

IDENTIFICATION OF GREEN SKILL NEEDS IN THE CYPRUS ECONOMY 2017 - 2027

The transition to a model of sustainable economic development, which uses resources efficiently and is based on knowledge and innovation, constitutes one of the main strategic goals of the European Union, as stated in the «EU 2020» strategy. An **essential prerequisite** for the achievement of this objective is the **availability of properly trained human resources**, having the necessary knowledge, skills and competences.

The **Human Resource Development Authority of Cyprus (HRDA)**, realising the magnitude and importance of the **change that the transition to a green economy will bring to the labour market**, has **conducted this study**¹.

A. Aim of the study

The main aim of the study is to examine and analyse the **green economy and green occupations**, to map out the green economy of Cyprus and to **identify green skill needs** in the Cyprus economy for the **period 2017-2027**.

B. Scope of the study

The study provides forecasts for **employment and demand for labour** in the **economic sectors and occupations** with participation in the green economy for the period **2017-2027**. Additionally, it identifies the **green skill needs** for specific occupations of the green economy of Cyprus.

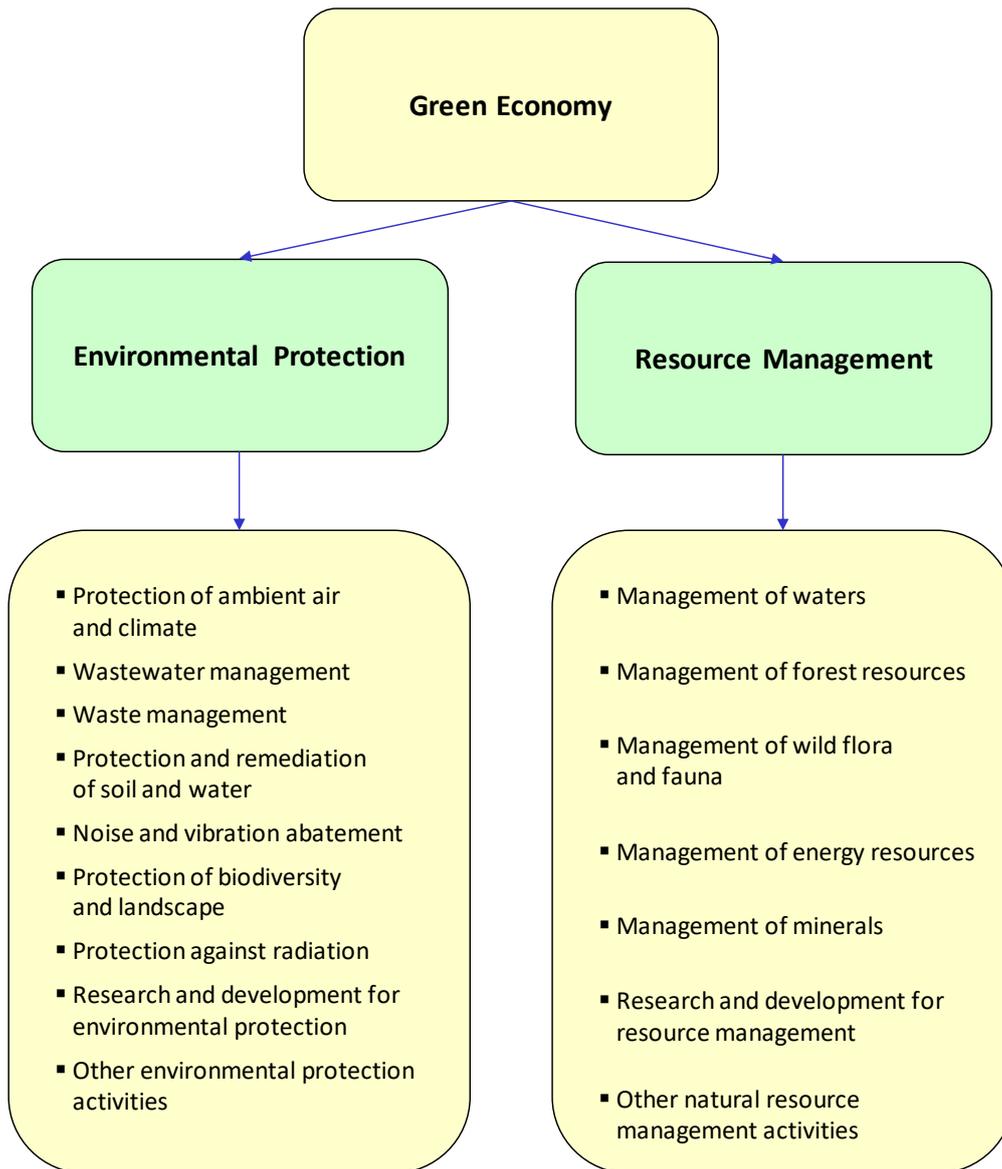
C. Green economy in the European Union

According to the **Eurostat** (European Statistical Service) **definition**:

The **green economy** consists of **all activities, which produce goods and services** that measure, control, prevent, treat, minimise and restore environmental damages to air, water and soil, as well as problems related to waste, noise and biodiversity. Thus, the **green economy includes technologies, goods and services, which reduce environmental degradation and minimise pollution and the use of natural resources**.

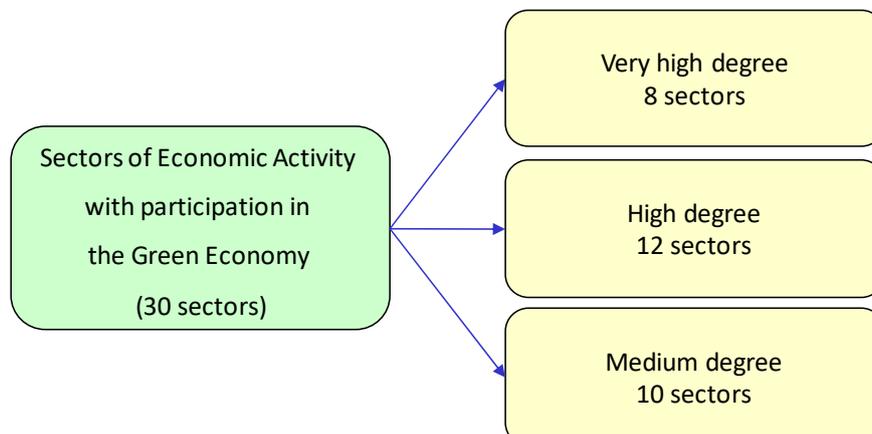
The activities of the green economy fall into two groups: the environmental protection activities and the resource management activities. The environmental protection activities include technologies, goods and services that are specifically related to protecting the environment from the harmful effects of socio-economic activities, by preventing/reducing pollution and degradation phenomena or restoring and repairing environmental damage where it occurs. The resource management activities include technologies, goods and services that reduce the need for using non-renewable resources.

¹ This study updates the information presented in the HRDA study entitled "Identification of Green Skill Needs in the Cyprus Economy 2010-2013", which was completed in 2010.



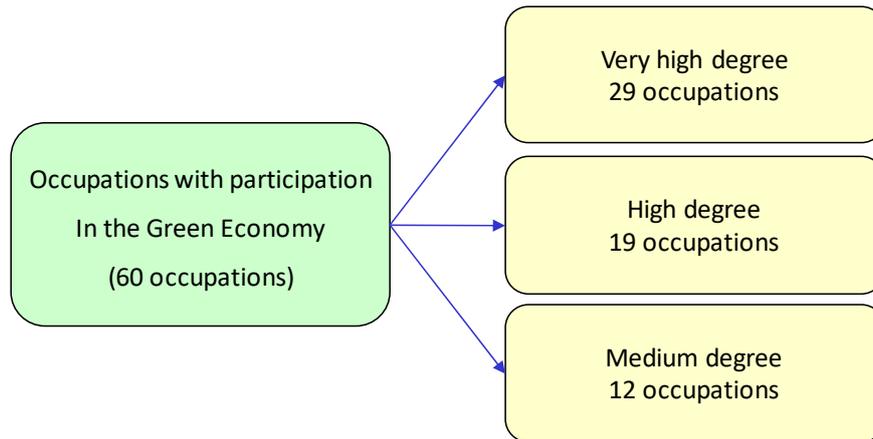
D. Green economy in Cyprus and forecasts for employment demand

The **green economy of Cyprus** consists of **30 economic sectors** and **60 occupations from the whole spectrum of the Cyprus labour market**, which are grouped into three main categories according to their degree of participation: Very high, high and medium degree.



Sectors of economic activity with a very high degree of participation in the green economy

- Electricity and gas supply
- Water collection, treatment and supply
- Sewerage
- Waste collection, treatment and disposal activities
- Remediation activities and other waste management services
- Civil engineering
- Specialised construction activities
- Architectural and engineering activities



Occupations with a very high degree of participation in the green economy

Professionals

- | | |
|--------------------------------|---|
| ➤ Meteorologists | ➤ Mining engineers and metallurgists |
| ➤ Chemists | ➤ Electrical engineers |
| ➤ Geologists and geophysicists | ➤ Electronics engineers |
| ➤ Production engineers | ➤ Architects |
| ➤ Civil engineers | ➤ Designers |
| ➤ Environmental engineers | ➤ Town and traffic planners |
| ➤ Mechanical engineers | ➤ Environmental and occupational health and hygiene professionals |
| ➤ Chemical engineers | |

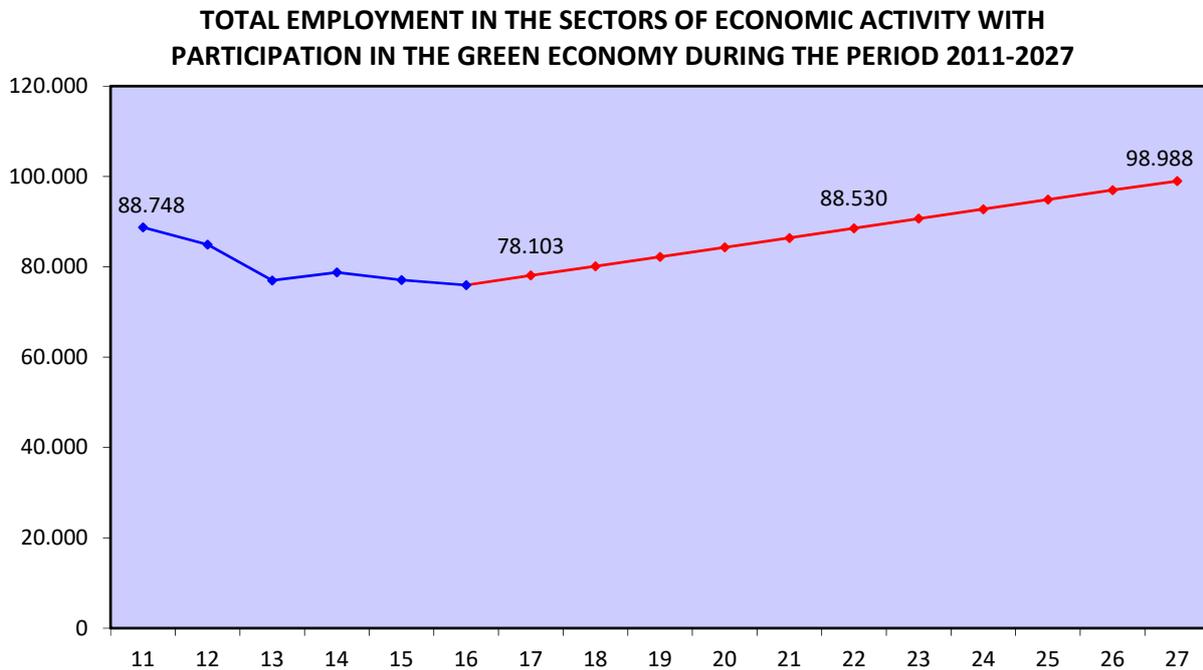
Technicians

- | | |
|---|---|
| ➤ Chemical and physical science technicians | ➤ Chemical engineering technicians |
| ➤ Civil engineering technicians | ➤ Power production plant operators |
| ➤ Electrical engineering technicians | ➤ Incinerator and water treatment plant operators |
| ➤ Electronics engineering technicians | ➤ Chemical processing plant controllers |
| ➤ Mechanical engineering technicians | |

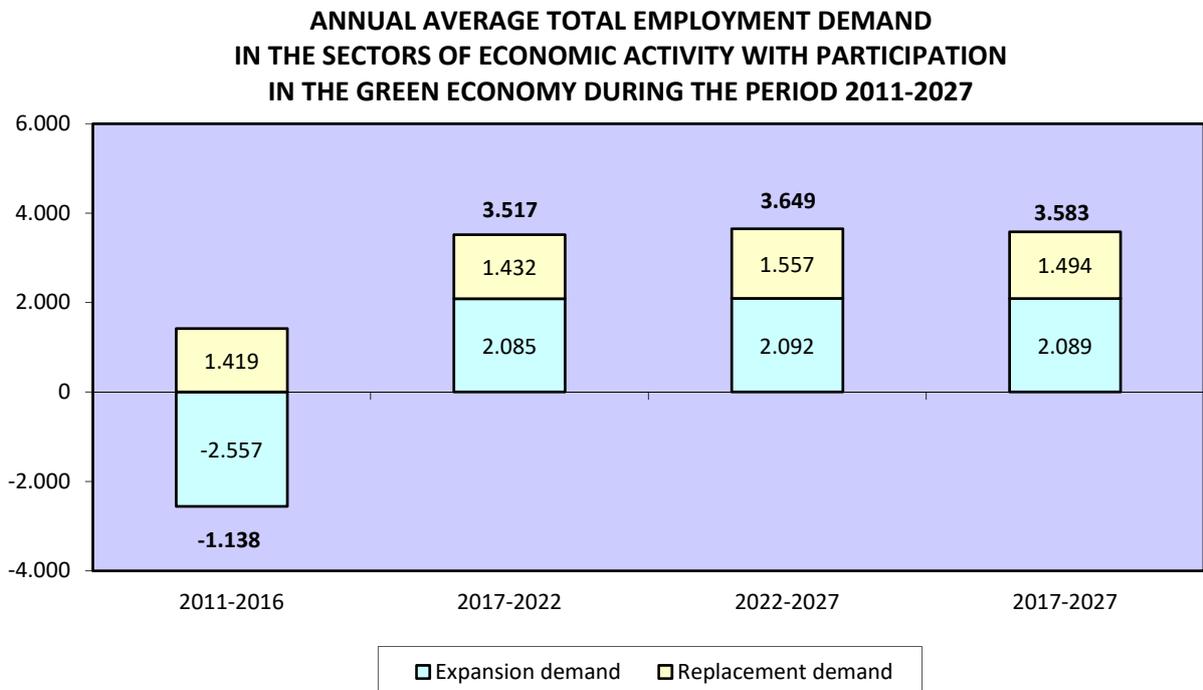
Craft workers

- | | |
|-----------------------------|--|
| ➤ Insulation workers | ➤ Air conditioning and refrigeration mechanics |
| ➤ Glaziers | ➤ Building electricians |
| ➤ Plumbers and pipe fitters | |

Total employment in the sectors of economic activity with participation in the green economy of Cyprus during the period 2017-2027 is forecasted to exhibit an **upward trend**. As a result in 2027, 98.988 persons or **around one out of five employed persons** will work in sectors of economic activity with participation in the green economy.



Total annual employment demand is estimated at **3,583 persons** or **4,1%** which corresponds to **22,7%** of total employment demand for the Cyprus economy.



The **majority of employed persons** in the green economic sectors will work in the **Professional, scientific and technical activities sector** with their number exhibiting a **significant upward trend**. **Over one out of**

three employed persons in the green economy will be employed in this sector, which also exhibits the **largest annual total employment demand** with 1.476 persons or 5,2% during the period 2017-2027.

Construction is the second largest green economic sector, also exhibiting a **significant upward trend**. The sector is gradually recovering, the forecast being that **one out of five employed persons** of the green economy will be working in this sector with the **annual total employment demand** reaching 649 persons or 3,5%.

Regarding the occupations with participation in the green economy, the **majority of the employed** will work in the occupational category of **Technicians**. Specifically, their number will increase **from 20.636 persons in 2017 to 24.643 persons in 2027** (33,7% of total employment) registering an **increase of 19,4%**.

Equally **important** is the employment in the occupational category of **Professionals** where their number will increase from **16.957 persons in 2017 to 21.661 persons in 2027** (29,6% of total employment) exhibiting the **largest percentage increase (27,7%) of the period 2017-2027**.

E. Identification of green skill needs in Cyprus

The **acquisition of the necessary knowledge and skills, by the persons** employed in green occupations, is a **necessary prerequisite** for the achievement of the goal **for transition to a green economy**. Also important is for the persons to **continuously upgrade and enhance the basic and specialised skills and knowledge** needed in their occupation.

Towards this direction, the study identifies the **main thematic categories of specialised knowledge and skills** of the occupations with participation in the green economy. These can be used in the design of specialised training programmes.

Several of the identified green skills are **new skills** that relate to **new green technologies, environmental legislation and environmental issues** that require a **high degree of specialisation**. However, the **majority of the identified green skills** are **existing skills which have to be adapted to the needs of the green economy** and are considered as indispensable for the development of a greener economy, such as project management, strategic planning, entrepreneurial skills, processes optimisation, personnel management and quality management.

F. Suggestions

The study leads to specific suggestions **aiming for the timely and planned response to the future situation in the labour market resulting from the transition to a green economy**. The suggestions concern the following strategies:

- ❖ Employment and human resource development.
- ❖ Education.
- ❖ Training.

Essential components for the implementation of the suggestions put forward and for their effectiveness are the **synergy and complementarity of the policies**: environmental, economic, social, education and employment. The **coordination between the stakeholders** responsible for the formulation and implementation of these strategies is imperative so that these interventions have the **greatest effectiveness with the minimum requirements in financial and human resources**.