



## **CHAIR'S FOREWORD**

I am delighted to present the ECITB's new strategy, which sets out our plans for the next three years to support productivity in the industry.

The engineering construction industry is at a critical juncture. Despite a challenging operating environment with profit margins still tight in many sectors, we are seeing signs of recovery. With major infrastructure projects underway and more planned in the near future, it



is crucial that industry has the skilled people it needs to deliver projects safely and efficiently. Employers will need to replace an ageing workforce with new recruits, amid increasing competition for skilled workers from other sectors. At the same time, we must prepare for the future by embracing technological change and attracting a new generation of diverse talent to the industry.

The ECITB is at the forefront of meeting these challenges. This strategy, which is the result of six months of extensive dialogue with employers, presents our plans to deliver what industry has told us they need – both to meet their current skills needs and those of the future.

Grant support for training is central to our strategy. Last year, we met our commitment to supplement grant support from the reserves. Notwithstanding this, demand exceeded planned expenditure and we spent £4m from the reserves compared to the £3.3 million originally planned.

In the autumn, we will consult on new levy rates required to deliver the strategy and we need industry's support. I am confident the strategy meets the needs of employers across all our regions and sectors and I look forward to engaging with levy payers over the coming months on our plans.

Lynda Armstrong OBE Chair of the FCITB

# ABOUT THE ENGINEERING CONSTRUCTION INDUSTRY

**334** in-scope companies











\* 0

Food & Drink





The engineering construction industry is responsible for the design, delivery, repair, maintenance and decommissioning of some of the UK's most important infrastructure. Our employers work in oil and gas, nuclear and renewables, as well as other major process industries including chemicals, pharmaceuticals, food processing, water and waste treatment.



61,000 in-scope workers







The industry contributes up to **£100 billion** to the economy each year (GVA)

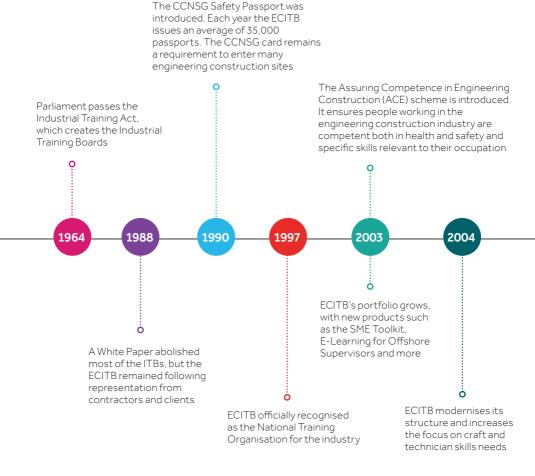






## **ABOUT THE ECITB**

The ECITB (previously the Engineering Industry Training Board (EITB)) was established in 1964 by the Industrial Training Act and became the ECITB in 1991. The purpose of organisation is to address the market failure in training that affects the engineering construction industry. The ECITB addresses this market failure through a sustainable skills investment fund to support training and improve productivity.





ECITB and Step Change in Safety work together to develop Mechanical Joint Integrity standards. Nearly 15,000 learners have completed the training to date ECITB introduces governance reforms, including a smaller, more strategic Board Regional teams and a new Council appointed to provide dedicated training advice to employers, ensuring ECITB celebrates 25 years, with more more can benefit from than 1.5 million learners supported ECITB grants since 1991; it also restructures to drive down cost and introduce new capability into the business 2011 2013 2016 2017 2018 2007 The new Provider Course Approval Scheme (PCAS) is introduced Government publishes ECITB responds to the the ITB review, which "Changing to Compete" report by recognises the ECITB's expanding its portfolio to include relevance and value to senior supervisor and introduces the industry the International Health and

Safety Passport

## WHAT WE DO

The ECITB helps to drive productivity in the engineering construction industry by supporting employers to train and upskill their workforce to industry standards. We have a countrywide network of specialists who work closely with each company to help them identify and develop the skills their workforce need. We also develop National Occupational Standards qualifications, training standards, technical tests and licensed training programmes, all of which are delivered by quality assured training providers and centres.

195

QUALITY-ASSURED TRAINING PROVIDERS AND CENTRES

delivering ECITB approved courses and qualifications

over **70%** 

of inscope employers using our products and services

MENTERS TO

have completed the ECITB's Project Management Mentoring Scheme, involving

23 companies

40

## **COMPANIES**

have used the ECITB Project Collaboration Toolkit since 2017 Through collaboration Shell reported a

40% cost saving

on the Brent Bravo Topsides decommissioning project compared to Brent Delta

137% INCREASE

in the number of apprentice starts (641 in total) supported by ECITB in 2018 compared to 2017

Supported **PROFESSIONALS** 

to attain Chartered Engineer status in 2018

**EFFICIENCY** & SAVINGS:

ECITB's operating costs reduced by

**£1.3**m FROM 2016

67%

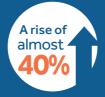
of employers taking on apprentices in 2018 were SMEs 73%
of apprentices complete
ECITB apprenticeships

The ECITB is an accredited Awarding Organisation with the Office of the Qualifications and Examinations Regulation (Ofqual), Qualifications Wales and the Scottish Qualifications Authority (SQA). We publish regular labour market intelligence and work with national and regional government to promote the industry's skills needs. As part of government, the ECITB is accountable to parliament and is funded by a levy that it is required to collect from the industry.

## Learners on ECITB Approved

# Technical Training Courses

**4,475 in 2017** rising to **6,131 in 2018** 





£4m

spent from the Reserves in 2018 to support training demand in excess of levy income



## 480 OIL AND GAS GRADUATE ENGINEERS

supported through CPD programme, retaining key skills within the industry during the downturn

IN 2018 ECITB SPENT

20% more

on grant support to SMEs than they paid in levy

### **Technical Tests**

**4,833 in 2017** rising to

8,617 in 2018

A rise of over 75%

We have a network of

**22** re

regionally-based training specialists

supporting SMEs and other in-scope employers across the country

454
16-18 YEAR OLDS



supported through pre-employment training (ITEC programme)

over 100,000

CCNSG safety passports issued in the last 3 years

We strive to ensure that everyone who should pay the levy does so

In first quarter of 2019 we have raised an additional



by bringing new companies onto the register

# OPERATING CONTEXT AND DRIVERS FOR CHANGE



After several challenging years, the outlook for industry is showing positive signs. With prices stabilising, the oil and gas sector has moved from recession to recovery, although low margins are still the norm for the contractor community.

More and more companies are looking to diversify their portfolios by moving into the growing offshore wind market and other renewables, while work on the UK Continental Shelf will continue for decades to come. In nuclear, the Hinkley Point C new build project is proceeding at pace and the sector has agreed an ambitious sector deal with the Government as part of the Industrial Strategy. Looking further ahead, the Government's clean growth strategy – which includes ambitious targets to decarbonise energy and industrial

processes - will also provide significant opportunities for engineering construction companies.

Despite this, skills shortages remain a problem and Brexit is already putting strain on access to skilled workers in sectors such as food processing. Employers are responding by investing in apprenticeships and upskilling and consequently demand for ECITB training grants has grown: last year, demand for grants exceeded our planned expenditure resulting in an extra £0.7m of funding from our reserves, on top of the £3.3 million originally planned.

## Against this backdrop, there are four main drivers underpinning our strategy:

## COMPETITION **FOR SKILLS**



With £600bn worth of infrastructure projects set to be delivered by 2028, engineering construction employers will face growing competition for skills from other sectors, including projects such as HS2 and Crossrail 2. Coupled with the impact of Brexit, unless addressed, skills shortages will grow.

## **INDUSTRY** 4.0



New data-driven technologies are transforming business operations and the workforce requirements of clients and contractors. Training standards and skills programmes need to reflect these changes to ensure the industry remains competitive.

## **DEMOGRAPHIC CHANGE**



14% of the ECI workforce are set to retire by 2026. The industry needs to attract more young and diverse talent into engineering construction to plug the gap.

## COMPETENT **WORKFORCE**



The importance of having a safe, skilled and productive workforce remains constant. This will ensure projects are delivered on time, to budget and to the highest standards of safety.

## **OUR STRATEGY**



The strategy consists of three elements. Our foundations underpin everything that the ECITB does and this will remain the case. Meeting the current skills need is about ensuring that ECITB responds effectively to the skills requirements of the industry today and employers have a safe and competent workforce.

Preparing for the future is about ensuring industry has the skills it needs tomorrow, responding to technology change and harnessing innovation in training. It is also about creating diverse and inclusive workplaces to enhance industry's attractiveness to future recruits.







## MEETING THE CURRENT SKILLS NEED



We will deploy ECITB grant and our specialist skills knowledge to tackle current skills gaps and shortages, including:

- Providing grant support for training in skills shortage occupations.
- Re-skilling people from other industries/sectors (e.g. coal to nuclear) and occupation groups.
- Upskilling and multi-skilling the existing workforce.
- Supporting just-in-time training to meet seasonal requirements.

These measures will enhance employer performance and productivity, support a flexible workforce and keep retraining costs to a minimum.

Over the next 3 years, investment in training will be critical if industry is to meet the challenges ahead. A major focus of the new strategy therefore is meeting industry's current skills needs, which involves tackling skills gaps and shortages, supporting new entrants, enhancing competence assurance and improving access to training.



To meet the anticipated growth in the workforce, and replace retiring workers, the industry will need to recruit thousands of new entrants over the strategy period.

We will invest grant in measures that facilitate and train recruitment of:

- · Apprentices.
- Graduates
- Workers from other sectors (sector transferees and the unemployed).

In addition to providing new entrants with occupation specific training, these measures will deliver common core skills to all new entrants, ensuring consistency and facilitating a transferable workforce.



The industry requires a competent workforce. We will ensure common competence requirements are accepted and implemented across sectors, including by:

- $\bullet \ \ \mathsf{Developing} \ \mathsf{fair}, \mathsf{consistent} \ \mathsf{and} \ \mathsf{relevant} \ \mathsf{assessment} \ \mathsf{tools}.$
- Expanding the ECITB's technical tests through Connected Competence and the ACE scheme.
- Provide sectoral competence assurance against common overarching occupational standards.

These measures will ensure the workforce acquires the skills, knowledge and understanding to carry out work safely and efficiently. Having common competence assurance systems will also create a transferable workforce and eliminate duplication of and/or poor quality assessment methods.



Training accessibility is critical if we are to provide the workforce with the skills it needs.

In quality assuring the network of approved training providers, we will ensure employers receive high quality training at the right price, ensuring they derive value for money for training received.

We will ensure there is sufficient geographical coverage to meet employers' needs for ECITB products and services. This will include encouraging collaboration and resource sharing across the provider network to ensure training can be delivered locally to employers, as well as building cohort sizes to ensure training can be delivered at sufficient scale.

## PREPARING FOR THE FUTURE



#### We will:

- Produce high-quality labour market intelligence to identify and forecast future skills requirements of the industry and target our grant making in these areas.
- Develop a labour force data platform to enable employers to pinpoint regional skills footprint, alongside a new Online Training Market.
- Review and future proof our training standards and qualifications to ensure that learners are qualified against work requirements that will still be relevant in the future
- Support the future skills pipeline by pump-priming talent through our ITEC programme, while also exploring new approaches to incentivising and supporting apprenticeship uptake.

We will also support upskilling in areas such as digital and leadership skills, as well as new disciplines such as project controls, which are growing in relevance.

In addition to being responsive to employer current skills needs, we will work proactively with industry to prepare for the future. This includes identifying future skills requirements, influencing government policies on skills to ensure they reflect the requirements of the ECI, and boosting diversity and inclusion so that ECI workplaces are attractive and inclusive. It also means preparing employers for the emergence of new technologies and helping them upskill and reskill the existing workforce to harness technological change.



## **RESPONDING TO INDUSTRY 4.0**

A key focus of the strategy is to adequately prepare industry for new and emerging technologies which are set to revolutionise the ECI.

There is a clear need to help employers understand the impact of Industry 4.0 on workforce skills and productivity, as well as investing our grant in new occupational skills and cutting edge technology-equipped training.

#### The FCITB will:

- Develop an Industry 4.0 roadmap for the ECI conducted with partners, this will set out a vision for industry and the workforce and skills requirements.
- Work with the provider network to ensure appropriate programmes are developed and delivered.
- Establish a tech seed fund to accelerate the development and accreditation of augmented and virtual reality training to address skills gaps and shortages.



### **DIVERSITY AND INCLUSION**

Improving the diversity of the Engineering Construction Industry is a major priority. Currently, 88% of the workforce is male, while BAME representation is also low. As a result the industry is not taking advantage of the business benefits a diverse talent pool provides.

The ECITB is committed to supporting industry to creating diverse and inclusive workplaces.

#### We will:

- Provide up to £500,000 of grants for diversity and inclusion (D&I) training for managers and other staff.
- Ensure D&I awareness is embedded in ECITB standards as part of our training and occupational standards review.
- Raise awareness and showcase diversity in action in the industry through PR activities and campaigns.
- Promote the industry as an appealing career choice for individuals regardless of gender and ethnicity.

Creating truly inclusive workplaces requires senior buy-in and cultural change, and will take time. However the industry will benefit from a wider talent pool and more diverse views and experiences across the workforce, which in turn will increase performance and innovation.



Government policies on skills will influence the way in which industry recruits and trains skilled workers.

The ECITB will harness its position as an arms-length body to influence policy and act as a conduit of information and intelligence between industry and government policymakers.

We will seek to maximise opportunities for employers to contribute to policy development at national, devolved and regional levels, ensuring the ECI has a voice in government. In England, we will support the delivery of the T-level programme and the provision of industry placements across the ECI. We will also contribute to delivery of the people and skills elements of the nuclear and offshore wind sector deals and the oil and gas industry's Vision 2035.

By influencing the development and delivery of skills and education policy, The ECITB will help to ensure future talent has the educational underpinning required by ECI employers.

## **REGIONAL PLANS**

The ECITB strategy is regionally focused and tailored to the needs of each of the ECITB's sectors and regions. Each region has its own team of dedicated skills specialists who work with employers on training plans and strategic skills initiatives. Detailed regional plans accompany this publication.

#### **SCOTLAND**

In Scotland, we will continue to support the upstream oil and gas industry as well as other key ECI sectors across central Scotland, enabling employers to develop and maintain a skilled, competent, safe and diverse workforce.

#### Our priorities include:

- Supporting up to 650 new entrants, including apprentices and graduates across a range of disciplines including asset integrity and project delivery occupations.
- Addressing skills gaps and shortages in areas such as: project management, project controls, operational and middle management, leadership and digital capability of the site based workforce. Upskilling programmes will be used to address skills shortages in technician and asset integrity occupations.
- Improving competence assurance—through the Connected
  Competence programme and in critical areas such as Mechanical
  Joint Integrity and Small Bore
  Tubing. We will continue to support the competence development of project management professionals through the Active Cup. PM
  Mentoring and RPP programmes.
- Ongoing workforce development in key priority areas to maintain the skills base for employers in Scotland and the wider ECI. This will include supervision, leadership, work access, inspection and asset integrity.

#### **NORTHERN ENGLAND**

In Northern England, we will support bespoke training and workforce development for companies of all sizes across the Humber, Mersey, Tees Valley and other key areas of activity in the region.

#### Our priorities include:

- Bringing 450 new entrants into the industry by 2022 – ranging from apprentices, graduates, ITEC learners and transferees. We will work with partners including Career Hubs, Career and Enterprise Company and Engineering UK to highlight new and traditional vocational apprenticeships.
- Assisting industry to increase productivity and safety by using common standards, through technical training and technical testing. We will provide competency assurance for up to 450 people on a rolling 3-year programme.
- Addressing skills shortages and gaps through tailored upskilling solutions to regional employers including pipefitting, rigging, welding, instrument and control, supervision, project management and estimating.
- Promoting the industry with regional decision makers including the NP11. This includes providing advice and guidance on new apprenticeship standards, T-level industrial placements and influencing local industrial strategies.

## WALES, MIDLANDS & EAST OF ENGLAND

In WMEE, we will support SMEs across all ECI sectors, with a particular focus on the water, food and drink and offshore wind sectors.

#### Our priorities include:

- Developing sector engagement with employers in the food & drink and water sectors to improve understanding of skills gaps and shortages and provide grant training solutions.
- Supporting the implementation of the Offshore Wind and Nuclear Sector Deals through a coordinated approach with relevant stakeholders including the East Coast's Energy Skills Partnership Forum.
- Developing local flexible training solutions in line with the stated needs of regional employers including in the areas of leadership and management, mechanical installation and welding.
- Working with decision makers, including the Welsh Government, LEPs, Combined Authorities and Regional Learning and Skills Partnerships on policy initiatives and the development of a skills pipeline in major regional areas of ECI activity such as Pembrokeshire and the East of England.

#### NUCLEAR

In the nuclear sector, the ECITB's focus will be on supporting existing decommissioning and maintenance activities, the MEH phase of the new nuclear builds, and preparing for the decommissioning of the existing EDF fleet. Our interventions will also directly support the Nuclear Sector Deal.

#### Our priorities include:

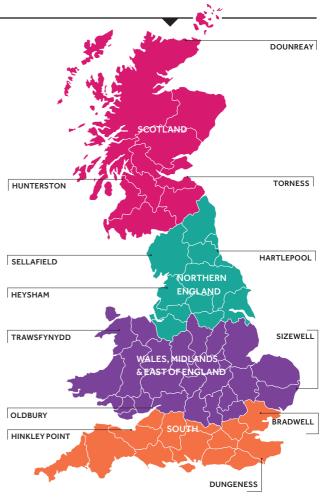
- New Entrants: supporting apprenticeship uptake ahead of contract award via group schemes, graduate development and experienced transferees. We will also target pre apprenticeships on harder to reach groups.
- Transferability/Mobility/Flexibility: developing standardised on-boarding prerequisites, extending the Coal to Nuclear accelerated learning programme, pre-testing and support for multiskilling to enable greater on project workforce retention and sharing best practice from other sectors.
- Diversity and Inclusion: Support the Nuclear Sector Deal's 40% women in nuclear target, increase the number of mid-career joiners, and enhance nuclear bursary scheme to increase diversity.
- Training grant support to address longer term skill shortages and upskilling for retention, including project and programme leadership, digital, future skills and mental health resilience.

#### **SOUTH**

In the South, our focus is to support companies across a wide range of operating sectors. This includes global Engineering Design & Procurement (EDP) companies and site-based companies, including SMEs.

#### Our priorities include:

- Support for up to 350 new entrants across a range of disciplines through: standardised development of graduates including soft skills, front-loading apprenticeship grants in key skills areas and establishing ITEC provision in the region to support the future skills pipeline.
- Implement flexible training solutions to improve accessibility of provision across the region and minimise overhead impact of training on employers, taking advantage of benefits offered by technology-based approaches.
- Deliver broad spectrum of workforce development in priority areas for the region's employers. This includes creating routes to upskill local workers at the Fawley refinery site.
- Introduce common competence assurance to relevant sections of region.



## LEVY PROPOSALS

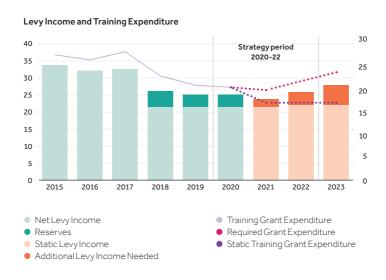
#### The overall picture

Following the decision to lower our levy rates at the last consultation, our levy income has fallen. During this period, we have maintained levels of grant support for training by drawing on up to £10m from the reserves, including £4m in 2018.

However this cannot continue indefinitely and from 2021 we will no longer be able to top up the levy from the reserves.

If levy rates don't change, we will be unable to deliver the strategy as set out in this document. This means there will be less funding for training available during a period when demand is forecast to grow.

In the 2016 levy consultation we stated that the levy rate would drop temporarily. To meet the continued demand for training, and deliver the proposed strategy, we need to raise the current levy income levels.



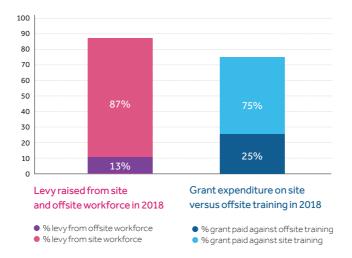
The ECITB's levy underpins all that we do. The funds raised are recycled back into the industry and provide the means by which the ECITB is able to grant support training. The system is rooted in fairness: it ensures that every employer (over a certain size) pays in and every eligible employer can receive grant in return.

#### Site versus offsite rates

At 0.14%, the current offsite worker levy rate is far lower than the site worker rate (1.2%). Historically, the offsite worker rate was 0.4%, but was reduced on the grounds that ECITB supported very little training of the offsite workforce, however this is no longer the case.

Last year, we raised 13% of levy from the offsite workforce. Yet 25% of grant spend went on training the offsite workforce – double the amount of levy paid.

These trends are only likely to increase as the size of the offsite workforce grows; it is currently 53% of the total ECI workforce and will grow further as companies harness technological change and more and more work is conducted remotely.



#### **Next steps**

The formal consultation with levy payers on our proposed levy rates will take place in the autumn. In the meantime, The Board is keen to receive your feedback on the proposed strategy. Please contact your local ECITB account manager, your regional chair or email Chris Claydon, ECITB's Chief Executive, at ceo@ecitb.org.uk.

## STATEMENT FROM THE BOARD

This strategy comes at a critical time for industry. Not only do we need to tackle the skills shortages facing employers today, we must also prepare for the future.

The ECITB levy enables investment in the industry's biggest asset – our people. Through the levy and grant system, the ECITB helps to boost productivity and business competitiveness. It also enables us to pump-prime the talent pipeline and train our people during periods of downturn, meaning that we have access to the right people with the right skills when we need them.

If the ECITB is to deliver this strategy, the levy needs to increase. This will be done in a managed way. We therefore call on the industry to back these proposals and as board members, we look forward to engaging with levy payers further in the months ahead.

Wynda Amstrong

Lynda Armstrong OBE

Chair ECITB

Simon Hicks

Managing Director (UK) Altrad

David Vineall

HR Director

Nuclear Decommissioning Authority

Vawn James

Dawn James

Vice President New Nuclear and Generation Services. Wood

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#### Hillary Hill

Chartered Engineer and Fellow of the Institute of Mechanical Engineers

#### Mike Hockey

ChiefExecutive Engineering Construction Industry Association

#### Christopher Claypole

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#### Professor Joe Howe

Executive Director and Professor of the Thornton Energy Institute at the University of Chester

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