2022 ANNUAL REPORT

June 28th 2023

Prince
Edward
Island
Paint Program



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1.0 About Product Care Association of Canada

Product Care Association of Canada ("Product Care") is a federally incorporated, not-for-profit product stewardship association formed in response to stewardship regulations and is governed by a multi-sector industry board of directors. Product Care has developed and managed paint, lighting products, household hazardous waste and special waste stewardship programs since 1994.

Product Care administers and operates the Prince Edward Island (PEI) Paint Stewardship Program ("Program"). The Program is approved by the Prince Edward Island Department of Environment, Energy and Climate Action under the *PEI Materials Recycling Regulations* ("Regulation") and has been in operation since September 2012. Product Care, on behalf of its members, oversees the administration, collection, transportation, recycling, and management of all designated consumer paint products. In addition, the Program is responsible for public education and fostering consumer awareness of the Program.

Product Care's members are the "brand owners" (manufacturers, distributors, and retailers) obligated by the Regulation under the category of architectural paint. In addition, Product Care operates paint product stewardship programs in seven other provinces: British Columbia, Manitoba, Saskatchewan, Ontario, New Brunswick, Nova Scotia and Newfoundland and Labrador. Product Care also operates the stewardship program for lamps in Prince Edward Island.

1.1 Report Period

This report covers the Program's activities from January 1, 2022 to December 31, 2022.

1.2 Program Summary

The Program offers collection sites throughout the province where consumers can bring leftover household paint free of charge. Six collection sites are operated by Island Waste Management Corporation (IWMC) under contract with Product Care.

The Program is funded by Environmental Handling Fees (EHFs) remitted by Product Care's members based on the number of units of designated consumer paint products sold in or into the province (see <u>Appendix</u> <u>1</u> for a list of current EHF rates).

Product Care supplies collection sites with standard reusable collection containers, such as tubskids, boxes, and drums. A hauler contracted by the Program collects the filled containers from the collection sites and drops off empty containers. The full collection containers are shipped to a processor for recycling.

2.0 Brand Owner Sales Information

Program members reported an estimated liquid volume of 1,028,431 litres¹ of Program Products sold in PEI from January 1 to December 31, 2022.

3.0 Collection

The following section provides the total amount of post-consumer paint collected in PEI, as well as the location of the Program's collection sites.

3.1 Total Amount of Post-Consumer Paint Collected

Table 1 shows the number of collection containers collected and the amount of post-consumer paint collected by the Program for the reporting period. Not all paint that was collected in 2022 was processed. The estimation of residual paint volume assumes that all the collected paint in 2022 was processed in the same year and utilizes conversion factors.

Table 1: Total Amount of Post-Consumer Paint Collected in 2022

	Number of Tubskids ²	Number of Aerosol Drums ³	Residual Paint Volume (L) ⁴	Residual Aerosol Paint Volume ⁵ (L)	Paint Share Volume (L)	Total Residual Paint Volume (L)
Post-Consumer Paint Collected	900	106	83,811	560	102	84,473

Table 2 provides the Program's recovery rate, based on the volume of paint collected as a function of volume of paint sold in PEI in 2022.

¹ Sales data is reported to Product Care in units. For purpose of this report, sales units are converted to litres sold using coefficients based on the volume of the most common container size in each product category.

² Each collection bin measures 42 x 42 x 48" and with a nominal capacity of 108 one-gallon containers. The actual number of paint containers per bin varies depending on the mix of paint container sizes, ranging from 250ml – 18.9L capacity.

³ Each drum holds approximately 175 aerosol containers.

⁴ To determine the residual volume of paint collected from tubskids, the number of tubskids collected is multiplied by a conversion rate of 93.1 L per tubskid. This conversion rate is obtained by dividing the total actual residual paint extracted (including both water-based and oil-based) by the number of tubskids processed in the same year. The 93.1 L conversion rate includes actual volumes for water-based paints and an estimation for oil-based paints that applies the 2021 residual volumes of oil-based paint per tubskid to 2022 tubskids.

⁵ Based on a conversion rate of 5.25 L per drum, in addition to approximately 3 L of aerosol cans collected in paint tubskids.

Table 2: 2022 Paint Sales, Residual Recovery Volume and Recovery Rate

	Total
Sales (litres)	1,028,431
Residual Recovery Volume (litres)	84,473
Recovery Rate	8.2%

3.2 Collection Sites

As of December 31, 2022, six collection sites participated in the Program. All six collection sites were operated and managed by IWMC (see Table 3).

Table 3: 2022 PEI Collection Sites

Collection Site	Address	City
GreenIsle	8 Superior Crescent	Charlottetown
Brockton	2202 Dock Road Rte # 150	West Prince
New London	10142 Rte #6	Central
Murray River	378 Cape Bear Road Rte #18	South Kings
Dingwells Mills	100 Selkirk Road Rte #309	North Kings
East Prince Waste Management Facility	29786 Rte #2	Wellington Centre

4.0 Processing

This section of the report sets out the following:

- a) The total amount of post-consumer paint processed or in storage;
- b) The percentage of post-consumer paint collected that was reused, recycled, disposed of in an engineered landfill, recovered for energy, or otherwise treated or disposed of;
- c) A description of the types of processes utilized to reuse, recycle, dispose of, recover energy from, contain, or otherwise treat or dispose of post-consumer paint;
- d) A description of the efforts to redesign paint products to improve reusability and recyclability; and
- e) The location of processing or containment facilities for post-consumer paint.

4.1 Location of Processing Facilities

The following is a list of facilities contracted by the Program to handle and process program products.

Table 4: Location of Processing Facilities

Laurentide Re-sources Atlantic Inc. 9322 Rue Main, Richibucto, NB E4W 4C7	Processing Facility
Société Laurentide Inc. 345 Bulstrode Street, Victoriaville, QC G6T 1P7	Processing Facility
GFL Environmental 17 Jones Court, Sussex, NB E4E 2S2	Processing Facility

4.2 Post-Consumer Paint Processed

In 2022, a total of 900 paint tubskids, and 106 aerosol drums were shipped to Laurentide (Richibucto) and GFL Environmental facilities for processing.

During the reporting period, Laurentide and GFL Environmental processed (i.e., opened, sorted and bulked into shipping containers) 908 tubskids and 106 aerosol drums, including collection containers that remained in their inventory from 2021. However, the majority of the oil-based paint collected in 2022 was temporarily stored for processing in 2023, resulting in no oil-based paint being recycled during that year.

Volumes collected but not shipped, or shipped but not processed, were managed in the following program year.

Table 5: Total Amount Post-Consumer Paint Processed in 2022

ltem	Number of Tubskids	Number of Aerosol Drums	Residual Paint Volume (L)	Residual Aerosol Paint Volume ⁶ (L)	Total Residual Paint Volume (L)
Shipped to Processor	900	106	83,811 ⁷	560	84,371
Processed	908	106	78,054 ⁸	560	78,614

⁶ Based on a conversion rate of 5.25 L per drum, in addition to approximately 3 L of aerosol cans collected in paint tubskids.

⁷ To determine the residual volume of paint shipped to processors from tubskids, the number of tubskids shipped is multiplied by a conversion rate of 93.1 L per tubskid. This conversion rate is obtained by dividing the total actual residual paint extracted (including both water-based and oil-based) by the number of tubskids processed in the same year. The 93.1 L conversion rate includes actual volumes for water-based paints and an estimation for oil-based paints that applies the 2021 residual volumes of oil-based paint per tubskid to 2022 tubskids.

⁸ Actual volume of residual paint recovered from processed tubskids, including both water-based and oil-based paint; does not account for any stored oil-based paint that was not processed.

Metal and Plastic Containers Collected, Processed and Stored

Table 6 lists the amount of metal and plastic containers recycled or temporarily stored in 2022 and their respective processors.

Table 6: Metal and Plastic Containers Collected, Recycled and Temporarily Stored in 2022

Container Type	Collected (tonnes)	Recycled (tonnes)	Temporarily stored (tonnes)	Processor	Management process
Metal	29.2 ⁹	29.2	-	DR Metal Recycling, NB, Nova 4 Metals, NS Aim Metal, NB, Copal Metal, QC	Mixed with other scrap metal and sold as a commodity that is eventually sent for smelting
Plastic (HDPE 2)	2.2	1	2.2	Laurentide Re-sources Atlantic/ Société Laurentide Inc.	Temporary storage
Plastic (polypropylene)	12.7	-	12.7	Laurentide Re-sources Atlantic/ Société Laurentide Inc.	Temporary storage

Metal containers (paint containers and paint aerosol containers) were managed by scrap metal recyclers, which take empty metal paint containers that have been baled and mixes them with other metals. The bales of scrap metals are then sold as a commodity and eventually end up being recycled at a smelter.

For plastic containers, the standard process is for the primary processor to bale the empty plastic paint containers and send them for recycling to secondary processors and to be sold as a commodity. In the 2021 annual report, Product Care incorrectly reported that 11.2 tonnes of the polypropylene empty plastic containers were recycled. Due to some challenges with downstream recyclers and market conditions, the 11.2 tonnes were placed into temporary storage while the program worked with the primary processor to find a recycling option. The plastics recycling issue remained in 2022. The program is hopeful that a solution will be found in 2023. Should the issue not be resolved in 2023, the Program will explore other product management alternatives, such as energy recovery and/or disposal.

⁹ Metal weight for aerosol paint cans is calculated using a conversion factor of 35.5 kg per aerosol drum.

4.3 Disposal Method Descriptions

The following sections describe each method the Program used to reuse, recycle, or otherwise treat or dispose of post-consumer paint.

4.3.1 Reuse (PaintShare Program)

The PaintShare Program makes better quality paint returned to collection sites available to the public to take and use at no cost. The collection sites record and report the number of containers given away. This is a highly efficient way to achieve reuse as the paint does not require transportation and reprocessing. Participating collection sites reported approximately 102 litres of paint given away for reuse in 2022.

The amount of paint taken through the Paint Share Program is subject to consumer demand. The accuracy of volumes managed through the Paint Share Program is predicated on users completing the reuse tracking form. PaintShare volumes are estimated by assuming that each container is 75% full on average.

4.3.2 Recycling

At the Laurentide Re-sources facilities in Richibucto, paint containers were removed from the collection containers, inspected, opened, sorted by type, colour and quality, and poured into shipping containers according to management options. Bulked water-based paint of recyclable quality was then distributed to an affiliated processor, Peintures Recuperées du Quebec (PRQ) in Victoriaville, QC, or transferred to other international recyclers.

Table 7 provides the quantity of water-based paint that was reprocessed and recycled as paint. The majority of oil-based paint was temporarily stored to be processed in 2023. As a result, no oil-based paint was recycled in 2022.

Table 7: Quantity and Type of Paint Recycled

Туре	Volume (L)	Percentage of Paint Recycled
Water-based Paint	64,319	100%
Oil-based Paint	0	0%
Total	64,319	100%

4.3.3 Aerosol Paint Management

Paint aerosol containers are punctured, the propellant is filtered through activated carbon, and the contents drained. The residual volumes of paint recovered from paint aerosols are very small and represent a variety of product formulations that limit the options for recycling. Consequently, the residual paint is used for energy recovery.

4.3.4 Energy Recovery

Not all oil-based paint collected is of suitable quality for recycling. In some cases, the paint may be in the form of skins or sludge, of an undesirable color, contaminated or of the wrong chemistry for paint recycling. In addition, regulations, such as the Federal VOC Regulations, require more stringent limits on certain chemical constituents, which tend to be found in higher concentrations in older paints, making it difficult to recycle. Finally, the market for recycled oil-based paint is significantly smaller than that for water-based products with demand continuing to decline.

Due to the high oil content of oil-based paints, these products are suitable for energy recovery. Through the process of fuel blending, oil-based paint collected by the Program that is not suitable for paint recycling is used as an alternative energy source in applications, such as permitted incinerators. During the reporting period, 970 litres of oil-based paint and paint from paint aerosols processing were blended with other fuels and utilized for energy value at licensed facilities.

4.3.5 Incineration

During the reporting period, no material went for incineration.

4.3.6 Landfill

The sorting and bulking of the water-based paint by Laurentide Re-sources generated 13,325 litres of non-recyclable water-based sludge/solid, which were solidified and disposed of at a synthetic-lined landfill cell with leachate collection.

8 below shows the breakdown of post-consumer paint managed by the different product management methods.

Table 8: Post-Consumer Paint by Management Method

Method	Volume (L)	Percentage
Reuse	102	0.1%
Recycle	64,319	81.7%
Energy Recovery	970	1.2%
Landfill	13,325	16.9%
Incineration	-	-
Total	78,716	100%10

4.4 Design for Environment

Product Environmental Impact Reduction, Reusability and Recyclability

The paint and coatings industry has been working tirelessly to make their products safer for the environment. This effort is driven by the growing awareness of the negative impact of chemical products on the environment. In recent times, the industry has made significant strides towards reducing the environmental impact of their products. The industry's offerings are not only safe to handle but are increasingly eco-efficient, reflecting the latest available science. The industry evaluates the impacts of their products along their entire life cycle and continuously develops new offerings. Sustainable production processes are top priorities for the industry. Beyond their primary function of protecting built infrastructure, coatings are also essential components in the production processes of various industries. Functional coatings provide additional properties to materials, leading to upgraded infrastructure, innovative products, and resource efficiency.

Here are some measures that the industry is taking to make their products more environmentally friendly:

- Using sustainable raw materials, such as bio-based resins and binders that have a lower environmental impact than their petroleum-based counterparts.
- Reducing volatile organic compounds (VOCs) in their products by using low-VOC and zero-VOC formulations.
- Working to reduce the amount of packaging used and the environmental impact of transportation, including the development of more efficient packaging and transportation methods.
- Collaborating with regulatory agencies to ensure that their products meet the required environmental and safety standards, leading to the development of guidelines and regulations designed to protect the environment and human health.

¹⁰ The values shown do not add up to the total value due to rounding.

In addition to these measures, the industry is also shifting towards the use of water-based paint products over oil-based paint products, as they are more recyclable. They are also researching and implementing improvements in packaging design, with the goal of finding more sustainable solutions. While plastic containers still prevail over metal ones due to cost and limited availability of post-consumer materials, industry members are determined to find more sustainable solutions, whether it's by using recyclable materials such as metal or containers made from recycled post-consumer materials. Some of the industry's long-term goals include improving education on eco-friendly offerings to drive consumer choice and actively conducting research into more sustainable alternatives, including bio-based and recyclable raw materials.

The paint and coatings products industry has made significant progress in making their products more environmentally friendly. While there is still much work to be done, the industry is committed to reducing the environmental impact of their products. The industry has realized that these efforts are not only good for the environment and people but also for the long-term sustainability of the industry.

5.0 Public Education and Communications

In 2022, in partnership with IWMC, Product Care executed a number of tactics to raise consumer awareness of the paint recycling program in Prince Edward Island, in accordance with regulatory requirements. The following section provides details regarding communication and public education program plan commitments in 2022.

5.1 Website

The Product Care website includes the following content for the Program:

- "Find a Recycling Location" tool (a searchable map displaying collection sites and drop-off events throughout the province). See <u>Appendix 2</u>.
- Collection site hours and operations
- Accepted and not accepted products
- Program member support section with news and updates
- Consumer videos showing the product management approach for paint
- Other information (e.g., a description of the PaintShare program, information about environmental handling fees (EHFs), frequently asked questions, information about buying and storing paint)

An estimated 477,479 unique visitors accessed ProductCare.org during the 2022 calendar year of which 1,852 sessions were from PEI. The Prince Edward Island section (including sub-sections for accepted products and fee information) received 900 total page views. In addition, there were a total of 1,815 page views to the recycling locator from consumers in Prince Edward Island.

5.2 Program Hotline

Product Care and IWMC continued to operate a toll-free "hotline" for consumers to obtain information about the Program.

5.3 Print Advertising

An inside cover print ad was featured in CPCA Insight Trade Publication. The full-page advertisement focused on informing members of the paint and coatings industry about Product Care paint programs, with 1,500 copies distributed to industry members. See Appendix 3.

5.4 Digital Advertising

All digital campaigns reached the entire province.

- **1. Google Search Advertising Campaign:** A search advertising campaign served paint ads to provincial residents based on an extensive list of keyword searches relevant to the Program. These ads generated 231 impressions and 32 clicks.
- **2. Facebook and Instagram Content Strategy:** Content focused on paint recycling, special waste and the recycling community in general.
- **3. Blog posts:** Blog posts including specific information on paint recycling, "do it yourself" ("DIY") content, renovation tips, and sustainability best practices were included in our website. All posts included a call-to-action to find a collection site or interact with the brand on social media.

See Appendix 4 for examples of digital advertising activities.

5.5 Point of Sale (PoS) and Point of Return (PoR) Materials

In 2022, Product Care distributed both PoS and PoR materials as requested by retailers and collection sites. The following materials are available for reorder through the online order form:

- General paint program awareness posters
- Return to Retail (R2R) and Return to Product Care posters
- Bifold paint brochures

See Appendix 5.

5.6 Partnerships

Product Care continued to contract with Island Waste Management Corporation (IWMC) to promote the Program in the province throughout the year by executing the following tactics:

- 1. Waste Watch News: Newsletters were distributed to Island residences (including seasonal dwellings and apartment units) in June and December through Canada Post. These newsletters were available in English and French and contained a summarized sorting guide, including information on paint products and recycling. A total of 72,000 newsletters were distributed each time.
- 2. Interactive Sorting Guide: The IWMC website provided a webpage with information on specific products, including steps for sorting recyclables into the correct stream and an interactive sorting guide. The page also included a direct link to the Program's website for a complete list of accepted and excluded products. Hard copies of the sorting guide were made available in English, French, Mandarin, and Arabic. They also produced this guide in poster size for display at businesses, community organizations and multi-family dwellings. The sorting guide was also made available to new residents, and promoted through social media channels in the various languages.
- **3. Business Customers:** Business Guides helped the industrial, commercial and institutional sectors manage waste. IWMC included Sorting Guides when distributing the Business Participant Guide. Sorting information for the business sector was also obtainable from IWMC's website.
- **4. Customer Service Inquiries:** IWMC's Customer Service Centre operated a toll-free line where consumers could call in to request more information regarding the disposal of various recyclables, including paint. IWMC receives an average of 50,000 calls every year and also answers queries through e-mail and IWMC's Facebook page.
- 5. Corporate Annual Report: Information on paint recycling was highlighted in IWMC's Annual Report. This report will be tabled in the Legislature, and the most current report made available on the IWMC website.
- **6. Sorting Game:** A bilingual sorting game included a paint can icon on its Special Disposal panel and was widely used by audiences of every age (day care, schools, community college, English as a Second Language sessions, and community groups).
- **7. Presentations & Tours:** IWMC made presentations about the program to over 450 residents in 2022, including daycare centres, senior homes and schools.
- **8. Website:** A link to product care.org was available through IWMC's website. The website, having been updated in 2020, has seen many upgrades in the past two years including an in-depth adult done bi-monthly to ensure all information is correct.

See Appendix 6.

6.0 Financial Information

A summary of the Program's financials for 2022 is provided in Table 9.

Table 9: Financial Summary

2022 Revenue and Expenses		
Total Revenue		
Total Operating Expenses		
Program Operations	305	
Program Administration	26	
Education, Public Awareness & Communications	10	
Regulatory	10	
Surplus / Deficit	87 ¹¹	
Cumulative Surplus / Deficit	426	

 $^{^{11}}$ Rounded values are shown in Table 9. The Surplus/Deficit value was calculated using the non-rounded values for Total Revenue and Total Operating Expenses.

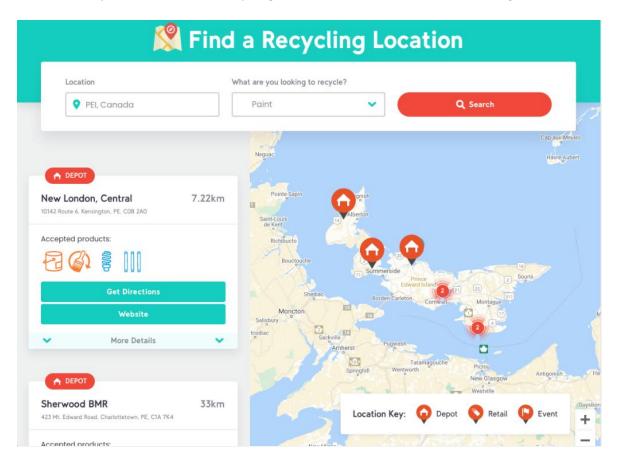
Appendix 1 - Environmental Handling Fee Rates

The following table provides the Program's environmental handling fees as of December 2022.

Paint Container Size	Current Rates
100ml to 250ml	\$0.45
251ml to 1 litre	\$0.75
1.01 litres to 5 litres	\$1.75
5.01 litres to 23 litres	\$3.15
Aerosol paint (any size)	\$0.45

Appendix 2 - "Find a Recycling Location" Tool

Below is a snapshot of the "Find a recycling location" tool found at ProductCare.org:



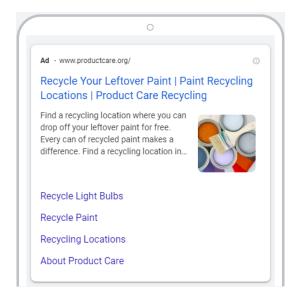
Appendix 3 - CPCA Insight Print Advertisement

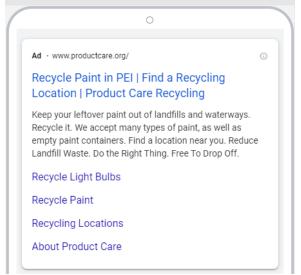
This CPCA ad was featured in CPCA's Insight Trade Publication



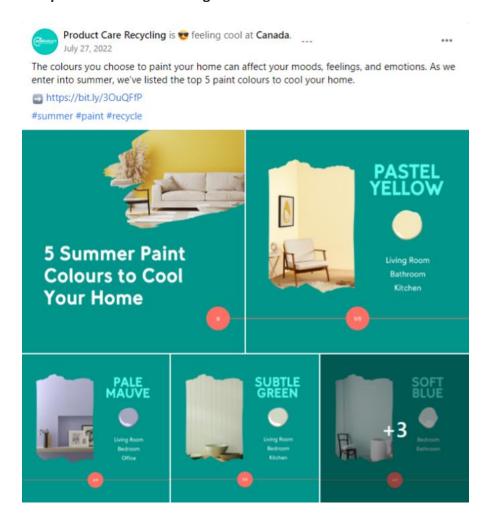
Appendix 4 - Digital Advertising Activities

Google Search Ads





Sample Facebook and Instagram Posts





Summer is a great time to freshen up the color palette and refresh your space. We've listed our top 5 summer paint colours to add a touch of cool to your home.

#summer #paint #recycle



PRODUCTCARE.ORG

5 Summer Paint Colors to Cool Your Home

Science shows that paint colors can subtly affect our moods, emotions, and feelings. From rese...



45 comments 59 shares



It's officially spring, which means it's time for spring cleaning! We're sharing 5 eco-friendly decluttering tips to help you get started.



PRODUCTCARE, ORG

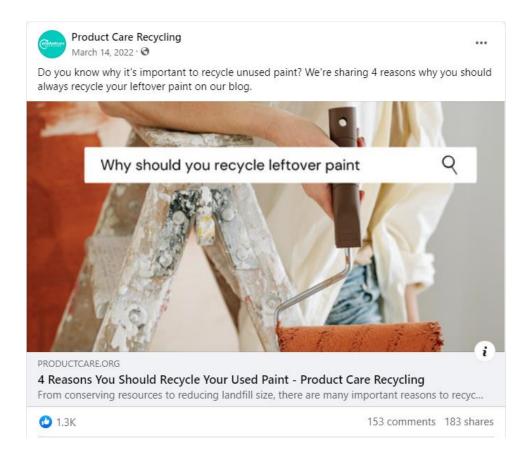
5 eco-friendly decluttering tips for your home - Product Care Recycling

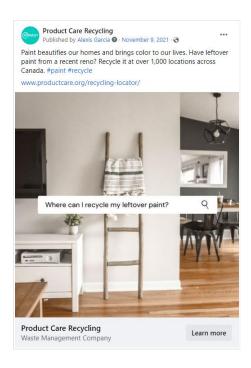
Have you caught the tidying up bug? Here are 5 methods for eco-friendly decluttering which e...

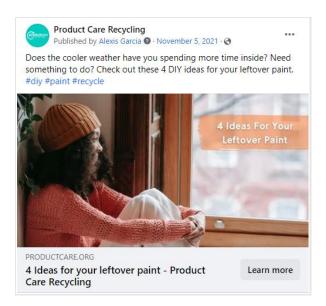


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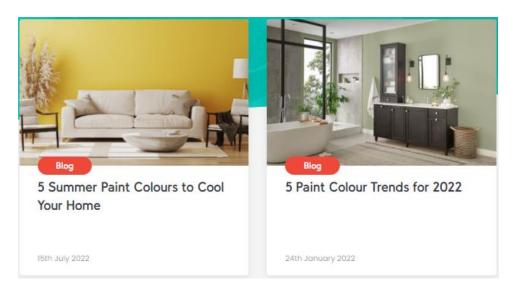
9 comments 53 shares







Blog Posts



Appendix 5 - PoS and PoR Materials

PoR/PoS Posters

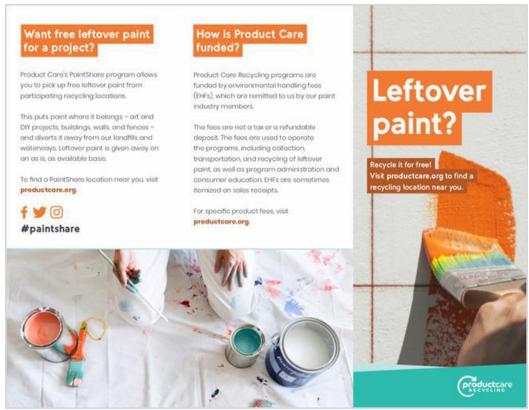






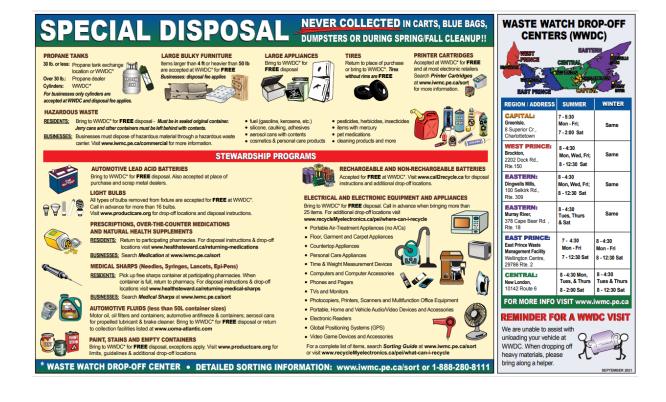
Bifold brochure



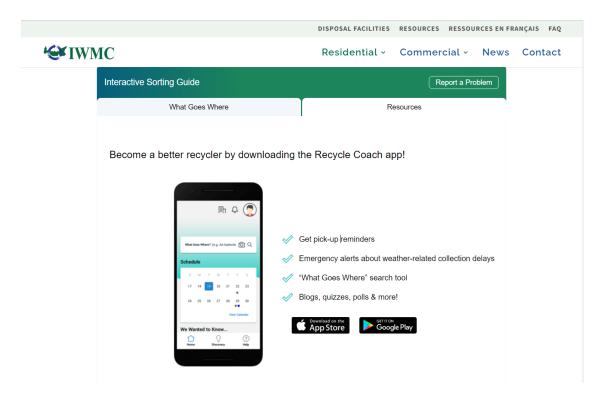


Appendix 6 - IWMC Partnership Materials

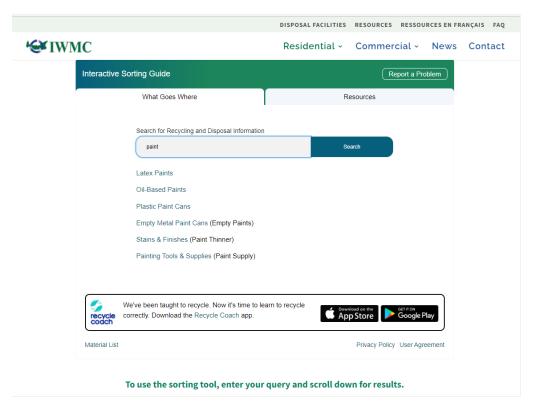
IWMC Sorting Guide

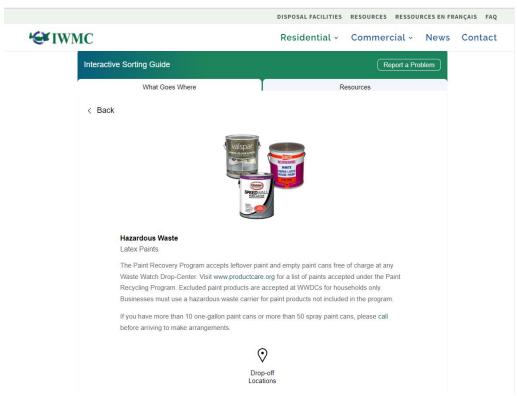


IWMC Recycle Coach App



IWMC Interactive Sorting Guide





IWMC Sorting Game

