneurship and economic development in towns and villages with a population of less than 10,000 people. These DACs are now making a contribution to our project pipeline across all our RDI activities.

In June 2021, the Institute launched a new five-year partnership, with €700,000 in funding from Enterprise Ireland, to deliver the New Frontiers programme for emerging entrepreneurs across the south-east region, incorporating counties Kilkenny, Carlow, Waterford and Wexford.

The main challenge and risk over the time period of the Compact has been the COVID-19 pandemic and its impact on recruiting international students. To overcome this challenge and mitigate risks, the Institute continuously monitors market trends in international students as part of our internationalisation strategy. Another part of our strategy, is to explore other markets and thus diversify and increase the number of countries that we recruit international students from. However, it is the view of the International Office that our existing international partnerships, built up over many years, will remain robust and will grow into the future. The greatest challenges lie in rebuilding the confidence of students and families in the value of studying abroad and the ability of our economy to be competitive post-pandemic.

| Strategic Priority 2.1 | Key Performance Indicators | Pre-compact Baseline 2018 | Overall Target 2018-2021 | August 2021 KPI Value |
|--|--|---------------------------|--|---|
| To develop and | | | | Max. 210-character limit (30 words approx.) |
| implement an effective internationalisation strategy | Output value (€) of internationalisation (gross student fee revenue) | €1.9m (2014/2015) | Increase of 40% in gross international fee income of €2.66mn | €2.75m for 2020/2021 (45% increase from 2014/2015 baseline) |

| | # of international students % of FT students | ts as a | 405/ | 4450 = 9 |).1% (20 | 16/17) | 675/4500 = 15% | 389 international students in 2020/2021 (303 non-EU and 86 EU). 389/4928 = 7.9% (Source: IT Carlow International Office & SRS) |
|---|--|--|---|---|---|---|---|--|
| SP 2.1 Commentary Max. 1,400-character limit (200 words approx.) | Despite this in 2020/2021 students, which represent | the Ir ted 7.9 | nstitute 9% of th | 's Intern e full-tir | ational ne stude | Office recrui ent population | nents were negatively impacted. ted and looked after 389 on. The Institute exceeded its and still maintained a high level in | Colour rating for this Strategic Priority: Green |
| | 16 | 6/17 | 17/18 | 18/19 | 19/20 | 20/21 | | |
| | International Students 40 | 05 | 482 | 583 | 631 | 389 | | |
| | All Full-time students 44 | 450 | 4670 | 4608 | 4843 | 4928 | | |
| | % of Full-time students 9. | .1% | 10.3% | 12.7% | 13.0% | 7.9% | | |
| | Compact Targets | | | 11.25% | 12.5% | 15% | | |
| | students, or 13.3%, had a were over 100 nationalities. In 2020/2021, the Institute | domices reprete's gro te's gro the 40 million | cile cour resented oss inter 0% targo r compa | ntry othed d among nationa et despit red to 2 | er than I sst our fo I studen se the im 018/201 | reland (Sour ull and part- t fee income npact of COV 9. The avera | | |

| | | | | T |
|---|-----------------------------------|---------------------------------------|--|---|
| | Year Gross Fee Income | | | |
| | 18/19 €3.3M | | | |
| | 19/20 €3.9M | | | |
| | 20/21 €2.8M | | | |
| | | | | |
| Strategic Priority 2.2 | Key Performance Indicators | Pre-compact Baseline 2018 | Overall Target 2018-2021 | August 2021 KPI Value |
| To increase the | | | | Max. 210-character limit (30 words approx.) |
| output of economically relevant knowledge, know-how and patents through strengthening institutional outputs delivered through our technology transfer and enterprise support activities and among researchers | # of Innovation Vouchers | 58 Innovation Vouchers (2017, KTI) | 66 Innovation Vouchers | 77 innovation vouchers (Source: KTI 2020). This is an increase of 31% from the baseline of 58 and 11 more than the target of 66. |
| | # of Spin Ins/Outs | 34 (33+1) (2017, KTI) | 40% increase achieved against baseline | 51 Spin Ins/Outs (Sources: KTI 2020, NF 2021 and Future Studio). This is an increase of 50% from the baseline and 10% more than the target of a 40% increase. |
| | # of commercial agreements | 24 research projects (2017, KTI) | 30% increase achieved | 108 research projects (Sources: KTI 2020, Catalyst and Bucanier). This is an increase of 350% from the baseline. |

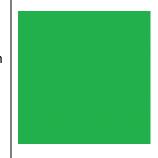
SP 2.2 Commentary

Max. 1,400-character limit (200 words approx.)

From 2019 to 2021, the Institute engaged with over 400 companies in research, technology transfer and enterprise support activities. The work with industry partners through our Research and Commercialisation Support Centre and Design + Technology Gateway accelerated through the COVID-19 pandemic. The Institute worked with companies of all sizes to help them prepare for changes due to Brexit and to support their recovery from the effects of the pandemic. Emphasis was put on developing proposals with SMEs and multinational corporations to programmes including the Disruptive Technologies Innovation Fund, the Regional Enterprise Development Funds and Innovation Partnership Programmes. These strategically important regional and national initiatives were won through targeted industry-institute interaction.

The number of innovation vouchers with industry in 2020 exceeded the target and increased by 31% compared to the baseline of 58 in 2017. The number of research projects with industry increased to 108. The Institute had 51 spin-in/incubation companies in 2020/2021, which exceeded our target for this year of 48. One additional spin out company was created in late 2021. This performance is remarkable against the disruption of COVID-19 in 2020/2021.

Colour rating for this Strategic **Priority:** Green



KSO 3:

Excellent research, development and innovation that has relevance, growing engagement with external partners and impact for the economy and society and strengthens our standing to become an Innovation Leader in Europe.

KSO 3 Summary Statement

Max. 4,200-character limit (550-600 words approx.)

Guided by our March 2020 Strategic Plan for Research and Innovation IMPACT 2020-2025, the Institute continues to invest in research infrastructure, personnel, support structures and systems.

A review of the Institute's COREs (Centres of Research and Enterprise) conducted in 2021 reported increased research enrolments, increased supervision capacity and increased outputs across all COREs. The Institute's research output continues to increase with the number of research publications per year increasing by 225% from 2016 to 2021 (i.e. the number of publications indexed in the Scopus database increased from 24 in 2016 to 78 in 2021). The Institute's researchers are increasingly collaborating with researchers in other institutions nationally and globally. Since 2015, our researchers have co-authored research publications with colleagues from 63 different countries.

In association with the Research and Commercialisation Support Centre and Design + Technology Gateway, there was significant successes in winning Irish Research Council funding, HEA Government of Ireland funding, Enterprise Ireland funding for capital equipment and innovation funding for industry partners.

The Institute received A grades in U-Multirank 2021 in three research and industry related indicators: interdisciplinary publications; copublications with industrial partners; and, publications cited in patents.

Research postgraduate enrolments increased strongly in the first two years of this Compact period but decreased in 2020/2021 due to the COVID-19 pandemic, which especially negatively impacted international student numbers. In spring 2021, the South East Regional Development Scholarship Fund for PhD scholarships was introduced and this initiative will help mitigate the impact of COVID-19 by increasing postgraduate research student numbers in 2021/2022. The funding for this scholarship scheme has been made available under Technological University Transformation Funding.

In April 2021, the Institute created the role of Director of Engineering Research and Innovation, which was funded under Phase 1 of the Senior Academic Leadership Initiative. The position will be instrumental in building our engineering research capacity in the coming years, including securing additional competitive funding for projects from national and EU agencies.

Our EU GREEN alliance in the period 2014-2020 recorded 52,500 Scopus publications and have collectively participated in almost 200 Horizon 2020 projects. The alliance demonstrates strong capabilities in life and health science and 25% of the Scopus publications related to one or more of the SDGs. Collaboration between partners is already high with 205 of the papers authored by teams comprising two or more partners.

During the time period of this Compact, the Institute was involved in several European projects:

- EU GREENER is a 4 year H2020 project started in January 2019 involving 20 partners in Europe and China including 8 industry partners. GREENER proposes the development of green, sustainable, efficient, and low-cost solutions for soil/sediment and water bioremediation, by integrating several remediation strategies with innovative bio-electrochemical technologies.
- The Arts and Humanities Entrepreneurship Hubs project was a 3.5 year initiative co-funded under the Erasmus+ programme. Ending in 2021, the project brought together 14 partners from 7 countries with the goal to equip arts and humanities graduates with the tools they need to succeed as entrepreneurs. Seven entrepreneurship hubs were created including FUTURE Studio at IT Carlow.
- Catalyst was a cross border project that utilised the theme of sustainability to inspire innovation within Welsh and Irish businesses in the life science and food and drink sectors between 2018 and 2020.
- BUCANIER project was a €2.9 million EU-funded scheme to support small businesses in Ireland and Wales, and finished in 2021.
- Commencing in 2020, Enter to Transform Transformational Entrepreneurship Hubs for Recognised Refugee Re-starters is a €2.14 million Interreg part-funded North-West Europe project which helps to increase the entrepreneurship capacity of recognised refugees.

| Strategic Priority 3.1 | Key Performance Indicators | Pre-compact Baseline 2018 | Overall Target 2018-2021 | August 2021 KPI Value Max. 210-character limit (30 | |
|--|--|--|--|---|--|
| To increase postgraduate research enrolments in disciplines aligned to enterprise and other national needs in line with Technological University criteria and informed by the goals of Innovation 2020 | # of postgraduate research enrolments (Research Masters/PhDs, full-time and part-time) | 156 | Increase of 10% in postgraduate research enrolments on 2019/20 | words approx.) 192 postgraduate research enrolments in 2020/2021, a 23% increase on the 2017/2018 baseline year (Source: SRS). | |
| SP 3.1 Commentary Max. 1,400-character limit (200 words | pandemic, especially international Compact period i.e. 2020/2021 connolments decreased by 5% compacts. | Research postgraduate enrolments were negatively impacted in 2020/2021 by the COVID-19 pandemic, especially international student numbers, but there was still a 23% increase over the Compact period i.e. 2020/2021 compared to 2017/2018. In 2020/2021, research postgraduate enrolments decreased by 5% compared to the previous year, but increased in 2019/2020 by 14% and in 2018/2019 by 13.5%. In 2020/2021, PhD enrolments increased by 2% to 22 (Source: SRS). | | | |
| approx.) | Under the Technology Universitie level 8 and above programmes ar application with WIT in April 2021 based on 2020/2021 data, which education sector (Source: HEA.ie) | | | | |
| | The new South East Regional Devi | | | | |
| | | g to potential research students in plied Social Studies) proposed leve | | | |

| | Total postgraduate enrolments (f to 1,294 from 1,084 in 2019/2020 | full-time and part-time, taught and O (Source: SRS). | research) increased in 2020/2021 | |
|---|---|--|--|---|
| Strategic Priority 3.2 To develop and | Key Performance Indicators | Pre-compact Baseline 2018 | Overall Target 2018-2021 | August 2021 KPI Value Max. 210-character limit (30 words approx.) |
| implement its engagement strategies with industry to provide opportunities for knowledge transfer and to achieve increased industry | # and total value (€) of industry funded projects | 60 (2016) | Target increase industry funded projects of 80 and €240k revenue | 101 projects and €408,000 revenue (Source: KTI 2020). The number of projects is 26% more than the target of 80 with revenue 70% more than the target of €240,000. |
| funding of applied research at the Institute | # of research projects with industry | 24 | Increase of 20% against baseline | 108 research projects (Sources: KTI 2020, Catalyst and Bucanier). This is an increase of 350% from the baseline. |
| SP 3.2 Commentary Max. 1,400-character limit (200 words approx.) | During the 3-year reporting period, the Institute engaged with hundreds of companies through our Research and Commercialisation Support Centre (RCSC) and Design + Technology Gateway. We worked with companies based in the South East, Midlands and Mid East regions, from owner manager run small businesses to multi-nationals, on new products/services or new business processes to assist a recovery from the COVID-19 pandemic and to prepare for Brexit. | | | Colour rating for this Strategic Priority: Green |

In 2020/2021, Institute greatly surpassed its targets for the number of industry funded projects (101), the total value of industry funded projects (€408,000) and the number of research projects with industry (108).

A range of outcomes have already developed out of the support received by industry from the Institute. A number of enterprises have seen measurable benefits and outcomes from their involvement with Design + and the RCSC, particularly through our INTERREG programmes, Bucanier and Catalyst, which were completed in 2021. The Institute expects more enterprises will see positive benefits over the coming years as a result of the Institute's intervention. Measurable outcomes include improved branding, new products, services and processes, new jobs, and sales growth. Alongside these measurable outcomes, our work appears to have had an impact on the confidence, knowledge, and business management skills of participating enterprises.



KSO 4:

Significantly improves the equality of opportunity through Education and Training and recruits a student body that reflects the diversity and social mix of Ireland's population

KSO 4 Summary Statement

Facilitating access and delivering an exceptional learner experience is a strategic priority which is central to the success of the Institute, and places it among the leading HEIs in the country at recruiting a diverse student body that reflects current Irish society.

Max. 4,200-character limit (550-600 words approx.)

In 2020/2021, the Institute had the highest proportion of mature students, mature new entrants and students aged 50+ amongst all HEIs (Source: HEA.ie). In the latest HEA socio-economic analysis based on 2019/2020 enrolments, 17% of IT Carlow learners are classified as disadvantaged and 7% as affluent. Only LYIT and TU Dublin (Tallaght) had proportionally more disadvantaged learners (Source: HEA.ie). The Institute as a whole has a mean deprivation index score of -2 with only LYIT and WIT having a lower score and the overall national mean being 2.0 (Source: HEA.ie). The Institute has continued to grow the numbers from DEIS schools in Carlow, Kildare, Laois, Kilkenny and Wexford. The Institute works closely with DEIS schools in providing initiatives such as the Carlow Access Programme, which provides for those from Direct Provision, asylum seekers and care leavers in addition to the Higher Education Access Route scheme.

The Institute's strong record in catering for 'non-standard' students is achieved via the Faculty of Lifelong Learning and via linked provision (e.g. An Cosán). For example, the Institute partnered with Family Carers Ireland to develop and deliver a Certificate in Family Caring for family carers throughout Ireland. Participants, who are often from low-income backgrounds, develop practical care skills, design a care plan and enhance their communication skills.

Over the Compact period, the Institute has signed formal link agreements with Laois Offaly ETB and Waterford Wexford ETB, with the total number of Further Education (FE) linked providers now 54. In 2020/2021, 8.9% of first year full time new entrants (107/1196) entered the Institute via the defined FE Progression Pathways scheme (Source: HEA Return 2021).

The Institute is co-lead on the PATH programmes 'Enabling Transitions' which commenced in February 2019 and 'Travellers in Education' which commenced in December 2019. The funding has enabled increased activities in these areas with some immediate impact in terms of community engagement, however generational disadvantage and cultural barriers require sustained and long-term intervention. Our plan is to embed long-term sustainability in these projects.

According to the results of the HEA's Equal Access Survey, the Institute has a higher proportion of new entrants with a disability than the national average. The Institute has seen increasing enrolments from students with disabilities having joined the Disability Access Route to Education scheme in 2018 and having commenced the 'Enabling Transitions' programme.

Currently the systems available to the Institute do not facilitate tracking of specific student cohort outcomes. This was identified as an area for development in the recent strategic review of Student Services. Better quality data is required from the HEA for the sector in order to allow the accurate benchmarking of the Institute's progress relative to other HEIs.

The Institute works to create an environment where learners can achieve their full potential, and one in which graduates are fully equipped to achieve the highest personal and professional standards. This is achieved through enhanced opportunities for participation in sport, clubs and societies, community engagement, social and voluntary work, experiential learning and international experience and programmes which embed a social responsibility and an outlook that is both regional and global. The learner experience has been supported by embedding the Student Success Strategy - LEAP (Learner Engagement and Progression), Graduate Attributes Framework, the Institute Gender Equality Action Plan and the ongoing EDI initiatives at institution and departmental level.

The learner voice is represented via the Students' Union, Class Representative Council, representation on programme boards and Institute committees, the National Student Engagement Programme and StudentSurvey.ie.

| Strategic Priority 4.1 | Key Performance Indicators | Pre-compact Baseline 2018 | Overall Target 2018-2021 | August 2021 KPI Value |
|---|----------------------------|---------------------------|--|--|
| To maintain its | | | | Max. 210-character limit (30 words approx.) |
| National Access Plan for Equity of Access to Higher Education | # of mature entrants | 174 (2017/18) | Maintaining access numbers above the sector average for entrants | 150 mature (24+) students were new entrants for 2020/2021 (Source: HEA.ie) |

| new entrant numbers by further developing, implementing and maintaining non- | | | | This is 14% of new entrants - the highest percentage of all HEIs. |
|--|--|---------------|---|--|
| standard entry routes aimed at the six target groups, lone parents and first generation learners | # of students from target socio- economic groups and Travellers | 388 (2017/18) | Maintaining access numbers above the sector average for entrants | In both 2019/20 (see above) and 2020/21 (Source: HEA, Nov. 2022) socioeconomic access numbers continued to exceed national averages (NAs) e.g., 14% of students were disadvantaged (NA = 10%) and 39% were marginally below average (NA = 29%). ITCs average DIS is -0.8 for 2020/21, which exceeds the national mean of 2.1. For 2020/21, there were 4 Traveller students, slightly below the national average enrolments of 6 (Source: HEA, Nov. 2022). |
| | PATH Projects | N/A | Further rollout of PATH initiatives including review of the rollout of PATH 3 | The Institute is a lead partner in the Southern Cluster (SOAR) with 2 out of 3 projects co-led by IT Carlow. |

SP 4.1 Commentary The number of new mature student enrolments fell from 174 (15.4%) in 2017/2018 to 150 (14%) in **Colour rating for this Strategic** 2020/2021, which can in part be attributed to the reduction in overall national mature enrolments. **Priority:** Green However, 14% in 2020/2021 is the highest amongst all HEIs and significantly exceeds the National Max. 1,400-character Access Plan target of 13% for this target group, and is double the national average (Source: HEA.ie). limit (200 words Out of all Irish HEIs for 2020/2021 IT Carlow has the highest: approx.) - Proportion of mature students (63% with mean 36%) Mean age (32 with mean 26) - Proportion of students aged 50+ (10.3% with mean of 3.5%) (Source: HEA.ie) The Institute is a lead partner in the Southern Cluster (SOAR) and successfully applied for additional HEA funding for PATH access initiatives. Over the Compact period, the Institute has rolled out an assistive technologies (AT) best practice project with education providers, created screencasts on free AT and provided an AT summer programme as CPD to primary school teachers. The number of students with disabilities who benefitted from supports funded by the HEA was 306 in 2019/2020, which includes 90 first years, and 297 in 2020/2021 including 96 first years (Source: IT Carlow Student Services). The Equal Access Survey of new entrant students for 2020/2021 showed that 23.2% of IT Carlow respondents had a disability, with the average for all Irish HEIs 18.1% (Source: HEA.ie). **Strategic Priority 4.2 Key Performance Indicators Pre-compact Baseline 2018** Overall Target 2018-2021 August 2021 KPI Value Max. 210-character limit (30 words approx.) To develop and implement its formal Development of learner centred Several initiatives in place to Implementation of the Institute's Student Success Learner Engagement framework, with support of the support students from framework reinforcing best Strategy or 'LEAP' framework Framework to further student representative body application to graduation practice and enhancing identifies each of the learnerembed an Institute-

throughput.

wide approach to

Institute touchpoints from pre-

entry to post-graduation. An

| access strategies for those from the six target groups, lone parents and first- generation learners | | audit of LEAP and formal adoption of LEAP has been completed. |
|---|--|--|
| SP 4.2 Commentary Max. 1,400-character limit (200 words approx.) | Completion of the Learner Engagement and Progression (LEAP) Framework occurred in December 2019 and it was formally approved by the Institute's Academic Council. The aim of LEAP as our Student Success Strategy is to assess the student lifecycle from application to alumnus and to use this information to ensure a positive and supportive transition to higher education for all learners. LEAP will further promote learner engagement, improve progression, and facilitate the development of transferable life skills within the Graduate Attributes Framework. In May 2020, eight cross-institutional COVID Response Teams (CRTs) were established to develop detailed responses to COVID-19 across all areas impacting the Institute's community. The Student Experience and Support CRT and the Hybrid Learning CRT focused on aspects of learner engagement and progression. The Institute offered many additional supports to students during the pandemic including a laptop loan scheme, exam fee waivers and supports for mental health issues. The international review panel in the QQI CINNTE Institutional Review Report 2020 commended the Institute on its student-centredness: "The review team commends IT Carlow for its strong commitment to student support and | Colour rating for this Strategic Priority: Green |
| KSO 5: | engagement and notes the ample evidence provided that IT Carlow is a student-centred institution." Demonstrates consistent improvement in the quality of the learning environment with a clo | se eye to international best |
| | practice through a strong focus on quality & academic excellence | |
| KSO 5 Summary Statement | Institute of Technology Carlow's commitment to quality and academic excellence during the Compact successful conclusion of its CINNTE Institutional Review in June 2020. The Institute highly values the acceptance and advice facilitated by this review. Preparation for the review provided the Institute with appraise its activities, focusing on an all-encompassing evaluation of quality enhancement undertaken Review in 2010/2011. The Institute's self-evaluation review was conducted throughout 2019 building a monitoring and review of processes conducted throughout the Institute over several years. These includes the control of the con | dditional perspectives, an opportunity to critically since the last Institutional upon extensive and ongoing uded reviews of governance, |

Max. 4,200-character limit (550-600 words approx.)

evaluation review has identified a range of new opportunities and actions for the future in order to ensure additional positive outcomes for students, staff and stakeholders. These actions together with the 13 commendations and 12 recommendations from the International Review Team have been prioritised for implementation in the coming months and years.

The Institute continues to invest in its staff through CPD and support for undertaking PhD and other level 10 studies. Currently, over 51% of the Institute's full-time academic staff have a level 10 qualification.

The Institute continued to participate in U-Multirank, the international university performance comparative system. U-Multirank compares university performance across teaching and learning, research, knowledge transfer, international orientation and regional engagement. The Institute significantly improved its performance in U-Multirank 2021 with ten top A grades, which enabled it to be ranked 5th out of the 16 Irish HEIs that participated. In addition, the Institute was also the top ranked Irish HEI for Teaching and Learning and is the 21st ranked institution worldwide out of 1,948 HEIs for Teaching and Learning in U-Multirank 2021.

Evidence of consistent improvement in the learning environment is also seen in the non-progression rates of our full-time undergraduate new entrants at levels 6, 7 and 8, which decreased each year from 2016/2017 (23%) to 15% for 2019/2020 (Source: HEA Statistics Team).

The biggest challenge during the Compact period was undoubtedly the COVID-19 pandemic. Due to restrictions, all modules across all disciplines were delivered through blended learning from March to May 2020. Significant planning, infrastructural investment, training and support took place across the Institute from March 2020 to August 2021. Some of the initiatives undertaken included:

- On-campus orientation for all new learners including COVID-19 awareness training
- Introduction of a student mobile app to support communication and to provide easily accessible information to students
- Laptop loan scheme
- Increased ebook procurement
- Developed an online library seat booking system.

In June 2020, the Institute undertook a review of hybrid learning activity from March to May in order to continuously enhance delivery of hybrid learning across all programmes for the 2020/2021 academic year. Mindful of institutional capacities and capabilities, the Institute set guidelines on timetabling and supporting students. Alongside these, additional supports were made available through library and information services, which were accessible to students both on and off-campus.

Despite disruptions caused by the pandemic in 2020 and 2021, infrastructural developments included demolition of the former Carlow VEC secondary school on the main campus in 2020 and the completion of phase 2 of the South Sports Campus in 2021. The next phase of our capital development plan includes the construction of a 4,750m² Corporate Support Services Building, which commenced in

| | October 2021, and the developm the next 12 months. | ent of a 6,000m ² Advanced Science | e and Technology Building, which is | due to commence on site within |
|---|--|---|---|--|
| Strategic Priority 5.1 To prioritise the | Key Performance Indicators | Pre-compact Baseline 2018 | Overall Target 2018-2021 | August 2021 KPI Value Max. 210-character limit (30 words approx.) |
| Continuous Professional Development of all staff | % of full-time academic staff qualified to level 10 | 42% (Dec 2018) | >50% of full-time academic staff qualified to level 10 | 51.3% of full-time academic staff with a level 10 qualification (134/261) at the end of December 2021 (Source: IT Carlow Human Resources). |
| SP 5.1 Commentary Max. 1,400-character limit (200 words approx.) | The Institute continued to support the Continuous Professional Development of its staff throughout the Compact period. The Institute has made a significant investment in supporting academic staff who are undertaking level 10 studies, which is evident in the numbers with higher awards. In December 2021, over 51% of the Institute's full-time academic staff had a level 10 qualification, which surpassed the target of >50%, and 98.5% had a level 9 or higher qualification. For all academic staff (full and part-time), 47% had a level 10 qualification and 98% had a level 9 or higher (Source: IT Carlow Human Resources). | | | Colour rating for this Strategic Priority: Green |
| | The Institute's Teaching and Learning Centre (TLC) and HR Department provide CPD opportunities for academic and professional support throughout the academic year. In 2020/2021, the TLC provided accredited professional development modules to 12 staff cohorts consisting of 135 participants. In addition, the TLC organised scheduled non-accredited staff workshops and CPD sessions over three separate CPD weeks in September, November and February, with 695 participants availing of 66.75 hours of support offered. | | | |

| | In U-Multirank 2021, the Institute ranked in the five top performing universities in Ireland. The Institute received nine top A grades in U-Multirank 2021, which was up four from 2020. The Institute received a tenth A grade for the gender balance indicator. | | | |
|--|--|---------------------------|--|--|
| Strategic Priority 5.2 Building on our ICT infrastructure and | Key Performance Indicators | Pre-compact Baseline 2018 | Overall Target 2018-2021 | August 2021 KPI Value Max. 210-character limit (30 words approx.) |
| virtual learning environment, we will implement strategic pilot projects within existing programmes and cross-campus and develop an integrated institutional strategic plan for blended, flexible and distributed learning | Operation of blended, flexible and distributed learning | N/a | Review the operation of all programmes integrating with innovations in experiential learning, co-operative work based learning and collaborative provision; and teaching, learning and assessment strategies for learner inclusiveness and equity. | All programmes were reviewed as part of the Programmatic Review process in 2020/2021, culminating in virtual peer review/evaluation panels from 24 May to 4 June 2021. |
| SP 5.2 Commentary Max. 1,400-character limit (200 words approx.) | which included aligning with our new semesterised Academic Delivery Framework and integrating innovations in experiential learning, co-operative work based learning and collaborative provision. This is being rolled out in our postgraduate programmes and a limited number of undergraduate programmes in 2021/2022. To support the move to online learning/working, major IT developments were undertaken including increasing the capacity of the online learning platform and installing video capture enabled | | | Colour rating for this Strategic Priority: Green |
| | classrooms. The Institute engaged a hybrid learning model from September 2020, which is grounded in best pedagogical practice and is informed by staff/student feedback. An intensive quality assurance | | | |

exercise was undertaken of all programmes/modules and examined the alternative teaching, learning and assessment strategies proposed for each. This resulted in enhanced guidelines on group work/discussion, ethics, academic integrity and assessment guidelines. These were underpinned by continual CPD activity.

The importance the Institute places on academic integrity is reflected in its involvement and engagement in the National Academic Integrity Network.

Throughout 2020/2021, the numbers of students on campus were limited in accordance with the COVID-19 restrictions at the time.

KSO 6:

Demonstrates consistent improvement in governance, leadership and operational excellence.

KSO 6 Summary Statement

Max. 4,200-character limit (550-600 words approx.)

The culmination of the past 3 years' effort was the announcement on 2 November 2021 by the Minister for Further and Higher Education, Research, Innovation and Science that Institute of Technology Carlow and Waterford Institute of Technology would merge

and be designated as the South East Technological University on 1 May 2022. Work continues on a range of transitional imperatives to ensure that the new organisation will function effectively from the start, while progressing to a fully unified multicampus university of the highest international standing.

The Institute has a strong tradition and commitment to supporting the development of our people. The principal objective of this commitment is a triangulation of achieving institutional strategic goals, realising individual aspiration and ambition, and building capacity and future growth within an inclusive environment that promotes equality and values diversity. The Institute established a new senior executive role during this Compact period - the Director for People and Equality, Diversity and Inclusion (EDI). Since August 2020, the Director for People and EDI has led the development and implementation of a progressive, effective People and EDI strategy and structure that will advance the Institute's mission. The Director for People and EDI is a member of the Institute's Senior Management team, and further demonstrates how the Institute developed its leadership excellence over this 3-year Compact period.

The evidence that the Institute has consistently improved in governance, leadership and operational excellence is demonstrated by reviews of the effectiveness of Academic Council and Governing Body that were conducted in 2019/2020. The Institute and the Governing Body considered these reviews and this was followed by a self-assessment process in 2021/2022.

In late 2020, the CINNTE Institutional Review panel commended the Institute for its:

- Strong and effective management team, which is systematic in developing and implementing administrative processes and procedures for the Institute.

- Maintenance of strong financial discipline and a value for money culture over an extended period of time resulting in creation of significant surpluses for investment in both physical infrastructure and research capacity.

The Institute works continuously to embed its key values of Equality, Diversity and Inclusion through its leadership, governance, structures and operations. As the first Athena SWAN Bronze Award holder under the Expanded Charter in the Irish technological higher education sector, the Institute is to the forefront of many initiatives designed to advance gender equality, representation, progression and success for all.

In November 2021, the Institute was the first HEI across the technological sector to achieve faculty and departmental Athena Swan Bronze Awards for the Department of Computing and the Faculty of Engineering. Institute of Technology Carlow joins TCD and UL in having this award for their computing departments and joins TCD and UCD in having the Bronze award for their engineering faculties/schools/colleges.

The Institute's Ending Sexual Violence, Prevention and Support Committee was established in 2021 and is responsible for the review and implementation of governmental policy and procedures in relation to the Framework for Consent in Higher Education Institutions.

In January 2020, the Institute was one of just four HEIs in the technological higher education sector to secure a new Senior Academic Leadership post for Engineering Research and Innovation under Phase 1 of the National Senior Academic Leadership Initiative (SALI).

In March 2021, the Institute, in collaboration with WIT, Carlow College St Patrick's, LIT and Mary Immaculate College, received funding from the HEA's Gender Equality Enhancement Fund 2020 to roll out a gender identity and diversity training programme for staff in each of its colleges. The Institute is leading on the project entitled: The development and implementation of a gender identity, expression and diversity training programme for staff in Irish HEIs.

| Strategic Priority 6.1 | Key Performance Indicators | Pre-compact Baseline 2018 | Overall Target 2018-2021 | August 2021 KPI Value |
|--|---|--|---|--|
| To develop and implement a strategy | | | | Max. 210-character limit (30 words approx.) |
| to support and develop members of our Governing Body, Executive and Management Teams | Application for designation as a Technological University | The Institute entered into a new arrangement in Q4 2017 with WIT to further explore the creation of TUSEI. | Submission of an application for TU status and intended designation date of 1st January 2022. | The application by IT Carlow and WIT seeking to establish a technological university was submitted to the Minister for Further and Higher Education, |

| in fulfilling their roles to the highest standard | | | | Research, Innovation and Science on 30 April 2021. |
|---|---|-----------------------------------|---|---|
| | Compliance with governance requirements | N/A | Maintain compliance with governance requirements | The Institute has maintained compliance with all governance requirements. This is evidenced by the very positive CINNTE report and the annual governance statement submitted in February 2022 to the HEA. |
| SP 6.1 Commentary Max. 1,400-character limit (200 words approx.) | IT Carlow and WIT submitted an application in April 2021 for merger and designation as a technological university, followed by an evaluation by an international advisory group in July 2021. In November 2021, the Minister announced the establishment of the South East Technological University on 1 May 2022. The Institute prioritises supporting and developing members of our Governing Body, Executive and Management Teams in fulfilling their roles to the highest standard, as this is central to the successful achievement of becoming a technological university and also the implementation of recommendations from rolling governance reviews. Evidence of our progress over the past 3 years | | Colour rating for this Strategic Priority: Green | |
| | can be found from: | | | |
| | - CINNTE ISER 2019 - CINNTE Institutional Review Report 2020 | | | |
| | - Our response to the impact of COVID-19 | | | |
| | - Progress on the TU Project | | | |
| | - Our strong financial performanc | e over all 3 years of the Compact | | |
| | - Annual reports and financial statements published on itcarlow.ie | | | |

| | - The appointment of a senior executive position – Director for People and EDI. The Institute supports and develops members of the senior management and management teams in achieving excellence in their roles by facilitating access to extensive training opportunities. In 2019-2021, 38 members across both management teams received training in leadership, management, governance, data protection, health & safety, and EDI issues. | | | |
|--|--|---------------------------|--|--|
| Strategic Priority 6.2 To develop a strategy | Key Performance Indicators | Pre-compact Baseline 2018 | Overall Target 2018-2021 | August 2021 KPI Value Max. 210-character limit (30 words approx.) |
| and plan for the implementation of the 2018 Higher Education Gender Equality Task Force and the attainment of Athena Swan bronze institutional award | Athena SWAN Bronze Departmental Applications | N/A | Athena SWAN Bronze Applications to be submitted from at least 3 Institute of Technology Carlow Faculties/Departments — Engineering, Computing & Networking & Humanities. Commence preparation of Athena SWAN Bronze Applications in additional departments. | Three applications were submitted in 2020/21 from Dept Computing, Dept Humanities & Faculty of Engineering. The Institute is currently preparing an application for the Faculty of Lifelong Learning. |
| | Equal Pay Audit | N/A | Complete an external Equal Pay Audit, including a Gender Gap Analysis, to cover all Institute of Technology Carlow staff, both academic and PMSS. Commence benchmarking and planning to address gaps where identified and report findings to | An Equal Pay Audit is scheduled as part of the internal audit programme for 2021/2022. The audit committee prioritised an audit of IT systems for 2021 given recent cybersecurity attacks. |

| | | | Institute of Technology Carlow's Governing Body. | |
|---|--|---|--|---|
| | Equality Impact Assessment Form | N/A | Development and implementation of an Equality Impact Assessment Form for use across Institute of Technology Carlow. This will ensure that all future Institute of Technology Carlow policies, procedures and practices are examined from and EDI perspective prior to approval/implementation and that they are non-discriminatory and promote EDI across the Institute. | An Equality Impact Assessment Form has been developed and was implemented in July 2021. |
| SP 6.2 Commentary Max. 1,400-character limit (200 words approx.) | period. This plan is underpinned be systematically advance gender eq Core Hours for Meetings Policy, the | nent its Gender Equality Action Pla by 68 targeted, specific and measur quality in the Institute. Key delivera he provision of LGBTQ+ training to astitute Gender Identity and Expres | rable actions designed to bles included the introduction of staff, the development, along | Colour rating for this Strategic Priority: Green |
| | Institute rolled out a number of to students, both on Active Consent | ramework for Consent in Higher Edraining workshops and seminars in and Offering Support in the Aftern the Ending Sexual Violence, Prever on of the Framework. | 2019 and 2020 for both staff and nath of Rape and Sexual Assault. | |
| | Award applications in June 2021 a | nd Faculty of Engineering submitted and were successful in November 2 updated application on 30 April 202 | 021. The Department of | |

Section D: Signature

Note: This section should be signed by the President or on behalf of the President.

| Name of signatory | Dr Patricia Mulcahy |
|-------------------|---------------------|
| Title | President |
| Signature | Dr Patricia Mulcahy |
| Date | 8 April 2022 |