

Lo stato dell'arte nella diffusione del Green Public Procurement: driver e opportunità per le imprese

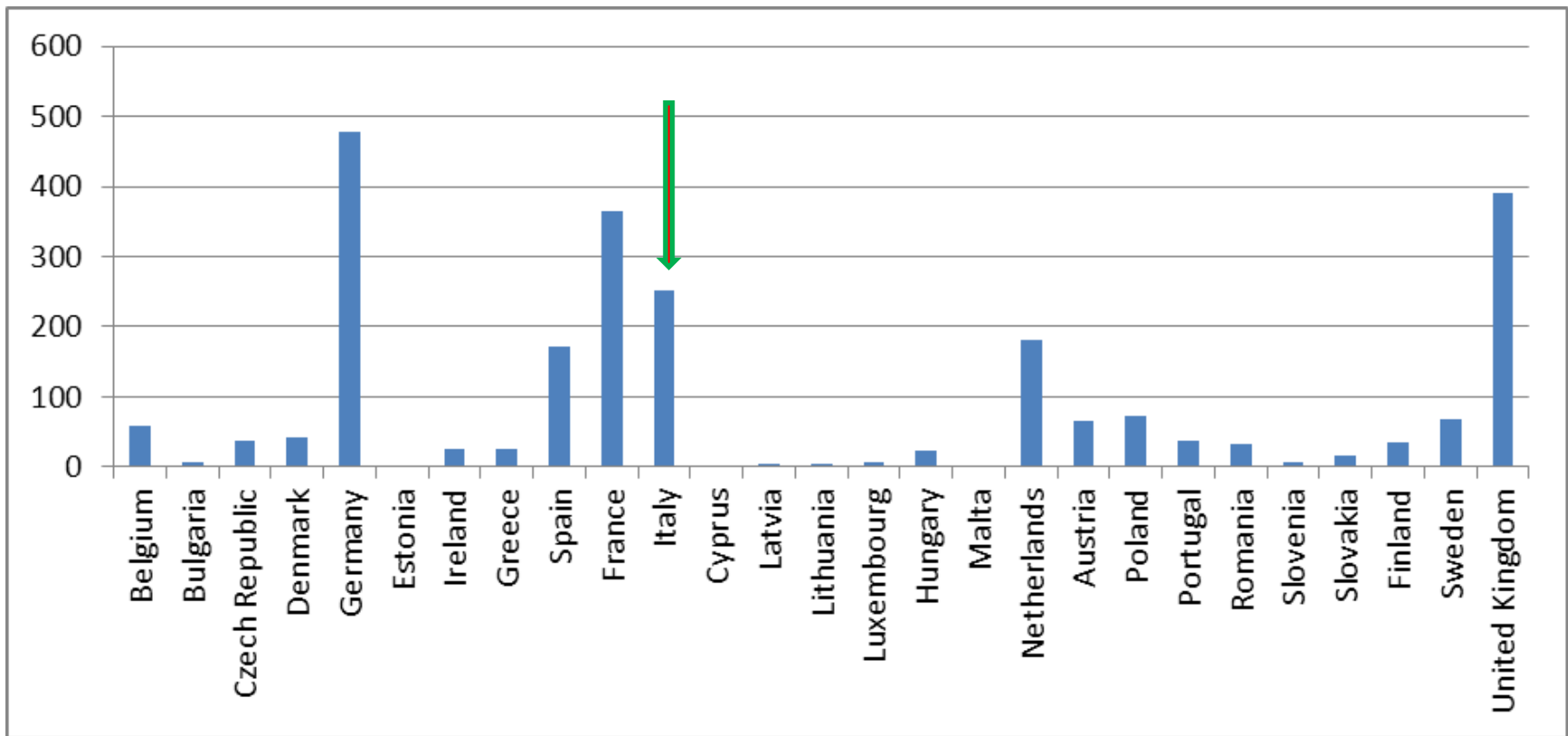
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Quale mercato potenziale?

La dimensione della spesa pubblica

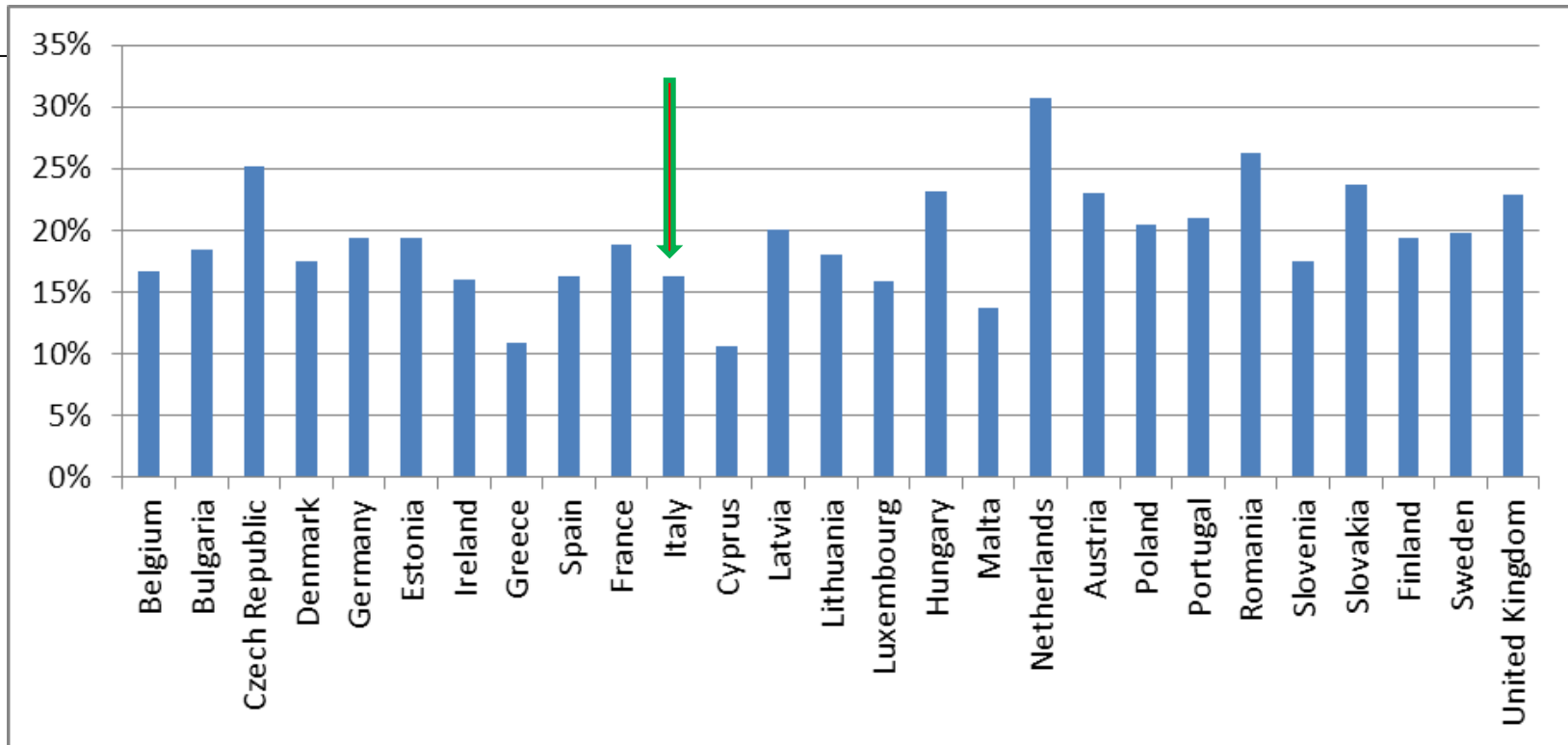
Figure 1: Total public expenditures on works, goods and services 2010 (Billion €)



Source: Public procurement indicators 2010, European Commission

L'Italia non è fra i primi se si utilizza l'indicatore sul PIL

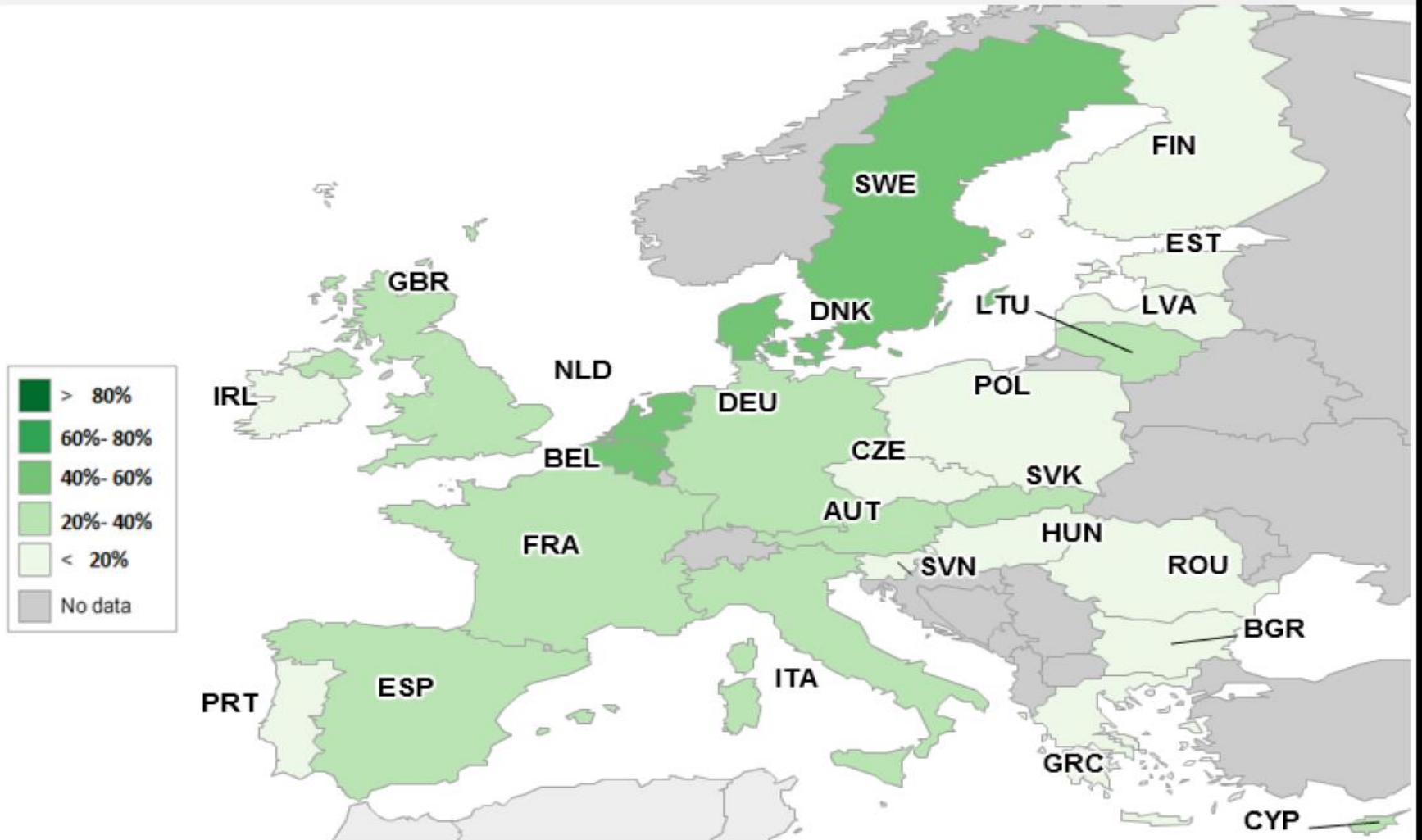
Figure 2- Total public expenditures of works, goods and services as a percentage of GDP (average 2006-10)



Source: Public procurement indicators 2010, European Commission

L'attuale diffusione del GPP

Figure D – Uptake of EU GPP in the EU27 (share of last contracts – by number)*



*Luxembourg excluded due to unavailability of data.

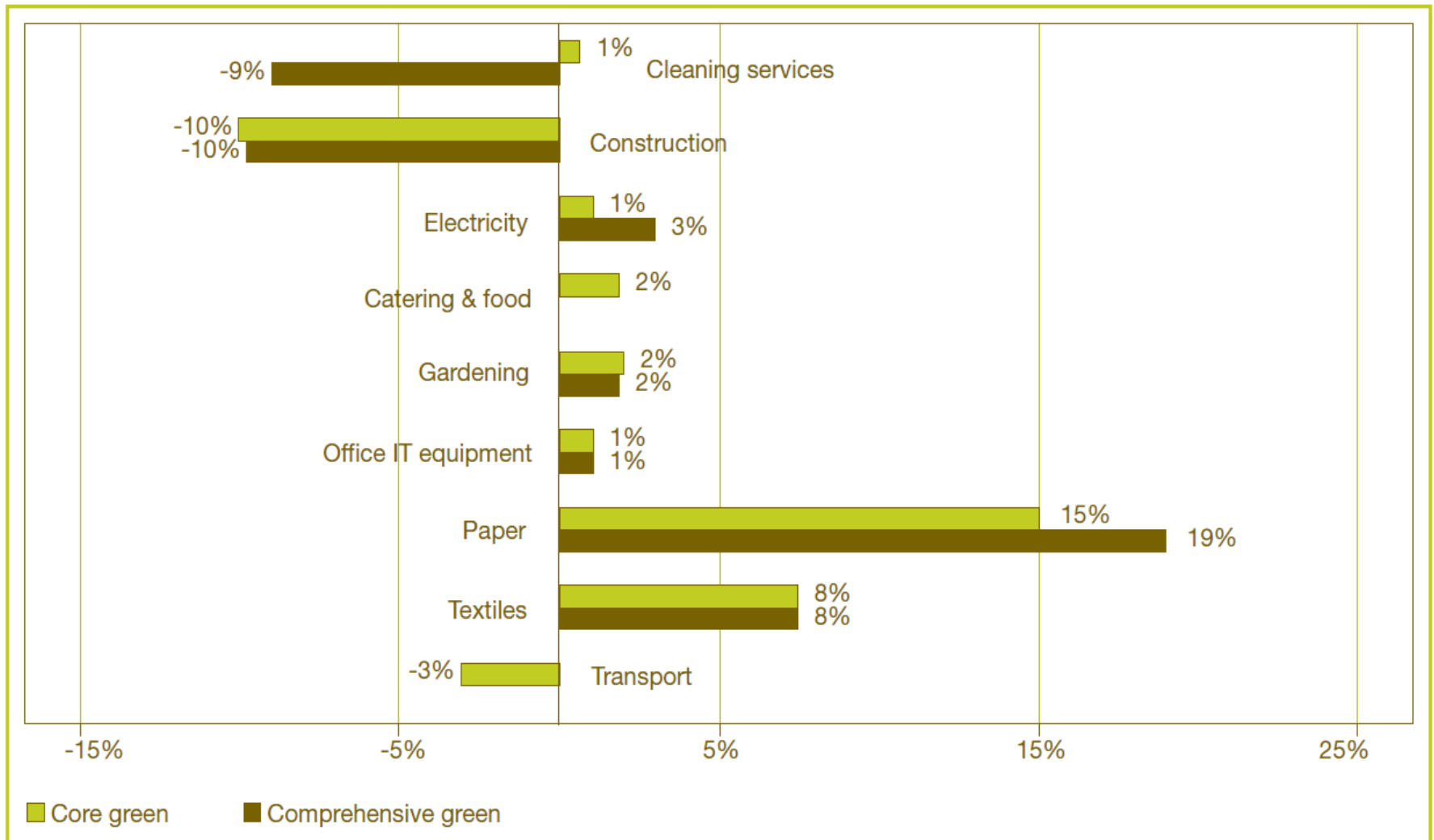
Vi sono differenze rilevanti tra «categorie merceologiche»

Table 6.1: Average relative procurement values of the Green-7 per product group¹³

product group	Relative procurement value
Cleaning services	6%
Construction	57%
Electricity	17%
Catering & food	2%
Gardening	2%
Office IT equipment	10%
Paper	1%
Textiles	1%
Transport	4%

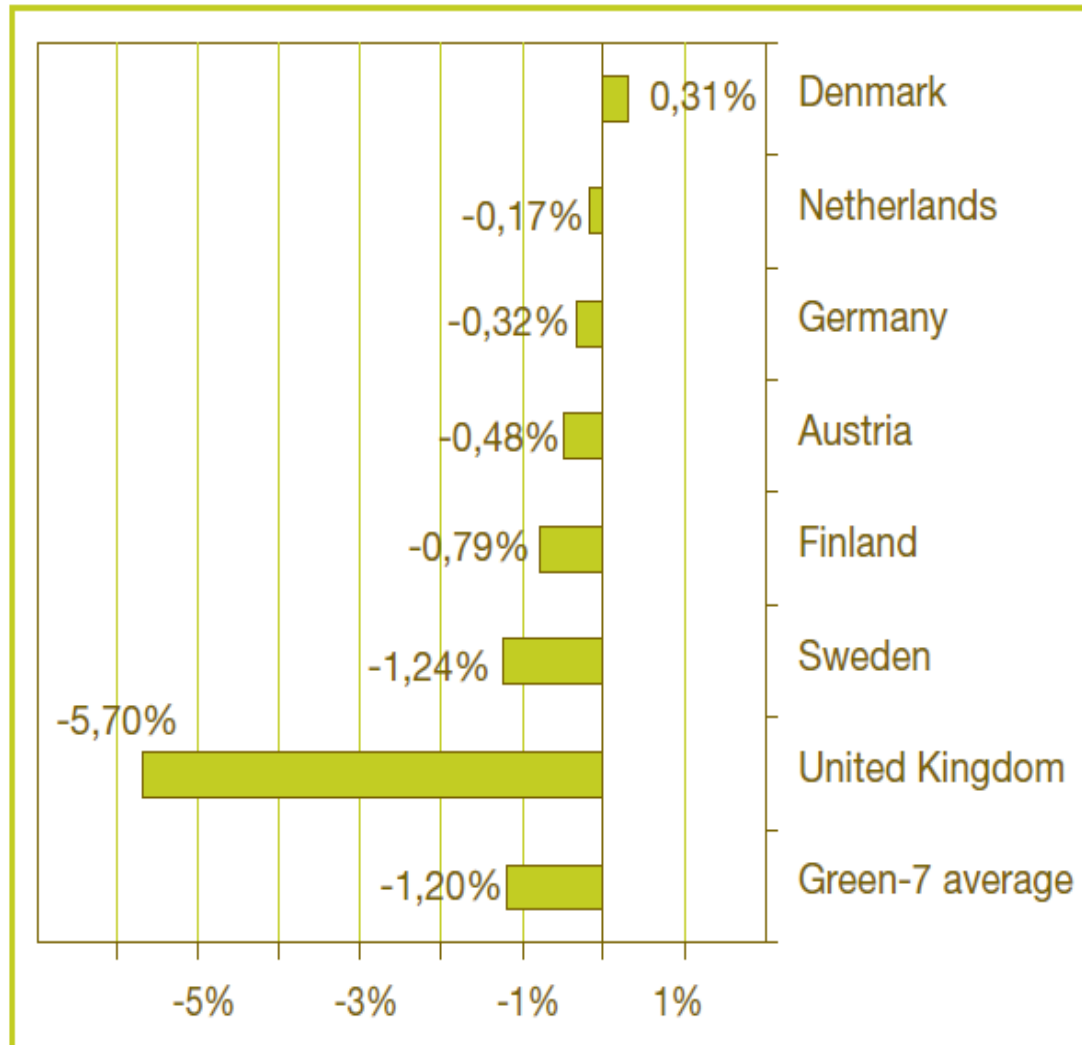
La «competitività» del GPP per l'acquirente: l'impatto sui costi

Figure 6.1: Financial impact of GPP per functional unit. Negative numbers imply reductions in costs and positive numbers imply increases in costs.



L'impatto dipende anche dal Paese

Figure 6.2: Financial impact of GPP in the Green-7. Negative numbers imply reductions in costs and positive numbers imply increases in costs.



Per comprendere le opportunità per le imprese, occorre analizzare le caratteristiche e le «frontiere» della domanda:

- Quanto sono diffusi i bandi «verdi»?
- Cosa chiedono?
- Come è possibile ampliare il mercato?

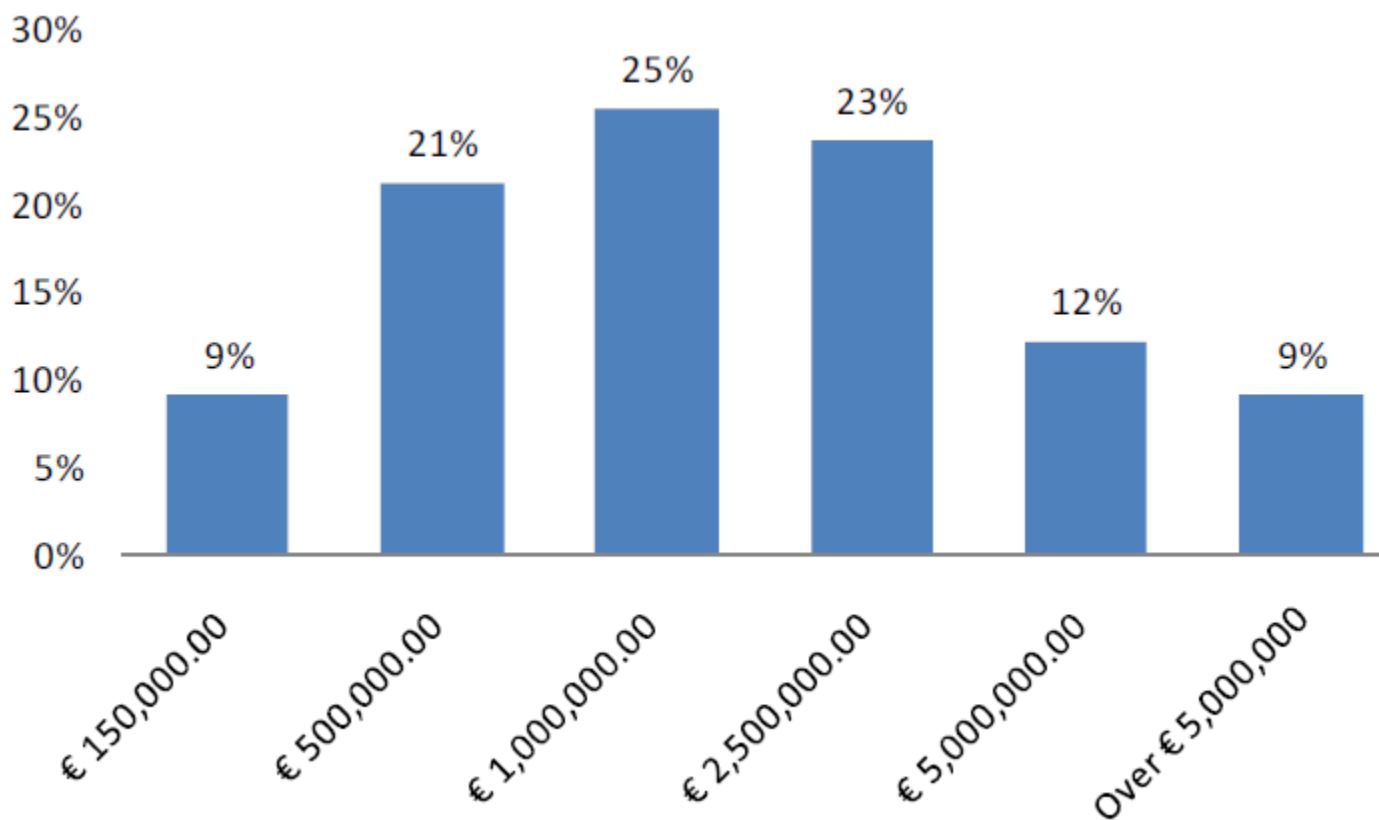
Parziali risposte nelle nostre ricerche:

- Diffusione della «greenness» nei bandi
- Variabili che determinano la scelta di adottare GPP da parte degli enti locali
- L'adozione del Life-Cycle costing nel GPP

1) Content Analysis su un campione di bandi del settore costruzioni italiano

Region	Code	Number of tenders	Percentage on number	Percentage on value
Abruzzo	ABB	3	2%	1%
Basilicata	BAS	2	1%	1%
Calabria	CAL	8	5%	5%
Campania	CAM	12	7%	3%
Emilia Romagna	EMRO	10	6%	43%
Friuli	FVG	3	2%	1%
Lazio	LAZ	16	10%	10%
Liguria	LIG	13	8%	3%
Lombardia	LOM	16	10%	8%
Marche	MARC	2	1%	1%
Molise	MOL	0	0%	0%
Piemonte	PIE	13	8%	1%
Puglia	PUG	11	7%	3%
Sardegna	SAR	21	13%	8%
Sicilia	SIC	4	2%	0%
Toscana	TOS	24	14%	6%
Trentino-Alto Adige	TRA	2	1%	3%
Umbria	UMB	1	1%	0%
Valle d'Aosta	VDA	0	0%	0%
Veneto	VENT	5	3%	3%
Total		166	100%	100%

Dimensione economica dei bandi analizzati



Distribuzione per dimensione dell'ente

Tendering org. Category	Number of tender	Value of tenders
Towns below 15,000 inhab.	9%	5%
Universities, Health org., Local gov. - owned companies	19%	11%
Towns between 15,000 and 100,000 inhab.	22%	11%
Towns between 100,000 and 500,000, social housing organization and others	24%	14%
Province, Cities between 500,000 and 1 million inhab.	14%	3%
Regions, cities over 1,000,000 inhab.	12%	56%

Guida per l'analisi: i criteri GPP europei su building and construction

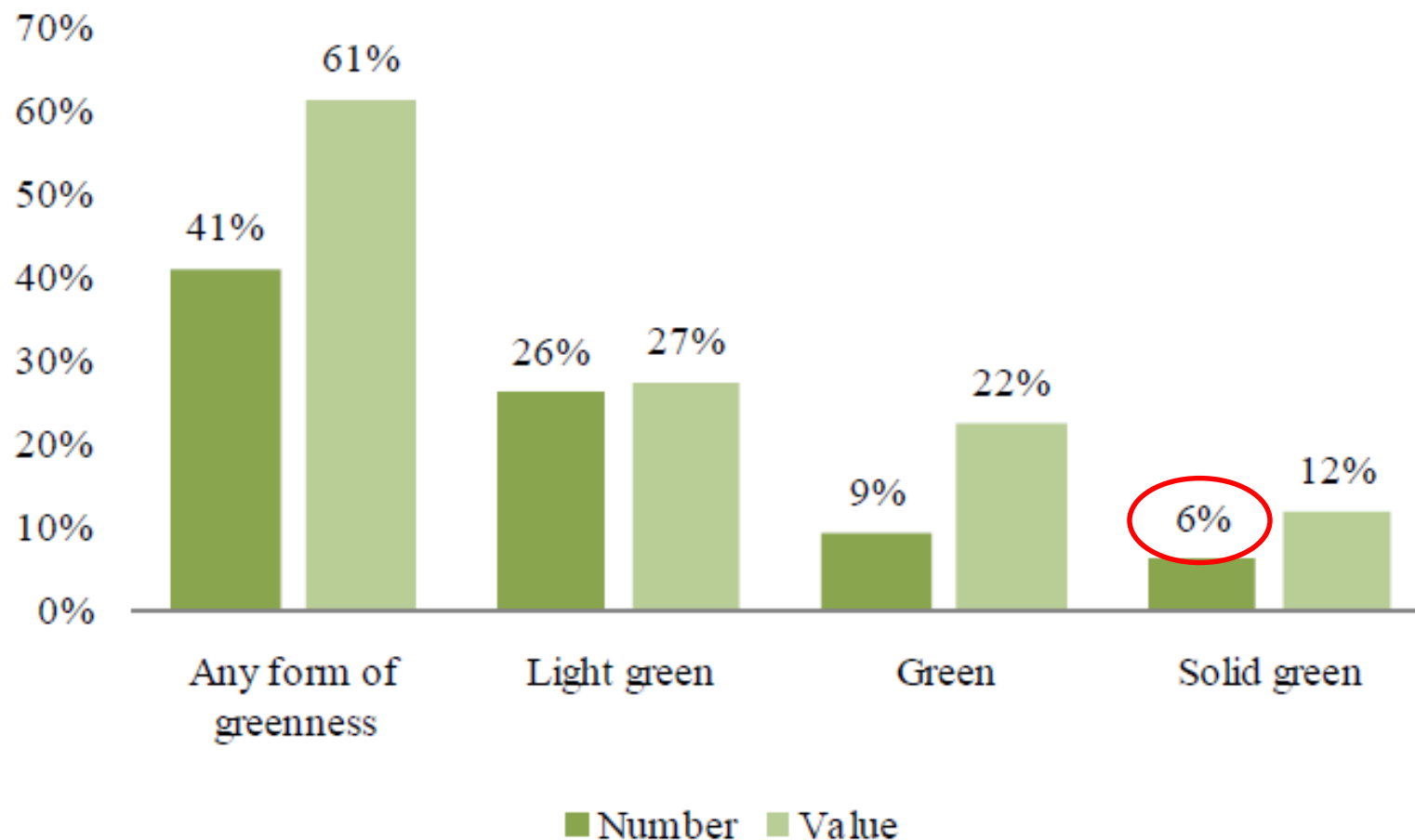
Tender Phase	Eco-impacts	Parameter	Description of the criteria
SM		Strength	Any reference to environment within the object of the tender
SC		Exclusion of certain contractors	Provision for exclusion of contractors which have a been found guilty of misconduct against the environment
		Experience of the architect in environmental construction	Proven experience of the architect in dealing with eco-design or sustainable building
		Technical capacity for environmental management measures	Ability of the contractor to put in place certain environmental measures
	Other Criteria	Strength	Criteria not foreseen in the GPP Toolkit
TS	Energy	Energy consumption standard	Provision for the overall energy consumption of the building lower than that required by the relevant legislation
		Localized RES (comprehensive)	Use of localized renewable energy sources or efficient cogeneration
		Energy efficiency training	The bidder should give a training session to the energy manager of the building
	Materials	Exclusion of Products which contain sulphurhexafluoride (SF6)	Bidder should declare that SF6 won't be used for the execution of the contract
		Exclusion of Indoor paints and varnishes	A list of material is provided which cannot be used within the tender
		Recycled materials/Eco-friendly	A fix amount of materials should be recycle or eco-friendly or a clear preference should be given to them
		Timber	All the timber used should come from certified sources
		Volatile Organic compound	The emission of the building should not be higher than a fixed standard
		Steel (comprehensive) [applicable for renovation works]*	Steel should be comply with certain standards or the cleanings procedure should not imply the use of silicon blasting
	Water	(comprehensive) Rainwater and grey-water use	Provision for reuse of grey water/rain water to be used within WCs or irrigate (only rain water)
		Water facilities equipped with the latest technology	Latest technology should be used for water savings
		Dual flush maximum use	Dual flush WCs should use a maximum of six liters for full flush and three liters for urine flush
		Waterless urinals operate with a biodegradable liquid or without liquid	Provision for use of waterless urinals or biodegradable liquid fluid
		Water saving devices saving of at least x% for toilet flushing.	Percentage of water saving every WC usage
		Tap insert better performance than normal tap use	Tap inserted should save at least 50% of water compared to normal tap use
Noise	Noise Control*	Request for the project or materials to minimize the noise impact within the building or providing a good insulation from outdoor	

AC	Other criteria	Strength	Criteria not foreseen in the GPP Toolkit
	Energy	Lowest energy consumption	The building should have a lower energy performance than that required by technical specifications by a certain extent or following specific energy standard
		RES (renewable energy source) usage	Use of localized renewable energy sources or efficient cogeneration
		(comprehensive) Innovative efficient building services	Proposal of additional energy saving trough building systems
	Materials	Materials complying with eco-standards	Materials should comply with certain eco-standards/eco-labels
		Construction Materials based on renewable raw materials	The construction materials should be based on predetermined environmental standards
Sustainable forestry sources		All the timber used should come from certified sources	
		(comprehensive)R-values for insulation	An higher insulation should be foreseen within the tender
Water	(comprehensive) Rainwater and grey-water use	Provision for reuse of grey water/rain water to be used within WCs or irrigate (only rain water)	
	Noise	Noise Control*	Request for the project or materials to minimize the noise impact within the building or providing a good insulation from outdoor
	Other criteria	Strength	Criteria not foreseen in the GPP Toolkit
CPC		Compulsory blower door test	A "door blower test" has to be performed in order to verify the insulation of the building
		Book-keeping	A bookkeeping service has to be provided for a certain amount of time to the energy manager of the building
		Transport and recycling of building materials	Building materials should be transported minimizing the impact
		Waste management	A minimum percentage of recycle of building materials have to be foreseen or at least
		Transport minizing impacts (e.g. noise, environment)	Provision should be take into consideration in order to minimize the impact on the surrounding area to the construction site
	Other criteria	Strength	Criteria not foreseen in the GPP Toolkit

Classificazione dei risultati

“Sum Methodology”	
Tender labels	Description
Non green	Tender not including any green criteria
Light-green	Tender including only generic green criteria or in some cases few core criteria
Green	Tender including many generic green criteria and some core criteria
Solid green	Tender including both many core criteria and some comprehensive criteria
Any form of greenness	This value measure the percentage of tenders including some form of greenness; it is the simple sum of the three categories (light green, green and solid green)

Risultato finale in numero e valore dei bandi verdi



2) Survey sui comuni toscani sulle dinamiche di acquisto e di scelta di adottare GPP

	Population	% of population	Number of municipalities	% of municipalities
Tuscany	3,749,813		287	
Sampled municipalities	1,946,028	51.9	81	28.6
Respondent municipalities	1,026,114	27.4	62	21.6

L'approccio dello studio

- Indagine questionaria diretta presso i Comuni
- Identificazione dalla letteratura delle principali determinanti e delle variabili che possono influenzare la scelta di adottare GPP
- Considerazione degli “esiti” delle strategie di GPP in termini di:
 - Percentuale di bandi verdi sul totale
 - Trend di crescita negli ultimi anni nell'adozione di criteri verdi nei bandi
- Lo studio si è concluso con un modello statistico che ha mirato a comprendere quali variabili sono cruciali nello “spingere” la diffusione del GPP, ovvero nel convincere ed aiutare un Comune nell'adozione di queste strategie

I risultati

	Percentage of green tenders		Trend of green tender	
	<i>Coeff.</i>	<i>Z</i>	<i>Coeff.</i>	<i>Z</i>
Training on GPP	3.58	1.74*	3.56	2.26**
Knowledge of GPP toolkit and guidelines	4.76	2.28**	3.25	2.05**
Awareness on GPP procedure	-1.67	0.12	-0.80	- 2.05**
Certified EMS adoption	-1.24	-0.84	0.53	0.37
Certified EMS maturity	0.62	2.05**	-0.07	-0.25
Structure of purchasing process (both centralized and decentralized)	-1.20	-0.76	1.62	1.15
Structure of purchasing process (not centralized)	-0.69	-0.83	0.39	0.44
Population	6.34	0.80	1.62	0.24
Environmental strategy	-0.04	0.93	0.39	0.95

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3) Uno studio sul Life Cycle Costing per la European Commission DG Environment *Studio Fieschi e Scuola Sant'Anna Istituto di Management*

The new **Directive 2014/24/EU** significantly innovates the process of tenders awarding, through assigning a relevant importance to LCC. New contract award criteria have been introduced in Article 67 :
*“The most economically advantageous tender from the point of view of the contracting authority shall be identified on the basis of the price or cost, using a cost-effectiveness approach, such as **life cycle costing** [...].*

Risultati dalla nostra survey

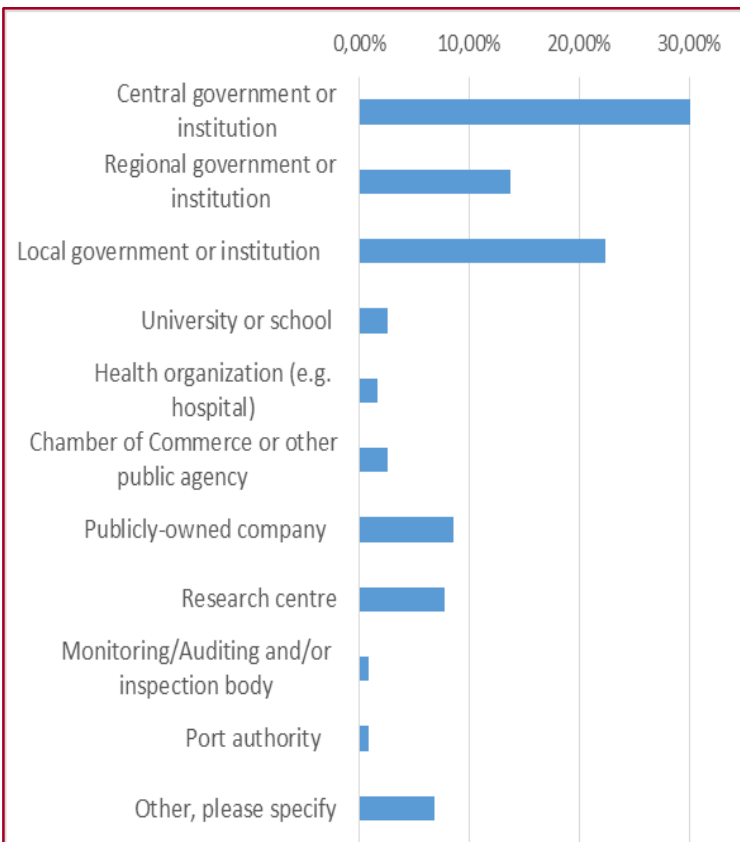
A survey among public administrations has been carried out, with the purpose of:

- Identifying the needs of public authorities to implement the Life Cycle Costing approach and to promote the use of the tool
- Collecting information to design an appropriate tool for the Life Cycle Costing analysis

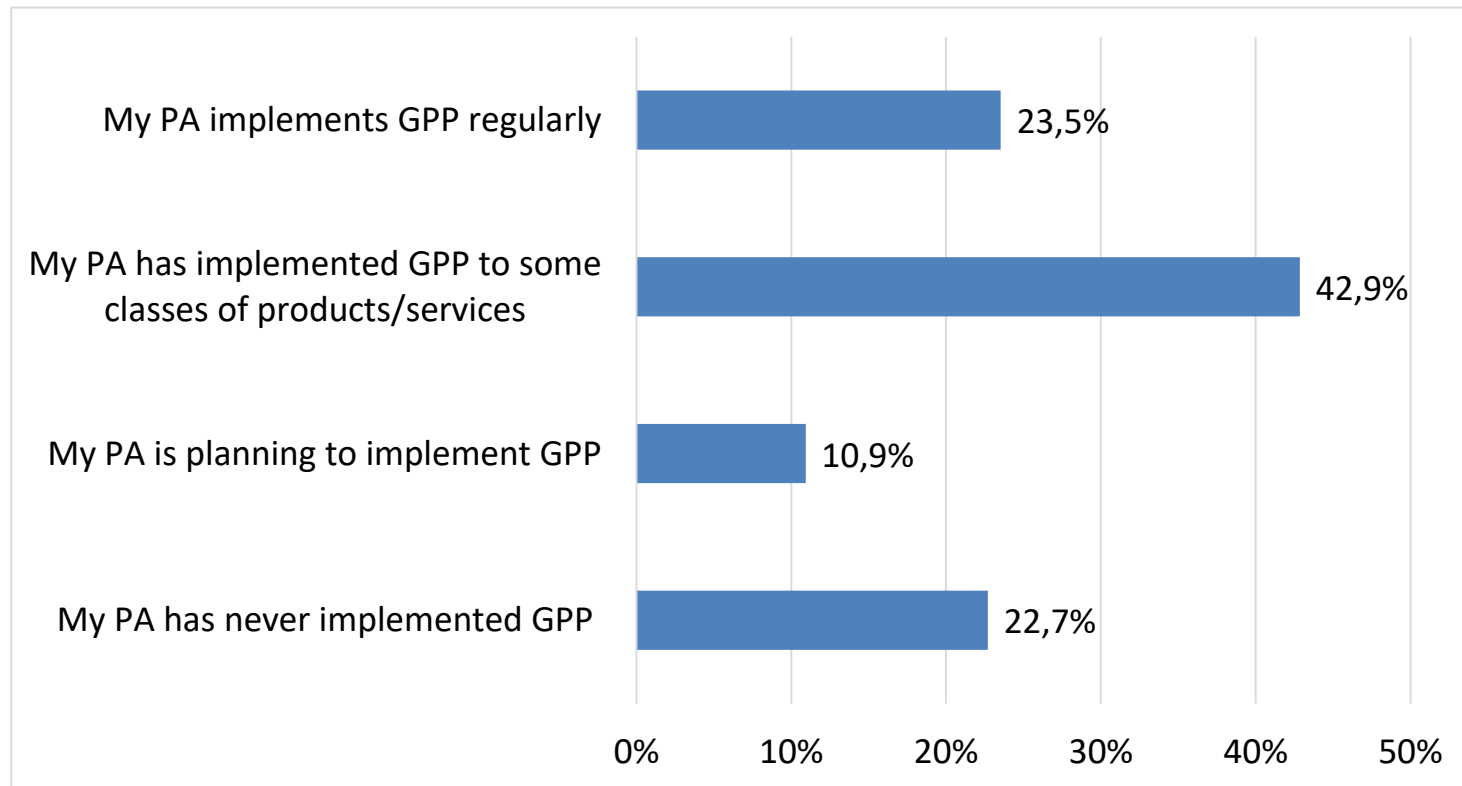
The survey results show that though GPP practices are commonly applied to at least some categories of products by public administrations, **the application of LCC still remains limited**, but **increasing progressively**. Barriers to application and actions designed to overcome them are judged relevant by the respondents.

119 public organisations replied to the questionnaire

Type of public organization

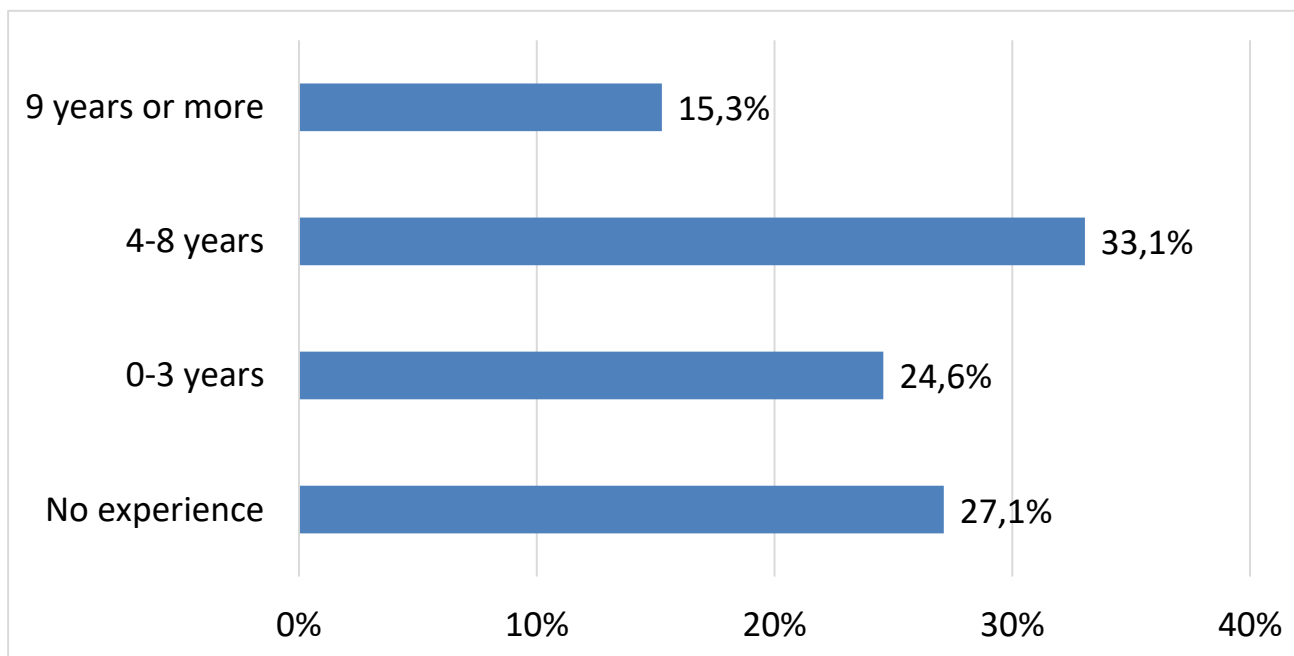


Primo passo dell'indagine: quanto è applicato il GPP?



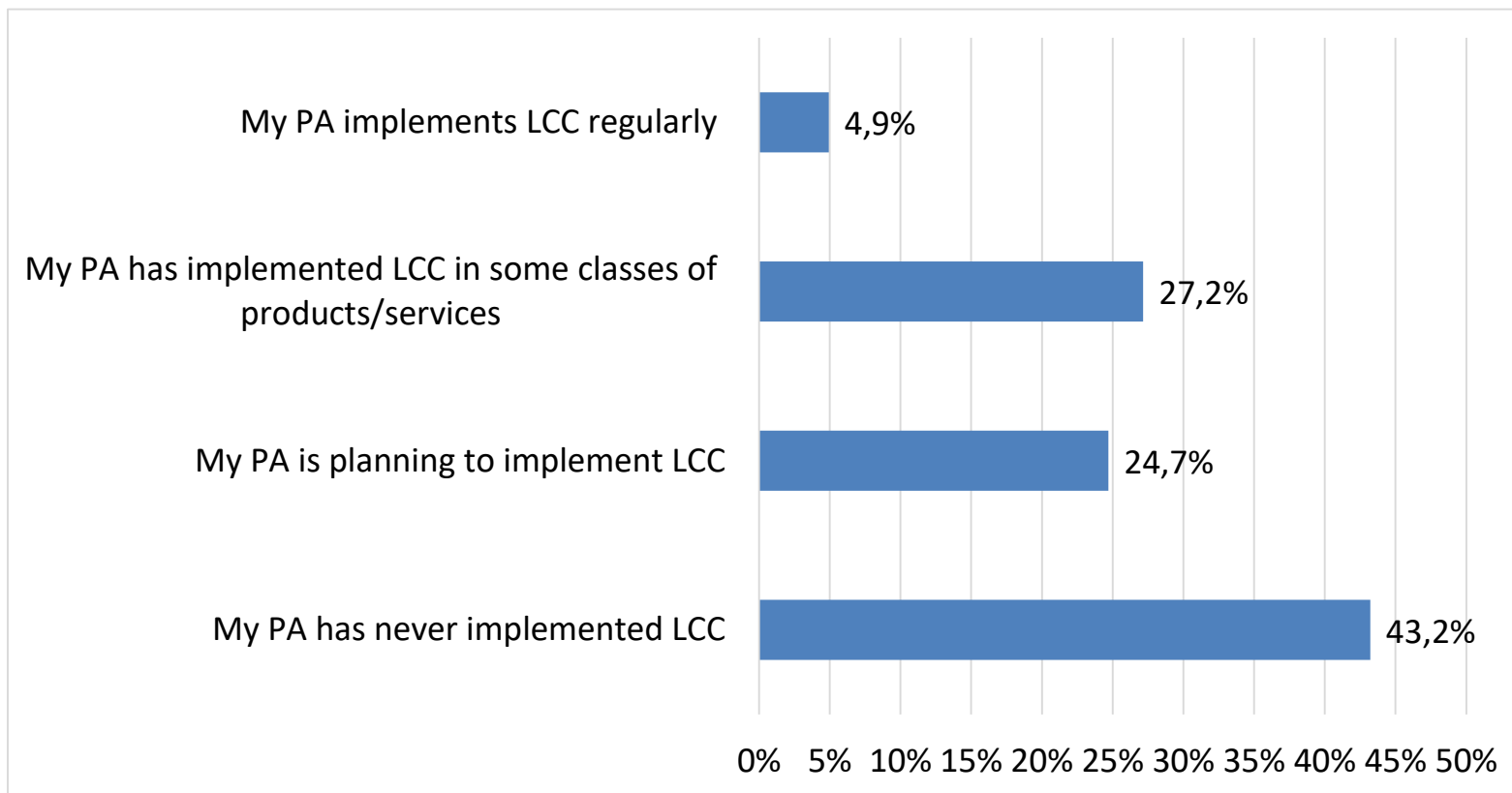
N. of responses: 119

Da quanti anni?



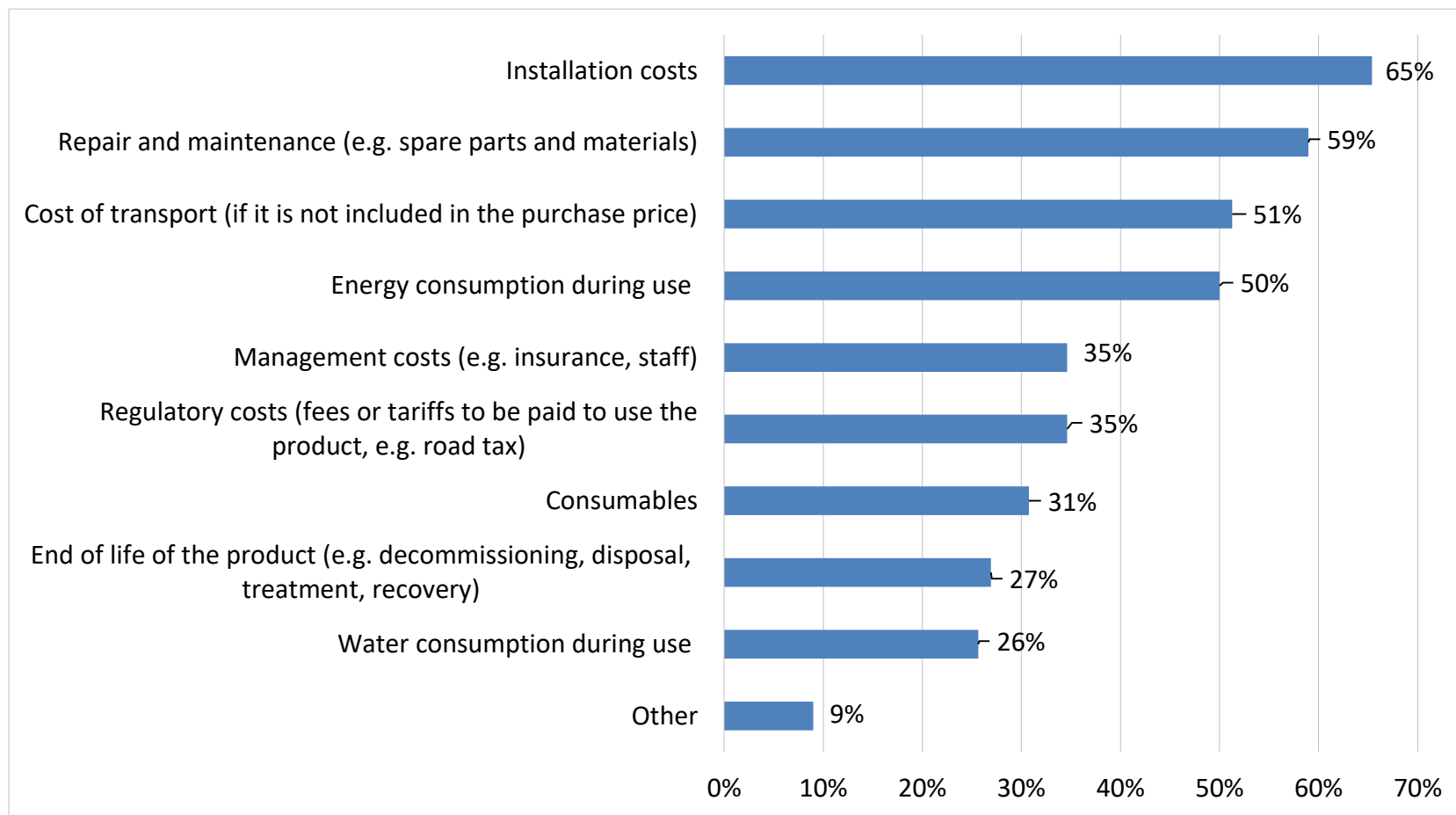
N. of responses: 118

Guardiamo ora alla frontiera: quanto è applicato il LCC nel GPP?



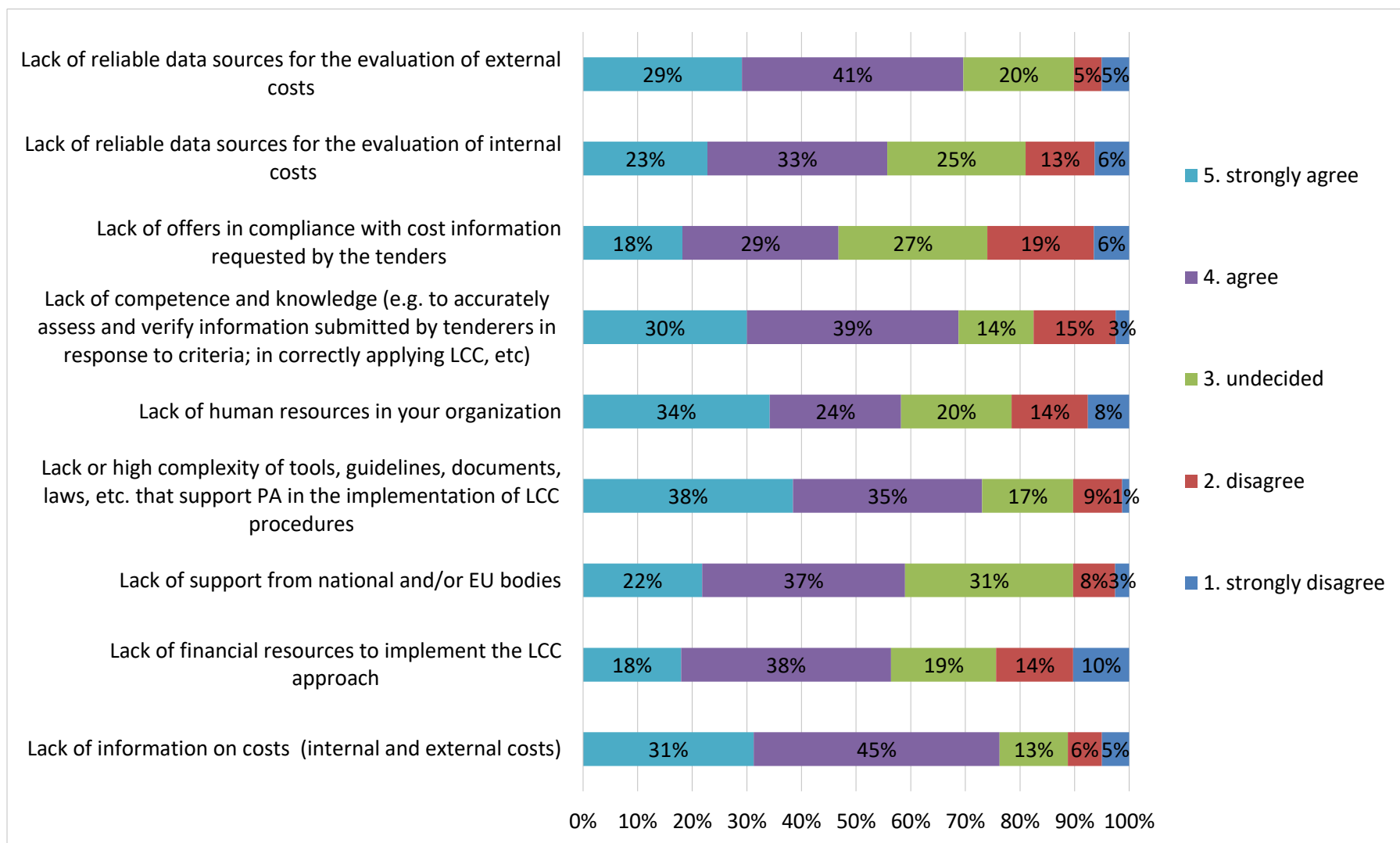
N. of responses: 81

Categorie di costo considerate più frequentemente (ad integrazione del prezzo base di acquisto del bene) nel GPP

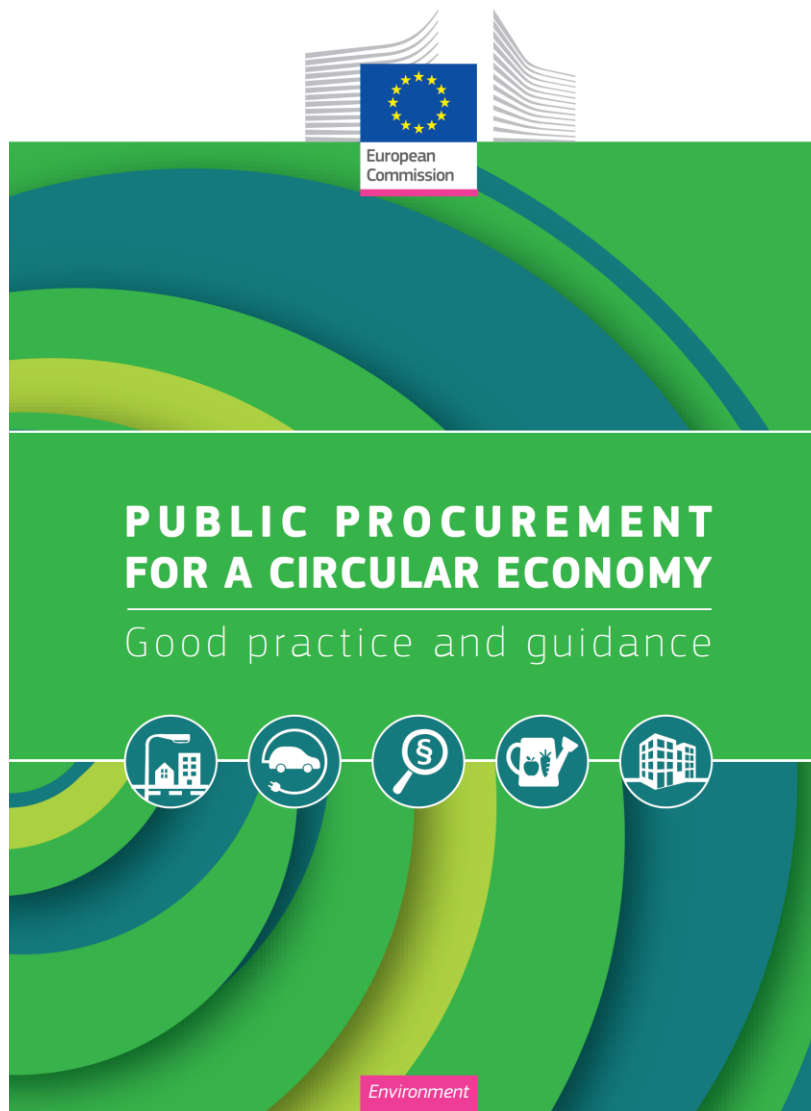


N. of responses: 78

Quali le barriere allo sviluppo del LCC?



Un'ultima prospettiva interessante:



Conclusioni

- Mercato in espansione ma è necessario lavorare per incrementare l'utilizzo di criteri «comprehensive» (in questo senso vanno i provvedimenti del «collegato»)
- Il perno su cui si deve fare leva per la diffusione del GPP è senz'altro la formazione del personale delle stazioni appaltanti
- Vi sono variabili che invece hanno poco impatto, da considerare condizioni necessarie ma non sufficienti (es.: consapevolezza, impegno ambientale dell'ente,...)
- Il tema dei costi sul ciclo di vita e, in particolare, dei costi esterni (i.e. legati alle esternalità ambientali) è senz'altro promettente per le future opportunità a favore delle imprese più «attive»
- Un'altra direttrice di sviluppo verso cui le imprese dovrebbero muoversi è quella della «economia circolare».