Interreg Europe

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Improving Skills and Qualifications in the Building Workforce in Cyprus

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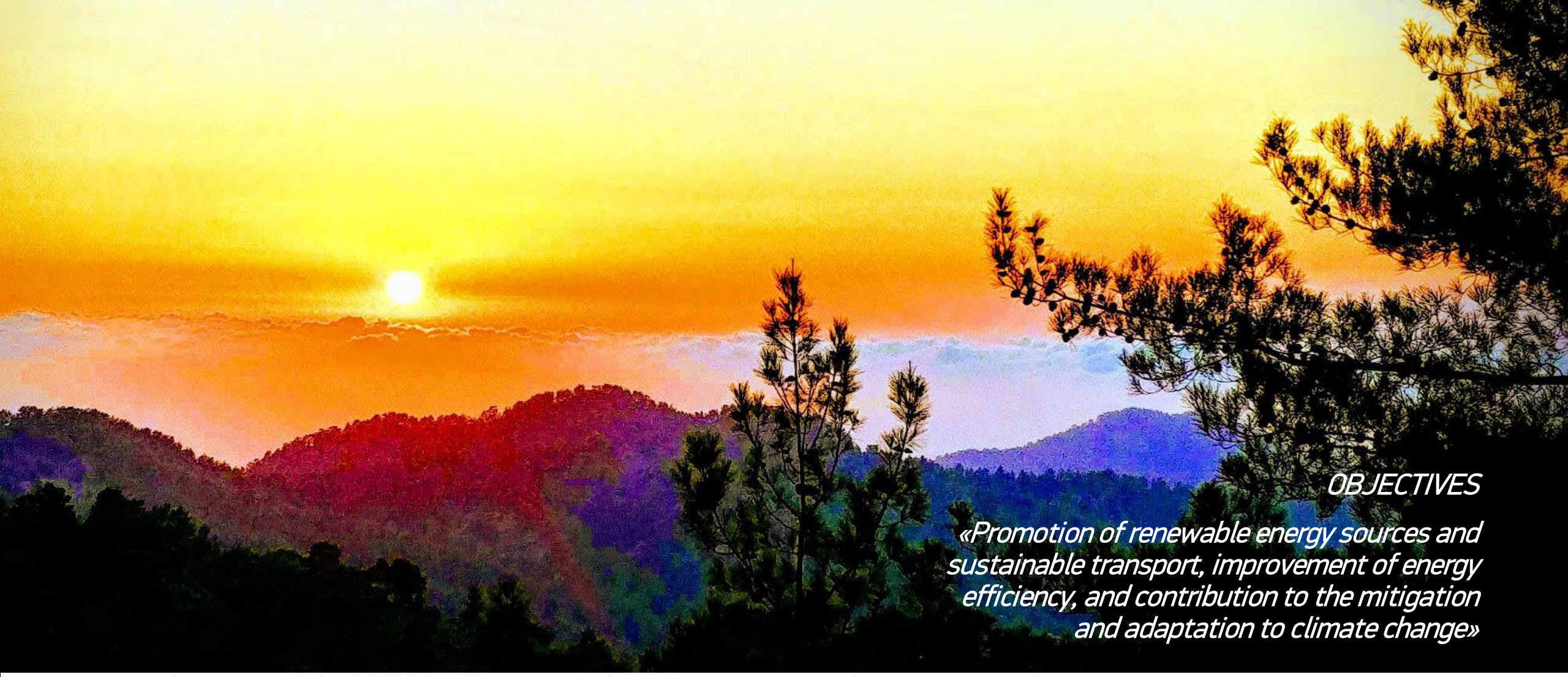
VP of FEDARENE for Smart and Sustainable Islands

19th of June 2025

Peer review hosted by the Moldovan Ministry of Energy

Capacity building: speeding up the energy transition in Moldovan buildings

Cyprus Energy Agency



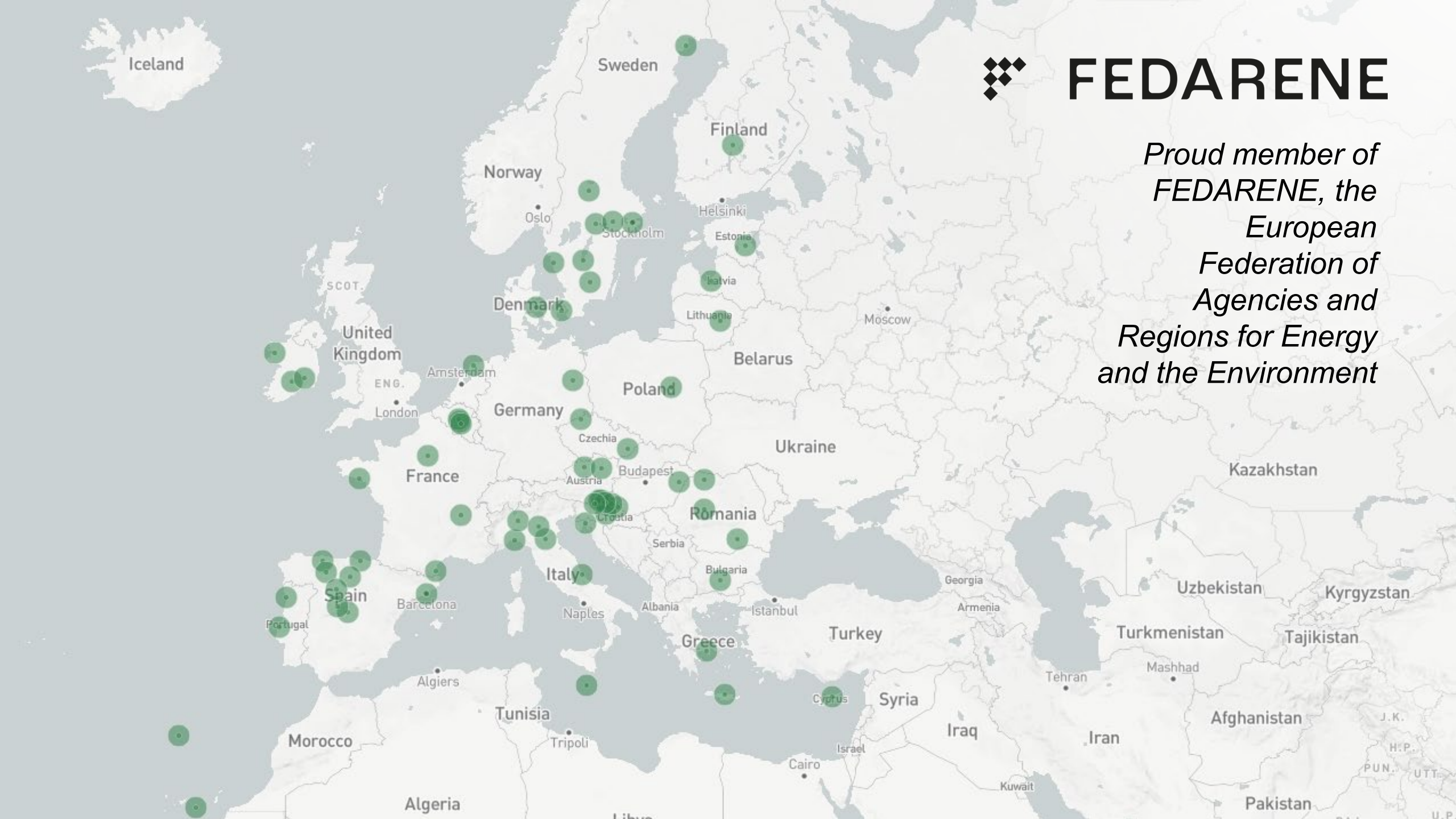
OBJECTIVES

«Promotion of renewable energy sources and sustainable transport, improvement of energy efficiency, and contribution to the mitigation and adaptation to climate change»

Cyprus Energy Agency

VISION

«To contribute actively to the conservation of energy resources, the protection of the environment and the improvement of the quality of life»



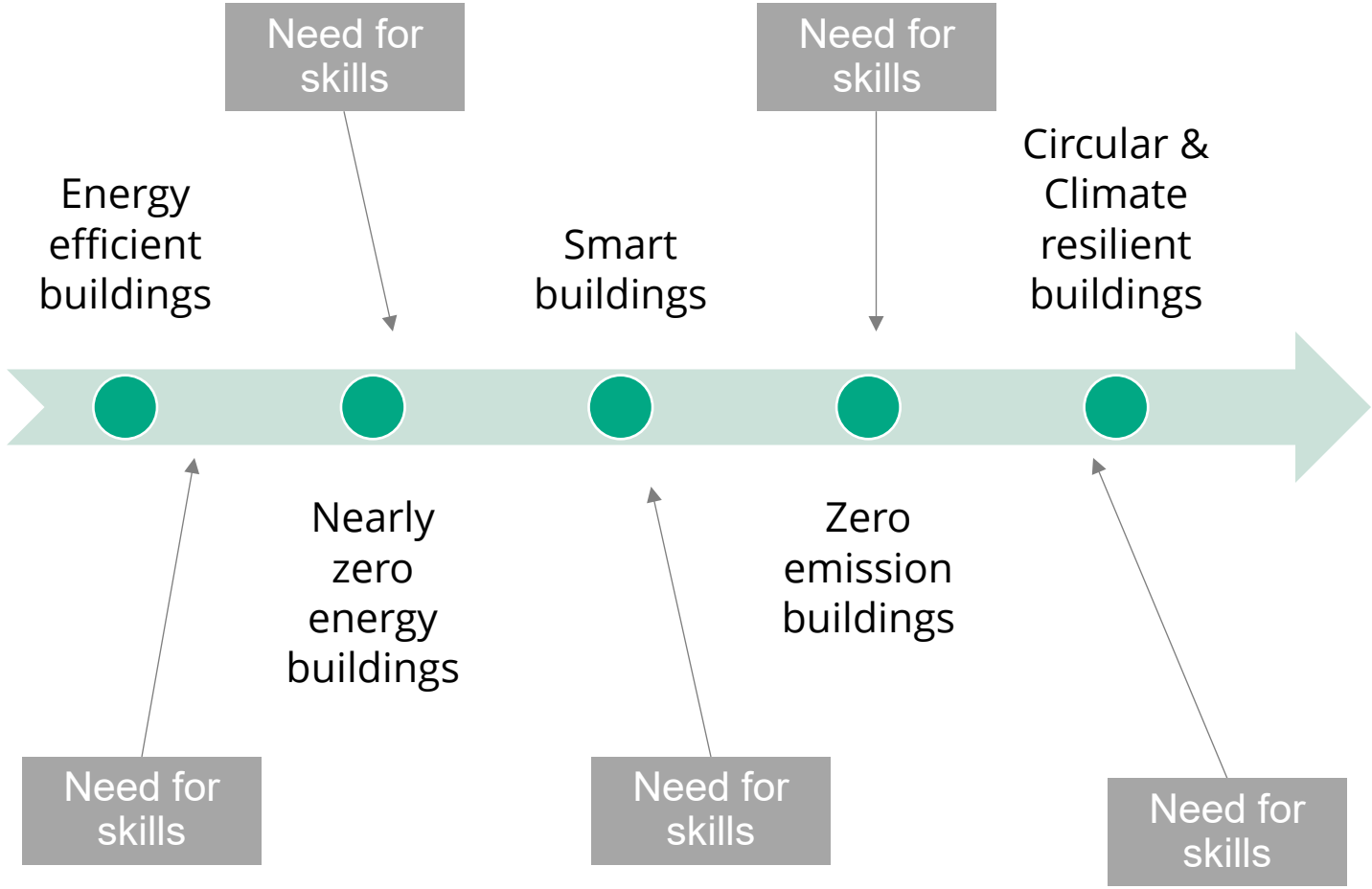
FEDARENE

Proud member of FEDARENE, the European Federation of Agencies and Regions for Energy and the Environment

Fedarene 2024
General Assembly in Cyprus

Roadmap for sustainable buildings

Roadmap for sustainable buildings



Energy Efficiency Skills (EES) demand

- How advanced is the EES demand?
- How the demand for EES is driven?
- Are there any good practices to highlight?
- What is the correlation of EES for better buildings?
- What are the effectiveness indicators?

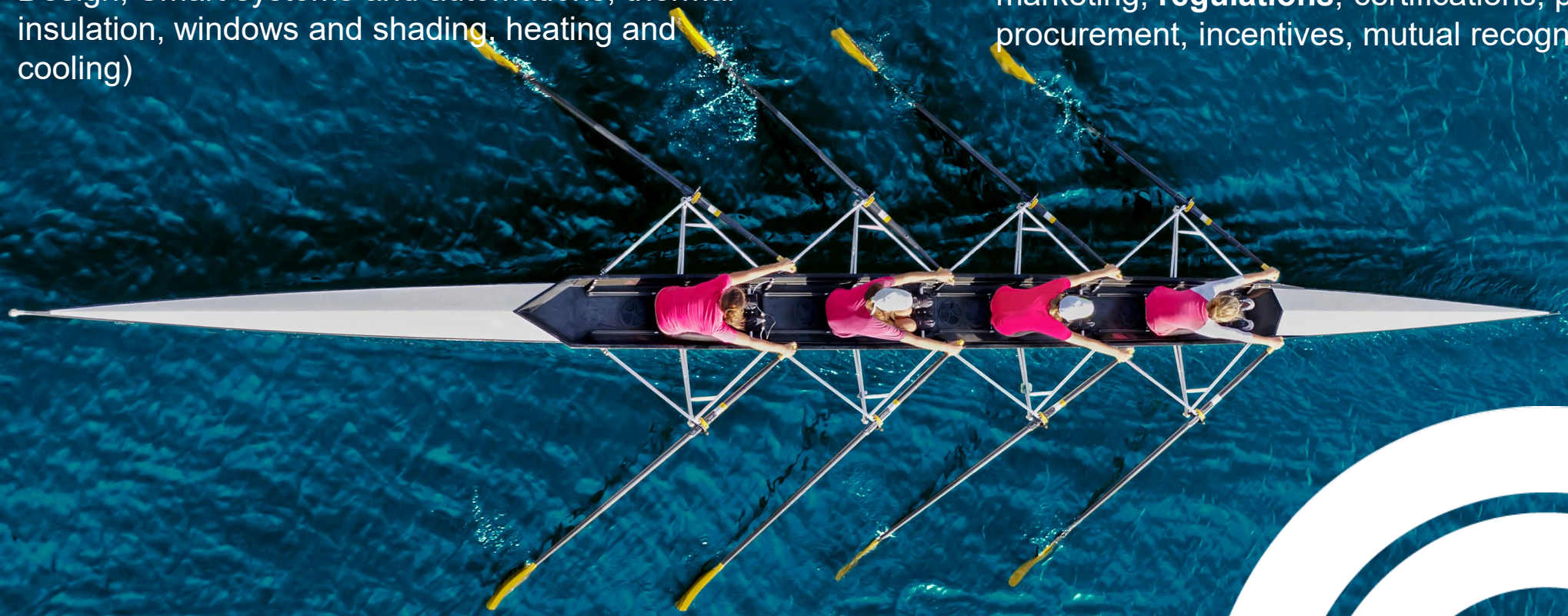
"Answers to the above questions will illustrate the market's need for dedicated trainings, work positions, legislations, narratives and incentives, resulting to tailor national/regional policy recommendations."

Roadmap for skilled professionals

- **Building professionals play** an important role in the energy transition and their contributions is essential for shaping the buildings' future. Furthermore, the engagement of the key actors, such as **policy makers, trainers and training centres** is crucial in deciding the future of EES **regulating their quality, supply and demand**.
- On another aspect, **building owners and tenants** have not always been aware of the skills that building professionals need to possess in order to complete certain tasks that include construction, Energy Efficiency and/or Renewable Energy Sources installations and design.
- In most cases, these skills become **obligatory** through **grant schemes** and in less cases through **Green Public Procurements**, with the general public not always being aware of the benefits of using skilled professionals.

1 **Trainings and qualification programs for white & blue collars**
(EE, NZEB, ZEB, Circular design, Bioclimatic Design, Smart systems and automations, thermal insulation, windows and shading, heating and cooling)

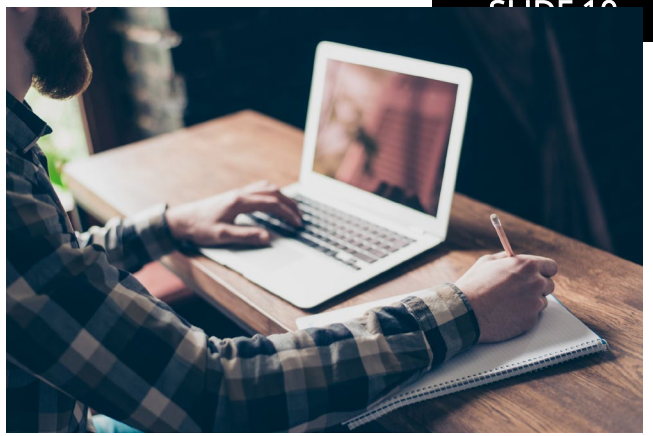
2 **Increase Energy Efficiency Skills demand and quality supply**
(Awareness, training competent authorities, marketing, **regulations**, certifications, public procurement, incentives, mutual recognition)



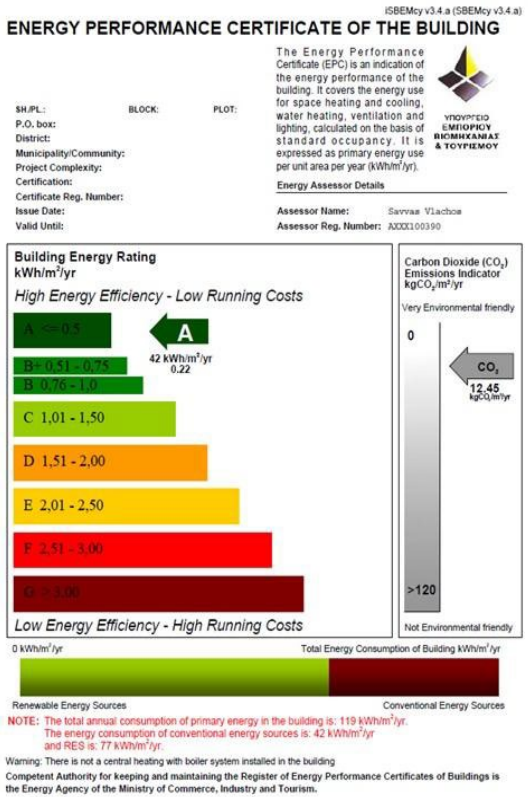
3 **Energy efficiency to boost employment opportunities and green jobs**
(Increase demand for green skills, coaching, mentoring, training, entrepreneurship, sustainable occupations for sustainable employment and sustainable development)

Energy auditors
Boiler inspectors
Energy Managers
Qualified experts
SRI evaluators
GWP evaluators

ISO 50001
ISO 14001
EMAS
BREEAM
LEED



Thermal insulation, windows, shading, Sollar panel, Biomass boilers, Heat pump, smart system installers



iSBEMcy v3.4.a (SBEMcy v3.4.a)

ENERGY PERFORMANCE CERTIFICATE OF THE BUILDING

The Energy Performance Certificate (EPC) is an indication of the energy performance of the building. It covers the energy use for space heating and cooling, water heating, ventilation and lighting, calculated on the basis of standard occupancy. It is expressed as primary energy use per unit area per year (kWh/m²/yr).

ΥΠΟΥΡΓΕΙΟ ΕΜΠΟΡΙΟΥ ΒΙΟΜΗΧΑΝΙΑΣ & ΤΟΥΡΙΣΜΟΥ

SH./PL.: BLOCK: PLOT:
P.O. box:
District:
Municipality/Community:
Project Complexity:
Certification:
Certificate Reg. Number:
Issue Date:
Valid Until:

Energy Assessor Details
Assessor Name: Savvas Vlachos
Assessor Reg. Number: AXXX100390

Building Energy Rating kWh/m²/yr
High Energy Efficiency - Low Running Costs
A <= 0.5
B+ 0.51 - 0.75
B 0.76 - 1.0
C 1,01 - 1,50
D 1,51 - 2,00
E 2,01 - 2,50
F 2,51 - 3,00
G > 3,00
Low Energy Efficiency - High Running Costs
A 42 kWh/m²/yr 0.22

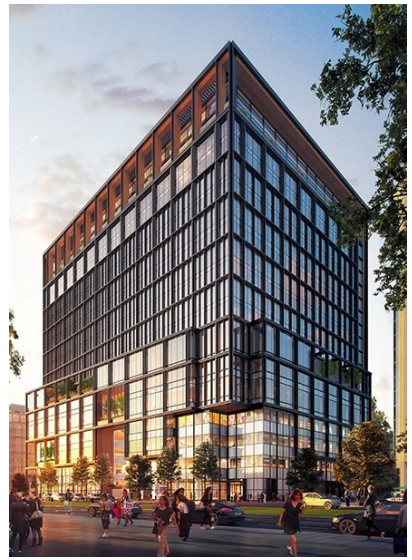
Carbon Dioxide (CO_2) Emissions Indicator kgCO_2/m²/yr
Very Environmental friendly
0
CO_2 12.45 kgCO_2/m²/yr
>120
Not Environmental friendly

0 kWh/m²/yr — Total Energy Consumption of Building kWh/m²/yr
Renewable Energy Sources — Conventional Energy Sources

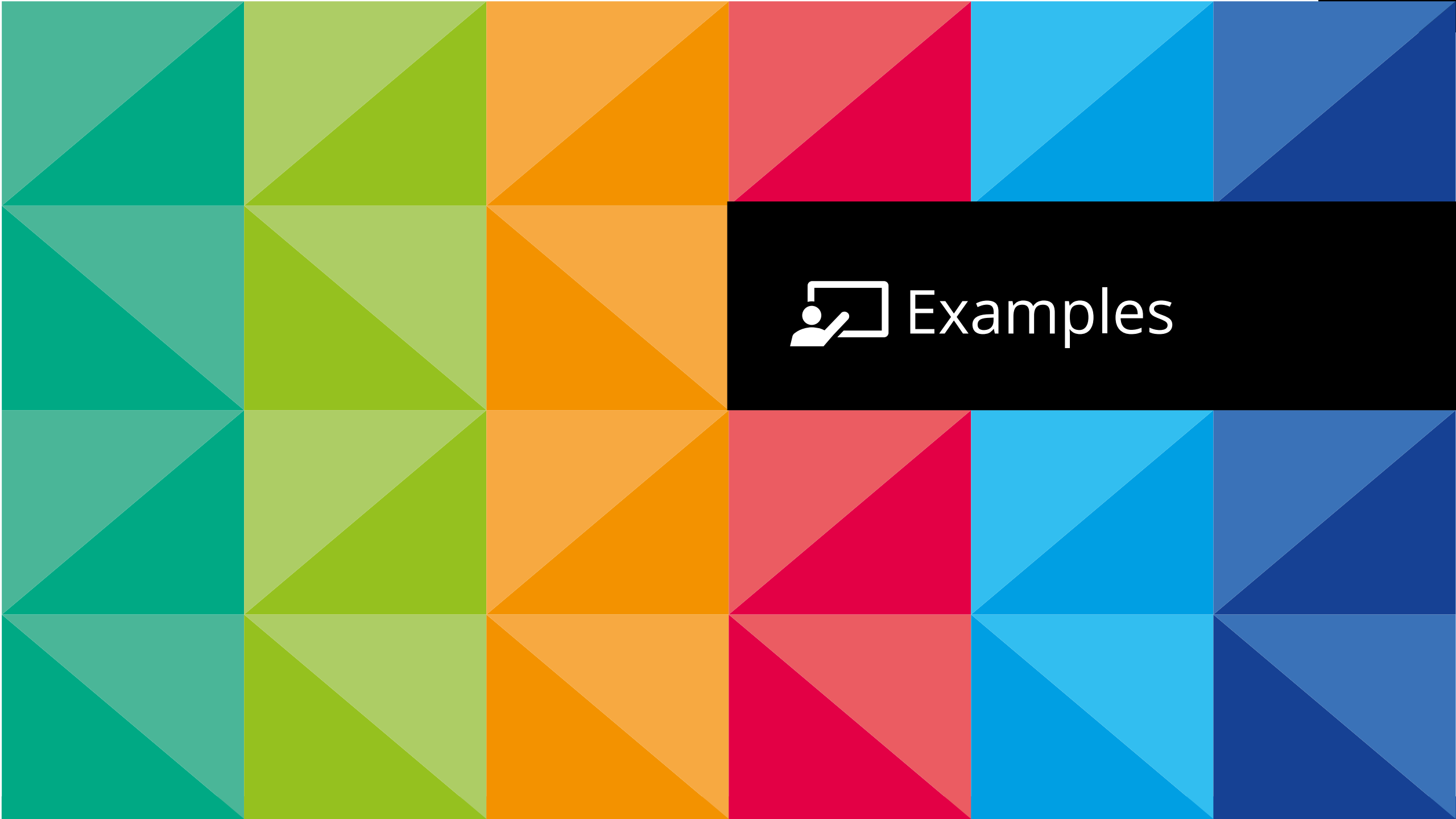
NOTE: The total annual consumption of primary energy in the building is: 119 kWh/m²/yr.
The energy consumption of conventional energy sources is: 42 kWh/m²/yr
and RES is: 77 kWh/m²/yr.

Warning: There is not a central heating with boiler system installed in the building

Competent Authority for keeping and maintaining the Register of Energy Performance Certificates of Buildings is the Energy Agency of the Ministry of Commerce, Industry and Tourism.

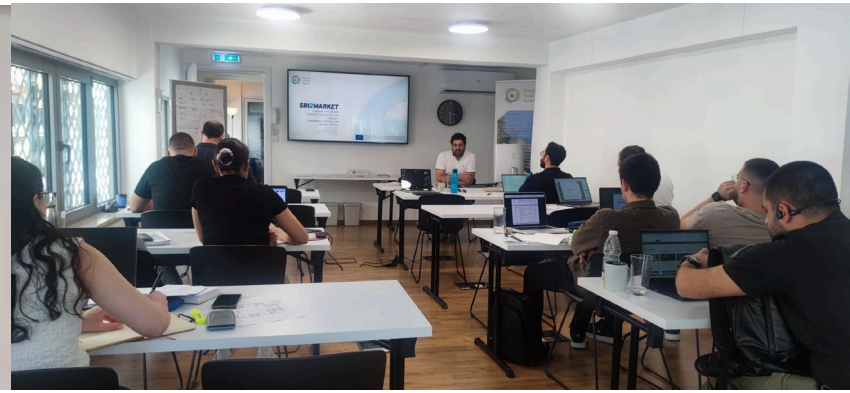


Awareness promotion & branding, labels, certificates


Examples

The Cyprus Energy Agency's "Energy Academy"



EDUCATIONAL ACTIVITIES

Organizes across all Cyprus and for all age groups, educational activities and workshops on Energy and the Environment.

SEMINARS

Has been certified by the Human Resources Development Authority (HRDA) as a Training Centre and Structure and organizes training seminars for specific professional qualifications.

EXAMINATIONS

The Cyprus Energy Agency is a certified organization for examining qualified candidates on issuing Energy Performance Certificates for Buildings, Boiler Inspectors, and European Energy Managers (EUREM).

Training, specialization, certification

Acquiring knowledge and skills for the energy performance improvement of buildings in Cyprus

The WE-Qualify project «Improve Skills and Qualifications in the Building Workforce in Cyprus» was an EU co-funded project through the «Intelligent Energy Europe» programme under the European initiative «Build Up Skills».

The initiative aims in promoting the **continuing vocational education and training of workers in technical occupations in the Construction sector**, as well as other relevant sectors related with the installation and maintenance of energy saving and renewable energy systems.

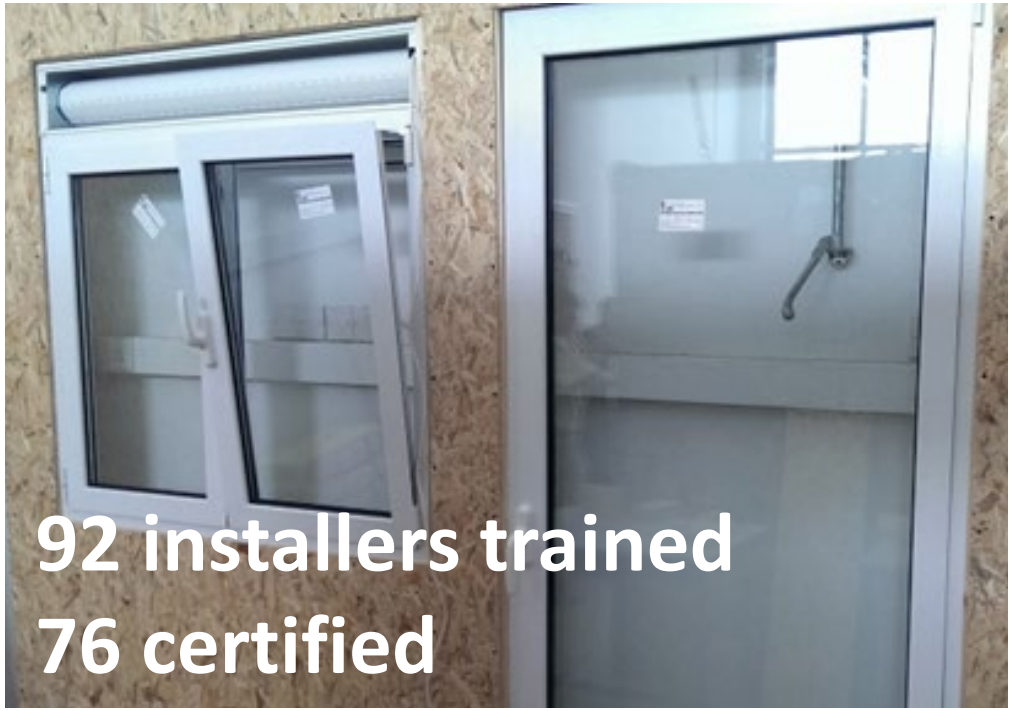
We Qualify | Training, specialization, certification

Educational training programmes for the development of the following skills were organized:

Skill 1: Installation of thermal insulation

Skill 2: Installation of thermopanes and exterior sunshades

Skill 3: Installation and maintenance of biomass boilers and stoves



92 installers trained
76 certified

Iceland Liechtenstein Norway grants

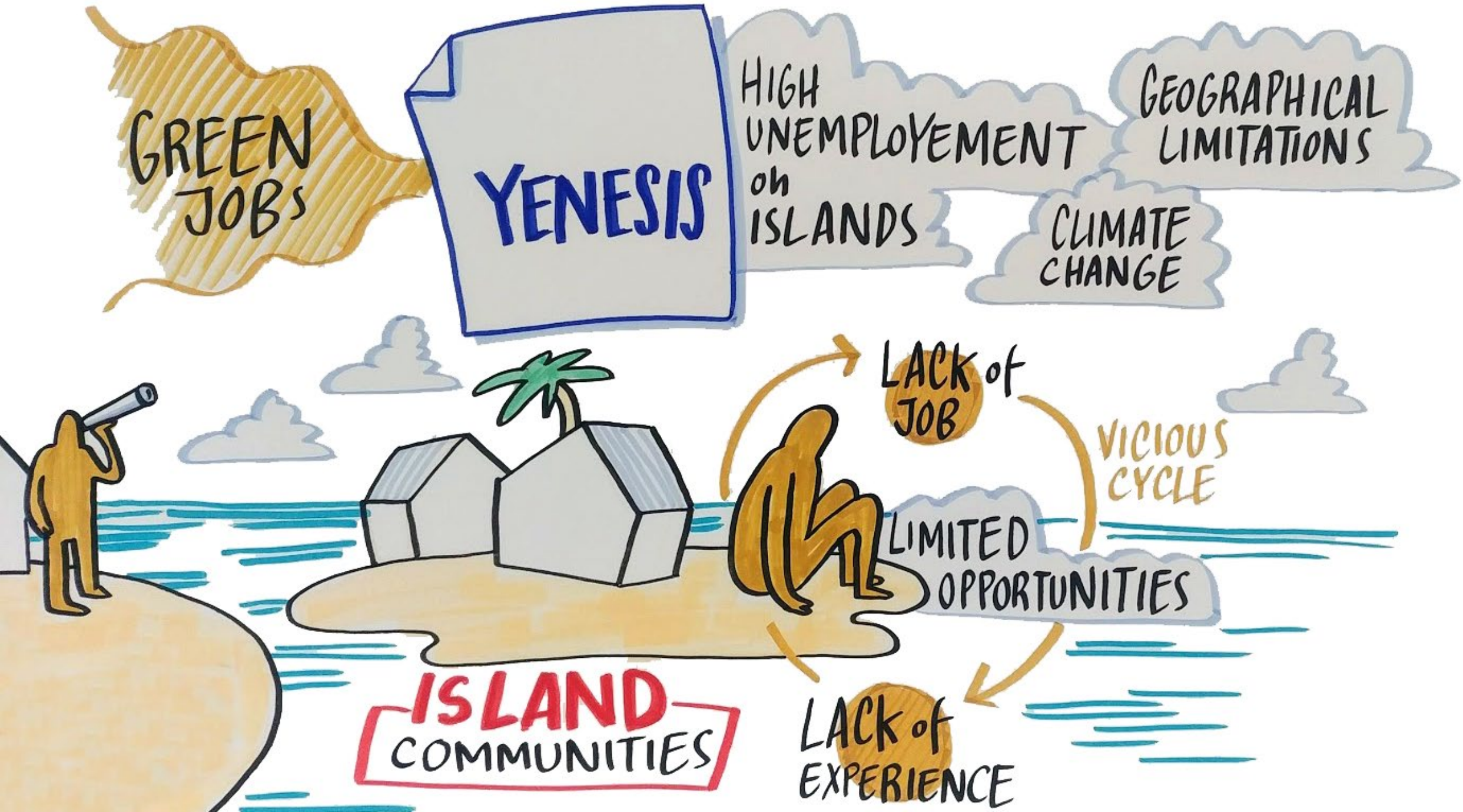
Norway grants

The Yenesis project

Youth Employment Network for Energy Sustainability in Islands

Energy Efficiency to provide “green” employment opportunities

YENESIS benefits from a € 2.3 M grant from Iceland, Liechtenstein and Norway through the EEA and Norway Grants Fund for Youth Employment.
The project aims at creating employment opportunities for NEETs in islands


GREEN JOBS
YENESIS
HIGH UNEMPLOYEMENT on ISLANDS
GEOGRAPHICAL LIMITATIONS
CLIMATE CHANGE
LACK of JOB
VICIOUS CYCLE
LIMITED OPPORTUNITIES
LACK of EXPERIENCE
ISLAND COMMUNITIES

What is a green job?

‘Green jobs’ can be defined as employment in various sectors that **contributes to preserving or restoring environmental quality**. This includes jobs that help to:

- protect ecosystems and biodiversity
- reduce the consumption of energy, materials, and water through **high efficiency strategies**
- **decarbonise the economy**
- avoid generation of waste and pollution

Green jobs are also defined by their **social approach**. They must be decent jobs for women and men, that promote social inclusion and gender equality, contributing to the eradication of poverty.

What skills do I need to get a green job?

Analytical
- Critical thinking
- Problem solving
- Learning ability
- Risk management
- Marketing competencies

Management
- Managerial skills
- Initiative
- Leadership capacity
- Multitasking
- Transdisciplinarity
- Sustainable planning
- Entrepreneurial spirit
- Sustainable business models
- Time management

Creative
- Innovation
- Creative thinking
- **Adaptation capacity**
- Flexibility

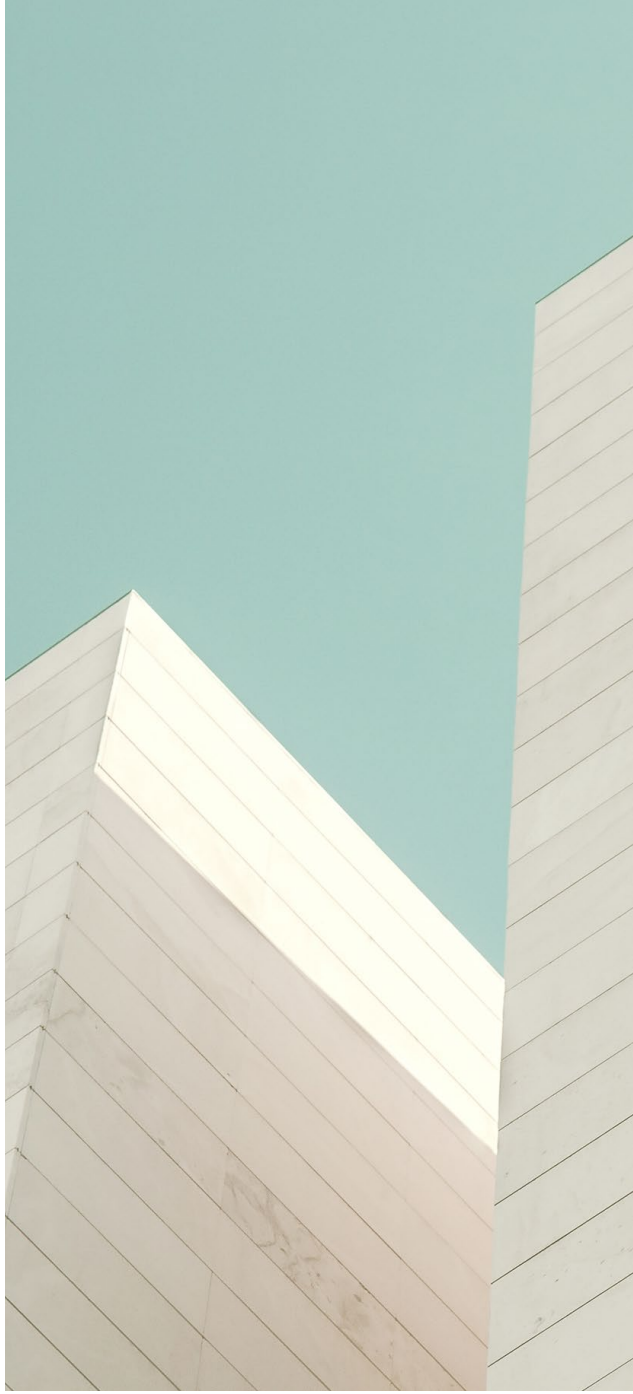
Relationship
- Teamwork
- Cooperation skills
- Accepting diversity
- Networking
- Integration skills
- Intercultural knowledge
- Environmental awareness
- Responsibility

Communication
- Social skills
- Social intelligence
- Foreign languages

Technical
- Digital literacy
- Coding and programming
- Big data analysis
- Information & communication technology (ICT)
- New media literacy
- Financial literacy

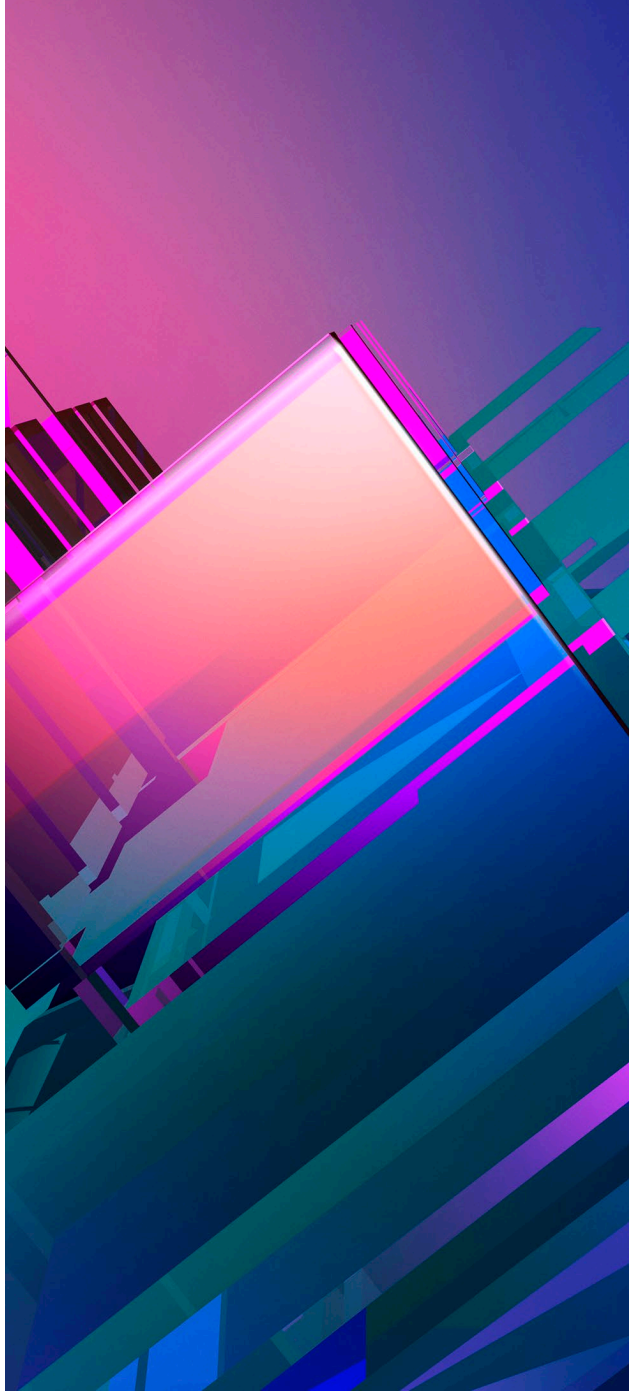
What green jobs can I follow in Energy Efficiency?

- Agriculture consultants
- Architects/ Landscape Architects
- Builders/ Technicians/ Electricians
- Chemists
- Civil engineers and Construction managers
- Database and network professionals
- District heating system engineers
- Efficient cooling technicians
- Electrical/Mechanical/ Environmental/ Energy Engineers
- Electronics/ Telecommunications engineering technicians
- Electronics mechanics and servicers
- Energy auditors
- Energy consultants
- Energy control analysts
- Energy efficiency managers and technicians
- Energy efficiency trainers
- Engineers of HVAC installations
- Installers of insulation, facade systems and ventilation facade
- Interior and exterior designers
- Managers of energy service companies
- Mechanical/ Chemical engineering technicians
- Net zero energy building designers
- Researchers in energy efficiency
- Procurements' officers
- Specialists in maintenance of facilities
- Technicians of building thermal envelope solutions
- Technicians of management of operation and maintenance in facilities



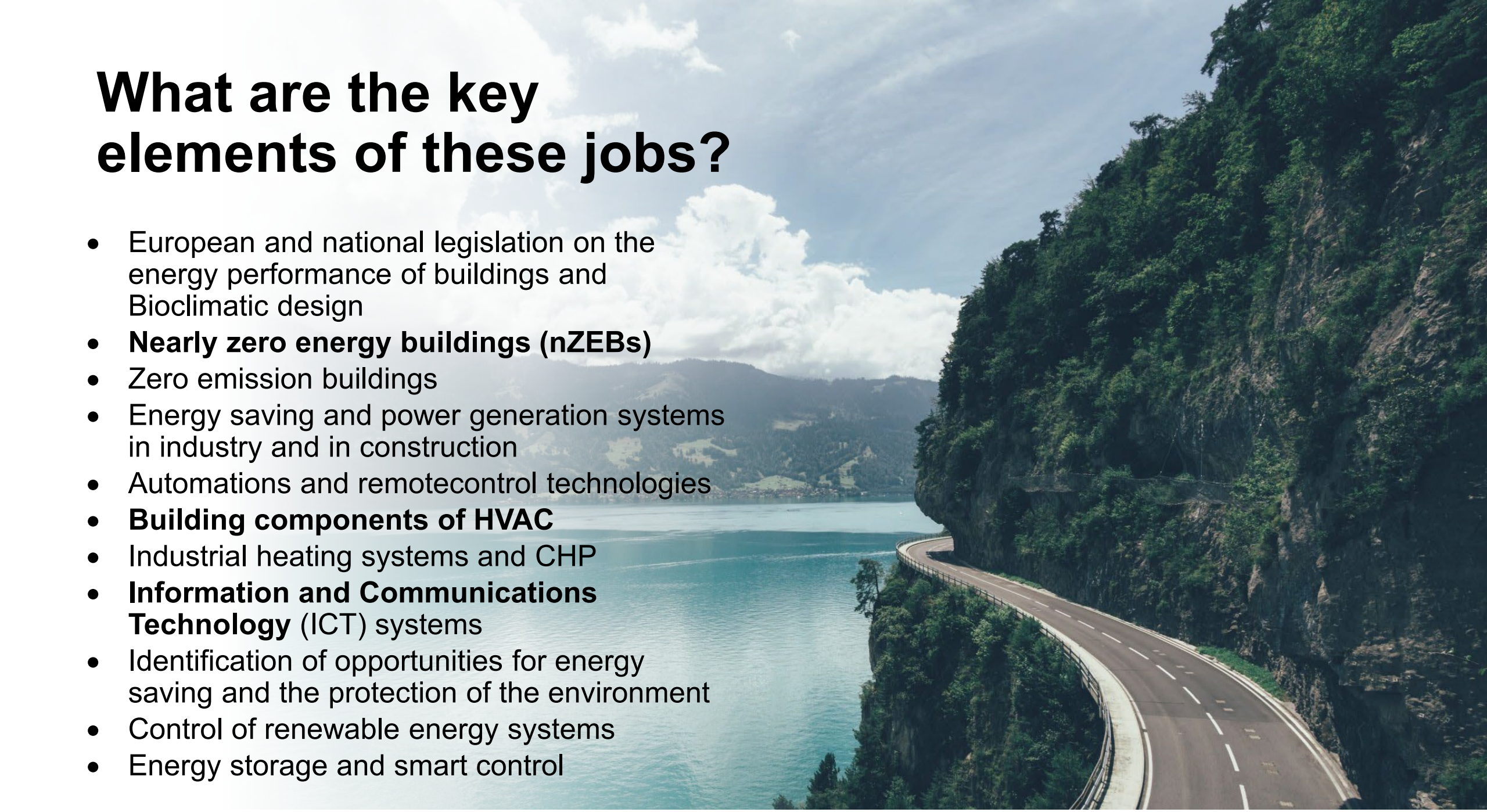
What green jobs can I follow in Renewable Energy Sources?

- Designers of solar PV, solar thermal systems and wind installations
- Electrical/Mechanical/ Environmental/ Energy Engineers
- Engineers of industrial process solarisation
- Geologists and geophysicists
- Renewable energy project engineers
- Sales Engineers
- Biomass boiler systems technicians
- Biomass collection and transformation companies – Refuse workers
- Biomass (wood) fuel supply operators
- Biomass plant technicians
- Electrical engineering technicians
- Installers of solar photovoltaics, solar thermal systems and wind installations
- IT experts
- Power production plant operators
- Project managers
- Solar facility managers
- Technicians of solar PV, solar thermal systems and wind farms



What are the key elements of these jobs?

- European and national legislation on the energy performance of buildings and Bioclimatic design
- **Nearly zero energy buildings (nZEBs)**
- Zero emission buildings
- Energy saving and power generation systems in industry and in construction
- Automations and remotecontrol technologies
- **Building components of HVAC**
- Industrial heating systems and CHP
- **Information and Communications Technology** (ICT) systems
- Identification of opportunities for energy saving and the protection of the environment
- Control of renewable energy systems
- Energy storage and smart control



How does it contribute to the development of the green market?

- Improving energy efficiency and renewable energy is **less expensive** than investing in new generation and transmission
- Energy efficiency and renewbales lowers baseload and peak demand and reduces the need for additional generation and transmission assets
- Energy efficiency **creates the right market conditions** for increasing the rate and level at which existing buildings are renovated
- **Increase in renovation rate will create additional job positions in the sector**
- Investing in energy efficiency and renewable compares favourably with investing in other energy sectors in terms of **local jobs creation**
- The design and development of novel energy-efficient and renewable energy products and services leads to **the boosting of SMEs and the local economy**
- **Renewable energy generation offers less dependence on imported fuel, thus countries are less vulnerable to the global fuel prices fluctuations**
- **Renewable energy sources enhance the diversification of the energy supply, which directly means increases of energy security and reliability**


Examples


Highly energy efficient windows
“A+++ “rated heating &Cooling
Smart meters
Photovoltaics
Led smart lights
A rated equipment
Indoor air quality monitoring
Outdoor weather station
Air purifiers
Green roof
Circular practices
Nature based solutions
Our 1960’s
“A” rated, energy renovated, rented premises

Green Roof

Breakout area
Nature Based Solutions
Climate adaptation
Pollinator
Social interaction
Aromatic herbs

The picture was taken on 6/6/2024 at noon, on the green roof of the Cyprus Energy Agency with an air temperature of 41°C.

40°C temperature difference thanks to Nature Based Solutions

PEDIA

Energy Renovation to 25 School Buildings

NZEB standard
Thermal insulation
Highly efficient windows
LED lights
Shading
Nature based solutions

Agios Dometios High School

A

Με τη συγχρηματοδότηση της Ευρωπαϊκής Ένωσης

Κυπριακή Δημοκρατία

Ενεργειακό Γραφείο Κύπρου

PEDIA

Energy Renovation to 25 School Buildings

NZEB standard
Thermal insulation
Highly efficient windows
LED lights
Shading
Nature based solutions

Second Primary School of Idalion

A

Με τη συγχρηματοδότηση της Ευρωπαϊκής Ένωσης

Κυπριακή Δημοκρατία

Ενεργειακό Γραφείο Κύπρου

A

Energy Renovation of Lakatamia Police Station

NZEB standard
Thermal insulation
Highly efficient windows
LED lights

Interreg Ελλάδα-Κύπρος
POLI-SYNERGIES
Supported by:
Cyprus Energy Agency

CLOSING REMARKS

WORLD GREEN BUILDING COUNCIL

SUSTAINABLE DEVELOPMENT GOALS

Green buildings can improve people's health & wellbeing

Green buildings can use renewable energy, becoming cheaper to run

Building green infrastructure creates jobs & boosts the economy

Green building design can spur innovation & contribute to climate resilient infrastructure

Green buildings are the fabric of sustainable communities & cities

Green buildings use 'circular' principles, where resources aren't wasted

Green buildings produce fewer emissions, helping to combat climate change

Green buildings can improve biodiversity, save water resources & help to protect forests

Through building green we create strong, global partnerships

3 GOOD HEALTH AND WELL-BEING

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

15 LIFE ON LAND

17 PARTNERSHIPS FOR THE GOALS

Thank you
Ευχαριστώ
Mulțumesc

Cyprus
Energy
Agency

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