

Draft Stage 1 Report: Existing System

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September 12, 2013

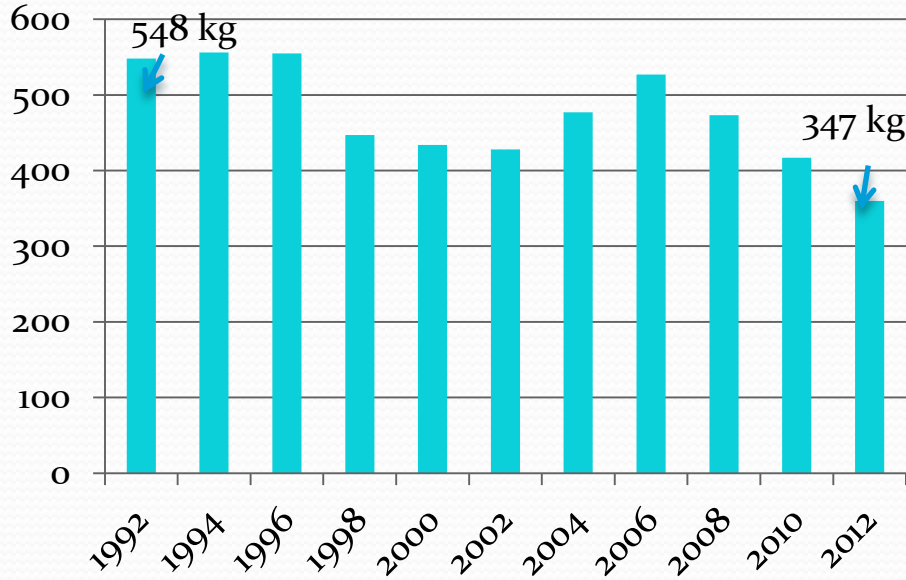


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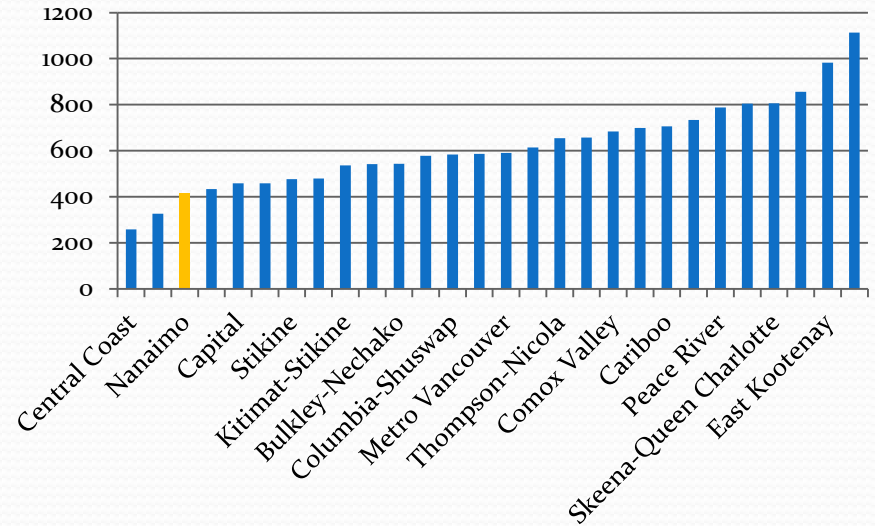
Today's presentation

- To provide an overview of the *current* solid waste management system
 - Key programs, policies and infrastructure
 - Baseline performance data
- To obtain your input on the draft
 - Clarity
 - Completeness
 - Accuracy
- To elicit discussion on the current system

Today's system...something to be proud of



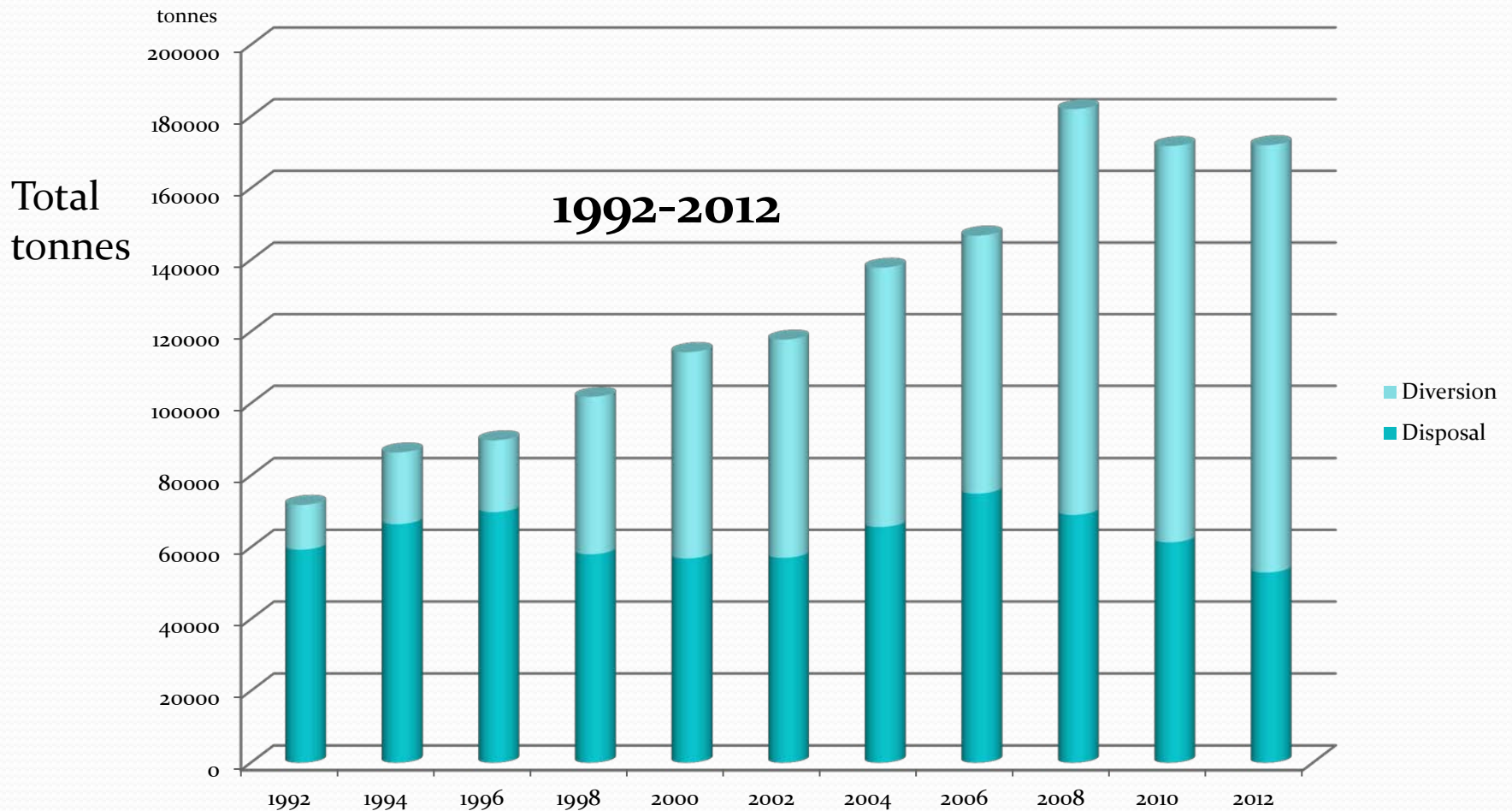
1992 – 2012 RDN Disposal Rate (kg/capita)



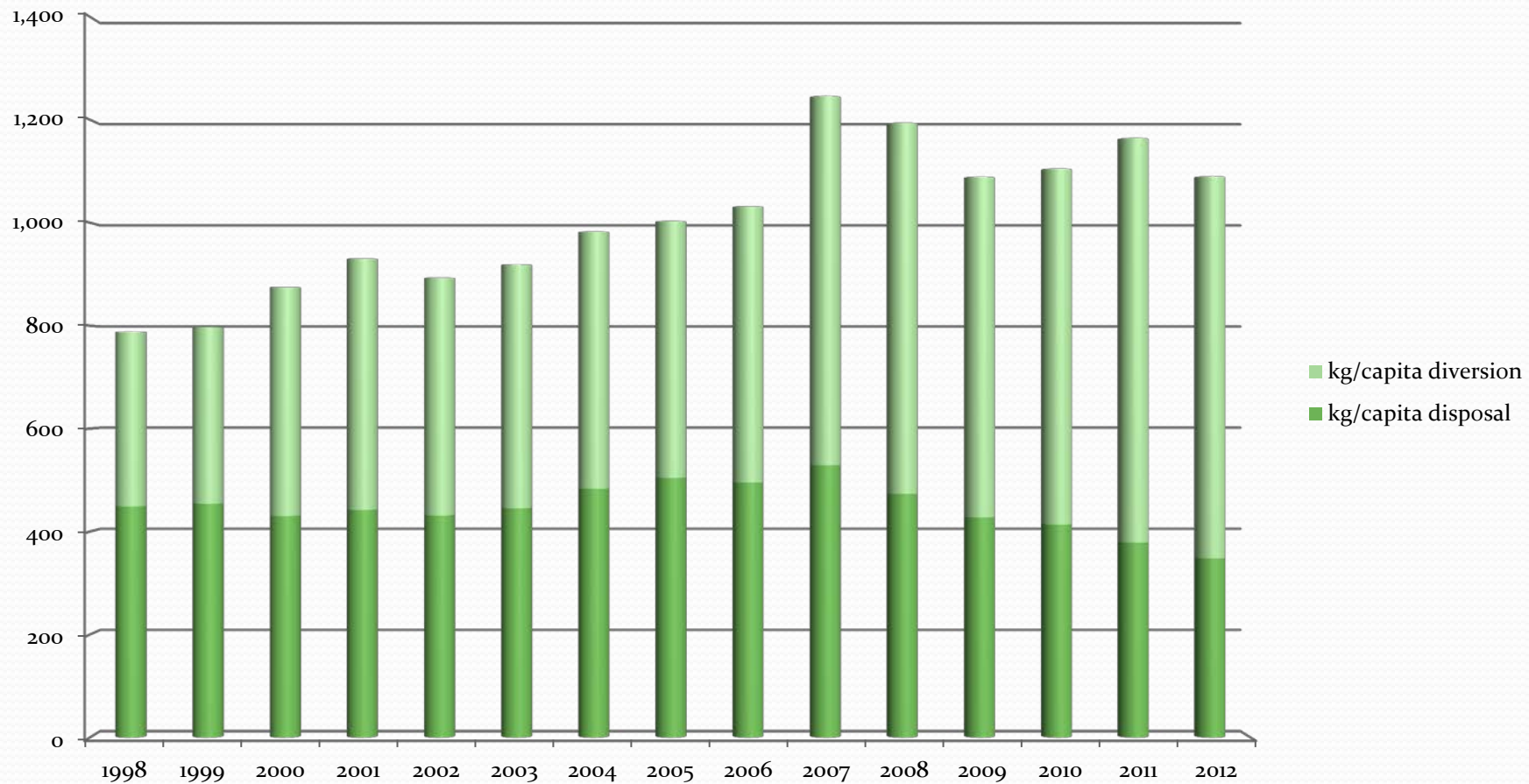
Disposal Rates (kg/capita/year) for BC Regional Districts (2010)

Trends in Waste Generation

- Generation = disposal + diversion



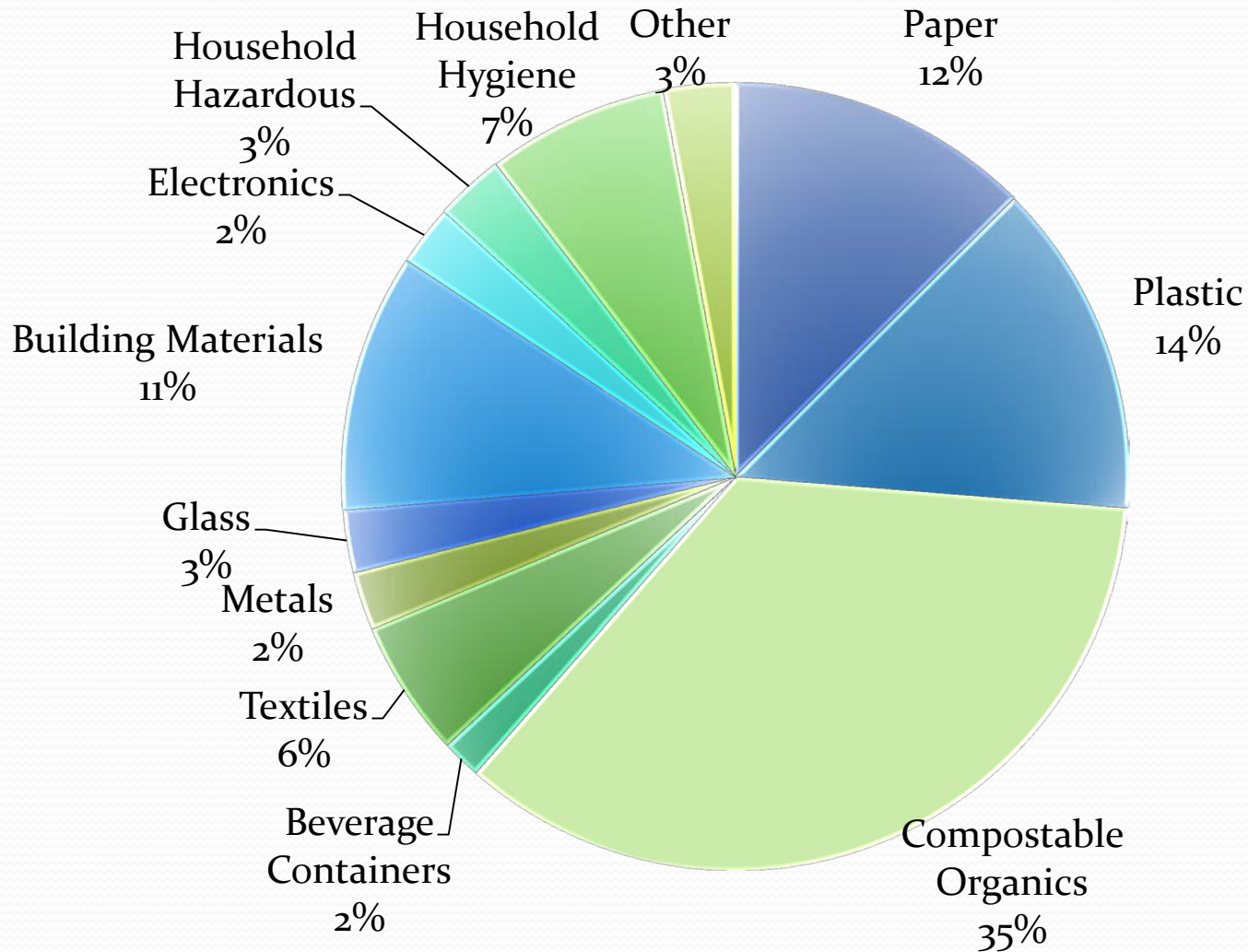
Per Capita Waste Generation (1998-2012)



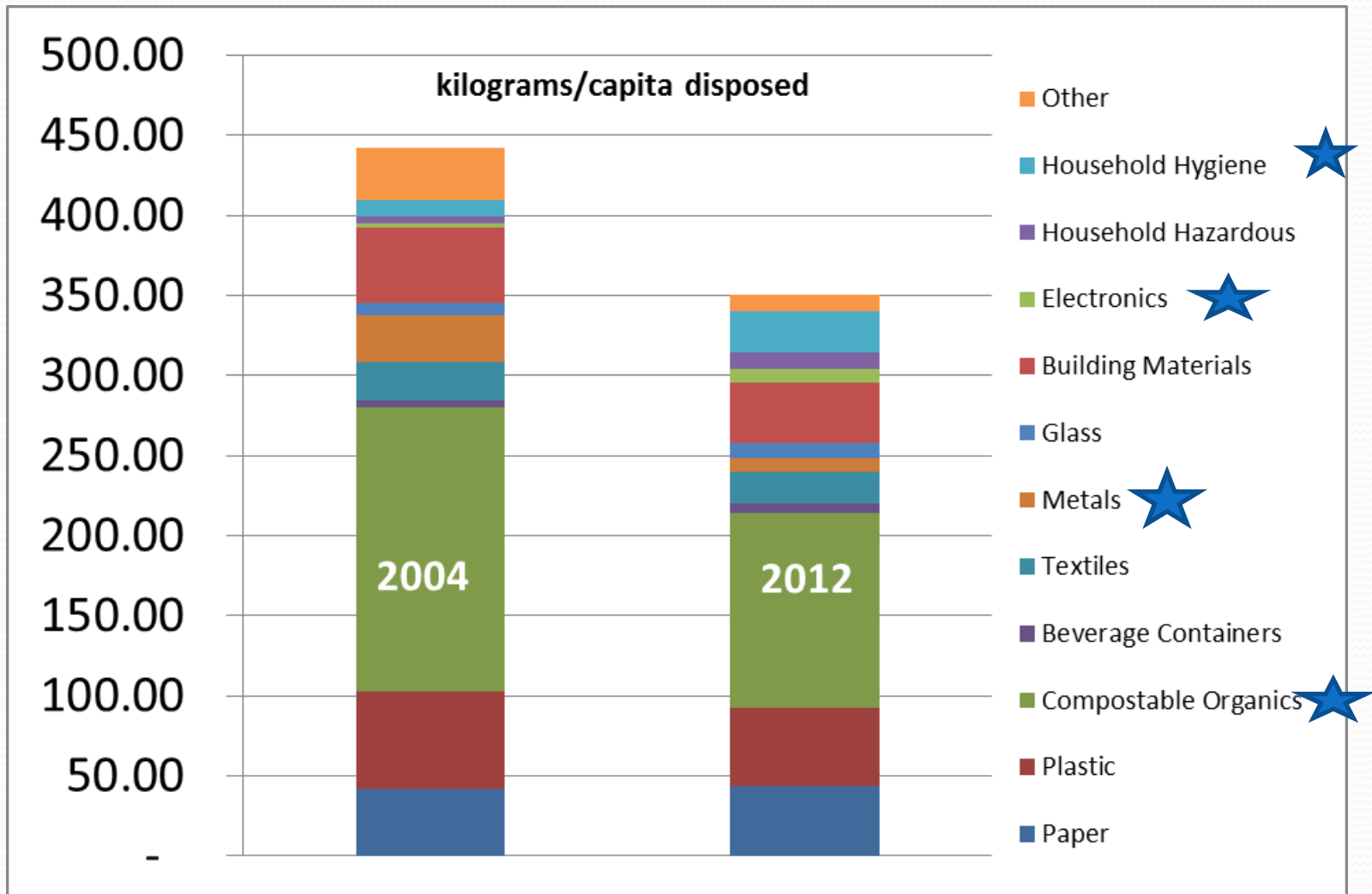
Source of Waste Disposed

Waste Source Type	Tonnes (2012)	% of waste disposed
Curbside residential waste	8,928	17%
Multi-family residential waste (estimated)	2,626	5%
Commercial waste	29,934	57%
Self-hauled waste	11,028	21%
Totals	52,897	100%

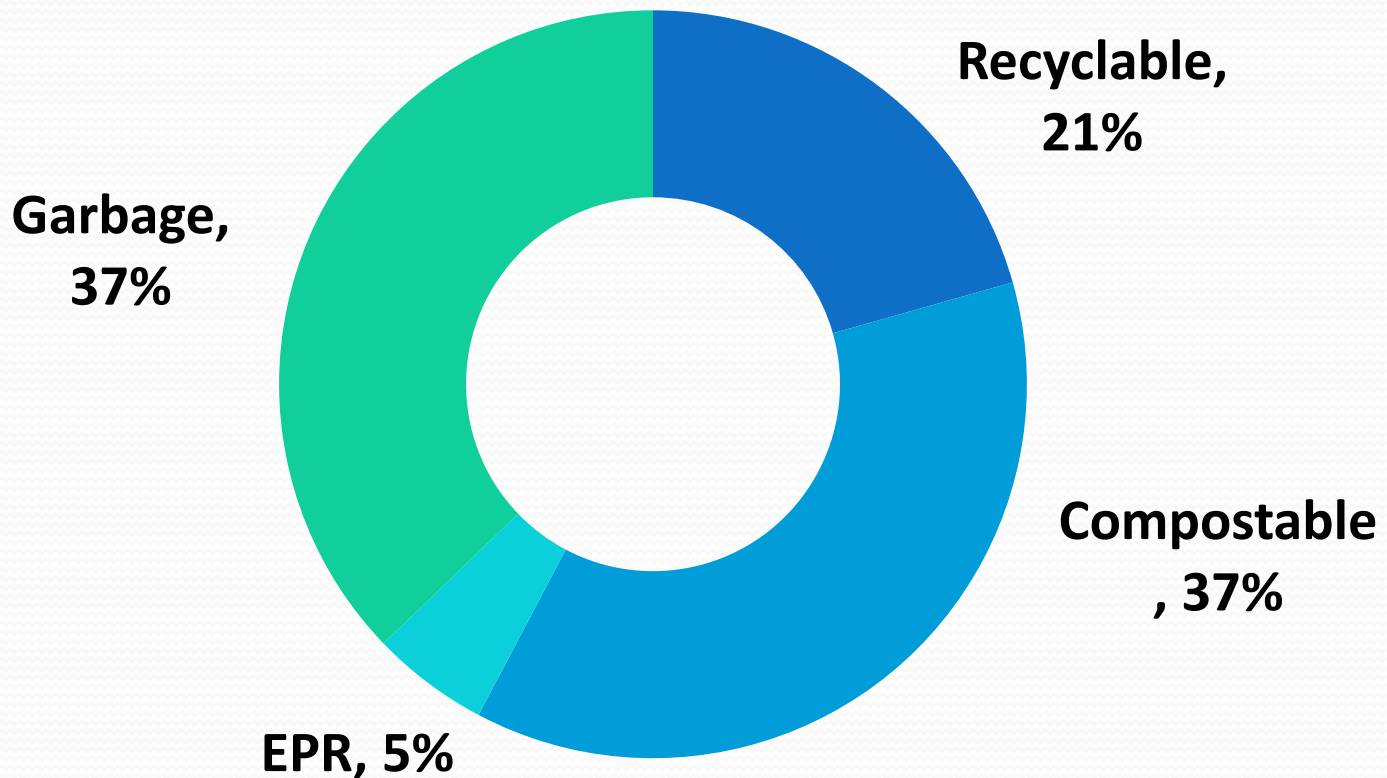
Composition of Waste Disposed (2012)



2004 vs. 2012 Waste Composition



Composition of Waste Disposed, by Waste Management Alternative (2012 data)



Key Policy Drivers

- “Zero Waste” diversion target
- Ensuring that the landfill is designed and operated to maximize environmental protection
- Banning waste materials from disposal in the landfill once an alternative has been established
- Organics diversion strategy
- Waste stream management licensing
- User pay (collection, disposal)

Reduction and reuse

- Both the RDN and CoN promote backyard composting and grasscycling
- CoN has Reuse Rendezvous
- Numerous second hand stores and on-line services that buy, sell and trade in used goods
- Several retailers promote bag reuse

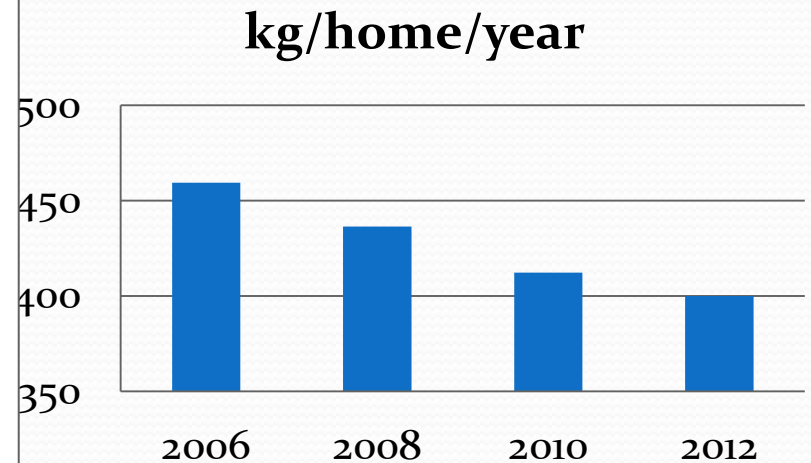
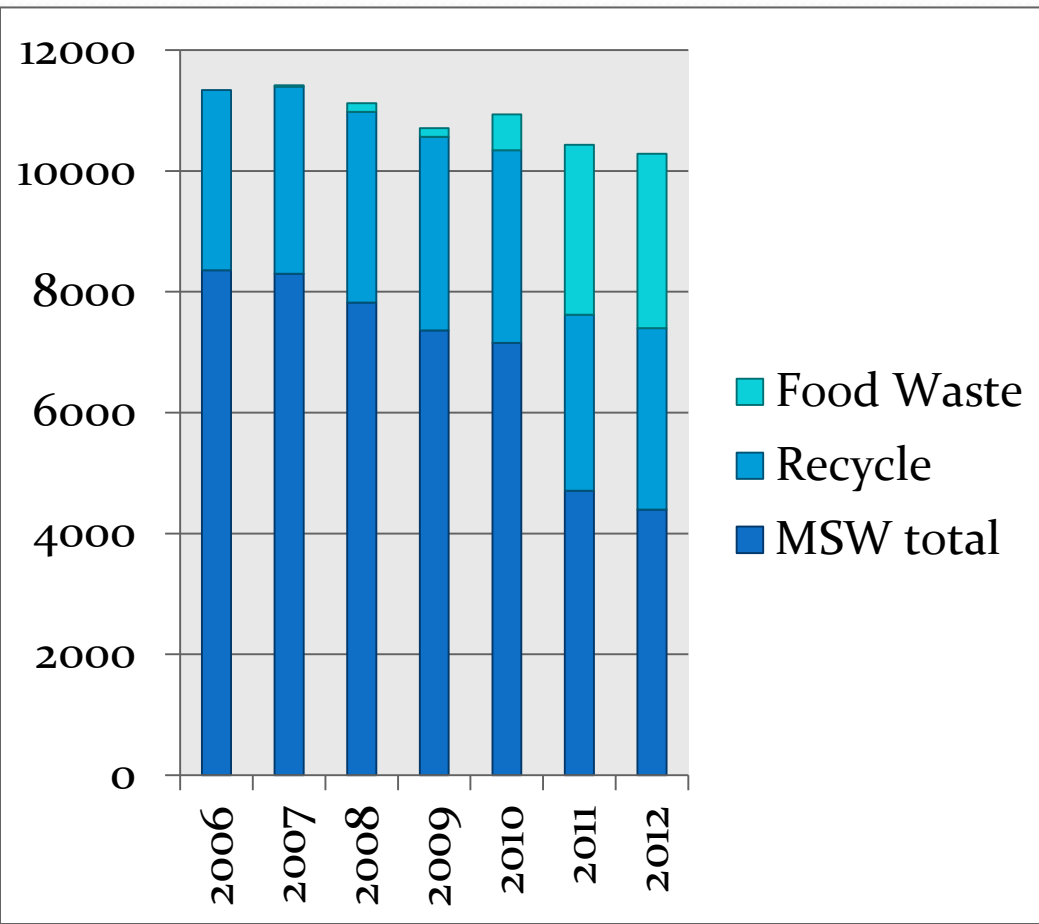


REUSE RENDEZVOUS 2013:
Give Unwanted Household Items a Second Chance

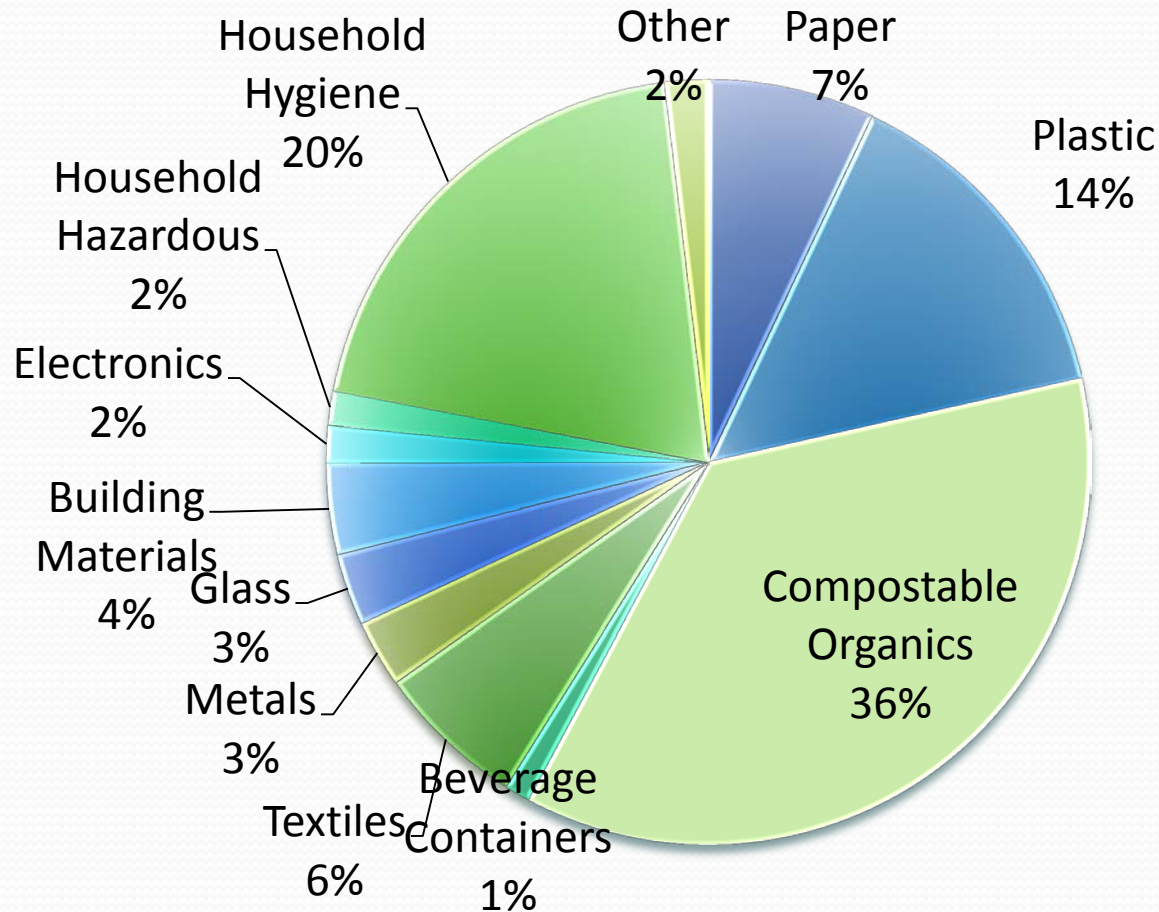


Single-Family Collection

- 53,500 homes receive “3 stream” collection from RDN and CoN
- Can limit of 1 can every other week



Composition of Single-Family Waste Disposed



Multi-Family Collection

- 13,430 multi-family units in RDN (12,000 of those in CoN)
- Privately serviced for collection (garbage, recycling)
- Recycling rates estimated to be 16-18% (compared to 30% for single-family)
- Roughly 44% of garbage is compostable

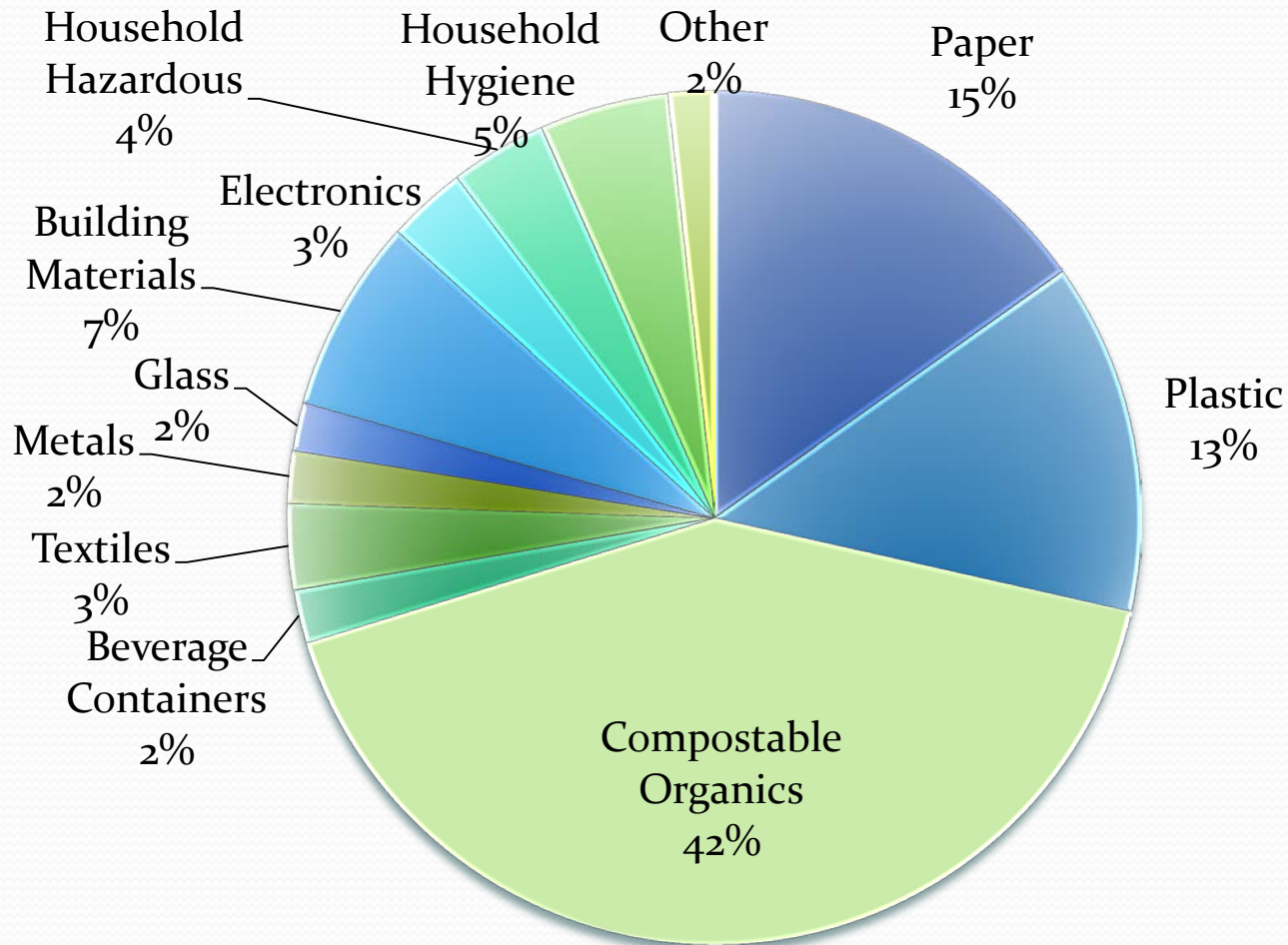


ICI (industrial, commercial and institutional)

- Collection services provided by the private sector
 - Town of Qualicum Beach provides some collection to businesses in their area
- Participation in recycling and organics diversion largely driven by disposal

ICI Disposal and Diversion	Estimated tonnes (2012)
Disposal	29,960
Diversion	84,974
Generation (disposal + diversion)	114,934
% Diversion	74%

Composition of ICI Waste Disposed (2012)



Yard waste management

- RDN and CoN do not provide yard waste collection
 - Banned from inclusion in curbside collection programs
- Yard waste banned from disposal at landfill
- Several private collection services
- Several drop off depots
- Yard waste estimated to be 2.5% of waste landfilled



Recycling depots

- Several private, public and non-profit recycling depots throughout the RDN that accept a wide variety of recyclable materials



Extended Producer Responsibility

- Growing part of solid waste management system
- EPR programs shift the cost of managing products and packaging from local governments to producers and consumers
- Driven by BC Recycling Regulation
 - Requires “producers” (first importers, including retailers, distributors and manufacturers) to set up collection and management system for products listed in regulation

BC's Current EPR Programs

- Paints and solvents
- Tires
- Cell phones
- TVs
- Used motor oil, filters and empty containers
- Batteries (all kinds)
- All appliances
- Pharmaceuticals
- Fuels and antifreeze
- Pesticides
- Thermostats
- Smoke detectors
- Audio-visual equipment
- Computers and computer related equipment
- “Lamps”, ballasts and fixtures, including CFLs

EPR: Product Stewardship Organizations

- Set up by producers to operate stewardship programs
 - **Encorp** (beverage containers, electronics)
 - **Product Care** (paint, flammable liquids, pesticides, electronics, smoke & CO alarms, small appliances, lighting)
 - **Tire Stewardship BC**
 - **BC Used Oil Management Association** (motor oil, containers, filters)
 - And others
- Collection mechanisms: Depots, return-to-retail, collection events
- Most programs funded through eco-fees levied at the point of sale
- Current programs have reduced the potential toxicity of garbage sent to disposal

Extended Producer Responsibility

Upcoming Products

- May 2014: Packaging and printed paper

Future EPR Products

- Automotive products
- Construction and demolition materials
- Furniture, textiles and carpet

Composting Facilities

- ICC in Nanaimo receives residential and ICI food waste and yard waste
- Earthbank in Parksville blends ground landclearing waste with fish mortalities/processing waste

Construction/demolition (CD) waste management

- Several facilities in RDN
- Recycling largely driven by disposal bans

Material	Facility Name
Asphalt	Haylock Bros. Hub City Paving
Asphalt Shingles	Pacific Coast Waste Management
Concrete	DBL Hub City Paving Haylock Bros. Mayco Mix Pacific Coast Waste Management Parksville Heavy Equipment
Metal	Alpine Annex Auto Bull Dog Auto Parts Carl's Metal Salvage DBL Nanaimo Recycling Exchange Porter Wood Regional Recycling Schnitzer Steel
Wood (lumber)	Alpine DBL Gabriola Island Recycling Organization Nanaimo Recycling Exchange Pacific Coast Waste Management Porter Wood

Illegal Dumping

- Issue throughout the province (urban and rural)
- Estimated to be 0.0002% of waste generated in the region
- RDN Anti-Illegal Dumping program:
 - Prevention of illegal dumping through education;
 - Funding the clean-up of illegal dump sites; and
 - Illegal dumping surveillance and enforcement activities
 - *Pursuant to RDN Bylaw No. 1386, those who generate (own), deliver or abandon waste illegally can be subject to a fine of up to \$200,000*

Education and Outreach

- RDN and CoN websites
- RDN Zero Waste newsletter is sent to all homes 3x/year
- CoN newsletter to all addresses 2x/year
- RDN on-line searchable recycling directory
- RDN zero waste school education program provides free classroom workshops

Residual Waste Management

- RDN's landfill (Nanaimo) and transfer station (near Parksville)
 - Subject of recent site visits and Carey's presentation at last RSWAC



Summary

- Range of programs, policies, services and infrastructure in the RDN are indicative of an advanced solid waste management system
- The RDN and member municipalities have been successful as a result of:
 - follow through with their policies (e.g. collection and disposal bans)
 - a supportive public
 - a waste management industry that has stepped up to the plate to fill the demand

Summary (2)

- Current diversion is impressive, but waste composition study indicates that more can be done within the current system to divert waste
- Reducing the per capita total waste generated is not experiencing the same level of success

RSWAC Public Engagement Schedule

