

# SEAP

## best practices on the Black Sea Coast

Round table “Covenant of Mayors”

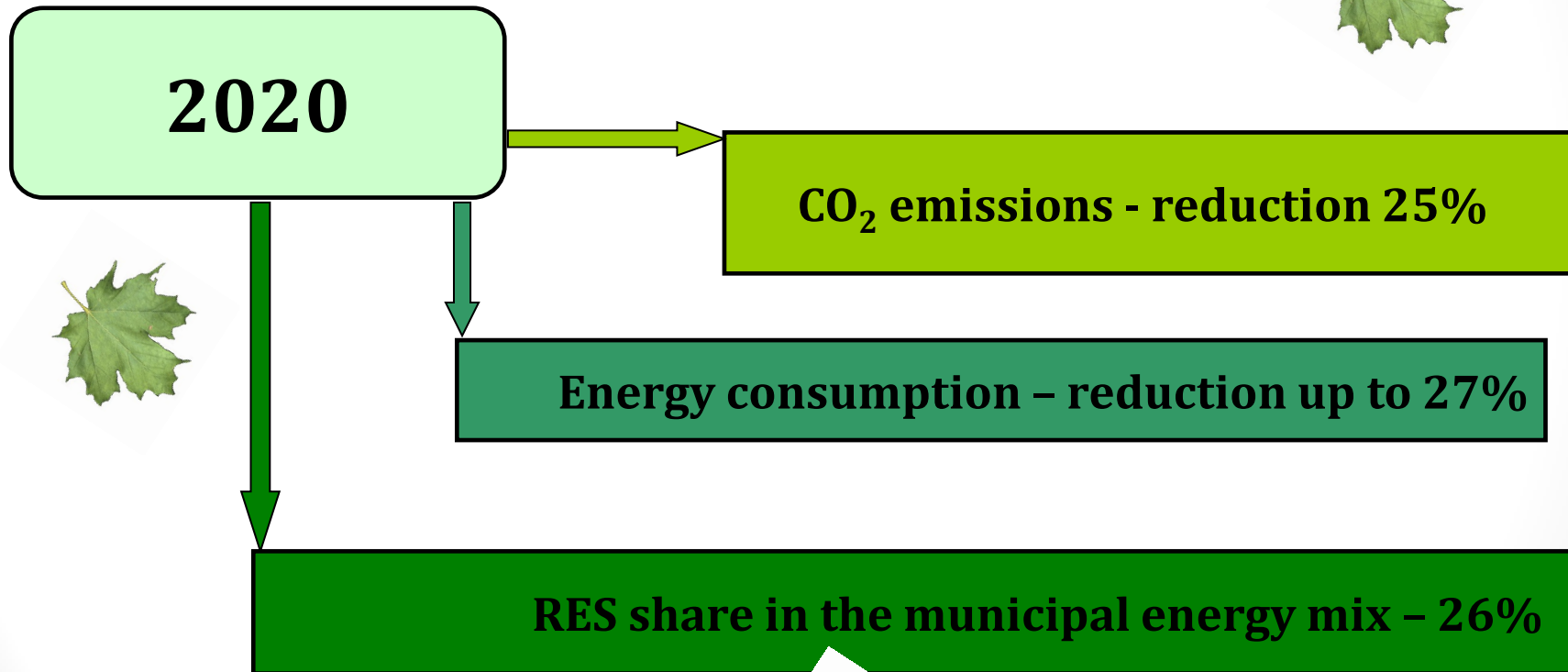
Varna, 12.09.2014

Graffit Gallery Hotel



# BOURGAS – CITY OF GREEN OPPORTUNITIES

## SEAP of Bourgas 2011 - 2020





# BOURGAS – CITY OF GREEN OPPORTUNITIES

**Priority 1:  
Sustainable infrastructure – construction and development**

**Priority 2:  
Development of sustainable urban mobility systems**

**Priority 3:  
Use of RES**

**Priority 4:  
Support to energy behaviour change**

**Priority 5:  
Raise of local capacity for sustainable energy development**





# BOURGAS – CITY OF GREEN OPPORTUNITIES

## Priority 1: Sustainable infrastructure – construction and development

EE measures in  
113 municipal  
buildings

Energy saved  
13 053 105kWh

Planned energy savings  
11 054 MWh/ y

CO<sub>2</sub> saved  
3 633t

Planned CO<sub>2</sub> savings  
3 675t/ y.

“Energy renovation of Bulgarian homes” project - OP “Regional development” - 17 multifamily buildings approved on the territory of the city

Planned energy savings  
266 860MWh/ y.

Planned CO<sub>2</sub> savings  
110 028t/ y.



# BOURGAS – CITY OF GREEN OPPORTUNITIES

## Priority 1: Sustainable infrastructure – construction and development

EE measures in street lighting:

- 3 753 replaced bulbs;
- Automatic control and monitoring system

Energy saved  
1 109 780kWh

Planned energy savings  
7 246 MWh/ y.

CO<sub>2</sub> saved  
674 t

Planned CO<sub>2</sub> savings  
4 949t/ y.





# BOURGAS – CITY OF GREEN OPPORTUNITIES

## Priority 2: Development of sustainable urban mobility systems

Planned energy savings  
5 648MWh/ y.

Planned CO<sub>2</sub> savings  
1 508t/ y.

“Integrated urban  
transport of Bourgas”,  
OP Regional  
Development

Generally renewed bus fleet  
of the public transport

Introducing of systems for  
integrated transport control

Construction of 59  
km cycling tracks

“Implementation of measures for improvement  
of life quality in cities of Bourgas, Varna, Stara  
Zagora and Pleven” – OP “Environment”

Expected delivery of new  
22 trolley busses

“Attractive PT for accessible cities”, OP SEE

Transport SMART terminals for real  
time information for alternative  
transportation

“Bicycle city – model of the modern urban  
mobility” - GEF

City bike system with capacity of 12  
cycling stands and 120 bikes



# BOURGAS – CITY OF GREEN OPPORTUNITIES

## Priority 3: Use of RES

Construction of solar systems part of the EE measures in public buildings

Planned energy production  
2 078MWh/ y.

Planned CO<sub>2</sub> savings  
1 324t/ y.



## Priority 4: Support to energy behaviour change

Ecology days;  
Joined campaigns with utility companies, recycling companies;  
European mobility week; Composting

Separate waste collection in city administration;  
“NO office paper” week  
GPPs





## SEAP Dobrich „Energy sustainable Dobrich 2020“



### ***PRIORITIES:***

**Priority 1:** Implementation of integrated package of measures for improvement of the EE in municipal buildings;

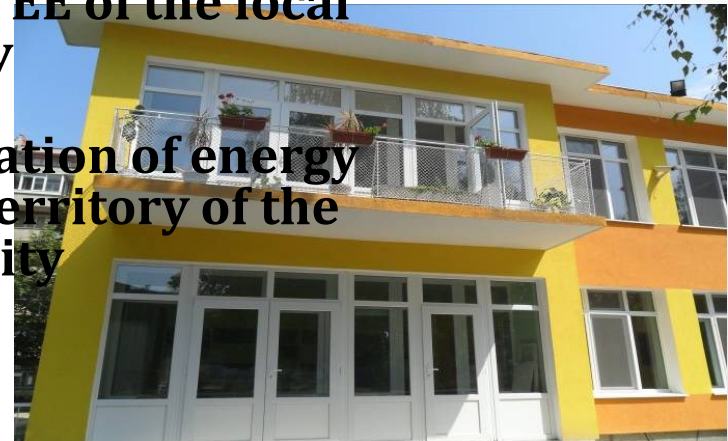


**Priority 2:** Increase of EE in households

**Priority 3:** Increase of EE of the local industry



**Priority 4:** Implementation of energy management on the territory of the municipality







## SEAP Dobrich „Energy sustainable Dobrich 2020“

### Goals

- **25 %** decrease of CO2 emissions;
- **25 %** decrease of energy consumption;
- **20 %** RES share in the total energy consumption

**Achievements:** 8 kindergartens and schools with installed solar systems for  
**2013** DHW;  
16 municipal buildings retrofitted and isolated  
Street lighting replaced with energy efficient bulbs  
Biofuels used in all vehicles of the public transport  
Established Energy info point  
Created a pilot bureau for complete information services in  
energy efficiency (Project “Knowledge and skills for enhancing EE in buildings”  
Campaigns: Municipal Intelligent Energy Days, European  
Mobility Week, etc.



## SEAP Dobrich „Energy sustainable Dobrich 2020“

### Financial sources

- **EESCO services** – Contracts with guaranteed result – **4 large developments 1 mln EUR investment**, 7 years payback period
- Operational programmes
- Fund “Energy efficiency and RES”
- International fund “Kozloduy”
- Municipal budget
- Loans from international and trade banks
- Grants from different funds and international programmes
- Fund “ELENA”

## SEAP Varna 2012-2020

**Priority 1** – Rehabilitation, modernisation and construction of infrastructure, ensuring environment for sustainable growth and employment

**Priority 2** – Development of sustainable urban mobility systems

**Priority 3** – Increase of the amount of produced and consumed energy from RES on the territory of Varna municipality

**Priority 4** – Increase of the managing capacity of the stakeholders and improvement of the awareness of the population of EE programmes, financing opportunities and use of RES



## SEAP Varna 2012-2020

- *Energy audits of 14 municipal buildings* – nurseries, kindergartens, schools, hospitals, social houses and administrative buildings

Expected **energy savings** – 3 788 MWh/y;

Expected **CO<sub>2</sub> savings** - 1 422 t/y

- *“Energy renovation of Bulgarian homes” project* - OP “Regional development”  
- 23 applications submitted by multifamily buildings
- *Construction of a system for intelligent street lighting and full control and monitoring of each individual post in all major transport roads in Varna* – International fund “Kozloduy” -- **Expected reduction of CO<sub>2</sub> – 2 655 y**
- *Integrated public transport of Varna* – OP “regional Development” - **50 new buses** with diesel engines, **20 busses with CNG**; **16 km of cycling tracks** to be constructed
- *Implementation of measures for improvement of life quality in cities of Bourgas, Varna, Stara Zagora and Pleven* – OP “Environment” – **new trolley busses** delivery, starting as from May 2014

## SEAP Varna 2012-2020

MOBISEC (EC, DG MOVE)– improved *pedestrian and cycling infrastructure* in respect to safety



- Comprehensive analysis of the potential for construction of RES installations in municipal buildings.
- Identified very good potential for use of **solar energy, geothermal waters and biomass.**
- Digital website created of Directorate “Engineering infrastructure and public works” with panel dedicated on EE with comprehensive relevant information
- Created an Advisory board for sustainable energy development with controlling and managing functions

**Thank you for your attention!**

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