

# Fost Plus - Recycling in a smart way

IBM Cognos performance 2009

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Together > Good sorting > Better recycling

Fostplus 

# Program

- Who is Fost Plus?
- BI & Fost Plus today.
- How will BI impact our future?
- Building the future on lessons learned.
- How did we get to where we are?

# FOST PLUS

Who is Fost Plus ?

System

Results

Information and reporting

# Fost Plus – Who?

- Non-profit organisation.
- Founded in 1994 on a pro-active voluntary basis of the private sector.
- Goal: Offer a global and durable solution to the management of household packaging waste
- 1997: Cooperation Agreement between the three regions concerning recycling and prevention of packaging.
- Fost Plus takes care of the legal obligations (obligation to take back and inform) , regarding household packaging waste, of the enterprises who have chosen to contribute (= members).
- Accredited by the Interregional Packaging Commission (= regional authorities) for 5 years (2013).

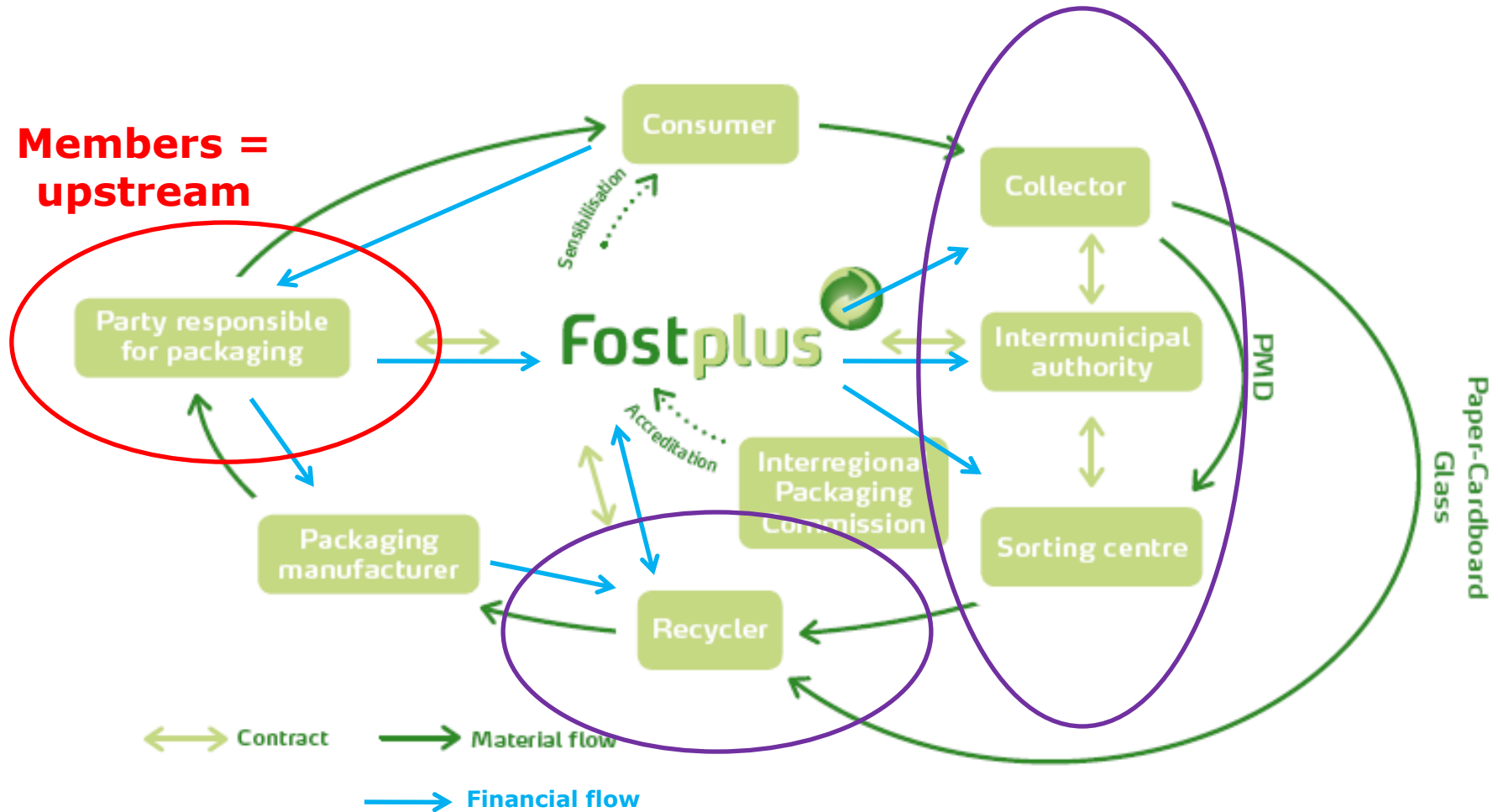
# Fost Plus –System

- Mission: to promote, to coordinate and to finance the **collecting, sorting and recycling of packaging household waste** in order to achieve the **recycling** (80%) and valorisation (90%) objectives prescribed by the Belgian law.
- **Collaboration** between private sector (industry), consumers, local authorities, intermunicipal authorities and recyclers.
- Throughout the activities of Fost Plus, **2.500 direct or indirect jobs** have been created

# Fost Plus -System

Collecting, sorting and recycling= downstream

Members = upstream



**Glass**  
Collection



**Bottle banks**  
• Clear/coloured separated glass  
• ± 1 site/1,000 inhabitants

Recycling



Finished products

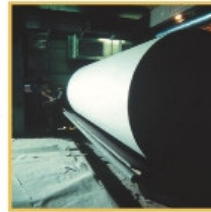


**Paper-cardboard** Packaging and waste paper  
Collection

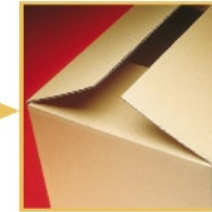


**Door-to-door collection**  
• Once a month (or at the same time as PMD in a dual-purpose lorry, twice a month)

Recycling



Finished products



**PMD** Plastic bottles and flasks,  
Metal packaging, Drinks cartons  
Collection



**Door-to-door collection**  
• Twice a month  
• Transparent blue bags

Sorting



Recycling

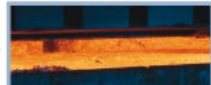


PET bottles

Finished products



HDPE flasks



Steel



Aluminium



Drinks cartons

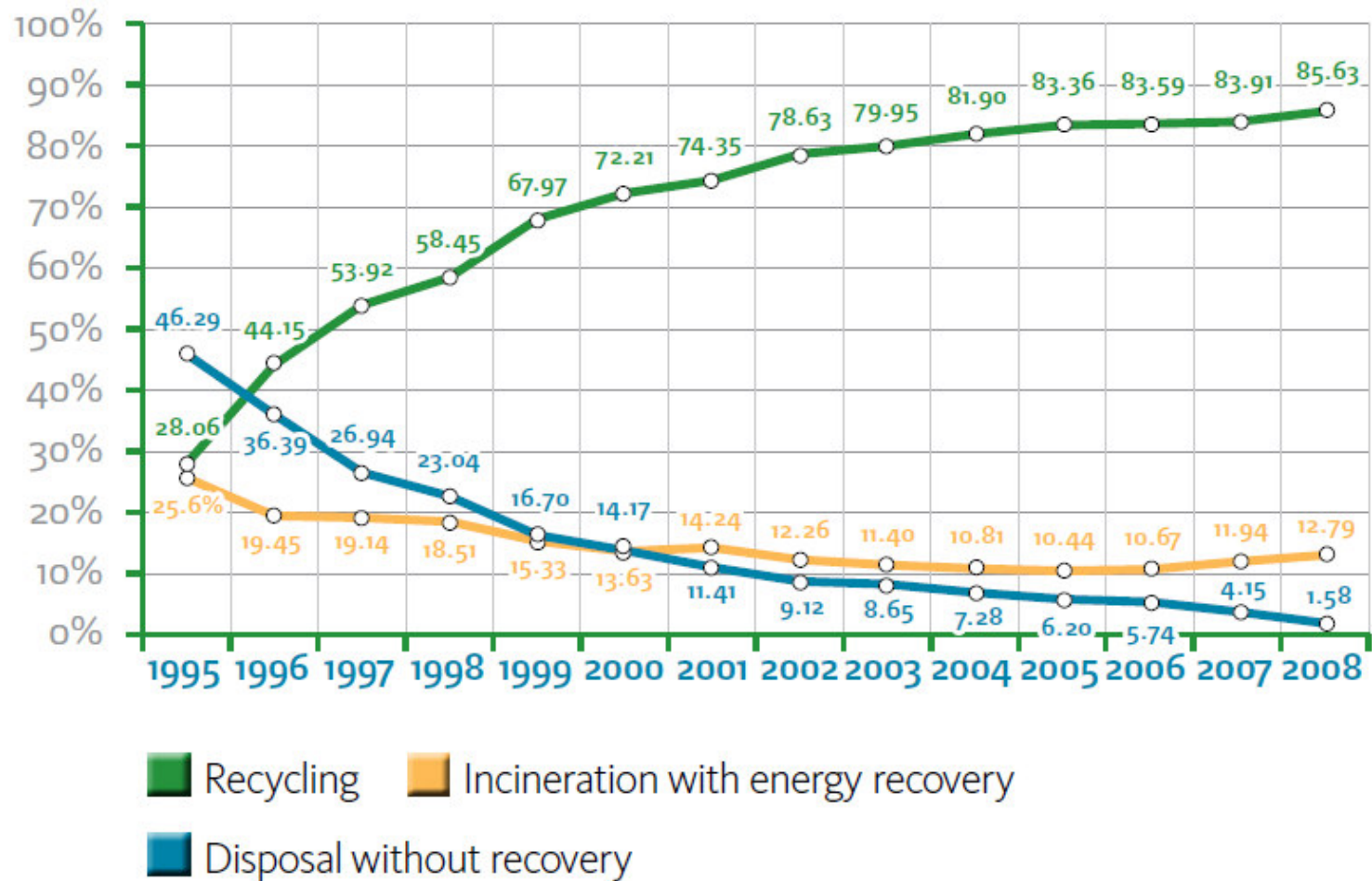


# Fost Plus –Results (2008)

- 5 644 members
  - ⇒ 730 kT household packaging;
  - ⇒ 92% of the Belgian market;
  - ⇒ Financial contribution: 67 millions EUR (or less than 7 Euros per inhabitant).
- 43 millions of Euros income from materials.
- 101.7 mio EUR operational cost (collecting, sorting and recycling).
- 117 kg/inhabitant collected.
- 93,0 % of recycling (697kT).
- 96,6 % of valorization (705kT).
- 850 000 T CO<sub>2</sub> avoided.
- 95% of the population participates actively.



# Treatment of household packaging.

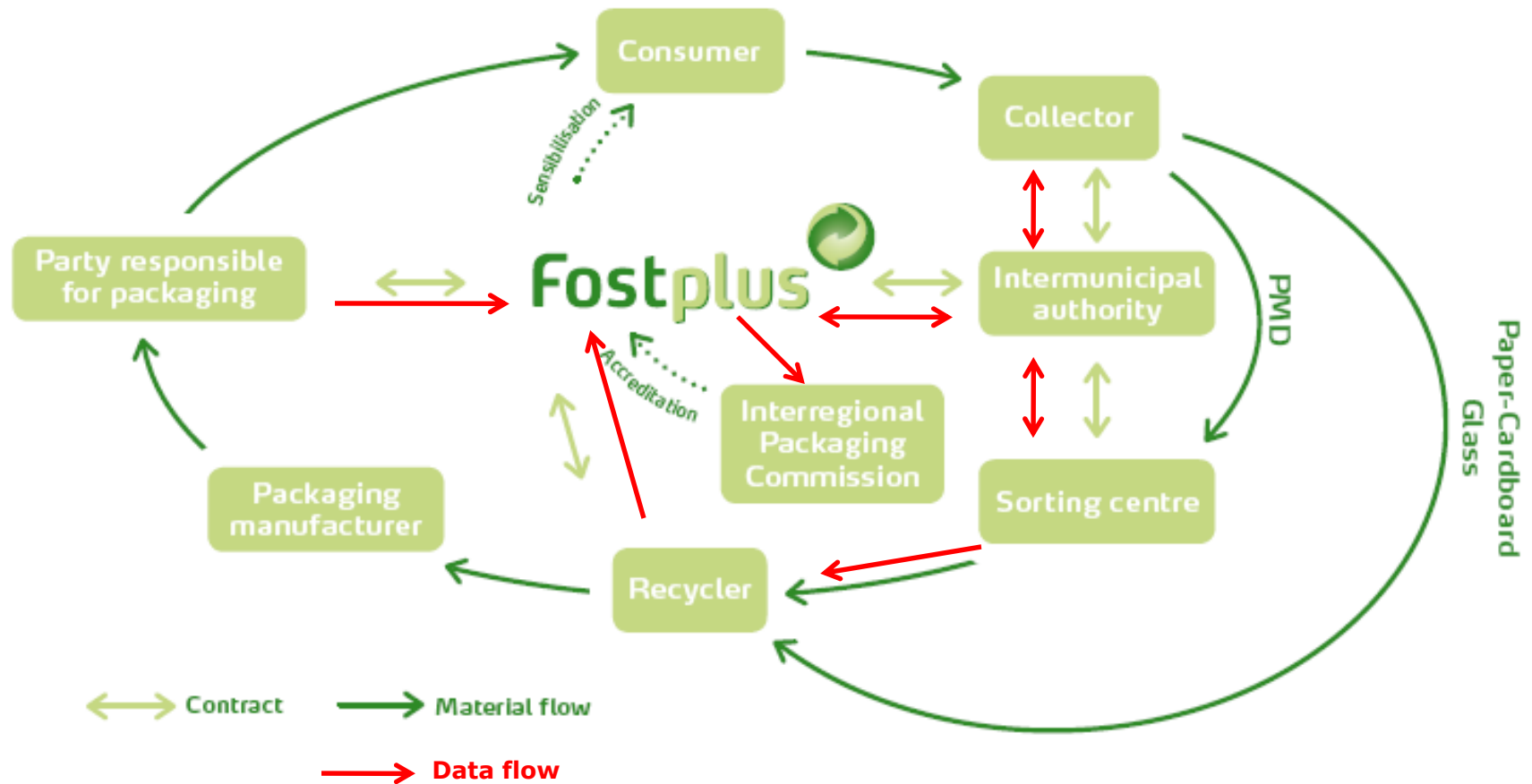


# Fost Plus – information and reporting

Information = our business:

- Exchange of information between the partners (data flows);
- Processing operational data;
- Invoicing based on collected data;
- Obligation to inform the regional authorities about the collected data and the recycling results.
- Reporting to management (inside) and partners (outside).
- Reporting to support operational processes versus management reporting.

# Fost Plus – data flows



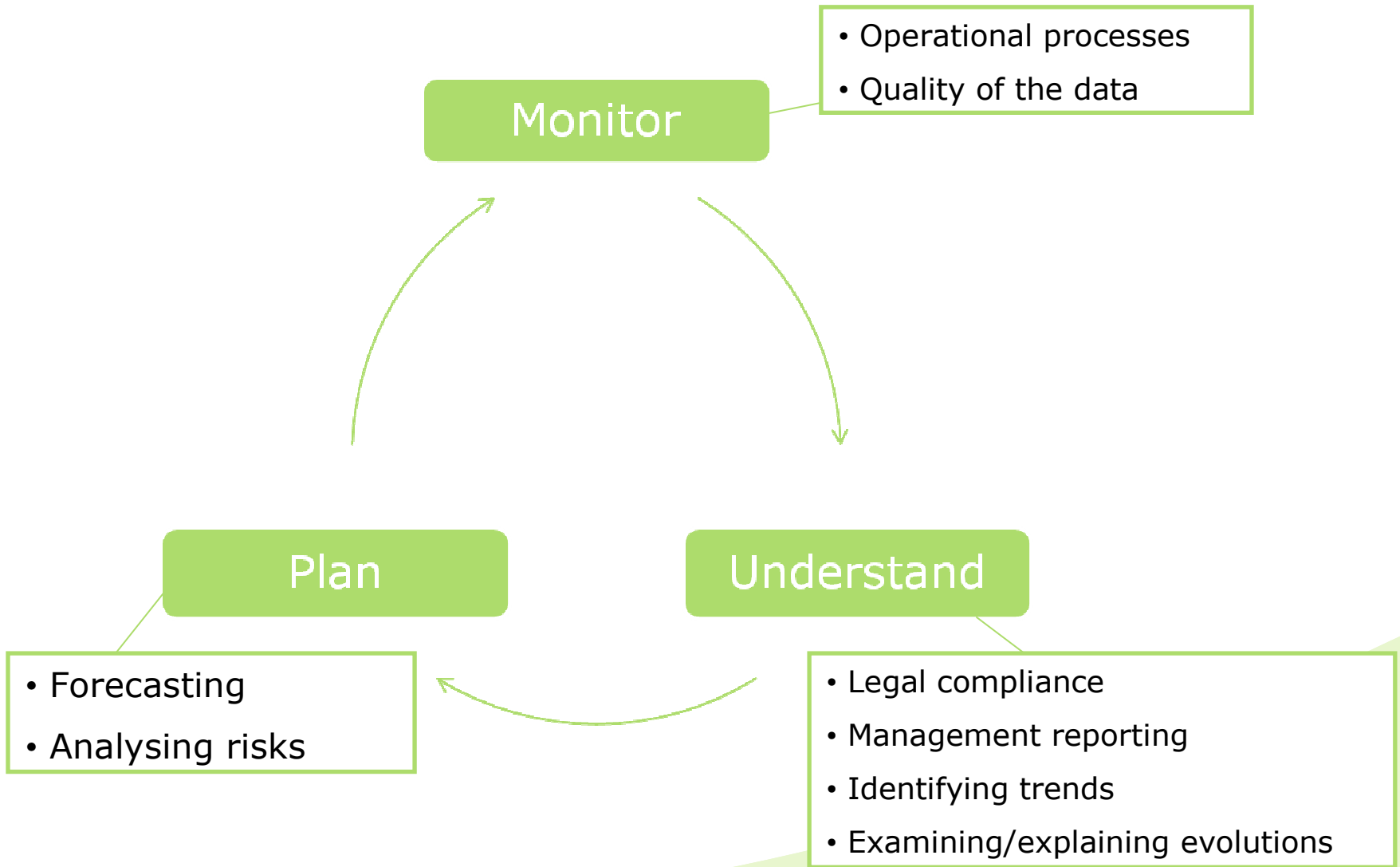
# Fost Plus – Business value of BI

## Reporting

- Legal compliance
- Monitoring operational processes
- Management reporting (scorecarding, ...)
- Internetservice to our partners

## Data mining/analysing

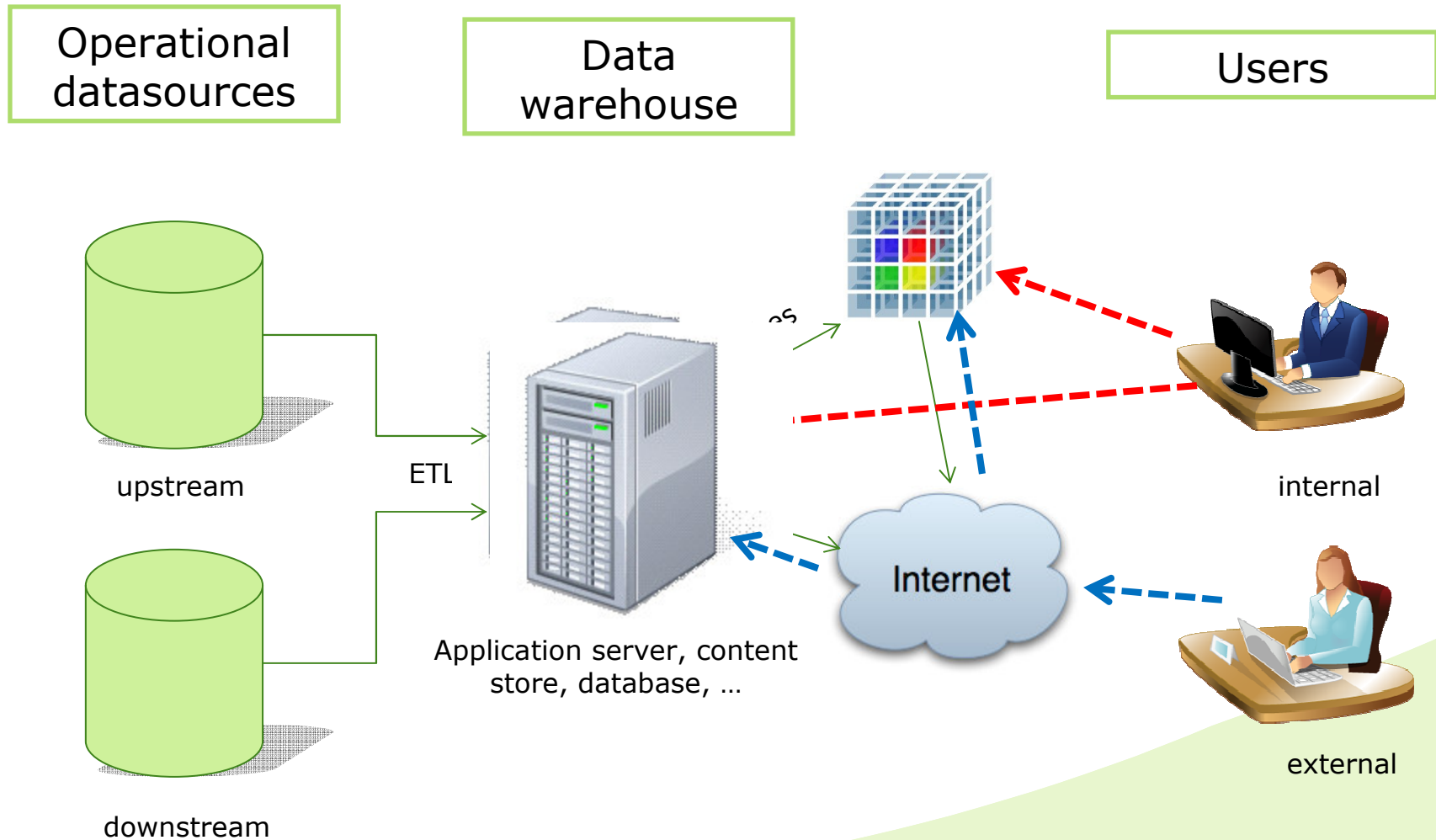
- Controlling quality of the data
- Identifying trends
- Examining/explaining evolutions
- Forecasting
- Analysing risks



# FOST PLUS & BI

Where are we now?

# Fost Plus & BI – design



# BI upstream – external users


The screenshot shows a Windows Internet Explorer browser window displaying the Fostplus website. The address bar shows the URL: <https://www.efost.be/or/orapp/createOnlineReportRequest.do?target=request&reportCode=REP001>. The page title is "TEST EFOST (999999)" and the user is identified as "Katja Van der Vekens".

The main content area is titled "Rapports" and contains the following sections:

- Home Rapports**
  1. Votre déclaration sur les 5 dernières années en kg et EUR par matériau.
  2. Votre déclaration sur les 5 dernières années en kg et EUR par famille de produits.
  3. Votre déclaration détaillée (à.p.d. fiches emballage) en kg et en EUR.
  4. Votre déclaration en unités, en EUR et en kg.
  5. Votre déclaration chiffre d'affaires.
  7. Résultats des contrôles sur votre déclaration.
- Rapports en attente**

info  
+32 2 775 03 58  
[efost@fostplus.be](mailto:efost@fostplus.be)

The main form area is titled "Complétez votre demande de rapport:" and contains the following text: "Votre déclaration Fost Plus sur les 5 dernières années en KG et en EUR par matériau." Ce rapport est basé sur la dernière déclaration de chaque année.

**Exemple fictif:** 

**Choisissez les paramètres:**

Type d'emballage:


**Langue:**  Néerlandais  Français

**Format:**  Pdf  Html(peut être ouvert sous excel)

Buttons:



# BI upstream – external users



## Resultaten van de controles op uw aangifte uitgevoerd in 2007

Onderneming: COMPANY X

**1. Controle op uw aangifte uitgevoerd door de revisor van FOST Plus**  
 Elk jaar wordt de aangifte van een aantal van onze leden gecontroleerd door een revisor, aangesteld door en op kosten van FOST Plus. Indien u onze revisor op bezoek kreeg, ziet u hier de resultaten.

Gecontroleerde aangifte	Bijdrage van de gecontroleerde aangifte	Geraamde afwijking op basis van de controle	Geraamde afwijking in %	Te veel/ te weinig aangegeven?	Bijdrage na correctie	Reële afwijking (na correctie)	Reële afwijking in %
2006 D	2.568			Te veel aangegeven	1	-2.567	-99,94%

**2. Een belangrijke daling of stijging van uw bijdrage**  
 Bij de verwerking van elke aangifte, berekenen wij het verschil in bijdrage met de vorige aangifte. Bij een belangrijke daling of stijging contacteren wij u alvorens de factuur op te maken. Indien dit voor uw bedrijf het geval was, vindt u hier meer informatie.

Datum van verwerking van de aangifte	Aangifte	Bijdrage (EUR)	Vorige aangifte	Bijdrage aan tarieven 2006(EUR)	Daling in EUR	Daling in %	Aangifte correct?
28/11/2007	2006 DCD1	1	2006 D	2.568	-2.567	-99,94%	Ja

**3. Het gewicht en de samenstelling van uw verpakkingen**  
 Op basis van een willekeurige selectie wordt elk jaar de samenstelling van enkele honderden verpakkingen gecontroleerd. Indien één of meer van uw verpakkingen gecontroleerd werden, vindt u hier de resultaten

Datum van opstart van de controle	Resultaat	Aangifte van de gecontroleerde verpakkingen	Productbeschrijving	Aangegeven gewicht (g)	Gemeten gewicht bij de controle	Vershil (g)	Vershil in %	Aantal aangegeven eenheden	Bijdrage op basis van uw aangifte (EUR)	Bijdrage op basis van de gemeten gewichten (EUR)	Vershil (EUR)	Vershil in %	Te veel/ te weinig aangegeven?
26/11/2007	OK (= Geen of kleine afwijking)	2006 D	PRODUCT 4	27,00	27,00	0,00	0,00%	500.000	546	546	0	0,00%	-
26/11/2007	Afwijking vastgesteld	2006 D	PRODUCT 6	5,00	5,00	0,00	0,00%	123.444	229	229	0	0,00%	-

# BI upstream – internal management reporting



## Use of the different declaration systems and supports.

Active members, most recent processed declarations

Declaration system	# members	KG (one-way)	€ 2008	€ 2009
Turnover	2.596	27.968.060	2.384.056	1.925.254
Detailed declaration	1.129	457.250.223	44.719.816	35.785.996
Simplified	1.126	29.491.172	2.236.691	1.800.042
Wine and alcoholic beverages	369	53.775.793	1.716.274	1.276.953
Service packaging per material (sv001-sv019)	217	16.318.770	1.270.869	1.020.614
Simplif.+ service packaging per material (retail)	20	54.428	7.426	6.084
Press & publishers declaration	20	147.044	17.773	14.491
Service packaging per element (sv1-sv55)	12	482.593	50.717	41.235
Wine and alcoholic beverages + product cards	5	5.252.438	161.183	119.072
Packbase - on hold	2	133.898.094	12.157.713	9.733.451
<b>Total</b>	<b>5.496</b>	<b>724.638.616</b>	<b>64.722.517</b>	<b>51.723.192</b>

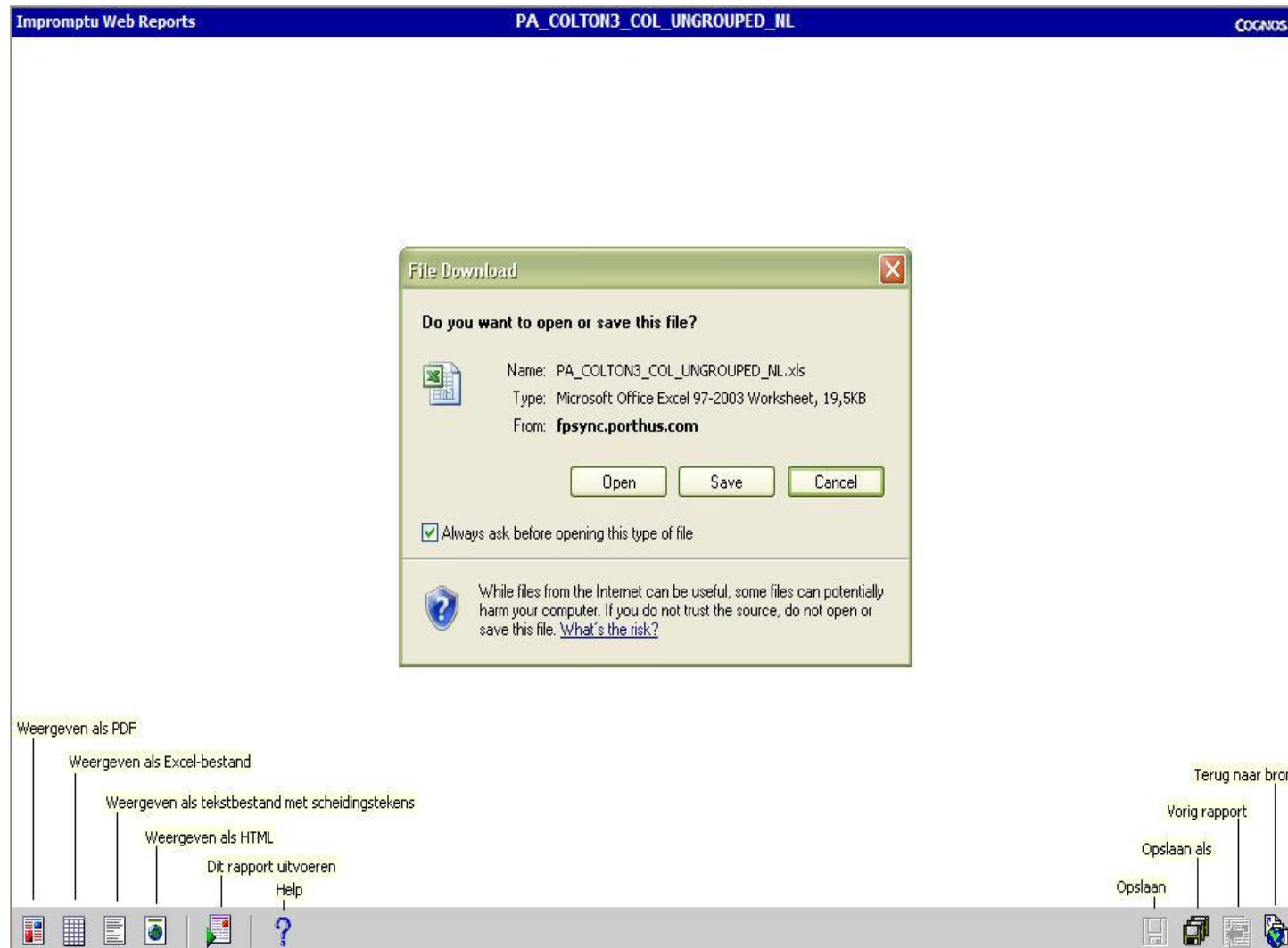
Support	# members	KG (one-way)	€ 2008	€ 2009
Web	2.908	39.404.358	3.286.840	2.653.886
Papier	1.983	126.646.932	7.610.551	6.016.091
PACKBase	605	558.587.326	53.825.126	43.053.216
<b>Total</b>	<b>5.496</b>	<b>724.638.616</b>	<b>64.722.517</b>	<b>51.723.192</b>

w8\_total weight and  
contribution\_declaration systems

1/1

19.10.2009

# BI downstream – external users



# BI downstream – external users

Impromptu Web Reports PA\_COLTON3\_COL\_UNGROUPED\_NIL COGNOS

Impromptu Web Reports PA\_COLTON3\_COL\_UNGROUPED\_NIL COGNOS

imrap.cgi [Read-Only] [Compatibility Mode]

	A	B	C	D	E	F	G	H	I
	Ophaler	Project	Fractie	Ophalings-systeem	Gemeente	Datum	Livcol Bon Nr.	Plaat Nr.	Validaties
1	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	LOCHRISTI	01.10.09	0221-2-0906144-1-05	STN834	Lokaal gevali
2	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	WACHTEBEKE	01.10.09	0221-2-0906150-1-65	SSJ768	Lokaal gevali
3	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	LOKEREN	02.10.09	0221-2-0906159-1-58	YIN764	Lokaal gevali
4	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	ZELZATE	02.10.09	0221-2-0906171-1-81	STN834	Lokaal gevali
5	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	LOCHRISTI	02.10.09	0221-2-0906172-1-91	RMS446	Lokaal gevali
6	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	ZELE	02.10.09	0221-2-0906173-1-04	YIN764	Lokaal gevali
7	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	WACHTEBEKE	02.10.09	0221-2-0906182-1-94	SSJ768	Lokaal gevali
8	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	LOCHRISTI	06.10.09	0221-2-0906230-1-89	SSJ758	Lokaal gevali
9	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	LOKEREN	06.10.09	0221-2-0906236-1-52	YIN764	Lokaal gevali
10	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	LOCHRISTI	06.10.09	0221-2-0906242-1-15	SSJ758	Lokaal gevali
11	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	ZELZATE	06.10.09	0221-2-0906244-1-35	STN834	Lokaal gevali
12	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	WACHTEBEKE	06.10.09	0221-2-0906253-1-28	SSJ768	Lokaal gevali
13	SITA RECYCLING SERVICES (GENT)	IDM	Papier-Karton	CP: Basis Scenario	MOERBEKE-	07.10.09	0221-2-0906254-1-38	YIN764	Lokaal gevali

Excel

# FOST PLUS & BI

Our future

# Future perspective: BI 2.0

- Relate BI to the company strategy and integrate it in the global architecture (EA).
- Validate the business value, make BI more visible in the company.
- Integrated approach: consolidation upstream and downstream
- Enlarge the target group:
  - All departments of Fost Plus (Finance, technical, ...);
  - Consumers/citizens;
  - All partners (approx. 6000).

# Future perspective: BI 2.0

- Intensify and stimulate the use of BI:
  - Strengthen the involvement of the management through extended management reporting and direct use of the BI tools.
  - Push the information to the users (distribution via email, dashboard, ...)
  - Expand BI as a service to our partners;
  - Develop simplified data models to achieve buy-in of the users.
- Introduce BI in Business proces management: measuring waste in processes in order to optimize them.

# FOST PLUS & BI

A future based on ... the following experiences



# Benefits

- More effective verification of the data (by Fost Plus).
- Higher quality of data.
- Identification in an early stage of upcoming changes in use of packaging.
- More accurate budgeting and forecasting.
- Flexible monitoring of operational processes.
- More efficient collaboration with our partners.
- Better services to our partners.
- Userfriendly and costefficient reporting. Business specialists make their own reports and do their own data mining.

# Lessons learned

- “Think big, start small but keep thinking big”.
- Integrate BI in strategic thinking.
- Make BI and its business value visible and tangible in the company.
- Choose between a top down <> bottom up implementation
- Create ‘quick wins’.
- Know your source data.
- Buy-in of the users is crucial: coach the users (tools & data knowledge).
- Incremental scaling of the hardware: grow along with the BI requirements.
- Keep the BI environment ‘alive’.

# FOST PLUS & BI

How did we get to where we are?

# Fost Plus & BI - history

- Before 2001:
  - Scattered data storage;
  - SQL queries on operational data;
  - Some reporting in applications (f.e. Oracle Reports);
  - Excel;
- 2001: Strategic decision to create a BI environment:
  - Dedicated databases filled via ETL.
  - Reporting tools.
  - Analysing tools.

# Fost Plus & BI - history

- 2002: Setup BI project:
  - Request for proposal Technical architecture;
  - Evaluation proposals;
  - Decision: Cognos BI Suite.
    - > High level of integration;
    - > Diversity of enduser facilities;
    - > Wide range of services;
    - > Web & client/server.
  - Partners:
    - > Numius (formerly known as H&C)
    - > Valoris
    - > iPerform

# Fost Plus & BI - history

- 2002-2003: Implementation (iterations).
- Since 2003:
  - Maintenance releases.
  - Preferred partner: Numius

# FOST PLUS & BI

Our conclusion

# Why BI?

- “Single point of access to the data.”
- “Single version of the truth.”
- Better understanding of our business.
- Better operational efficiency.
- Flexible and costefficient reporting.
- New services to our partners (e-servicing).
- Better insight in our performance through KPI’s.

Information ⇒ knowledge and insight ⇒ benefits



**Don't waste your data!**

**Turn them into knowledge and value.**

Fost Plus = smart recycling

[www.fostplus.be](http://www.fostplus.be)

Together > Good sorting > Better recycling

Fostplus 