July 2022

The Expert Group on Future Skills Needs Statement of Activity 2021

National Skills Council

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Foreword

The Expert Group on Future Skills Needs (EGFSN) is an independent, non-statutory body comprising representatives from business, the education and training sector, the enterprise development sector, the trade unions and government departments. It plays a key role in identifying current and future skills needs of enterprises and advising the Irish Government on these needs. The EGFSN Secretariat is based in the Department of Enterprise, Trade and Employment. This Activity Statement provides a summary of the work of the EGFSN in 2021, and outlines some of the main areas which the Group is addressing in 2022.

Providing the appropriate skillsets to the current and future workforce to support their employability and the sustainability of Ireland's enterprise base has always been the goal of the work of the EGFSN and that work continues. In 2021, the EGFSN continued its analysis of skills requirements across a number of sectoral and occupational areas as well as focusing on monitoring the implementation of its previous recommendations.

The Skills for Zero Carbon report was published in November 2021 and seeks to support the delivery by 2030 of some of the key enabling actions in the Government's Climate Action Plan- the ambitions to boost onshore and offshore wind energy generation, an increase in solar energy generation, the energy efficient retrofit of the existing housing stock, and the uptake and maintenance of electric vehicles on Ireland's road network. The report advises on the nature and quantity of the skills required by these Zero Carbon sectors over the next decade and will help inform the broader response put in place to deliver on the targets set for renewable energy generation, built environment energy efficiency and sustainable transport.

2022 also saw the EGFSN conducting the research for its preliminary study into the implications of Artificial Intelligence, and the skills that will be required to ensure its adoption and deployment is both optimal and ethical. This highly anticipated study is one of the first of its kind, and will lay the framework for future reports on technologies which are already becoming critical drivers of productivity across sectors and industries.

This report also outlines some of the areas that the EGFSN is addressing in 2022. These include an assessment of the skills needed by Ireland's BioPharmaChem industry, future demand for high-level ICT skills, and the skills requirement to expand provision of international financial services.

I would like to thank the members of the Expert Group on Future Skills Needs for their continued commitment to the work of the Group and the secretariat in the Department of Enterprise, Trade and Employment for the research and analysis work that they provide to the group. I would also like to thank the Department of Further and Higher Education, Research, Innovation and Science for their ongoing support.

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Tony Donohoe

Chairperson, Expert Group on Future Skills Needs

Introduction

The Expert Group on Future Skills Needs (EGFSN) has the task of advising Government on future skills requirements and associated labour market issues that impact on enterprise development and employment growth.

Specifically, the EGFSN:

- Carries out research, analysis and horizon scanning in relation to emerging skills requirements at thematic and sectoral levels. Steering Groups comprising of experts from relevant enterprise sectors and the education and training sector may oversee sectoral research studies to be undertaken or commissioned by the EGFSN. Drawing on statistical input and analysis from the Skills and Labour Market Research Unit (SLMRU) in SOLAS and consultation with the enterprise/education experts as part of the study, draft reports setting out the projected needs are prepared by the EGFSN.

- Engages with the Higher Education authority (HEA), the Further Education and Training Authority (SOLAS), Quality and Qualifications Ireland (QQI), the Regional Skills Fora, education and training providers in the course of its research.

- Engages with DFHERIS, HEA, SOLAS and other relevant bodies to produce agreed action plans to address the skills needs identified.

- Submits the findings of its research and proposed Action Plans to the National Skills Council prior to publication.

- Disseminates its findings to the Regional Skills Fora and other relevant groups.

Research and Analysis Resources

The research, analysis, and administration support to the EGFSN is provided by the Department of Enterprise, Trade and Employment.

EGFSN work undertaken by the Department of Enterprise, Trade and Employment is part-funded from the National Training Fund (NTF), through the Department of Further and Higher Education, Research, Innovation and Science. In 2021, €523,350 was allocated from the NTF towards the cost of this work.

Members of the Expert Group on Future Skills Needs

- Tony Donohoe, Chairperson – Policy Advisor, IBEC
- William Beausang, Assistant Secretary, Department of Further and Higher Education, Research, Innovation and Science
- Stephanie O'Brien, Department of Further and Higher Education, Research, Innovation and Science
- Breda O'Toole, IDA Ireland.
- Jonathan MacMillan, Enterprise Ireland.
- Dr. Vivienne Patterson, Higher Education Authority
- Dr. Laura Bambrick, Irish Congress of Trade Unions
- Joan McNaboe, Skills and Labour Market Research Unit, SOLAS
- Shauna Dunlop, SOLAS
- David Hegarty, Assistant Secretary, Department of Enterprise, Trade and Employment
- Marcus Breathnach, Head of EGFSN Secretariat
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EGFSN Research and Analysis in 2021

1. EGFSN Research and Analysis in 2021

Delivering skills for Ireland's economy

The work of the EGFSN in 2021 was aligned with the key concerns set out in the Economic Recovery Plan, including the enhancement of productivity, and the building of resilience across the enterprise base, while also addressing priorities in the Programme for Government announced in July 2020.

In 2021, the EGFSN continued to identify the skills required for the economy to recover and to rebuild the capacity of Ireland's workforce so that it can contribute to the recovery and future growth. Digital transformation across all aspects of the economy and society has accelerated, and the way enterprises work has changed forever. The EGFSN works to ensure that this transition continues to be a positive force in improving the Irish economy and society.

The EGFSN is committed to carrying out research into emerging skills needs and is a key component of Ireland's skills architecture. It identifies the skills required by enterprises across occupations and sectors. It provides information to policy makers and education and training providers to support the alignment of programmes with employers' needs and underpins labour market activation programmes. Its reports and analysis can assist individuals to make informed decisions around employment opportunities and career choices.

The EGFSN will continue to fulfil this role in the challenging times ahead and will feed into the deliberations of the National Skills Council (NSC), where priority areas can be identified and addressed.

Outlined below is a description of the work that the EGFSN carried out in 2021:

Skills for Zero Carbon- The Demand for Renewable Energy, Residential Retrofit and Electric Vehicle Deployment Skills to 2030

This report was developed in the context of the need to urgently accelerate the transition to a Zero Carbon Economy, as reflected in the binding targets for emissions reduction over the next decade, and ultimately, carbon neutrality by 2050. In Ireland this will be driven by the Government's Climate Action Plan and the Climate Action and Low Carbon Development Act, which seeks to achieve steep reductions in Ireland's carbon emissions by 2030.

*Modelled labour demand from offshore wind, onshore wind and grid-scale solar energy, 2021-2030*
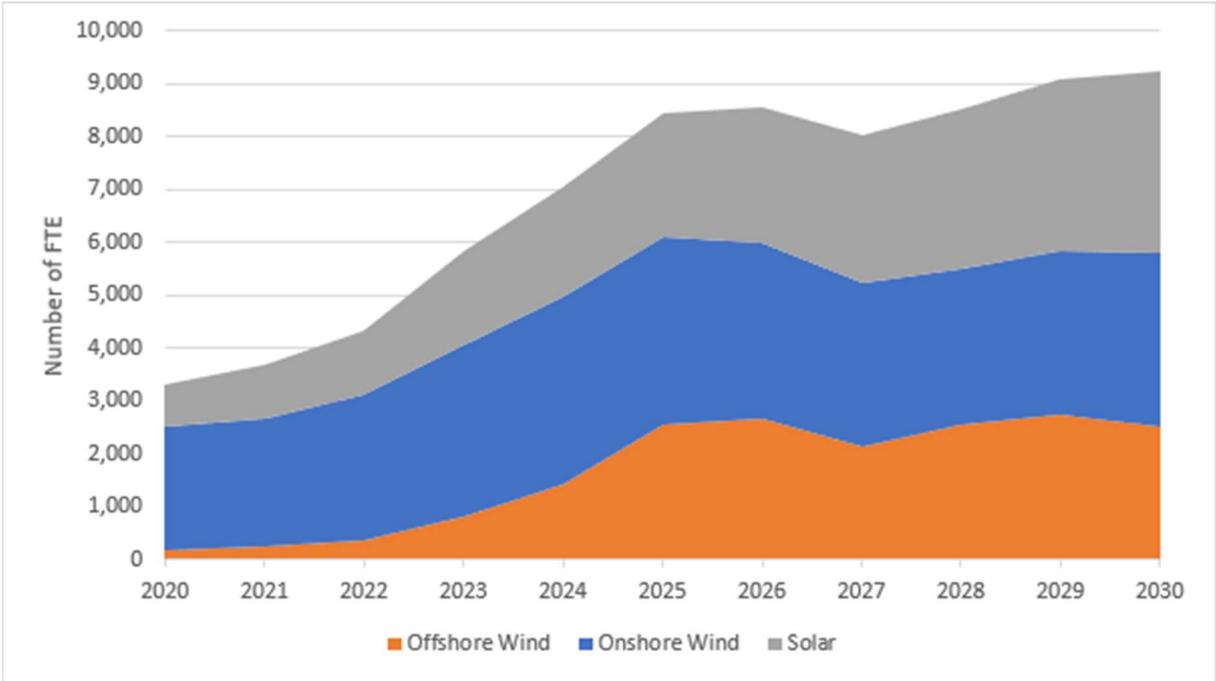
The report outlines recommendations for consideration with regard to the overall delivery of the Climate Action Plan in that 10-year timeframe, in areas it identifies as representing "Zero Carbon" activities: 5GW of offshore and up to 8GW of onshore wind energy generation, 1.5-2.5GW of solar energy generation, the energy efficient retrofit of 500,000 homes to a minimum B2 BER, the installation of 600,000 heat pumps, and the target of having 840,000 electric cars, and 95,000 commercial vehicles, on Irish roads.

Modelled FTE labour demand for domestic retrofit, heat pumps and solar PV, 2021-2030
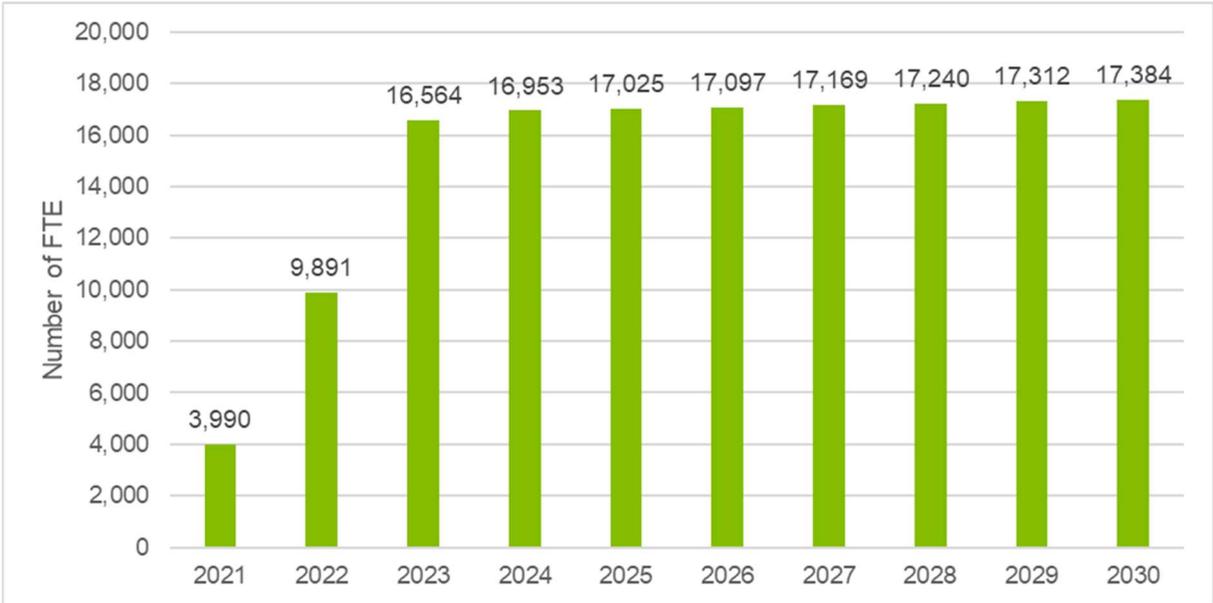
The report advises on the nature and quantity of the skills required by these Zero Carbon sectors over the next decade, and will help inform the broader response put in place in order to deliver on the targets set for renewable energy generation, built environment energy efficiency and sustainable transport. The report identifies the types and quantities of skills needed to deliver on these targets. Employment is predicted to substantially increase in renewable energy and residential retrofit by the end of the decade- from approximately 3,000 to 9,000 in wind and solar sectors, and from just under 4,000 to 17,400 in retrofit. The existing Internal Combustion Engine (ICE) vehicle mechanic workforce will need to be transitioned to work on electric vehicles (EV).

*Modelled labour demand for vehicle maintenance and repair, 2020-2030*
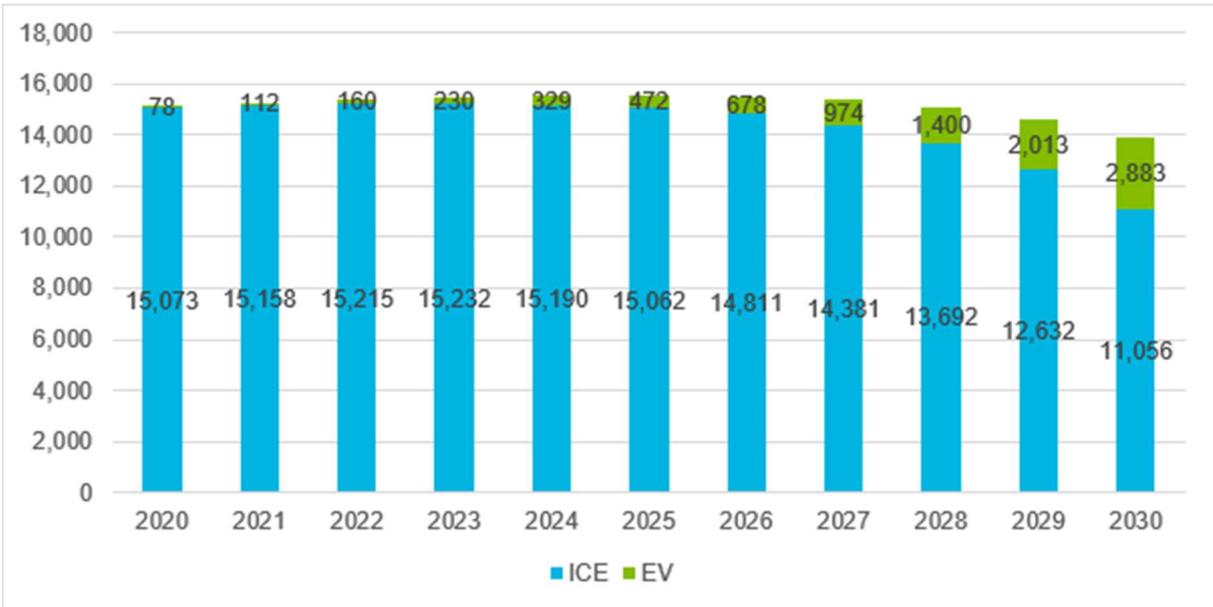
The recommendations arising from this study resulted from collecting and collating ideas in the interviews and workshops that were held with industry and stakeholders. Once the labour market analysis was undertaken - which identified the demand for labour over the next decade while also considering the supply pathways for that labour - a long list of recommendations was drawn up. These were presented to the EGSFN Steering Group in a draft report. The recommendations were refined, identifying those with responsibility for implementation. The 30 recommendations are divided into six categories:

1. Renewable Energy
2. Residential Retrofit
3. Electric Vehicles
4. Promotion of career pathways in zero carbon economy activities
5. Alternative sources of skills supply for zero carbon economy activities
6. Public Sector Programme Management and Carbon Accounting Skills

Implementation of the recommendations relating to the development of wind and grid scale solar energy are now being considered and progressed by the Department of the Environment, Climate and Communications, in collaboration with the Department of Further and Higher Education, Research, Innovation and Science and its agencies. The recommendations relating to residential retrofit, as well as those for the broader Built Environment, set out in the EGFSN's 2020 report, *Building Future Skills,* are meanwhile being implemented as part of the Government's *Housing for All* strategy.

Labour Demand Estimates for Ireland's National Housing Targets, 2021-2030

In September 2021, the EGFSN published Labour Demand Estimates for Ireland's National Housing Targets, 2021-2030. Undertaken at the request of the Department of Housing, Local Government and
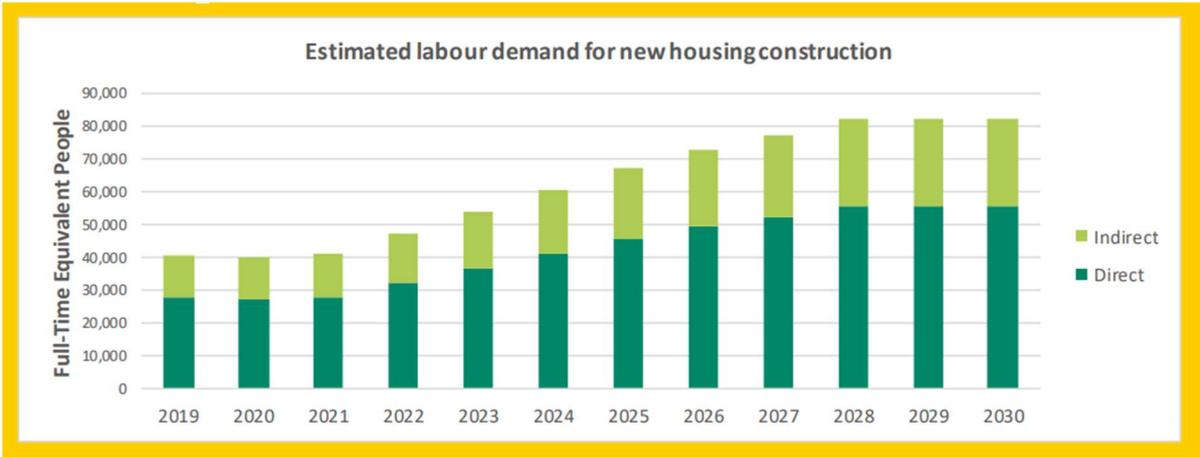
Heritage, these estimates represented the Group's contribution to the development of the Government's Housing for All strategy, which aims to deliver an average of 33,000 new houses annually over the period 2021-2030. The estimates set out the size of the new build workforce required to deliver on the target set out in the strategy, broken down by occupation and indicating the number of new entrants required each year.

The report found that to achieve an annual average of 33,000 over the decade, housing completions would need to ramp up from the current annual output of approximately 20,000 in 2020, to 33,000 by 2025, before peaking at around 40,000 at the end of the decade.

Based on this profile, total labour demand from housing construction is estimated to rise from approximately 40,000 full-time equivalent workers at its 2019/20 level, to 67,500 workers by the middle of the decade, when the 33,000 new housing unit target is expected to be reached. This represents an estimated additional 27,500 workers over five years. Total demand is estimated to peak at just over 80,000 workers towards the end of the decade.

Skills for Artificial Intelligence

A preliminary study of Skills for Artificial Intelligence was commenced in 2021 and was published in 2022. A wide-ranging Steering Group of experts was established to guide the study, chaired by Professor Barry O'Sullivan from UCC. The study is aimed at understanding the broad skills implications that AI will have in the economy and in society. The study included an extensive online survey, gauging opinions and perceptions of AI among policy makers, educators, innovators and members of the public, and a series of workshops which engaged with a variety of experts from across academia, public and private sectors. This is one of the first studies specifically carried out to examine the skills dimension of AI, and its publication was widely anticipated.

The report describes AI as a general-purpose technology that will have potential application across a broad range of sectors and occupations, expected to complement humans in some tasks, while replacing them in others. Skills availability has been identified as the number one barrier to AI adoption, with Irish firms reporting significant skills gaps in the areas of cloud computing, programming and machine learning or modelling, compared with our European neighbours. The adoption and deployment of AI systems is a complex process that requires a combination of AI-specific skills, relevant management and transversal skills, and an awareness and understanding of AI and its implications.

Improving digital literacy is the basis of improving AI skills, and educators must be enabled to embed the use and understanding of digital technologies across teaching and assessment, both in full-time education and life-long learning contexts. Policy makers, legislators and regulators with responsibilities in the area of AI need to know how AI systems work, how data are used, how data-related bias can arise and how ethics may be impacted by decisions taken by AI systems.

Preparedness of Educators for AI (Comparison of those with PhDs with all respondents)
(DETE AI Skills Survey; n = 146)
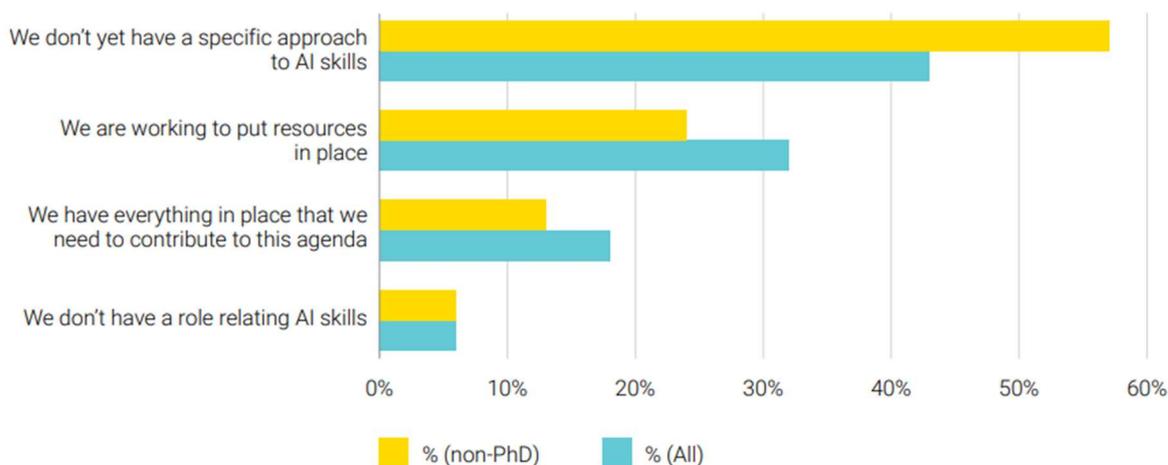
Question (for Educators):
How well prepared is your organisation for the adoption and deployment of AI?
(Select the most relevant.)

In addition to the actions set out already in the national AI strategy AI: Here for Good, the following 10 recommendations will help to deliver on the key messages of this report.

1. Ensure that Computer Science teachers' Continuous Professional Development evolves with AI developments. (DoE)

2. Enhance digital literacy in the continuum of teacher training so that all new teachers have sufficient ICT and AI knowledge to teach these topics at primary and post primary levels. (DoE, HEIs)

3. Examine the Teaching Council definition of Computer Science teacher qualifications to ensure it has suitable breadth to include the variety of relevant and appropriate recognised qualifications, including industry certifications, necessary for teaching about AI. (DoE, Teaching Council)

4. Support the development of new Apprenticeships in AI (National Apprenticeship Office, HEIs, ETBs, Industry)

5. Make AI-related micro-credentials – at HE and FET levels – available broadly to both learners and workers across the economy. (HEIs, SOLAS, ETBs, QQI)

6. Ensure the review of curricula at primary, junior and senior cycle includes consideration of AI, especially in STEM subjects. Aim to ensure that the review of Computer Science (including AI) curricula keeps pace with technological change. (DoE, PDST, NCCA)

7. Explore the use of AI to support teaching, learning and assessment – e.g., blended / flipped learning and personalising feedback delivery.

8. Promote a free online AI course for citizens. (e.g.: the Elements of AI) Underpin this with similar online courses on basic digital skills. Link the promotion of this with digital literacy courses provided by FET and HE sectors. (SOLAS)

9. Target international AI talent in a pro-active manner through the Tech/Life Ireland programme. (IDA, Enterprise Ireland, DETE)

10. Public servants who may interact with AI as regulators, legislators, users or procurers should seek out a relevant AI course or module through their employer. One or more such courses should be made available and publicised broadly to public servants. (Public Bodies, DPER)

A streamlined process will be established to ensure the delivery of these recommendations by the identified bodies, taking account of the existing infrastructure of AI and Digital coordination efforts that already exists.

Overall, the report finds that a very broad range of skills – from specific, technical AI skills to basic digital skills to 'soft' or transversal skills like critical thinking – are needed by workers, learners and educators across the economy. The particular skills that are needed by each individual will depend on their specific role. The main message is that AI skills are not just for AI experts; everyone will need some knowledge of AI and its implications.

2

Other Activities & Policy Inputs by the EGFSN in 2021

2. Other Activities & Policy Inputs by the EGFSN in 2021

Dissemination of information on Future Skills Needs

During 2021 the EGFSN continued to engage with stakeholders and partner organisations to ensure that information on the skills needs of the economy was shared with the relevant audiences.

The Secretariat took part in many online meetings and webinars and made presentations on skills needs at different fora throughout the year. In addition, the EGFSN Secretariat continued to engage with enterprise and educational bodies to develop plans for skills needs.

All reports published by the EGFSN are available on the website **www.egfsn.ie**. An e-alerts system is also in place to electronically distribute the group's reports.

In 2021 over 650 subscribers to the EGFSN website received e-alerts notifying them of EGFSN research publications. Subscribers also received e-bulletins promoting the work of the EGFSN and sharing stories from EGFSN partners.

Communications Activities

It is important to note that all aspects of the EGFSN's role involves communication, whether it is advising Government on projected skills requirements; making recommendations on how to improve education and training systems and delivery mechanisms; or advising on changes to the Department of Enterprise, Trade and Employment's employment permit regime. In addition, the EGFSN has a wider audience of students, parents and other stakeholders and as noted above, the Secretariat has engaged in many online communications initiatives during 2021.

The new EGFSN website was established in 2019 and the contemporary style of the website together with its more user-centric interface is an impactful way of sharing information on the work of the EGFSN. Policy makers understand the EGFSN brand, and it was important to promote it amongst all the Expert Group's audiences.

Legacy reports from the EGFSN dating as far back as 1999 are available on the website in an easily searchable way and are available as a source of knowledge for the EGFSN audience.

The Expert Group will continue to develop its relationships with its stakeholders in 2022 to highlight the nature and extent of the emerging skills needs of the economy, especially the acceleration of digitalisation and the imperative of increased climate action efforts.

The EGFSN Secretariat continually monitors engagement with stakeholders via its social media channels and regularly shares pertinent information with its followers. Special consideration will be given to the EGFSN audience and how best to transmit information to them in a clear and accurate way.

3

Implementation of Recommendations in EGFSN Reports

# 3.   Implementation of Recommendations in EGFSN Reports

Design Skills Implementation Group

In 2021, The Design Skills Implementation Group made considerable progress towards the fulfilment of the Together for Design report's recommendations throughout the first year of implementation. All actions are underway with many reaching significant milestones, helping to drive greater collaboration, leadership and momentum towards achieving the report's recommendations.

During its second year of work, the Design Skills Implementation Group built on the momentum achieved during its first year, with significant progress being made towards realising the goals and implementing the recommendations set out in Together for Design. Of particular note in this regard is the creation of *the New Now,* the national talent directory for design graduates, launched by IDI and Design Skillnet in early October 2021. *The New Now* offers mentoring to design graduates as well as providing a platform through which graduates can showcase their work to prospective employers.

Creative Attributes Framework

This in turn provides a directory for employers seeking new talent.

Further notable achievements include: the development of the Creative Attributes Framework by the CFA in partnership with the creative industries sector; an additional €7 million in funding was provided for Springboard+ in Budget 2021, with design skills being highlighted as an area of consideration in the subsequent Springboard+ funding call; over 500 companies and 840 people undertook design-related training across Skillnet Ireland's networks in 2021; the successful pilot of the B!G Idea Transition Year programme, with the second edition attracting a waiting list of over 10,000 students; and the creation of the Level 9 *Certificate Design for Sustainability and Circular Economies* being delivered in 2022 by Limerick School of Art & Design TUS. Progress has also been made on actions focussed on developing an apprenticeship programme and promoting the relevance of strategic design in non-design courses.
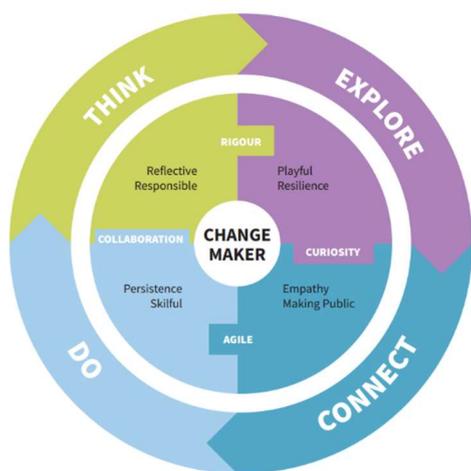
While the EGFSN ceased to provide secretariat support at the beginning of 2022, the Group will continue to work to drive further progress on all actions and provide a forum for the design sector.

Leading the Way SME Management

The EGFSN published the report *Leading the Way* in October 2020, dealing with Management Skills and Practices in SMEs in Ireland. The report examines management skills and practices in SMEs in Ireland, the attitudes and barriers to management development, and the opportunities that exist for Irish SMEs to improve their performance through greater investment in targeted, high-quality management training and development.

The project Implementation Group, chaired by Adam Weatherly from ISME, met four times in 2021. The main aim of the Group is to make it easier for those SME owners and managers who have not invested their own education and training before to identify their management development needs and connect with the resources and supports available to them in Ireland. Two subgroups worked on the two key recommendations from the report: (1) an Online Management Skills Assessment Tool and (2) a Central Repository of Information on Management Training. These resources will provide a step-by-step pathway for management training, making it more accessible and raising its profile.

Key messages of the Leading the Way report
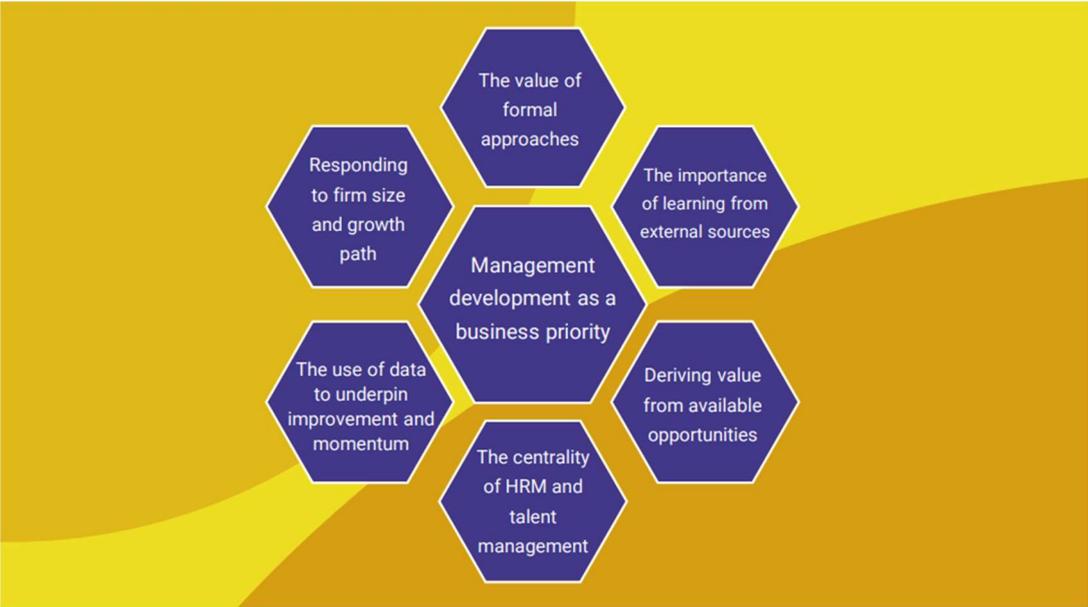
Significant progress was made on both fronts, and it is envisaged that completed outcomes will be delivered by Q3 2022.

The next goal of the Implementation group will be to ensure the successful launch of these resources and their communication to the owners and managers of Small and Medium Enterprises. The report recognises the crucial need to ensure that all SME owners and managers realise that firms with better management practices tend to be more productive, grow faster, and survive difficult periods more successfully. Spending on management development for SME CEOs and senior management teams should be seen as an investment rather than a cost. The report also identifies the wide range of opportunities for management training and education that exist for Irish SMEs and aims to make these resources easier to navigate so that owners and managers will find the courses they need quickly and efficiently.

The Chair rotated to Sven Spollen-Behrens of the Small Firms Association in 2022.

Logistics and Supply Chain Skills Group

The role of the Logistics and Supply Chain Group is to:

- Improve the profile of Logistics/Supply Chain roles, making it easier to recruit talent including by improving knowledge among secondary students of the range of interesting roles available across all sectors, and enhance employee retention;

- Make progression pathways available to those entering or already working in the roles, particularly for those at lower skilled levels, with clear role definitions mapped to academic or other vocational awards.
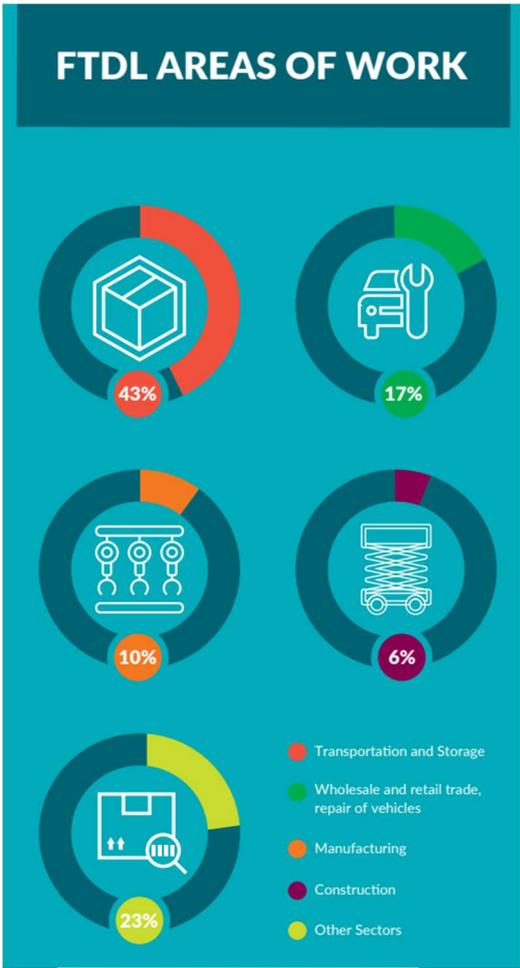
- Ensure development opportunities are available to provide the required skills, knowledge and competencies.An annual progress report produced by the Logistics and Supply Chain Skills Group (LSCSG) was finalised in December 2020 and officially published in January 2021.The report can be found here.

The LSCSG throughout 2021 continued working towards its goal to support the promotion of careers, skills development and sustainable employment in the Logistics and Supply Chain sectors. Many actions are underway, working towards the overall objectives of the Group. The five meetings that have taken place have created momentum in helping the group to achieve its aims. In facilitating these meetings, the objective to provide a forum for ongoing communication, collaboration and leadership by the Logistics and Supply Chain sectors in addressing the skills needs of the sector in Ireland is being met. Additionally, these meetings and discussions have taken account of evolving Brexit, and COVID19, developments. Subgroup 2 has made progress towards the objective to make progression pathways available to those entering or already working in the roles, particularly for those at lower skilled levels, with clear role definitions mapped to academic or other vocational awards. Meanwhile, Government departments continue with the objective to monitor labour market developments in the Logistics and Supply Chain sectors and provide insights into emerging skills needs.

4

2021/22 EGFSN Work Programme

4.   2021/22 EGFSN Work Programme

The National Skills Council (NSC) approved the 2022 Work Programme for the Expert Group on Future Skills Needs (EGFSN). The NSC oversees research and provides advice on the prioritisation of identified skills needs and how to secure the delivery of identified actions. The key elements of the EGFSN model of analysis and horizon scanning, with close engagement with enterprise, continues and has been further strengthened. The EGFSN presents the findings of its sectoral studies to the NSC and makes strategic recommendations to assist the NSC and policy makers in addressing the emerging skills needs.

Future Skills Needs in the Biopharmachem Sector

In August 2016, the Expert Group on Future Skills Needs published a report on "*Future skills needs of the biopharma industry in Ireland*". The objective of the study was to review the supply and demand of skills required to meet the needs of the biopharma sector in Ireland up until 2020. Since then, there have been step changes across the pharma and biopharma sector; the rapid adoption of technology such as artificial intelligence (AI), additive manufacturing, automation, and other Industry 5.0 technologies. It was therefore agreed that it would be appropriate to update the analysis and the recommendations from the 2016 study.

Ireland is a leading global location for biopharma, pharma, and chemical product manufacture. Ten out the top-ten global biopharmaceutical companies have a facility in Ireland employing approximately 42,000 directly. The demand for higher education skilled workers is likely to increase significantly over the coming decade, requiring increased supply from the education sector, and the up-skilling and re-skilling of current employees and the re-skilling of others who can then transfer successfully to the BioPharmaChem sector.

The BioPharmaChem sector is a major contributor to the Irish export economy, having a total value of €106 billion in 2020, which represents 67% of the total goods exported. Despite the many challenges in 2020, the BioPharmaChem sector continued to see strong investment resulting in 1,143 new high-tech positions created across the sector. There is a strong regional spread of companies in Ireland with clusters in Dublin and Cork – and smaller clusters in the midlands, Waterford, and Limerick.

Since the 2016 report, the sector continued to invest in other areas which has enabled the growth in related activities such as global business services, clinical trial management, automation, contract manufacturing and supply chain management, all of which require new skill sets.

The sector is also focusing on the next generation treatments, cell and gene therapies, personalised and precision medicine, combination therapies, genomics, connected health and combination therapies. Supply disruption due to global events has demonstrated the vulnerability of the industry, therefore there is a growing movement to bring back upstream pharmaceutical production from Asian countries, in particular Active Pharmaceutical Ingredients (API) being re-shored to European territory.

According to industry sources, a lack of skills and talent is one of the biggest obstacles to growth, modernisation, and digital transformation in the sector. Covid 19 has accelerated the digital transformation, widening the gap between the demand and the supply of tech-savvy employees, and the BioPharmaChem sector now competes for the same talent pool as the tech sector.

Threats to the sector include Brexit, new competitors and disruption on the island, global events impacting supply chain (e.g. Covid and political instability causing Europe to want to re-shore APIs), erosion of the base industry due to the emergence of lower cost manufacturing locations, competition for talent in other industries.

The objective of the report is to identify the likely skills needs and skills gaps that will arise in the BioPharma sector in Ireland over the next five years, by identifying the skills and competencies needed by the sector and forecasting the likely supply and demand of those skills. The study will also make recommendations aimed at resolving any such gaps identified.

The proposed timeline for the project completion is to commence in Q2 2022 and conclude in Q4 2022.

High-level ICT Skills

The skills associated with High Level ICT, and digitalisation more generally, have long been a focus of the Expert Group on Future Skills Needs. The Group's research has informed planning for the economy's ICT skills needs, both across the education and training and inward migration systems, going back to the EGFSN's establishment in the late 1990s. Comprehensive demand forecast studies undertaken by the Group have also informed all three of the Government's ICT Skills Action Plans, since the establishment of the Action Plan process in 2012; the latest EGFSN analysis was published

in March 2019 in the report *Forecasting the Future Demand for High-Level ICT Skills in Ireland, 2017-2022*. Previous reports were published in 2008. 2012 and 2013.

In light of digital transformation across all sectors of the economy, which is leading to a continuous evolution in skills needs, the EGFSN is piloting a new approach in 2022 which aims to capture changing skills needs in the ICT sector in near real-time. The primary objective of the new research will be producing an annual assessment of the nature of high-level ICT skills demand in Ireland, through a collation of evidence around the specific skills required across the Irish economy, as well as an overview of supply across Further and Higher (Public and Private) Education and Skillnet Ireland provision. By understanding the market in real time, we can provide specific and actionable insights for the education and skills sector in terms of course provision before skills become obsolete and change again.

In terms of assessing demand for high-level ICT skills, the EGFSN plan on using high-frequency data sources such as Employment Permit applications data and job vacancy data to build a more real-time system that produces detail on specific high-level ICT skills demands and trends.

Skills for International Financial Services

In April 2019, the Irish Government launched 'Ireland for Finance: The Strategy for the Development of Ireland's International Financial Services Sector to 2025'. The principal objective of the Strategy is to move Ireland further up the value chain and to continue growing the sectors Ireland already has in place. Action Plans are published each year with the goal of reaching this objective. The *Ireland for Finance 2021 Action Plan* contains the following action:

"The Expert Group on Future Skills Needs (EGFSN) will commence a study to assess the potential additional skills demands to fully exploit opportunities in subsectors such as fintech, applied alternative assets, sustainable finance, artificial intelligence, and blockchain."

One of the aims of the strategy is to address the skills challenges facing the industry through renewed focus on education and lifelong learning (Skillnet Ireland, Springboard+), STEM education, increased uptake of apprenticeships, greater education-industry linkages, and increasing diversity. In the context of the strategy, the EGFSN is carrying out a study to identify the niche subsectors of IFS with high growth potential and investigate if there are any shortfalls or gaps to address.

The objective of the research is to assess the skills needs and skills gaps that will arise in high potential IFS subsectors in Ireland between 2023-27. This will be achieved through identifying the International Financial Services Subsectors with the highest growth potential over the next five years and by identifying the skills and competencies needed by these subsectors and forecasting the likely supply and demand of those skills. The study will make recommendations aimed at addressing any gaps between skills demand and supply and identify appropriate lead actors to take ownership of the implementation of these recommendations over defined timelines. This study will commence in 2022.
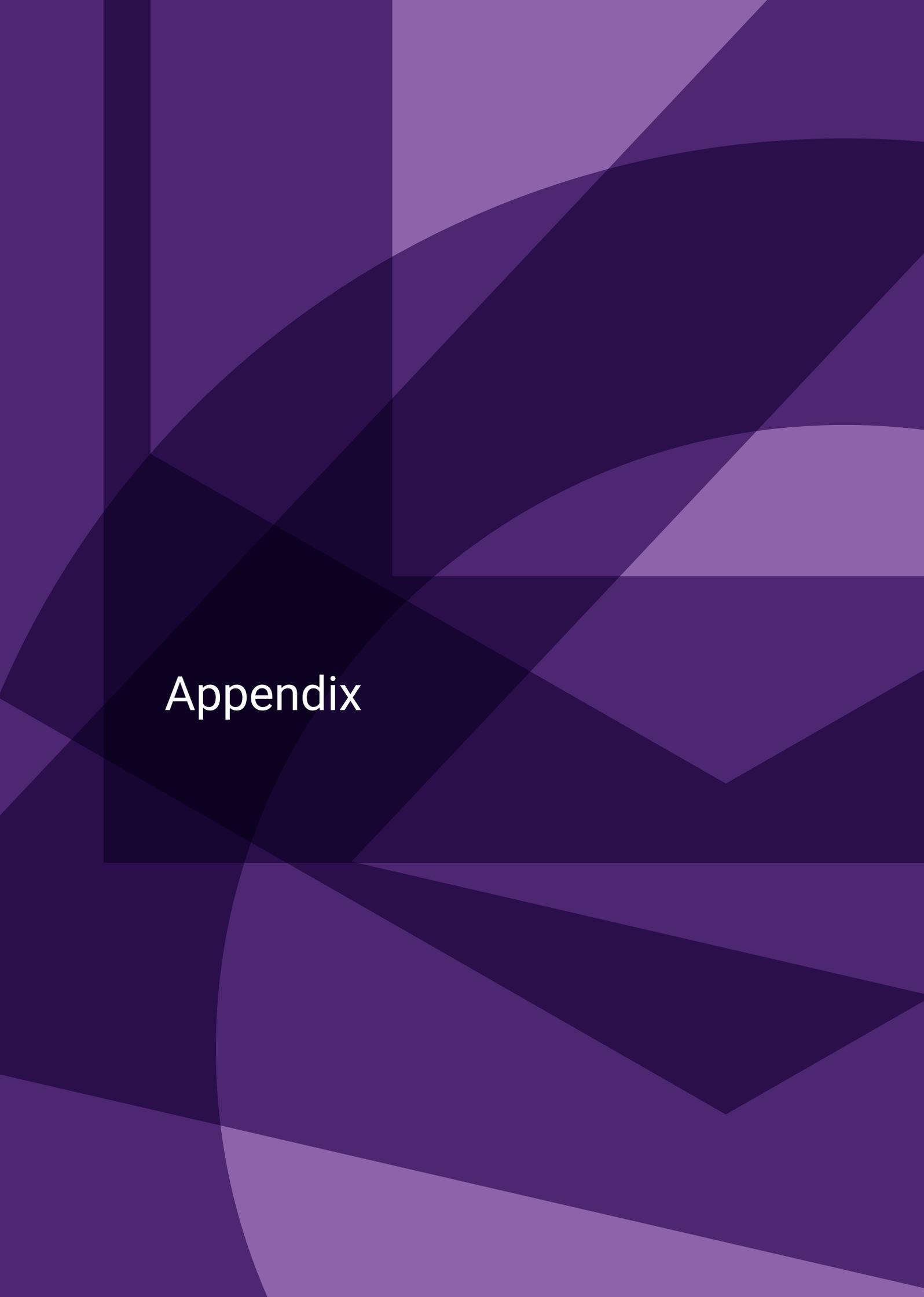
Appendix

Appendix: Recent Publications by the Expert Group on Future Skills Needs (2015 – 2022)

Report	Publication Date
AI Skills	June 2022
Skills for Zero Carbon	November 2021
Leading the Way	October 2020
Building Future Skills	September 2020
Annual Activity Statement	July 2020
Together for Design	June 2020
Construction Skills – Assessment of 2008-2018 Strategies	December 2019
The Expert Group on Future Skills Needs Statement of Activity	September 2019
High Level Demand ICT Forecast	March 2019
'Digital Transformation': the Impact of Digitalisation on Ireland's Workforce	December 2018
2018 Final Report of the Hospitality Skills Oversight Group	September 2018
Addressing the Skills Needs Arising from the Potential Trade Implications of Brexit	June 2018
Winning by Design	November 2017
The Expert Group on Future Skills Needs Statement of Activity 2016	October 2017
Hospitality Skills Oversight Group Interim Report	June 2017
Update on Future Skills Needs in the Food and Drink Sector	April 2017
Monitoring Ireland's Skills Supply 2016	November 2016
Regional Labour Markets Bulletin	October 2016
National Skills Bulletin	September 2016
Future Skills Needs of the Biopharma Industry in Ireland	May 2016
Vacancy Overview 2015	May 2016
Guidance for Higher Education Providers on Current and Future Skills Needs of Enterprise: Springboard+ 2016	February 2016
Assessment of Future Skills Requirements in the Hospitality Sector, 2015-2020	November 2015
Regional Labour Markets Bulletin 2015	October 2015
Monitoring Ireland's Skills Supply: Trends in Education and Training Outputs 2015	August 2015
National Skills Bulletin 2015	July 2015
Vacancy Overview 2014	May 2015
Lifelong Learning among Adults in Ireland, Quarter 4 2014	May 2015
A Study of the Current and Future Skills Requirements of the Marine/Maritime Economy to 2020	April 2015
The Expert Group on Future Skills Needs Statement of Activity 2014	April 2015
Addressing the Demand for Skills in the Freight Transport, Distribution and Logistics Sector in Ireland 2015 – 2020	February 2015