

Independent Evaluation Report on an Application for Validation of a Programme of Education and Training

Part 1. Provider details

Provider name Kerry Education and Training Board	
Date of site visit	16 Dec 2021
Date of report	11/01/2022

Section A. Overall recommendations

Principal	Title	Advanced Certificate in Industrial Wind Turbine Engineering
programme	Award	Advanced Certificate
	Credit	220
	Recommendation	Satisfactory subject to proposed conditions.
	Satisfactory OR	
	Satisfactory subject to	
	proposed conditions	
	OR Not Satisfactory	

Embedded	Title	N/A
programme 1	Award	
	Credit	
	Recommendation	
	Satisfactory OR	
	Satisfactory subject to	
	proposed conditions	
	OR Not Satisfactory	

Section B. Expert Panel

Name	Role	Affiliation
Mr David Denieffe	Chair	Registrar, Institute of Technology Carlow.
Dr Austin Hanley	Secretary	Management Consultant formerly Dean of Engineering & Informatics, AIT
Professor Byungik Chang	Subject Matter Expert	Department of Civil and Environmental Engineering, University of New Haven
Mr Gerry Dwyer	Subject Matter Expert Industry Representative	Formerly of Ballincollig Hill Wind Farm
Professor David Johnson	Subject Matter Expert	Wind Energy Group, Dept. Mechanical and Mechatronics Engineering, University of Waterloo
Ms Anne McGlynn	Subject matter expert	Apprenticeship Manager at the Insurance Institute
Dr Marion Palmer	QA Expert	Former Head of Department of Technology and Psychology, IADT
Mr Dave Collins	QA Expert	Director of Academic Affairs, Chevron College
Ms Fionnuala Foley	Apprenticeship Expert	Report Writer QQI
Ms Sandra Mooney	Shadow Secretary	Head of QA and Enhancement, Innopharma Education

Section C. Principal Programme

Names of centre(s) where the programme(s) is	Maximum number of	Maximum number
to be provided	learners (FT)	of learners (PT)
Kerry Education and Training Board	18	0

Proposed Duration and Enrolment					
	First Intoles	Dometica	Intakes per	Enrolment i.e. learners per Intake	
	First Intake	Duration	Annum	•	
	Date		Maximum	Minimum	Maximum
Full-Time	30 Sep 2021	36	1	12	18
Part-Time	30 Sep 2021	0	0	0	0
Intake Sched	lule e.g. January				
September					

Panel Commentary on proposed enrolment:

The panel is satisfied that there is strong evidence of market demand for the programme, and that KETB can scale up supply from within, or in collaboration with other sites, if needed.

Brief synopsis of the programme (e.g. who it is for, what is it for, what is involved for learners, what it leads to.)

This is a three-year apprenticeship for those employed in the wind industry who are seeking to become qualified maintenance technicians. The programme is delivered through alternating blocks of centre based and work based training- allowing the apprentice to integrate knowledge and skills gained in the training setting with those acquired and consolidated in the workplace. Through acquiring both theoretical and practical understanding and skills over the three years – apprentices will develop full competence in the role of Wind Turbine Maintenance Technician.

Target learner groups

This programme is open to applicants 18 years or over, who:

- a) Are currently working for an employer who operates and maintains commercial wind turbines and who intend to work in the role of maintenance technician
- b) Who, on achieving the qualification will seek to continue their training with a HEI or progress to more senior job roles in the industry

The target group for this apprenticeship includes:

- a) Those leaving mainstream education who are 18 years or over, & who hold a qualification NFQ Level 4
- b) Holders of EU qualifications, specifically who have a minimum of 5 passes in a certificate placed at EQF Level 3
- c) Those with three years' trade related experience who want to develop a career as a technician in the industry, specifically those who do not hold the above qualifications but who are in a position to provide evidence of this work history
- d) Current employees within the wind industry who are seeking to obtain a qualification at NFQ Level 6 to enhance their employability and career pathways

Approved countries for provision	Ireland
Delivery mode: Full-time/Part-time	Full-time

The teaching and learning modalities

Directed Learning
On-the-job Training
Self-directed Learning
Simulated Work Environment
Practical Sessions

Group Discussions/interactions

Summary of specifications for teaching staff			
Role	Profile	WTE	
National Programme Coordinator	A Diploma/Degree in a relevant discipline, with appropriate experience including line management responsibility, financial management, management of staff development, project evaluation, and continuous	0.50	

	improvement cycles-with the ability to take the lead responsibility for the development of the programme	
Programme Leader	A Diploma/Degree in a relevant discipline, with appropriate background in assessment management, administration and quality assurance, with the necessary authority to ensure correct and consistent implementation of management, administrative, assessment and internal verification procedures both on and off-the-job across the provider as a whole	0.25
Instructors	Level 6 Advanced Certificate, a National Diploma or Higher Education and Training qualification mapped to ISCED/Engineering and engineering trades/0713 Electricity and Energy-plus experience of instructing and a min of 5 years post qualification experience in the area of wind turbine maintenance	2
ICT Instructor	ICT Instructor- hold a Level 6 Advanced Certificate, a National Diploma or Higher Education and Training qualification mapped to ISCED/Business and administration/0611 Computer Software Use plus experience of instructing	0.75

Learning Activity	Ratio of learners to teaching staff
Directed Learning	18:1
On-the-job Training	2:1
Simulated Work Environment	18:1
Practical Sessions	18:1
Group Discussions/interactions	18:1

Panel Commentary on programme outline and staffing:

Subject to fulfilling the Special Conditions detailed in this report, the panel is satisfied with the programme outline as presented. The staffing arrangements, including suitably qualified instructors, on-the-job mentors and support personnel are satisfactory.

Programmes being replaced (applicable to applications for revalidation)			
Code	Title Last		
		enrolment	
		date	
N/A	N/A	N/A	

Section D. Other noteworthy features of the application

Part 1A Evaluation of the Case for an Extension of the Approved Scope of Provision

(where applicable). Having examined appropriate QA / Governance procedures, comment on the case for extending the applicant's Approved Scope of Provision to enable provision of this programme. (Especially relevant for move to online delivery / assessment)

N/A			

Part 2. Evaluation against the validation criteria

The panel should complete this section with commentary against each criterion to support the recommendation given in the 'Satisfactory?' column i.e. Yes, No, or Partially.

If 'Yes', there should be a comment citing the evidence for this finding. Likewise, there should be an explanation as to why the panel have concluded that the criterion has either not been met or only partially so.

Criterion 1. The provider is eligible to apply for validation of the programme

- a) The provider meets the prerequisites (section 44(7) of the 2012 Act) to apply for validation of the programme.
- b) The application for validation is signed by the provider's chief executive (or equivalent) who confirms that the information provided is truthful and that all the applicable criteria have been addressed.
- c) The provider has declared that their programme complies with applicable statutory, regulatory and professional body requirements.¹

Programme	Satisfactory? (yes, no, partially)	Comment
Advanced Certificate in Industrial Wind Turbine Engineering	Yes	The panel has evaluated the programme having regards to criterion 1 and sub-criteria (a-c) and recommends that QQI can be satisfied that the programme meets this criterion.
		The programme meets the prerequisites (Section 44(7)) of the 2012 Act) to apply for validation of the programme. The programme declaration is in order and the application is appropriately signed.

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¹This criterion is to ensure the programme can actually be provided and will not be halted on account of breach of the law. The declaration is sought to ensure this is not overlooked but QQI is not responsible for verifying this declaration of enforcing such requirements.

Criterion 2. The programme objectives and outcomes are clear and consistent with the QQI awards sought

- a) The programme aims and objectives are expressed plainly.
- b) A QQI award is specified for those who complete the programme.
 - (i) Where applicable, a QQI award is specified for each embedded programme.
- c) There is a satisfactory rationale for the choice of QQI award(s).
- d) The award title(s) is consistent with unit 3.1 of QQI's Policy and Criteria for Making Awards.
- e) The award title(s) is otherwise legitimate for example it must comply with applicable statutory, regulatory and professional body requirements.
- f) The programme title and any embedded programme titles are
 - (i) Consistent with the title of the QQI award sought.
 - (ii) Clear, accurate, succinct and fit for the purpose of informing prospective learners and other stakeholders.
- g) For each programme and embedded programme
 - (i) The minimum intended programme learning outcomes and any other educational or training objectives of the programme are explicitly specified.²
 - (ii) The minimum intended programme learning outcomes to qualify for the QQI award sought are **consistent with** the relevant QQI awards standards.
- h) Where applicable, the **minimum intended module learning outcomes** are explicitly specified for each of the programme's modules.
- Any QQI minor awards sought for those who complete the modules are specified, where applicable.

For each minor award specified, the minimum intended module learning outcomes to qualify for the award are consistent with relevant QQI minor awards standards.³

Programme	Satisfactory? (yes, no, partially)	Comment
Advanced Certificate in Industrial Wind Turbine Engineering	partially	The panel has evaluated the programme having regards to criterion 2 and sub-criteria (a-i) and recommends that QQI can be satisfied that the programme partially meets this criterion The panel acknowledges that the Occupational Profile, created from consultative market demand data, was a main starting point from which the programme was developed. The panel notes however, that the Occupational Profile is not included in the Programme Descriptor. While the programme objectives are clear, the panel finds that it is not clear how the Occupational Profile is mapped to the Programme Objectives, the Programme Learning Outcomes, the Module Learning Outcomes and to the QQI award standards. A compressive mapping of these components is required. Therefore, It is a Special Condition of validation that
		the programme documentation details how the Occupational Profile is mapped to

² Other programme objectives, for example, may be to meet the educational or training requirements of a statutory, regulatory or professional body.

³ Not all modules will warrant minor awards. Minor awards feature strongly in the QQI common awards system however further education and training awards may be made outside this system.

the Programme Objectives, Programme Learning Outcomes, QQI Level 6 standards and to the Module Learning Outcomes

The rationale for the award is anchored within the continuing and sustained shift towards the use of green energy. The QQI title complies with QQI's Policy and Criteria for Making Awards.

MIPLOs and MIMLOs are clearly articulated for the QQI Level 6 award sought.

While the Programme Learning Outcomes are explicitly stated, they are not included in documents that are key to sound and effective communication with apprentices and stakeholders. Therefore,

The panel recommends that KETB includes the PLOs in the employer documentation and in the Apprentice Handbook.

Criterion 3. The programme concept, implementation strategy, and its interpretation of QQI awards standards are well informed and soundly based (considering social, cultural, educational, professional and employment objectives)

- The development of the programme and the intended programme learning outcomes has sought out and taken into account the views of stakeholders such as learners, graduates, teachers, lecturers, education and training institutions, employers, statutory bodies, regulatory bodies, the international scientific and academic communities, professional bodies and equivalent associations, trades unions, and social and community representatives.⁴
- b) The interpretation of awards standards has been adequately informed and researched; considering the programme aims and objectives and minimum intended programme (and, where applicable, modular) learning outcomes.
 - (i) There is a satisfactory rationale for providing the programme.
 - (ii) The proposed programme compares favourably with existing related (comparable) programmes in Ireland and beyond. Comparators should be as close as it is possible to find.
 - (iii) There is support for the introduction of the programme (such as from employers, or professional, regulatory or statutory bodies).
 - (iv) There is evidence⁵ of learner demand for the programme.
 - (v) There is evidence of employment opportunities for graduates where relevant⁶.
 - (vi) The programme meets genuine education and training needs.⁷
- There are mechanisms to keep the programme updated in consultation with internal and external stakeholders.
- Employers and practitioners in the cases of vocational and professional awards have been systematically involved in the programme design where the programme is vocationally or professionally oriented.
- e) The programme satisfies any validation-related criteria attaching to the applicable awards standards and QQI awards specifications.

Programme	Satisfactory? (yes, no, partially)	Comment
Advanced Certificate in Industrial Wind Turbine Engineering	yes	The panel has evaluated the programme having regards to criterion 3 and sub-criteria (a-e) and recommends that QQI can be satisfied that the programme meets this criterion.
		The rationale to provide the programme is based on solid employer driven data and known demand for Wind Turbine (WT) Technicians in the coming 15-20 years. The WT programme is compared to apprenticeship and training programmes in Norway, England, Scotland, as well as broadly equivalent education programmes in Ireland. There is evidence of employer and learner demand for the programme and for sustained employment opportunities. Employers are embedded in the course design and its delivery. Subject to meeting the Special Conditions outlined in

⁴ Awards standards however detailed rely on various communities for their interpretation. This consultation is necessary if the programme is to enable learners to achieve the standard in its fullest sense.

⁵ This might be predictive or indirect.

⁶ It is essential to involve employers in the programme development and review process when the programme is vocationally or professionally oriented.

⁷ There is clear evidence that the programme meets the target learners' education and training needs and that there is a clear demand for the programme.

	this report, the programme meets the validation-
	related criteria linked to the Level 6 award standards.

Criterion 4. The programme's access, transfer and progression arrangements are satisfactory

- a) The information about the programme as well as its procedures for access, transfer and progression are consistent with the procedures described in QQI's policy and criteria for access, transfer and progression in relation to learners for providers of further and higher education and training. Each of its programme-specific criteria is individually and explicitly satisfied⁸.
- b) Programme information for learners is provided in plain language. This details what the programme expects of learners and what learners can expect of the programme and that there are procedures to ensure its availability in a range of accessible formats.
- c) If the programme leads to a higher education and training award and its duration is designed for native English speakers, then the level of proficiency in English language must be greater or equal to B2+ in the Common European Framework of Reference for Languages (CEFRL⁹) in order to enable learners to reach the required standard for the QQI award.
- d) The programme specifies the learning (knowledge, skill and competence) that **target learners** are expected to have achieved before they are enrolled in the programme and any other assumptions about enrolled learners (programme participants).
- e) The programme includes suitable procedures and criteria for the **recognition of prior learning** for the purposes of access and, where appropriate, for advanced entry to the programme and for exemptions.
- f) The programme title (the title used to refer to the programme):-
 - (i) Reflects the core *intended programme learning outcomes*, and is consistent with the standards and purposes of the QQI awards to which it leads, the award title(s) and their class(es).
 - (ii) Is learner focused and meaningful to the learners;
 - (iii) Has long-lasting significance.
- g) The programme title is otherwise legitimate; for example, it must comply with applicable statutory, regulatory and professional body requirements.

Programme	Satisfactory? (yes, no, partially)	Comment
Advanced Certificate in Industrial Wind Turbine Engineering	yes	The panel has evaluated the programme having regards to criterion 4 and sub-criteria (a-g) and recommends that QQI can be satisfied that the programme meets this criterion. Access criteria to the programme is clear and comparable to well-established standards for equivalent apprenticeship programmes. The panel notes that gender imbalance is a feature of the learner cohort and recognises that this is a challenge for all involved. However, the panel finds that better communication of the programme access criteria, and the career opportunities, may help to redress the gender imbalance. Therefore,

⁸ Each of the detailed criteria set out in the Policy and criteria for access, transfer and progression in relation to learners for providers of further and higher education and training must be addressed in the provider's evaluation report. The detailed criteria are (QQI, restated 2015) arranged under the headings

- Information provision

⁻ Progression and transfer routes

⁻ Entry arrangements

⁹ http://www.coe.int/t/dg4/linguistic/Source/Framework EN.pdf (accessed 26/09/2015)

The panel recommends that KETB work together with industry partners to try to achieve a more equitable gender balance leaner cohort.

Access may be gained to the programme through a documented RPL process that requires the applicant to have *inter alia* a minimum of three years trade related experience.

The panel acknowledges that transfer or progression opportunities are not yet formally in place and that the programme is focused primarily on providing a Level 6 apprentice qualification and entry to a growing and sustainable wind turbine sector. However, the panel suggests that arrangements in respect to transfer and progression are inadequate. Therefore,

The panel recommends that KETB engages with other providers to enable transfer and progression opportunities for WT apprentices as soon as possible

The panel notes that the mathematics standard required for entry to the programme is set at Level 3 on the NFQ framework, lower than some comparable programmes. The panel acknowledges however, that KETB provides additional academic support to students if required. Nevertheless, it is not clear from the documentation what standard of mathematics the successful learner will achieve on completion of the programme. The panel finds that this may limit the learner's progression opportunities. Therefore,

The panel recommends that KETB considers formally documenting the mathematics standard that qualified Wind Turbine Apprentices will achieve, in order to support their progression opportunities.

The programme title is meaningful to learners, has long-term significance. It is unambiguous and reflects the PLOs.

Criterion 5. The programme's written curriculum is well structured and fit-for-purpose

- a) The programme is suitably structured and coherently oriented towards the achievement by learners of its intended programme learning outcomes. The programme (including any stages and modules) is integrated in all its dimensions.
- b) In so far as it is feasible the programme provides choice to enrolled learners so that they may align their learning opportunities towards their individual educational and training needs.
- c) Each module and stage is suitably structured and coherently oriented towards the achievement by learners of the intended *programme* learning outcomes.
- d) The objectives and purposes of each of the programme's elements are clear to learners and to the provider's staff.
- e) The programme is structured and scheduled realistically based on sound educational and training principles¹⁰.
- f) The curriculum is comprehensively and systematically documented.
- g) The credit allocated to the programme is consistent with the difference between the entry standard and minimum intended programme learning outcomes.
- h) The credit allocated to each module is consistent with the difference between the module entry standard and minimum intended module learning outcomes.
- i) Elements such as practice placement and work-based phases are provided with the same rigour and attentiveness as other elements.
- j) The programme duration (expressed in terms of time from initial enrolment to completion) and its fulltime equivalent contact time (expressed in hours) are consistent with the difference between the minimum entry standard and award standard and with the credit allocation. 11

Programme	Satisfactory?	Comment
	(yes, no, partially)	
Advanced Cortificate in		
Advanced Certificate in Industrial Wind Turbine Engineering	partially	The panel has evaluated the programme having regards to criterion 5 and sub-criteria (a-j) and recommends that QQI can be partially satisfied that the programme partially meets this criterion. The programme is structured across seven stages to enable learners to reach the programme Learning Outcomes.
		While all modules are mandatory, the programme is sufficiently varied to allow learners to develop specific areas of interest. The panel finds that the allocation of credits to modules is inconsistent with the learner effort in a number of modules. Therefore,
		It is a Special Condition of validation that KETB rebalances the programme credits to accurately reflect the learner effort.
		It is acknowledged that the learner requires a fundamental understanding of Health and Safety standards as they

¹⁰ This applies recursively to each and every element of the programme from enrolment through to completion.

In the case of a modular programme, the pool of modules and learning pathway constraints (such as any prerequisite and co-requisite modules) is explicit and appropriate to the intended programme learning outcomes.

¹¹ If the duration is variable, for example, when advanced entry is available, this should be explained and justified

apply to the WT environment and this is reflected in the number of Learning Outcomes attaching to the module. However, the panel finds that the number of credits allocated to the Health & Safety module does not adequately reflect its importance or the leaner workload attaching to it. Therefore,

The panel recommends that KETB considers allocating more credits to module number 2 (Health and Safety), given its importance and the number of LOs.

While the purpose of the programme is clear, the module descriptors do not always provide sufficient guidance to the learners on what is expected of them. For example, some reading lists contain material that is well beyond the standard that the learner can be expected to have. Therefore,

The panel recommends that KETB includes additional guidance to learners in the programme descriptors on the reading lists that are relevant to the modules.

The panel acknowledges that the programme is structured so that as the complexity of the tasks and theoretical material increases the learner is gaining the skills to carry out independent tasks. In parallel the learner gains the skills to search for relevant material and articulate the work through discussions with the Mentor and record it within Diary Pro. However, the panel finds that it is not clear how the reflective element of the programme is realised, and how the learner may access and use material for research. Therefore,

The panel recommends that KETB describes in more detail how the reflective element for the programme is realised and managed, including access to research resources.

The panel acknowledges that Diary Pro is an important programme teaching and learning instrument and that it requires sustained and continuous learner effort. However, the panel finds that it is not clear from the Programme Descriptor the level of effort required of the student to submit continuous entries to the diary. Therefore,

The panel recommends that the Learner writing effort is documented in the programme descriptor, specifically in respect to the use of Diary Pro.

The panel acknowledges that later stage on-the-job modules carry higher credits. However, the panel finds that the number of LOs and associated assessment strategies are inadequate for the level of credits available. Therefore,

The panel recommends that KETB ensures that later stage, on-the-job modules that carry higher credits should have an appropriate number of LOs and associated assessment strategies.

The panel acknowledges the broader responsibilities attaching to Wind Turbine maintenance and the consequences of failure to carry our duties to industry standards. Accordingly, ethics and ethical behaviour is an important element of training where such responsibilities are carried out. However, the panel finds that there is no provision made for the inclusion of Ethics as part of the programme. Therefore,

The panel recommends that KETB includes Ethics as part of the programme.

The programme duration and the learner hours are appropriate for the minimum entry standard and the achievement of the award standard.

Criterion 6. There are sufficient qualified and capable programme staff available to implement the programme as planned

- a) The specification of the programme's staffing requirements (staff required as part of the programme and intrinsic to it) is precise, and rigorous and consistent with the programme and its defined purpose. The specifications include professional and educational qualifications, licences-to practise where applicable, experience and the staff/learner ratio requirements. See also criterion 12 c).
- b) The programme has an identified complement of staff¹² (or potential staff) who are available, qualified and capable to provide the specified programme in the context of their existing commitments.
- c) The programme's complement of staff (or potential staff) (those who support learning including any employer-based personnel) are demonstrated to be competent to enable learners to achieve the intended programme learning outcomes and to assess learners' achievements as required.
- d) There are arrangements for the performance of the programme's staff to be managed to ensure continuing capability to fulfil their roles and there are staff development¹³ opportunities¹⁴.
- e) There are arrangements for programme staff performance to be reviewed and there are mechanisms for encouraging development and for addressing underperformance.
- f) Where the programme is to be provided by staff not already in post there are arrangements to ensure that the programme will not enrol learners unless a complement of staff meeting the specifications is in post.

Programme	Satisfactory? (yes, no, partially)	Comment
Advanced Certificate in Industrial Wind Turbine Engineering	yes	The panel has evaluated the programme having regards to criterion 6 and sub-criteria (a-f) and recommends that QQI can be satisfied that the programme meets this criterion.
		The staff resources are in place and are suitably qualified and equipped to deliver the programme as described. Teaching staff members are required to have suitable academic and work experience. There are mechanisms in place to monitor instructor performance, informed through <i>inter alia</i> , data gathered from key stakeholders including the apprentices and employers. Staff upskilling is recommended, encouraged and supported when appropriate. The panel recognises the key role that the Mentor plays in supporting the Learner to achieve the PLOs.

¹² Staff here means natural persons required as part of the programme and accountable (directly or indirectly) to the programme's provider, it may for example, include contracted trainers and workplace supervisors.

¹³ Development here is for the purpose of ensuring staff remain up-to-date on the discipline itself, on teaching methods or on other relevant skills or knowledge, to the extent that this is necessary to ensure an adequate standard of teaching.

¹⁴ Professional or vocational education and training requires that teaching staff's professional/vocation knowledge is up to date. Being qualified in a discipline does not necessarily mean that a person is currently competent in that discipline. Therefore, performance management and development of professional and vocational staff needs to focus on professional/vocational competence as well as pedagogical competence. Professional development may include placement in industry, for example. In regulated professions it would be expected that there are a suitable number of registered practitioners involved.

Appropriate Mentor training is, therefore, important to ensuring good outcomes for the on-the-job modules. However, the panel finds that a 2 ½ hour Mentor training programme may be insufficient, and that details of the training are not provided in the Programme Descriptor. Therefore,
The panel recommends that details of KETB's Mentor Training is outlined in the

programme documentation.

Criterion 7. There are sufficient physical resources to implement the programme as planned

- a) The specification of the programme's physical resource requirements (physical resources required as part of the programme and intrinsic to it) is precise, and rigorous and consistent with the programme, its defined purpose and its resource/learner-ratio requirements. See also criterion 12 d).
- b) The programme has an identified complement of supported physical resources (or potential supported physical resources) that are available in the context of existing commitments on these e.g. availability of:
 - (i) suitable premises and accommodation for the learning and human needs (comfort, safety, health, wellbeing) of learners (this applies to all of the programme's learning environments including the workplace learning environment)
 - (ii) suitable information technology and resources (including educational technology and any virtual learning environments provided)
 - (iii) printed and electronic material (including software) for teaching, learning and assessment
 - (iv) suitable specialist equipment (e.g. kitchen, laboratory, workshop, studio) if applicable
 - (v) technical support
 - (vi) administrative support
 - (vii) company placements/internships if applicable
- c) If versions of the programme are provided in parallel at more than one location each independently meets the location-sensitive validation criteria for each location (for example staffing, resources and the learning environment).
- d) There is a five-year plan for the programme. It should address
 - (i) Planned intake (first five years) and
 - (ii) The total costs and income over the five years based on the planned intake.
- e) The programme includes controls to ensure entitlement to use the property (including intellectual property, premises, materials and equipment) required.

Programme	Satisfactory? (yes, no, partially)	Comment
Advanced Certificate in Industrial Wind Turbine Engineering	yes	The panel has evaluated the programme having regards to criterion 7 and sub-criteria (a-e) and recommends that QQI can be satisfied that the programme meets this criterion.
		The off-the job elements of the programme will take place on KETB's Monavalley campus. The panel finds that the physical environment available to deliver the programme is not sufficiently described in the programme documentation. Therefore,
		The panel recommends that the programme documentation describes the physical environment available to deliver the programme.
		Although the panel is satisfied that there is clear demand for the programme, and that a 5-year financial plan is presented, it finds that there is insufficient information in the programme documentation on how KETB plan to expand programme provision, if/when its capacity to deliver can no longer meet market demand. Therefore,

The panel recommends that KETB document its capacity to expand its programme provision on site, based on expected market demand.
There is evidence of suitable locations to deliver the on-the-job elements of the programme and technical and administration supports are satisfactory.

Criterion 8. The learning environment is consistent with the needs of the programme's learners

- a) The programme's physical, social, cultural and intellectual environment (recognising that the environment may, for example, be partly virtual or involve the workplace) including resources and support systems are consistent with the intended programme learning outcomes.
- b) Learners can interact with, and are supported by, others in the programme's learning environments including peer learners, teachers, and where applicable supervisors, practitioners and mentors.
- c) The programme includes arrangements to ensure that the parts of the programme that occur in the workplace are subject to the same rigours as any other part of the programme while having regard to the different nature of the workplace.

Programme	Satisfactory?	Comment
	(yes, no, partially)	
Advanced Certificate in Industrial Wind Turbine Engineering	yes	The panel has evaluated the programme having regards to criterion 8 and sub-criteria (a-c) and recommends that QQI can be satisfied that the programme meets this criterion.
		The learning environment is suited to the apprenticeship model and facilitates a high degree of on-the-job mentoring, allows for controlled and progressively independent practical learning, and supports peer learning and face-to face teaching of the theoretical elements of the programme. Although the learning environment is suitable in a normal delivery environment, the panel finds that no contingency is made for learner needs where face-to-face delivery is not possible due to circumstances beyond KETB's control. Therefore,
		The panel recommends that KETB includes its contingency plan to offer the programme in the event of face-to-face delivery constraints (e.g. pandemic restrictions).
		Work place arrangements including learner supervision and assessment are satisfactory.

Criterion 9. There are sound teaching and learning strategies

- a) The teaching strategies support achievement of the intended programme/module learning outcomes.
- b) The programme provides authentic learning opportunities to enable learners to achieve the intended programme learning outcomes.
- c) The programme enables enrolled learners to attain (if reasonably diligent) the minimum intended programme learning outcomes reliably and efficiently (in terms of overall learner effort and a reasonably balanced workload).
- d) Learning is monitored/supervised.
- **e)** Individualised guidance, support15 and timely formative feedback is regularly provided to enrolled learners as they progress within the programme.

Programme	Satisfactory?	Comment
	(yes, no, partially)	
Advanced Certificate in Industrial Wind Turbine Engineering	partially	The panel has evaluated the programme having regards to criterion 9 and sub-criteria (a-e) and recommends that QQI can be satisfied that the programme partially meets this criterion.
		In the main, the teaching and learning strategies facilitate the learner to achieve the programme and module outcomes. However, the learner workload/credits require to be rebalanced (See Special Condition 2, Criterion 5). The number of LOs and their associated assessments provide important guidance to learners in achieving MIMLOs. The panel finds that in respect to Module 2, the number of LOs is excessive, and may not enable learners to achieve the module outcomes. Therefore,
		The panel recommends that KETB considers reducing the number of LOs in Module 2, moving many of them to the indicative syllabus.
		Learning monitoring and supervision is satisfactory and formative feedback is clearly an embedded feature of the programme teaching and learning strategy, both onthe-job and in face-to-face delivery modes.

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¹⁵ Support and feedback concerns anything material to learning in the context of the programme. For the avoidance of doubt it includes among other things any course-related language, literacy and numeracy support.

Criterion 10. There are sound assessment strategies

- a) All assessment is undertaken consistently with Assessment Guidelines, Conventions and Protocols for Programmes Leading to QQI Awards¹⁶
- b) The programme's assessment procedures interface effectively with the provider's QQI approved quality assurance procedures.
- c) The programme includes specific procedures that are fair and consistent for the assessment of enrolled learners to ensure the minimum intended programme/module learning outcomes are acquired by all who successfully complete the programme.¹⁷
- d) The programme includes formative assessment to support learning.
- e) There is a satisfactory written **programme assessment strategy** for the programme as a whole and there are satisfactory module assessment strategies for any of its constituent modules.¹⁸
- f) Sample assessment instruments, tasks, marking schemes and related evidence have been provided for each award-stage assessment and indicate that the assessment is likely to be valid and reliable.
- g) There are sound procedures for the moderation of summative assessment results.
- h) The provider only puts forward an enrolled learner for certification for a particular award for which a programme has been validated if they have been specifically assessed against the standard for that award.¹⁹

Programme	Satisfactory? (yes, no, partially)	Comment						
Advanced Certificate in Industrial Wind Turbine Engineering	yes	The panel has evaluated the programme having regards to criterion 10 and sub-criteria (a-h) and recommends that QQI can be satisfied that the programme meets this criterion.						
		The programme assessment strategy includes the use of effective assessment instruments and complies with QQI's assessment guidelines for QQI awards. However, the panel finds that there is scope for using more varied assessments that may be more appropriate to achieving the MLOs. Therefore,						
		The panel recommends that KETB reviews the programme assessments to ensure that they are varied and appropriate to the achievement of the Module Learning Outcomes.						
		Formative assessment is an embedded feature of the assessment strategy. Moderation of assessment results is satisfactory and the assessment procedures interface effectively with QQI's approved quality approved procedures. Information in respect to repeat options,						

¹⁶ See the section on transitional arrangements.

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¹⁷ This assumes the minimum intended programme/module learning outcomes are consistent with the applicable awards standards.

¹⁸ The programme assessment strategy is addressed in the Assessment Guidelines, Conventions and Protocols for Programmes Leading to QQI Awards. See the section on transitional arrangements.

¹⁹ If the award is a QQI CAS compound award it is not necessarily sufficient that the learner has achieved all the components specified in the certification requirements unless at least one of those components is a capstone component (i.e. designed to test the compound learning outcomes).

	submission deadlines are unsatisfactory (See Special
	condition 3, Criterion 11).

Criterion 11. Learners enrolled on the programme are well informed, guided and cared for

- a) There are arrangements to ensure that each enrolled learner is fully informed in a timely manner about the programme including the schedule of activities and assessments.
- b) Information is provided about learner supports that are available to learners enrolled on the programme.
- c) Specific information is provided to learners enrolled on the programme about any programme-specific appeals and complaints procedures.
- d) If the programme is modular, it includes arrangements for the provision of effective guidance services for learners on the selection of appropriate learning pathways.
- e) The programme takes into account and accommodates to the differences between enrolled learners, for example, in terms of their prior learning, maturity, and capabilities.
- f) There are arrangements to ensure that learners enrolled on the programme are supervised and individualised support and due care is targeted at those who need it.
- g) The programme provides supports for enrolled learners who have special education and training needs.
- h) The programme makes reasonable accommodations for learners with disabilities²⁰.
- i) If the programme aims to enrol international students it complies with the *Code of Practice for Provision of Programmes to International Students*²¹ and there are appropriate in-service supports in areas such as English language, learning skills, information technology skills and such like, to address the particular needs of international learners and enable such learners to successfully participate in the programme.
- j) The programme's learners will be well cared for and safe while participating in the programme, (e.g. while at the provider's premises or those of any collaborators involved in provision, the programme's locations of provision including any workplace locations or practice-placement locations).

Programme	Satisfactory? (yes, no, partially)	Comment
Advanced Certificate in Industrial Wind Turbine Engineering	partially	The panel has evaluated the programme having regards to criterion 11 and sub-criteria (a-j) and recommends that QQI can be satisfied that the programme partially meets this criterion.
		The panel acknowledges the importance of the Student Handbook as a programme information source for students. The panel finds that the handbook is less informative than it should be, and suggests its contents be reviewed. The panel finds that vital information in respect to repeat assessment options and rules on student submissions are missing from the Student Handbook and the module descriptors. Therefore,
		It is a Special Condition of validation that KETB includes repeat options and rules in respect to meeting submission deadlines in the learner handbook and in the module descriptors

²⁰ For more information on making reasonable accommodations see www.AHEAD.ie and QQI's Policies, Actions and Procedures for Access, Transfer and Progression for Learners (QQI, restated 2015).

²¹See Code of Practice for Provision of Programmes to International Students (QQI, 2015)

The panel acknowledges that a minimum level of physical agility is an appropriate requirement to access the programme. In respect to learning disabilities, the panel is satisfied that KETB provides sufficient support (drop-in and scheduled sessions) for students through its *Adult Literacy and Basic Education Service* unit. A designated contact person is planned to be assigned from the unit to support each apprentice. The programme makes provision for the monitoring and supervision of the apprentice at all stages of the programme.

The supportive learning and teaching approach allows learners with varying backgrounds to progress effectively through the programme.

Criterion 12. The programme is well managed

- a) The programme includes intrinsic governance, quality assurance, learner assessment, and access, transfer and progression procedures that functionally interface with the provider's general or institutional procedures.
- b) The programme interfaces effectively with the provider's QQI approved quality assurance procedures. Any proposed incremental changes to the provider's QA procedures required by the programme or programme-specific QA procedures have been developed having regard to QQI's statutory QA guidelines. If the QA procedures allow the provider to approve the centres within the provider that may provide the programme, the procedures and criteria for this should be fit-for-the-purpose of identifying which centres are suited to provide the programme and which are not.
- c) There are explicit and suitable programme-specific criteria for selecting persons who meet the programme's staffing requirements and can be added to the programme's complement of staff.
- d) There are explicit and suitable programme-specific criteria for selecting physical resources that meet the programmes physical resource requirements, and can be added to the programme's complement of supported physical resources.
- e) Quality assurance²² is intrinsic to the programme's maintenance arrangements and addresses all aspects highlighted by the validation criteria.
- f) The programme-specific quality assurance arrangements are consistent with QQI's statutory QA guidelines and use continually monitored completion rates and other sources of information that may provide insight into the quality and standards achieved.
- g) The programme operation and management arrangements are coherently documented and suitable.
- h) There are sound procedures for interface with QQI certification.

Programme	Satisfactory? (yes, no, partially)	Comment
Advanced Certificate in Industrial Wind Turbine Engineering	yes	The panel has evaluated the programme having regards to criterion 12 and sub-criteria (a-h) and recommends that QQI can be satisfied that the programme meets this criterion. Appropriate and QQI compliant governance and quality assurance procedures are in place for the programme. Staff recruitment processes are appropriate.
		Quality Assurance arrangements and procedures are consistent with QQI's statutory guidelines. Although the physical resources required to deliver the programme are clearly understood and in place, the panel points to the recommendation under Criterion 7 in respect to documenting same. The operation and maintenance arrangements for the programme are comprehensively documented and are appropriate for interfacing with QQI certification. Subject to fulfilling the Special Conditions detailed in this report, QA arrangements and procedures address the validation criteria satisfactorily.

²² See also QQI's Policy on Monitoring (QQI, 2014)

Part 3. Overall recommendation to QQI

3.1 Principal programme: Advanced Certificate in Industrial Wind Turbine Engineering

Select one	
	Satisfactory (meaning that it recommends that QQI can be satisfied in the
	context of unit 2.3) of Core policies and criteria for the validation by QQI of
	programmes of education and training;
	Satisfactory subject to proposed special conditions (specified with timescale
	for compliance for each condition; these may include proposed pre-validation
V	conditions i.e. proposed (minor) things to be done to a programme that
V	almost fully meets the validation criteria before QQI makes a determination);
	Not satisfactory.

Reasons for the overall recommendation

1. As detailed under each validation criteria above

Commendations

- 1. The panel commends the proposal for the strength of the industry support that is evident throughout.
- 2. The panel commends KETB and its consortium and industry partners for the manner in which they collaborated successfully to develop the programme.

Special Conditions of Validation (directive and with timescale for compliance) (to be implemented prior to the commencement of the programme)

- 1. It is a Special Condition of validation that the programme documentation details how the Occupational Profile is mapped to the Programme Objectives, Programme Learning Outcomes, QQI Level 6 standards and to the Module Learning Outcomes
- 2. It is a Special Condition of validation that KETB rebalances the programme credits to accurately reflect the learner effort.
- 3. It is a Special Condition of validation that KETB includes repeat options and rules in respect to meeting submission deadlines in the learner handbook and in the module descriptors.

Summary of recommendations to the provider

- 1) The panel recommends that KETB document its capacity to expand its programme provision on site, based on expected market demand.
- 2) The panel recommends that details of KETB's Mentor Training is outlined in the programme documentation.
- 3) The panel recommends that KETB includes the PLOs in the employer documentation and in the Apprentice Handbook.
- 4) The panel recommends that the programme documentation describes the physical environment available to deliver the programme.
- 5) The panel recommends that KETB engages with other providers to enable transfer and progression opportunities for WT apprentices as soon as possible

- 6) The panel recommends that KETB considers formally documenting the mathematics standard that qualified Wind Turbine Apprentices will achieve in order to support their progression opportunities.
- 7) The panel recommends that KETB work together with industry partners to try to achieve a more equitable gender balance leaner cohort.
- 8) The panel recommends that KETB includes its contingency plan to offer the programme in the event of face-to-face delivery constraints (e.g. pandemic restrictions).
- 9) The panel recommends that KETB includes additional guidance to learners in the programme descriptors on the reading lists that are relevant to the modules.
- 10) The panel recommends that KETB ensures that later stage, on-the-job modules that carry higher credits should have an appropriate number of LOs and associated assessment strategies.
- 11) The panel recommends that KETB describes in more detail how the reflective element for the programme is realised and managed, including access to research resources.
- 12) The panel recommends that KETB reviews the programme assessments to ensure that they are varied and appropriate to the achievement of the Module Learning Outcomes.
- 13) The panel recommends that the Learner writing effort is documented in the programme descriptor, specifically in respect to the use of Diary Pro.
- 14) The panel recommends that KETB considers allocating more credits to module number 2 (Health and Safety), given its importance and the number of LOs.
- 15) The panel recommends that KETB considers reducing the number of LOs in Module 2 moving many of them to the indicative syllabus.
- 16) The panel recommends that KETB includes Ethics as part of the programme.
- 17) The panel recommends that KETB reviews the wording of the LOs to ensure they are assessable, for example to employ action or 'doing' verbs in place of 'understand'.

Declarations of Evaluators' Interests

There was nothing declared

This report has been agreed by the evaluation panel and is signed on their behalf by the chairperson.

Panel chairperson: David Denieffe Date: 11/01/2022

Signed:

3.2 Disclaimer

The Report of the External Review Panel contains no assurances, warranties or representations express or implied, regarding the aforesaid issues, or any other issues outside the Terms of Reference.

While QQI has endeavoured to ensure that the information contained in the Report is correct, complete and up-to-date, any reliance placed on such information is strictly at the reader's own risk, and in no event will QQI be liable for any loss or damage (including without limitation, indirect or consequential loss or damage) arising from, or in connection with, the use of the information contained in the Report of the External Evaluation Panel.



Part 1. Proposed programme schedules (post panel feedback and consequent amendments, if any)

Programme and stage schedules

PG24656 Advanced Certificate in Industrial Wind Turbine Engineering

r 024030 Auvaii	ceu certificate ili ili	austriai vviila Turbii	ne Engineering												
Name of Provide	er	Kerry Education ar	Kerry Education and Training Board												
Programme Title	2	PG24656 Advance	d Certificate in I	ndustria	l Wind T	urbine E	ngineering								
Award Title Advanced Certificate										ard		N/A			
Teaching and le	arning modalities	Directed Learning; Discussions/Intera		ining; Se	elf Direct	ed Learn	ing; Simul	ated Worl	k Environn	nent; Prac	tical Sess	sions; Gr	oup		
Delivery Modes	Award Class	Award NFQ Level	Award EQF Le	Stage	Stage NFQ Level			Stage Credits		First Intake			ISCED Code		
Full time	Major	6	5		Award	Stage	5		220		Jan 2022			07.1.3	
Module	'	'				Total St	udent Effor	t Module (I	Hours)		Allocation	on of Mar	·ks		
Title			Semester	Status	Credit	Total Hours	Class Contact Hours	Direct e-learning	Hours of independent learning	Work-based learning efforts	C.A. %	Project %	Skills demonstration %	Exam %	Work based %
Wind Turbine Health and Safety			Not Applicable	М	5	91	81	0	10	0	100	0	0	0	0
Introduction to ICT	-		Not Applicable	М	5	60	52	0	8	0	100	0	0	0	0
Wind Turbine Operations		Not Applicable	М	5	79	52	0	27	0	0	50	0	50	0	
Electrical Systems 1		Not Applicable	М	10	160	135	0	25	0	0	0	0	100	0	
Mechanical Systems 1			Not Applicable	М	10	160	135	0	25	0	0	0	0	100	0
Stage 2 On-the-Job			Not Applicable	М	20	645	0	0	85	560	20	0	80	0	0
Electrical Systems 2	2		Not Applicable	М	10	164	134	0	30	0	0	0	50	50	0
Mechanical Systems 2		Not Applicable	М	10	164	134	0	30	0	0	0	50	50	0	
Inspection & Maintenance of Wind turbine Component		Not Applicable	М	20	194	134	0	60	0	0	0	50	50	0	
Stage 4 On-the-Job		Not Applicable	М	30	645	0	0	85	560	20	0	80	0	0	
Electrical Systems 3		Not Applicable	М	10	143	113	0	30	0	0	0	50	50	0	
Mechanical Systems 3 Not		Not Applicable	М	10	143	113	0	30	0	0	0	50	50	0	
Diagnostics & Location of faults on Wind Turbine C Not App		Not Applicable	М	20	288	258	0	30	0	0	0	50	50	0	
Stage 6 On-the-Job Not Applicab		NI A PLAN	М	40	646	0	0	86	560	20	0	80	0	0	



 Capstone Assessment
 Not Applicable
 M
 15
 246
 123
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