

TAKING COOPERATION FORWARD

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Policy aspects of dynamic lighting implementation

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AGENDA



Introduction

V

Methodology aspects

EU Policy Framework



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Public Lightning in the EU - Key environmental impacts



Source: European Lamp Companies Federation (2005)

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Public Lightning in the EU - Key environmental Impacts

PRODUCTION PHASE

- Materials used will influence the impact in production and end of life phases
- Glass, metals, plastics, ...
- Mercury
- Maintain optimal life cycle performance and maximum energy efficiency

USE PHASE

- Energy consumption
- Energy efficiency and efficacy
- Wasted light
- Obtrusive light / light pollution
- Product durability



Public Lightning in the EU - Key environmental Impacts

END OF LIFE AND WASTE MANAGEMENT

- Recycling of the used materials
- Special facilities that have the required technology
- Managing of possible environmental impacts such as ecotoxicity

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POSSIBLE SAVINGS: €5.3 **BILLION PER YEAR (70%)**

Public Lightning in the EU - Key figures





2015





INTRODUCTION

LIGHTING



Public Lightning in Germany Key figures

- €3.4 billion for municipal electricity and heat supply
- 40% of them for public lighting
- Energy efficiency savings potential: €400 million or kWh 2.2 billion per year





Public Lightning in Italy Key figures

- Italy spends more on street lighting than any other EU country
- €1.7 billion in 2015
- Potential energy savings with a public lighting efficiency system: up to €400 million per year



Public Lightning in Italy - The example of Milan



- 23.650 less tons of CO2
- 60.000 less bulbs every year
- 9 tons of waste will be saved per year
- Removing of all mercury and other polluting materials

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Public Lightning in EU - Examples from the Streetlight-EPC Project

	Municipality of Gunskirchen (Upper Austria)	Municipality of Kostrena (North-West Croatia)	Municipality of Gdansk - SOWA Piecewska (Pomerania, Poland)	Municipality of Trhové Sviny, South Bohemia (Czech Republic)
Inhabitants	5.800	4.180	460.430	5.100
Electricity cost savings €/year	12.500	24.000	2.300	1.090
Maintenance cost savings €/year	28.000	20.500	/	740
Reduction electricity consumption kWh/year	78.300	222.500	16.000	9.900
CO2 reduction tons/year	36	102	7.4	4.6

* (not guaranteed in the EPC contract)

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METHODOLOGY



Methodological Approach

- Main Task: "Developing strategy on promoting dynamic lighting with legal certainty"
 - Meeting EU and Local Legal and Policy Frameworks
- Qualitative data analysis -> content analysis
- Main source of information provided by PPs:
 - Questionnaires about legal questions and policy aspects regarding public lighting development
- Secondary data analysis provided complementary information for a comprehensive comparative analysis
- Main Outcomes:
 - 6 Country Reports (Croatia, Czech, Germany, Italy, Poland, Slovenia) and European Report (EU Report)
 - Strategy to facilitate the integration of dynamic lighting from a legal perspective



METHODOLOGY



Challenges for the Policy and Legal inquiry

- Lacking of a clear definition
- Working definition within the DL-Project:
 - "Dynamic lighting is adaptive lighting, i.e. it is being provided where and when it is needed depending on different variable conditions, such as travelling speed, traffic volume and/or composition, ambient luminances, weather and other exterior factors in a way that it reduces light pollution as well as energy consumption; beyond that it recognizes varying human and social needs, such as aesthetics or feeling of safety, as a basic concern and key factor in the design of adaptive public lighting."
- What kind of lighting does the project tackle?
 - Street
 - Urban
 - Public



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EU - POLICY FRAMEWORK





EU - POLICY FRAMEWORK



Comparative Inventory of the political/legal framework

- Norms, standards and regulations Α.
 - Ecodesign Directive: Directive 2009/125/EC Α.
 - Energy labeling Directive: Directive 2010/30/EU Β.
 - Ecodesign and energy labelling Directional and LED lamps: С.
 - Commission Regulation (EU) No 1194/2012 ecodesign requirements for directional lamps, light emitting Α. diode lamps and related equipment.
 - Commission Delegated Regulation (EU) No 874/2012 Directive 2010/30/EU regarding energy labelling of Β. electrical lamps and luminaires.
 - Commission Regulation (EU) 2015/1428 of 25 August 2015 amending Commission Regulation (EC) No С. 244/2009 with regard to ecodesign requirements for non-directional household lamps and Commission Regulation (EC) No 245/2009 with regard to ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps (repealing Directive 2000/55/EC and (EU) No 1194/2012)
 - Regulation (EC) No 245/2009 with regard to eco-design requirements for fluorescent lamps D. without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps (repealing Directive 2000/55/EC, and Regulation 347/2010).
 - Directive 2000/55/EC on energy efficiency requirements for ballasts. Ε.
 - F.

No worries ... we are

not going to read the

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MAIN RESULTS

Inventory Part I

- The inventory's goal is to have an overview of the legal and political circumstances of urban lighting on a country/regional level.
- 3 sections
 - General aspects concerning urban lighting
 - Ownership, maintenance, and operation
 - Political strategies and targets
 - Actors and Stakeholders
 - General Legal Background
 - Public and Private Procurement
 - National Public Procurement
 - Regional Procurement
 - International Procurement
 - Green Procurement
 - Development of Lighting Facilities
 - Planning and authorization
 - Refinancing sources/mechanisms
 - Construction
 - Cost relevant aspects





MAIN RESULTS



- Most national obligations for EU Member States • are derived from international law
 - i.e. International treaties •
 - Research should focus on a common • international framework/EU Framework
- Project is a Central European effort, so the main • sources here are:
 - **EU** Legislation •
 - **EU** Policies •



Interreg

Dynamic Light



identify and engage with the

Securing the finance to cover init

benefit. Do not install new lightin where it is not needed, but imple SSL as an integral part of all pe

to showcase the benefits of SSL to t

design that most effectively solves th

specific lighting tesk, balancia

Procuring and Prioritization Make initial i

tments, (Lighting) Industry m

COMPARATIVE ANALYSIS

V



Dynamic Light

DIN	GERMANY	SLOVENIA	ITALY	POLAND	CROATIA CZECH REPUBLIC		
B.I. National Public	Euro Germany uses the sai its currency.	Slovenia uses the state to currency.	Raly uses the as its currency.	Poland dom will be the Euro. The national	Containing Contained size the func. The national correspondences in Croatia is the Kuna (MRIQ)	Currency	
Procurement	Information According	Conserval Autorett	Ceneral Aspects	Currency in Poland is the Zhoty (PLN).	In Croatia is the Kuna (The Carch Republic when have the Earth. The Statumed correctly in the Carch Republic is the Carch Konuna	
	Laws in Germany regarding urban lighting that have been implemented due to a legal act on an EU level	Laws in Slovenia regarding urban lighting that have been implemented due to a legal act on an EU level include	Laws in they regarding urban lighting that have been	General Aspects Laws in Poland regarding urban lighting that have	Less in Croatia regarding listen latting the have been implemented due to a legal kit on an EU listen include Directive 2010/2010 on the insult of concession contracts, Directive 2010/2010 on		
	been implemented due to a legal act on an EU level include Directive stansized BU - on the award of mocession contracts. Directive additional of the on procurement, and Directive additional of the one procurement by entities operating in the water, energy.	Derective 2014/24/5U - on public procurement and	Implemented due to a legal act on an EU level include Directive 2014/2014/U- on the award of concession contracts, Directive 2014/24/U- on gublic procurement, and Directive 2014/25/U- on gublic		Been implemented due to api act on an EU level	General Aspects	
and the second se	Incession contracts. Directive 2004/24/8V - on public	Deactive 2014/25/EU - on procurement by entities	contracts, Deletive 2014/24/EU- on public	level include Directive 3014/25/ED - on the award	include Directive acts, Directive and the award of	Pat have been implemented due to a legal act on an	
	procurement, and Directive 2014/25/EU- on	operating in the water, energy, transport and postal	procurement, and Directive usage stress on procurement by entities operating in the water, energy,	evel include Directive 2014/25/PD - on the sward of concession contracts, Directive 2014/25/PD - on public procurement, and Directive 2014/25/PD	concession contracts, on core assurance on public procurement, and Directive assarching on on	U level include Directive 2004/2004 - on the award of concession contracts, Directive 2004/2004 - on	
	procurement by entities operating in the water, entities,	services sectors. Directive 2034/13/10 is on the award of concession contracts has not yet been implemented in	transport and postal services sectors.	- on procurement by entities operating in the		P conception contracts, Directive BOSA/De/EU Hon	
*	transport and postal services sectors. The nationally implemented laws regarding urban	Slovenia	The nationally implemented law in italy regarding	water, energy, transport and pestal services	energy, transport anemented land	Public processment, and Directive activity with on Processment by entries operating in the water, smergs.	
	Renting include the Konsessionsabgabeseroninung	Public Procurement Act (Official Gazette No. 91/2015) is the Slovenian Public Procurement Act and it establishes	urban lighting is the D. Lgs. 50/2016 - Public Contracts Regulations, and it adopts the EU directives on the	National Public Procurement rules for values		a writeport and pottal services section.	
			subject of grants and tenders in both ordinary and	above the EU thresholds		The nationally implemented laws regarding urban	
	Cover, Verordning user also vergous orrestations of Astraige (VV). Algemeine Verwaltungsvorschrift für Besachaffung energieeffürienter Produkte und Denstleibtungen (AVV-Griff), Verordning über Ebrasswinsabgaben für Strom und Gas (§ PKAV), and Scharzensenendenze (ScharVO).	nuthorities with respect to contracts and design contests.	special sectors.	The public procurement rules regulate The Act of		Afting which have been implemented is Act 134/2015 of April 19 2016 on Public Procurement, which	
	Besachaffung energieeffizienter Produkte und	The act transposes the above-mentioned EU directives	The D.Lgs. 50/2016 must be enforced with reference to all parts reserved to tenders with values both above	29 January 2004 - Public Procurement Law - At	National Public Procurement rules for values above	transposes the EU directives into national law without	
	Dienstielstungen (AVV-EnEM), Verordnung über	National Public Procurement rules for values above the	and below EV thresholds.	The Act of 22 June 2011. Amending the Act - Public	and the second burged in	a matter are charges.	
	Sektorenverordnung (SektVO).	EU thresholds	Relevant National Laws in regard to general	Procurement Law and some other acts. This act	the procurements for values show the EU	National Public Procurement rules for values above the EU thresholds	
	Unterestimation of the state of	Act shall apply to procurements with a value net of value	obligations and procurement	implements to estimate law EU disactions	thresholds is by Croatian aw considered as the procurement of high value. The procurement	When awarding a contract is the higher threshold.	
	All parts of the above mentioned directives have been	added tax (hereinafter VAT) estimated to be equal to or	The D.Lgs. 50/2016 (Public Contracts Regulations) in the	mentioned above: Classic Directive (Directive 2014/24/EU), Sectoral Directive (Directive	descentation must be deleared to both the	ereas, the contracting authority may sculy an open.	
	implemented, and all rules for procurement above	greater than the following thresholds: In the general field:	basic law in regard to tenders, and it is to be integrated with the Guidelines issued by ANAC (Autorità Nacionale	2014/25/EU), Sectoral Directive (Directive 2014/25/EU) and Directive 2014/23/EU.		Procedure as well as, provided that the conditions Moulated below are fulfilled, a regonated procedure	
	breshold values have been transposed into the GWB. Relevant National Laws in regard to general obligations	 EUR 20,000 for public supply or 	Anticorruzione - National Anti-Corruption Authority)	The new regulation of the Prime Minister was	(ECIN - https://ecin.mn.bi/Calansi/) as well as in Tenders Electronic Daily (TED). In open procurent	the with prior publication, a negotiated procedure without	
S. C. States and States and	and procurement	service contracts or design	the authority established for surveillance on public	published on 29 December 2015, on the value	Tenders Electronic Gary from in open procurero procedures and in restricted procurement	ent prior publication, a competitive dialogue procedure or	
	Mindestlohngesetz (Minimum Wage Law)	contests;	tenders.	throughold of contracts and design contests which imposes an obligation for the dispatching of	manufactors the deadline for the spole store and	an innovative partnership procedure.	
	Federal States' minimum Wage Laws	 EUR 40,000 for public works contracts; 	Legal protection below threshold values Legal protection for companies is available by filing an	imposes an obligation for the dispatching of polices to the Publications Office of the European			
A CONTRACTOR OF	Certain federal state laws (i.e. Gesetz		appeal to the Regional Administrative Court. Generally,	Union. The Regulation provides for the following	documentation to the EOIN and TED. In negotiat	Ion Small scale public procurement limits entail that limits	
	Mittelstodsförderung in Baden Württemberg)	contracts for services listed in	on the basis of records, this proves to be quite a good	EU musikolds, also applicable from 1 January	procedures with prior notion and competitive dialogue, the deadline for the delivery of an	to exclude the application of the Act are EUR 77,880	
	Tariffreuezesetze der Länder (Law on	Annex XIV to Directive	Jevel of protection.	2016:	dialogue, the deadline to the betwery of an application is 30 days from the delivery of the	(C2X 2,000,000) for supplies and services and EUR	
	Collective Agreements of the respective	2014/24/EU and Annex XVII to	National Thresholds All tender procedures are regulated by the D.Lgs.	1. for communition works regardless of the ordering: 1.005.000 Film,	wocurrement documentation to the EOIN and T	233,629 (CZX 6,000,000) for construction work. The ED. contracting authority is not obliged to use the	
	federal states)	Directive 2014/25/EU and Annex XVII to Directive 2014/25/EU	All tender procedures are regulated by the D.Lgs. 50/2016 (Public Contracts Regulation). There may be	IL for supplier and services:	National Public Print of American Inc.	contracting authority is not obliged to use the procurement procedure for the awarding of a small	
	ational threshold values	(hereinafter: social and other	exceptions within regional laws of some regions with	a) classical contracting: 135 000 EUR,	the EU thresholds	scale public contract, however, when awarding a small	
	elow threshold values, procurement law is purely udgetary ruling, and not legally visible. Thus, there is no	specific services), except for	Political Autonomy in certain matters such as the	b) sectoral contracting and in the field	Procurements of a low value are all those which emount from 26,489 EUR (200,000 HRX) for an	h scale contract, the contracting authority must comply	
	gal protection quite like it is ruled in the GWB. Still, it is	services which are covered by	autonomous Provinces of Trento and Bolzano.	of defense and security: 418 000 EU		ods with the principles of procurement such an IKI for thransparency and in an appropriately proportionate	
	ssible to go before civil courts and sue for damages or	CPV code 79713000-5	Central, National, and Regional Databases for Public Procurement	c) for other authorities: 209,000 EUR. The new Regulation of the Prime Minister was	mores. The procurement documentation must	De mateur	
	emporary legal protection".	In the infrastructure field: O EUR 50,000 for public supply or	The ability to review tender notices is possible via the	published on the 28" of December 2015 on the	Relivered only to the EDIN. It open procurem	ent Public contracts below-threshold means that a	
Ab	now threshold values, there are possibilities for review	 EUR 50,000 for public supply of service contracts or design 	database available at ANAC (Autorita Nazionale	average exchange rate of the sloty against Euro	procedures and in restricted procurement	contracts estimated value is below the threshold	
	supervisory authorities, such as a review of the	contexts:	Anticorruzione - National Anti-Corruption Authority) of	being the basis for converting the value of publ	c accedures, the deadline for the application of 20 days from the delivery of the procureme	belivery number and also exceeds the values for exclusion from int the Act. The choice of procurement procedures are	
	cision of a procurement chamber by a high court berianesgericht/Vergabesent); sofortige Beschwerde	EUR 100,000 for public service	on the Ministry of Infrastructure and Transport	contracts. According to this Regulation, euro		wither to award a public contract below threshold.	
17	1 GWBL	contracts for social and other	website. It is also possible to find tender notices	exchange rate for determining the estimated vi of - 4.1749 is obligatory from 1 January 2015.	modedures with prior notion and competitive	e meaning the contracting authority must apply a	
	tender goes beyond the European thresholds, it is	specific services, except for	published on the Regional Observatory website for the Lombardy Region territory.	The most important changes of the Public	minute the deadline for the application de	livery is simplified procedure, with the exception of a contracts	
stat	possible to have "single bids", who can be procured	services which are covered by	Method of Lighting System Acquirement	Procurement Law resulting from these directiv	es: No 20 days from the delivery of the procur	ement whose value exceeds EUR 1,946,916 (CZX 50,000,000),	
0.1	a national level, if their estimated net worth is below	CPV code 7971300-5. Notices regarding public contracts whose value, net of	The acquisition of lighting systems is carried out most	ty I. Simplification of procedures for the award of	ocumentation to the EQIN.	or type's above-threshold procedures; in which case	
E.0	R 80,000 for services and below EUR 1,000,000 for	VAT, is equal to or greater than the values referred to in	through public tenders.	contracts and their flexibility: bettor use of	Contraction of the local division of the loc	the contracting authority shall proceed pursuant to above threshold proceedings.	
Dut of the second se	iding/construction works and together they account less than 20% of the entire order volume (so-called	paragraph 1 of the preceding Article shall be published by	Contraction and the second second	negotiations as a means to clarify the terms of	Relevant National Laws in regard to genera		
	i contingent, § 3 Abs. 8 VgV).	the contracting authority on the public procurement	and the second se	contracts with contractors in order to obtain services; new rules also reduce the formal dut	a Ablientions and procurement	abligations and procurement	
AT	lederal states have threshold amounts which allow	portal. Notices regarding public contracts whose value,		at the stage of applying for the award of the	. M . 1 The decision of the Constitution	nal Court • 1 Regulation no. 163 - on detarmining the score of documents required for public	
the	contracting authority to award a tender via	net of VAT, is equal to or greater than the following values	Party and a start of the second	contract - the contractor has to only submit a	of the Republic of Croatia no.		
rest	ricted procedure with or without competition. The	shall be published by the contracting authority on the public procurement portal and in the Official Journal of		statement about fulfilling conditions for	1678/2013 from December 13	F", 2013. supplies or services including statements.	
follo	owing sections illustrate the above mentioned	the European Union:		participation in proceedings and no grounds f	and the second se	an annual of imagestates.	
	sholds in the example of the Bavarian Federal State.	In the general field:		exclusion, then only the selected entity will			
For	example, in Bavaria: • Services: EUR 100,000 for municipalities -	 EUR 134,000 for public supply or 		present other documents (mandatory above to EU thresholds and, optionally, other procedure	resh: 6.4. 3 (NN78/2012, 152/2014)	for the first actions of the contracting	
	above that, only under special	service contracts awarded by a		II. Promotion of non-economic public objection	the law on state commission		
	circumstances, § 3a VOB/A / § 3 VOL/A	contracting authority referred to		such as the environment, social integration a	the second of a ship and and the second second	Butilduty burning the warm and or part	
All fe	ederal states that have threshold amounts which	in point a) or b) of paragraph 1 of Article 9 of this Act, for design		support for innovation. In this regard, the	procedures (NN 152/2014, 1	27/2013. A Beaulation no. 248 - on elements of th	
	w the contracting authority to award a tender			amendment focuses on multiple values of the	74/2014)		
	tly without explanation ("freihändige Vergabe").	contests organized by such a contracting authority, and for		choices and not only the prices or cost. The	making and the treatment of	modification of the contractual oblight	
Par e	* Works: EUR 30,000 for municipalities; EUR	public supply contracts for	Contraction of the second	amendment also introduces innovation Partnerships, which is designed to acquire	minimum designment and	e and	
	Works: EUR 30,000 for municipalities; EUR 10,000 for federal state procurement	products listed in Annex III to		Partnerships, which is designed to acquire products and services that are not yet availa	bie on tenders (NN 10/2012)	Procurement.	
and a state of the	departments	Directive 2014/24/EU if such	CONTRACTOR OF A	the market. The new regulations also promo	tes inte . 6 Regulation on the announce	ement of the pin .4 Government Decree no. 172 - on the determination of thresholds god amon	
	Services: EUR 30,000 for municipalities; EUR	contracts are awarded by a	Extraction of the second	the employment of disadvantaged people w			
	25,000 for federal state procurement	contracting authority referred to		may be disabled or homeless, ultimatery hgt	tine Regulation on the supervisi	on of the	
	departments	point a) or b) of paragraph 1 of Article 9 of this Act operating in		unemployment rates.	implementation of the Law	on public Concernment Decree no. 173-on	
	Below EUR 500, a contracting authority or	Article 9 of this Act operating in the field of defence;	Constant of the second s	In Providing better access for small and me	fium- procurement (NN10/2012)	rement for public contracts for the acquisition of	
	public agency can directly and simply	C EUR 207,000 for public supply or		sized enterprises to the market and the	Sitions Sec • 8 Regulation on public proce the purpose of defense an	a security INN public contracts for the acquisition of	
Thorna and the real	purchase goods.	service contracts awarded by a	the second s	introduction of the upper ceiling of the com of participation in the proceedings, regarding	6 89/2012, 145/2014)		
Centr	al, National, and Regional Databases for Public	contracting authority referred to		annual turnove	G Budehaak on shatting at	the public the first he first he successions operate	
	and detailers on the of the making property of	in point c) of paragraph 1 of		which the contracting authority may require	brocurement sector (NN V	\$6/2012. A second as is at trak of being harmed by	
	ises in Germany include the Deutsches	Article 9 of this Act, for design		not exceed twice the estimated value of the	125/20141	an advised of the contracting authority, connection	
Verse	beportal , Federal states also have their own	contests organized by such a		contracth			
	al detabase known as Landersergebestelle.	contracting authority, and for	A DECEMBER OF	IV. The introduction of more flexible solution	Visite University of the Visite of the Visit	(CPV) (NN Bontracts, including concession contracts, with the object of small-scale concession. The object	
	od of Lighting System Acquirement	public supply contracts for products not listed in Annex III		modify public procurement contracts - new		exception of single and may be fired against	
The se	courrement of lighting facilities is carried out	to Directive 2014/23/EU if such		evidence making it possible to modify the t contracts or the termination of contracts;	erms of Il Rulebook on public proce		
aimea	it exclusively by public procurement.	contracts are awarded by a		v. Simplification of procedures for the awa	rd of 4. diplomatic musicors and offices in the Republic of	Croatia (NA during the procurement procedure in well is a	
Region	nal Procurement	contracting authority referred to		and a services including	g legal	Berring the processing the setting of the awa	
in Ger	many, every federal state has their own legislation	points a) or b) of paragraph 1 of		hospitality, gastronomic, cultural, and heat	In all a 17 manual of another the		
	ling regional procurement, and threshold values lifter by region.	Article 9 of this Act operating in				a for the procedure, and/or the practices of the contra	
uni a	and all all all all all all all all all al	the field of defence;		National Public Procurement rules for val	Processing processing processing	1	
		 EUR 5, 186,000 for public works 		11			

EU-REPORT | STRUCTURE



INTRODUCTION

A. GENERAL POLICY ASPECTS CONCERNING PUBLIC LIGHTING

- I. POLITICAL STRATEGIES AND TARGETS
- II. CURRENCY
- III. ACTORS AND STAKEHOLDERS
 - 1. Ministries
 - 2. Regulatory agencies
- IV. GENERAL LEGAL BACKGROUND

B. LEGAL ASPECTS

- I. OWNERSHIP, MAINTENANCE AND OPERATION
 - 1. Ownership
 - 2. Operation
 - 3. Maintenance
- II. PUBLIC PROCUREMENT
 - 1. EU Legal Framework
 - 2. National Legal Frameworks

C. DEVELOPMENT OF LIGHTING FACILITIES

- I. PLANNING AND AUTHORISATION
 - 1. Relevant Legal Aspects in Respect of Planning and Authorisation
 - 2. Opportunities for Public Civil and other Stakeholders' Participation in the Administrative Process
- II. CONSTRUCTION
- III. REFINANCING SOURCES AND MECHANISMS



[AVAILABLE ON LINE]

EU-REPORT | POLICY ASPECTS



Political Strategies and Targets

- In its Energy 2020 strategy (2010) the European Commission (EC) stated:
 - "Energy efficiency is the most cost-effective way to reduce emissions, improve energy security and competitiveness, make energy consumption more affordable for consumers as well as create employment, including in export industries".
- The Energy Efficiency Directive (EED) 2012/27/EU is the most relevant step towards the achievement of the Europe 2020 strategy for *"smart, sustainable and inclusive growth"*, within which the promotion of energy efficiency was planned. EED identifies energy efficiency as a major element in ensuring the sustainability of the use of energy resources and sets the 20/20/20 targets by 2020. Urban and street lighting systems are also subject to meet energy efficiency targets; therefore, the actions and plans in each Country are derived from/or in line with the EED.
- Under the EED, each Member State (MS) must meet certain energy savings targets between 01.01.2014 and 31.12.2020.
- The PPs implemented National Energy Efficiency Action Plans (NEEAPs) shortly after the Directive came into force, like Germany in 2014, or some years later, like Poland in 2016. Moreover, the implementation period of the NEEAPs vary amongst the MS varies from country to country; i.e. Germany sets targets until 2020 while Croatia considers the period 2014-2016. In either case, MS implemented monitoring instruments that are reported on yearly basis.





Main Actors and Stakeholders

	DE	SL	IT	PL	HR	CZ
Economy	Х	Х	Х			
Energy	Х		Х	Х	Х	
Environment	Х	Х	Х	Х	Х	
Buildings	Х					
Nuclear Safety	Х					
Nature Conservation	Х					
Transport	Х		Х			
Digital Infrastructure	Х					
Urban Development/Spatial Planning	Х	Х		Х		
Infrastructure		Х				
Finance		Х	Х	Х		
Industry & Trade						Х

Source: own elaboration



Grazie mille per la vostra attenzione!

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