

“Higher Education–Enterprise platform for fostering, modernisation and sustainable growth in natural stone industry in Western Balkans”

SUMMARY

BalkaStone project has the main objective of fostering the modernization and development of the stone sector in Western Balkans through strengthening the relationship between the higher education institutions and the enterprises. To achieve its development according to the EU standard and requirements and in order to meet the needs and requirements of current international demand of natural stone products, the Western Balkan industry has to perform important changes in different aspects: management, quarrying methods, processing methods, quality controls, following international standards, placing methods, marketing strategies, etc. These changes require the participation of all local agents, namely the Higher Education Institutions (HEI) and Vocational Education and Training (VET) organizations. Without the contribution of education organizations, the modernization of the stone industry is impossible.

The project will focus in different aspects of stone sector:

a) Technology

The continuous changes in the technology internationally applied to the stone, both in quarrying the stone and during its manufacturing process, and the advantages that every new technology bring to the industry, makes that those companies using old techniques and equipment have very limited access to the international markets, not only because of the technology contribute to reduce costs in a sector where the material to be transformed is hard and difficult to be processes, as the stone is, but also because of this technology is crucial to meet the quality requirements of the international markets, very strict nowadays with the standards and quality requirements.

b) Quality certifications

The industry must count with local qualified and certified laboratories guarantying the customer that the delivered materials totally fulfils all the requirements of the order. Otherwise, they will not place the orders. These laboratories need highly qualified staff, which only HEI's can supply. But these HEI's must include in their curricula the required knowledge and must carry out continuous training courses for their staff, otherwise, they cannot provide their students with the required skills and competences.

c) Sustainable development

Besides technologies, the project also address the sustainable development of the stone sector in Western Balkans. In the quarries, the sawing and other processes to quarry the stone produce a lot of dust, which must be controlled. Furthermore, the final products, compared to the handled mass of rock vary from 5% to 10%, what makes that every quarry produce a big amount of waste that must be manage in the proper way. All this requires an important knowledge in order to minimize the impact in the environment.

Environment protection is a key issue in EU, and day-by-day more important in most developed countries, and if we foresee a long term permanence and growing in the market, we must keep it in mind when developing the strategy for the sector. This makes still more important the contribution of the universities to the industry, due to the need of a knowledge that contribute to the economic development of the sector at the same time that keep at the minimum level

the impact in the environment. To manage both issues at the same time requires a well planned and complete strategy, where HEI's have an important role.

d) Health protection

Health protection is also a key issue in the natural stone sector. Due to the need of handling big masses of rock, the use of the heavy and dangerous machinery and explosives and the continuous production of dust, the quarrying and manufacturing of the stone must be done following very specific procedures to reduce to the minimum the risks of accidents and health problems. In EU these procedures have been deeply developed during the last decades, due the increasing importance giving to this issue. EU partners in the project, both HEI's and technologic centres, have a wide experience in developing and putting in practice, some of these procedure, as well as, in developing training materials for support their implementation in the stone industry.

Through this project, the education and training organizations will incorporate knowledge regarding health protection in stone sector to their courses and transfer it not only to the students, but also to the companies. They have a key role not only in the education of the future staff of the companies, but also in organizing continuous training courses for the staffs in the different levels, from managers to workers. In the involved Balkan countries, these courses do not exist at all or are still very scarce. It results in a high level of accidents and profesional illnesses compare to the size of the industry.

EU PARTNERS:

University of Vigo – Mining engeeniring – Vigo – Spain
University of A Coruña – Technichal Architerture – A Coruña – Spain
CTM- Centro Tecnológico del Marmol de Cehegin – Murcia – Spain
IES Ribeira do Louro – O Porriño – Spain (Vocational Training School)
Klersarska Skola – Puchinska – Croatia (Vocational Training School)
University La Sapienza – Italy
University of Athens – Greece
Saimaa University of Applied Sciences – Lappeenranta - Finland
EUROROC – European and International Federation of Natural Stone Industries – Germany-
Belgium.

BALKAN PARTNERS

University of Elbasan – Albania
Shluj Universiteti Marin Barleti – Albania
City of Elbasan – Albania
City of Gjirokastra – Albania
University of Sarajevo – Architecture – Bosnia & Herzegovina
University of Mostar – Civil Engineering – Bosnia & Herzegovina
University Džemal Bijedić – Civil Engineering – Bosnia & Herzegovina
University Kadri Zeka – Architecture – Kosovo
University Haxhi Zeka – Business - Kosovo

