

ERASMUS Intensive Program “Permaculture Design Course – The City of the Future”
Essay on case study

Solving nowadays ecological issues...it is a challenge, it is a dream, it is a mission...

This ERASMUS Intensive Program is inspired from the increasing need of urgent measures to cope with more and more soundly raising ecological problems. This topic is relevant not only in Europe, but it is considered as a global challenge. It is a subject of series of world meetings, conferences and documents, some of them successful, others not that much. And still no tangible policies are developed and no effective results are achieved. It has been too long since the developed countries were rapidly developing their economies and lifestyle at the expense of nature’s balance. Today it is not a matter of single and dispersed actions and changes that we have to make to create a better future. A crucial change in our mindset and habits is needed to cope with the growing ecological issues. As William Rees states "It is not just the "environment" that needs to be fixed, but humans ourselves - the environmental crisis is the product of gross human ecological dysfunction (or, if you prefer, of humanity's spectacular evolutionary success) (2003 cited in Newman and Jennings, 2008).

Spatial planning as a complex discipline is depending on direct or indirect relations and interdependences with other disciplines to contribute to solving climate change issues. Through “wise” planning we can put the base towards more responsible and sustainable future not excepting a good quality of life. All the planning instruments, methods and processes could be part of the creation of new model of development. Several topics in the spatial planning area are mentioned in this essay as important for reducing carbon emissions – land use, transportation, green and public areas and building stock.

One of the most actual spatial planning challenges is the urban sprawl and the following consequences. Its expansion resulted in a great amount of resources consumption among which most relevant for the workshop topic being land and energy consumption. The urban sprawl led to bigger demand and addiction to private car possession and use. As a consequence disconnected urban communities were developed. Transportation links between these urban structures were provided through urban highways contributing to raised carbon and noise pollution.

Related to the previous issue, by means of land use regulations car dependent transportation demand can be minimised and walking and cycling stimulated, along with public transport be provided and promoted for long distances. Not only transportation energy and pollution will be reduced but better life quality will be established with opportunities for enhanced social interaction.

These land use and transportation measures can be complemented by system of connected green areas and public spaces in a close proximity to living and working units. Having a quantitative and qualitative green spaces system is vital for high quality urban environment. We should not plan just “green spaces” but spaces with a lot of greenery – trees, shrubs, flowers (instead of spacious empty lawns), which can contribute to better climate conditions and elimination of carbon emissions. In this sense permaculture is increasingly becoming a distinguishing content of recently developed plans and projects. It can be considered as a tool to make an effective use of the not built up green spaces on one hand, and on the other, as a means to create a better relationship between residents and the place they inhabit. By minimising distances and worth living green and public areas smaller communities with local self-services are created.

The built environment is an important sphere which need and can accommodate substantial interventions towards a non-carbon future. Covering big part of the land in developed countries and occupying a significant share of people’s lifetime, applying decarbonisation strategies and measures on fabrics are crucial steps in the overall process. Change in new buildings’ development and renovation of old ones can be encouraged through implementation of local and more natural resources and energy efficiency measures. More rational and practical use of natural and anthropogenic resources in urban environment and waste management can be achieved by implementing smart technologies, innovations and green infrastructure. Over the past decades a lot of efforts are put in creating zero-energy neighbourhoods, passive and zero-energy houses including their whole lifecycle – design, construction, exploitation and refurbishment and/or demolition.

All these visible, physical interventions would lead to increased mobility, viability, social interaction, accessibility, development in the sphere of green economy and environmental responsibility. At the same time they will result in lowering energy consumption and carbon emissions, excessive noise and light pollution, urban sprawl and waste production. But more important is that these actions could change our behaviour and our everyday consciousness of ecological issues. Children raised in such environmentally friendly communities will grow up with sense of responsibility and belief that this bright future depends on each of them. Hopefully, they would not have to change the system, but to further develop the one we would have already changed.

Managing urban sprawl, minimising greenfield developments and investing into urban regeneration and brownfield developments originally considered as urban planning issues are interrelated with energy and natural resources consumption. All planning instruments (plans, schemes, planning acts, strategies, etc.) can provide the base for implementation of zero carbon policies.

Other very essential planning instruments are information sharing and public involvement – conferences, discussions, stakeholders’ involvement, etc. Public involvement in planning processes from the beginning can contribute to bottom-up and top-down exchange of knowledge and ideas about solving climate change issues. Thus people are involved in the process, they feel their own importance and responsibility, and they are

aware what is happening in their community, in their village, town or city. They feel confident and accept this national or local eco-policy as their own cause. Significant results could be achieved through mutual education and actions. As it is described in *Zero Carbon Britain 2030* (2010) “many of these [measures] are policy driven, however individuals and communities must also play an active part in decarbonisation. The public can do this by accepting, supporting and indeed calling for the positive change that climate science shows is necessary.” Latest shows that having the legislation adapted, sustainability ideas and measures promoted, education spread and knowledge shared could lead society to more active and demanding position.

Important to mention is that this change should not be accepted as a total shift in the way we live. To a certain extent it is a process of returning back to basic principles of our ancestors’ life, close to nature and using natural means and “technologies”. Cities can become more sustainable by modelling urban processes on ecological principles of form and function, by which natural ecosystems operate (Newman and Jennings, 2008).

Describing the issues investigated in the current essay I believe that crucial to the Neusiedl am See case study is to focus on both global challenges and local strengths to reach sustainability in its future development. Its natural and built environment must be comprehensively investigated to define fundamental steps for future action plan. For integrated and complex results in coping with ecological issues these main spatial planning approaches must be complemented by actions in the areas of ecology (agriculture and forestry), solidarity economy and culture & identity.

All these can sound like a dream never coming true but “in nature multi-functionality is the norm” (Mollison, cited in Kvarda, 2012) and not just refuse, reduce, reuse, repair and recycle principles must be followed, but *reimagine* what life can be if we make these efforts.

References:

1. Kvarda, W. (2012) *Prodigious wisdom and appropriate technology for the era of transition*. [online] Available at: <http://academia-danubiana.net/wp-content/uploads/2012/02/2012p17_12.08.24.PRODIGIOUS-WISDOM-APPR.TECHNOLOGY-8th.pdf> [Accessed 07 August 2013]
2. Newman, P. Jennings, I. (2008) *Cities as Sustainable Ecosystems: Principles and Practices*. Washington D.C.: Island Press