

> With 'know-how' based on local businesses, academia, natural resources, external consultants, governmental agencies and NGOs, Serbia is well placed to lead the region in a 'green building' explosion. <

Your company M2E has experience in 'green building' in the USA. Based on this experience, how would you define the advantages of this phenomenon in protecting the environment and saving energy?

Sustainable design is more than a process of reducing environmental impact. It is rethinking the relationship between humans and nature. At M2E, we understand this as a holistic approach that incorporates environmental concerns into our design processes from the very start.

A Collaborative Approach

Sustainable design is a result of a collaborative approach that realizes synergies between all relevant disciplines and

produces thoughtful, intelligently integrated work. In implementing this approach, M2E has been successful in creating buildings that will conserve natural resources, water and energy; preserve the natural environment, offer healthier places for people to work and live and be more cost effective to operate over the building's life cycle.



COULD SERBIA BE ON THE VERGE OF A 'GREEN BUILDING' SURGE?

Would you say that the demand for such buildings is growing in the USA and worldwide?

At the time M2E got involved in the Green Movement, over six years ago, it was an activity on the fringe of the design, engineering and construction mainstream. Today, however, we look like visionaries. The market for green buildings has been increasing at a strong pace since the Leadership in Energy and Environmental Design (LEED) green-building rating system was introduced in the spring of 2000 by the US Green Building Council (USGBC). In the US, in Canada and 10 other countries, owners and developers have registered for the certification of their buildings under the LEED rating system.

LEEDing the Way

Currently there are 19,524 projects registered to achieve various levels of LEED certification, and 2,476 projects have already attained a level of LEED certification. This growth has also been supported by a study from the Freedonia Group, Inc., a Cleveland, Ohio-based industry research firm, showing that in 2008 the U.S. market for 'green' building materials generated sales of almost \$57 billion. This market is projected to expand by 7.2 per cent annually to over \$80 billion in 2013, outpacing the growth of building construction expenditures over that period. There is no better indicator to justify the investment our firm provided in educating its staff (a third of our engineers are LEED AP Certified) and modifying our corporate approach.

Can you tell us more about LEED certification system, its key features and advantages?

The LEED Green Building Rating System is a voluntary, consensus-based, market-driven building rating system based on proven existing technology. It evaluates environmental performance from a whole building perspective over a building's life cycle, providing a definitive standard for what constitutes a "green building". The rating system is organized into five environmental categories

- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality

There is also an additional category, Innovation and Design Processes which addresses sustainable building expertise as well

A Green Future for Serbia

'Serbia has a unique opportunity to skip a period of 'questioning' that the Green Building Movement experienced in other societies. As it is not only our experience that green will be the new standard in worldwide construction in the foreseeable future, Serbia could get on that train early and establish itself as the Green Powerhouse in the region. It certainly has the potential for educational resources to generate quickly a unique "know-how" base by integrating all of the relevant elements, including external consultants, governmental agencies, NGOs, local business, academia and natural resources. M2E would welcome the opportunity to share our knowledge and experience in making this move toward green building a resounding success.'



> 'Clients and investors worldwide are already realizing quite impressive returns on green buildings in the form of lower operating costs, which is moving the entire green building "alternative" into the mainstream. Furthermore, in many developed societies, "green" has become a standard, not an option, as investors and governments alike realize that it is the only prudent, responsible and profitable option considering medium to long term horizons.' <

as design elements not covered under the five environmental categories.

tools that support the adoption of sustainable design and building practices.

paying "green collar jobs" that can be created throughout the whole region.

Many benefits

There are many benefits of employing green building technologies and practices for occupants, owners, the environment and society at large that are quantifiable and well documented. These benefits include measurable reduction of waste, decreased water use, energy savings, reduced operating and maintenance costs and improved indoor air quality. Other benefits are less tangible and harder to demonstrate statistically, such as improvements in occupant health, employee morale, productivity, recruitment, retention and an improved public image for organizations that build green.

A Way of Thinking

Sustainable professional practices are a way of thinking at M2E, where we experienced first-hand the benefits of such a philosophy. That's why we believe that Serbia needs to develop comprehensive energy efficiency, conservation and renewable energy strategies that would ultimately help reduce greenhouse gas emissions and energy use, increase energy independence and, simultaneously, shift toward a low-carbon economy. M2E's office in Belgrade, established a couple of years ago with the specific task of exposing the Serbian market to American know-how in innovative engineering practices, has the capability

How would you estimate the initial costs of investing in green building vs. long term payback?

The initial cost of many green buildings is the same or even lower than for conventional alternatives. This is mainly due to the implementation of resource-efficient strategies and integrated design which often allows downsizing of more costly mechanical, electrical, and structural systems. Even for projects loaded with high-value features, increased initial costs are often recoverable within three to five years through lower operating costs and utility and tax rebates for energy-saving equipment. According to a report released by the American Environmental Protection Agency (EPA) in 2002, the operational cost for ENERGY STAR-labeled office buildings is approximately 40 per cent lower than for the average office building.

> 'Sustainable design is a result of a collaborative approach that realizes synergies between all relevant disciplines and produces thoughtful, intelligently integrated work. In implementing this approach, M2E has been successful in creating buildings that will conserve natural resources, water and energy; preserve the natural environment, offer healthier places for people to work and live and be more cost effective to operate over the building's life cycle.' <

Is the initial cost the investors' responsibility while the benefits affect society as a whole, or can investors benefit as well by choosing the green-building option?

While comprehensive scientific studies are needed to verify results, preliminary studies are confirming intuitive assumptions about the benefits of green buildings. Many building and health experts agree that the social benefits of green-building technologies and practices can produce financial returns for employers that overshadow the savings associated with more measurable building performance gains. Nevertheless, M2E's clients and investors worldwide are already realizing quite impressive returns on green buildings in the form of lower operating costs, which is moving the entire green building "alternative" into the mainstream. Furthermore, in many developed societies, "green" has become a standard, not an option, as investors and governments alike realize that it is the only prudent, responsible and profitable option considering medium to long term horizons.

Could you describe for us the role of US Green Building Council and how it influences green building policies? Would you recommend that a similar organization be established in Serbia?

M2E is uniquely positioned to give an opinion on this question, as our Vice President Vladimir Markoski was among the founding fathers of the US Green Council (USGBC) for South Florida. The U.S. Green Building Council is coordinating the establishment and evolution of a national consensus effort to provide the industry with the tools necessary to design, build and operate buildings that deliver high performance inside and out. Council members work together to develop industry standards, design, construction and operating practices and guidelines, policy positions and educational

and expertise to lead the development and implementation of a LEED green building rating system in Serbia.

'Green-Collar' Jobs

By integrating all of the relevant resources (governmental, intellectual, natural) Serbia can become a regional leader in LEED practices through development and implementation of various market-specific green technologies. In addition, we believe that investments in green technologies will produce employment opportunities across a broad range of occupations, including research scientists, roofers, electricians, truck drivers and accountants. It will also provide a pathway for manual workers to move up to higher-