

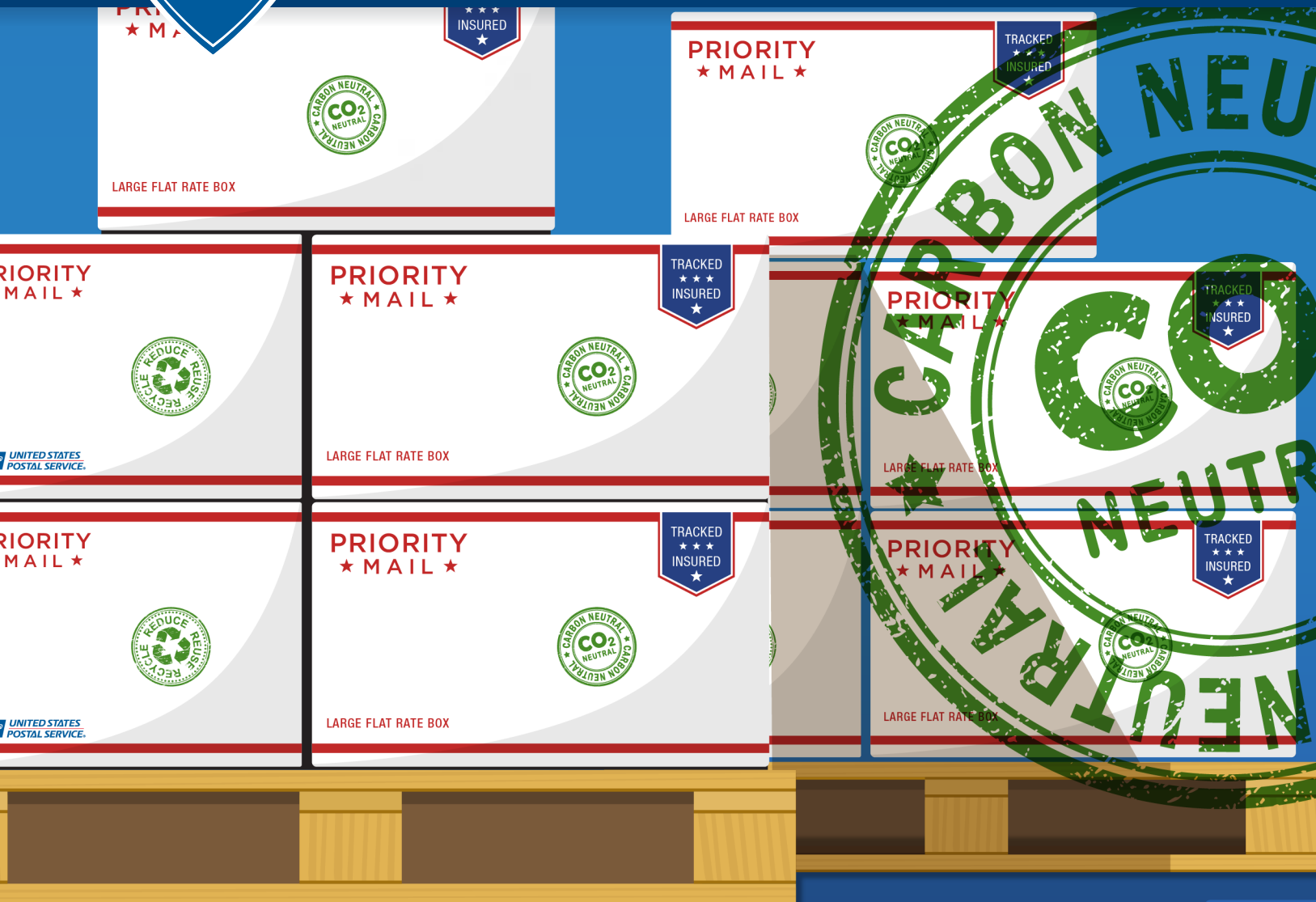


Office of Inspector General | United States Postal Service

## RISC Report

# Sustainability and the Postal Service: Creating a Greener Future Through Product Innovation

Report Number RISC-WP-20-005 | August 5, 2020



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# Executive Summary

For more than a decade, postal operators and delivery companies have put in place sustainability strategies. Their plans often include environmentally-friendly (or “green”) letter or package products and innovations, with an increased focus on a sustainable last mile.

Are Americans interested in such initiatives? And, if so, what could the U.S. Postal Service do to address this customer interest? To answer these questions, the U.S. Postal Service Office of Inspector General (OIG) researched the sustainable product innovations of 18 international posts and surveyed more than 2,800 U.S. customers.

The survey showed that 56 percent of U.S. customers are concerned about the environmental impact of their deliveries, with younger and urban residents being the most concerned. The OIG survey also found that sustainability is not only a source of goodwill or a response to environmental laws — it can also be a source of competitive advantage. In fact, 41 percent of customers stated that environmental practices play a major role when selecting a delivery service for online orders.

Given the high level of customers’ environmental awareness, it is no wonder that a majority of them supported most of the sustainable product concepts that the OIG tested in its survey. Two examples of new product concepts favored by the respondents were carbon compensation for packages and letters and reusable packaging solutions.

## Highlights

A majority of U.S. customers surveyed by the OIG are concerned about the environmental impacts of deliveries, and many factor in these concerns when choosing a delivery company.

To meet the needs of environmentally-conscious consumers, the Postal Service, like some international posts and other delivery providers, could consider offering optional carbon compensation for its parcels and a “green” semipostal stamp — a stamp issued to raise money for environmental projects.

We identified that reusable packaging solutions, which is an emerging market that both startups and some large carriers have recently entered, is an area of opportunity.

In conjunction with new products, the Postal Service could also highlight the environmentally-friendly features of its operations. While it already promotes the recyclability of its packaging products, USPS may also emphasize its scheduled, optimized routes and full delivery trucks.

- Carbon compensation for packages and letters — Many posts, as well as UPS and DHL, provide carbon offset or compensation for their products: they fund, for example, the planting of new trees to help compensate for pollution caused by their operations. Fifty-two percent of the U.S. consumers we surveyed stated they would be willing to pay an average of 32 cents per package to support carbon offsetting efforts. For the Postal Service, one option may be to launch a carbon compensation option with its products, which would build upon its existing USPS BlueEarth Product Carbon Accounting Service that calculates large business customers' greenhouse gas emissions. It may launch this initiative in conjunction with a USPS green "semipostal" stamp — a postage stamp issued to raise money for carbon reducing projects.
- Reusable packaging solutions — Seventy-six percent of consumers surveyed by the OIG supported reusable packaging solutions, such as durable mailers or shipping boxes that customers mail back and which last through multiple shipping cycles. Although UPS and several international posts have entered this space, it is still an emerging market. The Postal Service could explore the business value of this service. This may involve partnering with a third-party packaging company that sells reusable mailers or boxes to ecommerce merchants.

Aside from implementing new products, the Postal Service could also leverage the sustainable features of some of its existing products. Doing this would demonstrate how aspects of its delivery operations are by their very nature more environmentally-friendly than those of other delivery providers. These unsung benefits, like scheduled, optimized routes and relatively fuller delivery trucks, may be emphasized in external marketing communications. By introducing new sustainable products and emphasizing environmentally-friendly aspects of its current operations, the Postal Service could not only meet emerging customer needs, but also help build a more renewable future.

# Observations

## Introduction

For more than a decade, postal operators like the Postal Service and other delivery companies have been working to reduce their environmental footprints. Their environmental sustainability plans feature commitments and strategies to achieve carbon neutrality, reduce waste, and develop energy-efficient products and processes. They strive to decrease the greenhouse gas emissions generated by postal facilities, transportation, and mail delivery. For example, many are implementing plans to curb consumption of fuel, water, and energy, and to recycle waste.<sup>1</sup>

The world's largest posts claim sustainability efforts are bearing fruit. Their total emissions of carbon dioxide (CO<sub>2</sub>) — a greenhouse gas — decreased by 27 percent from 2008 to 2019.<sup>2</sup> However, as a result of ecommerce growth, one aspect of environmental stewardship that has recently gained wider attention is delivery. Delivery is the segment of the postal supply chain that has the largest CO<sub>2</sub> impact (Figure 1). The nature of what is being delivered matters too — a parcel generates 13 times more CO<sub>2</sub> than a letter.<sup>3</sup> Unfortunately, even though delivery providers are trying to be more sustainable there are signs that increased deliveries could make matters worse. The World Economic Forum recently

estimated that in the world's largest cities, CO<sub>2</sub> emissions from delivery traffic may increase by 32 percent from 2019 to 2030.<sup>4</sup>

To help curb emissions and satisfy eco-conscious customers, international posts and other delivery companies are developing environmentally-friendly products. The OIG wanted to determine whether similar offerings would appeal to American households, and, if so, whether the Postal Service could take action to address that consumer interest. To answer these questions we used a two-part approach. We first researched the “green” product innovations of postal operators from 18 foreign countries as well as UPS, FedEx, and Amazon.<sup>5</sup> We then conducted a nationwide survey of 2,841 Americans to gauge their perception of the environmental impacts of delivery and to test their interest in a range of sustainable products and product features. (For more details on our methodology, please see [Appendix A.](#))

This report first presents survey findings regarding U.S. customers' perception of the environmental footprint of delivery. We then discuss different types of sustainable products innovations and whether they would resonate with U.S. customers' interests. Finally, we briefly summarize possible implications for the Postal Service.<sup>6</sup>

1 Each year the Postal Service recycles 250,000 tons of paper, cardboard, and plastic waste. U.S. Postal Service, 2019 *Sustainability Report and Implementation Plan*, [https://www.ipc.be/-/media/documents/public/sustainability/reports/ipc\\_sustainability\\_2019.pdf](https://www.ipc.be/-/media/documents/public/sustainability/reports/ipc_sustainability_2019.pdf), p.7.

2 This figure is based on International Post Corporation's (IPC) data for a sample of 19 postal operators (including USPS) representing 80 percent of the world's postal volume. International Post Corporation, Postal Sector Sustainability Report, November 2019, [https://www.ipc.be/-/media/documents/public/publications/ipc-sustainability-report/ipc\\_sustainability\\_report\\_2019.pdf](https://www.ipc.be/-/media/documents/public/publications/ipc-sustainability-report/ipc_sustainability_report_2019.pdf), p.4.

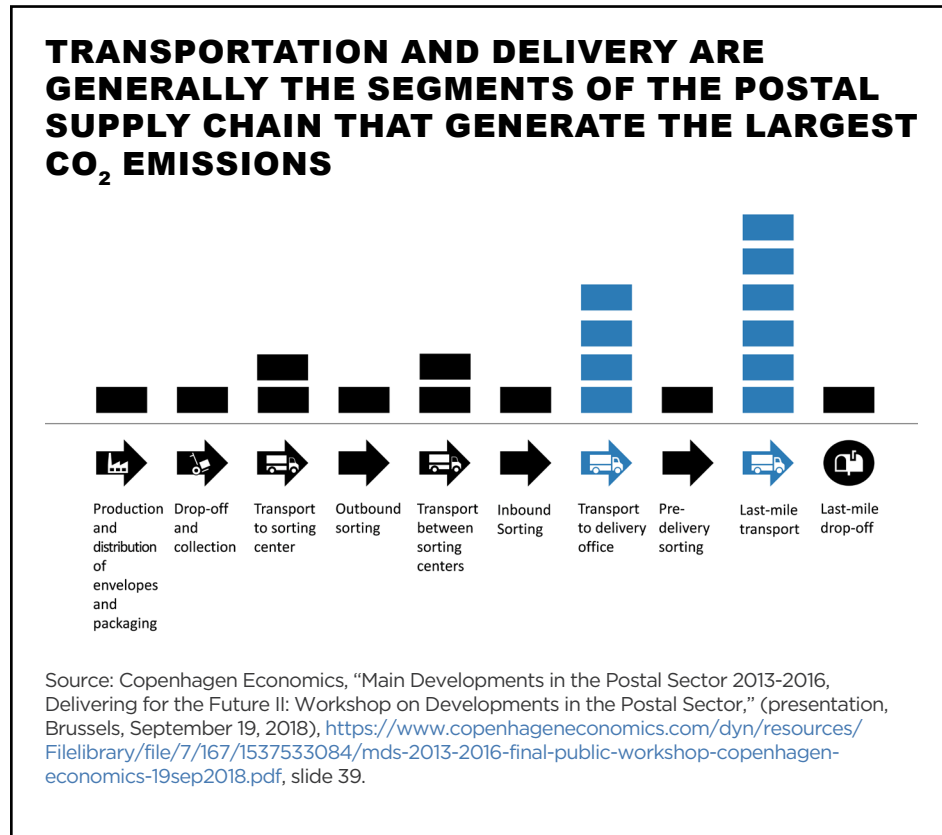
3 Results from 2018. International Post Corporation, *Postal Sector Sustainability Report*, p.8.

4 World Economic Forum, *The Future of the Last-mile Ecosystem, Transition Roadmaps for Public- and Private-Sector Players*, January 2020, [http://www3.weforum.org/docs/WEF\\_Future\\_of\\_the\\_last\\_mile\\_ecosystem.pdf](http://www3.weforum.org/docs/WEF_Future_of_the_last_mile_ecosystem.pdf), p.5.

5 In this paper, the OIG uses the terms “green” and “sustainable” interchangeably when referring to products with embedded sustainable features.

6 Our survey and analysis were completed before the President of the United States issued the national emergency declaration concerning the novel coronavirus disease outbreak (COVID-19) on March 13, 2020. Our findings do not reflect operational changes, service impacts, and/or changes in consumer behavior that may have occurred as a result of the pandemic.

Figure 1: The Relative CO<sub>2</sub> Impacts of the Postal Supply Chain



## Americans Care About Sustainable Deliveries

### The Environmental Impact of Products and Deliveries Matters

Many customers pay attention to the environmental impact and the green credentials of the products they buy. A 2019 study from Nielsen found that 33.5 percent of Americans were willing to pay more for environmentally-friendly products.<sup>7</sup> OIG survey results corroborate this finding. When asked how likely they are to pay more for a product that is more environmentally-friendly, 7 percent responded they would "always" and 26 percent "sometimes" choose the greener product.<sup>8</sup>

Customers' environmental awareness extends from the goods themselves to how those goods are delivered. Over half of the respondents to the OIG survey (56 percent) reported being "very" or "slightly" concerned about the environmental impact of package delivery (Figure 2).<sup>9</sup> Furthermore, 41 percent stated that environmental practices are an "extremely" or "very important" consideration in their choice of a carrier.<sup>10</sup>

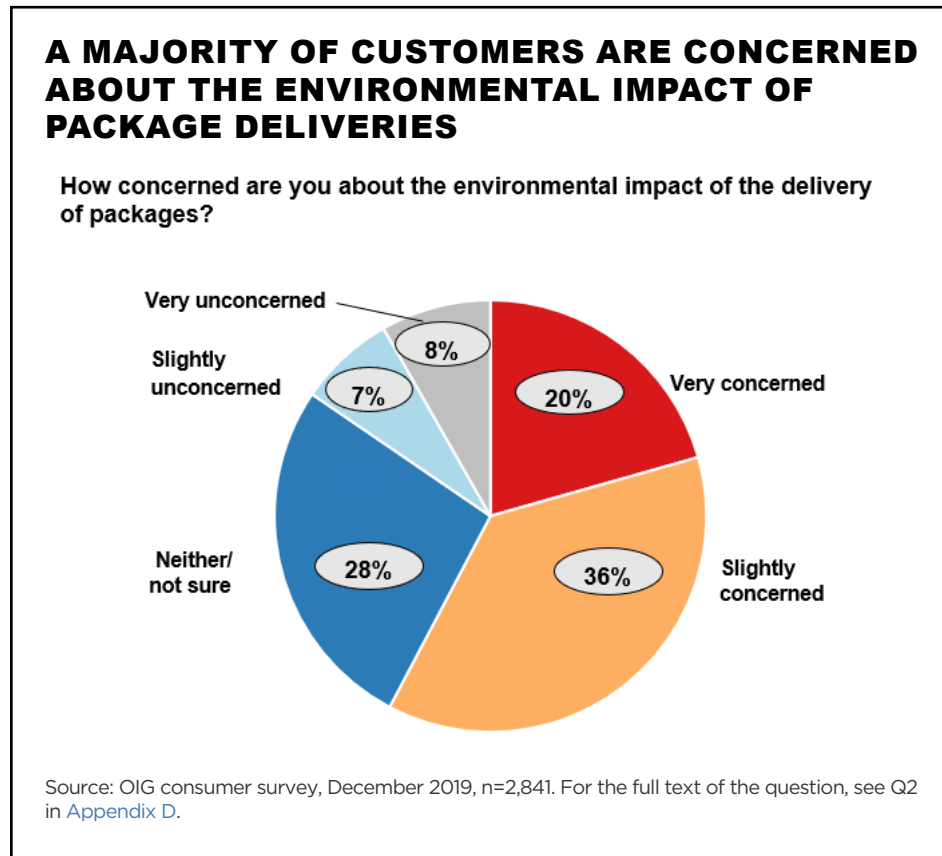
7 Julia Wilson, "Brands increase trust—and prices—through sustainability," *Nielsen Insights*, July 11, 2019, <https://www.nielsen.com/us/en/insights/article/2019/brands-increase-trust-and-prices-through-sustainability/>. Another large quantitative survey (EcoFocus Worldwide's 2019 U.S. Trends Survey) yielded even more positive results: 53 percent of respondents stated they were prepared "to pay more for eco-friendly products," including 38 percent of Baby Boomers and 64 percent of Millennials. Evergreen Packaging, 2020 *Food and Beverage Sustainable Packaging Trends*, January 2020, <https://evergreenpackaging.com/wp-content/uploads/19-EVP-0127-2020-Trend-Whitepaper-1-24.pdf>.

8 For the full text of the question, see Q1 in [Appendix D](#). Similarly, 2019 research conducted in Europe for Groupe La Poste DPD found that a growing number of online shoppers expect ecommerce to be environmentally responsible. These "eco-selective e-shoppers" are willing to pay a premium for sustainable products. DPD, *E-shoppers in Europe — 2019 Barometer*, Survey conducted by GfK for DPD Group, 2020, [https://www.dpd.com/group/wp-content/uploads/sites/77/2020/02/E-shoppers-in-Europe\\_2019-Barometer\\_EN.pdf](https://www.dpd.com/group/wp-content/uploads/sites/77/2020/02/E-shoppers-in-Europe_2019-Barometer_EN.pdf).

9 For the full text of the question, see Q2 in [Appendix D](#).

10 For the full text of the question, see Q3 in [Appendix D](#).

**Figure 2: Level of Concern About the Environmental Impact of Package Deliveries**



Going one step further, the OIG asked respondents about concerns specific to package delivery.<sup>11</sup> The top three responses, with about 33 percent of customers being “extremely” or “very” concerned for each issue, focused on wasted cardboard and other shipping materials, air pollution from delivery vehicles, and delivery vehicles being sent out without being full. Other concerns included delivery vehicles contributing to traffic and to parking shortages.<sup>12</sup>

### Young and Urban Americans are More Concerned

Our survey also revealed that age and geographic location had a direct impact on respondents’ perception of the environmental impacts of delivery:

- About one-half of Millennials, Gen Xers and urban customers stated that environmental practices play an “extremely” or “very” important role in their choice of delivery company. Only 31 percent of Baby Boomers and 35 percent of rural respondents voiced this opinion.<sup>13</sup>
- Two-thirds of Millennials and 63 percent of urban respondents reported being “very” or “slightly” concerned with the environmental impact of package delivery in general. In comparison, 45 percent of Boomers and 46 percent of rural citizens expressed these views.
- Millennials and urban residents also showed a much higher level of concern across the board regarding environmental issues that relate to package delivery.

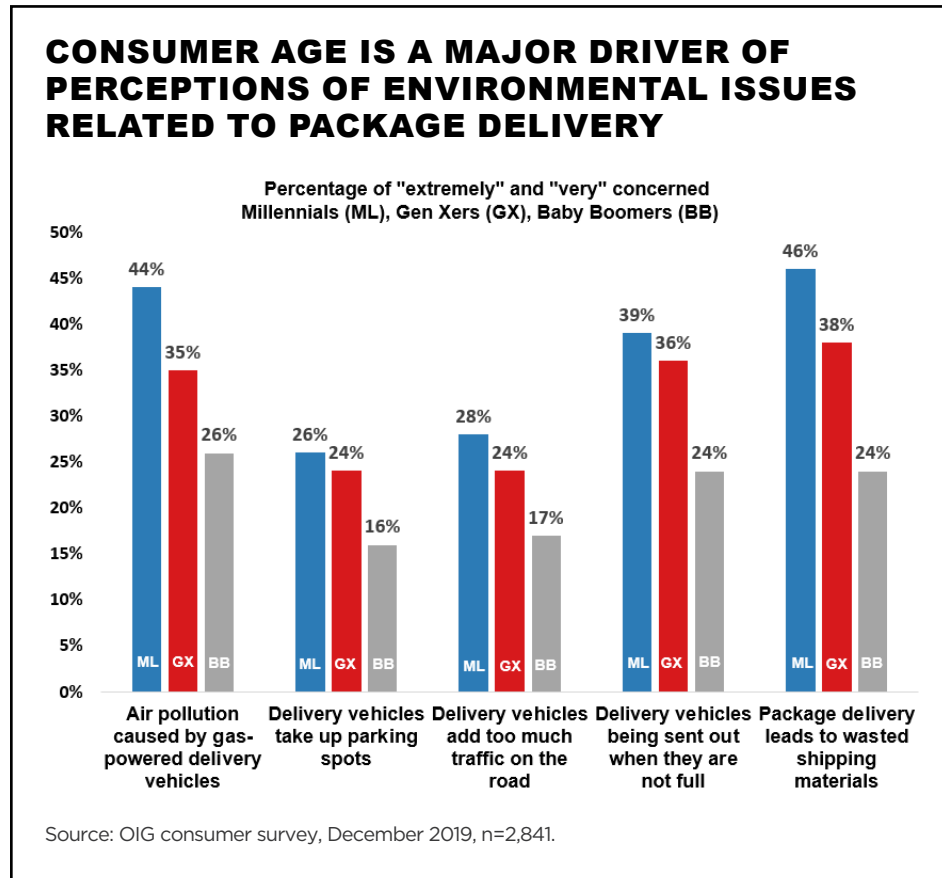
[Figure 3](#) shows results according to age categories.

<sup>11</sup> For the full text of the question, see Q4 in [Appendix D](#).

<sup>12</sup> Twenty-three and 21 percent of respondents, respectively, reported being “extremely” or “very” concerned by these factors.

<sup>13</sup> For the purposes of this survey, the OIG defined Millennials as being aged 18-34, Generation X (Gen Xers) as being aged 35-49, and Baby Boomers as being aged 50-75.

Figure 3: Generational Breakdown of Environmental Concerns



Given consumers' overall interest in sustainable deliveries, how do international posts and commercial carriers meet their expectations? To gain a comprehensive

understanding of posts' sustainable products strategies we analyzed both parcels and letter mail concepts and grouped them into eight categories. For each category, we present:

- A description of the concept and a description of what other delivery companies do in this area;
- The related OIG survey results dealing with U.S. customers' interest, where applicable; and
- Implications for USPS.

## Postal Operators Have Built New Products Around Environmentally-Friendly Features

There are several ways to embed green features in new products. Carbon compensation options and sustainable advertising mail do not entail any modifications to postal operations. Other innovations discussed below involve new operational processes.

### Concept 1. Optional Letter and Package Carbon Compensation

#### *Most of the Posts Surveyed Offer Some Kind of Carbon Offsets*

In this concept, the post gives customers — mailers and shippers — the choice of paying more for the carbon compensation of their letter or parcel deliveries.<sup>14</sup> In practice, the post buys carbon offset credits from a third-party organization, often a carbon offset nonprofit or a governmental agency.<sup>15</sup> The partner company uses the funds it receives from the post to implement actual carbon-reducing projects involving, for example, reforestation projects.<sup>16</sup> In some cases, mailers and shippers using the postal product can print a "carbon compensated" or "carbon

<sup>14</sup> We use the terms "carbon compensation" and "carbon offset" interchangeably in this report.

<sup>15</sup> Several offsetting systems coexist — one ("Clean Development Mechanism") is under intergovernmental oversight, while others ("Voluntary Carbon Market Mechanisms") are managed by private organizations. They have different focuses in terms of governance, types of projects funded and countries of operation. For a full description, see Miguel A. Naranjo Gonzalez (United Nations Framework Convention on Climate Change), "Carbon Offsetting: The Basics and Options," Presentation to the 4th Universal Postal Union-International Post Corporation Sustainability webinar, February 2020, <https://www.ipc.be/services/sustainability/sustainability-emms/ipc-upu-webinars>.

<sup>16</sup> Deutsche Post DHL Group, "Climate Protection Projects," <https://www.dpdhl.com/en/responsibility/environment-and-solutions/green-products-and-services/climate-protection-projects.html>. One carbon credit purchased represents one ton of carbon "prevented" from entering the atmosphere. DHL, "DHL and Ohio State partner to offset 2,000 metric tonnes of CO<sub>2</sub>," September 12, 2018, <https://www.dhl.com/us-en/home/press/press-archive/2018/dhl-supply-chain-and-ohio-state-create-first-of-its-kind-program-to-offset-campus-carbon-footprint.html>. The price of a carbon credit is not fixed and varies, among other factors, according to the actual cost of running the project. There are some variations in how funds are allocated. For example, CTT Portugal Post posted a list of possible compensation projects on its Facebook page and asked customers to select their preferred ones.

neutral” logo on their envelope or packaging to communicate the positive environment impact (Figure 4).

**Figure 4: Swiss Post’s ‘pro clima’ Logo Printed on Carbon Neutral Shipments**



Source: Swiss Post.

In our benchmark sample of foreign posts, use of carbon compensation is widespread. Thirteen of the 18 posts offer free or paid carbon offset for at least some of their products and two have carbon offset programs not tied to products (Appendix B). In practice, carbon compensation comes in different shapes. Three posts have been providing free carbon compensation for all mail and parcels for years, without customers even needing to request it — the Austrian, Finnish, and French posts. CO<sub>2</sub> compensation is sometimes combined with other environmental benefits, such as recyclability. For example, CTT Portugal

Post’s Correio Verde and Deutsche Post DHL Express Envelopes are prepaid envelopes made from recycled (and recyclable) materials.

Carbon compensation is also making strides in the U.S. domestic package market. Both UPS and DHL eCommerce offer carbon offset options for eco-conscious shippers. UPS domestic shippers can pay a “carbon neutral” fee that varies from 5 cents (standard packages) to 20 cents (expedited and express).<sup>17</sup> In 2019, ecommerce merchant Etsy and Sendle, a shipping platform, introduced free compensation on all shipments.<sup>18</sup> In 2012 USPS introduced its BlueEarth Carbon Accounting measurement tool where large business mailers can go to

the Postal Service’s Business Customer Gateway platform to calculate their emissions. Shippers interested in offsetting them can purchase carbon offsets from Carbonfund, a nonprofit organization.<sup>19</sup> However, USPS does not directly offer the carbon compensation option.

### ***Many Customers Would Agree to Pay to Have Their Package or Letter Carbon-Compensated***

The OIG separately tested consumers’ interest and willingness to pay a carbon surcharge for letters and parcels. For letters, we tested the concept of a “green semipostal stamp” — this is a stamp issued to raise money for a particular cause (such as breast cancer research) and sold at a premium over its face value.<sup>20</sup> Fifty-nine percent of respondents liked this concept “very much” or “somewhat,” and about the same proportion (56 percent) stated they would likely consider paying a small carbon offsets surcharge.<sup>21</sup> On average, customers who viewed the semipostal stamp concept favorably would agree to pay a five-cent surcharge.

Consumer interest in carbon-compensated ecommerce packages is also high, albeit a bit lower than for the green semipostal stamp.<sup>22</sup> About half of OIG survey respondents (49 percent) liked the carbon compensated shipping concept (“very much” or “somewhat”) and 52 percent would be willing to pay for carbon offsets.

Customers willing to pay said they would agree to contribute on average 32 cents per package. Carbon offsets for letters or packages would also benefit the Postal Service’s brand image — about half of

Customers willing to pay to have their package carbon compensated would on average accept to pay 32 cents for this service.

17 UPS, “Receiving a UPS carbon neutral shipment - What Is UPS carbon neutral?,” <https://www.ups.com/us/en/help-center/shipping-support/carbon-neutral/recipient.page>, UPS, UPS 2020 Rate and Service Guide, [https://www.ups.com/assets/resources/media/en\\_US/daily\\_rates.pdf](https://www.ups.com/assets/resources/media/en_US/daily_rates.pdf), p.114, and DHL (United States), “Additional Information & Services,” <https://www.dhl.com/us-en/home/our-divisions/ecommerce/shipping/helpful-information.html#gogreen-carbon-offset>.

18 Etsy, “Carbon-Offset Shipping: Delivering a world of good,” <https://www.etsy.com/impact> and Sendle website, <https://www.sendle.com/en-us>.

19 Carbonfund has endorsed the Postal Service’s methodology. Customers that purchase carbon credits through Carbonfund can use a Carbonfree Shipping logo. U.S. Postal Service, “USPS BlueEarth® Carbon Accounting for commercial mailing customers,” <https://about.usps.com/what-we-are-doing/green/carbon-accounting.htm> and Carbonfund.org, “Carbonfree® Shipping Program,” <https://carbonfund.org/take-action/businesses/carbonfree-programs/shipping-program/>.

20 For the full text of the questions, see Q6 in Appendix D.

21 This figure is the sum of “extremely,” “very,” and “somewhat” likely.

22 For the full text of the questions, see Q7 in Appendix D.

respondents reported that they would have a more positive impression of USPS if these options were available.<sup>23</sup>

### ***The Postal Service Could Offer Optional Carbon Offsets***

Given consumers' interest and the potential impact on the Postal Service's image, USPS could consider offering carbon offset products or options like those described above. By doing so, it would also build upon the expertise gained from supporting eco-conscious business shippers through its BlueEarth Carbon Accounting initiative.

- A CO<sub>2</sub> compensation option could help USPS differentiate its package products or catch up with competitors, and support merchants' sustainability strategies. The Postal Service could consider offering a CO<sub>2</sub> carbon compensation option directly to large business shippers, as well as to smaller ecommerce shippers in partnership with shipping platforms who ship through them. In turn, merchants could give consumers the choice to pay for CO<sub>2</sub> compensation in online shopping carts. Finally, the Postal Service could make the option widely available to small businesses and households through the USPS Click-N-Ship platform and in post offices. A carbon offset option on parcels could potentially improve the Postal Service's sustainability brand as well as generate additional revenue. For example, if the option were available on 10 percent of USPS packages, and the option cost 20 cents per package,

the Postal Service would raise \$36 million a year to fund third parties' carbon compensation programs under this scenario.<sup>24</sup>

- Under its Semipostal Stamp Program, the Postal Service could issue semipostal stamps that advance causes in the national public interest<sup>25</sup>—USPS is currently looking for new ideas from the public.<sup>26</sup> By law, such stamps cannot be sold for more than two years.<sup>27</sup> Prices are set by the Postal Service Board of Governors at 15 percent or more above the price of a First-Class Mail first-ounce stamp.<sup>28</sup> Launching it in conjunction with the parcel compensation option would allow the Postal Service to highlight that its commitment to environmentally-friendly products applies to a significant part of its portfolio.

### **Concept 2. Slower, More Sustainable Letters**

#### ***Slower Letters Could be More Environmentally Friendly***

Relaxed performance standards can give a postal operator more flexibility to choose cheaper and potentially more environmentally friendly ways of handling letters. For example, Groupe La Poste's Green Letter (Figure 5) is a two-day product that is slower than traditional first-class mail (called "Priority" letter), a next-day product. Launched in France in 2011, the Green Letter currently is 16 percent cheaper than its faster counterpart.<sup>29</sup> La Poste also stated that the Green Letter generates 30 percent less CO<sub>2</sub> emissions than first-class mail because, unlike the latter, it does not use air transportation at all.<sup>30</sup> Over time,

23 The percentages of respondents with a "somewhat" or "much" more positive impression of the Postal Service are, respectively, 51 percent for a green semipostal stamp and 46 percent for carbon-compensated packages.

24 Ten percent of the Postal Service's total annual Shipping and Packages volume represented about 620 million packages in fiscal year (FY) 2019. "U.S. Postal Service Reports Fiscal Year 2019 Results," November 14, 2019, <https://about.usps.com/newsroom/national-releases/2019/1114-usps-reports-fiscal-year-2019-results.htm>. We assumed that the 29 percent of U.S. consumers who said they were prepared to pay 20 cents or more for the option (per OIG survey results) would choose it.

25 U.S. Postal Service, "Community activities - Semipostal Stamps," 2020, <https://about.usps.com/what/corporate-social-responsibility/activities/semipostals.htm>.

26 In November 2019, the Postal Service said it would consider proposals for future semipostals until May 20, 2023. U.S. Postal Service, "U.S. Postal Service Announces Healing PTSD Semipostal Fundraising Stamp," news release, November 8, 2019, <https://about.usps.com/newsroom/local-releases/dc/2019/1108-usps-announces-healing-ptsd-semipostal-stamp.htm>. Individuals, companies, associations, and government agencies can propose semipostal stamps to the Postal Service.

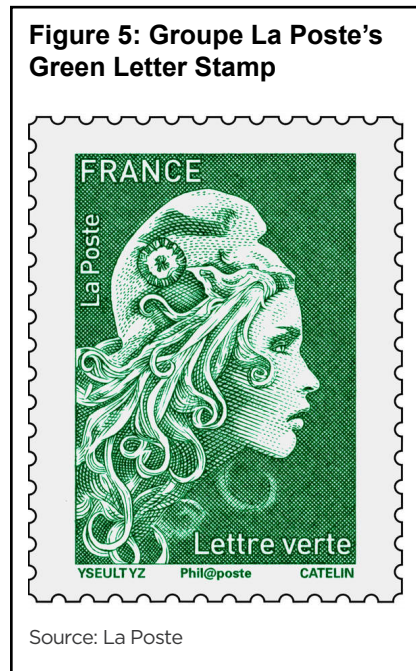
27 The two-year limit applies only to the "discretionary" semipostal stamps that the Postal Service issues under the Semipostal Stamp Program. It does not apply to Congressionally-mandated semipostal stamps, such as the Breast Cancer Research stamp issued in 1998 and still available.

28 For example, the price of the Postal Service's current Healing PTSD semipostal stamp is 65 cents, while a regular First-Class Mail stamp costs 55 cents. U.S. Postal Service, "U.S. Postal Service Dedicates Healing PTSD Semipostal Fundraising Stamp," December 2, 2019, <https://about.usps.com/newsroom/national-releases/2019/1202-healing-ptsd-semipostal-fundraising-stamp-on-sale-today-nationwide.htm>. See also US Code 39 CFR § 551 – Semipostal Stamp Program, in particular § 551.5 - Frequency and other limitations, and § 551.6 - Pricing.

29 As of January 2020, a single piece 20 gram Green Letter costs \$1.08 versus \$1.29 for a Priority (first-class mail). La Poste, "Main 2020 letter mail and stamps prices" (in French), <https://www.laposte.fr/tarifs-postaux-courrier-lettres-timbres>.

30 Interview with Groupe La Poste, Mail, Services and Parcels Division, Sustainability Unit, January 16, 2020.

Green Letter volumes have grown and overtaken first-class mail as the country's main letter product.<sup>31</sup> A variant of the “slower but greener” strategy entails relaxing



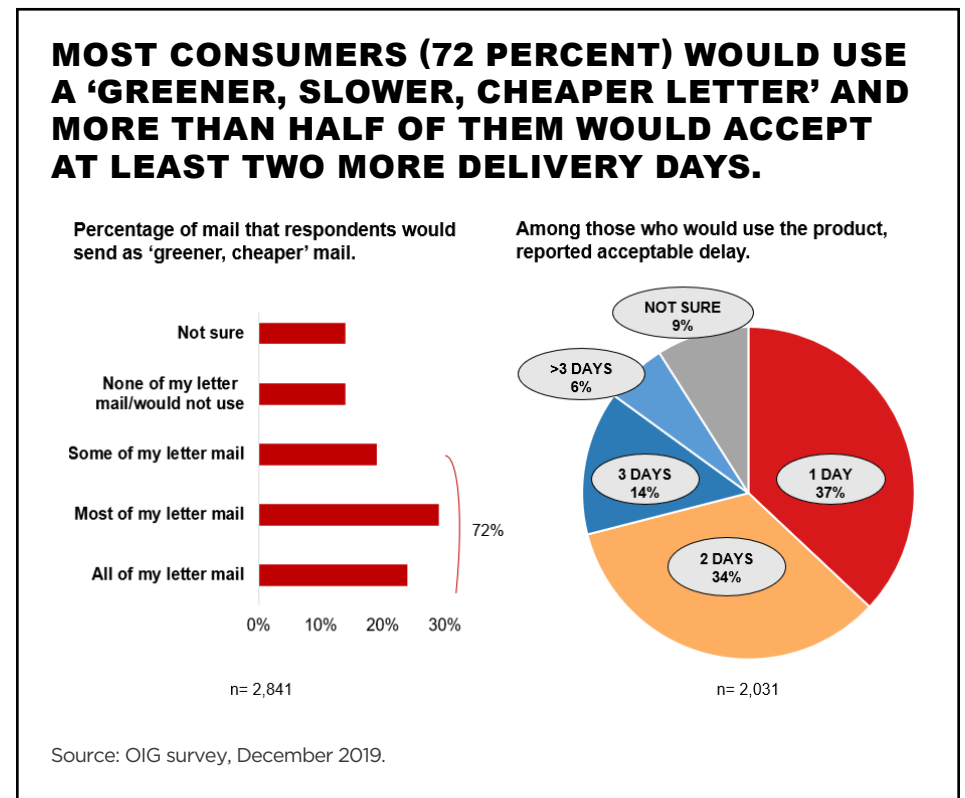
the main first-class mail product's service standard, as opposed to launching a new product. In Sweden, moving the single-piece letter standard from one to two days allowed the post to reduce the use of air transportation of letters, thereby — according to the post — cutting both costs and emissions.<sup>32</sup>

### ***Many Customers State They Would Trade Fast Delivery Standards for Greener Letter Processes***

The OIG tested customers' interest in a letter that would be 10 percent cheaper than the Postal Service's current First-Class Mail (FCM) but would take longer to deliver.<sup>33</sup> As in the examples above, it would never be transported by air, reducing CO<sub>2</sub> emissions. Seventy-two percent of

customers said they would be willing to use this slower, greener, and cheaper letter for at least some of their mail volumes. On average, potential users would find it acceptable that their mail be delivered about two days later than is currently the case. Regardless of their interest, half of survey respondents (52 percent) said they would also have a “much more” or “somewhat more” positive image of USPS if the service existed (Figure 6).

**Figure 6: Willingness to Use a Greener, Cheaper, Slower Letter Mail Product and Number of Acceptable Additional Delivery Days for This Product**



31 ARCEP, *The French Market for Postal and Related Activities for the year 2018* (in French), October 2019, <https://www.arcep.fr/fileadmin/cru-1582218129/reprise/observatoire/activ-poste/2018/observatoire-postal-an2018-oct2019.pdf>, p.8. In addition to Priority (first class) and Green Letter, La Poste has a third, slower (four days delivery) transactional letter mail product.

32 PostNord, Annual and Sustainability Report 2018, 2019, [https://www.postnord.com/siteassets/documents/investor-relations/financial-reporting/annual-and-sustainability-reports/2018\\_2n\\_postnord\\_eng\\_190327\\_index\\_final.pdf](https://www.postnord.com/siteassets/documents/investor-relations/financial-reporting/annual-and-sustainability-reports/2018_2n_postnord_eng_190327_index_final.pdf), p.11.

33 For the full text of the questions, see Q8 in Appendix D.

## **Absent Significant Cost Savings a Greener, Cheaper FCM May Not Be Feasible**

A greener, slower, and cheaper letter mail product could be well perceived by U.S. customers. However, implications are limited by two factors. First, OIG survey results do not reveal whether it is the price incentive or the “green” benefit that attracts customers to the product. Second, domestic air transportation represented only 5.1 percent of total FCM costs in fiscal year (FY) 2019.<sup>34</sup> As a result, a switch from air to ground transportation, as the French and Swedish posts did, would probably not yield significant cost benefits for USPS. That said, the Postal Service may consider conducting studies on the CO<sub>2</sub> impact of moving all FCM to ground transportation. In addition, the Postal Service, if it considered relaxing FCM standards again, as it did in 2015, could quantify the environmental benefits (if any) of this measure and communicate them to help gain consumers’ acceptance.<sup>35</sup>

### **Concept 3. Environmentally-Responsible Marketing Mail**

#### **Posts Can Incentivize Mailers to Embrace Sustainable Practices**

In this concept, the post rewards marketing mailers that meet strict sustainability requirements and green standards for the sourcing of paper and ink, and for the production and recyclability of their mailings. In exchange, mailers receive an ecological certification, specific discounts, or “free” carbon compensation from the post. Products include Royal Mail’s Sustainable Advertising Mail, CTT Portugal Post’s DM Eco, and PostNord Sweden’s Climate Efficient ADM.<sup>36</sup>

Launched in 2009, Royal Mail’s product involves compliance with a UK environmental standard developed by Royal Mail and industry organizations. The purpose of the standard is to reduce the environmental impact of ad mail

campaigns.<sup>37</sup> The “green” discounts, which originally ranged from 2 to 5 percent, help defray the cost of sustainable materials such as envelopes.<sup>38</sup> Similarly, to access the CTT Portugal Post’s DM Eco product, direct mailers must get “points” corresponding to ecological criteria (Figure 7).<sup>39</sup> This product generates about 40 percent of the post’s total marketing mail volumes.

#### **It Would Benefit both USPS’s and Mailers’ Brand Image**

Two-thirds of respondents liked this concept — 33 percent liked it “very much” and 33 percent “somewhat.”<sup>40</sup> In addition, 55 percent reported they would have a “much more” or “somewhat more” positive opinion of the Postal Service, and the same percentage would have a positive opinion of the marketing mail advertiser if USPS were to implement it.

#### **The Legal Feasibility of Environmentally-Friendly Marketing Mail is Uncertain**

The Postal Service’s web site lists “green ideas” to encourage marketing mailers to create campaigns that have a minimal impact on the environment.<sup>41</sup> USPS could go one step further and consider working with the mailing industry. In principle, a “Green Marketing Mail Promotion,” along the same lines as its “Emerging & Advanced Technology Promotion,” might create a novel way for the Postal Service to increase the value of marketing mail with both advertisers and consumers. However, adding a financial incentive for sustainable advertising

**Figure 7: Portuguese Post’s DM Eco Users Print an “Environmentally-Friendly message” Logo**



Source : CTT Portugal Post

<sup>34</sup> U.S. Postal Service, Public Cost Segments and Components, FY2019, <https://www.prc.gov/docs/111/111544/FY19Public%20Cost%20Segs%20and%20Comps.xlsx>.

<sup>35</sup> In January 2015, the Postal Service changed some of its delivery standards. In particular, changes involved delivering a majority of single piece FCM in two days instead of one day. The average delivery standard for total FCM increased from 1.8 to 2.1 days. U.S. Postal Service, “USPS Delivery Standards and Statistics fact sheet,” March 2015, <https://about.usps.com/news/electronic-press-kits/our-future-network/ofn-usps-delivery-standards-and-statistics-fact-sheet.htm>.

<sup>36</sup> ADM stands for Addressed Direct Mail. For more details about this product, see PostNord Sweden, “Addressed Direct Mail,” <https://www.postnord.se/en/sending/advertisement-and-periodicals/addressed-direct-mail>.

<sup>37</sup> The UK DMA (Data and Marketing Association) and ISBA (Incorporated Society of British Advertisers) worked with Royal Mail on the development of the standard, called PAS 2020. British Standards Institute, “PAS 2020 – Direct marketing – Environmental performance,” <https://shop.bsigroup.com/Navigate-by/PAS/PAS-LP/PAS-homepage/Marketing/PAS-2020-Case-Study-full-copy/>.

<sup>38</sup> Information provided by Royal Mail, January 31, 2020.

<sup>39</sup> For the list of criteria (in Portuguese), see CTT Portugal Post, Ecological Merit Calculation Chart, <https://www.cttads.pt/application/brand/downloads/CALCULO%20ECO.pdf>.

<sup>40</sup> For the full text of the questions, see Q9 in [Appendix D](#).

<sup>41</sup> U.S. Postal Service, “Green ideas for mailers,” About USPS, <https://about.usps.com/what-we-are-doing/green/mailers.htm>.

mail would likely require Postal Regulatory Commission approval, and the Postal Service would first need to demonstrate that the incentive or discount improves efficiency or cost avoidance.<sup>42</sup>

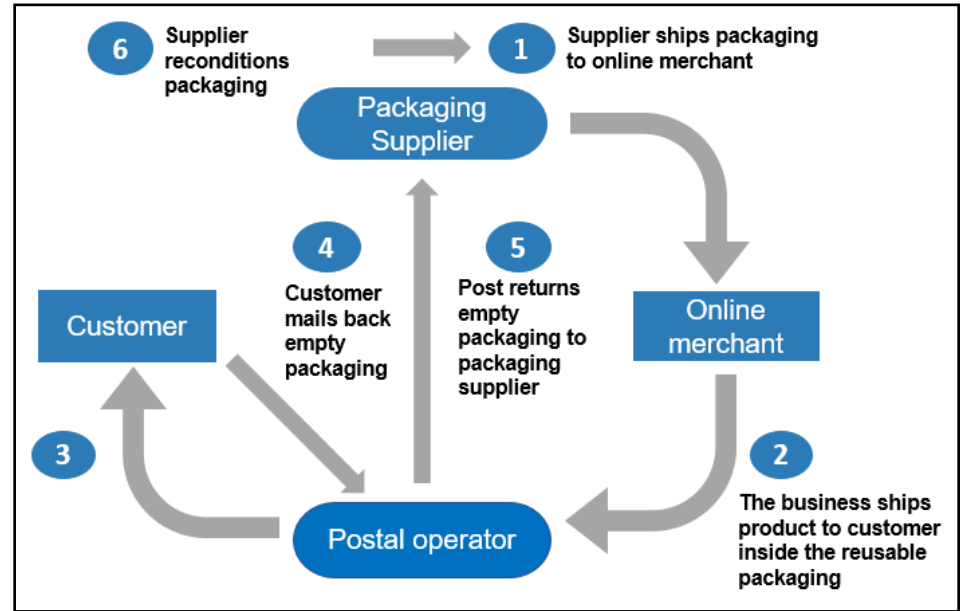
#### Concept 4. Reusable Packaging Solutions

##### **Reusable Packaging Can Help Cut Waste and Create a New Revenue Stream**

A number of “reusable packaging” companies sell reusable mailers or shipping boxes to ecommerce merchants. Customers return these items to the reusable packaging company for quality check, reconditioning, and redistribution to merchants for a new shipping cycle (Figure 8). To return empty mailers or foldable boxes, customers can put them in a mailbox or schedule a pickup. The post benefits in different ways:

- New package volume and revenue. It creates a flow of returns — the empty packaging — and therefore a new revenue stream.
- Revenue from supplies. By partnering with a reusable packaging company, a post could gain additional revenue — for example, by cobranding reusable mailers and boxes or selling them through its retail and business sales channels.
- Brand image. The post could communicate about its product’s environmental benefits to consumers.

**Figure 8: Reusable Packaging Flowchart**



Source: OIG analysis.

Different business models currently coexist (Figure 9):

- RePack and Limeloop market their mailers to online merchants of lightweight items such as clothing retailers. RePack products are available in Europe, and the company has recently entered the U.S. and Canadian postal markets.<sup>43</sup>
- LivingPackets’ product is a high-end connected shipping box. Its sensors, built-in camera, and Internet connectivity allow for real-time tracking and reporting. Customers return the box at a collection point, which could be a

<sup>42</sup> The Postal Service has the authority to offer discounts to mailers who assume some share of mail processing that the Postal Service would ordinarily handle. (See 39 U.S.C. § 3622(e).) However, these discounts generally may not exceed the Postal Service’s cost avoidance. (See id. at § 3622 (e)(2).) There are exceptions for diminishing discounts associated with new or changed services; for mitigating rate shock; for educational materials; and, for situations where reducing the discount would impede the Postal Service’s efficiency. 39 U.S.C § 3622. Modern rate regulation.

<sup>43</sup> RePack, “RePack has arrived in North America,” <https://buy.originalrepack.com/us-pilot>, Mitch Barlas, Director US/Canada, RePack, in discussion with the OIG, December 5, 2019, and Limeloop, “Smart Shippers,” <https://www.thelimeloop.com/>.

retail counter or a post office.<sup>44</sup> Groupe La Poste's Chronopost subsidiary is testing this product.

- The Loop box is a reusable tote bag for groceries or household goods deliveries. Loop positions itself as a “global circular shopping platform” — customers purchase directly from the Loop marketplace, choosing products from retailers such as Walgreens and Krogers. In the United States, UPS delivers Loop's orders and also picks up empty tote bags and used product containers.<sup>45</sup> Loop's competitor, Liviri, concentrates on groceries, cold-shipping, and wine.<sup>46</sup>

**Figure 9: Examples of Reusable Packaging Solutions**



Source: RePack, LimeLoop, Loop, Liviri, and Livingpackets.

### ***Three-Quarters of Consumers Like the Concept of Reusable Packaging***

Seventy-six percent of respondents liked (very much or somewhat) the reusable packaging concept.<sup>47</sup> Furthermore, about two-thirds said they would be more inclined to choose USPS if it offered this service; the same percentage stated this would give them a more positive impression of the Postal Service.

### ***The Postal Service Could Further Study Reusable Packaging Models***

Like other “circular economy” concepts, the reusable packaging solution is just emerging and there are several challenges to its development.<sup>48</sup> Given its high price compared to single-use cardboard packaging, will online merchants embrace it? Will they take on this cost or pass it to online shoppers? Several business models are competing with each other. However, given the high level of consumers' and competitors' interest in this solution, the Postal Service may wish to develop a proof of concept and explore partnerships with providers of reusable packaging solutions.

## **Concept 5. Expanded Recycling Services**

### ***The Postal Service Already Collects Small Electronics Waste***

This second example of a “circular economy” concept involves posts' picking up merchandise for recycling, then forwarding it to dedicated recycling centers. In some cases, pickup is done by the carrier. The Postal Service already collects government agencies' empty printer cartridges and small electronics free of charge, through its BlueEarth Federal Recycling Program. USPS then ships these items to recycling companies, which pay shipping costs. Federal agencies can schedule pickups through the USPS app or hand over shipping boxes to the carrier.<sup>49</sup>

44 Livingpackets, “Smart, secure, sustainable,” <https://www.livingpackets.com/> and Alex Sword, “Cdiscount trials 4G-connected “intelligent packaging” for deliveries,” InternetRetailing, October 29, 2019, <https://internetretailing.net/operations-and-logistics/operations-and-logistics/cdiscount-trials-4g-connected-intelligent-packaging-for-deliveries-20459>.

45 Loop, “How it works,” <https://loopstore.com/how-it-works> and “The Loop Tote,” <https://loopstore.com/tote>.

46 Liviri, “Reimagine the box,” <https://liviri.com/>.

47 For the full text of the questions, see Q10 in Appendix D. IPC recently found that 72 percent of U.S. customers agreed with the statement “I would like the packaging material of my parcels to be reusable” (of which 30 percent “strongly agree”). These results confirm consumers' receptivity to reusable packaging solutions. International Post Corporation, *IPC Cross-border Online Shopper Survey – US Report*, December 2019, slide 48.

48 The United Nations define “circular economy” as “an economy in which waste and pollution do not exist by design, products and materials are kept in use, and natural systems are regenerated.” *United Nations, Circular Economy for the SDGs: From Concept to Practice*, Concept Note, 2018, [https://www.un.org/en/ga/second/73/jm\\_conceptnote.pdf](https://www.un.org/en/ga/second/73/jm_conceptnote.pdf).

49 Federal Recycling Program, “Welcome to FedRecycling.com!,” <http://www.fedrecycling.com/>.

Collection could be extended to other types of waste. For example, France's Groupe La Poste subsidiary Recy'go specializes in recycling office paper waste, which the carrier picks up together with letters and parcels. The postal operator of Singapore, SingPost, uses its network of post offices as collection points for customers' electronic waste. As part of their ReCYCLE program, customers can dispose of old tablets or smartphones in dedicated bins at post offices.<sup>50</sup>

### ***USPS Could Also Consider Collecting Other Types of Small Waste***<sup>51</sup>

Building upon the experience gained under the BlueEarth Federal Recycling Program, the Postal Service could assess the legal and operational feasibility of extending this service to other types of small waste, or, like Singpost, to the general public. It would need to ensure that picking up office waste does not disrupt normal delivery operations. USPS may also wish to conduct research to determine recyclers' interest in such a service.

## **Concept 6. Consolidated Last-Mile Deliveries**

### ***Delivery Consolidation Might Reduce Costs and Pollution***

In a number of large U.S. cities, multiple delivery carriers crowd the streets, contributing to air pollution as well as traffic congestion.<sup>52</sup> In New York and Seattle, among other cities, delivery companies are working with local governments to determine how new logistics models for faster delivery can also be more environmentally friendly.

Consolidation could potentially reduce costs, congestion, and emissions. One way to consolidate last-mile deliveries in urban areas is to use microhubs — central drop-off and pickup locations for goods, which multiple delivery firms and retailers can use.<sup>53</sup> In over 20 French cities, Groupe La Poste's Urby subsidiary is currently deploying microhubs from which its low-emissions vehicles and bicycles conduct consolidated deliveries on behalf of several carriers.<sup>54</sup> In the United States, the University of Washington is starting a project aimed at assessing and piloting "common microhubs" in downtown Seattle.<sup>55</sup> Another concept is to consolidate all last-mile deliveries for a given area, restricting them to a single delivery company. This theoretical last-mile public utility model could, for example, result from a local government's decision to give this company a monopoly over all parcel deliveries within a given urban area.<sup>56</sup>

### ***Entrusting a City's Package Delivery To a Single Provider May Be Controversial***

The OIG tested customers' perspectives on the last-mile delivery consolidation concept in which all carriers would hand over their parcels to a single last-mile delivery company (single company package delivery concept). When prompted about the concept, 39 percent of respondents indicated that they liked it, but 29 percent stated that they disliked it.<sup>57</sup> The low approval rate for this concept relative to others tested in the OIG survey confirms that consolidated delivery is a divisive topic.

50 Although Singapore Post (SingPost) was not on the list of operators selected for this project, we found that the value of this service justified mentioning it in this report. For more information about the program, see ReCYCLE web site, <http://recycle.sg/>.

51 The OIG did not test this concept in its survey.

52 See for example, Brittainy Newman, "1.5 million packages a day: the Internet brings chaos to N.Y. streets," *New York Times*, October 27, 2019, <https://www.nytimes.com/2019/10/27/nyregion/nyc-amazon-delivery.html>. The INRIX annual index compares U.S. cities' levels of congestion. INRIX, "Congestion Costs Each American Nearly 100 hours, \$1,400 A Year," March 9, 2020, <https://inrix.com/press-releases/2019-traffic-scorecard-us/>.

53 For a description of the microhub concept, see USPS OIG, *Coordination and Optimization Technologies*, Report Number RARC-WP-18-014, September 6, 2018, <https://www.uspsoid.gov/document/coordination-and-optimization-technologies-and-postal-applications>, p. 9 and pp.15-17.

54 Groupe La Poste, "Urby brings sustainable and innovative urban logistics solutions to Grenoble," April 27, 2019, <https://www.groupelaposte.com/en/article/urby-brings-sustainable-and-innovative-urban-logistics-solutions-to-grenoble>.

55 Sara Pearson Spector, "The Future of Urban Freight," MHI Solutions, January, 2020, [http://www.mhisolutions-digital.com/mhiq/0120\\_volume\\_8\\_\\_issue\\_1/MobilePagedArticle.action?articleId=1545755&app=false#articleId1545755](http://www.mhisolutions-digital.com/mhiq/0120_volume_8__issue_1/MobilePagedArticle.action?articleId=1545755&app=false#articleId1545755).

56 The fundamental difference with the current situation is that the choice of the last-mile provider would not result from a commercial agreement between carriers, as is the case when, for example, Amazon or UPS hand over some of their parcels to the Postal Service for local home delivery, or in the Urby case study discussed above. In this theoretical example, a city government would put out to tender the provision of parcel deliveries and choose a single provider — effectively treating it like a water or energy utility company.

57 Sum of, respectively, the percentage of respondents who like "very much" and "somewhat" the concept, and dislike it "very much" and "somewhat". For the full text of the question, see Q11 in [Appendix D](#).

To further explore customers' concerns, we also asked an open-ended question about why they liked or disliked the concept, then conducted a sentiment analysis by coding responses into a few major categories. Customer responses are heavily skewed either for or against the consolidated delivery concept, with few respondents expressing indifference. Widespread worries about the possible implications of a last-mile parcels monopoly — price increases, reduced service quality — balance customers' positive expectations of environmental and efficiency benefits. (For more details, please see [Appendix C](#).)

### ***The Postal Service May Explore Green Delivery Concepts With City Governments***

While the Postal Service holds a monopoly on delivery to mailboxes and on letter mail, many customers do not think that the environmental benefits of a last-mile package delivery monopoly in urban centers, regardless of who holds it, would justify losing the benefits of competition. That said, as the Urby example shows, other last-mile consolidation business models may yield sustainability benefits. Even without consolidation, the Postal Service could work with city governments to respond to their environmental concerns and minimize the impact of last-mile delivery.

### **Some Existing Postal Products Already Have Noteworthy Sustainable Features**

In addition to developing new sustainable products, postal and other delivery companies can also promote the green benefits of their current offerings. Showcasing the sustainable features of a postal product can be a source of competitive advantage. In fact, sustainability features are among the criteria that large shippers use for selecting a carrier, together with price, service standards,

and reliability.<sup>58</sup> According to Groupe La Poste, sustainability represents about 15 percent of the total weights large shippers give to evaluation factors used when selecting a carrier.<sup>59</sup> Over the past five years, Groupe La Poste has also put in place internal processes to ensure that the marketing team, when developing new products, takes into account their environmental impacts and includes them at all stages of the product planning process, right up to launch and external communications campaigns.<sup>60</sup> We provide examples below of how international posts and other carriers highlight the environmentally-friendly features of postal products.

### **Sustainable Last-Mile Processes**

#### ***Some Delivery Companies Promote the Greenness of Their Last Mile***

Some delivery companies put an emphasis on the “sustainability” of specific elements of their last-mile processes. A non-exhaustive list includes:

- Optimized delivery routes. Since the deployment in 2012 of its ORION delivery route optimization solution, UPS has consistently communicated around its environmental benefits. According to the company, ORION has saved UPS about 100 million miles and 10 million gallons of fuel per year.<sup>61</sup>
- Consolidation of delivery networks. When FedEx announced in February 2020 that its FedEx Ground network delivery trucks would start delivering some of its Express packages, the company argued that reducing the number of delivery vehicles in neighborhoods would improve sustainability.<sup>62</sup>
- Less frequent deliveries. Amazon argues that its Amazon Day service, which involves consolidating all orders into one single weekly delivery, contributes

58 In the United States, tools like the Environmental Protection Agency's (EPA) SmartWay allows for the benchmarking of carriers' CO<sub>2</sub> impact. EPA established its SmartWay program in 2004. The Postal Service, its main competitors, and many others participate in this program. For a discussion of the use of environmental criteria for the selection of logistics providers, see <https://www.intechopen.com/books/sustainable-supply-chain-management/identification-of-environmental-criteria-for-selecting-a-logistics-service-provider-a-step-forward-t>. For a case study on how a large U.S. shipper (Home Depot) integrates sustainability in the choice of carriers, see WBCSD, *Smart Freight Procurement Guidelines*, September 2019, [https://docs.wbcsd.org/2019/09/WBCSD\\_Smart\\_Freight\\_Centre\\_procurement\\_guidelines.pdf](https://docs.wbcsd.org/2019/09/WBCSD_Smart_Freight_Centre_procurement_guidelines.pdf), pp. 36-316.

59 Interview with Groupe La Poste, Mail, Services and Parcels Division, Sustainability Team, January 16, 2020.

60 Interview with Groupe La Poste, Mail, Services and Parcels Division, Sustainability Team, February 6, 2020.

61 UPS, “UPS To Enhance ORION With Continuous Delivery Route Optimization,” January 29, 2020, <https://pressroom.ups.com/pressroom/ContentDetailsViewer.page?ConceptType=PressReleases&id=1580323236977-290>. For an early example, see UPS, “UPS Speeds ORION Deployment And Takes Routing Optimization To New Heights,” October 30, 2013, <https://pressroom.ups.com/pressroom/ContentDetailsViewer.page?ConceptType=PressReleases&id=1426329938198-204>.

62 FedEx, “FedEx to Optimize Last-Mile Residential Deliveries; Position for Continued E-commerce Growth,” news release, February 7, 2020, <https://newsroom.fedex.com/newsroom/fedex-to-optimize-last-mile-residential-deliveries-position-for-continued-e-commerce-growth/>.

to its Shipment Zero program because it reduces the number of deliveries.<sup>63</sup> Along the same lines, the Finnish post estimated in 2019 that reducing the number of its weekly letter mail deliveries to three days throughout the country would save up to 40 percent of CO<sub>2</sub> emissions.<sup>64</sup>

- **Returns pickup.** The Belgian post, bpost, promotes a new return service as “environmentally friendly” because the carrier will pick up packages during evening delivery rounds.<sup>65</sup>
- **Greener Delivery Vehicles.** Amazon has said that the 100,000 custom electric delivery vehicles it recently ordered will help reach its goal of becoming carbon neutral in the long term.<sup>66</sup> Similarly, DHL has argued that its participation in an electric bicycle delivery pilot test in New York fits in with the company’s target to perform at least 70 percent of pickups and deliveries with green energy solutions by 2025. DHL stated that taking conventional delivery trucks off the road helps relieve congestion and increases service levels.<sup>67</sup>

### ***The Promotion of Sustainable Product Features Could Generate Goodwill***

OIG survey results confirm that promoting specific green benefits can generate goodwill among customers. We tested customer perceptions of several green package features.<sup>68</sup> Results showed a high level of customer support for all of them:

- Energy-efficient vehicles, dynamic routing software (which the Postal Service uses to optimize its Sunday parcels delivery routes), and online payment

solutions (which save trips to retail locations), received each about 75 percent of “like very much” or “somewhat.”<sup>69</sup>

- Full delivery trucks (to minimize the number of round trips) and evening deliveries received, respectively, 69 and 60 percent of “like very much” or “somewhat.”

### ***USPS Could More Broadly Promote “Unsung” Greener Product Features***

The Postal Service has sometimes highlighted the environmental benefits of product features. In 2010, when it sought a relaxation of the six-day delivery obligation, it argued this would reduce delivery and transport vehicle fuel use, which could lead to a 4-percent decline of its total greenhouse gas emissions.<sup>70</sup> More recently, as the “Sustainability” pages of its website show, the Postal Service said that online postage helps save trips to the post office. However, product communication efforts could focus on a broader set of parcel delivery features that are de facto “greener” than those of competitors but that the Postal Service does not promote as such. For example, the Postal Service could better promote unsung advantages such as:

- Its scheduled delivery routes and full trucks. Some carriers, such as same-day delivery companies, deliver a few packages at a time to a small number of consumers. As University of Washington Professor Anne Goodchild noted, the Postal Service has a major environmental advantage over them: “a

63 The program aims to make 50 percent of all shipments carbon neutral by 2030 and 100 percent by 2040. Connie Chen, “Amazon Day is a new Prime-member perk from Amazon that allows you to schedule your package deliveries — here’s how it works,” *Business Insider*, July 23, 2019, <https://www.businessinsider.com/what-is-amazon-day-schedule-deliveries-prime-benefit>, and Amazon, “The Climate Pledge,” <https://sustainability.aboutamazon.com/about/the-climate-pledge>.

64 Posti, “Study by Posti: A reduction of delivery days would reduce emissions by 30–40 [percent],” news release, May 21, 2019, <https://www.posti.com/en/media/media-news/2019/posti-study-footprint-of-mail-delivery/>.

65 Bpost, “bpost launches new environmentally friendly return service in association with bol.com,” news release, March 9, 2020, <https://press.bpost.be/bpost-launches-new-environmentally-friendly-return-service-in-association-with-bolcom>.

66 Amazon has said it would have 10,000 electric vehicles on the road in 2022, increasing to 100,000 in 2030. Meg Coyle, “Go behind the scenes as Amazon develops a new electric vehicle,” Amazon blog, February 4, 2020, <https://blog.aboutamazon.com/sustainability/go-behind-the-scenes-as-amazon-develops-a-new-electric-vehicle>.

67 DHL, “DHL Rolls Out Its Cubicycle in New York City, Participating in New Pilot Program to Test the Use of Cargo Bikes to Alleviate Traffic Congestion,” December 4, 2019, <https://markets.businessinsider.com/news/stocks/dhl-rolls-out-its-cubicycle-in-new-york-city-participating-in-new-pilot-program-to-test-the-use-of-cargo-bikes-to-alleviate-traffic-congestion-1028738313>.

68 For the full text of the question, see Q12 in Appendix D.

69 Being aimed at consumers, our survey question did not use the phrase “dynamic routing.” Instead, we used the following definition: “Using software that minimizes the distance driven between deliveries.” For a discussion of routing software, see USPS OIG, *Coordination and Optimization Technologies*, p.13.

70 The Postal Service estimated it could save between 300,000 and 500,000 tons out of a total of 12.6 million metric tons of greenhouse gas emissions generated in 2010. U.S. Postal Service, “Delivering the Future: a Balanced Approach — Five-Day Delivery is Part of the Solution,” March 2010, <https://about.usps.com/news/electronic-press-kits/five-day-delivery/plan/5day-plan-delivery.pdf>, pp.17-18.

consolidated system where one postal worker comes to a neighborhood to deliver all the mail in one trip.”<sup>71</sup>

- Its Parcel Select products when compared to competitors’ faster products. Amazon argues that the fastest deliveries, such as same-day, are less carbon-intensive because they involve very short trips from a local warehouse or retailer to the consumer. The Postal Service might argue that when considering the end-to-end footprint of merchandise, this is not necessarily true.<sup>72</sup>

Also, USPS has indicated it would make a decision in 2020 regarding the choice of next-generation delivery vehicles.<sup>73</sup> Customers’ interest in energy-efficient vehicles means that the Postal Service, when communicating about its final decision, could — as its competitors do — highlight the green benefits of the new vehicles versus older generations of delivery trucks, in addition to other improvements.

## Sustainable Packaging Materials

### *The Postal Service Has Long Promoted Recyclable Packaging*

Sustainable packaging differs from the “reusable packaging solutions” discussed earlier because while packaging materials may be recycled, the packaging itself is not designed for multiple reuse cycles. In their communications, a number of delivery companies, including USPS, highlight that their boxes are made from

recycled and recyclable materials.<sup>74</sup> In fact, the Postal Service has been very active in the space for many years. As early as 2008, its Vendor Partnership for Envelope Reuse involved collaboration with three companies developing reusable envelopes and making recycling easier for customers.<sup>75</sup> The Postal Service is also working to raise awareness among users of its recyclable packaging products about the appropriate means to recycle them.<sup>76</sup> For example, USPS has entered into an agreement with How2Recycle®, an organization that provides a standardized on-package labeling system that communicates recycling instructions to the public.<sup>77</sup>

### *OIG and IPC Surveys Confirm Customers’ Appetite for Sustainable Packaging*

Sustainable packaging is the environmental product feature that received the highest level of support in our survey. Eighty percent of respondents like “very much” or “somewhat” the idea of “offering customers recycled shipping materials,” and 74 percent support “encouraging sellers and retailers to use less packing materials to reduce waste.”<sup>78</sup> The results of a 2019 IPC survey confirm this last finding.<sup>79</sup>

### *“Package Less” as the Next Frontier?*

As discussed above, the Postal Service is focused on communicating to customers about the recyclability of its packaging products. Considering consumers’ concerns about packaging waste, it is likely that delivery companies

71 Leslie Albrecht, “Cautionary tale this holiday season: Fast shipping may contribute to climate change,” *MarketWatch*, December 20, 2019, <https://www.marketwatch.com/story/7-ways-to-reduce-the-carbon-footprint-on-your-amazon-orders-2019-11-11>.

72 In practice, when considering the end-to-end carbon footprint from the manufacturer to the consumer the apparent advantage of same-day delivery may disappear. Leslie Albrecht, “Cautionary tale this holiday season: Fast shipping may contribute to climate change.”

73 Cyndia Zwahlen, “U.S. Postal Service Delays New Mail Truck Choice to 2020,” *Trucks.com*, September 3, 2019, <https://www.trucks.com/2019/09/03/postal-service-delays-new-mail-truck-contract/>.

74 Examples from other U.S. companies include Amazon’s recyclable paper padded mailer. Dave Quigg, “The big ideas and tiny details behind Amazon’s new recyclable mailer,” Amazon Day One blog, November 26, 2019, <https://blog.aboutamazon.com/sustainability/the-big-ideas-and-tiny-details-behind-amazons-new-recyclable-mailer>.

75 For example, one of the Postal Service’s partners, ecoEnvelope developed a “two-in-one” envelope which eliminates the need for a separate reply envelope product to respond to a statement or a marketing mail piece.

76 The Postal Service Priority Mail boxes meet Sustainable Forestry Initiative® or Forest Stewardship Council® certification standards, which means the paper for the boxes comes from well-managed forests. It also includes at least 30 percent recycled content. In addition, all Ready Post box materials are 100 percent recyclable and are fabricated from post-consumer waste. Information provided by the Postal Service to the OIG on March 12, 2020.

77 Information provided by the Postal Service to the OIG on March 12, 2020. How2Recycle defines itself as “a coalition of forward thinking brands who want their packaging to be recycled and are empowering consumers through smart packaging labels.” How2Recycle, “A cleaner world starts with us,” <https://how2recycle.info/>.

78 For the full text of the question, see Q5 in [Appendix D](#). A 2014 quantitative survey yielded similar results — 77 percent of customers noted that the packaging a retailer uses for e-commerce “reflects its environmental values.” Sealed Air, “New Sealed Air Survey Reveals Why and How e-Commerce Retailers Need to Rethink Their Packaging,” November 3, 2014, <https://www.3blmedia.com/News/New-Sealed-Air-Survey-Reveals-Why-and-How-E-Commerce-Retailers-Need-Rethink-Their-Packaging>.

79 According to IPC, 73 percent of U.S. consumers agree with the statement “I would like the packaging material of my parcels to be recyclable” — including 35 percent who “strongly agree.” International Post Corporation, *IPC Cross-border Online Shopper Survey – US Report*, December 2019, slide 48.

offering package-less solutions, such as package-less returns, will also communicate about this environmental benefit. The Postal Service is currently conducting a Package Less Returns pilot and could consider a larger roll-out if successful.<sup>80</sup>

## Implementation Considerations For the Postal Service

Although extensive, the Postal Service's sustainability strategy appears to be less customer-facing than those of some competitors or international posts. The OIG survey showed that customers expected more environmentally-friendly deliveries, were often willing to pay for some green concepts, and would have an even better image of the Postal Service if it were to implement them. While our study did not focus on the direct revenue potential of sustainable products and product features, the expected impacts on branding and competitiveness may lead the Postal Service to consider testing select new sustainable product innovations. Based on the experience of other posts and survey results, USPS could consider the following:

- Conduct additional research to further measure the environmental impact of the concepts discussed in the paper.
- Develop proofs-of-concept for:
  - Optional CO<sub>2</sub> compensation options, in particular for package products;
  - Reusable packaging solutions — monitor the strategies of reusable packaging startups active in the U.S. market, study the business value of this service, and assess the relevance of partnerships with reusable packaging suppliers.
- If it were to receive support for a “green” semipostal stamp from the public under the Semipostal Authorization Act, consider the issuance of such a stamp.
- Take a holistic view of the sustainable benefits of existing products and how to better market them to mailers/shippers and consumers. The Postal Service

could develop a plan consisting of specific steps to (1) identify and select the most effective green benefits of existing products; (2) advertise them more widely in external communications; (3) develop processes to systematically include in product plans their green selling points when developing new products; and (4) measure customers' perception of the environmental sustainability of USPS products, for example in its brand tracker surveys.

## Conclusion

Consumers' concerns about sustainable products are both a challenge and an opportunity. Delivery companies, including the Postal Service, that fail to fulfill customers' expectations for environmentally friendly deliveries may lose ground to competitors more adept at developing and marketing green products and product features. At the same time, customers' attitudes further open the door for delivery companies to implement new sustainable product initiatives. By generating goodwill and product differentiation, these initiatives could help the Postal Service protect its business.

If it builds upon its extensive sustainability expertise, the Postal Service is well-equipped to introduce and emphasize customer-facing sustainable products and features to support its business. Doing so would also help fulfill its consumers' expectations for more environmentally-friendly products and further improve the USPS brand image.

## Management's Comments

Management agreed that providing environmentally conscious goods and services is important and improves the Postal Service's brand; however, expressed concern that the report was largely based on Internet research. Management noted that the report does not acknowledge the environmental benefits of the Postal Service's Expedited Packaging Supplies (EPS) program. Further, they questioned the business value of the reusable packaging solution discussed in the report, owing to its high costs and the low usability of reusable totes. USPS communicated concerns that the discussion of this solution was geared towards a specific supplier. Finally, Management stated that the carbon

<sup>80</sup> For more information about this pilot, see U.S. Postal Service, “No package, no problem - Package Less Returns option being tested,” *Link*, September 17, 2019, <https://link.usps.com/2019/09/17/no-package-no-problem/>.

compensation for letters and packages was not a financially viable option given the current financial situation of the Postal Service. See Appendix E for management's comments in their entirety.

## Evaluation of Management's Comments

The OIG appreciates Management's comments and offers the following points of clarification.

This white paper's scope focused on customer-facing innovations; therefore, it did not include or acknowledge benefits of the Postal Service's Expedited Packaging Supplies (EPS) program. A section of the OIG's white paper titled "*The Postal Service Has Long Promoted Recyclable Packaging*" recognizes USPS's initiatives in this area. One of the objectives of this paper was to evaluate the potential appeal and features of reusable packaging in general. Although the paper did examine reusable packaging solutions offered by existing suppliers, it does not endorse a specific supplier.

The methodology utilized for this research included several approaches including internet research. Other research methods conducted were interviews and documentation review from Postal Service resources, a quantitative survey (general population survey of 2,841 Americans), and benchmarking of international posts and other delivery companies. The research did not attempt to develop business models and, for innovations with a high potential, suggested that the Postal Service consider doing market tests.

Lastly, the white paper highlights, via benchmarking analysis, that a number of delivery companies offer carbon compensation offsets as an option paid for by shippers or recipients. This strategy, should the Postal Service adopt it, could meet the expectations of the 52 percent of customers who expressed interest in this product per our survey. This option, if paid for by shippers or recipients, would be financially neutral. If offered for free, it may not be financially viable at this time, but could be considered in the future as the Postal Service continues its commitment to sustainability.

# Appendices

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# Appendix A: Additional Information

## Objectives

The objectives of this research were as follows:

- Gain an understanding of the main categories of sustainable postal product innovations implemented by international posts and commercial carriers.
- Understand U.S. customers' interest in these innovations.
- Examine the relevance for the Postal Service of these green product innovations.

Our survey and analysis were completed before the President of the United States issued the national emergency declaration concerning the novel coronavirus disease outbreak (COVID-19) on March 13, 2020. Our findings do not reflect operational changes, service impacts, and/or changes in consumer behavior that may have occurred as a result of the pandemic.

## Scope

The OIG focused on “customer-facing” environmental innovations — those that customers experience as recipients (the delivery experience) or as mailers and shippers (when choosing a carrier or shipping options). In practice, the research concentrated on products advertised and marketed as “green.”

The research did not consider other aspects of environmental sustainability, such as initiatives related to the reduction of the use of water or energy in plants or to the recycling of “postal” waste.

Finally, the OIG chose not to cover the perspective of businesses, such as ecommerce merchants, and to concentrate instead on the value of green innovations for consumers. The OIG recognized the importance of this aspect and considered that covering it in-depth would require a different type of survey methodology and perhaps a different report.

## Methodology

The OIG used a two-part methodology:

### Internet Research

The OIG identified the sustainable product innovations of the postal operators of 18 foreign countries as well as UPS, FedEx, Amazon, and the Postal Service. The OIG selected postal operators that are members of International Post Corporation, a cooperative association of 25 member postal operators in North America, Europe and Asia Pacific.<sup>81</sup> The OIG considered:

- An Post (Ireland)
- Australia Post (Australia)
- bpost (Belgium)
- Canada Post (Canada)
- Correos (Spain)
- CTT Portugal Post (Portugal)
- Deutsche Post DHL Group (Germany)
- Posti Group (Finland)
- Groupe La Poste (France)
- New Zealand Post (New Zealand)
- Österreichische Post AG (Austria)
- Poste Italiane SpA (Italy)
- Posten Norge (Norway)
- PostNL (The Netherlands)

<sup>81</sup> IPC member organizations deliver 80 percent of the world's mail volumes and therefore represent a good cross section of industrialized countries' postal operators. However, the OIG did not include in its analysis some of the smallest IPC members — the postal operators of Croatia, Cyprus, Greece, Hungary, Iceland, and Luxembourg.

- PostNord Denmark (Denmark)
- PostNord Sweden (Sweden)
- Royal Mail Group plc (United Kingdom)
- Swiss Post (Switzerland), and
- United States Postal Service (United States of America).

The OIG also conducted interviews with two postal operators and one industry supplier to double-check information collected during the research. After analyzing the innovations identified, the OIG grouped them into eight main categories.

### OIG Quantitative Survey

The “Sustainability Survey” was fielded online by USPS OIG between November 27 and December 24, 2019. The survey questionnaire and sampling plans were developed by an in-house survey research expert and were then reviewed by an external expert in survey methods prior to field work. (For the list of survey questions used in this report, please see [Appendix D](#).)

The confidential survey targeted a nationally representative sample of 18-to-75-year-old residents of the 50 states and the District of Columbia. The survey’s 2,841 respondents completed the survey on our online survey platform and were

solicited by the sampling services provider Full Circle Research Co., per their standard procedures. The survey was conducted in English and Spanish.

Quota sampling procedures were employed during the survey field period to improve the representativeness of the data collected by modeling a geographically diverse sample of 18-to-75-year-old U.S. residents. Quotas were employed for age, gender, nativity, ethnicity, race, education, geographic sub-region, and e-commerce participation. Apart from ecommerce participation, all data were weighted prior to analysis according to U.S. Bureau of the Census population estimates on all quota variables, as well as on income and employment status. Ecommerce participation was weighted to reflect the proportion of Americans that made an online purchase in the previous month, per the results of a national general population probability telephone survey.

The OIG conducted work for this white paper in accordance with the Council of the Inspectors General on Integrity and Efficiency, Quality Standards for Inspection and Evaluation. We discussed our observations and conclusions with management on June 29, 2020, and included their comments where appropriate.

### Prior Coverage

The OIG did not identify any prior audits or reviews related to the objective of this white paper.

# Appendix B: Carbon Compensation for Domestic Products — International Comparison

**Table 1: Carbon Compensation for Domestic Products Available to International Posts' and Delivery Companies' Customers**

		Included in all products – no additional cost		Included in select products – no additional cost		Offered as an option for a fee	
		Letters	Packages	Letters	Packages	Letters	Packages
Australia	Australia Post				✓ <sup>(1)</sup>		
Austria	Österreichische Post	✓	✓				
Belgium	bpost			✓ <sup>(2)</sup>			
Canada	Canada Post						
Denmark	PostNord Denmark						✓
Finland	Posti Group	✓	✓			✓ <sup>(3)</sup>	✓ <sup>(3)</sup>
France	Le Groupe La Poste	✓	✓				
Germany	Deutsche Post DHL		✓ <sup>(4)</sup>			✓ <sup>(5)</sup>	✓ <sup>(6)</sup>
Ireland	An Post	✓ <sup>(7)</sup>	✓ <sup>(7)</sup>				
Italy	Poste Italiane SpA						
Netherlands	PostNL					✓ <sup>(8)</sup>	✓ <sup>(8)</sup>
New Zealand (9)	New Zealand Post						
Norway	Posten Norge	✓			✓		
Portugal	CTT Portugal Post			✓ <sup>(10)</sup>	✓ <sup>(10)</sup>		

		Included in all products – no additional cost		Included in select products – no additional cost		Offered as an option for a fee	
		Letters	Packages	Letters	Packages	Letters	Packages
Spain (11)	Correos						
Sweden	PostNord Sweden			✓ <sub>(12)</sub>	✓ <sub>(12)</sub>		
Switzerland	Swiss Post	✓					✓
United Kingdom	Royal Mail Group Plc						
United States	DHL eCommerce					✓	✓
	FedEx			✓ <sub>(13)</sub>			
	UPS						✓
	USPS						

Source: OIG, based on data from companies' websites.

#### Notes

1. For parcels entered at counters and through the post's MyPost app.
2. For bulk transactional and advertising mail.
3. Option was offered on top of the free compensation already provided by the post. It was suspended in January 2020.
4. Parcels from individual customers only.
5. For bulk letters from business customers.
6. For small packages and parcels from business customers.
7. Only for deliveries to a few areas (Dublin).
8. Business customers only.
9. New Zealand Post created a decarbonization fund but not directly tied to its products.
10. For express and "green mail" (Correio Verde).
11. Correos buys carbon offset credits (Correos Compensa) but not directly tied to its products.
12. To receive free compensation shipper needs to produce letters, periodical or direct mail pieces according to environmental standards.
13. Refers to FedEx (express) envelopes, not letter mail per se.

# Appendix C: The Single Company Package Delivery Concept — Customer Sentiment Analysis

Question: “In some large cities, some people have proposed reducing the congestion and pollution that results from having multiple organizations complete the deliveries in that city by having one single delivery company complete all package deliveries in that city instead. What do you like or dislike about the idea above?”

**Table 2: Summary of Positive Comments Consumers Made in Response to OIG’s Open-ended Question**

POSITIVE COMMENTS (n = 838)			
Environmentally-friendly	Reduces Congestion	Increased Service Quality	Other Benefits
45%	30%	19%	5%
“I like that there would be less pollution and less congestion. Most of the time, packages received do not need to arrive at my home in an emergency. It makes more sense to have one company do it (...)”	“It would help reduce the amount of traffic in highly populated cities and make the streets a bit safer for pedestrians.”	“You would get all of your deliveries at the same time, if you have items coming from multiple shippers.”	“With multiple companies competing for the delivery business there may be a drop in price.”
“(...) Companies wouldn’t be wasting time, money, or energy competing against each other and there would be a lot less fuel or materials being wasted (...)”	“(...) We have too many different companies delivering packages causing so much traffic and pollution — it’s ridiculous.”	“(...) It shouldn’t add too much on to the time it takes to deliver all packages.”	“(...) This sort of idea is already enacted in my area, the San Luis Valley (...) UPS and USPS work together to get packages to their recipients (...)”
		“(...) It [would be] easier for consumers because we [would] know who we need to get ahold of if we have any issues with our deliveries.”	“It sounds like it would be more efficient, less cars on the road and more easily organized.”

Source: OIG analysis of responses to an open-ended question in OIG survey.

**Table 3: Summary of Negative Comments Consumers Made in Response to OIG’s Open-ended Question**

NEGATIVE COMMENTS (n = 1,163)			
Anti-competition	Social Impact	Reduced Service Quality	Other Concerns
55%	6%	28%	12%
“Monopolies are never good for the customer.”	“(…) I feel like a lot of people would actually lose their jobs to a company with [lower] standard[s] just to try save the world of pollution…”	“I think it would take longer to receive things if it was just one delivery company. Sometimes we need things in a hurry.”	“Who gets to decide which company gets all the business and why?”
“This idea seems to have the potential for abuse by one or more of the companies, while at the same time reducing liability.”	“I dislike this concept because this would be putting people out of work.”	“ I think one company would be overloaded, causing loss of packages or damaged packages when attempting loading trucks and delivery.”	“[It] would not make a difference because that one company would need to add more trucks on the road to deliver packages on time.”
“While it would have less traffic in theory, I strongly support competition in the market, and having the option of choice.”			
“(…) Competition drives innovation and lowers prices for consumers.”			

Source: OIG analysis of responses to an open-ended question in OIG survey.

# Appendix D: OIG Sustainability Survey: List of Questions Mentioned in the Report

Note: We renumbered and reordered questions to match the structure of the report. In other words, Question 1 is the first discussed in the report.

- Q1.** In general, how likely are you to buy a product that is better for the environment than another similar product that is slightly cheaper?
- a. Would always choose the slightly cheaper item
  - b. Would sometimes choose the slightly cheaper item
  - c. Neither/neutral
  - d. Would sometimes pay slightly more for an environmentally friendly item
  - e. Would always pay slightly more for an environmentally friendly item
  - f. It depends/not sure
- Q2.** Overall, how concerned or unconcerned are you about the environmental impact of the delivery of packages?
- a. Very concerned
  - b. Slightly concerned
  - c. Neither concerned nor unconcerned
  - d. Slightly unconcerned
  - e. Very unconcerned
  - f. Not sure
- Q3.** How important are the following considerations when choosing a company to send a document or package, or when selecting a company to deliver a product that you ordered?  
[Scale: *Extremely important, Very important, Somewhat important, Not very important, Not at all important, Not sure*]
- a. The company's environmental practices
  - b. Price
  - c. Speed of delivery
  - d. Convenient drop-off or retail locations
  - e. Customer service
- Q4.** How concerned or unconcerned are you about the following potential issues regarding the delivery of packages?  
[Scale: *Extremely concerned, Very concerned, Somewhat concerned, Slightly concerned, Not at all concerned, Not sure*]
- a. Air pollution caused by gas-powered delivery vehicles
  - b. Delivery vehicles take up parking spots, making it too hard to park
  - c. Delivery vehicles add too much traffic on the road
  - d. Delivery vehicles being sent out when they are not full to get packages delivered faster, increasing the number of trips needed to complete all deliveries
  - e. Package delivery leads to wasted cardboard and/or other shipping materials

**Q5.** How much do you like or dislike the following ideas for making mail and/or package delivery more environmentally friendly?

[Scale: *Like very much, Like somewhat, Neither like nor dislike, Dislike somewhat, Dislike very much, Not sure*]

- a. Participating in tree-planting programs that help offset delivery trucks' carbon dioxide (CO<sub>2</sub>) emissions
- b. Encouraging online sellers/retailers to use less packing materials to reduce waste
- c. Delivering packages to a local, easily-accessible parcel locker instead of to your door in order to reduce delivery trucks' carbon dioxide (CO<sub>2</sub>) emissions
- d. Using packaging that can be returned and used again
- e. Offering customers recycled shipping materials

**Q6.** Concept: "Green" Postage Stamps. In addition to normal postage stamps, the United States Postal Service (USPS) could sell stamps with a small surcharge that would fund organizations that plant trees in order to "cancel out" the emissions required to deliver your letter(s). These stamps would have special environmentally-themed designs but otherwise would work the same way that normal stamps work for sending letters.

**Q6.1.** How much do you like or dislike this concept?

- a. Like the concept very much
- b. Like it somewhat
- c. Neither like nor dislike it
- d. Dislike it somewhat
- e. Dislike the concept very much
- f. Not sure

**Q6.2.** Would your overall impression of the United States Postal Service (USPS) be more positive or less positive if you knew that they would be implementing the concept described above?

- a. Much more positive
- b. Somewhat more positive
- c. About the same
- d. Somewhat less positive
- e. Much less positive
- f. Not sure

**Q6.3.** How likely would you be to consider paying a small surcharge to buy stamps that would fund organizations that plant trees in order to "cancel out" the emissions required to deliver your letter(s)?

- a. Extremely likely
- b. Very likely
- c. Somewhat likely
- d. Not very likely
- e. Not at all likely
- f. It depends on the price of the surcharge
- g. I would not/do not buy stamps
- h. Not sure

**Q6.4.** Stamps currently cost \$0.55. How much more would you be willing to pay to fund the planting of trees that “cancel out” your letter’s environmental impact under this program?

- a. \$0.00/I would always purchase normal stamps instead
- b. Less than \$0.03
- c. \$0.03
- d. \$0.05
- e. \$0.08
- f. \$0.10
- g. More than \$0.10
- h. I would not/do not buy stamps
- i. Not sure

**Q7.** Concept: “Carbon Compensated” Shipping. Online retailers could give you the option to add “carbon-compensation” when ordering an item to be delivered. Selecting this option would increase your shipping price by a small amount, but the money collected would fund organizations that plant trees in order to “cancel out” the emissions required to deliver your item.

**Q7.1.** How much do you like or dislike this concept?

- a. Like the concept very much
- b. Like it somewhat
- c. Neither like nor dislike it
- d. Dislike it somewhat
- e. Dislike the concept very much
- f. Not sure

**Q7.2.** Would your overall impression of the United States Postal Service (USPS) be more positive or less positive if you knew that they would be implementing the concept described above?

- a. Much more positive
- b. Somewhat more positive
- c. About the same
- d. Somewhat less positive
- e. Much less positive
- f. Not sure

**Q7.3.** On a typical shipment, how much would you be willing to pay/contribute to fund the planting of trees that compensate for the environmental impact of delivering an item under this program?

- a. \$0.00/not interested
- b. Less than \$0.10
- c. \$0.10
- d. \$0.20
- e. \$0.30
- f. \$0.40
- g. \$0.50
- h. \$0.60
- i. \$0.70
- j. \$0.80
- k. More than \$0.80
- l. It would depend on what was being delivered
- m. I would not/do not purchase items that are shipped to my home

**Q8.** Concept: Green First-Class Mail. In addition to normal postage stamps, which currently cost \$0.55, the United States Postal Service (USPS) could sell stamps that would cost slightly less - \$0.50 – but which would take a little longer to deliver because these items would never be transported by air. Delivery without using airplanes would reduce the amount of carbon dioxide (CO<sub>2</sub>) emissions released when delivering your letter(s).

These stamps would have special environmentally-themed designs and stamped items would take a little longer to delivered, but otherwise they would work the same way that normal stamps work for sending letters.

**Q8.1.** How much do you like or dislike this concept?

- a. Like the concept very much
- b. Like it somewhat
- c. Neither like nor dislike it
- d. Dislike it somewhat
- e. Dislike the concept very much
- f. Not sure

**Q8.2.** Would your overall impression of the United States Postal Service (USPS) be more positive or less positive if you knew that they would be implementing the concept described above?

- a. Much more positive
- b. Somewhat more positive
- c. About the same
- d. Somewhat less positive
- e. Much less positive
- f. Not sure

**Q8.3.** First class letters typically take one to three days to arrive at their final destination in the U.S.. How many additional days' delay would be acceptable for you to buy stamps that would take a little longer to deliver because these letters would never be transported by air in order to reduce the amount of CO<sub>2</sub> emissions required to complete delivery, but which would cost \$0.50 instead of \$0.55?

- a. 1 additional day (2-4 days total)
- b. 2 additional days
- c. 3 additional days
- d. More than 3 additional days
- e. I would always purchase normal stamps instead
- f. I would not/do not buy stamps
- g. Not sure

**Q8.4.** For how much of your mail do you think you would use stamps that cost \$0.50 instead of \$0.55 cents, but which would take a little longer to deliver because these items would never be transported by air in order to reduce the amount of CO<sub>2</sub> emissions required to complete delivery?

- a. I would use these stamps for...
- b. All of my letter mail
- c. Most of my letter mail
- d. Some of my letter mail
- e. None of my letter mail
- f. Not sure
- g. I would not/do not buy stamps

**Q9.** Concept: “Certified Green” Mailings. The United States Postal Service (USPS) delivers advertisements in the mail that include special offers, promotions, or messages. In order to encourage those advertisers to act in environmentally-friendly ways, USPS could allow advertisers to place a special logo on their mail certifying that the envelope and its contents are recyclable, made from recycled paper and inks, and have been printed and transported according to higher environmental standards than other pieces of mail.

**Q9.1.** How much do you like or dislike this concept?

- a. Like the concept very much
- b. Like it somewhat
- c. Neither like nor dislike it
- d. Dislike it somewhat
- e. Dislike the concept very much
- f. Not sure

**Q9.2.** Would your overall impression of the United States Postal Service (USPS) be more positive or less positive if you knew that they would be implementing the concept described above?

- a. Much more positive
- b. Somewhat more positive
- c. About the same
- d. Somewhat less positive
- e. Much less positive
- f. Not sure

**Q9.3.** Would this concept make you feel more positive or less positive towards the advertiser sending the piece of mail that you received?

- a. Much more positive
- b. Somewhat more positive
- c. Neither more nor less positive
- d. Somewhat less positive
- e. Much less positive
- f. Not sure/it depends

**Q10.** Concept: Reusable Packaging. In order to reduce the amount of packaging used for deliveries, the United States Postal Service (USPS) could offer rugged, reusable packaging to be used for the items they deliver. Reusable packaging would work like the packaging that is used now, except that it would be tough enough to be used many times. After receiving an item that was shipped with reusable packaging, you would leave the packaging by your mailbox for your USPS Mail Carrier to pick up. USPS would then offer the packing materials to others to reuse for future deliveries.

**Q10.1.** How much do you like or dislike this concept?

- a. Like the concept very much
- b. Like it somewhat
- c. Neither like nor dislike it
- d. Dislike it somewhat
- e. Dislike the concept very much
- f. Not sure

**Q10.2.** Would your overall impression of the United States Postal Service (USPS) be more positive or less positive if you knew that they would be implementing the concept described above?

- a. Much more positive
- b. Somewhat more positive
- c. About the same
- d. Somewhat less positive
- e. Much less positive
- f. Not sure

**Q10.3.** If USPS offered reusable packaging and other shipping companies did not, would this concept make you more or less likely to choose the United States Postal Service (USPS) to send packages, or to select USPS when selecting a company to deliver a product that you ordered?

- a. Much more likely
- b. Somewhat more likely
- c. Neither more likely nor less likely
- d. Somewhat less likely
- e. Much less likely
- f. Not sure

**Q11.** Concept: Single City Package Delivery Provider. In some large cities, some people have proposed reducing the congestion and pollution that results from having multiple organizations complete the deliveries in that city by having one single delivery company complete all package deliveries in that city instead.

**Q11.1.** How much do you like or dislike this idea?

- a. Like the idea very much
- b. Like it somewhat
- c. Neither like nor dislike it
- d. Dislike it somewhat
- e. Dislike the idea very much
- f. Not sure

**Q12.** How much do you like or dislike the following ideas for making mail and/or package delivery more environmentally friendly?

[Scale: *Like very much, Like somewhat, Neither like nor dislike, Dislike somewhat, Dislike very much, Not sure*]

- a. Delivering packages in the evening when there is less traffic
- b. Providing online package payment, postage, and labeling services to save customers trips to a retail location/store/post office
- c. Ensuring that delivery trucks are full before completing deliveries to minimize the number of round trips each truck has to make
- d. Using software that minimizes the distance driven between deliveries
- e. Using energy-efficient/electric delivery vehicles

# Appendix E: Management's Comments

GARY C. REBLIN  
VICE PRESIDENT, PRODUCT INNOVATION



July 27, 2020

EVGENI DOBREV  
ACTING MANAGER, OPERATIONS CENTRAL  
RESEARCH AND INSIGHTS SOLUTION CENTER

SUBJECT: Sustainability and the Postal Service: Creating a Greener Future Through Product Innovation (RISC-WP-20-005) OIG White Paper

Thank you for providing the United States Postal Service (USPS) with an opportunity to review and comment on the subject Office of the Inspector General (OIG) RISC Report "Sustainability and the Postal Service: Creating a Greener Future Through Product Innovation". In this response, Management provides necessary clarifications.

The report does not acknowledge what Expedited Packaging Supplies (EPS) has accomplished since 2012 with respect to Postal Service sustainable packaging initiatives. Below are the accomplishments since the Victory Packaging contract was competitively awarded in 2012.

- Page 4, paragraph 1 – Carbon Compensation for packages and letters: Carbon offsets or compensation are not financially viable options due to budget reductions resulting from the financial situation of the Postal Service.
- Page 4, paragraph 2 – Reusable packaging solutions: The increased cost to produce a reusable package adds to the risk and customer issues of not receiving the package back and the subsequent logistics of handling and reinserting the package into the usage stream. These concerns will outweigh any expected return on investment. From the EPS perspective, the fulfillment of our packaging uses optimal shipping/delivery avenues, maximizes trucks and ships to customized customers as local as possible to reduce freight (and associated greenhouse emissions). We produce high quantities to reduce and control cost, and we require that our suppliers maximize recycled content to meet or exceed federal and regional standards.

Reusable packaging solutions (pages 13 and 14 of the OIG report):

- The report appears to be geared towards a specific product and seems to promote a specific supplier's product. This type of application/package would only be useful for a very specific customer/application. The products displayed are patented products and the Postal Service does not promote the usage of patented products. The overall cost of this reusable type of packaging would escalate our packaging cost dramatically - from .40 to .50 cents on average to \$3 to \$5 per package.
- Regarding the narrative on page 13 of the report, many think that reusable packaging benefits the customer, which in this case is the Postal Service. In fact, the manufacturer is the beneficiary because the overall product is higher in cost, more costly to manufacture, entails slower production and when the supplier gets the product back they must check the item, clean it and resell what was just returned by the customer.

- We have three overarching concerns with the referenced reusable totes. Firstly, for many of the totes in today's market, the reality is that many customers receiving them would use the totes for their own personal use for storage bins, coolers etc. and those totes would not be returned for service. They are not cost effective compared to standard packaging and an additional cost is incurred for returning them through mail processing. Secondly, many are more beneficial to the manufacturer than the end user. Recyclability could also be a problem compared to the current EPS boxes which are 100% curb side recyclable. Lastly, cleaning totes in a COVID-19 environment would be extremely challenging.

Since 2012, Victory Packaging has been responsible for fulfillment of our Expedited Packaging Supplies, order processing, inventory management and product packaging. Leveraging this contract vehicle, the Postal Service has accomplished the following sustainable last mile process enhancements (page 16 of OIG Report):

- Delivery to 21 Postal Service Network Delivery Centers (NDCs), whereas prior to Victory Packaging, delivery was only to two NDCs.
- Over 280 SKU's from 15 manufacturers of Expedited Packaging Supplies and ReadyPost products warehoused and fulfilled using 19 Victory Packaging Distribution Centers (prior to Victory Packaging only two Distribution Centers were utilized)
- Victory Packaging's distribution model removes **10 million miles** of transportation delivering the same **11,132 truckloads** of material. It is approximately equal to:
  - o Annual greenhouse gas (GHG) emissions from **3,739 passenger vehicles**
  - o CO2 emissions from **2,137,519 gallons** of gasoline consumed
- Additionally, the Postal Service has added four How2Recycle labels that will be displayed on the front or back of Expedited Packaging Supplies. Information provided on the recycling label effectively communicates the proper steps to recycle the packaging. Examples of approved package labeling is provided below.



Regarding the OIG comments on the efficiency of our truck loading, the logistics associated with the Victory Packaging solution supports inbound freight to 19 Victory facilities with 90 to 95 percent full truck loads. The remaining 5 percent consist of tape and labels which is less than truck load (LTL). Prior to Victory Packaging, truck loads were approximately 30 to 40 percent full going into the two distribution centers.

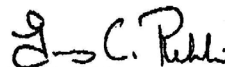
- Page 13 and 14; page 17 – second orange bullet point: The Postal Service has invested heavily over the past several years in vans built to carry new and growing package volume.
- Page 18, paragraph 6 – OIG and IPC perspectives concerning customer appetite for sustainable packaging:
  - Customers often state that they want environmentally conscious packaging, however that opinion tends to change when they realize the additional costs they will incur. In today's environment, it is a questionable premise that consumers will pay for the reusable packaging due to the \$3 to \$4 price tag.

The Postal Service agrees that providing environmentally conscious goods and services is important for the environment and increases our brand as a sustainability leader. In addition to reducing our GHG emissions, water usage and increasing our diversion of waste from landfills, the Postal Service has recently made great progress on effectively communicating how our packaging is to be recycled due to our agreement with How2Recycle.

A general concern with the OIG research presented in this Report is that it is largely based on internet research. Improved research and subsequent recommendations would have resulted from more extensive research with packaging suppliers, Postal Service shippers, and internal Postal Service organizations including the packaging teams, Supply Management and the Office of Sustainability. On a final note, given the current financial situation of the Postal Service, it is critically important that proper comparative cost analysis is conducted prior to investing in sustainable packaging solutions that incur additional cost and/or work hours.



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**We conducted work for this white paper in accordance with the Council of the Inspectors General on Integrity and Efficiency's Quality Standards for Inspection and Evaluation (January 2012).**