# ENERGY EFFICIENCY MANAGER

# COMPETENCE PROFILE

*Transferring European VET Structures to cover skill needs in the Energy Efficiency Sector*

APEE
Organismo Autónomo Programas Educativos Europeos

Lifelong Learning Programme

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| **Competence Unit**<br>Assignments | **Task**<br>Sub-Assignments | **Knowledge**<br>*Knowledge of/about* | **Skills**<br>*To be able to...* | **Competences**<br>*To be competent at…* | **NQF** | **EQF** |
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| **1. Law, Politics, Economy** | | | | | | |
| **Legal, formal and technical obligations.** | *Working according to legislation relevant for the energy sector* | National and European Energy legislation / rules & standards<br><br>Climate protection<br><br>Emissions trading | To apply the current legislation in energy<br><br>To keep updated with regulations<br><br>To prepare documentation for legal authorizations and possible subsidies. | | | |
| **Funds** | Using funds and funding programs for energy | Regional, national and European funding possibilities and their | To evaluate cost-benefit ratio | Communicating with stakeholders | | |

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| | measures | regulations | To evaluate if custom-fit | | | |
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| **Global Energy Market** | *To make use of the global energy market* | Energy Contracting<br><br>Energy purchase/carriers<br><br>Energy trade | To act according probable future developments<br><br>To negotiate on the energy market<br><br>To monitor the energy policies implementation programs<br><br>To monitor developments on the market<br><br>To evaluate the current market offer in respect to own enterprise/client | Networking with players of the energy market<br><br>Choosing the communication method adequate to the purpose and importance of the situation | | |
| **2. Management** | | | | | | |
| **Project management** | *Planning*<br><br>*Implementing*<br><br>*Controlling* | | To prioritize measures<br><br>To coordinate measures/ to delegate tasks<br><br>To identify and plan resources<br><br>To control and evaluate activities | Taking decisions concerning the procedures to follow<br><br>Reacting and solving possible arising problems<br><br>Having a “problem-solving-attitude”<br><br>Working effectively under stress<br><br>Working in teams<br><br>Identifying the specific roles within the teams and defining the | | |

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| | | | | responsibilities stemming from them<br><br>Correlates the tasks with the skills of the team members | | |
| **Financial management** | *Economics calculation*<br><br>*Risk evaluation*<br><br>*Financial instruments* | | To identify the most appropriated financial instrument for each situation<br><br>To prepare and manage a budget<br><br>To identify, evaluate and reduce potential risks | | | |
| **Energy management** | *Planning an EMS.*<br><br>*Implementing an EMS*<br><br>*Review an EMS*<br><br>*Certification*<br><br>*Measuring and Control*<br><br>*Documentation*<br><br>*Constant review* | ISO 50001 and other standard requirements<br><br>Energy data collection<br><br>Energy balancing<br><br>Process management | To discuss und define energy goals with management<br><br>To define and plan a strategy<br><br>To define an action plan<br><br>To collect data<br><br>To analyze data<br><br>To compose operating figures<br><br>To plan and conduct internal auditing<br><br>To plan and conduct certification process<br><br>To plan and conduct review processes<br><br>To plan and conduct measuring and control process<br><br>To plan and conduct documentation | | | |

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| | *Integration of all relevant parties from management to worker* | Structure/hierarchy of companies | To evaluate energy saving projects<br><br>To raise awareness<br><br>To communicate incentives<br><br>To communicate with all levels in a company | simplifying and structuring topics<br><br>Visualizing and generating an easily interpreted graphic image of sth.<br><br>Using power of persuasion<br><br>Being tenacious | | |
| | *Methodology/Tools/Software* | | To apply *Methodology/Tools/Software* | | | |
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| **2.1 Basic technical principles and cross-sectional-technologies** | | | | | | |
| **Evaluation energy systems** | *Fundamental energy concepts*<br><br>*Structure of energy systems* | Energy production | To assess the working processes that need energy<br><br>To assess the kind of energy that is | | | |

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| | | Use of energy | necessary for the working processes<br><br>To decide to use energy directly or by generator or compressed air or other<br><br>To decide how to use energy most efficiently or how to convert it<br><br>To handle measurement devices<br><br>To collect data from all relevant technologies<br><br>To apply all relevant safety requirements of all relevant technologies<br><br>To know what can be done by oneself and what needs to be given to an expert | | | |
| **Energy data acquisition** | *Cross-sectional technologies: Heating, Ventilation, Air conditioning, Refrigeration, Process Heat, Compressed Air, Lightning, energy efficiency in buildings* | | | | | |
| **Selection of improvement measures** | *Energy consumption reduction techniques* | | To choose the appropriated technologies to optimize energy consumption<br><br>To evaluate the parameters for energy efficiency (logistics, machine times, etc.)<br><br>To evaluate economics (to reduce production in order to safe energy?)<br><br>To keep updated in new technologies | being open-minded<br><br>being able to think out of the box on energy consumption reduction techniques | | |
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