## Sustainability reporting in the postal sector: The Belgian experience

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21st Königswinter Postal Seminar, 13-14 March 2025

Belgian Institute of Postal Services and Telecommunications



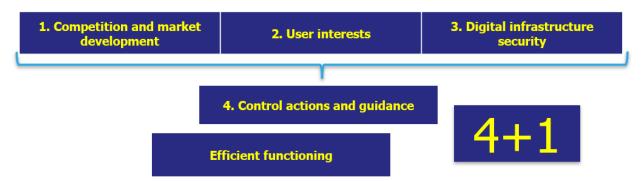
# **BIPT strategic plan**

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## Vision

### "A reliable, sustainable and competitive digital environment for everyone"

## **Strategic axes**

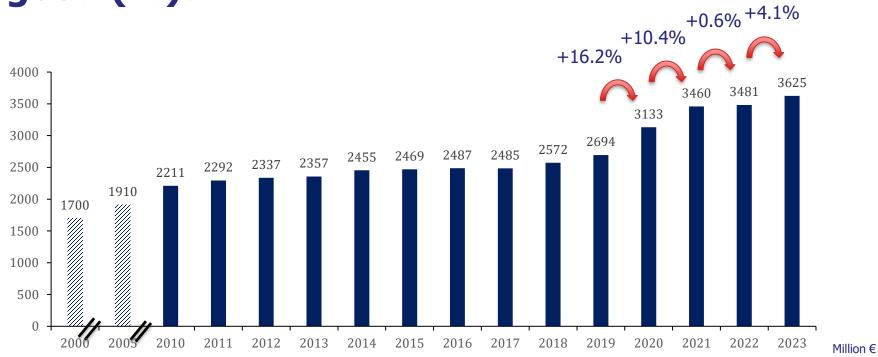


# **Belgian Postal market**

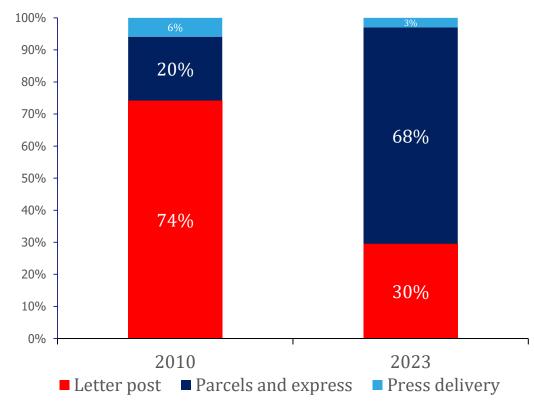


**Belgian Institute for Postal services and Telecommunications** 

## Turnover of the overall postal market: off to a good (re)start

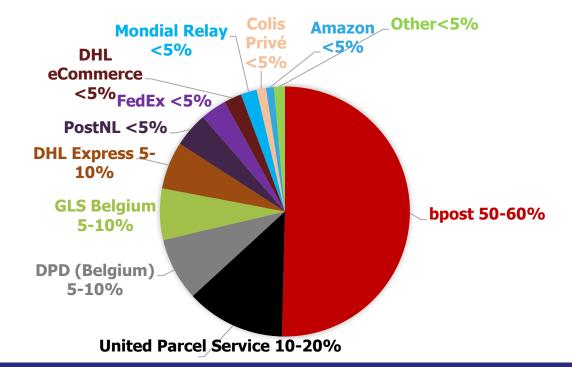


## **Transition towards a parcel-driven market**



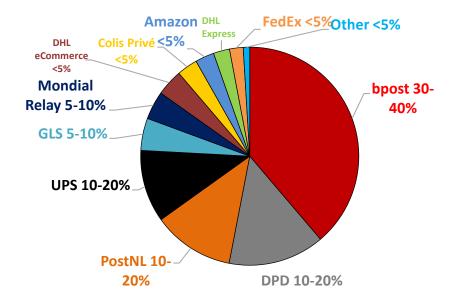
## **Bpost dominates postal market shares, Colis Privé and Amazon join the fray**

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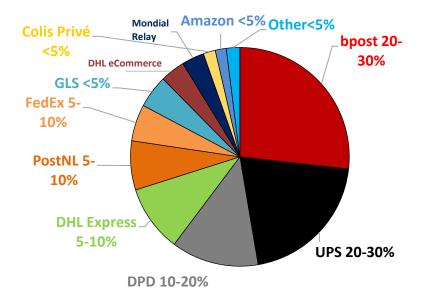


## **Parcels & express: volume vs turnover**

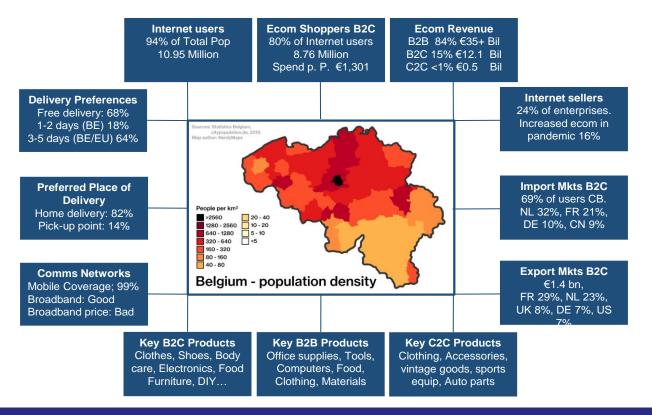
#### Volume



#### Turnover



## **Strong underlying e-commerce basis in BE**





## Environmental postal sustainability indicators

BIPT observatory results (2023)

121-269 gr/CO2 per parcel

7-22% less emissions compared to 2022

3.5% of parcels delivered by electric/emission-free vehicles

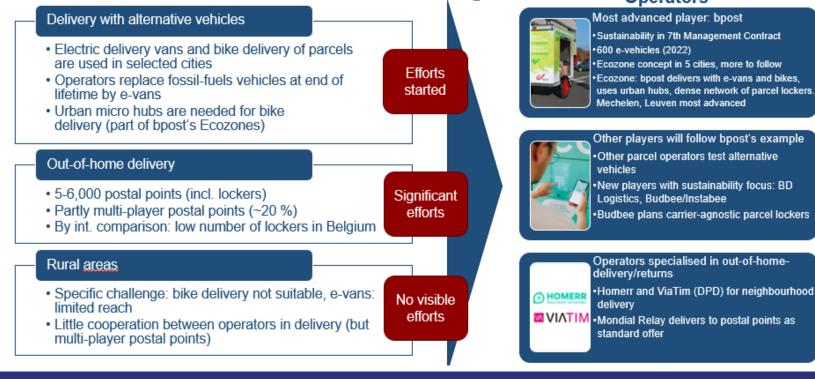
Delivery Efficiency	2019	2020	2021	2022	2023	2025 targe
Letter mail (grams CO <sub>2</sub> per item)	37.4	40.9	37.8	40.4	43.7	28.4
Parcel (grams CO, per	499.9	513.4	479.4	536.5	509.7	432.7
item)						
item) 2012–2023 comparison of % of alte	rnative-fuel ve	hicles				
	rnative-fuel ve 2012	phicles 2020	202	1 2	022	2023
	and a second		202 630,0		022	2023 651,000
1012–2023 comparison of % of alte	2012	2020		00 63		

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No estimation of the overall environmental impact of the postal sector: public figures can be broader (e-commerce/transport) or reduced (e.g. USPs only)

## Environmental efforts in e-commerce first and <sup>©</sup> last mile result in status quo

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#### 21st Königswinter Postal Seminar

## **Environmental actions for the sector needed**

 There is a high potential for improving sustainability on the first and last mile by postal operators and online retailers without regulatory intervention



#### Postal operators

- support sub-contractors to invest in e-vehicles
- improve information on sustainable delivery options to e-retailers
- improve attractiveness of out-of-home delivery options
- increase number of postal points, share points



#### Online retailers

- promote sustainability options at check-out
- change the return policy and introduce return fees
- develop sustainability policies
- inform online customers on environmental impact of deliveries and returns
- Postal operators and e-retailers have started measures to reduce greenhouse gases and air pollutants, but pace of transformation is too slow
- Further political and regulatory measures needed to create a framework targeted at increasing sustainability for parcel operators on the first and last mile



# Recent legislative and regulatory developments



**Belgian Institute for Postal services and Telecommunications** 

## Environmental sustainability in the Postal Law

In **Belgium** an amendment to the Postal Act (2023):

- defines (public) parcel lockers and includes parcel lockers as an element of postal infrastructure;
- prescribes that access to the postal infrastructure can be requested based on environmental sustainability objectives
- obliges postal operators to make use of private parcel boxes (if any) when delivering parcels at homes

A Royal Decree (2022) **relaxed the delivery targets** for inbound cross-border single-piece mail to D+3 (95%) and D+4 (97%) in stead of D+2 (95%) and D+3 (97%)

A Royal Decree (2023) regarding sustainability imposes on providers of parcel delivery services with more than 250 workers **to communicate to users and the BIPT on 7 environmental indicators** 



## **Royal Decree 14 December 2023 on environmental sustainability indicators**

- Parcel delivery providers with 250 workers, including subcontractors and temporary, workers need to:
  - 1. yearly publish the environmental indicators results on website and contracts
  - 2. indicate to users the environmentally sustainable delivery option(s)
  - 3. yearly report the data to the BIPT
- BIPT to publish results after verification (audit)

## **7** environmental postal indicators

- for each method of delivery, the average of the emissions of CO2 equivalents generated by the collection, sorting, transport & distribution of postal items, measured in grams <u>per volume</u> <u>unit determined by the BIPT</u> (scope 1, 2 and 3)
- for each method of delivery and for the different types of emissions the average of CO2 equivalent emissions, measured in grams, <u>per volume unit defined by the BIPT</u>, generated only during the distribution
- 3. for each method of delivery, the **average number of vehicle kilometres per parcel** during the distribution
- the percentage of vehicle kilometres covered by zero-emission vehicles during the distribution
- 5. possible accession to a **sectoral sustainability charter**
- 6. the percentage of **renewable energy used** in their buildings
- the percentage of **electric vehicles** and zero-emission vehicles operated within the fleet





## BIPT & VUB developed a CO<sub>2</sub> calculation tool

vub mebilise

METHODOLOGY FOR SUSTAINABILITY REPORTING FOR BELGIAN POSTAL SERVICE PROVIDERS

Koen Mommens

Mobilise - Vrije Universiteit Brussel

- To verify and validate the reporting of indicators 1 & 2 (CO<sub>2</sub> emissions equivalents) to BIPT by postal service providers
- The methodology makes **feasible** for the postal service providers to collect the requested data without administrative burden
- The methodology is accurate, the information collected is representative and to allow comparative analysis
- Tool aligned with existing international standards: ISO 14083 & aligned with GLEC Framework (same basis as ESRS and CSRD)
- CO<sub>2</sub> data published by the operators are checked by the tool
- A **result dashboard** in the tool presents:
  - The total annual CO<sub>2</sub> emissions
  - The CO<sub>2</sub> emissions per parcel
  - The difference in CO<sub>2</sub> emissions per parcel between the reported data and the tool data. A 10% difference indicated as a threshold value to review the reported result





The methodology set out in the report is based on four pillars:

- 1. CO<sub>2</sub> values to be calculated and communicated by the postal service providers;
- 2. Required input values: from energy used, volume, logistic facilities and delivery modes) throughout the entire chain;
- 3. Same input specifically for the last mile;
- 4. Finally, there are the **calculation values** from the GLEC Framework.

Operator's own reporting															
[to be completed by the BIPT based on input operator	[to be completed by the BIPT based on input operators - EMISSIONS PER PARCEL IN GRAMS]														
	Delivery method														
							4								
	4														
	Private address	Manned collection	Unmanned collection			1	4								
for each method of delivery, the average of the emissions of CO $_2$ equivalents generated by the collection, sorting,		point	point	Shop	Express delivery	Sizeable delivery	4								
transport and distribution of postal items, measured in grams per volume unit determined by the Institute,	1						4								
distinguishing between the following emissions:	4														
direct emissions from sources owned or managed by the undertaking;							CO 2 per parcel (in grams/parcel)								
indirect emissions linked to energy consumption; and;							co2 per parcel (in grams								
other indirect emissions generated by outsourced activities.							co2 per parcel (in grams								
for each mode of delivery, the average of the emissions of CO 2 equivalents, measured in grams, by volume unit															
defined by the Institute, generated only during the distribution phase within the meaning of Article 2, $6^{\circ}$ of the	1														
	1														
Act, distinguishing between the following emissions:	1														
direct emissions from sources owned or managed by the undertaking;							co <sub>2</sub> per parcel (in gram								
indirect emissions linked to energy consumption; and;							co₂ per parcel (in gram								
other indirect emissions generated by outsourced activities.							co2 per parcel (in gram								



## **Data collection by BIPT**

What is the total annual energy consumption of all your logistic facilities that fall within the limitations (distribution phase)? Gas and other consumption should be converted to kWu.		kWh
What is the total number of logistic facilities included in the energy consumption calculation above?		number of
Own transport without distinction between all delivery methods		
Do you use a single delivery method yourself (chain of facilities, type of vehicles, type of drive, round, etc.) for the different delivery methods (private address point, manned collection point, unmanned collection point, shop, express delivery, sizeable delivery)?	yes	Yes/No
What portion of the surface of the logistic facilities (with the exception of the headquarters if this is different) is reserved for the parcel volumes that fall within the scope?		
What portion of the vehicle surface, on average, is reserved for the parcel volumes that fall within the scope?		number between 0 and 100
Do you combine collection and delivery on the same route?	no	Yes/No
What is the total annual volume of parcels that you deliver?		number of parcels
What is the total annual volume of parcels that you deliver?		number of parcels
How many litres of diesel do you use each year in the context of the above activity for your own transport and vehicle and machinery in the logistics facilities?		litres of diesel
How many litres of gasoline do you use each year in the context of the above activity for your own transport and vehicle and machinery in the logistics facilities?		litres of gasoline
How many litres of biodiesel do you use each year in the context of the above activity for your own transport and vehicle and machinery in the logistics facilities?		litres of biodiesel
How many litres of HVO do you use each year in the context of the above activity for your own transport and vehicle and machinery in the logistics facilities?		litres of HVO
How many kilograms of CNG do you use each year in the context of the above activity for your own transport and vehicle and machinery in the logistics facilities?		kg of CNG
How many kilograms of LNG do you use each year in the context of the above activity for your own transport and vehicle and machinery in the logistics facilities?		kg of LNG
How many litres of LPG do you use each year in the context of the above activity for your own transport and vehicle and machinery in the logistics facilities?		litres of LPG
How many megajoules of hydrogen do you use each year in the context of the above activity for your own transport and vehicle and machinery in the logistics		MJ hydrogen
How many kWh of electricity do you use each year for your own transport in the context of the above activity?		KWh of electricity
What is the share of emission-free electricity in your consumption?		Portion - number between 0 and 100
How many logistic facilities do you use within the defined limits for collection?		Number - e.g.: if for a manned collection point, a sorting centre and a distribution centre are used each time, the $2^{\circ}$ ; if for a private address point, you use a sorting centre each time, and for 2 towns that account for 25% of the volume for this delivery method, additionally you use an urban distribution centre, then state 1,25°
How many logistic facilities do you use within the defined limits for delivery?		Number - e.g.: If for a manned collection point, a sorting centre and a distribution centre are used each time, then '2'; if for a private address point, you use a sorting centre each time, and for 2 towns that account for 25% of the volume for this delivery method, additionally you use an urban distribution centre, then state '1,25'
> INTRODUCTION INPUT BIPT INPUT OPERATOR SCOPE INPUT_OPERATOR_DISTRIBUTION ASSUMPT + :		



## **Assumptions and calculation values**

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			А					В	С	D		E		F			G		Н	I		
1																						
2		Energy	y carrier					heating (MJ/kg)	Density (kg/l)	GHG emission TTW (g CO2e/MJ)		emission WT g CO2e/MJ)		GHG emissi TT (g CO2e,		GHG em CO2e/kg or			GHG emission WTW (g CO2e/kg or kWh for electric)	GHG emission WTT (g CO2 or kWh for electric)	2e/kg	
3	Diesel						4	2,8	0,83	74,1		96,6		22,5			3,17		4,13	0,96		
4	Gasoline						4	2,5	0,74	75,1		99,1		24			3,19		4,21	1,02		
5	Biodiesel (50% rapese	ed, 40%	used co	oking o	il, 10% so	ybean)		37	0,89	0,05		34,3		34,25		(	0,0019		1,27	1,2681		
	HVO (50% rapeseed, 5				,			44	0,77	0,05		28,6		28,55		(	, 0,0022		1,26	1,2578		
	CNG		````				4	9,2	n.a.	56,6	79,2			22,6			1,5		3,9	2,4		
	LNG							9,1	n.a.	57,9		82,6		24,7			1,5		4,05	2,55		
9	LPG						45,5		0,55	67,1	90,3			23,2			3,05		4,11	1,06		
	Electric						n.a.		n.a.	0	47,11			47,11		0			154	154		1
	Hydrogen						120 n.a.		0	160,7			160,7		0			19,29	19,29			
12										_						0				,		
13																						
14																					Opm	
	background - GLEC														i i						Opin	
16	Emission factors: European so	urces								Biofuel Blends												
17 18	Energy carrier	Lower heating value ALTitg	Density igit	CHG emission (operational/T g CO_e/MJ	GHG emission (total/WTW) g CO <sub>p</sub> elMJ	GHG emission (operational/TTV Ag CO <sub>p</sub> e/kg	(botal/WTW) (botal/WTW) Ag CO <sub>j</sub> elkg	Non-CO, GHG emissions (operational/TTW) g CO <sub>J</sub> e/MJ	Source	In many countries national regu- fossil kusi. It is recommended the composition of the fuel. This mo Because of the variation in legis such emission factors. However biodeset blends.	at GHG emission ty be defined by a lation from count	in factors for such fuels are calc energy content, volume, or ma try to country it is not possible	culated based o ss according to to provide a co	n the percentage the local legislation. mprehensive list of								
19	Casoline Ethanol (40% maize, 35% sugar beet,	42.5	0.74	75.1	99.1 47.9	0.0005	4.21		ecoinvent v3.9.11 feu, infras & Fraunhofer IML, 20221	uouese uerus.												
20	25% wheat) Diesel	42.8	0.83	74.1	96.6	3.17	4.13	0.05	ecoinvent v3.9.12	Energy carrier	Lower heating value MJ/kg	AgiT Volume AgiT energy Al.iT	tric GH density (en /W	G emission GHG emissio ergy provision (operational TT) g CO <sub>g</sub> e/MJ	n GHG em TTW) (total/W g CO_eN	ission GHG emission (W) (energy provisio MJ WTT)	GHG emission (operational/ TI kg CO_e/kg	GHG emission (total/WTW) kg CO <sub>j</sub> ellig				
21	Biodiesel (50% rapeseed, 40% used cooking oil, 10 % soybean)	37.0	0.89	0.05	34.3	0.0019	1.27		feu, infras & Fraunhofer IML, 2022 <sup>1</sup>	100% Diesel	42.0	0.832 35.6	22.5	74.1	96.6	0.96	3.17	4.13				
22	Liquefied Petroleum Gas (LPG)	45.5	0.55	67.1	90.3	3.05	4.11		ecoinvent v3.9.1 <sup>2</sup> ecoinvent v3.9.1 <sup>2</sup> and CORSIA 2019 <sup>2</sup>	99% Diesel, 1% Biodiesel	42.7	0.833 35.6	22.6	73.4	96.0	0.97	3.14	4.10				
23	Heavy Fuel Oil (HFO) (2.5% sulfur)	41.2	0.97	76.8	93.7	3.18	3.86		ecoinvent v3.9.12	98% Diesel, 2% Biodiesel 95% Diesel, 5% Biodiesel	42.7	0.833 35.6	22.7	72.6	95.4 93.5	0.97	3.10	4.07				
24	Light Fuel Oil (LFO) (0.1 % sulfur)	42.6	0.86	75.3	95.4	3.21	4.06	1.33	ecoinvent v3.9.12	90% Diesel, 7% Biodiesel	42.5	0.636 35.4	23.3		92.2	0.98	2.99	3.97				
25	Hydrogen from steam reforming of nature gas HVO/HEFA (SAF) (50% rapeseed, 50% used cooking oil	al 120.0	n.a.	0	160.7	0	19.29	0.00	JEC 2020, modified*	90% Diesel, 10% Biodiesel	42.2	0.838 35.4	23.7	66.7	90.4	1.00	2.82	3.82				
25 26	HVO/HEFA (SAF) (50% rapeseed, 50% used cooking oil)	44.0	0.77	0.05	28.6	0.0022	1.26	0.05	feu, infras & Fraunhofer IML, 20221	50% Diesel, 50% Biodiesel	39.9	0.862 34.4	28.4	37.1	65.5	1.13	1.48	2.61				
	INPUT_OP	ERATO	R_SCOPE	E   IN	IPUT_OPE	RATOR	DISTRI	BUTIE	ASSUMPTIES	BEREKENINGSV	VAARD	DASH	IBOAR	D (+)	на 	1.27	0.0019	1.27	I		Þ	j



## **Dashboard (comparison)**

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														Delivery	y me	thod	1			L									
	P	Private a	. Idre-	ess point		Manr	i d ç	collection point		, y	Inmar	ir ed v		ection point					Shop			Expre	s delivery				1	zeabl	le delivery
		emiss per pa	sons	Outference between Tot operator reporting and tool emis		CO <sub>2</sub> C ions emis	D <sub>2</sub> ission	operator reporting and		al CO <sub>2</sub> ssions		JD <sub>2</sub> is ior	c	operator reporting and		al CO ssion	D <sub>2</sub> ns em	CO2 n ssio	I operator reporting and I		otal CD <sub>2</sub> ssions (in em	CO <sub>2</sub> missic	Difference t operator repo	orting and		il CO <sub>2</sub> ions (ir	n emi	O <sub>2</sub> sion:	Difference between operator reporting and tool
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to energy consumption; and;	#WAARDE!	#WAA	DE!			RDE! #WA			#W	AARDE!	#W/	A RDE	/E!	0%	#W	ARD	E! #W	N AR	DE! 0	: 1	VAARDE! #W	WAAR	E!	0%	#W	ARDE!	#W	ARDE	1 0%
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## **BIPT transparancy tool: www.postalpoint.be**

