

## **STATEMENT**

of a PhD thesis submitted for the award of the educational and scientific degree “Doctor” in the area of higher education 3. Social, economic and legal sciences, professional direction 3.7. Administration and management

**Author of the dissertation:** Maxims Kaimovs

**Topic on the dissertation:** „Waste Generation and Treatment Processes Management in the Baltic Sea Region Countries“

**Member of the scientific jury:** Assoc. Prof. Georgi Dimov Georgiev PhD, Technical University - Sofia, Branch Plovdiv, in the area on the higher education 3. Social, Economic and Legal sciences, Professional direction 3.7. Administration and Management, scientific major "Economics and Management "

### **1. Relevance of the problem developed in the dissertation in scientific and applied terms.**

For the last decade the concept of sustainable development has become one of the most discussed topics. The vision of the world as a sustainably developing system requires the necessities of the present population to be satisfied not on behalf of the future generations.

In that respect Waste management plays an important role within the framework of sustainability with its aim to reduce negative effects of waste on global, regional, national and local level. As there is a vast number of attitudes, processes and instruments that can be used for this, each country can make its own chose of waste management. The

stated goal of this doctoral research is closely connected with the ways of dealing with waste and managing the waste operations.

In this regard, the considered issue related to waste management is significant and relevant in a scientific and applied scientific aspect.

All this give me reason to accept the presented doctoral dissertation as relevant.

## **2. Degree of knowledge of the state of the problem and creative interpretation of the literary material**

The doctoral student demonstrates good knowledge of the research problem. A total of 268 sources of information have been used. They are correctly cited and indicated in the bibliography of the dissertation work.

The thesis is balanced and well structured with Introduction, three chapters and Conclusions.

In the first Chapter the genesis of the concept of sustainability and sustainable development and the main pillars of sustainable development have been presented. An author's interpretation with four pillars of sustainable development are stated and they are discussed from the point of view of the circular economy concept.

The detailed description of the processes of waste treatment and their advantages and disadvantages are presented in the second chapter. The application of these ways of waste treatment in the countries of the Baltic Sea region is analysed. On the basis of this analysis the countries

of the region are divided in 2 different groups for the purposes of regression analysis.

The research conducted is based on sufficient, well-selected and systematized empirical material, in accordance with the goal and tasks of the study.

Overall, the doctoral student shows good knowledge of the research subject and demonstrates scientific and research skills in exploring the problem of waste management within the framework of sustainability in a circular economy.

### **3. Compliance of the chosen research methodology and the set goal and objectives of the dissertation with the contributions achieved**

The stated goal of the dissertation is to determine the degree of effect of the macroeconomic indicators on the waste generation and various types of waste treatment within the region of the Baltic Sea in the frameworks of sustainable development and circular economy concepts. For achieving this goal, seven tasks have been set.

The methodology chosen, well presented in the third chapter of the study, is based on the Statistical Analyses approach. In this respect correlation analysis is used to determine the significant macroeconomic factors capable of affecting the waste generation and waste treatment processes within the 8 countries selected. The independent variables have been chosen on the basis of desk research. Then the recommended variables have been researched for the data availability for a 15-year period/2009-2023/. Four dependent variables for regression analyses have been determined – 1/Generation of waste per

capita, 2/Recycling of waste per capita, 3/Waste-to-Energy per capita and 4/Anaerobic digestion of waste per capita. The proper use of the methodology chosen has allowed the PhD student to prove the three hypotheses put forward in the introduction of the dissertation submitted.

I believe that the methodology developed has allowed the goal and tasks set to be achieved.

#### **4. Scientific and/or applied scientific contributions of the dissertation work**

The doctoral student claims a total of seven scientific-applied contributions to the thesis. Along with this he offers two “practical” contributions – 1/determining the factors, having the priority for waste treatment in the countries of the Baltic Sea region and 2/ elaborating the range of activities aimed at improvement of waste treatment in the certain country.

I accept the stated contributions.

#### **5. Assessment of the publications connected to the dissertation**

A total of 3 individual publications are presented, directly related to the dissertation work. They provide the minimum required for the award of the the educational and scientific degree “Doctor” in the professional direction 3.7. Administration and management.

#### **6. Opinions, recommendations and remarks**

I have no critical comments on the research presented.

From a publications perspective, I recommend that Maxims Kaimovs continue more actively to promote the results of the research through participation in scientific forums and specialized publications.

## 7. Conclusion

The dissertation work proposed for defense by Maxims Kaimovs is in accordance with the norms of the Act on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the regulations of the Academy of National and Information Security. It presents a completed study with specific scientific and applied scientific results and meets the requirements for obtaining the educational and scientific degree "Doctor".

Based on the above arguments, I give a **firm positive assessment** of the dissertation entitled „Waste Generation and Treatment Processes Management in the Baltic Sea Region Countries“. I propose to the esteemed members of the scientific jury to make a decision to award master economist Maxims Kaimovs the scientific degree "Doctor" in professional field 3.7. "Administration and Management".

**Date:** 15.01.2026  
Plovdiv

**Member of the scientific jury:**.....  
(Assoc. Prof. Georgi Georgiev PhD)