



An Roinn Breisoideachais agus Ardoideachais,  
Taighde, Nuálaíochta agus Eolaíochta  
Department of Further and Higher Education,  
Research, Innovation and Science

# Climate Action Council Carbon Budget Committee

## Climate Action Plan – Responding to the Upskilling Challenge

28 June 2021

# 1. National Framework for Skills Policy



- Establishment and mandate of DFHERIS
- National Skills Strategy 2016-2025
- National Skills Council – Advises on high level skill prioritisation.
- National Training Fund Advisory Group – enterprise-led advice / engagement on resource allocation
- 9 Regional Skills Fora – multi-stakeholder regional engagement on skills priorities
- Skills forecasting system – Skills and Labour Market Research Unit (SOLAS)/Expert Group on Future Skills Needs

## 2. National Recovery Plan



- **NERP** – Reinvigoration of skills architecture to minimise skills mismatches and ensure skills policy is rooted in digital and green transition
- **NRRP** – Priority 3: focus on equipping the Irish workforce with the necessary future skills that will be required to boost the innovation and productivity of the SME sector, and the provision of skills in support of climate action
- **Pact for Skills** – Proposed partnership model focusing on centrality of lifelong-learning and in particular green & digital skills economy / society-wide to underpin economic and social sustainability.
- Comprehensive review of skills strategy and priorities envisaged.

# 3. Just Transition – NESC presentation to NSC



- Ireland & the world in midst of unprecedented economic & social change” (OECD, 2017)
- Employment & social impacts of decarbonisation vary by group, country, sector & region
- Ambitious approach required to protect vulnerable workers disproportionately impacted by transition
- Maximise alternatives and opportunities for those who are vulnerable
- Continuous and pre-emptive workforce development - “Life-long learning, training and education represent the best way to prepare for and address the complex and uncertain changes associated with climate action and digitisation” (NESC)
- Just transition – systematic and whole of economy and societal approach to sustainability – people centred, bottom up, place based...no-one left behind

# 4. New Apprenticeship Action Plan



- New Action Plan for Apprenticeship 2021-2025 prioritises skills for the low carbon economy, supporting targets set out within the Climate Action Plan and Project Ireland 2040
- Curricula in apprenticeships being updated on an ongoing basis to keep pace with changes in building practices and regulations and technology (e.g. motor mechanic evolution due to electric vehicles)
- New apprenticeships are being developed in wind turbine maintenance and scaffolding which will also include best practice in green technology
- Under the Climate Action Plan 2019 a Housing Retrofit Taskforce was established by DCCAE with a target to deliver 56,000 retrofits and 50,000 heat pump installations per year to 2030.
- Retrofit skills including Near Zero Energy Buildings (NZEB) training is currently provided through 14 programmes by Education and Training Boards with 5 Retrofit Centres of Excellence expected to be operational in 2021
- Under Just Transition, a Skills to Advance programme in Thermal Insulation Installation LOETB has been developed

# 5. Higher Education Response



- From a relatively low base, significant increase in interest in mainstream HE courses in environmental issues (64% increase in first preferences at L8 and 44% increase at L6/7 in CAO 2021 compared with 2020)
- Targeted Skills provision through Springboard+ with 310 places on 14 courses (e.g. Corporate Environmental Planning, Near Zero Energy Buildings and Energy Infrastructure)
- HCI Pillar 3 provides funding for innovative and agile projects addressing skills needs including:

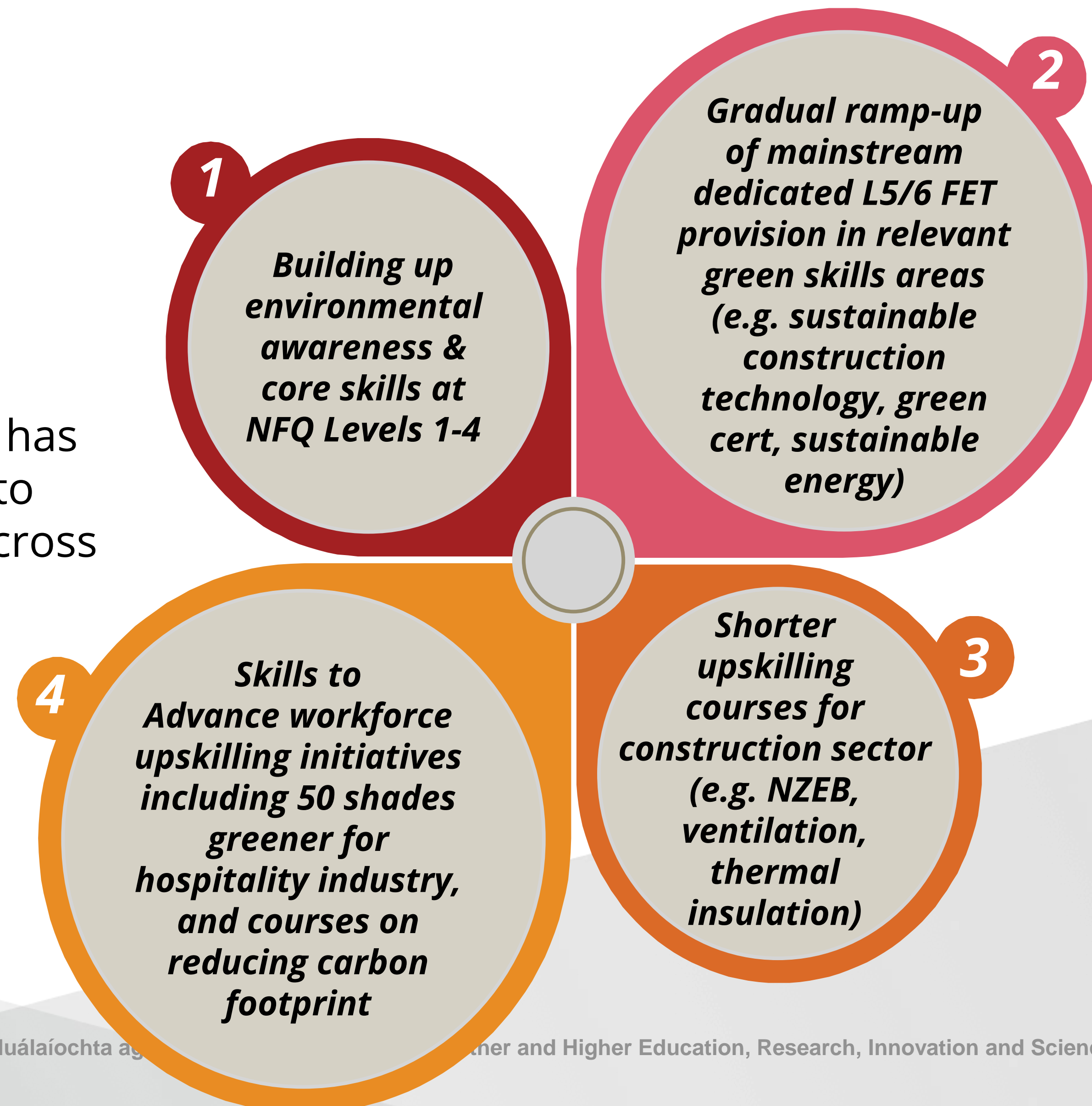
**LIT: Digital Academy for Sustainable Built Environment (DASBE)** - A hub for provision of upskilling and education to the building sector on green construction, circular economy, and digital skills. It will enable rapid design, development and deployment of education and training programmes to construction workers and professionals

**UCC: Sustainable Futures:** The project proposes an innovative, agile, and responsive model for programme design, development and delivery which is designed to: anticipate, understand and respond to emerging priority skills needs for enterprise during the transition to a lower carbon economy.

# 6. Further Education & Training Response



Alongside evolution of apprenticeship curricula, FET has been developing a response to the climate change agenda across 4 key areas



# 7. FET Recovery and Resilience Programme



Initiative	2021	2022	Total
<b>Skills to Compete</b> <i>Upskilling initiative for those who lost jobs due to COVID – builds employability, digital &amp; targeted specialist skills with green skills a priority focus</i>	€35M 7,800 places	€40M 8,900 places	€75M 16,700 places
<b>Retrofitting Upskilling Programme</b> <i>Significant upskilling required to support target to deliver 56,000 retrofits and 50,000 heat pump installations per year to 2030. Expanding NZEB centres of excellence from 2 to 5 and ramping up major upskilling initiative</i>	€12M 1,900 places	€17M 2,650 places	€29M 4,550 places
<b>Green Skills Action Programme</b> <i>Initiative to make green skills modules available to all FET learners &amp; upskill FET practitioners in delivery of education and training.</i>	€5M 25,000 Learners	€5M 35,000 Learners	€10M 60,000 Learners

But this is only the start!



# 8. Scale of the Challenge



- Over 17,500 live craft apprentices requiring modernised curricula
- Construction sector employing **147,000** pre-pandemic with over **80,000** employed in construction trades
- Structural changes already happening but hard to get full picture while PUP remains in place. For example, at 22/6, there were over 20,000 construction workers still registered for the Pandemic Unemployment Payment
- Other key vulnerable sectors will need targeted support. For example, **17,000** employed in meat processing at risk.

**Craft Apprentice Population (end May 2021)**

Construction	4842
Electrical	8498
Engineering	2121
Motor	2334

# 9. Need for Further Analysis

- Despite some work internationally by bodies like ILO & CEDEFOP, need for detailed consideration on impact of green transition in same way as undertaken for automation and digital transformation

- Expert group on future skills needs undertaking research on Skills to Enable the Low Carbon Economy to 2030 with focus on:

1. Energy efficient retrofit of buildings and installation of Heat Pumps and other renewable heating options
2. Development of onshore and offshore Wind and Solar power energy generation
3. Rollout of comprehensive Electric Vehicle fleet and charging infrastructure

- Impact of the greening of the economy and employment mainly takes the form of new green skills within existing occupations and new green occupations tend to be in the high-skilled bracket

- **NOT ENOUGH ATTENTION** on those negatively impacted by the green transition or the need to help them upskill to ensure their skills remain relevant

Table 5.1 Changes in skills as a result of the green transition, by skill level

SKILL LEVEL	NATURE OF CHANGE	EXAMPLE OCCUPATIONS
<b>Low-skilled occupations</b>	Generic change, i.e. environmental awareness; simple adaptations to work procedures	Refuse/waste collectors, dumpers
<b>Medium-skilled occupations</b>	Some new green occupations Significant changes to some existing occupations in terms of technical skills and knowledge	New occupations: wind-turbine operators, solar-panel installers Changing occupations: roofers; technicians in heating, ventilation and air conditioning; plumbers
<b>High-skilled occupations</b>	Locus of most new green occupations Significant changes to some existing occupations in terms of technical skills and knowledge	New occupations: agricultural meteorologists; climate-change scientists; energy auditors and energy consultancy; carbon-trading analysts Changing occupations: building facilities managers; architects; engineers

# 9. Conclusions and how we can help



- Detailed policy framework and significant educational and training infrastructure in place to response to workforce need from decarbonisation.
- Analysis and assessment of labour demand and implications essential and both SLMRU & EGFSN can help with this
- As critical as identifying defined future needs is ensuring skills infrastructure sufficiently responsive, flexible and agile for rapidly evolving landscape
- Need to recognise negative labour market impact of green transition and ensure that no one is left behind
- Key role of Council & Committee in highlighting these requirements & the resources and prioritisation essential to ensure effective and efficient delivery