



Romania and Climate Change Policies - Economic Stimulus from a Green Economy

Introduction - An Economic Opportunity

It is possible for Romania to have an **immediate economic stimulus** and **job creation** while moving quickly to abide by the requirements of climate change legislation and energy efficiency directives. It is our objective here to recommend measures that have an immediate and positive economic impact, low cost to the public budget, and secure better protection for Romania's valued environment.¹

Following the example of forerunners in different parts of the globe, Romania can obtain the significant benefits by lower energy costs, greater energy security, and creation of employment - including many new skilled jobs in green technology, products and services. As our buildings utilize almost 40% of the energy² and have a direct impact on the quality of life for all Romanians, **improvements in our new and existing buildings** represent a tremendous opportunity to achieve economic stimulus, improve the lives of the citizenry, and achieve the full benefits of international and European climate change legislation. In particular, construction renovation efforts provide numerous local jobs ensuring an answer to growing unemployment in the construction and related sectors.

At the European level, the environmental industry was estimated to employ 3.4 million people in 2005³. This was more jobs than those found in the automobile and chemical industry, demonstrating

¹ Various stakeholders expressed similar points of view at a workshop in June organized by the United Nations Development Programme – Romania. This document does not necessarily represent the opinion of UNDP, but that of the stakeholders present at the event.

² As measured in final energy at the level of the national economy; information from the "National Plan for Energy Efficiency 2007-2010"

³ European Trade Union Confederation study, 2007 The main sectors offering these jobs were pollution control (waste management and recycling, air and water quality), renewable energy sources and services for energy efficiency. Germany alone accounted for 1.8 million "low carbon jobs", most of them created by financial incentives for investments in renewable sources and energy efficiency. The projections for the future show substantial job potential in these sectors.

the potential of the “green market” to create **immediate benefits for people** in addition to achieving critical environmental stewardship in the long term. According to the European Renewable Energy Council, by raising the share of renewable energy to 20% of the EU’s energy consumption by 2020, the number of green jobs would rise by 2 million.

The costs of **implementing energy efficiency and renewable energy measures** are minimal as they are **not cash expenditures but rather investments** paid back by future, continuous energy savings. With already proven technologies that are currently available in Romania, the energy consumption in both new and old buildings can be cut by an 30-50 percent without significantly increasing the upfront investment cost⁴. In addition, government or private loans can be utilized to improve energy efficiency and have the benefit that the reach of existing programs can be vastly expanded without undue strain on today’s budget.

Stronger legislation to promote energy efficiency is being implemented throughout Europe and the world. Romanian firms can prosper by developing the capabilities to service these needs domestically, regionally and internationally that are generated from these higher standards. Alternatively, Romanian firms can be left behind as other nations win these projects. We urge leadership to position the country for the jobs and capabilities required in our very near future.

Benefiting from meeting Climate Change requirements

Most credible analysts predict continuously rising energy costs which will be transferred to the homeowners and businesses and hurt economic potential. More dramatic price increases can be expected as the global economic crisis turns again to growth. Therefore **encouraging energy efficiency in buildings** will provide **economic safety and comfort to Romanians** - particularly those most **vulnerable** to high energy bills. Measures to reduce carbon dioxide emissions obviously have the immediate and long term benefit require reducing dependence on fossil fuels. It is therefore important to also consider the value of avoiding the severe economic distress on families, businesses, regions, and economies as fossil fuel costs rise due to scarcity, increased human population, and economic growth.

⁴ Submission of the United Nations Environment Programme (UNEP) Sustainable Building & Climate Initiative (SBCI) to the Ad Hoc working group on long-term cooperative action under the Convention (AWG-LCA); 24 April 2009

In addition to providing **immediate economic stimulus**, measures promoting **sustainable construction** will aid Romania in compliance with numerous European directives related to energy efficiency, promotion of renewable energy and GHG emissions reductions. The construction and real estate sector is responsible for almost 40% energy consumption and represents 36% of all carbon dioxide emissions. Consequently, the sector was recently introduced as one of the important areas for Greenhouse Gas (GHG) reduction in the mandatory European Energy and Climate Change Package and is likely to be elevated in importance at the Copenhagen discussions this December.

New buildings have the main saving potential (both energy consumption and CO₂ emissions). However, significant GHG reduction and future cost savings could be easily achieved with public investment in the existing building sector through thermal rehabilitation of buildings. In Romania 38% of the thermal energy consumption could be saved through minimal thermal rehabilitation of existing residential blocks. The CO₂ emission reduction potential from the thermal rehabilitation of old blocks alone is 4 million tons of CO₂ per year. Considering that starting with 2013 many of the thermal plants will be excluded from the EU-ETS scheme and will have to pay (and pass along the cost to consumers) for every CO₂ tone emitted, the saving potential is appealing.

In addition, while opinions of causes may vary, it is a known fact that the citizenry is growing increasingly concerned about changing weather patterns - particularly those affecting agriculture and personal safety. According to a Eurobarometer survey from 2008, Romanians place climate change as the biggest global problem of the moment demonstrating a high level of concern for the matter. Impacts such as droughts and floods, increased temperatures would be highly disruptive to a country with such a strong agriculture sector. Many citizens would welcome strong action by government to understand and resolve the source of this problem

Key Actions to take

The immediate actions that should be taken to optimize the immediate economic benefits of implementing Climate Change policy are:

1. **Enhanced implementation of Energy Audits.** Proper implementation of Law 372/2005 regarding energy performance of buildings (transposes the Energy Performance Directive in Buildings). According to current law since **2007** all **new and public** buildings must have an **energy performance certificate** that states the level of energy efficiency and CO2 emissions. Starting with **2010** all **existing buildings/apartments** must have the energy performance certificate when sold or rented. The law is one of the main legislative instrument already “in force” for monitoring the energy efficiency level of the building stock and encouraging the development of high efficient buildings. It has not yet, however, been properly implemented at the local level. We therefore ask the government to:
 - a. Verify the implementation of the law at the local level
 - b. Provide implementation support at the local public authority level with awareness raising, training, and administrative capacity building.
2. **Increase the popular thermal rehabilitation of blocks program** implemented by MDRL as one of the major tools for reducing energy consumption in existing residential blocks. While the program has made notable progress, we recommend increasing the efficiency and impact of the funds allocated by:
 - a. Modify the program to become a comprehensive “Energy Efficiency Rehabilitation Program” (versus just “Thermal”) or add additional programs to include the modernizing/refurbishing of installation systems, energy-efficient lighting and controls, systems that efficiently shade the building from the sun and facilitate the use of natural daylight. As the Return on Investment due to energy savings is very favorable, this addition to the original program’s benefits can be financed at very low cost to public budgets and the building occupants. (see “Financial Incentives” in the next section).
 - b. Developing norms and standards to encouraging the usage of ecologic construction materials and consider the total energy used of manufacturing (or “embodied energy”) when selecting these materials. This can be implemented first in pilot projects and afterward expanding it to the whole program. Buildings could, for instance, receive a visible rating based on the total embodied energy of the renovation.

3. Financial Incentives

- a. **Create new budget-neutral financing mechanisms** that reward green building, green tech, renewable energy solutions, and manufacturers of energy efficiency equipment. This type of investments are paid back by future energy savings and are a low cost way for encouraging innovation and helping Romania to prosper from adopting a low carbon economy and the resulting high-quality jobs. **As money is borrowed and not simply spent**, access to far more financial resources to improve buildings and expand the program is possible without exhausting today's limited public budgets. Partnerships with private financial institutions can facilitate the management of the program on a much wider scale.
- b. **Financial incentives** offered to the citizenry of Romania to promote energy efficiency and renewable energy are consistently popular measures and should be considered **investments not expenditures**.
 - i. For low income households in particular, governments can significantly reduce the need for future support payments to ensure proper heating and cooling of homes. A onetime investment in energy efficiency provides both an urgently needed economic stimulus and continuous future dividends for economic and energy security. Existing energy policies and programs could be analyzed, prioritized and modified to better support poverty reduction. Policy makers, with better approaches and responsible borrowing, **can assist Romania's citizens most vulnerable** to "fuel poverty".
 - ii. The design of the Green Investment Scheme for Romania should include such a mechanism by shifting the destination of the income resulted from the emissions trade from supporting non-performing non-renewable energy sector to investing into renewable energy solutions AND measures to increase the energy efficiency of Romanian citizens' homes and apartments.
 - iii. Better use of the opportunities offered through the European Fund for Regional Development⁵ can include green priorities into the social housing projects of the municipalities; contributing also to a higher quality of life for their citizens.

⁵ 4% of this FEDER was assigned for energy efficiency projects with a focus on social housing.

4. **Support action at the local level.** Municipalities need to play an important role for encouraging the development of new energy efficient buildings. The proposed version of the European Performance in Buildings Directive requires that **starting with December 2018 all the new buildings should be net zero energy** (producing at site energy from renewable sources in the same amount as the energy that they consume). Public Buildings have an even more ambitious target of December 2015. There is a strong need for developing a strategy to be able to comply with the target but also a **major opportunity** for cities to develop local competencies in the construction of these high performance buildings of our future. Density bonuses, property tax exemptions and expedited permitting and other incentives for green buildings can provide better quality property investments, sustained economic growth, and, of course, better buildings and quality of life at minimal cost. Local incentives for green building will attract greater amounts of high quality property investment, professional companies, and more skilled jobs offsetting the cost of tax reductions to municipalities.
5. **Greater speed to review and allow environmentally-superior yet cost efficient construction materials** is necessary to increase the energy efficiency of buildings and reduce their environmental impact. Often, good solutions are not available to Romanians simply due to a slow approval process for items readily accepted across Europe. Improving lives and achieving progress on climate change commitments can therefore be accelerated by more innovative thinking and new policies without greater public spending.

As we have stated, our recommended measures are investments for immediate and sustainable growth; not costs for the public budget. Our organizations can provide suggestions and assistance in implementing the above solutions. We believe each of these measures would be **strongly in the public's interest and will be popularly supported**. In this time of economic challenges, important decisions Romania makes today can create either growth and stability or uncertainty for many years to come. We are encouraging a decision to take a leadership role by investing in energy efficiency and green energy that will provide a continuous dividend of lower energy costs, greater energy security, better jobs, and a higher quality of life.

Authors / Signatories

Romania Green Building Council,
President Steven Borncamp

The Romania Green Building Council is a non-profit, non-political association of companies that promotes sustainable constructions by providing specific trainings, implementing pilot projects that demonstrate the feasibility of green buildings in Romania and working with the public authorities for encouraging the necessary legislative measures for building green.

WWF Romania,
Program Director Luminita Tanasie

WWF is one of the world's largest and most effective environmental organizations, whose mission is to stop the degradation of the natural environment, by conserving the biological diversity, by promoting sustainable use of renewable natural resources, reduction of pollution and wasteful consumption.

United Nations Development Programme Romania,

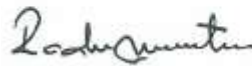
UNDP is the UN's global development network, an organization advocating for change and connecting countries and knowledge, experience and resources to help people build a better life. UNDP supported Romania's intensive efforts for joining the European Union and contributed significantly to preparing the country's national strategies, programs and policies.

The Association of Energy Auditors for Buildings (AAEC),
President dipl.eng. prof. Emilia-Cerna Mladin, Ph.D.

A professional association aiming: to promote and support the new energy auditor profession; to promote new intelligent solutions for energy use that lead to lower energy loads at the final consumer; to inform and educate the general public to achieve an "energy attitude"; to help decision factors to adopt the best energy and environmental policies and programs.

The "Ion Mincu" University of Architecture and Urban Planning,
President prof. arch. Emil Barbu Popescu, Ph.D.

The Cluj-Napoca Technical University,
Rector dipl.eng. prof. Radu Munteanu, Ph.D.



The Association of Student Architects (A.St.A.) Cluj,
President stud. arch. Adrian Pop



Reteaua de Actiune pentru Clima Romania,
President Elisabeta Teodorescu

Asociatia Alma-Ro,
President Adrian Badila

Fundatia Terra Mileniul III,
President Lavinia Andrei

Contact Person:

Anca Bieru - Director Membership & Public Affairs RoGBC

Anca.bieru@rogbc.org
Tel: 021 5695012
Fax: 021 2231201
www.rogbc.org