



INSTITUTE *of*  
TECHNOLOGY  
CARLOW

Institiúid Teicneolaíochta Cheatharlach

**Institute of Technology Carlow**  
**Self-Evaluation Report**  
**Strategic Dialogue Cycle 4**

Submission to the Higher Education Authority  
16th May 2017

## 2030 VISION

*"To be Ireland's Leading Technological University,  
Inspiring Individuals - Transforming Society"*

Institute of Technology Carlow  
Strategic Plan 2014-2018



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# PRESIDENT'S OVERVIEW OF INSTITUTIONAL PROGRESS/ OVERARCHING STATEMENT

*“Our vision is for a connected multi-campus higher education institution:*

- That acts as a focal point for leadership, innovation and policy direction, connecting our regions internally and externally for maximum economic and social impact.*
- That is an education continuum in which we interact with our learners, researchers and collaborative partners throughout their lifetimes, empowering them to respond to their changing goals and needs.*
- That has an academic community that increasingly transcends traditional disciplinary boundaries to facilitate the generation of new cross-disciplinary ideas, programmes and research not possible in more traditional faculty settings.*
- That has a culture of engagement and innovation that endeavours to ensure no discernible barriers between our campuses and the community”.*

Institute of Technology Carlow  
2016 Mid-Term Review  
Strategic Plan 2014-2018

## GENERAL INTRODUCTION AND STRATEGIC CONTEXT

The overall challenge for Institute of Technology Carlow encapsulates an organisation that aims to develop and grow across a wide range of strategic priorities while maintaining and enhancing a high level of quality in a heavily resource-constrained environment. The strategic response to these challenges have been informed by the framework outlined in Figure 1 – the drivers of change in higher education.

Notwithstanding the various environmental challenges, Institute of Technology Carlow recognises the advantages which has enabled it to continue an upward trajectory year-on-year across a range of activities and empowering an increasing number of professionally-ready graduates to make a significant, sustainable and socially responsible contribution to our regions and country, while simultaneously positioning the institute for technological university designation. Table 1 presents representative five-year developmental metrics that demonstrate this. The growth in student population at Institute of Technology Carlow is presented in Figures 2 and 3, while the accompanying increasing graduate output is presented in Figure 4. The scale of the Institute's response to increasing national demographics and demand for higher education from 2010/2011 to 2015/2016 is positioned within the national response of higher education providers in Figures 5 and 6.

Institute of Technology Carlow is a values-led higher education provider which positions the quality of the learner experience centre-stage, supported by a commitment to knowledge development and the

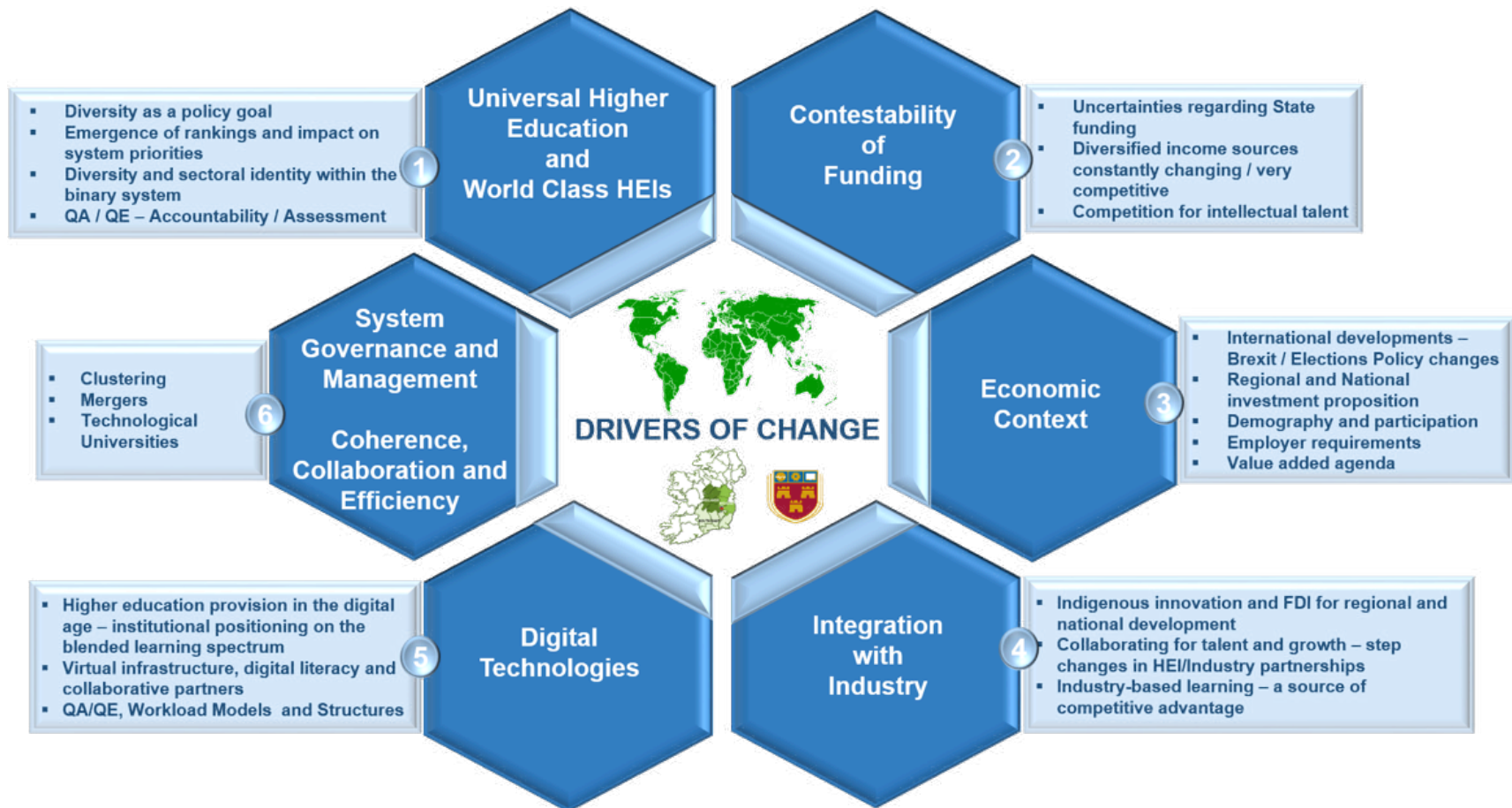
achievement of excellence, to creativity and innovation, to connectivity with our regions and the world (Strategic Plan 2014-2018, [itcarlow.ie/resources/strategic-plan.htm](http://itcarlow.ie/resources/strategic-plan.htm)). Engage, Learn, Challenge and Innovate represent the pillars of the mission of the Institute and provides the overarching principles under which the mission, strategies and operations of the Institute are aligned. Institute of Technology Carlow is fully committed to further developing its role as an exceptional economic and quality of life driver within the regional, national and international higher education landscape.

With particular reference to this fourth and concluding round of performance reporting on Compact 2014-2016, the HEA has indicated that they are particularly interested in HEIs demonstrating a strategic approach; reporting on progress towards targets, self-analysis, actions taken in response, lessons learned and good practice that can be shared. Goal 5 (Reputation, Public Confidence and Sustainability) of the Institute's Strategic Plan 2014-2018 is therefore particularly relevant as it highlights our strong commitment to the development of "an internationally oriented organisation, with a robust self-evaluation, peer review and quality enhancement culture, as we strive to embody the highest international standards of provision, transparency and stewardship of resources".

Our Institute-wide culture of informed strategic thinking, integrated planning / prioritisation and risk management is demonstrated by the outcomes of a series of self-evaluations and peer reviews conducted throughout 2012-2016. The primary reviews are summarised in Figure 7 and have been designed to address quality enhancement across all endeavours. This culture is underpinned by innovation, resource development and widespread connectivity with our constituencies. This is demonstrated by the results and progress detailed in this review while operating within a particularly challenging funding and regulatory framework for the Technological Sector.

*"The challenge encapsulates an organisation that aims to develop and grow across a wide range of strategic priorities while maintaining and enhancing a high level of quality in a heavily resource-constrained environment."*

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**Figure 1** The drivers of change in higher education which provide the context for strategic planning, implementation and risk management at Institute of Technology Carlow.

**Table 1** Representative Five Year Developmental Metrics for Institute of Technology Carlow (year-on-year trends are presented in Appendix 2)

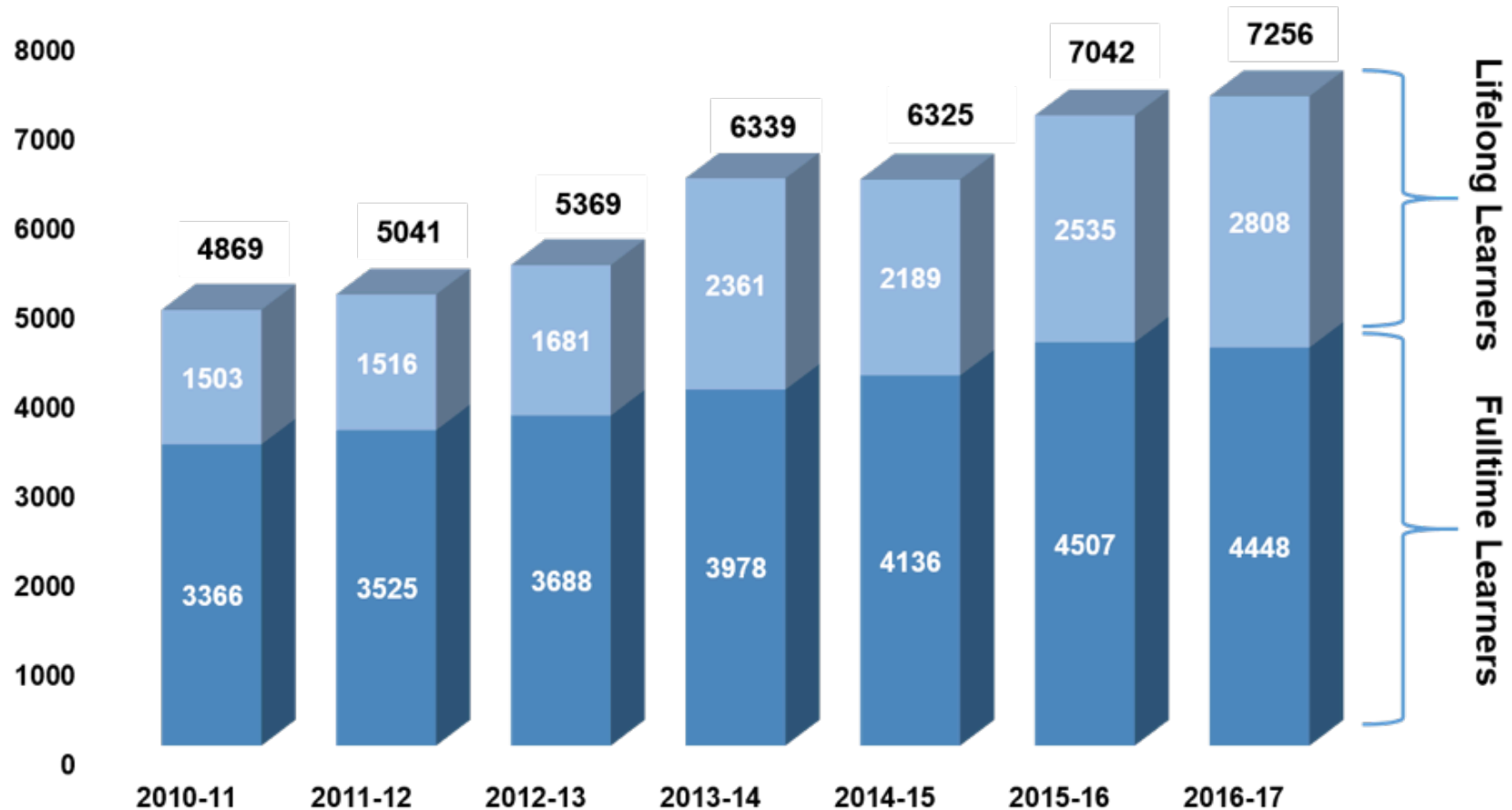
METRIC	2012	2016	CHANGE
<b>OVERALL INSTITUTIONAL PERFORMANCE WITHIN IRISH HIGHER EDUCATION</b> (Source: HEA)			
HEA Performance Review SDC2 Outcome for 2014	Not applicable	Category 1	<b>New development</b>
HEA Performance Review SDC3 Outcome for 2015	Not applicable	Category 1	
<b>GRADUATES</b> (Source: SRS 2011/12 and 2015/16)			
Total Graduates	1544	2591	<b>+68%</b>
Graduates – Major Awards	1445	1949	<b>+35%</b>
% Level 9 and 10	1.4%	7.7%	
% Level 8	46.8%	51.8%	
% Level 6 and 7	51.8%	40.0%	
Graduates – Minor Awards	99	642	<b>6.5-fold increase</b>
<b>STUDENT NUMBERS</b>			
Total Students (Headcount) and the Technological Sector (Source: HEA Enrolment Statistics 2011/12 and 2015/16)	7th largest of 14 IoTs	4th largest of 14 IoTs	<b>Up 3 places</b>
	<b>29% LLL students, 4th highest amongst the 21 IoTs and Universities</b>		
WTE Student Population and the Technological Sector (Source: HEA RGAM Grant Allocation Workbook for IoTs 2015/16 Student Numbers for 2017 Allocation)	4554 WTE (6.7% mrk. share)	5525 WTE (8.0% mrk. share)	<b>+21%</b>
	<b>28% WTE LLL students, the highest of the 14 IoTs (equivalent university data not available)</b>		
<b>STUDENT NUMBERS</b> (Source: SRS 2011/12 and 2016/17)			
Total Students (Headcount)	5041	7258	<b>+44.0%</b>
Total Students FT (Headcount)	3525	4450	<b>+26.2%</b>
Total Students LLL (Headcount)	1516	2808	<b>+85.2%</b>
Total Students (WTE)	4554	5970	<b>+31.0%</b>
Weighted Student Numbers (WSN)	6376	8450	<b>+32.5%</b>
FT STEM Students	1162	1630	<b>+40.4%</b>
Springboard	72	235	<b>3.3-fold increase</b>
	<b>4th highest % Springboard participants of the 14 IoTs (equivalent university data not available)</b>		
	(Source, HEA RGAM Grant Allocation Workbook for IoTs 2015/16 Student Numbers for 2017 Allocation - Headcount)		

METRIC	2012	2016	CHANGE
<b>POSTGRADUATE LEARNERS</b> (Source: HEA 2011/12 and 2015/16)			
Total Postgraduates (Headcount) and Technological Sector (Source: HEA Enrolment Statistics 2011/12 and 2015/16)	140	620	<b>4.4-fold increase</b> <b>9% postgraduate students, the 3rd highest of the 14 IoTs</b>
WTE Postgraduates and the Technological Sector (Source: HEA RGAM Grant Allocation Workbook for IoTs 2015/16 Student Numbers for 2017 Allocation)	119	561	<b>4.7-fold increase</b> <b>10.3% WTE postgraduates, the 2nd highest of the 14 IoTs</b>
<b>INTERNATIONAL</b> (Source: SRS 2011/12 and 2016/17)			
% International FT (Erasmus plus Non-EU)	5%	9%	<b>+4.0%</b>
Non EU International Students	126	236	<b>+87.3%</b>
	<b>4th highest % International/Non EU participants of the 14 IoTs</b> <b>(equivalent university data not available)</b> (Source, HEA RGAM Grant Allocation Workbook for IoTs 2015/16 Student Numbers for 2017 Allocation - Headcount)		
'Other' Nationalities on Campus (15% Total)	69	88	<b>+27.5%</b>
Formal Agreements with International HEIs	33	47	<b>+42.0%</b>
<b>ACCESS, RETENTION AND STUDENT SATISFACTION</b> (Source: SRS 2011/12, 2015/16 and 2016/17; ISSE)			
HE-Funded FT Students	<b>51%</b>	<b>54.5%</b>	<b>+3.5%</b>
Formal Agreements with FET Providers	<b>0</b>	<b>34</b>	<b>New development</b>
Presence Rate Level 8 FT Students	<b>81%</b>	<b>89%</b>	<b>+8.0%</b>
Presence Rate All FT Students	<b>78%</b>	<b>84%</b>	<b>+6.0%</b>
Progression Rate Source, HEA, A Study of Progression in Irish Higher education 2013/2014 to 2014/2015, March 2017	<b>Progression rates for Levels 6, 7 and 8 are 81% (2nd highest in sector), 79% (1st in sector) and 86% (3rd in sector), respectively. The overall progression rate for all levels combined is 83% which is the highest in the sector and just 2% below the national average for the Universities, Institutes and Colleges.</b>		
ISSE – ITC Student Satisfaction (Final Year)	78% (2014 ISSE)	86% (2016 ISSE)	<b>+8.0%</b>
ISSE – ITC Student Satisfaction (First Year)	81% (2014 ISSE)	88% (2016 ISSE)	<b>+7.0%</b>

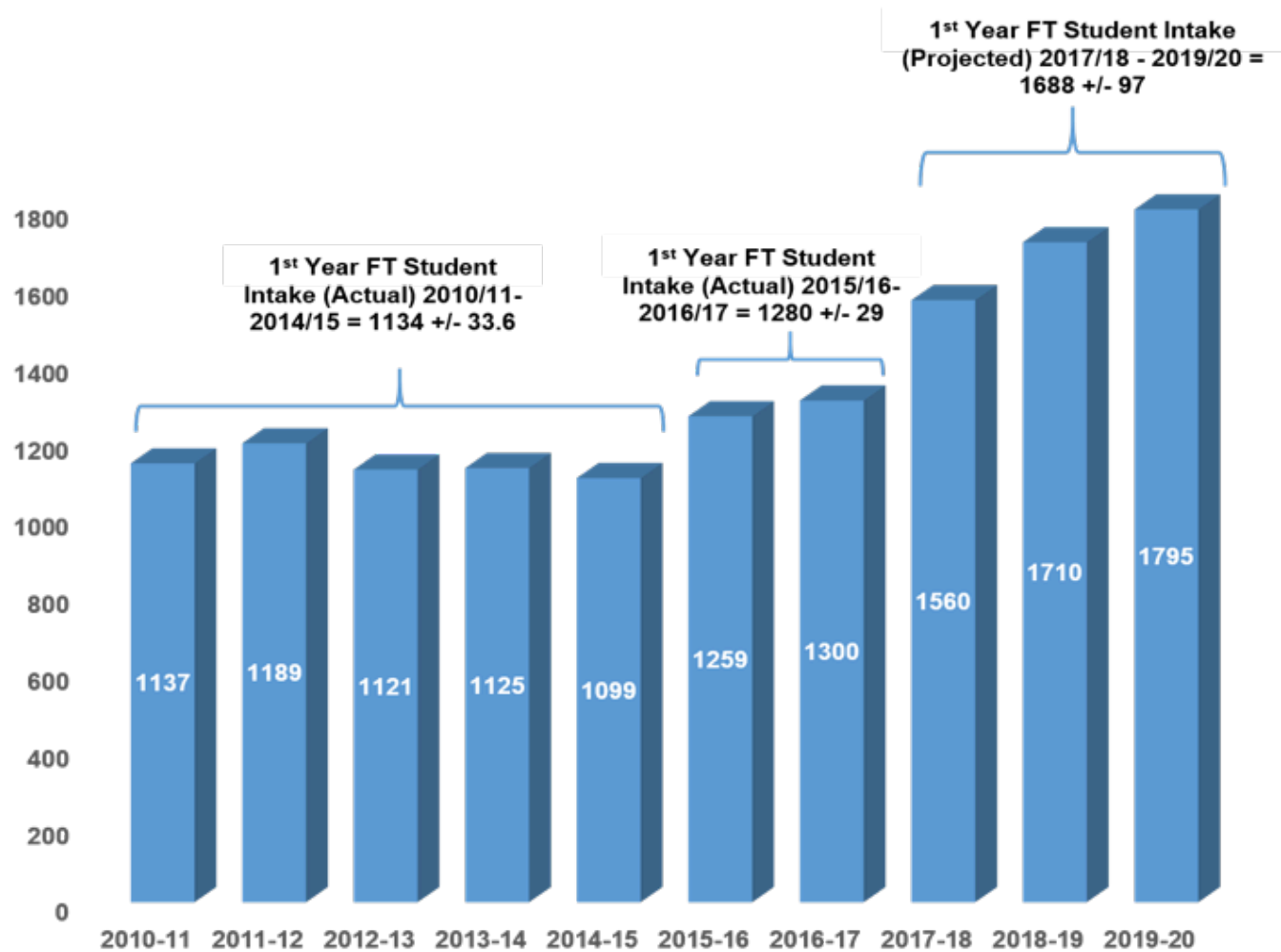
METRIC	2012	2016	CHANGE
<b>ACADEMIC STAFF QUALIFICATIONS</b>			
FT Academic Staff L10 Qualified	18.0%	31.7%	<b>+13.7%</b>
FT Academic Staff Pursuing L10 Qualifications	2.6%	17.6%	<b>+15.0%</b>
FT Academic Staff L9 and / or L10 Qualified	83.0%	96.0%	<b>+13.0%</b>
% FT Academic Staff Active in Postgraduate Research Supervision (L9/10)	4.6%	32.7%	<b>+28.1%</b>
<b>STAFF NUMBERS</b>			
Total Staff (WTE)	357	433	<b>+21.0%</b>
Total Academic Staff (WTE)	210	270	<b>+28.6%</b>
Total Staff (Headcount)	621	760	<b>+22.0%</b>
<b>NEW PROGRAMME DEVELOPMENT</b>			
Taught Programmes L6/7 (Major, OIC)	55	66	<b>+20%</b>
Taught Programmes L8 (Major, OIC)	40	64	<b>+60%</b>
Taught Programmes L9 (Major, OIC)	2	35	<b>17.5 fold increase</b>
<b>INCOME</b> (Source: Institutes audited accounts)			
Total Income	35,289,000 (Yr. ending Aug. 2012)	41,474,000 (Yr. ending Aug. 2016)	<b>+17.5%</b>

**Abbreviations:** SDC2, HEA Strategic Dialogue/Performance Funding Cycle 2; SDC3, HEA Strategic Dialogue/Performance Funding Cycle 3; FT, Fulltime Learners; LLL, Lifelong Learners; WTE, Whole Time Equivalent Learners; IoTs, Institutes of Technology; SRS, Student Record System; STEM, Science, Technology, Engineering and Mathematics; FET, Further Education & Training; ISSE, Irish Survey of Student Engagement; OIC, Order in Council.





**Figure 2** 49% Growth in the student population at Institute of Technology Carlow 2010/11 to 2016/2017 (Source, SRS). (Note that the first four years are not directly comparable with the latter three years due to new reporting exclusions and categorisations introduced by the HEA). The increase over this time period has primarily been due to expansion of progression opportunities and flexible forms of delivery, enhanced progression rates and increases in international learners (1st year entrants averaged: 1134+/-33.6 over 2010/11 to 2014/15 and 1280+/-29 over 2015/16 to 2016/17- see Figure 3). Assuming current patterns of participation in higher education in the primary catchment area of the Institute, current market share of higher education new entrants from the post-primary sector and availability of the necessary additional infrastructural and recurrent resources, it is projected that student numbers could increase to 9,300 (5,800 FT and 3,500 LLL equating to approximately 8,000 WTE) by 2020.



**Figure 3** Actual (2010/11 – 2016/17) and Projected (2019/2020) fulltime first year entry to Institute of Technology Carlow, assuming current patterns of participation in higher education in the primary catchment area of the Institute, current market share of higher education new entrants from the post-primary sector and availability of the necessary additional infrastructural and recurrent resources. These projections would result in an increase in fulltime learners to approximately 5,800 in 2019/2020 and a total student population of 9,300.

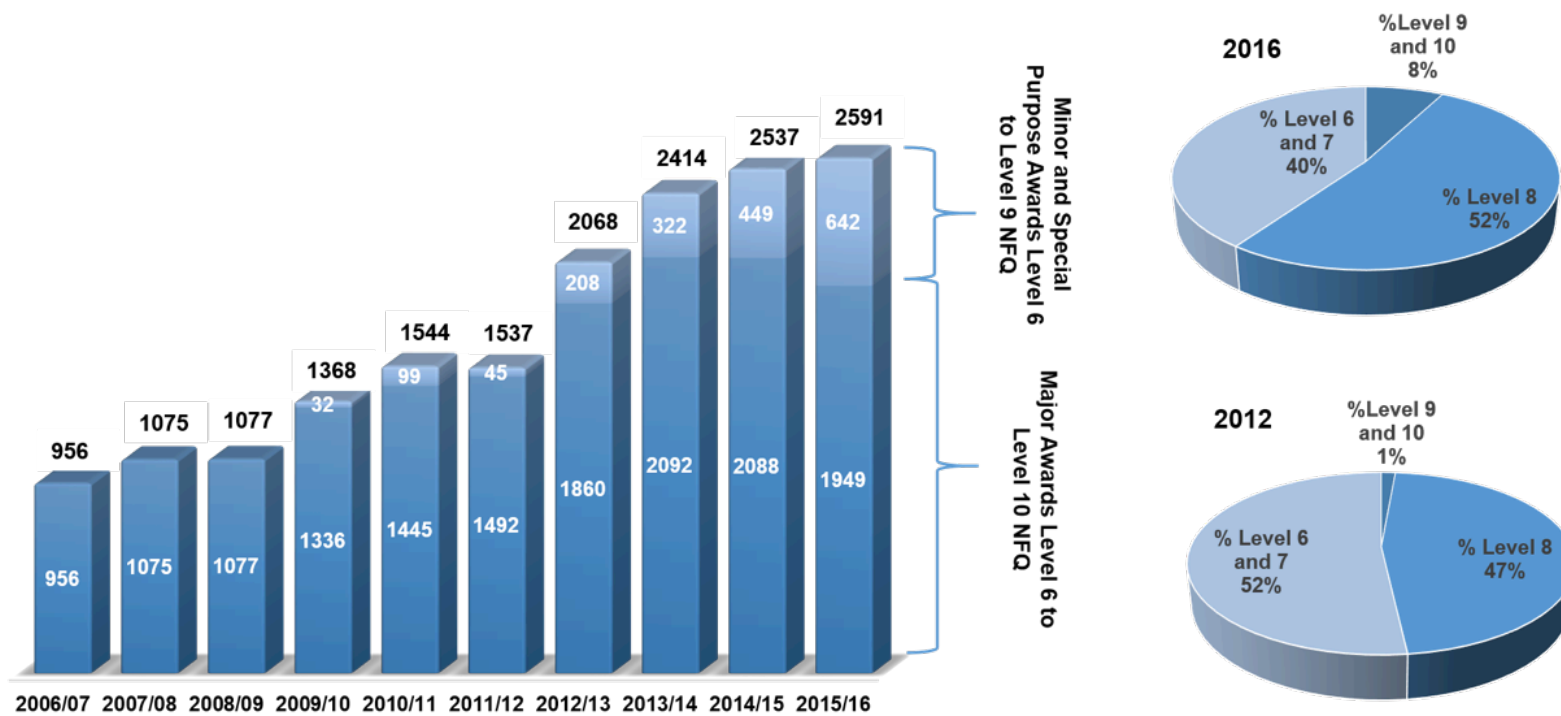
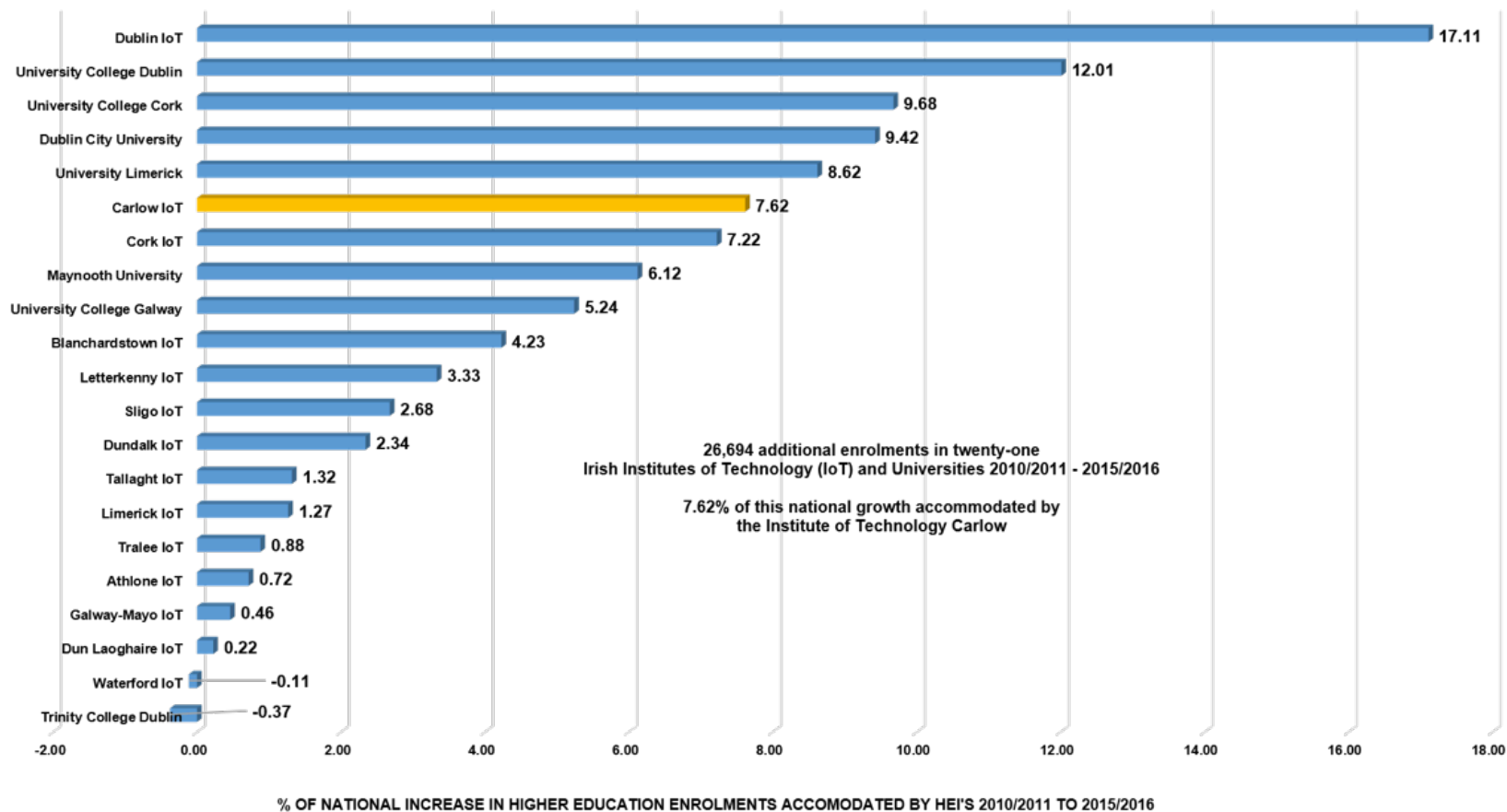


Figure 4 Graduate output at Institute of Technology Carlow 2007 to 2016 across Science, Engineering, Computing, Business and Humanities (Source, SRS).



**Figure 5** National increase (%) in higher education enrolments over 2010/2011 to 2015/2016 accommodated by the twenty-one Irish Institutes of Technology and Universities (Source, HEA Enrolment Statistics).

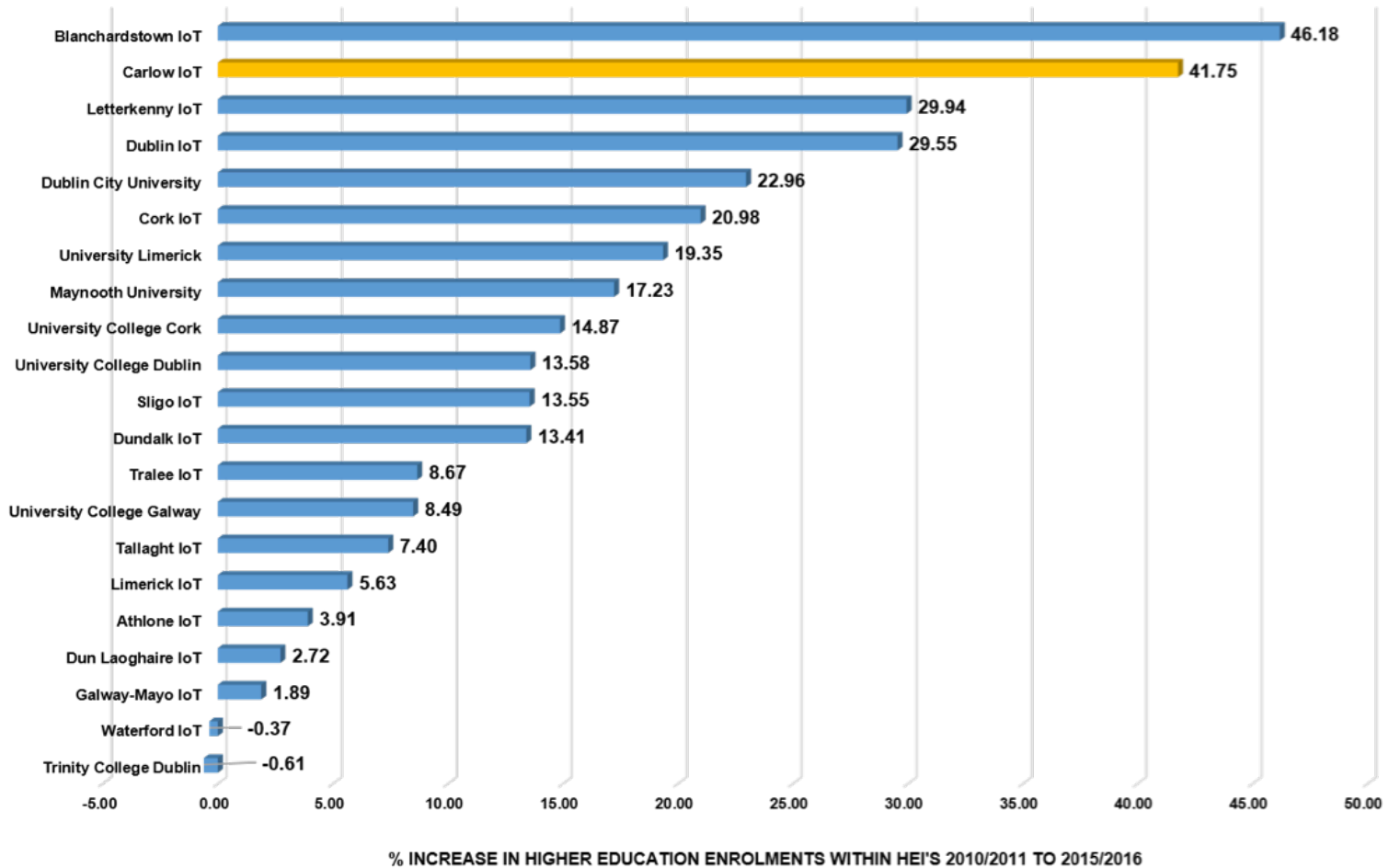
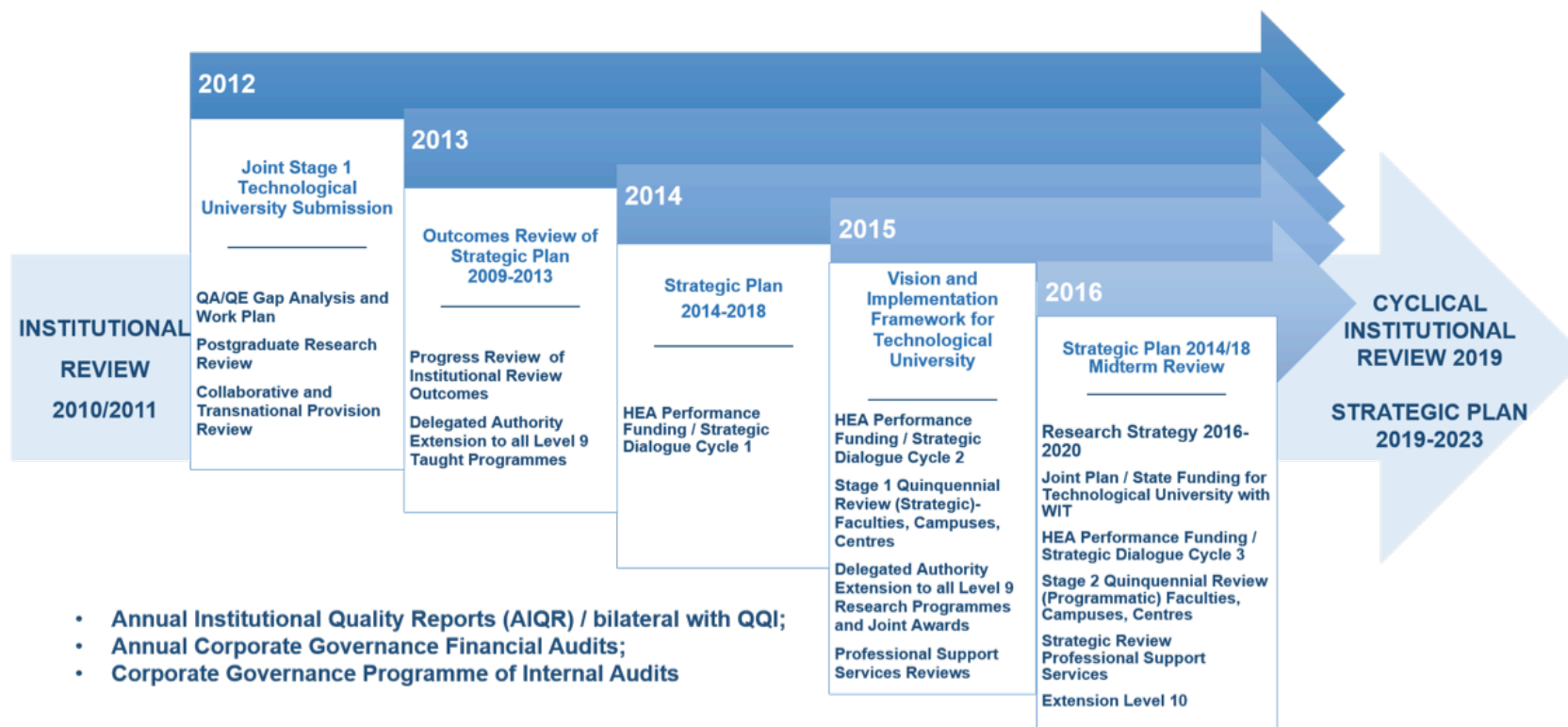


Figure 6 Growth (%) within individual HEIs over the time period 2010/2011 to 2015/2016 (Source, HEA Enrolment Statistics).



**Figure 7** Overview of Institute of Technology Carlow strategic planning, reviews and quality enhancement initiatives and milestones 2012-2016. Further information can be found at [www.itcarlow.ie/resources/quality.htm](http://www.itcarlow.ie/resources/quality.htm).

Through the series of reviews and consultations summarised in Figure 7, we have benefitted greatly from the perspectives, experience and advice of a wide range of national and international experts and stakeholders across the public and private sectors. This has been central to our progress and we are grateful to all members of the various review panels for giving so generously of their time and expertise. The Institute has in place processes and systems that regularly review the effectiveness of our response to the feedback from such reviews and consultations at all levels within, and across, our organisation.

Within this context, the Mission-based Performance Compact 2014-2016 and the Strategic Dialogue process has been an important and valuable development. At an institutional level, it has provided a much more informed and focused engagement with the HEA and expert panels on the Institutes contribution to an evolving higher education system and response to new national policies and imperatives. This experience has been both informative and encouraging for Institute of Technology Carlow. At a systems level, it is in the interests of all that the HEA, as the statutory funding authority, statutory planning and policy-advisory body for higher education and research in Ireland, is equipped with the highest-quality and evidence-based information on the collective and coordinated development of the countries HEIs.

This final report on Compact 2014-2016 demonstrates that Institute of Technology Carlow has addressed all of its agreed 2016 targets with two in progress (these relate to the merger and technological designation). All others have been met or exceeded.

As detailed in Section 7 on Institutional Consolidation, the Institute has made very significant progress on all fronts in terms of meeting and exceeding

national technological university designation criteria. The Institute has also conducted significant research on national and international exemplars to inform the vision and implementation framework for a South East Technological University.

Joint vision and merger planning discussions have been ongoing with Waterford Institute of Technology since 2012 and it is well documented that the project faced a series of significant challenges unique to the South East project. These were verified by an independent review of the project commissioned by the Minister for Education and Skills in 2015 (Kelly Report, 2015; [www.education.ie/en/Publications/Education-Reports/Engagementand-Consultation-Process-on-a-Technological-University-for-the-South-East.pdf](http://www.education.ie/en/Publications/Education-Reports/Engagementand-Consultation-Process-on-a-Technological-University-for-the-South-East.pdf)). The seven challenges unique to the South East TU project identified are presented in Appendix 9.

This project has been a substantial learning experience for the two Institutes and its stakeholders and we remain fully committed to a better-informed, supported and substantive effort and approach focussed on delivering for stakeholders. The new drivers for the project are summarised in Section 7 and include funding support from the HEA, a commitment from the leadership in both Institutes to make a joint submission for Technological University designation within a three-year timescale; a new draft MOU which provides inter alia for a revised governance and management framework for the project; and a commitment to build additional positive collaborative experiences across and between all levels of both Institutes in line with the Kelly (2015) recommendations. Within this context, finalisation and enactment of the Technological Universities Bill is an imperative.

## POLITICAL AND REGULATORY INFLUENCES

The goal of Ireland 2040 proposed by Taoiseach Enda Kenny is “to secure sustained long term and regionally balanced progress on social, economic and environmental fronts.” (Merrionstreet.ie 6/3/17). Much is therefore expected of Institute of Technology Carlow, particularly at an intraregional (counties of the South-East region), interregional (South-East, Mid-East and Midlands regions) and Southern Regional Cluster (comprised of the South-West and South-East regions) level. The Institute is a vital source of exceptional talent with credible credentials, new knowledge, innovative thinking and leadership. The Institute contributes to innovation, attracting talent and business investment into the regions, while also acting as an agent of social justice and mobility. This is particularly relevant at this time of rapid population growth (Figure 8) and a renewed emphasis on balanced regional development for economic and social recovery.

The drivers of change in higher education summarised in Figure 1 provide the context for strategic planning, implementation and risk management at Institute of Technology Carlow. Through Strategic Plan 2014-2018 the Institute set new ambitious and challenging targets which were developed through a broad and inclusive consultative process conducted throughout 2012/2013 and informed by a detailed environmental analysis which included the National Strategy for Higher Education to 2030 (Hunt 2011) and the HEA’s vision for the future of Irish higher education (HEA’s Strategic Plan 2012–2016).

The Mission-based Performance Compact 2014-2016 between the Institute and the HEA was developed in accordance with new national policy and implemented as an integral part of Strategic Plan 2014-2018. This concluding review of Compact 2014-2016 coincides with a mid-term

review of progress on the overall Strategic Plan 2014-2018 which was conducted throughout 2016. The objective of this mid-term review was to gain a retrospective view of the effectiveness of the plan to-date and a prospective view and refinement of priorities and strategic initiatives for the next two years of this current planning and implementation cycle. The Midterm Review Strategic Plan 2014-2018 (Appendix 1) therefore provides further context for this Compact 2014-2016 review.

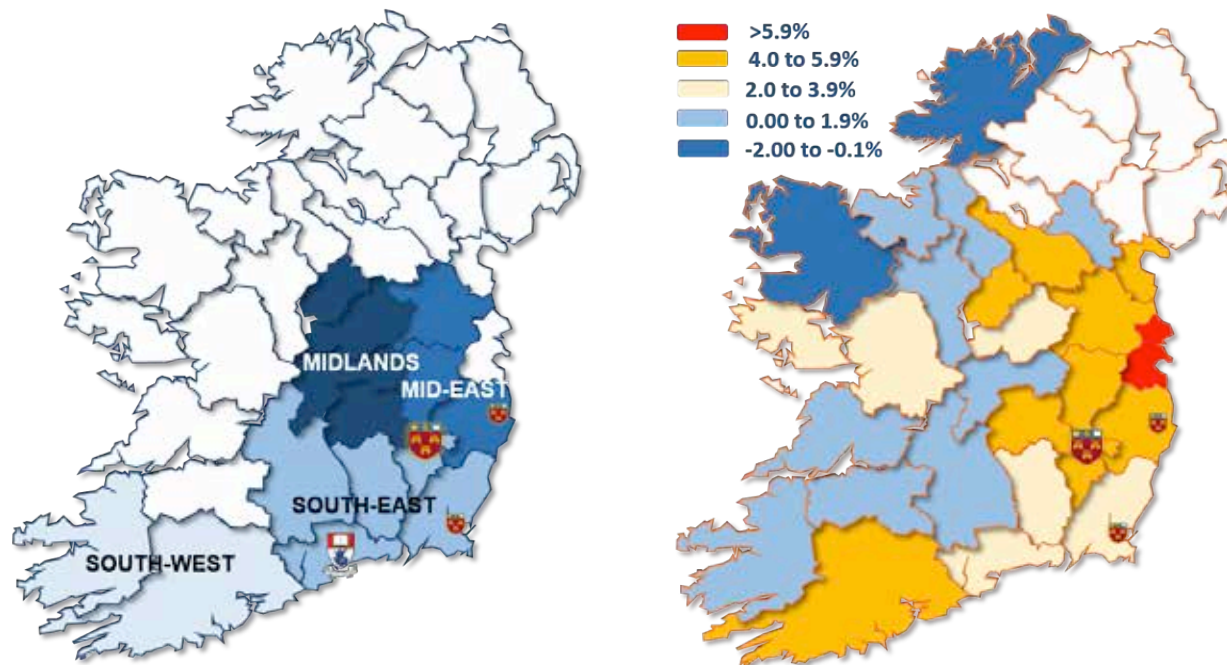
Our vision is to be Ireland’s leading technological university by 2030; an ambitious vision and a challenging one that represents the development of a mature institution with an important leadership role in the regional economic and social landscape. The development of a technological university, in line with Government policy, comprising an integrated regionally-engaged multi-campus organisation with a significant and balanced presence in Carlow, Kilkenny, Waterford and Wexford, would be a major strategic asset to drive regional development in the South East and adjoining counties (Engagement and Consultation Process on a Technological University for the South-East, Kelly, 2015). The existing campuses of both Waterford and Carlow institutes are well placed to provide a recognisable north/south axis to the region and this has the potential to provide a strong back bone to an otherwise diverse area.

It is well established that the Irish higher education system has undergone deep financial cuts since 2008. Uncertainty currently surrounds its collective ability to respond adequately to ongoing demographic trends and Ireland’s future social and economic development needs (Investing in National Ambition: A Strategy for Funding Higher Education. Report of the Expert Group on Future Funding for Higher Education, 2016). This funding

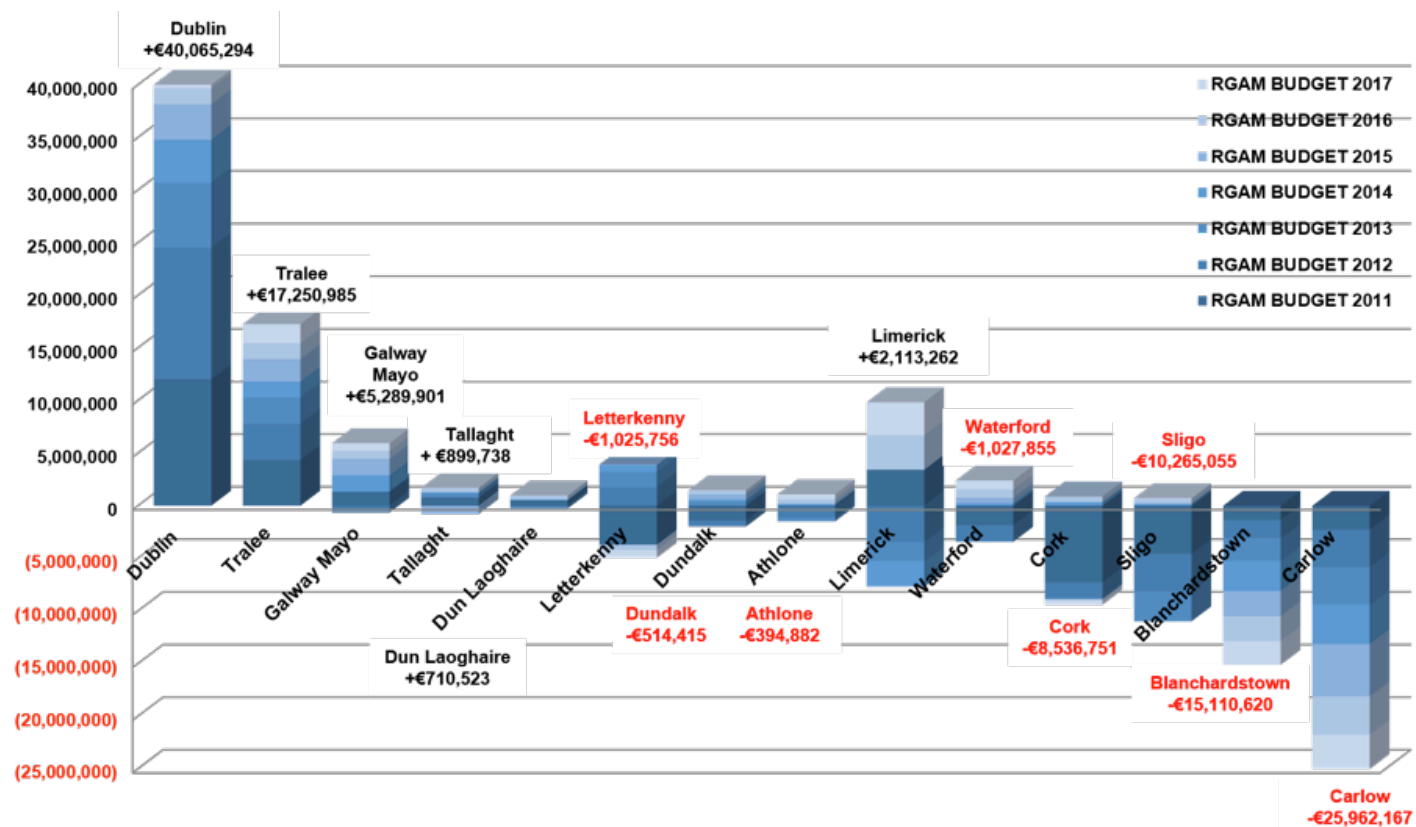


challenge is increased for the technological sector of higher education which has been disproportionately affected by the various austerity measures to-date (Presentation to the Joint Oireachtas Committee on Education and Skills, Report of the Expert Group on Future Funding for Higher Education, THEA Ireland, November 2016). The funding challenge is further increased for Institute of Technology Carlow due to legacy

inequities in core funding for individual HEIs and the current configuration of the funding model generally for higher education (Figure 9). Within this context, Institute of Technology Carlow welcomes the HEA Review of the Funding Allocation Model for HEIs currently underway and the ongoing HEA Review of Capital Investment Priorities.



**Figure 8** Strategic geographic location of Institute of Technology Carlow in terms of regional development, on the cusp of the South-East, Mid-East and Midlands Regions (left map) and national demographic changes over the time period 2011 to 2016 (right map, Central Statistics Office, Ireland) impacting on the demand for higher education in the catchment area of Institute of Technology Carlow. Ireland's population in April 2016 was 4,761,865. This is an increase of 3.8% since April 2011. Institute of Technology Carlow's immediate catchment area has grown at a faster rate of >5.0%. This has provided the context for the growth in learners at Institute of Technology Carlow (49% growth between 2010/11 and 2016/17 alone).



**Figure 9** Cumulative funding gap (State core grant) to HEIs within the technological sector of the Irish higher education system 2011-2017 based on the current HEA RGAM funding model. The current funding model is not equipped to accommodate growing or falling student numbers in the Institute of Technology sector. For example, the cumulative core funding shortfall for Institute of Technology Carlow between 2011 and 2017 amounts to €25,962,167. This is equivalent to approximately 20% of the total funds received over the time period through the core grant. The existing system of allocating recurrent funding evolved when the HEA took over responsibility for allocating funding to the technological sector in 2006 (in addition to the university sector), when a set % of core funding was ring-fenced for the two parts of the HEI binary system. From this starting point two very different funding models have evolved. For the university sector the bulk of funding is allocated as fee grant to which no moderator applies. For the technological sector, the bulk of funding is allocated by way of core grant to which a 2% moderator cap is applied. In the university sector, tuition fees (excluding student contribution) are approximately five times the fee for Business, Humanities, Science and Computing Level 8 degrees, and nearly three times for Engineering disciplines. The resulting core grant per student is lower in the university sector, but the absence of a moderating cap on the tuition fee element gives greater certainty and encourages institutions to provide more places. The growth in the university sector reflects the greater fiscal return under their funding model.

## DEMOGRAPHIC AND GEOGRAPHIC INFLUENCES

Early career outcomes for Institute of Technology Carlow graduates is high at 93% employment at graduation, rising to 96% within six months of graduation. A 2016 review of the top employers of 11,000 of our 50,000 (approx.) graduates to-date confirmed careers in many top Information Technology, Pharmaceutical and Finance companies across the globe (Figure 10). Against this backdrop there is considerable work being done on a cross- and inter-agency level under the auspices of the Department of Education and Skills-led Regional Skills Fora ([regionalskills.ie](http://regionalskills.ie)) and the Department of Jobs, Enterprise and Innovation-led Regional Action Plans for Jobs Implementation Groups ([djei.ie](http://djei.ie)). The South East region underperforms under a number of key indicators (e.g. Table 2 and Building a Better Future: It's Everyone's Business; IBEC submission to the Public Consultation on the National Planning Framework, March 2017). Key industry sectors with capacity issues identified through the South East Action Plan for Jobs Implementation Group are summarised in Figure 11 and the Institute is leading actions in these areas.

The primary advantage and challenge for the Institute is its highly strategic geographic location which combines a rural location 50 minutes from the largest population centre in the country. Institute of Technology Carlow is located within the boundary of the South East Region but is on the borders of two other regions, the Midlands and Mid- East, and is also now firmly within the newly defined 'Dublin sprawl'. The finding in the Ireland 2040 position paper that "there is a correlation between large urban areas and regional economic activity" has a particular impact on the South East where Waterford City is not of sufficient scale to influence the wider region.

Population projections from the CSO continue to indicate strong growth in the Dublin, Mid East, Midlands and South East regions. Forecasting from data provided by the statistics section of the Department of Education and Skills, the post-primary population in the Institutes catchment area will increase by over 17,000 by 2021 (19% increase, - see Figure 12) with a further increase to 2025 of 11% projected.

The immediate challenge for Institute of Technology Carlow therefore relates to demographics, capacity and access.

Our detailed projections for the future are based on the 12,721 actual increase in secondary school enrolments experienced in our immediate catchment from 2007 to 2015 and the projected additional increase of 17,452 in secondary school enrolments in the same area 2016-2021. The total increase is 30,173 second level learners from 2007-2021 (Figure 12). This forecasts a potential increase in the total learner population at Institute of Technology Carlow from 7258 (approximately 6,000 WTE) in the current academic year to approximately 9,300 (approximately 8000 WTE) by 2020. Following a 44% increase in learners since 2011/2012, this represents a further overall increase in total enrolments of 30% assuming maintenance of current participation rates for full-time and lifelong learners. The Institute is currently meeting the demands of the region with assistance from non-State funding revenue streams, but these are susceptible to market trends and are not a sustainable foundation on which to build future growth of an institution within the existing funding model and regulatory framework.

<b>TOP TEN COMPANIES EMPLOYING INSTITUTE OF TECHNOLOGY CARLOW GRADUATES</b> (Source LinkedIn, March 2016 – Sample size 11,000)		
<b>INFORMATION TECHNOLOGY</b>	<b>PHARMACEUTICAL</b>	<b>FINANCE</b>
<ol style="list-style-type: none"> <li>1. Intel</li> <li>2. IBM</li> <li>3. UNUM</li> <li>4. SAP</li> <li>5. LotusWorks</li> <li>6. Hewlett Packard</li> <li>7. Dell</li> <li>8. Apple</li> <li>9. Accenture</li> <li>10. Microsoft/Ericsson</li> </ol>	<ol style="list-style-type: none"> <li>1. Pfizer</li> <li>2. MSD</li> <li>3. Boston Scientific</li> <li>4. Abbott</li> <li>5. Stryker</li> <li>6. Allergan</li> <li>7. Medtronic</li> <li>8. Eli Lilly</li> <li>9. Novartis</li> <li>10. Sanofi Genzyme</li> </ol>	<ol style="list-style-type: none"> <li>1. Bank of Ireland</li> <li>2. AIB</li> <li>3. State Street</li> <li>4. BNY Mellon</li> <li>5. Citibank</li> <li>6. Ulster Bank</li> <li>7. Zurich Insurance</li> <li>8. PwC</li> <li>9. VHI</li> <li>10. Permanent TSB</li> </ol>

**Figure 10** The top ten Information Technology, Pharmaceutical and Finance companies employing Institute of Technology Carlow graduates. This study was conducted using LinkedIn profiles of 11,000 Institute of Technology Carlow graduates in March 2016.

Figure 11 A

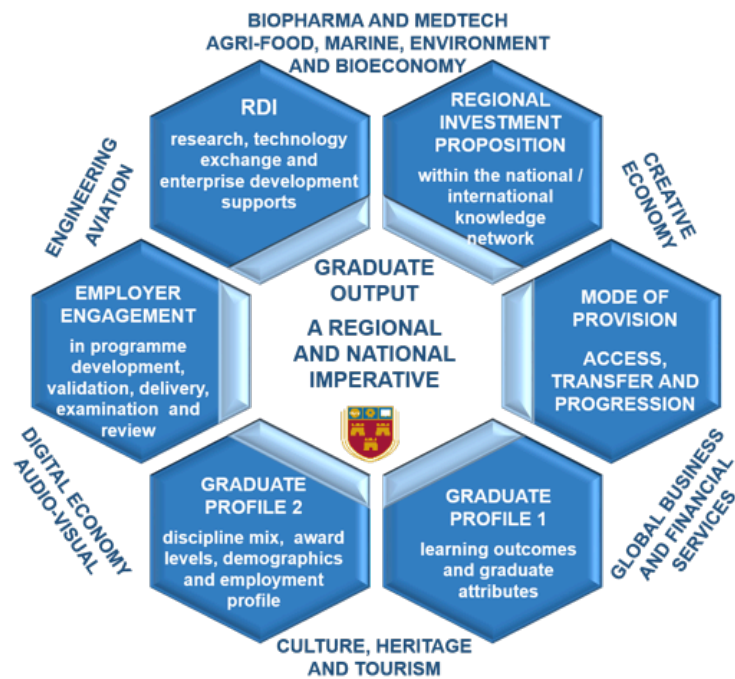
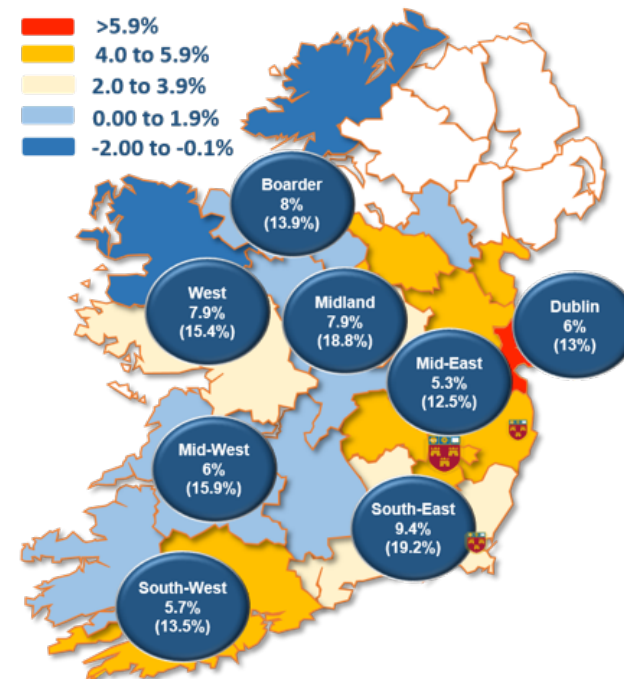


Figure 11 B



**Figure 11 A)** Key regional industry sectors with development potential and /or graduate capacity issues identified through the South East Action Plan for Jobs Implementation Group. **B)** Unemployment in the regions Q4 2016 (unemployment in the regions Q4 2011) set against the national demographic changes over the time period 2011 to 2016 (Central Statistics Office, Ireland). The national unemployment rate is 6.7% for Q4 2016 (national unemployment rate was 14.6% in Q4 2011). The regions are as follows: South East, Carlow, Kilkenny, South Tipperary, Waterford, Wexford; Mid-East, Kildare, Meath, Wicklow; Midland, Laois, Longford, Offaly, Westmeath; South West, Cork, Kerry; Mid-West, Clare Limerick, North Tipperary; West, Galway, Mayo, Roscommon; Border, Cavan, Donegal, Leitrim, Louth, Monaghan, Sligo.

**Table 2** Overview of the South East Region (Source, IBEC March 2017)

**Population:** 421,999 (8.9% of national); **Population density:** 59.3 per km<sup>2</sup>; **Under 35:** 49% (National average 50%); **Over 65:** 12% (National average 12%)

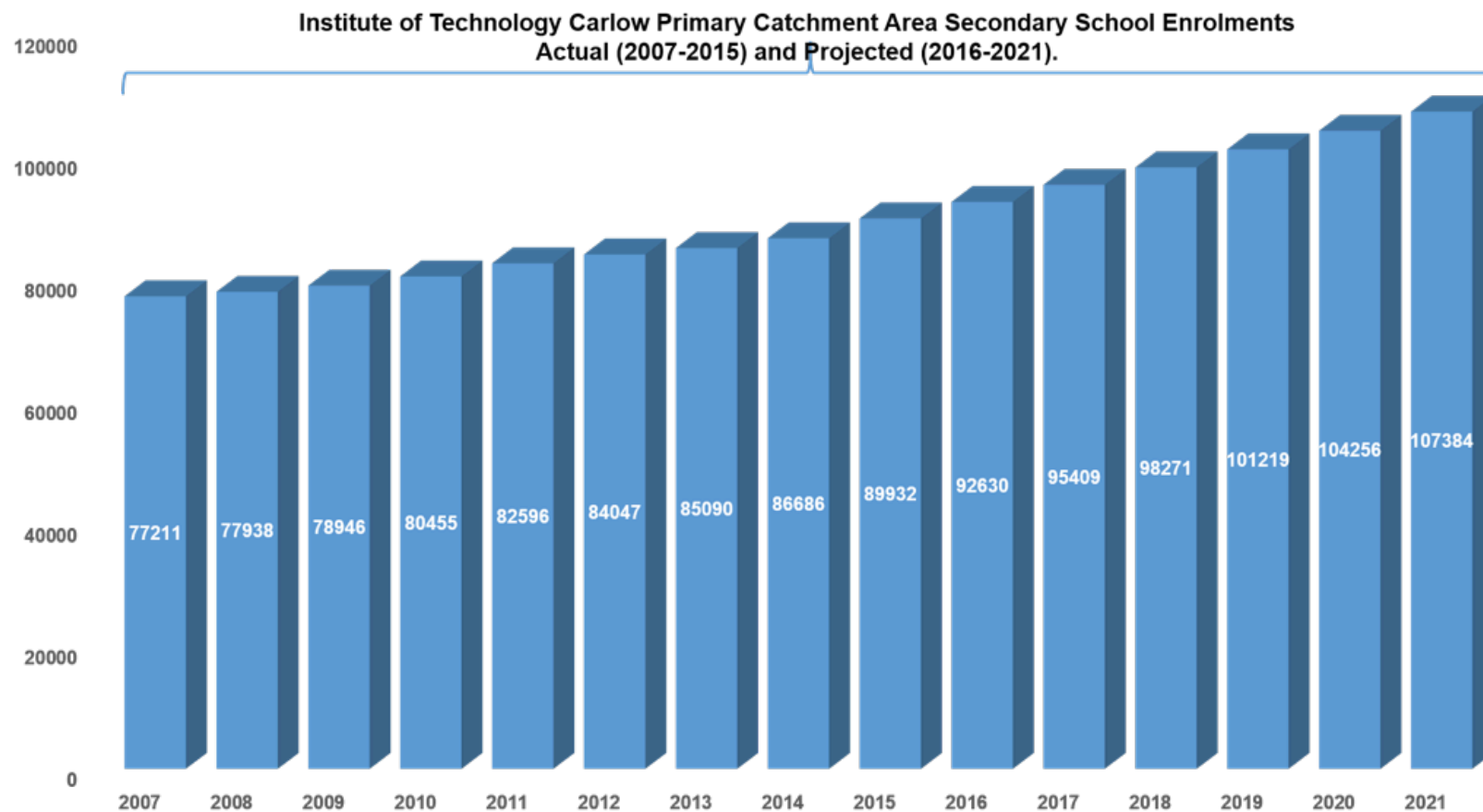
**Average household income:** €63,269 (89% of national average)

**Average rent/house price:** €691pm/€167,421 (€1,037pm/€215,000 nat' av.)

**Skills Profile:** When it comes to skills the region has the 2nd lowest share of 3rd level graduates of any Ibec region at 27.8%. It also comes 7th of eight when it comes to graduates in STEM (Science, Technology, Engineering and Maths) related subjects. This translates into the 5th highest level of IDA supported jobs per capita of any Ibec region and also 5th in terms of Enterprise Ireland supported jobs.

**Regional Connectivity:** The South East ranks 3rd for the share of premises with access to high speed broadband.

Indicator	South East	Out of 8 Regions	National Average	Highest	Lowest
<b>REGIONAL INDICATORS FOR THE SOUTH EAST REGION</b>					
<b>Skills</b>					
Participation rate (% LF)	60.6%	6	61.9%	GDR (63.6%)	North West (58.7%)
Third level graduates (% LF)	27.8%	7	33.4%	GDR (39%)	Midlands (26.5%)
STEM-related grads (% LF)	6.1%	7	7.8%	Cork Region (9.4%)	Midlands (6%)
<b>Connectivity</b>					
Broadband (% premises 2016)	59%	3	57%	GDR (83%)	West (43%)
Minutes to state airport	98 (ORK)	7	62	North West (135)	Cork Region (12)
Minutes to regional airport	14 (WAT)	2	76	North East (134)	North West (12)
Minutes to Tier 1 or 2 port	14 (W)	3	61	North West (141)	Cork Region (6)
Road quality (IRI)	3.8	3	3.9	North East (3.4 IRI)	Cork R' (4.55 IRI)
<b>Tourism</b>					
Overseas € per 10,000 pop.	€5.14m	6	€6.40m	West (€12.68m)	Midlands (€2.60m)
Hotel beds	11,083	4	5,017	GDR (47,808)	Midlands (4,421)
<b>Enterprise Agencies and Local Government</b>					
Commercial rates % budget	29%	6	36%	GDR (44.4%)	NW (20.1%)
IDA jobs per 10,000 (LF)	497	5	685	Cork Region (1,284)	North East (289)
LEO jobs per 10,000 (LF)	270	2	183	Midlands (271)	GDR (76)
EI jobs per 10,000 (LF)	884	5	836	North East (1,045)	North West (517)



**Figure 12** Growth in Institute of Technology Carlow primary catchment area secondary school enrolments (2007-2015; source, education.ie) and projections 2016-2021 which are based on County Progression Rates published in Towards the Development of a New National Plan for Equity of Access to Higher Education, 2014 (HEA). The growth from 2007 to 2021 using school data in association with census projections gives a conservative increase in post primary enrolments of 30,173 for the period in the primary catchment area of Institute of Technology Carlow.

## INSTITUTIONAL RESPONSES TO ENVIRONMENTAL CHALLENGES

Our progress and achievements over 2012-2016 include:

- Placement in Category 1 under Strategic Dialogue Cycle 2 and Strategic Dialogue Cycle 3;
- A trajectory which positions the Institute to meet and exceed all national technological university criteria within a three-year time period.
- A significant growth in student numbers and graduates; increased diversity in student and graduate profile; advances in the qualifications and research experience of academic staff; improvements in retention and student satisfaction; consolidation as the leader in flexible provision; new programme development, particularly at postgraduate and higher degree level; growth in the international student population and international collaborations; and enhanced links with other sectors of the Irish education system (see Table 1).
- A strong quality enhancement culture acknowledged through our international external peer reviews (Appendix 2, Table 2.5).
- The roll-out of a €100 million physical master plan which saw the completion of the Houghton Building for Teaching and Learning in 2016; the Centre for Aerospace Engineering in 2015; the Dargan Centre for Research and Innovation in 2014; the commencement of a thirty-acre South Sports Campus; and the acquisition of an additional forty-two acres for future growth in Carlow and Wexford.
- An increased leadership role in the economic and social regeneration of our regions including the South-East, Mid-East and Midlands regions.
- An increase in total annual income (Table 1) and successive balanced budgets.

Our achievements to-date in responding to (i) the demographic wave across our catchment area, (ii) the funding model and regulatory framework for the technological sector and (iii) the drive for continuous enhancement of our provision in line with the needs of our learners,





the economy and society, is attributable to our culture of strategic planning and implementation. This has equipped the Institute to demonstrate maintenance and enhancement of its quality provision, while accommodating a significant increased learner participation. There are three indicators that warrant particular mention:

- **Institute of Technology Carlow's quality assurance and enhancement framework for the monitoring, validation and enhancement of Institute wide performance.** The Institute is committed to robust self-evaluation and peer review as a key component of our quality enhancement culture. This supports the Institute in identifying new opportunities while also ensuring the identification and management of risks across all levels and activities of the organisation. This philosophy has served us well in maintaining a high standard of achievement in recent formal quality assurance reviews, some of which are summarised in Figure 7. This includes strategic and programmatic reviews across all Faculties, Centres and Campuses conducted throughout 2015 and 2016. The outcomes of these are published at [www.itcarlow.ie/resources/quality.htm](http://www.itcarlow.ie/resources/quality.htm)

A direct outcome of the QQI/Institute of Technology Carlow Annual Dialogue meeting in December 2016 was approval of the Institute's QA procedures, by the QQI Programmes and Awards Executive Committee, in accordance with Section 30 of the Qualifications and Quality Assurance (Education and Training) Act 2012. The Institute is amongst the first tranche of HEIs to complete this re-engagement process with QQI under the 2012 legislation.

An additional outcome of the QQI Annual Dialogue meeting related to the Institute's commitment to transparency as indicated by the quality reviews outcomes published on its public website. QQI concluded that: *"...this is an excellent model of transparency for the sector, which gives visibility for the quality environment in which they operate, and shows how they have regard to both QQI's suite of guidelines as well as the ESG. It also*

*further embeds trust amongst all stakeholders in relation to their policies and procedures, programme and registers, and most importantly activities in relation to all of their reviews and outcomes of same."*

- **Irish Survey of Student Engagement 2016.** This survey offers an important insight into the experiences of students in Irish higher education and more specifically their experiences in Institute of Technology Carlow. The performance of Institute of Technology Carlow continues to confirm the many positive aspects of the student experience and re-affirms the progress made and the direction taken through the implementation of the Institute's strategic plan (Appendix 3). In looking specifically at how first year, final year and postgraduates judged the quality of their entire educational experience, across the three annual engagement surveys (2014 -2016) there is a very definite trend showing an increasingly positive response year on year. For example, in 2014 78% of postgraduate students judged their experience to be good or excellent; this figure increased to 86% in 2016. Likewise, when the same groups were asked if "you could start over again would you go to the same institution", the responses showed very positive and an improving assessment. For example, in 2014 81% of first year students said they would probably or definitely repeat the experience; this figure increased to 88% in 2016.
- **The 2016 HEA Financial Review of the Institutes of Technology** (hea.ie) confirmed the financial stability of the Institute of Technology Carlow and cited several examples of how the Institute responded successfully to the challenges of the past number of years. This reflects the Institutes core value of maintaining a financially stable organisation which is underpinned by a fundamental belief in achieving best value for money coupled with high quality outputs. The double imperative of high quality and efficiency has led to the development of a streamlined and effective organisation that has prioritised maximising the available discretionary resources to invest strategically in the enhancement of the learner experience, new programmes and research, in high quality staff, the physical environment and other resources.

## MIDTERM STRATEGIC PLAN REVIEW – REVIEW OF PROGRESS TO 2016 AND PRIORITIES FOR 2017-2018

The progress charted in this report demonstrates that the Institute continues to work towards fulfilling its vision in line with its Strategic Plan 2014 -2018. Through the 2016 Mid-Term Strategic Plan Review (Appendix 1) Institute of Technology Carlow continues to plan for its future. It has refined its strategic initiatives under its five strategic goals for the next two years of this current planning and implementation cycle. These may be summarised as follows:

### Outstanding Learner Experience

We are a learner-centred institution dedicated to the creation of an environment where our learners can achieve their full potential and where our graduates are fully equipped to achieve the highest personal and professional standards. We are committed to lifelong learning, equity of access, transfer and progression to ensure a significant, sustainable and socially responsible contribution to our regions, Ireland and the world.

Priorities include:

- Implementation of the graduate attributes project. This will continue to shape our approach to the generation of professionally-ready graduates across all disciplines and give our graduates the strategic edge in employability and career advancement throughout their lifetime.
- Increased digital capacity. We have a modern and resilient IT physical infrastructure and virtual learning environment as a result of prioritised investment over many years. We are ideally positioned to embark upon new initiatives incorporating an enhanced use of digital technologies across our multi-campus structure. 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.

- Enhanced learner engagement. We will implement a range of new initiatives across the domains of governance and management, teaching and learning, research and quality assurance to ensure learners are active partners in the creation of the learning process.

### Implementation of the Strategic Plan for Research 2016-2020

The Strategic Plan for Research 2016-2020 has been designed to build on the internationally recognised achievements of our researchers and postgraduate learners. Through implementation of this plan, we aim to build research environments with critical mass, high ambition and strong international networks. The successful implementation of this plan will be underpinned by ongoing strategic investment in infrastructure, personnel and policy developments and will accelerate progress towards reaching key metrics for Technological University designation.

Priorities include:

- Building research capacity and research culture. We will continue to develop an enquiry based, research informed learning environment that will produce more research opportunities and outputs and positively contribute to the teaching and learning culture within the Institute.
- Achieving research impact. Members of our research community will be supported in increasing research productivity and performance through the publishing and dissemination of research, nationally and internationally. Through this plan we will further encourage and support the pursuit of research excellence and seek to maximise our impact through academic pathways and commercialisation and knowledge transfer routes.
- Developing future research themes and research policy. We have made significant progress in building and developing research themes and research impact. Our Strategic Plan for Research 2016-2020 will

further enhance this culture and deliver benefits for our economic, social and cultural stakeholders. Our postgraduate attributes will ensure that researchers have the enterprise development and innovation skills necessary to contribute to the development of the economy and society.

### **Designation as a Technological University**

Further clarity is anticipated on the national process, criteria and legislation; however, the broad parameters for an internationally credible Technological University are indisputable. This mid-term review has provided further opportunity to review progress to-date on our trajectory towards meeting Technological University criteria and establish additional initiatives that build on our achievements to-date.

Priorities include:

- Further investment in the talent of existing and prospective faculty and management with creative and innovative ideas and the qualities necessary to implement them. This will be supported by the generation of increasingly diversified non-State funding streams and capacity building initiatives in staff development, research and innovation and new programme development directly linked to the needs of the economy and society.
- Designation as a self-awarding body. This will involve completion of ongoing reviews across the Institute, progress on recommendations arising from these reviews, and a strong 2018 Cyclical Institutional Review.
- Collaborative capacity building with Waterford Institute of Technology. This will include putting in place a supportive project governance and management structure to facilitate positive collaborative initiatives across and between all levels of both Institutes.
- Development of strategic partnerships and coalitions with stakeholders. All of our endeavours require strong national and international partnerships.

In addition to working towards Technological University designation and with the Southern Regional Cluster, we will help shape the development of the new Technological Higher Education Association of Ireland as the policy voice for the Irish Technological Higher Education sector.

### **Organisational Restructuring Review for Continued Development and Growth**

National demographic changes are increasingly evident in our primary catchment area of the South-East, Mid-East and GDA regions. Our recent projections, based on published statistics from the Department of Education and Skills and the Central Statistics Office, predict a potential increase in the total learner population from 7,000 to approximately 9,300. Following a 40% increase in learners over the past five years, this represents a further overall increase in total enrolments of 31% assuming maintenance of current participation rates for full-time and lifelong learners. Given the high degree of efficiency and high quality return on investment to-date to the State by the Institute, additional growth will require investment in capital and staffing levels. Further development of our organisational structure will also be required to support and further enable our continued successful transition to a larger, more complex and impactful higher education provider.

Priorities include:

- Organisational structure review. We have continued to adapt our organisational structure as the Institute has entered different phases of its development. We are now entering a new phase in preparation for designation as a Technological University. We will review our academic structures encompassing faculties, departments and research units. We will also pursue appropriate recognition models for exceptional academic

leadership in line with international norms. The professional support services will also be reviewed with the goal of ensuring that they have the resources and capacity for growth.

- Investment in our People. The diversity of our staff is a key asset for the Institute as we continue to prioritise recruitment and retention of best available talent.
- Infrastructural development. We are committed to continuing to provide world class facilities. We will continue to make strong representations under the higher education capital programmes while exploring alternative funding mechanisms.

### Providing Leadership in Regional and National Initiatives

Our leadership role in regional and national development is enabled by exceptional people, international partnerships, high-quality infrastructure and financial sustainability. We have a track record of flexibility, innovation and responsiveness throughout the recession and are exceptionally well placed to provide further leadership at this time of national recovery. We are committed to harnessing our education and research to evolving economic and social objectives and to further enhancing our engagement and integration with regional development with a particular focus on the South-East, Mid-East and Midlands.

Priorities include:

- Utilising our human, physical and intellectual capabilities to provide leadership to national and regional development initiatives including the Technological University, South-East, Midlands and Mid-East Regional Skills Fora, National Skills Strategy to 2025, the Action Plan for Education 2016-2019 and the International Education Strategy 2016-2020.
- Delivering on our commitments under the South-East, Midlands and Mid-East Regional Action Plans for Jobs while continuing to formulate new ambitious strategies aimed at enhancing balanced regional economic and social progress.



## INSTITUTIONAL RESPONSE TO COMPACT FEEDBACK

Following Strategic Dialogue Cycle 3 (SDC3), the HEA confirmed that Institute of Technology Carlow had been placed in Category 1 for agreed 2015 targets. Category 1 is defined as '*...HEIs which, overall, have performed well against their objectives and have demonstrated excellence in some mission-critical domains*'.

Feedback following this process is included in Appendix 4. This includes the following:

*"ITC was commended on its strong progress and for its self-evaluation report that provides evidence of reflection on performance and identification of issues arising. The HEA is aware that all higher education institutions are operating in a challenging financial environment, while continuing to respond to increasing student demand. The system has demonstrated that it continues to provide high-quality higher education and to respond to national priorities. The HEA made the following observations on the institute's performance:*

- The institute continues to make progress against the majority of the targets set out in its compact*
- The institute is closely engaged with and committed to the ongoing process for merging with WIT, with the aspiration of achieving TU status for the South East; the institute recognises the need to undertake this in a carefully planned fashion, having regard to the challenges inherent in such a complex task.*
- The institute uses processes such as quality assurance and external review effectively to assist in its own strategic planning and development.*
- The institute has sought to benchmark its performance against that of a range of other institutions; while this is welcome, the focus at present is only on quantitative benchmarks; the institute should seek opportunities to complement these with more qualitative and issue-specific approaches.*

- While there is evidence of some progress in respect of clustering, overall the progress is more limited than was expected originally.*

*The institute welcomed the opportunity to engage with the HEA on the compact and its broader strategic vision. It considers that it is delivering strong performance and is well-placed to develop further. It projects that the institute will continue to grow in response to student demand, to reach a level of c. 9,000 students in the coming years. The institute would welcome enhancement of its capacity to manage this growth, by, for example, the introduction of a borrowing framework. The institute also considers that there is an opportunity to significantly enhance educational and research provision in the region through the realisation of its plans for creating a Technological University in conjunction with WIT, and is very committed to this project."*

Institute of Technology Carlow welcomes these findings and continues to build on the progress already made within the context of its strategic planning, review and enhancement processes. Individual topics included in the feedback are presented in Table 3 with the response from Institute of Technology Carlow.

**Table 3** Feedback to Institute of Technology Carlow following SDC3 and institutional response.

SDC3 ASSESSMENT FINDINGS	
Feedback from SDC3	Response from Institute of Technology Carlow
The self-evaluation report, and subsequent discussion at the bilateral meeting, have shown that progress can be demonstrated across all domains.	The Institute welcomes the recognition of the significant achievements over the lifetime of the Compact.
The institute is engaged in a major change project with WIT with the objective of achieving designation as a technological university. The HEA notes the evident commitment of ITC to this objective, having regard to the need for careful planning, given the complexities involved.	The Institute welcomes the recognition of its commitment to deliver a Technological University for the South East and due recognition of the complexities involved in the collaboration.
The institute also continues to respond to increasing student demand in its catchment area.	The provision of higher education opportunities to students in the Institute’s catchment area is a high priority for the Institute as it is central to its public service mission.
The institute has made less progress than anticipated in the development of the regional cluster, although its work in the local regional skills forum is noted.	The main drivers for change and collaboration between all sectors of education and the communities we serve has shifted from the clusters framework to the Regional Skills Fora and Regional Action Plans for Jobs Implementation Groups. The Institute has provided significant leadership to both these initiatives across three regions and has seen tangible and relevant outcomes (Appendix 5).
<p>The institute is also making progress in its use of diverse sources of data and information to enhance strategic planning, such as quality assurance, internal audit and others. The institute has also made progress in international benchmarking; it should continue to develop this with a focus on developing this benchmark beyond quantitative measurement, to include more qualitative assessment of success against particular policy objectives.</p> <p>Overall, ITC has demonstrated very good progress against mission-coherent objectives through an analytical and probing self-evaluation report and other data sources. The institute is commended for its use of benchmarking. The HEA would expect that the institution would continue to expand its use of benchmarking to set priorities and undertake self-evaluation.</p>	The Institute welcomes the acknowledgement of its use of extensive and diverse sources of data in benchmarking successes. Lack of timely, relevant and freely available key data on higher education sectorally, nationally and internationally is a challenge in consistently benchmarking achievements for the Institute. The Institute has committed to develop a series of qualitative assessment against particular policy objectives going forward and is in the process of establishing an Office of Strategic and Institutional Research.

SDC3 ASSESSMENT FINDINGS	
Feedback from SDC3	Response from Institute of Technology Carlow
<p>This places ITC in Funding Performance Category 1, and it is therefore proposed to release performance funding in full in respect of the 2017 budget allocation. ITC should have regard to the specific institutional feedback provided in this document and in the "Reflections on Performance". In advance of, and in preparation for, the next round of compact evaluations the HEA will also provide more generic feedback to all institutions as part of the formal and final communication of cycle 3 outcomes.</p>	<p>The Institute believed that the bilateral dialogue on the day was at an appropriate level to enhance the strategic direction of the Institute, particularly with input from the international perspectives. The reflections on performance arising from the desktop review of the submissions appeared to be at a more operational level. The issues raised at the operational level were addressed by the Institute on the day to the apparent satisfaction of all.</p>
<p><b>Risk management</b></p> <p>The institute noted that the compact was underpinned by extensive layers of risk management and assessment. The institute uses processes such as quality assurance, financial reviews, and internal and external audits to inform both strategic planning and the associated necessary risk management. This helps the institute to manage its challenges, such as the work involved in the planned merger with WIT and development towards TU status.</p>	<p>Risk management is a critical process in ensuring a high standard of governance in complex organisations and the Institute is committed to good risk management processes across all of its activities.</p>
<p><b>Regional cluster</b></p> <p>The institute noted that there has been some good progress in respect of the cluster, and cited engagement with FE providers as an example. There is a particular focus on trying to address skills needs, and the institute has been an active participant in the local skills forum.</p> <p>The wider cluster has been less successful, partly because of the geographic spread of the Southern cluster region. The institute considers that there is an opportunity to build on the work of the regional skills forum to progress the issue.</p>	<p>The work and success of the RSF and APJs over the past 18 months has demonstrated potential to achieve many of the original cluster goals. For Institutes whose catchment area transverses multiple regions, capacity issues do arise. For example, Institute of Technology Carlow is involved in six regional fora/implementation groups and action plans through these two national initiatives alone. The Institute would welcome a new and broad ranging discussion on how to enhance collective impact and create the 'regions of knowledge' originally envisioned for the regional cluster programme.</p>

### SDC3 ASSESSMENT FINDINGS

Feedback from SDC3	Response from Institute of Technology Carlow
<p><b>Transitions</b></p> <p>The institute has made progress to reduce its intake points from 30 to 24, and has introduced common entry for science and business, which has been well received by students. The institute is using the programmatic review process to consider further changes. It also pointed out its role as a multi-campus institution and the complication that this creates in moving to common entry – some of the other campuses provided specific denominated entry in response to particular student demands or needs.</p>	<p>The Institute welcomes the acknowledgement of its progress in relation to transitions and the unique accommodations required by a multi-campus institution.</p>
<p><b>Research and development</b></p> <p>The institute clarified that the PhD numbers identified in the compact do not match the official HEA figures. Whereas the compact figures reflect all students who have started a research course, the figures submitted to the HEA include only students who have undertaken certain initial work as part of their research programme. The institute is seeking to continue to grow these numbers in line with the compact objectives.</p> <p>In terms of the objective for graduate school delivery, the institute has made ongoing progress over 2015, and still aims to establish a school jointly with WIT by the end of 2016.</p>	<p>Following the discussions with the HEA, the Institute is moving towards a sectorally consistent basis for registering of postgraduate research students.</p> <p>Progress on the TU and the Graduate School in particular has been delayed due to the filling of the Presidents posts in both Institutions and the replacement of the Governing Body Chair in WIT. Initial steps require the agreement of an MOU between both Chairs and Presidents of the two Institutes.</p>



## SDC3 ASSESSMENT FINDINGS

Feedback from SDC3	Response from Institute of Technology Carlow
<p><b>Internationalisation and benchmarking</b></p> <p>The institute has benchmarked its performance against five IoTs and four UK institutions, to consider such issues as the relative numbers of undergraduates and postgraduates.</p> <p>HEA noted that benchmarking could be extended to a range of more specific performance measures (such as access, retention, and student experience). The HEA also noted the predominance of domestic academic external examiners (90 per cent of external academics are drawn from Ireland), and suggested that the institute consider actively internationalising in this regard. There is also an opportunity to target those international institutions from whom peers might be drawn, and to use this as an alternative form of benchmarking of quality.</p> <p>In terms of internationalisation, the institute noted that it is taking a measured approach around targeted markets, and while it wishes to increase numbers, these will remain a relatively small proportion of the overall student body (around 10 per cent). The institute has identified six markets as a priority, and aims to have 400–420 international students out of an overall population of 4,000. The institute provided a range of supplementary information to address issues arising in the HEA evaluation.</p>	<p>The Institute welcomes the acknowledgement by the HEA of its use of benchmarking and accepts the recommendations that this be extended into further areas of interest. The suggestion to actively internationalise our external examiners is a helpful suggestion and as positions become vacant, priority will be given to international candidates.</p>

## INSTITUTIONAL RESPONSE TO HEA KEY INSTITUTIONAL STATISTICS (SECTORAL AND TREND DATA 2011/2012 TO 2015/16)

Institute of Technology Carlow acknowledges the data output at a macro level issued by the HEA to aid HEIs in SDC4 benchmarking against sectoral and national data. The Institute has considered these in the context of this submission and highlights the following high level observations:

1. **Mode and Level** – The Institute’s profile, particularly of part-time/lifelong learners, shows the Institute to be significantly above the national (16%) and technological sector (21%) averages at 29% for Institute of Technology Carlow (Source, HEA Enrolment Statistics). This is in keeping with our trajectory towards national criteria for technological university designation (30%). In terms of postgraduate learners, the technological sector average for 2015/16 is 4.5%. The Institute is significantly outperforming this at 9%. The growth rate in postgraduate students for the Institute of 11.2% in the past year compares very favourably to a national average growth rate of 2.4%.
2. **Programme Type** – Institute of Technology Carlow’s level 8 headcount at 52% of learners is ahead of the sectoral average of 47%. Across all HEIs the average at Level 8 accounts for 59% of all enrolments.
3. **Graduates** – The Institute has experienced a significant increase in graduates ahead of the national profiles (Table 1 and Appendix 2). Particularly noteworthy is the increase in minor/special purpose awards levels 6-9 (10-60 ECTS) meeting key needs in the lifelong learning market.
4. **International** – Institute of Technology Carlow grew non-EU students by 4.6% 2014/15 to 2015/2016 while the numbers at sectoral level declined by 1.5% in the same period.
5. **Participation Metrics** – As detailed in Appendix 2 (Table 2.2, Figures 2.22-2.26) overall access figures are being maintained with some shifts within categories. These are:
  - Mature - 19.5% in 2015/16 representing a 3% increase since 2014/15. National comparators provided by the HEA indicate a 12% national decline and a 17% sectoral decline;
  - SWD/FSD - 10.4% in 2015/16, up from 9.4% in 2014/15. National comparators provided by the HEA indicate no change nationally;
  - SEGs - 32% in 2015/16. This is a decrease from 38% of new entrants in 2014/15. National comparators provided by the HEA indicate a 3% national increase and a 4% sectoral increase. The growth of the Institution, its range of provision and its increased reputational standing in its region has contributed to this evolving profile.
6. The **highest progression rate** in the Technological Sector in 2014/15 (the latest available comparative data – Source, HEA, A Study of Progression in Irish Higher education 2013/2014 to 2014/2015, March 2017). The progression rates for Level 6, Level 7 and Level 8 is 81% (2nd highest in sector), 79% (1st in sector) and 86% (3rd in sector), respectively. The overall progression rate for all levels combined is 83% for the Institute which is the highest in the sector and just 2% below the national average for the Universities, Institutes and Colleges.

The national statistics provided by the HEA have further evidenced the fact that the Institute is performing exceedingly well on many criteria.

Additional trends and benchmarked analyses are presented in Appendices. These are:

- Trends and Benchmarking of the Learner Profile (Appendix 2)
- Irish Survey of Student Engagement (ISSE) 2014-2016 - analysis and benchmarking of ISSE 2016 and 2015 (Appendix 3)
- Enhancement of Research and Innovation Capacity (Appendix 6)
- Knowledge Transfer and Industry Engagement Metrics (Appendix 7)
- Enhanced Internationalisation – Benchmarking with Irish Institutes of Technologies and UK Universities (Appendix 8).

## CONCLUDING COMMENTS

The Mission-Based-Performance Compact and Strategic Dialogue process has helped reinforce the potential and importance of diversity as a key factor in Irish higher education, and a vital national strategy that can help meet student and employment market needs, enhance social mobility, allow for the combination of elite and mass education systems, while increasing the level of effectiveness of individual HEIs. The funding model requires early reconfiguration to accommodate growing or falling student numbers within the system. The *HEA Review of the Funding Allocation Model for HEIs* currently underway and the ongoing *HEA Review of Capital Investment Priorities* are welcomed.

The demographic challenge in higher education is predominantly on the East Coast, within a 50-mile arc of Dublin City, which is Institute of Technology Carlow's main catchment area. The Institute has achieved significant progress across a wide range of domains over the lifetime of the compact and is in the prime position in the Technological Sector to provide additional higher educational opportunities for its catchment area given the necessary resources. These resources include capital investment for infrastructure and accompanying financial resources for the operational costs. Institute of Technology Carlow is the most appropriate location as it is well serviced by good rail and road infrastructure, has a supply of good quality and affordable student accommodation and investment in the location has a very strong multiplier effect for the regional economy it supports. The establishment of a Technological University would put the Institute in a better position to address the demographic surge and the lack of a university in the South East.

Over the past number of years, higher education institutions in the State have been grappling with the competing demands of increased demographics, reduced funding and greater call for collaboration across the sector and with industry. In this context the opportunity to reflect on performance, refocus objectives and continue to strive forward, was greatly enhanced by the introduction of the process for Strategic Dialogue by the HEA. The Strategic Dialogue process is the only credible evaluation of the performance of publicly funded higher education institutions in the State by a competent and objective authority. Therefore, the outcomes of the Strategic Dialogue process have carried significant weight both in the higher education sector and with the general public. Notwithstanding the financial implications of the performance targets, the most significant outcome of the Strategic Dialogue process was the effective ranking of institutions by their performance by the HEA. The existence of ranking ensures that HEIs were continually striving to achieve the highest ranking. To remove the rankings could undermine one of the significant benefits of the process to the institutions and the public.

**Dr Patricia Mulcahy**  
*President*



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# INSTITUTE OF TECHNOLOGY CARLOW PERFORMANCE AGAINST THE FINAL SET OF COMPACT TARGETS FOR 2016

## 1. REGIONAL CLUSTERS

*"Our leadership role in regional and national development is enabled by exceptional people, international partnerships, high-quality infrastructure and financial sustainability. We are committed to harnessing our education and research to evolving economic and social objectives and to further enhancing our engagement and integration with regional development."*

**Institute of Technology Carlow**  
2016 Mid-Term Review  
Strategic Plan 2014-2018

### OVERARCHING STATEMENT

At the commencement of the Strategic Dialogue process and at the time of publication of the Institute of Technology Carlow Strategic Plan 2014-2018 there was a strong commitment to the development of the Higher Education South Regional Cluster amongst the HEIs in the South-West and South-East in accordance with national policy. Early in the Strategic Dialogue Compact timeline other Government initiatives began to subsume many of the objectives of the cluster. This was noted in the HEA feedback to SDC2 in 2015 and was prominently mentioned in the Institute's submission to SDC3 in 2016. These initiatives primarily are the:

- Department of Education and Skills-led Regional Skills Forum (RSF) programme and
- Department of Jobs, Enterprise and Innovation-led Regional Action Plan for Jobs (APJ).

All RSF and APJ Implementation Groups have dedicated departmental-funded managers. All RSFs have detailed and ambitious objectives and timelines formulated and implemented by forum members. This membership includes senior representatives across regional higher education, further education, training providers, industry, industry representative bodies, government departments and development agencies (Appendix 5).

Institute of Technology Carlow is committed to the achievement of the regional impact envisioned in the HEA's strategy by increasing its impact and contribution to the development of its region(s) and is doing so through these

national programmes. The geographic location of the Institute means that it is centrally involved in South-East, Mid-East and Midlands action plans under both of these initiatives. Institute of Technology Carlow chaired the South-East RSF throughout 2016; is an active member of the Mid-East RSF, the South East APJ Implementation and the Mid-East APJ Implementation Group; and is leading actions in the Midlands APJ. The South-East and South-West RSF's have a reciprocal arrangement whereby members from each attend forum meetings of the other. This is to ensure synergies with the South-West region of the South Cluster and consistency of approach to achieving the national goals of the RSF programme, in support of the National Skills Strategy to 2025. This has proved beneficial to the achievement of programme goals and also in building relationships with providers intra and inter region. For instance, a formal link has been created with this Institute and FET providers in the Cork ETB area.

The Southern Cluster did not operate as originally intended by the participants. The geographic spread of the cluster across 6 counties and 2 provinces, and the cluster comprising one University and four Institutes of Technology divided between two consortia working towards merger and TU designation, proved challenging within the changing national policy environment. The primary objectives of the South Regional Cluster focussed on increasing the capacity and responsiveness of the Irish higher education system; deepening partnerships and collaborations among the cluster higher education Institutions; providing improved progression pathways between higher education institutions; and enhancing co-operation across the cluster higher education institutions in support of regional economic, social and cultural development. Each of these objectives mirror the objectives of the

RSF and the APJ (Appendix 5). The experience of the Institute to-date is that the Government-led Action Plans for Jobs and Regional Skills Fora structures provide the opportunity to deliver a more immediate and identifiable impact at regional levels within the national context. For example, the South East RSF is acting as a catalyst to enhance and develop academic planning across FET and HET providers and is building relationships and networks with key industrial sectors by identifying (i) skills needs, (ii) existing programmes to meet these needs across all levels of the NFQ and (iii) programme development opportunities where a need is identified. The work of the South East RSF is closely aligned with that of the South East APJ Implementation Group. This is maximised by cross-representation by the South-East IoTs on both.

Through the above arrangements the following has been achieved:

- Embedding the Regional Skills Forum managers within the regional development ecosystem across the Cluster;
- Sharing data from industry workshops where skills needs are identified and mapped against the full range of programme provision across higher and further education in each of the two regions;
- All partners in the South Cluster continue to expand and deepen their partnerships with further education providers. This Institute increased its formal partnerships to 34 in 2016.

The Institute notes the HEA consultation document entitled *Discussion Document Regional Clusters: Maximising Collective Impact Strategy 2015-2020* issued in November 2015 and would welcome a new and broad ranging discussion on how to enhance collective impact and create the 'regions of knowledge' originally envisioned for the regional cluster programme.

INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<b>Create a formal regional cluster between the named member institutions.</b>	Agree and implement a framework for cluster operation and commence implementation of agreed collaborative projects.	Many inter-institutional relationships exist but no formalised cluster structure is in place.	Evaluate the effectiveness of the governance framework in place for the cluster and explore further collaborative opportunities.	<p>The Institute has evaluated the effectiveness of the governance framework in place for the cluster. The Cluster did not progress or function as originally envisaged but many of the objectives are being achieved within and across regions.</p> <p>The programmes and initiatives described in the overarching statement took over the objectives and goals of the Cluster programme. Many of the intended goals e.g., the National Strategy for Higher Education to 2030 identified engagement with external stakeholders and the formation of regional clusters as ways to build greater collaboration and co-operation between HEIs, and between HEIs and other stakeholders. This is a primary outcome of the RSF and the Regional APJ action plans (see Appendix 5 for further details).</p>	
<b>Improve Student Pathways.</b>	Produce a mapping profile which outlines learner opportunities and pathways for all disciplines and levels across the cluster region which will assist in future academic planning and delivery.	Many inter-institutional pathways exist but no complete mapping profile is available.	Review pathways profile based on new academic developments.	<p>The RSF provides a mechanism for maintaining and enhancing relationships between FET and HET providers. More and deeper partnerships are being developed. For instance over the course of Compact 2014-2016, 34 new agreements and pathway programmes were developed between Institute of Technology Carlow and FET providers across each of the regions we serve.</p>	

INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<p><b>Shared Academic Planning</b></p>	<p>Develop a cluster wide academic planning structure focused on the delivery of national priority objectives such as the Transitions Programme, Horizon 2020 and other objectives focused on improving the economic, social and cultural profile of the cluster region.</p>	<p>No cluster wide academic planning structure exists. However, there is an understanding that: Individual institutes will continue to provide a broad base of undergraduate course opportunities up to level 8 to satisfy needs of individual hinterlands given the geographical scale of region; External stakeholders such as regulatory and professional bodies will also influence the planning and delivery process;</p> <p>The number of CAO entry paths is anticipated to reduce with the collective implementation of the transitions initiative;</p> <p>Agreement that there are benefits to shared academic planning in specialist areas, most notably at level 9 and above; Acceptance this will lead to the creation of strong thematic areas in individual and co-operating institutes in the cluster. This activity is particularly relevant to the delivery of Horizon 2020, Government objectives, targets for R&amp;D activity and enterprise and industry development. It is also relevant to the delivery of industry and employer needs, hence engagement with employers in the region is significant to academic planning agenda.</p>	<p>Review operation of academic planning process with a view to identifying new areas for collaboration in the next round of institutional compacts.</p>	<p>Shared academic planning has occurred between HET, FET and Skillnets in the South-East region. Through the management committee of the RSF, opportunities to meet skills needs have been discussed and actioned across all levels of the NFQ from levels 4 to 10.</p> <p>For instance, a detailed mapping of all programmes aimed at developing employees for the biopharma sector has been carried out and presented to the Biopharma committee of the APJ. This promoted programmes ranging from short skills based programmes in laboratory practice offered by WWETB, to the MSc in Pharmaceutical Regulatory Affairs offered by Institute of Technology Carlow. Linkages between programmes and providers are being developed and promoted to industry through this mechanism thereby meeting the goals of the regional cluster.</p>	







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## 2. PARTICIPATION, EQUAL ACCESS AND LIFELONG LEARNING

*"We are committed to lifelong learning, equity of access, transfer and progression to ensure a significant, sustainable and socially responsible contribution to our regions, Ireland and the world. We will strengthen and sustain equitable access, transfer and progression opportunities for all learners."*

**Institute of Technology Carlow**  
2016 Mid-Term Review  
Strategic Plan 2014-2018

### OVERARCHING STATEMENT

Institute of Technology Carlow has a long established track record in broadening the range of opportunities for students from diverse backgrounds. We continue to build on the commitment of Institute of Technology Carlow's Strategic Plan 2014-2018 to "*strengthen our engagement with the regions, communities and sectors we serve...ensure access and progression opportunities...development of a creative, sustainable and fair society*". The modes of study available continue to grow, and now include full-time, part-time and flexible learning, online and blended learning, offering opportunities for continued engagement and enrichment. Detailed evidence for this is presented in Appendix 2.

The Institute is committed to the principle of equal access to education and continues to facilitate increased participation, particularly from students from under-represented groups, through the provision of enhanced opportunities and supports and the development of new pedagogical tools, especially online. We are focused on developing and pioneering equitable and innovative pathways so as to ensure that we admit and support those who will best benefit from the kind of education that Institute of Technology Carlow offers. Equality of access incorporates engagement with communities 'distant' from the Institute, offering alternative admissions and progression pathways (Institute of Technology Carlow CAP policy and articulation agreements with ETB's) and providing an inclusive learning environment highlighting that difference is not only accommodated, but is actively built into and part of policy and practice.

Institute of Technology Carlow recognises its responsibility to contribute to social, civic, economic and environmental development of the region by providing access to knowledge-based skills and professional development in support of its life-long learning provision. Lifelong Learning at Institute of Technology Carlow fosters an environment that nurtures innovation and promotes a spirit and culture of entrepreneurship, enabling knowledge and innovation to be made actionable for economic and social benefit (reference enrolment numbers, market position etc.). The Institute, through the development of its extensive range of undergraduate and postgraduate taught courses in all disciplines which are available to part-time students, responds to upskilling, reskilling and professional development as well as advances in technology and professional practice across the region. The innovative nature of Lifelong Learning at Institute of Technology Carlow is evident once more in 2017 as it aims to become the lead Institution for the provision of Psychotherapy at Level 9 with its new collaborations with the Irish Gestalt Centre and with Tivoli Institute. The Institute will be one of the few educational institutions where different approaches to counselling and psychotherapy can be studied. Non accredited diplomas used to be the highest level of qualification available in Counselling/Psychotherapy, and there was no such thing as academic accreditation. However, all of that is now changing and the need for the Counselling/Psychotherapy profession to be seen as equal to other, more established, helping professions such as Psychiatry, Clinical Psychology, and Social Work etc. is more evident than ever before.

Institute of Technology Carlow has responded each year to the HEA Springboard+ call and was successful in 2016 in securing 225 places from ten programmes from levels 6-9. 75% successfully completed their programme of study, 25% withdrew or did not successfully complete. Of those who successfully completed 69% are in employed or self-employed, 18% are in further education (as in progressed to the next level), 9% are looking for employment and 4% did not respond to the question.

Institute of Technology Carlow has been hugely successful in embedding participation, access and lifelong learning into the culture of the Institute by ensuring the policies and practices of both academic units and professional support units actively support the agenda of equality of access.

Overall Institute of Technology Carlow's commitment to participation is evidenced through the performance of new entrants with the highest progression rate in the Technological Sector in 2014/15 (the latest available comparative data – Source, HEA, A Study of Progression in Irish Higher education 2013/2014 to 2014/2015, March 2017). The progression rates for Level 6, Level 7 and Level 8 is 81% (2nd highest in sector), 79% (1st in sector) and 86% (3rd in sector), respectively. The overall progression rate for all levels combined is 83% which is the highest in the sector and just 2% below the national average for the Universities, Institutes and Colleges.

INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<p><b>To maintain National Access Plan student entrant numbers by developing further non-standard entry routes through FE and other providers, including RPL opportunities.</b></p>	<p>(1) Mature student entrant numbers (2) Non-standard student entry routes to Institute of Technology Carlow.</p>	<p>Mature student entrants to Institute of Technology Carlow September 2012 – 26% of full-time student enrolments.</p>	<p>Maintain and exceed National Access Plan numbers.</p> <p>RPL to be used in all schools/ centre/ campus</p>	<p>Targets achieved.</p> <p>Detailed statistics and benchmarking is provided in Appendix 2, Table 2.2 and Figures 2.22 to 2.26. Overall access figures are being maintained with some shifts within categories. These are:</p> <ul style="list-style-type: none"> <li>• Mature - 19.5% in 2015/16 representing a 3% increase since 2014/15. National comparators provided by the HEA indicate a 12% national decline and a 17% sectoral decline;</li> <li>• SWD/FSD - 10.4% in 2015/16, up from 9.4% in 2014/15. National comparators provided by the HEA indicate no change nationally;</li> <li>• SEGs - 32% in 2015/16. This is a decrease from 38% of new entrants in 2014/15. National comparators provided by the HEA indicate a 3% national increase and a 4% sectoral increase.</li> </ul> <p>Institute of Technology Carlow continues to provide accessible entry opportunities for all and has expanded its non-standard entry route. The Institute is a national leader in this field and the field of work based learning as exemplified by its collaboration with the Irish Defence Forces.</p>	

INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<b>To maintain Institute position as market leader of Life-Long Learning and flexible learning WTE student numbers to 2016 (Appendix 1) contributing to the national priority of facilitating work-ready graduates contributing to economic development.</b>	Lifelong Learning returns.  National Springboard reports.	Lifelong Learning returns 2012.  Springboard allocations 2013.	Maintaining our position as a market leader.	<p>Targets achieved.</p> <p>Detailed statistics and benchmarking is provided in Table 1 and Appendix 2 (Figures 2.9 to 2.11).</p> <ul style="list-style-type: none"> <li>• LLL continues to grow, increasing to 2808 in 2016/17, up from 2544 in 2015/16, and from 2189 in 2014/15.</li> <li>• LLL (headcount) now accounts for approximately 38% of registered students at the Institute (SRS Data for 2016/17) or 29% (HEA Enrolment Statistics 2015/16). This is the 4th highest % amongst the 21 IoTs and Universities.</li> <li>• A more meaningful comparison is WTE LLL. Using this the Institute has 28% WTE LLL which is the highest of the 14 IoTs (HEA RGAM Grant Allocation Workbook 2015/16 Student Numbers). Equivalent benchmarking data is not available for the university sector.</li> </ul> <p>Institute of Technology Carlow continues to be the market leader of Life-Long Learning and flexible learning WTE. This is evidenced by the feedback from expert panels in the recent Strategic and Programmatic Reviews (Appendix 2, Table 2.5).</p>	
	National Springboard reports.	Springboard allocations 2013	Participation in targeted labour market initiatives.	<p>Targets achieved.</p> <p>Statistics and benchmarking for 2015/16 are provided in Appendix 2, Figure 2.27 and 2.20-2.21.</p> <p>The Institute had the third highest number of participants across the technological sector in absolute numbers / headcount and the fourth highest in % of total enrolments. Again equivalent benchmarking data is not available for the university sector. Also WTE statistical data is particularly relevant here if meaningful benchmarking comparisons are to be made given the nature of LLL programmes in terms of ECTS.</p> <p>The Institute's Springboard outcomes for 2015/16 – 75% successfully completed their programme of study, 25% withdrew or did not successfully complete. Of those who successfully completed 69% are employed or self-employed, 18% are in further education (as in progressed to the next level), 9% are looking for employment and 4% did not respond to the question.</p> <p>In April 2016, Institute of Technology Carlow responded to the Springboard call and was successful in securing 235 places across ten programmes from levels 7-level 9. All places have been filled.</p>	





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### 3. EXCELLENT TEACHING AND LEARNING AND QUALITY OF THE STUDENT EXPERIENCE

*"We are a learner-centred institution dedicated to the creation of an environment where our learners can achieve their full potential and where our graduates are fully equipped to achieve the highest personal and professional standards."*

**Institute of Technology Carlow**  
2016 Mid-Term Review  
Strategic Plan 2014-2018

#### OVERARCHING STATEMENT

The Institute of Technology Carlow is a learner-centred institution dedicated to the creation of an environment where our learners can achieve their full potential and where our graduates are fully equipped to achieve the highest personal and professional standards. We are committed to lifelong learning, equity of access, transfer and progression to ensure a significant, sustainable and socially responsible contribution to our regions, Ireland and the world.

Over the course of the past three years, the objectives set out in the original performance compact have been achieved. These aligned fundamentally with the central elements of Goal 1 of the Institute's Strategic Plan 2014-2018 Learner Experience and Graduate Attributes. The achievement of these has been underpinned by an ethos of quality where enhancement, building on assurance, informs all of our activities.

Robust self-evaluation and peer review processes across all of our faculties and campuses in 2015/2016 coupled with a systematic evaluation of all of its professional operations and services by 2018 will ensure the Institute is prepared for Institutional Review in 2018/2019.

The Institute's QA procedures have recently been approved by the QQI Programmes and Awards Executive Committee, in accordance with Section 30 of the Qualifications and Quality Assurance (Education and Training) Act 2012. The Institute is amongst the first tranche of HEIs to complete this re-engagement process with QQI under the 2012 legislation. The Institute demonstrated "an excellent model of transparency for the sector, which gives visibility for the quality environment in which they operate and further embeds trust amongst all stakeholders in relation to their policies



and procedures, programmes and registers, and most importantly activities in relation to all of their reviews and outcomes of same” (QQI, Feedback on Annual Bilateral Meeting December 2016).

An integral part of quality enhancement is staff development. Mindful of the published criteria for Technological University designation, the Institute has exceeded the targets it set for full-time academic staff qualifications in the original performance compact with 32% now having a Level 10 qualification and a further 17.6% pursuing doctoral studies.

The Institute has set out mid-term (2016) Strategic Review priorities towards continually enhancing the learner experience. These include, but are not limited to:

- Implementation of the graduate attributes project: This will continue to shape our approach to the generation of professionally-ready graduates across all disciplines and give our graduates the strategic edge in employability and career advancement throughout their lifetime.
- Increased digital capacity: We have a modern and resilient IT physical infrastructure and virtual learning environment as a result of prioritised investment over many years. We are ideally positioned to embark upon new initiatives incorporating an enhanced use of digital technologies across our multi-campus structure. 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.
- Enhanced learner engagement: We will implement a range of new initiatives across the domains of governance and management, teaching and learning, research and quality assurance to ensure learners are active partners in the creation of the learning process.

INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<b>To implement Institute of Technology Carlow staff development plan focusing on: the enhancement of teaching, learning, assessment and curricular development skills and the development of knowledge linked to IT Carlow's strategic research goals.</b>	28% of academic staff qualified to doctoral level by 2016.  <u>Sub-indicators</u> Continued implementation and recognition of Academic Professional Development suite of courses including delivery of MA in Teaching and Learning programme.	18% of WTE Academic Staff with doctoral level qualifications (2010).	Continued implementation and recognition of Academic Professional Development suite of courses including delivery of MA in Teaching and Learning programme.	The Institute has in place a comprehensive professional development programme for new and existing staff. All staff, together with staff from our collaborative partners, can undertake formal qualifications in teaching and learning. The restructuring of the MA in Teaching and Learning under Programmatic Review 2016 now offers new staff through our induction process the opportunity to achieve this award. Additionally, 65% have a Level 9 qualification.  Sources: Academic Professional Development Programme figures; MA T&L registered student numbers	
	Continued rollout of the Institute's staff development plan linking to the Institute's strategic goals.		28% of staff qualified to doctoral level.		

INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<b>To further embed quality assurance and enhancement arrangements, leading best practice and meeting all statutory requirements.</b>	<p>To continue to implement QA&amp;E work plan.</p> <p>Surveys, action and feedback.</p> <p>Established Teaching, Learning and Assessment Strategy.</p>	<p>Approved QA&amp;E work plan.</p> <p>Successful conclusion of Institutional Review 2010.</p>	<p>100% of work plan implemented.</p> <p>Strategic and Programmatic Reviews.</p> <p>Preparation for Institutional Review 2017.</p>	<p>This has been concluded successfully and is best evidenced through the Institute engagement with the QQI Annual Institutional Report in 2014/2015.</p> <p>All elements of the Institute openly commit to robust self-evaluation and international peer review processes. In 2016, the faculties and campuses undertook Stage II of Programmatic Reviews. This involved the review of all programmes in the Institute.</p> <p>Coupled with this, the professional support services in the Institute will undertake reviews. In 2016, the Library and Computing Services underwent these processes and all others will follow suit by 2018/2019 in preparation for Institutional Review. The Institute's collaborative partnerships with An Cosán and the Defence Forces were also reviewed.</p> <p>The Institute has played a leading role in the drafting of the QQI Policy on Cyclical Reviews and the Handbook for the Cyclical Review of Institutes of Technology. The Institute's Institutional Review is now scheduled for 2018/2019.</p> <p>Sources: QQI Annual Dialogue Meeting note; Review reports: Quality Outcomes webpage.</p>	

INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<p><b>To enhance the first-year experience of students through the provision of more broad-based, multi-disciplinary presence while facilitating progression to highest possible level in specialist demand-based programmes meeting social and economic regional and national need.</b></p>	<p>Development and delivery of market-led programmes meeting the dual demand of applicants and industry at regional and national needs while enhancing the transition from second to third-level for entrants via that route.</p>	<p>Current academic portfolio and CAO presence.</p> <p>Development of Strategic Plan 2014-18 with graduate attributes as a key theme.</p>	<p>Further accommodate integrated module provision across levels, programmes and campuses as part of programmatic reviews.</p> <p>School/ Centre/ Campus programmatic reviews.</p>	<p>In line with undertakings given in its original performance compact, and following on from commitments under Supporting a Better Transition from Second Level to Higher Education, the Institute of Technology Carlow has modified its CAO listing to further broad-based entry options at Level 7 and Level 8. It is noteworthy that the Institute has reduced its CAO 'footprint' from 77 offerings to 68 currently listed and on its Level 8 list from 37 to 31 (a 16% reduction) when nationally IoT offerings have increased by 6% (see Appendix 2, Table 2.4).</p> <p>Through the Graduate Attributes project we identify the essential qualities and traits that the Institute will engender in all of its graduates. They represent the skillsets and qualities which our learners will have the opportunity to develop as part of their overall higher education experience. Graduate attributes are not limited to the individual's own discipline area, but can and should be developed through engagement within the Institute as a whole.</p> <p>The process of refinement of the Institute's graduate attributes is being progressed through extrapolation from programme learning outcomes as part of the programmatic review processes in 2015/16. The publication of the Institute's graduate attributes charter will encapsulate and highlight the learner experience of the Institute of Technology Carlow graduate. The process of further ingraining these attributes into our learning culture will be the focus of our ongoing activities to 2018 and beyond.</p>	



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## 4. HIGH QUALITY, INTERNATIONALLY COMPETITIVE RESEARCH AND INNOVATION

*"The Strategic Plan for Research 2016-2020 has been designed to build on the internationally recognised achievements of our researchers and postgraduate learners. Through implementation of this plan, we aim to build research environments with critical mass, high ambition and strong international networks."*

**Institute of Technology Carlow**  
2016 Mid-Term Review  
Strategic Plan 2014-2018

### OVERARCHING STATEMENT

Institute of Technology Carlow's RDI activities are underpinned by ongoing strategic investment in institutional infrastructure and personnel and policy developments that have been designed to accelerate progress towards meeting ambitious targets for research and knowledge exchange and meeting national criteria for technological university designation. These are shaped by established institutional strengths. They are closely aligned to National and European priorities and Institute of Technology Carlow's own values and integrated vision for 'knowledge in action'. They embrace the wider teaching and regional engagement mission, are embedded across all disciplines and award levels and are ultimately focused on the generation

of innovation, creation of opportunity and the building of value in the regional economy.



In 2015 the Institute formally established 5 "CORE" targeted research areas (designCore, healthCORE, enviroCORE, gameCORE and engCORE) with designated CORE Directors with defined leadership responsibilities. Within the COREs research is focused around key themes where the Institute has developed significant expertise that is recognised internationally and is reflected in the high impact achieved by research outputs. Within and between the five CORE domains, cross-disciplinary activity ensures that a lively and collaborative research culture can flourish. This provides the necessary

environment that fosters research talent, stimulates innovative thinking and helps to develop and transfer ideas into productivity. The new Enterprise Ireland funded Design+ Technology Gateway at Institute of Technology Carlow launched in 2016 provides an interface linking internal multi-disciplinary technological RDI capacity across CORES with the needs of industry partners.

In 2016 the Institute developed a new Research Strategic Plan (2016-2020) through a broad and inclusive consultative process. Institute of Technology Carlow's developing research system involves a dynamic relationship between: Learners - postgraduates providing specialist expertise for the future; Researchers – specialist research staff driving programmes; Infrastructure - support and facilities; and Partners – regional and national SME and FDI partners. The strategy for research takes an integrated approach. It is a key driver in informing and shaping graduates and is embraced by a wide portfolio of teaching programmes that emphasise self-directed learning and development of the research skills for all learners. The Institute aims to build research environments with critical mass, high ambition and strong international networks whilst accelerating progress towards reaching key metrics for Technological University designation. The successful implementation of this research strategy continue to be underpinned by ongoing strategic investment in infrastructure, personnel and policy developments such as building a research capacity and research culture by promoting the COREs, through the commercialisation of a range of research projects and by developing future research themes and research policy.

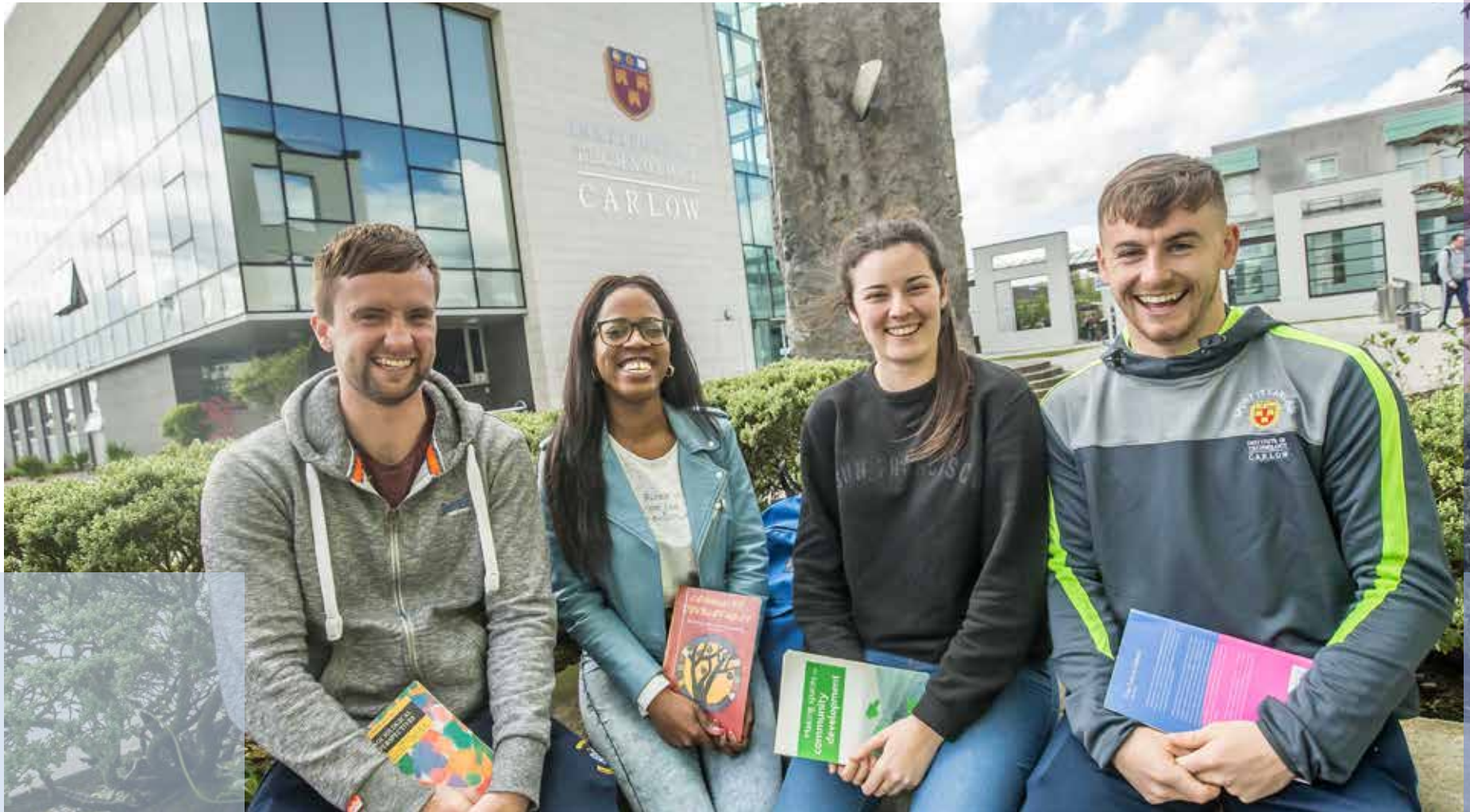
The Institute has developed and grown its postgraduate research supervisory capacity to 32% by 2016 (Table 1). The number of registered postgraduate research students has increased by 140% in the past five years. Currently there are 85 registered research postgraduate students (2016-17). Academic staff with doctoral qualifications has increased from 18% to 32% in the same period. There has also been a significant increase in the number of academic staff undertaking Level 10 postgraduate studies, rising from 2.6% in 2012 to 17.6% towards the end of 2016. A programme is now in place for Adjunct and Visiting Fellows and a number of both academic and industry based appointments have been made across Faculties and Programmes. Citation/research impact metrics and KTI metrics detailed and benchmarked in Appendix 6 and Appendix 7 confirm the development of high quality RDI endeavours.

The National Doctoral Framework has identified a range of core attributes that research students "acquire" as outcomes of their research programme. To develop these core skills and to help fashion and refine a distinctive and valuable set of attributes a core programme of modules has been developed to assist researchers in realising their potential in these areas.



INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2015 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<p><b>To integrate the new RDI building (Dargan Centre) into the Institute's Research and Innovation environment. This will include the establishment of appropriate structures to manage and support campus based spin-out companies, Institute companies and other enterprises emerging from or linked to the Institute's research activity.</b></p>	<p>Fully commissioned RDI building, innovation and enterprise supports in place, spin-out/ industry led RDI.</p>	<p>Current research facilities (2013) and campus incubation and innovation Centres.</p>	<p>The RDI building activities fully integrated with the Institute's RDI and teaching activities.</p> <p>Centre of the Institute's postgraduate studies provision.</p> <p>Facilitation of spin-out companies and industry focused research contracts/ collaborations.</p>	<p>Completed</p> <p>The Dargan Centre for Research and Innovation now provides a focal point for the postgraduate researcher population. All CORES and research groups have access to the facility and not alone does it provide a physical location but also a location where the different groups can exchange ideas and work on interdisciplinary proposals for funding. This is pertinent given the need for inter or trans disciplinary research proposals to European funding opportunities under Horizon 2020 or Erasmus +.</p> <p>Citation/Research Impact Metrics are presented and benchmarked in Appendix 6. For example, over the time period of this evaluation (2011-2016) the IoTs (as a group) have a SciVal FWCI (Field Weighted Citation Impact) of 1.19. The FWCI for Institute of Technology Carlow over this time period is 1.59 (this has increased from 1.19 in the SDC3 report). This and other metrics compare favourably with other representative National and International universities.</p> <p>KTI Metrics for 2016 include 70 Collaborative Agreements with Industry; 27 Consultancy Service Agreements; 89 New Spin-in Companies Supported; 22 Companies in On-Campus Incubation; 111 Start-ups Supported; 8 Invention Disclosures (IDFs); 1 Patent application filed; 1 Active Spin-out.</p> <p>2016 saw the continued strengthening of KT activity at Institute of Technology Carlow with noticeable operational impact through:</p> <ul style="list-style-type: none"> <li>• Establishing a stronger KT pipeline with structured case management yielding an increased percentage of larger value and repeat business projects.</li> <li>• Greater institutional awareness of KT objectives leading to more industry engagement and IPP/CF applications from academics.</li> <li>• Launching the new Enterprise Ireland Design+ Technology Gateway which provides a further platform for industry interaction and knowledge transfer.</li> </ul> <p>Detailed TTSI3 Target Metrics (2017 – 2021) have been agreed with Enterprise Ireland (Appendix 7) and will be enabled by recent successes in securing European and Enterprise Ireland funding totalling over €5mn with our consortia partners to support economic development activities for the region. These include our Enterprise Ireland Technology Gateway, Design +, the New Frontiers national entrepreneur development programme and the Bucanier Project (€2.9mn project). These initiatives will see the Institute work with in excess of 400 companies by 2018.</p>	

INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2015 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<b>To develop a multi-campus Graduate School in collaboration with WIT as a key component of a South East Technological University.</b>	Progress towards a multi-campus graduate school initiative.	Current postgraduate research provision and delegated authority position within each Institute; Current research strategies; Strategic plans and research prioritisation plans.	Full implementation of the Graduate School for all Level 9 and 10 postgraduate research students.	The Institute has worked to develop and enhance its capacity for research training in line with national protocols and in the expectation of meeting TU criteria for research provision. Based on training needs and the recommendations of the National Framework for Doctoral Education, a formal structured PhD programme (delivered over 24 months) has been designed. Additional programmes are also offered on a needs basis to provide specific support in the areas of academic writing, editorial skills and language supports. In tandem with the Teaching and Learning Centre a specific module in Research Supervision is offered to staff and this is supplemented by refresher workshops for staff.  This will provide the basis for any future multi-campus graduate school as part of the development of a South East Technological University.	
<b>To increase the number of post graduate research students to 100 registered students by beginning of academic year 2016/17 - Note: This objective is directed towards meeting the criteria of Technical University designation and is subject to additional investment for completion.</b>	Post graduate registered students.	Registered students as at beginning of academic year 2012/13.	100 Registered students as at beginning of academic year 2016/17.	Currently 85 Registered PG students  There has been a 140% increase in PhD/MSc researchers over the period of the compact 2014-2016. The CORE programme will assist in building this figure and subject to achieving positive funding application outcomes will achieve the TU designation national targets early in the next HEA Institute compact.	





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## 5. ENHANCED ENGAGEMENT WITH ENTERPRISE AND THE COMMUNITY AND EMBEDDED KNOWLEDGE EXCHANGE

*"Engagement with business, government, community and voluntary sectors defines the Institute of Technology Carlow's leadership role in the development of our region and nation.....We will strengthen our engagement with the regions, communities and sectors we serve. We will share our knowledge and resources and we will continue to enhance our contribution to the development of a creative, sustainable and fair society."*

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2016 Mid-Term Review  
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### OVERARCHING STATEMENT

The principle of 'connectedness' permeates all activities of Institute of Technology Carlow across our teaching and learning, research, and service missions. The development of a stronger economic, social and cultural base to our regions is reflected through the work undertaken with local, regional and national stakeholders and initiatives such as the Regional Skills Forum, Regional Action Plan for Jobs, Regional Planning Guidelines and the development of Local Economic and Community Plans (LECP) for the counties in our regions. In 2016 the Institute of Technology Carlow provided the lead on, and direction to, the South East Regional Skills Forum (SE RSF). Major outputs here include a mapping exercise for all providers delivering programmes aimed at the biopharma sector, a series of workshops with the seven designated industry sectors experiencing skills shortages in the region, the commissioning and launching of a video highlighting education/industry links (Appendix 5). In addition, the Institute is a member of the Mid East and Midlands RSF steering group.

The delivery of 'knowledge in action' has long been a cornerstone of institute enterprise engagement. In 2016 the Design+ Technology Gateway was launched to support and enhance technology driven disciplines, linking that technology to business opportunities and user needs. Design + engaged with more than 40 companies in 2016 bringing to over 110 companies the various industry engagement functions of the Institute supported in 2016. Part of these initiatives saw the implementation of the INTERREG 4 funded Inspire Best Practice Guide to companies in Rathdowney Co Laois (Midlands). This successful programme involved multiple stakeholders and saw new business, products and services

developed with minimal investment and demonstrated that the outputs of the INSPIRE project were sustainable (Appendix 7).

Our TTSI (Technology Transfer Strengthening Initiative) consortium involving Athlone Institute of Technology, Maynooth University and Waterford Institute of Technology developed strong collaborative practices over the course of TTSI2. The consortium was recognised as being very effective through the achievement of an “A Rating” in performance and in feedback provided by the expert panel. The Institute awaits the final evaluation of TTSI 2 but has received increased funding and resources under TTSI 3 including the addition of a managed consultancy resource to develop an additional pipeline of clients.

The Institute of Technology Carlow President’s Volunteer Award was established in association with UNUM, a US multinational based in Carlow, and Carlow Volunteer Centre to harness, acknowledge and support the contribution that students at the Institute make to their communities whether on campus and its environs or within their own local community, or overseas (Appendix 7). The Faculties and Centres of the Institute in 2016 underwent a programme of peer evaluated strategic reviews where each Programme Board/Stream reviewed its curricula to incorporate learner engagement and civic identity element(s) by considering criteria identified by the faculty, and informed by literature and practice, as key to embedding engagement in the Institute. The validation of a special purpose award for the President’s Volunteer Awards is an important aspect of the scheme as it allows voluntarism and engagement to be included in the learners diploma supplement.



INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<b>Enhance our contribution to the economic, social and cultural development of the region in partnership with WIT through the expansion of partnerships and alliances</b>	Establishment of Regional Engagement Forum as per TU Stage 1 submission. Staff and institute engagement audits.	Extensive engagement and collaborations across region in economic, social and cultural activities. IT Carlow staff and Institute Engagement Audit 2013/14.	Evaluation of Regional Engagement Forum. Report on staff and institutional engagement audit.	The development of a 'regional engagement forum' was an initiative proposed by Institute of Technology Carlow under phase 2 of the process towards Technological University. This was originally included as an objective under SDC1. The proposal for a Regional Engagement Forum has been subsumed into the national network of Regional Skills Fora (RSF) established by the Department of Education and Skills in 2015. A report on the SE RSF is included in Section 1 (Regional Cluster) and Appendix 5.  The staff engagement audit will be repeated in 2017.	
<b>To increase IT Carlow output of economically relevant knowledge, know-how and patents through strengthening institutional competence at TTO level and among researchers.</b>	Agreed EI Technology Transfer Office metrics.	EI Technology Transfer Office metrics 2012.	EI Technology Transfer Office metric targets for 2016 are Spin outs (1); Licences/ Options/ Assignments (3); Research agreements with industry (>25K) (2); Invention disclosures (4); Priority patent applications (2); PCT Patent Applications (1); Research agreements with industry (<25K) (50); Start-ups, spin-ins etc (15)	<p>KTi Metrics for 2016 include 70 Collaborative Agreements with Industry; 27 Consultancy Service Agreements; 89 New Spin-in Companies Supported; 22 Companies in On-Campus Incubation; 111 Start-ups Supported; 8 Invention Disclosures (IDFs); 1 Patent application filed; 1 Active Spin-outs.</p> <p>2016 saw the continued strengthening of KT activity at Institute of Technology Carlow with noticeable operational impact through:</p> <ul style="list-style-type: none"> <li>Establishing a stronger KT pipeline with structured case management yielding an increased percentage of larger value and repeat business projects.</li> <li>Greater institutional awareness of KT objectives leading to more industry engagement and IPP/CF applications from academics.</li> <li>Launching the new Enterprise Ireland Design+ Technology Gateway which provides a further platform for industry interaction and knowledge transfer.</li> </ul> <p>Detailed TTSI3 Target Metrics (2017 – 2021) have been agreed with Enterprise Ireland (Appendix 7) and will be enabled by recent successes in securing European and Enterprise Ireland funding totalling over €5mn with our consortia partners to support economic development activities for the region. These include our Enterprise Ireland Technology Gateway, Design +, the New Frontiers national entrepreneur development programme and the Bucanier Project (€2.9mn project). These and other initiatives will see the Institute work with in excess of 400 companies by 2018.</p>	

INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<p><b>To strengthen learner engagement and civic identity through module and programme delivery.</b></p>	<p>Proportion of modules reviewed against learner engagement and civic identity criteria approved by academic council. Number of students participating in President's Volunteer Awards.</p>	<p>Programmatic review documentation as completed. Number of students participating in President's Volunteer Awards 2012/13.</p>	<p>All schools to have reviewed modules against learner engagement and civic identity criteria Increase of 10% in the number of students participating in President's Volunteer Awards.</p>	<p>The Faculties and Centres of the Institute in 2016 reviewed its curricula to incorporate learner engagement and civic identity element(s) by considering criteria identified by the faculty as key to embedding engagement in the Institute (Appendix 2, Table 2.5)</p> <p>The growth objective for the award scheme was achieved.</p>	







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## 6. ENHANCED INTERNATIONALISATION

*"We will build upon our strategic collaborations and partnerships, both nationally and internationally. These enhance our capacity, extend our reach, increase our relevance and maximise our impact..... We will reinforce our internationalised curriculum and strategic provision to ensure our graduates can thrive in a globalised society..... We will continue to develop an internationally oriented organisation, with a robust self-evaluation, peer review and quality enhancement culture, as we strive to embody the highest international standards of provision, transparency and stewardship of resources."*

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### OVERARCHING STATEMENT

Over the course of the *Mission Based Performance Compact 2014-2016* process, Institute of Technology Carlow has identified barriers and enablers of its internationalisation strategy and processes. To give one example - At the commencement of the compact process decisions were taken regarding the strategic direction of international student recruitment. There were competing demands for limited resources with a potential opportunity in Brazil and the Middle East market. Following internal consultation, it was decided to put the effort into the Middle East market for two reasons (i) A relationship was being developed with influential stakeholders in the Middle East and (ii). The Institute had reservations with offering already limited places in award years of programmes to international non-EU learners who did not have to take the full award programme. That decision has been proved correct given subsequent developments in Brazil and the fact that in 2015/16 we had 74 registered students from the Middle East. This indicates the formulation, implementation and monitoring of strategic objectives for international recruitment.

Institute of Technology Carlow remains a leader in international recruitment among the IoTs and continues to perform in excess of national averages for the sector in terms of student recruitment (Appendix 2, Figures 2.16-2.19). We continue to benchmark ourselves in particular against the other IoTs. We work closely with state agencies and other stakeholders to ensure the quality of decision making is maintained and enhanced. The SRS / HEA RGAM Grant Allocation Workbook 2015/16 Student Numbers shows that the Institute has the fourth highest number of non-EU learners at 253; exceeding the IoT average of 219 learners. In addition, we had 140 incoming

Erasmus students. The final figure for 2016 will show 390 international learners or approximately 9% of fulltime undergraduate learners. The Institute profile in 2010/11 showed that 5% of fulltime enrolments were represented by International students against a national figure for IoTs of 3%. In 2013 the figure for Institute of Technology Carlow had risen to 6.7% and in 2014 had further increased to 9%. The target for 2016 was 10% in the 2014/2016 Compact. This target was set in 2013 at the start of the compact process and was based on a projected fulltime student population which has been exceeded by the Institute in the intervening time period (Appendix 2, Figure 2.5). The future national objective is a very challenging 15% of fulltime enrolments. UK HEIs of a similar profile to Institute of Technology Carlow would attract incoming non-EU students of approx. 10%. The UK system as a whole recorded a drop in 2012/13 of 3% to approx. 12% as a result of UK Border Agency changes. This figure was largely recouped in 2013/14. In addition, Australia has launched a plan to increase international student recruitment by 760,000 by 2020 and is enhancing immigration policy to assist in achieving this target. The ability of Ireland to respond to such competitor regulatory and marketisation shifts is questionable as indicated by the ongoing issues regarding the stay-back period for level 9 graduates.

Institute of Technology Carlow actively seeks and welcomes collaborative / co-operative arrangements with other organisations. These collaborations are an important aspect of our international recruitment. In 2014 following extensive international peer evaluation, the Institutes Policies and Procedures for Collaborative and Transnational Provision and Joint

Awards were approved. These now provide the Institutional framework for forming new international partnerships. Due diligence was completed on 3 international partners in 2016 and it is intended to offer at least one programme transnationally in 2017/18. These collaborative arrangements also provide opportunities for overseas placement. The Department of Science and Health is particularly active in this regard and has over 30 learners in placements outside the EU in the year under review. Graduate placement opportunities under Erasmus + are over-subscribed with insufficient places being made available to the Institute. In the present year 30 places will be allocated. In addition, all 10 allocated places for study mobility will be used. The Institute has spent a lot of time developing student mobility opportunities and these efforts are now seeing growth to a stage where available opportunities are over-subscribed.

The Faculties and Centres of the Institute in 2016 underwent a programme of peer evaluated strategic reviews where each Programme Board/Stream reviewed its curricula to incorporate international/global element(s) by considering criteria identified by the faculty, and informed by literature and practice, as key to embedding internationalisation in the Institute. The *National Strategy for Higher Education to 2030* acknowledges that internationalisation is both necessary and multi-faceted and that it encompasses a range of practices and activities. While internationalisation involves international student recruitment and partnerships, it also includes the development of inter-cultural experience as a core competence for graduates in an export-driven and innovation-based economy. These include the enhancement of student exposure to global perspectives by developing

an internationalised curriculum; by promoting study and work placement in industry (for industrial projects) abroad; student exchange programmes; by providing a culturally diverse environment to study in; by allowing students to undertake mobility programmes with international partners (not only academic but also industrial partners) and by ensuring that the ethos in which students learn reflects the global nature of education today. Further information is provided in Appendix 8.



INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<b>To implement an effective strategy for student recruitment, focusing on strategically identified key markets with the objective of increasing the Institute's international student population to a minimum of 10% of the total full-time student population as per the baseline measure.</b>	Admissions data for percentage of full time student population coming to IT Carlow whose normal place of residence is not in Ireland.	Percentage of full time student population coming to IT Carlow whose normal place of residence is not in Ireland as per Institute returns 2012/13.	International student population is a minimum of 10% of the total full-time	<p>In 2015/16 there are 390 registered international learners continuing the upward trend in numbers (Appendix 2, Figure 2.16) and equating to 9% of total full-time students.</p> <p>The 2016 target was 10%. This target was set in 2013 at the start of the compact process and was based on a projected fulltime student population increase of 6% (Appendix 2, Figure 2.5). The actual increase in fulltime students over this time period was 13.3%. This will inform the Institute's future approach to the articulation of metrics for future compact purposes.</p> <p>A further contributing factor was a reduction in scholarship students from Oman due to economic difficulties in that country. This reduced our international intake by at least 10. Changes in Malaysia also resulted in no growth in that market. The change relates to the timing of issuing results in key HEI partners in that country meaning that the students who require a visa don't have enough time for the visa application process. This is outside of our control but will be monitored.</p>	
<b>To develop internationalised curricula and internationally focussed programmes, learning outcomes and assessment of students in line with international goals</b>	Proportion of modules reviewed against internationalisation criteria; Increased number of alliances and collaborations with international HEIs (by 10%) over the lifetime of the plan; Percentage of students and staff involved in overseas exchange & mobility programmes.	Programmatic review documentation as completed; Data from Collaborative register as at 31/12/13; Erasmus returns for 2012/13.	All Schools to have reviewed modules against internationalisation criteria approved; 0.75% of students and 5% of academic staff to have participated in overseas mobility programmes.	This objective was achieved through the programmatic review process of 2016.	
<b>Increase the number of alliances and collaborations with international HEIs by 10% over the lifetime of the plan.</b>	Number of alliances and collaborations listed in Institute Collaborative Register.	Data from Collaborative register as at 31/12/13.	Target achieved.	International collaborative activity is a key objective of the next strategic planning cycle. The implementation of a collaborative programme of study is a priority goal. To that end three due diligence exercises were completed in 2016 in Malaysia and a process is underway in China.	

INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<p><b>To enhance student exposure to global perspectives by promoting study and work placement in industry (for industrial projects) abroad; staff &amp; student exchange programmes; and by encouraging students to undertake mobility programmes with international partners (not only academic but also industrial partners).</b></p>	<p>Percentage of students and staff involved in overseas exchange &amp; mobility programmes.</p>	<p>Erasmus returns for 2012/13.</p>	<p>1% of students and 7% of academic staff to have participated in overseas mobility programmes.</p>	<p>Student placement overseas has grown substantially over compact 2014-2016. Presently 30 places are facilitated through the Erasmus programmes and in the current year 32 additional placements are facilitated through the Department of Science and Health. 10 places are also used for study mobility. The nett result is approx. 1.8% of students now involved in mobility programmes across the globe.</p> <p>All available HEA funded staff places are allocated annually. The Institute is also facilitating staff mobility through its own resources to develop networks for research and innovation partnership development.</p>	



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## 7. INSTITUTIONAL CONSOLIDATION

*“Within the evolving Irish higher education landscape, our Institute continues to assert its position as a strong, confident, progressive and ambitious institute with a commitment to delivering step changes in higher education provision and designation as a Technological University under new impending legislation.”*

**Institute of Technology Carlow**  
2016 Mid-Term Review  
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### OVERARCHING STATEMENT

It is well established that development of a technological university comprising an integrated regionally-engaged multi-campus organisation with a significant and balanced presence in Carlow, Kilkenny, Waterford and Wexford, would be a major strategic asset to drive regional development in the South East (Joint submission by the South East Institutes of Technology to the HEA 2012; Engagement and Consultation Process on a Technological University for the South-East, Kelly, 2015). The existing campuses of both Waterford and Carlow institutes are well placed to provide a recognisable north/south axis to the region and this has the potential to provide a strong back bone to an otherwise diverse area, while capitalising on the considerable opportunities provided by the neighbouring more economically-advanced regions of Dublin and the GDA (to the north of the region) and Cork (to the south of the region).

The strategic approach to this opportunity by the Institute has been multi-faceted and includes:

- Strategic development of the Institute of Technology Carlow towards being “technological university-ready” in terms of national process and criteria;
- Working collaboratively with Waterford Institute of Technology regarding joint vision and merger planning;
- Developing a vision and implementation framework for a South East Technological University;
- Continuing to meet our public mandate as a publicly-funded institution, aligning all of our resources and endeavours with new national policies and imperatives in a prioritised, effective, efficient and transparent manner.

Significant progress has been made on all fronts as evidenced by this submission and the outputs determined in 2016 through our Mid-Term Strategic Plan Review on our five over-arching strategic goals, nineteen objectives and sixty targeted initiatives (Appendix 1). Importantly, we continue to plan for the future and we refined our strategic initiatives and priorities throughout 2016 for the remaining two years of this current planning and implementation cycle (2014-2018). Preparations for a new Strategic Plan have commenced and it is envisaged that the stakeholder consultative phase will commence in late 2017/early 2018.

Joint vision and merger planning discussions have been ongoing with Waterford Institute of Technology since 2012 and it is well documented that the project faced a particularly challenging time in 2014 and 2015. An independent review of the project was commissioned by the Minister for Education and Skills at this time and the outcomes were published in August 2015 ([www.education.ie/en/Publications /Education-Reports/Engagementand-Consultation-Process-on-a-Technological-University-for-the-South-East.pdf](http://www.education.ie/en/Publications/Education-Reports/Engagementand-Consultation-Process-on-a-Technological-University-for-the-South-East.pdf)). The Institute of Technology Carlow fully endorses the conclusions and recommendations contained within the report. In particular, the Institute notes the seven challenges unique to the South East TU project identified in the report and the importance of addressing these if the project is to be successful. The relevant extract from the report is presented in Appendix 9 to indicate the scale of the challenges for the project. Additional insights have been gleaned during a pre-engagement process with the new leadership in Waterford Institute of Technology involving Governing Body Chairs and Presidents in Q4 2015. There is also uncertainty and speculation regarding the final shape of, and timing for

the enactment of the Technological Universities Bill. Within this context the Institute acknowledges the need for risk management in pursuing the unitary technological university model so as to ensure successful amalgamation and formation of an integrated unitary multi-campus organisation that provides the foundation upon which the new Irish Technological University can be developed.

Notwithstanding these challenges, there are also new drivers. Not least of these is the collaborative engagement of key regional stakeholders from across the five counties in new regional structures established to implement the South East Action Plan for Jobs and to better align skills with the economy through the South East Regional Skills Forum (Appendix 5).

Following a joint meeting of the two Governing Bodies in early 2016 there was agreement on recommencing work on the South East TU project. Funding of €1.5m was provided from the HEA in late 2016 following a joint application and presentation to HEA Board Members and Executive. It is planned to use this funding to support positive collaborative experiences across and between all levels of both Institutes, while developing a unitary vision for the Technological University of the South East. There is also a commitment from the leadership in both Institutes to make a joint submission for a Technological University of the South East region within a three-year timescale. A new MOU has been drafted by the Presidents and Chairs of the two Institutes and this will be brought for approval to the Executives and Governing Bodies of both institutes following the appointment and agreement of the new Governing Body Chair to WIT (a process currently underway). This MOU provides inter alia for a governance and management framework to scaffold the new process comprised of the

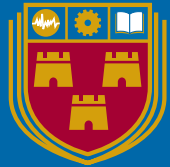
MOU, an Independent Chair and a Project Steering Group comprised of members of the Governing Bodies and Senior Executives of both Parties, International Experts and experts in Change Management.

The Institute of Technology Carlow acknowledges that the past five years has been a substantial learning experience for all involved and it is now timely to take the lessons from this into a renewed and substantive effort focussed on delivering for stakeholders. The South East Technological University is a much needed development which is likely to deliver rich dividends for this and future generations.



INSTITUTION OBJECTIVE	PERFORMANCE INDICATOR	BASELINE	FINAL TARGET, END 2016	PROGRESS AGAINST 2016 TARGET, COMMENTARY AND DATA SOURCE	SUMMARY
<p><b>To progress the development of a multi-campus Technological University (TU) for the South East in partnership with WIT.</b></p>	<p>Progress through stages for designation as a TU in line with the process set out in the HEA 2012 publication 'Process and Criteria for Designation as a Technological University'.</p>	<p>Memorandum of understanding between IT Carlow and Waterford IT (Appendix 6).</p> <p>Approval to progress to Stage 2 of the published TU process.</p> <p>TU Project.</p> <p>Implementation Board in operation.</p> <p>TU Project Office established in each campus.</p>	<p>Advanced implementation of business plan for the establishment of the TU.</p>	<p>Significant progress continues to be made on the strategic development of the Institute of Technology Carlow towards being "technological university-ready" in terms of national process and criteria.</p> <p>This is evidenced by this performance review submission to the HEA and the outputs determined in 2016 through our Mid-Term Strategic Plan Review (Appendix 1). The Institute has further refined our strategic initiatives and priorities for the remaining two years of this current planning and implementation cycle (2014-2018) and it is envisaged that the stakeholder consultative phase will commence in late 2017/early 2018 for a new Strategic Plan (2018+).</p> <p>Following re-engagement of WIT in the South East TU process in January 2016, both Institutes completed the preliminary engagement phase, recommended by Michael Kelly in his 2015 report to the Minister for Education and Skills.</p> <p>Funding of €1.5m was provided from the HEA in late 2016 following a joint application and presentation to HEA Board Members and Executive. It is planned to use this funding to support collaborative projects across and between all levels of both Institutes, while developing a unitary vision for the Technological University of the South East.</p> <p>There is also a commitment from the leadership in both Institutes to make a joint submission for a Technological University of the South East region within a three-year timescale.</p> <p>A new MOU has been drafted by the Presidents and Chairs of the two Institutes and will be brought for approval by the Executives and Governing Bodies of both institutes following the appointment and agreement of the new Governing Body Chair to WIT (a process currently underway).</p> <p>This MOU provides inter alia for a governance and management framework to scaffold the new process comprised of the MOU, an Independent Chair and a Project Steering Group comprised of members of the Governing Bodies and Senior Executives of both Parties, International Experts and experts in Change Management.</p>	





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