

0

Meeting Wroclaw (Poland) – 19/20/21 April 2017

SMART CITY LIFE:

TECHNOLOGY AND SERVICES FOR THE FULL USABILITY OF GREEN AREAS

Dynamic Light – Tea S.p.A., Mantova

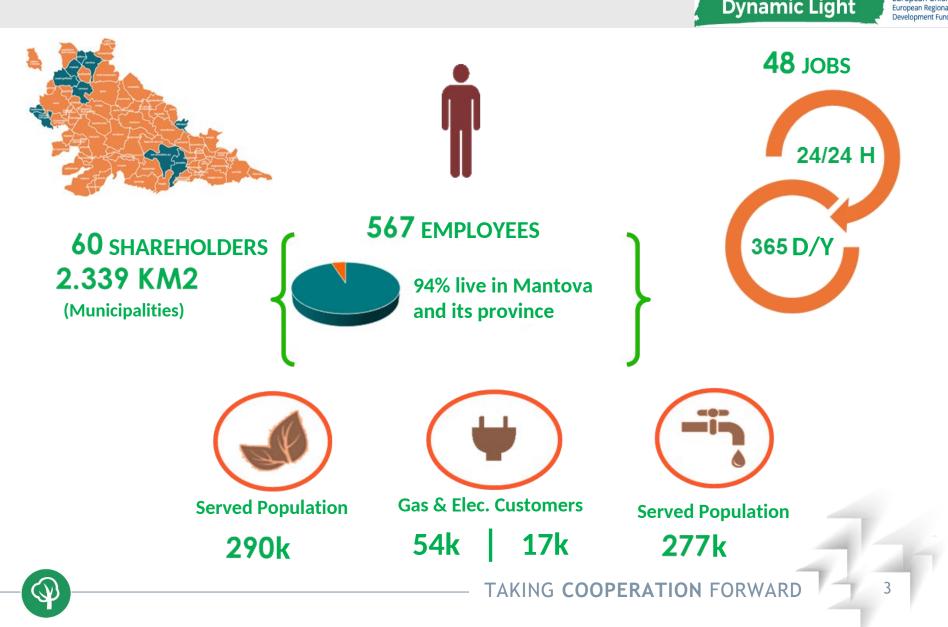
GROUP STRUCTURE





TEA AT A GLANCE





BOSCO VIRGILIANO PROJECT



Bosco Virgiliano is an extended green area at the edge of Mantova and a very known hangout for recreational activities by all the community. In the same area you can find public and private sports facilities, fields used for social vegetable gardens and accomodation facilities for children and young people of "Villaggi SOS" Association.





Dynamic Light

Interreg

European Regiona Development Fund

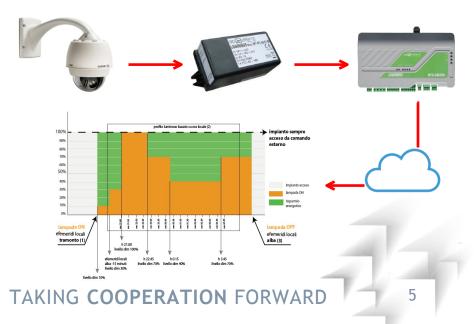
LIGHTING REDEVELOPMENT

Replacement of the traditional light sources with LED lighting systems, providing an estimated energy saving of 65% and a better "light" distribution, aimed at eliminating light pollution (amount of "Urban Sky Glow" < 0,49 cd/Klm)



USE OF VIDEO CAMERAS WITH "VIDEO ANALYTICS AT THE EDGE" FOR ADAPTIVE LIGHT **CONTROL**

On the basis of detection and movement on the field (pedestrians, bicycles, service vehicles), the amount of radiated light is regulated through dimmering, in order to guarantee people security and an efficient consumption at the same time.







ACTIVATION OF CONTEXT VIDEO SURVEILLANCE SYSTEMS

Placement of security video cameras equipped with specific software that allow to automatically elaborate video signals, identify potential risks and send the information to a control center (morphological and forensic features, intelligence tracking, speed detection...)





• AIR QUALITY ANALYSIS AND CRITICAL EVENTS MONITORING

Implementation of a measurement system regarding air quality parameters and a monitoring system of critical events (such as whirlwinds) using weather forecast services





• INTERACTIVE TOTEMS

Availability of touch tools in order to show touristic and recreational information, as well as the dedicated "Digital Guardian Angel" service (a tracking app activated within the green area)



TAKING COOPERATION FORWARD

• FREE WI-FI Free Wi-Fi Internet connection in the whole green area



Interreg

CENTRAL EUROPE

Dynamic Light

European Unior European Regiona Development Fund





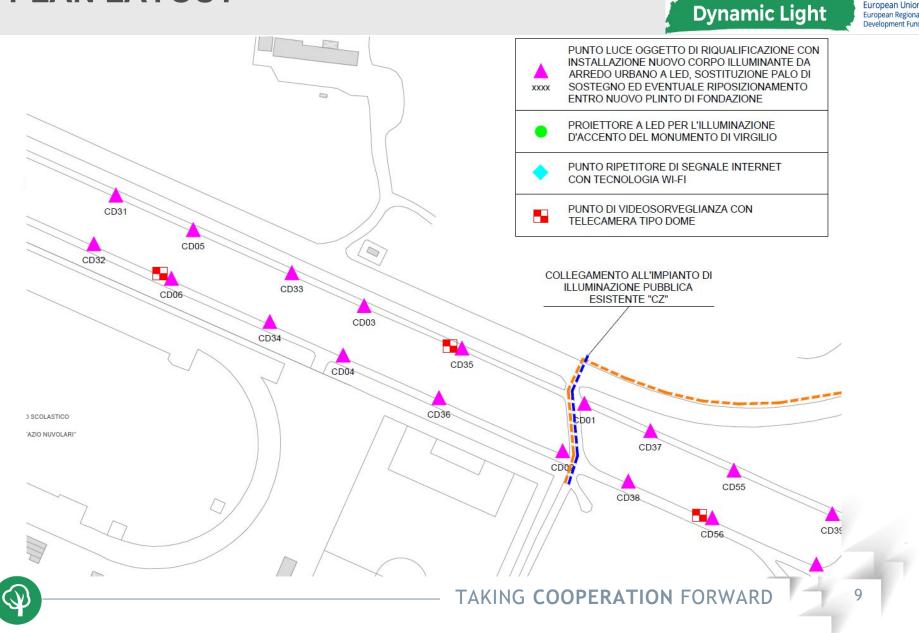




PLAN LAYOUT



European Unior European Regiona



PL INFRASTRUCTURE TECHNICAL DETAILS



The entire operation provides:

- Structural redevelopment of the current 58 light fixtures and realization of optical fiber infrastructure
- Revamping of light sources with the installation of n. 58 "Full Cut-Off" LED technology lighting systems, equipped with bio-dynamic light (4.000K ÷ 2.500K) and point-to-point remote control
- Renovation of the electric power and control panel with implementation of the point-to-point remote control system through "power line" technology and optical fiber connection

Currently installed power: 7,00 kW After-Revamping power: 2,00 kW Estimated energy saving (Revamping + Dynamic): 🖋 65%, considering the operating outline determined by AEEGSI (4.196 average annual hours)

GANTT



Dynamic Light

European Union European Regiona Development Func

0	Modalită attivită	i Nome attività	Durata	Inizio	Fine	febbraio 30/0106/0213/0220,	marzo /0227/0206/0313/0320	aprile	maggio 17/0424/0401/0508/0515/0	giugno 522/0529/0505/061	luglio 2/0619/0626/0603/0710/0717	agosto /0724/0731/0707/0814/08	settembre
1		Progetto Bosco Virgiliano	158 g?	ven 17/02/17	mar 26/09/17								
2	*	Progettazione preliminare	1 g	ven 17/02/17	ven 17/02/17	8							
3	*	Autorizzazione da gestori terzi	15 g	mar 02/05/17	lun 22/05/17				_				
4	*	Conferenza Servizi	15 g	mar 02/05/17	lun 22/05/17				-				
5	*	Sottoservizi ENEL	15 g	mar 02/05/17	lun 22/05/17					1 C			
6	*	Sottoservizi TELECOM	15 g	mar 02/05/17	lun 22/05/17								
7	*	Sottoservizi Gruppo TEA	15 g	mar 02/05/17	lun 22/05/17								
8		Progettazione esecutiva	15 g		ven 19/05/17				_				
9	-	Trasmissione al responsabile Lavori Pubblici per presa d'atto	10 g		ven 02/06/17					*			
LO	-	Selezione partner	45 g	lun 27/02/17	ven 28/04/17								
11 📖	-	Incontri con Bosch , APSystem	45 g	lun 27/02/17	ven 28/04/17		*		lenne l				
12	-	Forniture	41 g?	lun 05/06/17	lun 31/07/17								
13		Infrastrutture	41 g?	lun 05/06/17	lun 31/07/17								
14 🕴		Corpi illuminanti	41 g?	lun 05/06/17						-			
15		ordine	1 g?	lun 05/06/17	lun 05/06/17					1			
16	-	fornitura	40 g	mar 06/06/17	lun 31/07/17					*		1	
17	• =:	Telecontrollo	41 g?	lun 05/06/17	lun 31/07/17					-			
18		ordine	1 g?	lun 05/06/17	lun 05/06/17					1			
19	-	fornitura	40 g	mar 06/06/17						*			
20	-	Pali	41 g?	lun 05/06/17									
21		Ordine	1 g?	lun 05/06/17						1			
22	-	Fornitura	40 g	mar 06/06/17						+			
23	• =:	Parte infrastrutturale - opere edili	2 g		mar 06/06/17								
24	-	ordine	1 g	lun 05/06/17						1			
25		fornitura	1 g		mar 06/06/17					T.			
26	-	Smart devices	41 g		lun 31/07/17								
27		Video Sorveglianza con analisi video e regolazione dinamica illuminazione	41 g		lun 31/07/17								
28	-	ordine	1 g	lun 05/06/17	lun 05/06/17					+			
29	-	fornitura	40 g	mar 06/06/17		-				-			
30	-	Pannelli informativi	41 g		lun 31/07/17					_			
31	-	ordine	1 g	lun 05/06/17									
32		fornitura	40 g	mar 06/06/17						-			
33	-	WIFI	40 g		lun 31/07/17								
34	-	ordine	1g	lun 05/06/17						+		2.5	
35	-	fornitura	40 g	mar 06/06/17									
36 🕴	-	Montaggio e posa in opera	40 g		mar 26/09/17					-			
37	-	Infrastrutture	80 g		mar 26/09/17								
38		Parte infrastrutturale-opere edili	80 g		mar 26/09/17					·			
39		Fibra ottica	80 g		mar 26/09/17					+			
10		Pali	30 g	mar 01/08/17								+	
41		Corpi illuminanti	30 g	mar 01/08/17 mar 01/08/17								+	
42		Telecontrollo	-									+	
42		Smart devices	30 g	mar 01/08/17									_
44		TVCC	20 g		lun 28/08/17	1						÷	
44	-		20 g	mar 01/08/17								+	
10.11	-	Pannelli informativi	20 g	mar 01/08/17		-						+	
46		WIFI	20 g	mar 01/08/17	lun 28/08/17								

TAKING COOPERATION FORWARD



17

ECONOMIC DIMENSION OF THE ACTION

BUDGET LINES	COST (EUR)
Public lighting infrastructure (dynamic lighting with LED)	54.000,00
Construction works	9.800,00
Video surveillance system	19.200,00
Wi-Fi network	4.500,00
Information panels	27.500,00

• Energy savings: with LED / TLC PP system, about 65%

• CO₂ savings: about 8 tons/year - 4 TEP/year



European Unior European Regiona Development Fund

Dynamic Light

Interreg

CENTRAL EUROPE



European Regiona Development Func

Lighting Project Event October 2017 – Mantova, Italy



We will gladly welcome all of you in our beautiful city!



TAKING COOPERATION FORWARD