



## REPORT ANALYSIS

### **PESTLE Analysis for promoting Blue Energy in Cyprus**

#### **1<sup>st</sup> Blue Energy Laboratory**



**Country: CYPRUS**

**JUNE 2018**

## Summary

This report provides the results of the PESTLE Analysis for promoting Blue Energy in Cyprus, that was carried out within the framework of the 1<sup>st</sup> Blue Energy Laboratory (BEL), that took place on the 15<sup>th</sup> May 2018 in Nicosia, Cyprus.

A well-designed questionnaire was developed by the Cyprus Employers and Industrialists Federation (OEB), in cooperation with the Oceanography Center of the University of Cyprus with the purpose of identifying the political, economic, social, technological, legal and environmental factors that affect the promotion and penetration of Blue Energy in Cyprus.

The questionnaire was distributed to the 24 participants of the 1st Blue Energy Laboratory (BEL) and it was answered by a total number of 13 participants, who come from associations, NGOs, universities, public authorities and business representatives.

The participants believe that the **most important political factors** for promoting Blue Energy sector in Cyprus are the ease of taking decisions to develop infrastructure, the understanding from government and government policy for promoting Blue Energy and the level of bureaucracy and corruption.

As the most important **economic factors** for blue growth were evaluated the availability of funding instruments and credit facilities, the interest rates, the hidden expenditures for the investors and the unambiguous pricing policy of fees.

The participants also believe that the acceptance of Blue Energy technologies from the local authorities and the general public are the most important **social factors** for promoting Blue Energy sector in Cyprus.

The technology maturity over other competing technologies, the access in technology and the ease of infrastructure development were rated as the most important **technological factors** for promoting Blue Energy sector in Cyprus.

The participants believe that the most important **legal factors** for promoting Blue Energy sector in Cyprus are the time duration and complexity of the licensing system, the laws and regulations for business operation and the development and adoption of plan for Maritime Spatial Planning.

Lastly, as the most important **environmental factors** for blue growth were evaluated the availability of measurements, the environmental regulations and the definition of sensitive maritime locations.

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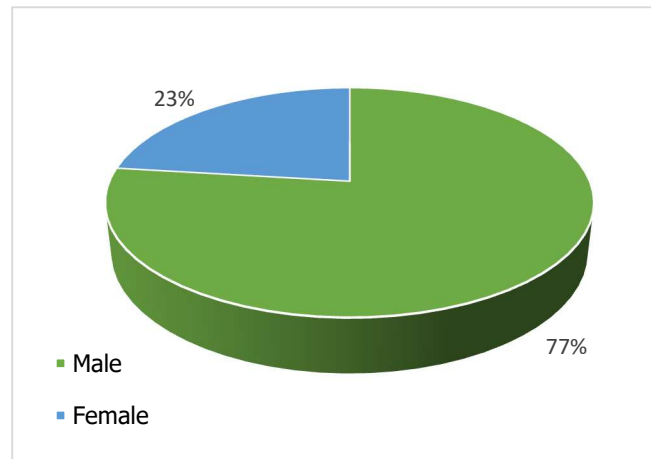
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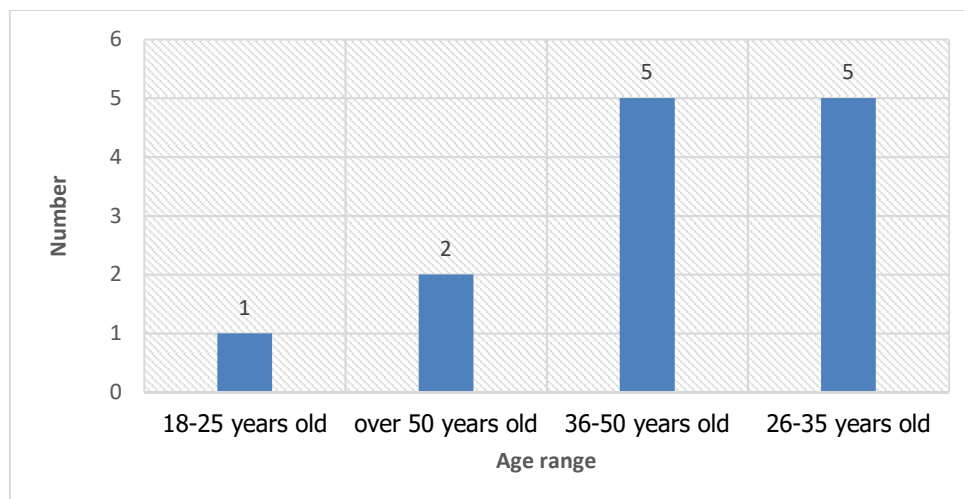
## SECTION A: PROFILE OF RESPONDENTS

The **PESTLE Analysis for promoting Blue Energy in Cyprus** was answered by a total number of 13 participants. The majority of them, ten (10) in number (77%), were male and three (3) of them (23%) were female (Figure 1).



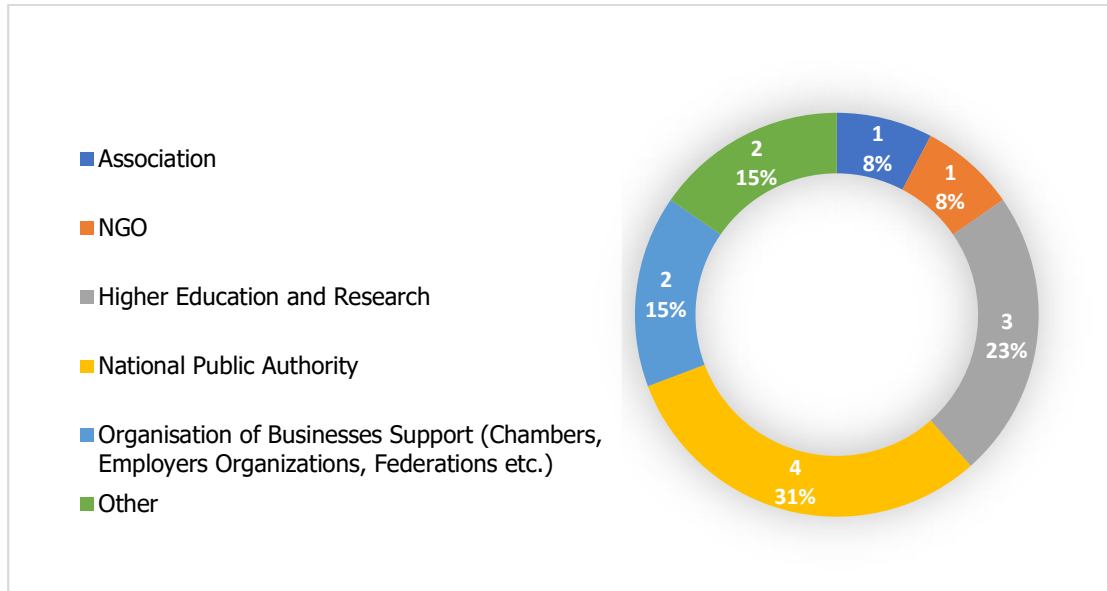
*Figure 1 Sex of participants*

Five (5) respondents were between 26-35 years old, another five (5) respondents were between 36-50 years old, one (1) respondent was between 18-25 years old and two (2) over 50 years old (Figure 2).



*Figure 2 Age of participants*

As shown in Figure 3, participants come from various sectors of employment or fields of interest. Four (4) participants were from public authorities, three (3) were from Higher Education and Research Sector and two (2) from business organizations/federations.



**Figure 3 Employment sector of Participants**

## SECTION B: PESTLE ANALYSIS

### Aim of the PESTLE Analysis

A PESTLE analysis is a tool that it is used in order to assess the impact and influence of various external factors to a strategic plan, business or project.

PESTLE stands for "Political, Economic, Social, Technological, Legal and Environmental" factors and is used for strategic planning, marketing planning, organizational change, business and product development and research reports. By understanding these external environments, organizations can maximize the opportunities and minimize the threats to a strategic plan.

The aim of this PESTLE analysis is to understand how stakeholders evaluate the impact of certain political, economic, social, technological, legal and environmental external factors for the promotion of Blue Energy in Cyprus. The results can be taken into consideration by decision makers for the development of a strategy about Blue Energy in Cyprus.

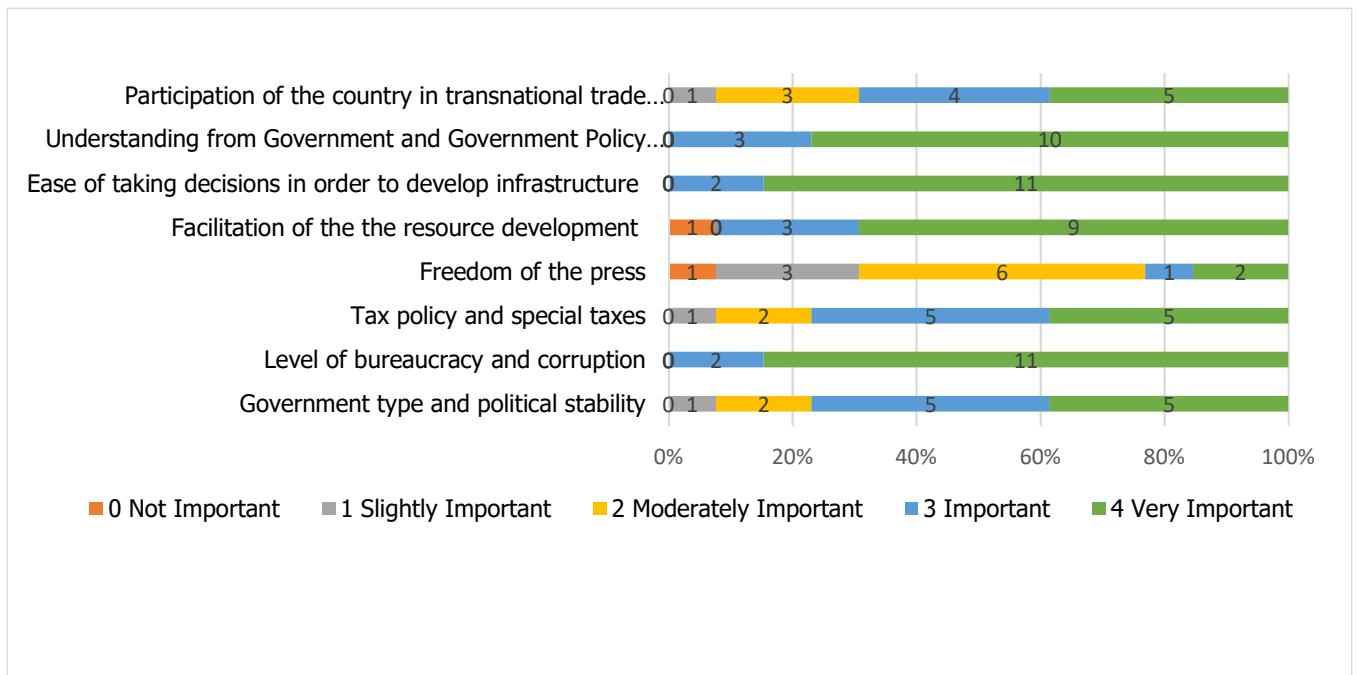
### POLITICAL FACTORS

The respondents were asked to evaluate from a scale of 0 to 4 the importance of various political factors for promoting Blue Energy in Cyprus, with 0 for not important, 1 for slightly important, 2 for moderately important, 3 for important and 4 for very important. The means of their answers are presented in Table 1. The participants believe that the most important factors for promoting Blue Energy sector in Cyprus are the ease of taking decisions to develop infrastructure, the understanding from government and government policy for promoting Blue Energy and the level of bureaucracy and corruption.

Table 1 Importance of political factors for promoting Blue Energy in Cyprus

<b>Political Factors</b>	<b>Averg</b>
Ease of taking decisions in order to develop infrastructure	3,8
Understanding from Government and Government Policy for Promoting Blue Energy	3,8
Level of bureaucracy and corruption	3,8
Facilitation of resource development	3,5
Government type and political stability	3,1
Tax policy and special taxes	3,1
Participation of the country in transnational trade agreements	3,0
Freedom of the press	2,0

Analytically, the level of importance of the Political Factors evaluated by the participants is shown in Figure 4. The participants evaluated as important to the promotion of blue growth other political factors, such as the participation of the country in transnational trade agreements, tax policy and government type and political stability.



**Figure 4 Importance of Political Factors for promoting Blue Energy in Cyprus**

## ECONOMIC FACTORS

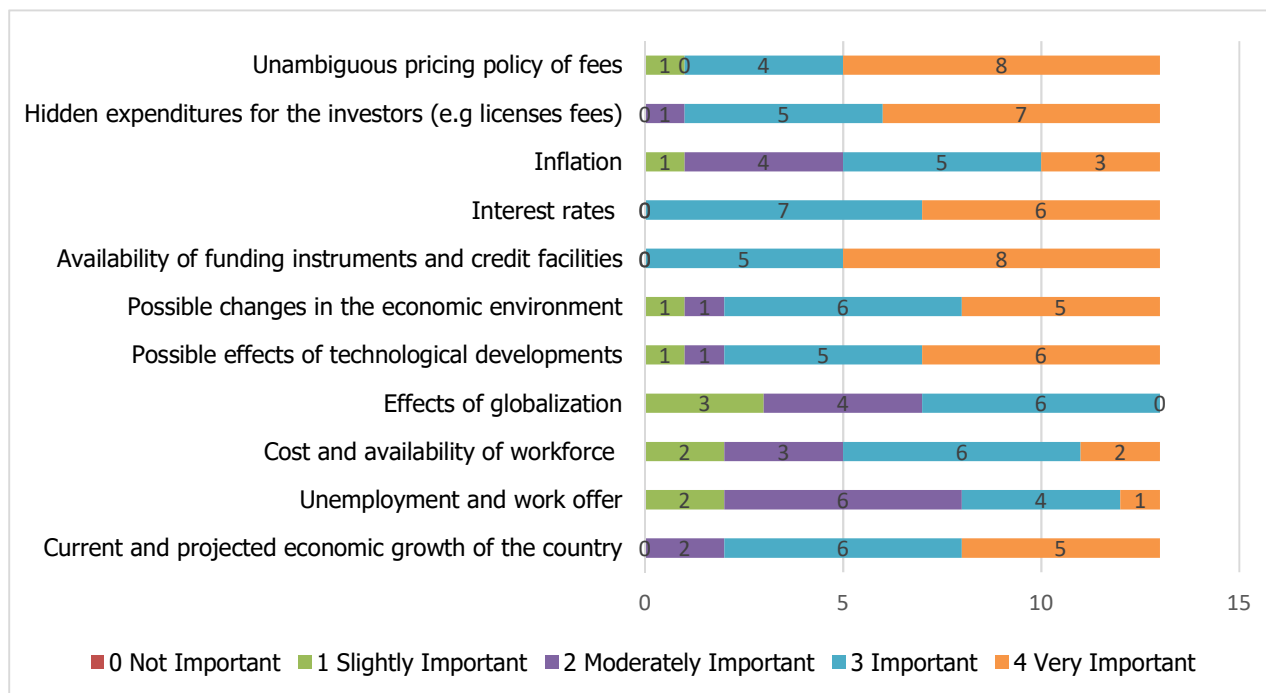
The respondents were asked to evaluate from a scale of 0 to 4 the importance of various economic factors for promoting Blue Energy in Cyprus, with 0 for not important, 1 for slightly important, 2 for moderately important, 3 for important and 4 for very important. The means of their answers are presented in Table 2. The participants believe that the most important factors for promoting Blue Energy sector in Cyprus are the availability of funding instruments and credit facilities, the interest rates, the hidden expenditures for the investors and the unambiguous pricing policy of fees. The participants evaluated lower the effect of cost and availability of workforce, unemployment, work offer and globalization to the blue growth in Cyprus.

Table 2 Importance of economic factors for promoting Blue Energy in Cyprus

Economic Factors	Averg
Availability of funding instruments and credit facilities	3,6
Hidden expenditures for the investors (e.g licenses fees)	3,5
Interest rates	3,5

Economic Factors	Averg
Unambiguous pricing policy of fees	3,5
Possible effects of technological developments	3,2
Possible changes in the economic environment	3,2
Current and projected economic growth of the country	3,2
Inflation	2,8
Cost and availability of workforce	2,6
Unemployment and work offer	2,3
Effects of globalization	2,2

Analytically, the level of importance of the Economic Factors evaluated by the participants is shown in Figure 5. More than half of the participants rated as very important the availability of funding instruments and credit facilities (8 persons, 62%) and the unambiguous pricing policy of fees (8 persons, 62%).



**Figure 5 Importance of Economic Factors for promoting Blue Energy in Cyprus**



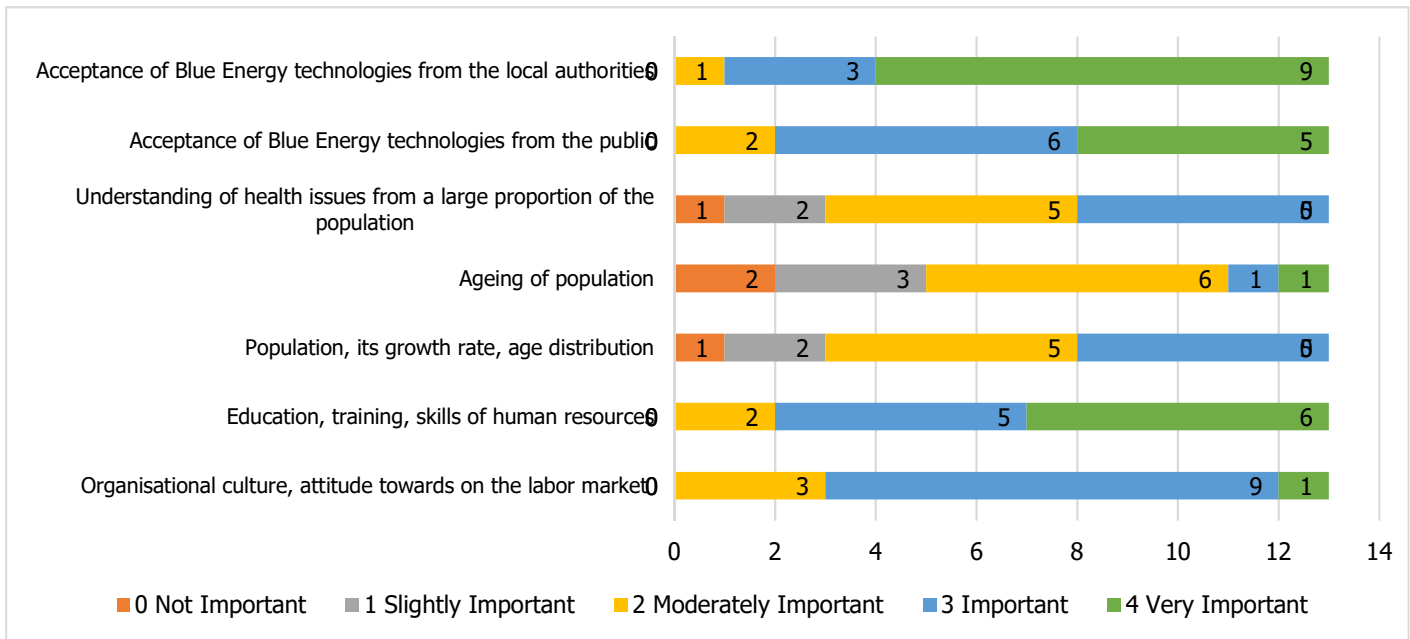
## SOCIAL FACTORS

The respondents were asked to evaluate from a scale of 0 to 4 the importance of various social factors for promoting Blue Energy in Cyprus, with 0 for not important, 1 for slightly important, 2 for moderately important, 3 for important and 4 for very important. The means of their answers are presented in Table 3. The participants believe that the most important social factors for promoting Blue Energy sector in Cyprus are the acceptance of Blue Energy technologies from the local authorities, the level of education, training and skills and the acceptance of Blue Energy technologies from the public.

Table 3 Importance of social factors for promoting Blue Energy in Cyprus

Social Factors	Averg
Acceptance of Blue Energy technologies from the local authorities	3,6
Education, training, skills of human resources	3,3
Acceptance of Blue Energy technologies from the public	3,2
Organizational culture, attitude towards on the labour market	2,8
Understanding of health issues from a large proportion of the population	2,1
Population, its growth rate, age distribution	2,1
Ageing of population	1,7

Analytically, the level of importance of social factors evaluated by the participants is shown in Figure 6. The organizational culture and attitude towards the labour market are also considered as important factors for blue growth by the majority of the respondents (69%, 9 persons).



**Figure 6 Importance of Social Factors for promoting Blue Energy in Cyprus**

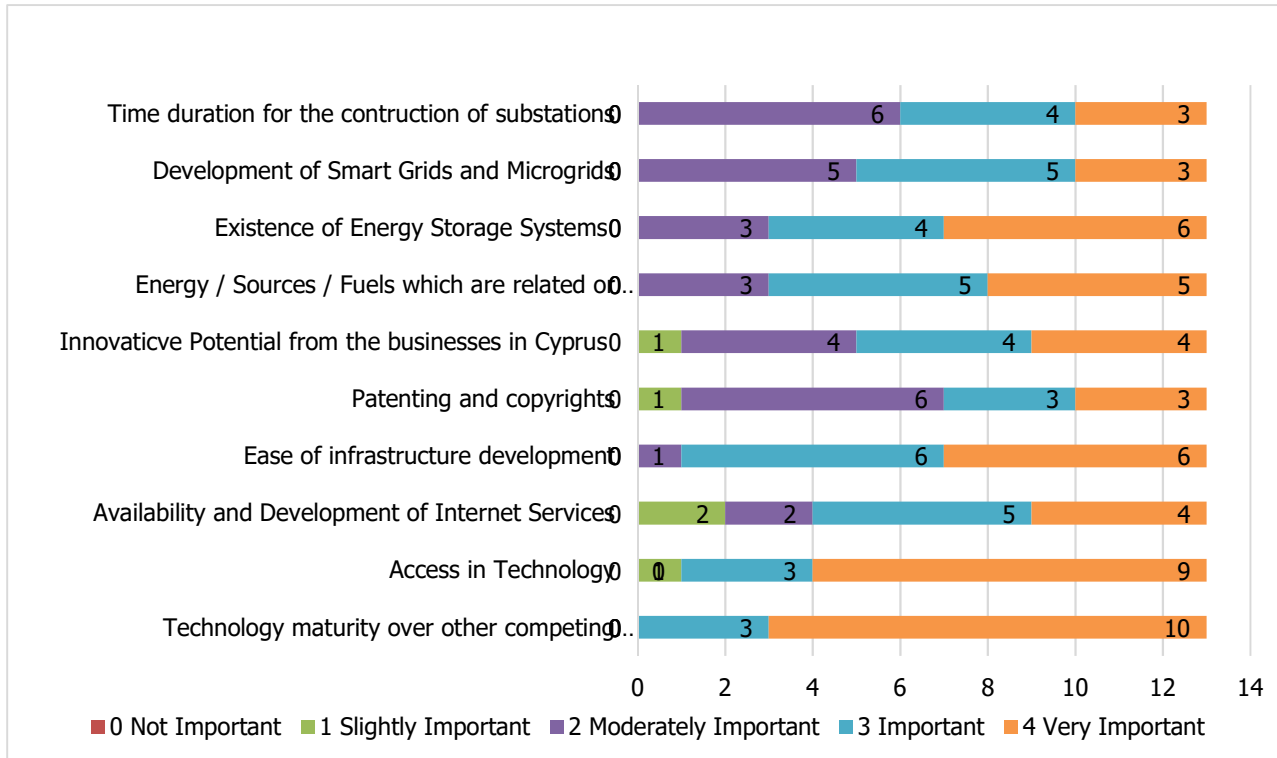
## TECHNOLOGICAL FACTORS

The respondents were asked to evaluate from a scale of 0 to 4 the importance of various technological factors for promoting Blue Energy in Cyprus, with 0 for not important, 1 for slightly important, 2 for moderately important, 3 for important and 4 for very important. The means of their answers are presented in Table 4. The participants believe that the most important technological factors for promoting Blue Energy sector in Cyprus are the Technology maturity over other competing technologies, the Access in Technology and the Ease of infrastructure development.

**Table 4 Importance of technological factors for promoting Blue Energy in Cyprus**

Technological Factors	Averg
Technology maturity over other competing technologies	3,8
Access in Technology	3,5
Ease of infrastructure development	3,4
Energy / Sources / Fuels which are related or depended from the technologies	3,2
Existence of Energy Storage Systems	3,2
Development of Smart Grids and Microgrids	2,9
Availability and Development of Internet Services	2,8
Time duration for the construction of substations	2,8
Innovative Potential from businesses in Cyprus	2,8
Patenting and copyrights	2,6

Analytically, the level of importance of technological factors evaluated by the participants is shown in Figure 7. All factors are rated from moderately important to very important for the promotion of Blue Energy in Cyprus.



**Figure 7 Importance of Technological Factors for promoting Blue Energy in Cyprus**

## LEGAL FACTORS

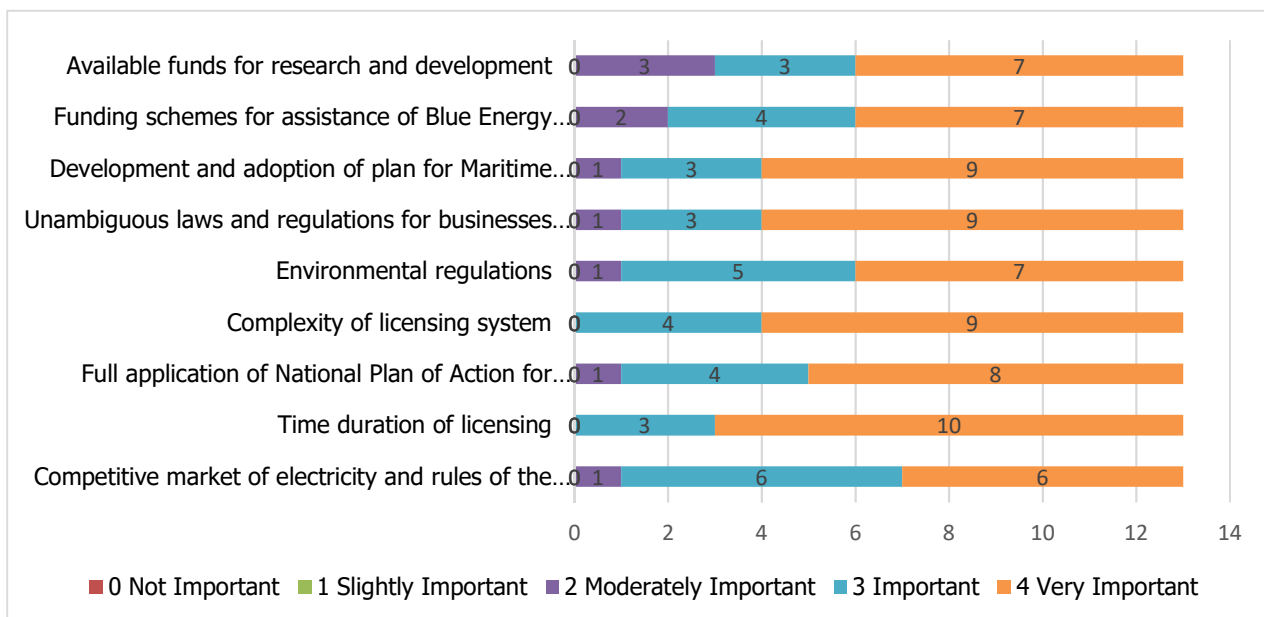
The respondents were asked to evaluate from a scale of 0 to 4 the importance of various legal factors for promoting Blue Energy in Cyprus, with 0 for not important, 1 for slightly important, 2 for moderately important, 3 for important and 4 for very important. The means of their answers are presented in Table 5. The participants believe that the most important legal factors for promoting Blue Energy sector in Cyprus are the time duration and complexity of the licensing system, the laws and regulations for business operation and the development and adoption of plan for Maritime Spatial Planning.

Table 5 Importance of technological factors for promoting Blue Energy in Cyprus

Legal Factors	Averg
Time duration of licensing	3,8
Complexity of licensing system	3,7
Unambiguous laws and regulations for business operation	3,6
Development and adoption of plan for Maritime Spatial Planning	3,6
Full application of National Plan of Action for promoting RES	3,5

Legal Factors	Averg
Environmental regulations	3,5
Competitive market of electricity and rules of the market	3,4
Funding schemes for assistance of Blue Energy technologies	3,4
Available funds for research and development	3,3

Analytically, the level of importance of legal factors evaluated by the participants is shown in Figure 8. All factors are rated from moderately important to very important for the promotion of Blue Energy in Cyprus.



**Figure 8 Importance of Legal Factors for promoting Blue Energy in Cyprus**

## ENVIRONMENTAL FACTORS

The respondents were asked to evaluate from a scale of 0 to 4 the importance of various environmental factors for promoting Blue Energy in Cyprus, with 0 for not important, 1 for slightly important, 2 for moderately important, 3 for important and 4 for very important. The means of their answers are presented in Table 6. The participants believe that the most important environmental factors for promoting Blue Energy sector in Cyprus are the availability of measurements, the environmental regulations and the definition of sensitive maritime locations.

Table 6 Importance of environmental factors for promoting Blue Energy in Cyprus

Environmental Factors	Averg
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Availability of measurements (e.g. air speed, waves etc)	3,6
Environmental regulations	3,5
Definition of sensitive maritime locations	3,4
Strictly Imposition of carbon footprint	3,3
Development of Tourism Industry	2,8
Environmental values of customers	2,7
Existence of insurance companies which understand the environmental issues	2,6
Development of Shipping	2,6

Analytically, the level of importance of environmental factors evaluated by the participants is shown in Figure 9.

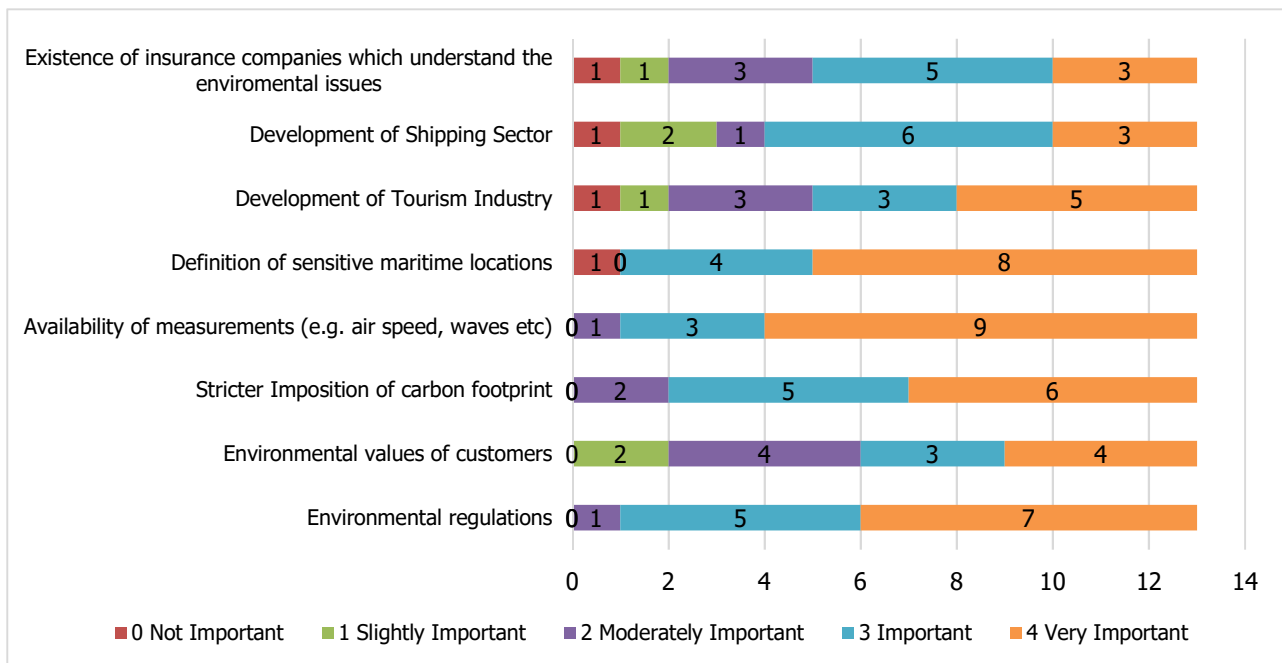


Figure 9 Importance of Environmental Factors for promoting Blue Energy in Cyprus