

**1. TITLE OF THE CERTIFICATE (HU)**

52 5483 04 ENERGIATERMELŐ ÉS -HASZNOSÍTÓ TECHNIKUS (MEGÚJULÓ ENERGIAGAZDÁLKODÁSI TECHNIKUS)

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)ENERGY PRODUCER AND UTILIZER TECHNICIAN (RENEWABLE ENERGY MANAGEMENT TECHNICIAN)
(THIS TRANSLATION HAS NO LEGAL STATUS)**3. PROFILE OF SKILLS AND COMPETENCES****A typical holder of the certificate is able to:**

- A typical holder of the certificate is able to: Participate in: - the performance of energy production analyses, calculations; - the implementation processes of energy producing equipment; - the exploration and repair of occurring errors; - the putting into operation and adjustment of equipment installed; - experimental work; - data collection; - modernisation work of products, machinery and equipment; - the elaboration and implementation of new technologies; - the elaboration of a quality assurance system; - the planning and implementation of projects; - the performance of technical supervisory tasks; - the performance of operational supervision; - the safe operation of machinery and equipment; Supervise: - the continuity of operation; - the observation of safety and environmental protection regulations related to energy producing equipment; - the technical parameters of materials, supplementary materials, machinery, measurement devices used in operation, production, repair, construction and regular maintenance; - the operability of safety devices, - the observation of technology discipline; - the operability of safety devices. Provide for: - the adaptation, observation and making observed labour safety, environmental protection and fire protection regulations; - the appropriate technical condition of machinery, devices and equipment they are responsible for; - the supply of material, machinery, tools, device, measurement device and energy necessary for continuous operation, production, maintenance and repair; - the appropriate professional preparedness and assignment of employees working on their work area; - the observation of quality assurance regulations; Perform jobs requiring higher vocational preparedness: - laboratory and measurement room tasks; - trial operation, error exploration and their remedy; - implementation of work organisation, execution, takeover and delivery; - in their environment perform activities aiming to make labour safety, fire protection, accident prevention and environmental protection regulations observed.

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE

3151 Energy manager

(*) Explanatory notes:

This document is designed to provide additional information about the specified certificate and does not serve as a legal certificate of vocational qualification. The format of the description is based on the following documents:

Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications; Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates, and Recommendation 2001/613/EC of the European Parliament and of the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers.

More information on transparency is available at: <http://europass.cedefop.europa.eu/>

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5. OFFICIAL BASIS OF THE CERTIFICATE

<p>Name and status of the institute issuing the certificate</p>	<p>Name and status of the national/regional authority providing accreditation/recognition of the certificate</p> <p>In the case of vocational qualifications belonging to the competence of the Ministry of Education (OM), a vocational qualification-related independent professional committee commissioned by the OM</p>																						
<p>Level of the certificate (national or international)</p> <p>Level of vocational qualification according to the National Qualification Register: 52 Intermediate vocational qualification entitling the holder to fill positions requiring physical or intellectual work, which is based on the input competence determined in the vocational and examination requirements, on preliminary vocational qualification or on the baccalaureate.</p> <p>ISCED97 code: 4CV</p>	<p>Grading scale / Pass requirements</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Five -grade:</td> <td style="width: 10%; text-align: center;">5</td> <td style="width: 75%;">excellent</td> </tr> <tr> <td></td> <td style="text-align: center;">4</td> <td>good</td> </tr> <tr> <td></td> <td style="text-align: center;">3</td> <td>satisfactory</td> </tr> <tr> <td></td> <td style="text-align: center;">2</td> <td>pass</td> </tr> <tr> <td></td> <td style="text-align: center;">1</td> <td>fail</td> </tr> </table> <p>Vocational qualification examination after the completion of vocational training</p> <p>Parts of the examination: - Vocational theory - Vocational practice</p> <p>A successful vocational qualification examination requires a pass grade both in vocational theory and practice.</p>	Five -grade:	5	excellent		4	good		3	satisfactory		2	pass		1	fail							
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<p>Certificate number: PT K</p> <p>Serial number: 123456</p> <p>Certificate issue date: 2023.09.14</p>	<p>Description of vocational theoretical and practical subjects and their grades according to the five-grade scale</p> <p>1. Grades of vocational theoretical examination subjects</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: left;">Topics/subjects of written examination</td> </tr> <tr> <td style="width: 80%;">Technical studies (Flow studies, Machinery studies, Thermodynamics)</td> <td style="width: 20%; text-align: center;">5</td> </tr> <tr> <td>Vocational studies (Solar energy, Wind and water energy, Geothermal energy, Energy from biological sources, Planning studies)</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Grade of Written Examination</td> <td style="text-align: center;">5</td> </tr> <tr> <td colspan="2" style="text-align: left;">Topics/subjects of oral examination</td> </tr> <tr> <td>Technical studies (Machinery studies, Measurement and control)</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Vocational studies (Energy management, Solar energy, Wind and water energy, Geothermal energy, Energy from biological sources)</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Grade of Vocational Theory</td> <td style="text-align: center;">5</td> </tr> </table> <p>2. Assessment of vocational practical preparedness</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: left;">Subjects of practical examination</td> </tr> <tr> <td style="width: 80%;">Vocational training</td> <td style="width: 20%; text-align: center;">5</td> </tr> <tr> <td>Grade of Vocational Practice</td> <td style="text-align: center;">5</td> </tr> </table>	Topics/subjects of written examination		Technical studies (Flow studies, Machinery studies, Thermodynamics)	5	Vocational studies (Solar energy, Wind and water energy, Geothermal energy, Energy from biological sources, Planning studies)	5	Grade of Written Examination	5	Topics/subjects of oral examination		Technical studies (Machinery studies, Measurement and control)	5	Vocational studies (Energy management, Solar energy, Wind and water energy, Geothermal energy, Energy from biological sources)	5	Grade of Vocational Theory	5	Subjects of practical examination		Vocational training	5	Grade of Vocational Practice	5
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<p>Access to next level of education/training</p> <p>To higher education</p>	<p>International agreements</p>																						
<p>Other information concerning the vocational training process</p>																							
<p>Legal basis</p> <p>Act LXXVI of 1993 on vocational training, Decree 26/2001 (VII. 27.) OM of the Minister of Education on the general rules and rules of procedure of vocational examinations, Decree 37/2003. (XII.27.) of the Minister of Education (OM) on the National Qualification Register, Ministry of Education decree no. 28/2003. (X. 18.) OM.</p>																							

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

Description of vocational education and training received	Percentage of total programme %	Duration (hours/weeks/months/years)
School-/training centre-based	Theory: 70 % Practice: 30 %	
Workplace-based		
Accredited prior learning		
Total duration of the education/training leading to the certificate		2 years

Entry requirements:

- baccalaureate
- vocational aptitude

Further information:

MANDATORY VOCATIONAL THEORETICAL SUBJECTS

Professional foreign language	144 hours
Technical display	111 hours
Industrial Materials and Prefabricated Products	74 hours
Hydrodynamics	74 hours
Technical Mechanics	74 hours
Machine Elements	74 hours
Machinery	105 hours
Geology I.	37 hours
Measurement Engineering, Instrumentation and Control	70 hours
Energy management I.-II.	107 hours
Environmental protection	37 hours
Thermodynamics	74 hours
Solar energy	70 hours
Wind and water energy	70 hours
Geothermal energy	70 hours
Energy from biological sources	70 hours
Planning studies	70 hours
Electrical Engineering	74 hours

MANDATORY VOCATIONAL PRACTICAL SUBJECTS

Basic Practice of Mechanical Engineering	185 hours
Technical Measurements	148 hours
Vocational training	315 hours
Uninterrupted Period of Long-Term Vocational Practice	80 hours

Further information (including the description of the national grading method):

The basis of the grading system is a list of vocational and examination requirements compiled in accordance with uniform criteria and structure, issued in the form of legal regulation that includes the following:

- identification number and description of the vocational qualification as specified in OKJ and the relevant FEOR number,
- school and vocational prequalification required for the start of the training, aptitude and vocational competence requirements and prescribed practice,
- the most typical occupation or activity accessible to the holder of the vocational qualification certificate, the short job description, and the list of related vocational qualifications,
- the duration of the training required for the vocational qualification; maximum number of hours; the ratio of theoretical and practical training; the number of vocational training classes in the vocational training school; the duration of initial training period; the possibility of organising a grade examination assessing the efficiency of practical training,
- occupational requirements of vocational qualification,
- requirements pertaining to vocational examination.

The vocational and examination requirements will be classified by the occupational group committees of the National Qualification Register (OKJ) and by the National Council for Vocational Training, and subsequently they will be issued in the form of legal regulations.

Vocational and examination requirements are available at: <http://www.nive.hu>

This certificate supplement was prepared on the basis of the instruction for filling in the Certificate Supplement published on the homepages of the National Reference Point and the National Europass Centre.

National Reference Point – NSZFH – <http://nrk.nive.hu>

Head of Examination Organiser:

Issue date: 2023.09.14

SEAL

SAMPLE