

## European School for Brownfield Redevelopment The University of Economy in Bydgoszcz E-LEARNING

### **European perception of Brownfields:**

European perception of brownfields is predominantly one of a societal problem, featuring social changes, real estate markets failure and reflecting various land use mismanagements. On the other hand, the US perception of brownfields emerged from a perspective of environmental and liability issues, representing the main reuse barriers (an initial US policy and grant support was also geared to this point). This difference in perception can be also traced in educational products.

### **The horizontal themes:**

There are many horizontal themes one can follow, when brownfields regeneration is considered. Sustainability of brownfield regeneration in economic, social and environmental terms is in our opinion one the strongest ones. The other two key horizontal issues, which are universally important for the work of brownfield manager is the governance and the communication.

### **Multiprofessional teams based discipline:**

Brownfields remediation is a highly multi-aspect and interdisciplinary issue, carried out in cooperation of various experts and professionals. Through this cooperation participants' knowledge is expanded and their new experiences is gained and enhanced. As a general rule, in brownfield redevelopment mastering of only one profession is usually not enough. The multidisciplinary environment requires a good grasp and understanding of the other professions' work. The most important skills in the brownfields management are therefore: a good communication, an ample lateral know-how and a good understanding of values and contributions that other professions and stakeholders can bring to brownfields regeneration. Brownfield projects' redevelopment is a process, not to dissimilar to processes and management practices followed by many other projects. However brownfields projects usually encounter more variables and more risks, than regular projects. They also require more soft skills. Coping with multiple variables, mitigating risks and communicating with stakeholders is the main task of multidisciplinary teams' managers.

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### **Level of e-learning achievement:**

Brownfields managers' education of necessity cannot produce deep individual subjects learning, just because the breath of professional subjects that brownfields regeneration covers. What should be the essence of brownfields manager education is the lateral knowledge, communication, management of key processes and knowledge possessed by others. It is working with a large amount of uncertainties and being able quickly to perceive an essence of the subject while using the other stakeholder to realize these visions. This is a type of job, which would suite the creative types and frustrate the exact types. But all the participants would be learning a subject, which is substantially new to them. From the 4 levels of educational achievements

1. awareness raising
2. subject understanding
3. can do thing level
4. expert level

one would expect that majority of learning achievements would finish at the level 2 and some subjects, which are of more practical nature or are bases on an organizational process (project management principles or communication for example) can reach the level 3. Some more complex issues (environmental, financial est.) however may only reach the level 1. To be useful in practice, brownfields management course participants need to acquire skills, which allow them in their role of brownfields managers at least do:

- gathering of facts
- comprehending them
- synthesizing them
- analyzing them
- communicating them
- formulating recommendations based on the above

### **Content of the e-learning course:**

Additional output of WP6 is E-learning Course designed for students and graduates. The structure of individual course modules was organized in such a way that participants of various backgrounds and experiences can benefit by it. To cover brownfields, individual module's content need to be quite broad, usually comprising of more than one fields of expertise. This is why the module content was broken down into individual sections. Only when this is done, the actual content of each module is clear. In order to ascertain the level of likely educational achievement, it is necessary to break each section into subsections, to which a level of educational achievement can be assigned.

Assuming that most of participants are new to the brownfields as a subject the first module consists of a holistic introduction to brownfield issue. In a first module „Holistic approach to the revitalization“ are following sections: Civil law aspects of the revitalization of cities and settlements, Financing revitalization, Introduction to management and organization, Project management, Socio-cultural aspects of revitalization. Second module “Brownfield revitalization” explains main problems connected with revitalization. Third module “Environment protection” consists of following sections: Types of environmental pollution, Anthropogenic impacts of the environmental pollution, Tasks of the



environmental protection and Costs of the environmental protection. Fourth module “Urban planning” was divided into three sections: Introduction to urban planning, Planning framework and Urban design regulation. Last module “Culture heritage” consist of following sections: Understanding industrial cultural heritage, Organizational and systematic framework for urban regeneration of degraded areas and Examples of urban regeneration of degraded areas and industrial cultural heritage.