



BULGARIAN NATIONAL CONFERENCE

“SUSTAINABLE ENERGY DEVELOPMENT OF THE MUNICIPALITIES IN BULGARIA”

06 June 2011, Burgas

In terms of decentralization and expanding the power of local governments, municipalities are playing more significant role in the management of energy. Rational use of energy resources, manufacture and supply of energy is a major concern of municipal authorities. During the last decade concerns about the effect of greenhouse gases on climate change and the responsibility of local authorities are growing. Therefore, energy planning and ensuring energy independence became a major component of sustainable development policy of each municipality.

In 2009 Burgas Municipality joins Covenant of Mayors initiative - an initiative of the European Community, recognizing the leading role of local authorities in achieving the goals of reducing CO₂ by 20% by 2020., the municipality is committed to develop a Local Action Plan to increase energy efficiency and utilize the possibilities of renewable energy sources.

For the last few years Burgas Municipality has been active in organizing awareness rising campaigns for increasing knowledge of the population on rational use of natural resources and energy and possibilities of use of RES through various initiatives such as exhibitions, classes, etc.

Energy Week 2011 was named “Green days in Burgas” and it included series of events aiming at changing people behavior toward environment and energy use.

Part of Energy Week 2011 was a conference “Sustainable energy development of the municipalities in Bulgaria” held on 06 June 2011, which was focused at Bulgarian local authorities. The aim of the event was to share the experience of municipalities in Bulgaria in the process of development and implementation policies and strategies for sustainable energy planning and development. Along with the experience of municipalities in Bulgaria in the field of energy development, policies and good practices contributing to the transition of municipalities into sustainable energy communities, a draft version of "Strategy for sustainable energy development of the Municipality of Burgas 2011 - 2020" was presented which will be instrument in achieving the EU targets 20/20/20 enshrined in the signed by the Mayor of Burgas Covenant of Mayors.

The meeting was launched by Mrs. Atanaska Nikolova – deputy mayor “EU Integration and environmental protection”, Municipality of Burgas that presented the steps that Burgas has

taken toward reaching energy sustainability. The presentation was named „Solutions to achieve energy sustainability on local level – policies and good practices of Burgas Municipality” and described the challenges that are the base of increase of the harmful emissions, such as:

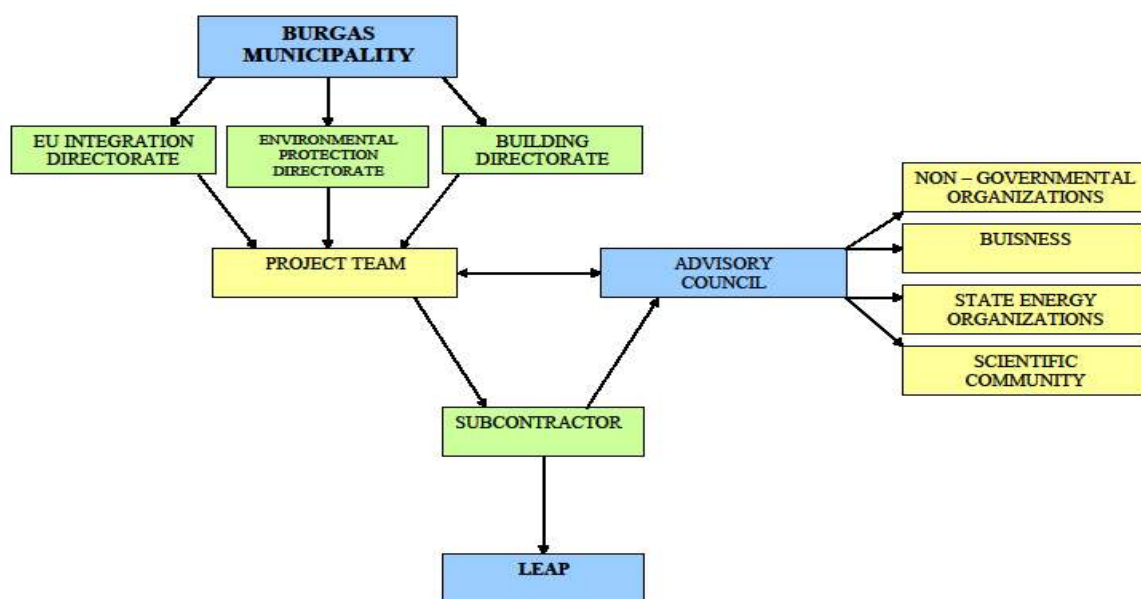
- High urbanization – 50 % of the population of the world is living in cities
- Urban areas generate 2/3 of the CO2 emissions;
- The pollution by vehicles increases with 2,5% a year

and how local authorities can contribute for reduction of emissions:

- Development and implement local energy plans;
- Introduction of energy efficiency measures in public and residential buildings;
- Improvement of the public transport and enhancement the use of alternative means of transport;
- Increase awareness;

Taking into account that the Local Energy Action Plan should serve not only for the administration but for the whole community, Municipality of Burgas took an approach that involves wide range of stakeholders into the process of LEAP development - from outlining components of LEAP, setting priorities and targets to setting measures to be implemented - Burgas Municipality invited different key actors from energy sector, NGOs, science sector, big industrial companies on territory of Burgas, decision makers and many others to form the so called “Advisory council” to support Burgas municipality in LEAP development and its implementation.

ORGANIZATION CHART OF LEAP DEVELOPMENT TEAM



Mrs. Nikolova also presented good practices in Burgas Municipality such as gasification of the city, introduction of energy efficiency measures in public buildings, pilot projects for introduction of EE measures in multi-family residential buildings, energy efficient street lightning, sustainable transport (replacement of bus fleet with vehicles using methane) and many others.



Next the word was given to Mrs. Liyana Adjarova – Executive director of Association of Bulgarian Energy Agencies whose presentation focused on how local authorities should choose long and short term priorities; Presentation was named „Targets, priorities and measures of municipal actions plans and programs on EE, RES, air quality and sustainable energy – short term and long term conceptions for sustainable energy development“. The focus was on local, national and EU law on EE, RES, environmental law and air quality. Results of inventory of energy use, CO₂, share of RES in different municipalities in Bulgaria were shown. Mrs. Adjarova also presented the steps that local authorities should follow in setting of local energy policy, laws that should be taken into consideration and how to link targets at local level with the targets set at national and EU level;

A draft version of “Strategy for sustainable energy development of Burgas Municipality 2010 – 2020” and Local Energy Action Plan 2011 – 2013 were introduced by the Consultants developing the LEAP. They also presented stages in Burgas’ LEAP development, the results of CO₂ inventory of sectors industry and households, transport and municipal infrastructure

(including street lightning) were presented and showed comparison of the energy use during the baseline 2005 and the last year of inventory 2010 that are the base for setting long and short term priorities and measures to be implemented;

Burgas has set the following targets:

- Reduction of the CO2 emissions in Burgas Municipality 25 % to 2020
- Reduction of the energy usage in Burgas Municipality 27 % to 2020
- RES share in the energy mix of Burgas Municipality 26 % to 2020

Achievement of which is distributed as follow:

ENERGY EFFICIENCY

	Energy savings	Cost savings	Investment	Reduction of harmful emissions	Reduction of CO2	Reduction of energy consumption
	MWh/year	lv./year	lv.	t CO2/ year	%	%
Energy efficiency in municipal buildings	11 054	1 603 656	9 677 149	3 678	0,60%	0,85%
Energy monitoring of municipal property buildings	1020	15 682	649 700	368	0,06%	0,08%
Construction of energy grid independent street lighting	7246	1 700 000	30 000 000	4949	0,81%	0,56%
Energy efficiency in Household sector	266 860	80 000 000	784 500 000	110 028	18,06%	20,52%
Reduction of the losses from the heating network	37 000	10 000 000	130 000 000	17290	2,84%	2,85%
Energy efficiency in Industry sector	30 000	10 000 000	100 000 000	20490	3,36%	2,31%
Optimizing and renovating the public transport	4899, 151	1 203 806,256	7 834 3000	1308	0,21%	0,37%
Alternative modes of transport	749	184 068	4 600 000	200	0,03%	0,05%
TOTAL	358828,15	104 707 212,26	1 137 769 849	158 311	25,97 %	27,59 %

RENEWABLE ENERGY SOURCES

	Installed capacity	Produced energy per year	Income	Investment	Reduction of harmful emissions	Share of RES
	kW	MWh/year	лв/год.	lv	t CO2/ year	%
Photovoltaic modules integrated in municipal buildings	1 613	2 078	1 157 723	9 649 496	1 324	0,16%
Indicators for solar collectors for hot water		615	123 261	1 123 199	182	0,05%
Biomass	12 000	53 859	10 502 505	24 000 000	36 785,697	4,14%
Biogas from wastewater treatment plants and landfills	830	6 938	1 723 500	3 750 000	4 738,654	0,53%
Photovoltaic modules integrated into privately owned buildings	70 000	88 000	50 887 655	420 000 000	60 288	6,77%
Wind plants	150 000	185 000	32 005 000	381 450 000	126 355	14,23%
Big solar installations	6 000	7 500	3 637 500	29 340 000	5 122,5	0,58%
TOTAL	240 443	343 990	100 037 144	869 312 695	234 795, 851	26,46 %

TRANSPORT

	Reduced mileage	Fuel reduced	Income	Investment	Reduction of harmful emissions
	km	liters	Lv/year	lv	t CO2/ year
Reducing the mileage of the buses serving urban transport within "integrated urban transport project"	1 319 963	501 585,94	1 203 806,256	132 000 000	1308

“Instruments to enhance local policies for sustainable energy development” was the topic presented by Mr. Zdravko Genchev – Executive Director of Centre for energy efficiency “En Effect”.

Mr. Genchev introduced the goals of the association of Bulgarian municipalities EcoEnergy, which serves as an instrument for outlining and enhancement local policies for sustainable development and energy efficiency; frame methodology for municipal energy planning – an instrument for integration of local policies for EE in the policies for sustainable development; Covenant of Mayors initiative, its members and various good practices applied by the members and available financial instruments to fund SEAPs’ implementation;

He also presented the portal “Let’s build green” <http://www.buildingreen.net/>, instrument for buiding knowledge and skills for low emission building. Various up to date information is available there such as news, discussions, interviews, etc. Books for green architecture were distributed among the public.

Mr. Genchev introduced to what is passive house, the advantages for building such house and presented the idea for development of joint project between Burgas Municipality and Centre for energy efficiency “En Effect” as an instrument to achieve one of the long term priorities of Burgas Municipality to build a new residential area entirely consisting of passive houses.

Representatives from other municipalities in Bulgaria – members of Covenant of Mayors initiative (Dobrich Municipality and Karlovo Municipality) presented their stages in the development of Sustainable Energy Action Plan and best practices in implementing measures for Energy Efficiency and Renewable Energy Sources.



As a result of the conference “Sustainable energy development of the Municipalities in Bulgaria” representatives of local authorities gained significant knowledge in the process of energy planning on local level and development of instruments for its management, which will turn them into sustainable energy communities and will contribute to achieve the ambitious targets set by EU – 20-20-20 by 2020.