

Digital Labeling for Recyclability

SB 123 PRESENTATION

SENATE ENERGY AND ENVIRONMENT
COMMITTEE

MARCH 28, 2023

Evolution of Digital Labeling Conversation

- China implements National Sword in 2018
- Recycling Steering Committee (RSC) convened to address market crisis
- RSC work became foundation for Recycling Modernization Act (SB 582, 2021)
- SB 582 established Truth in Labeling Task Force- one recommendation was to mandate “smart labeling,” or digital labels on packaging by 2030
- Stakeholders convened to assess digital labeling approach- SB 123 -2 amendment interim step
- Potential to be a tool to address customer confusion on the front end to reduce contamination

SB 123 -2 Amendment

- Directs Producer Responsibility Organizations (PROs) to consider and develop recommendations for the use of digital labeling by producers to convey information about recyclability claims by 2027
- Does not place a mandate on PROs or producers
- Aligns with second PRO plan to provide time for work group discussion
- PROs comprised of brands with expertise make recommendation

Why digital labeling?

Challenges solved with digital labeling:

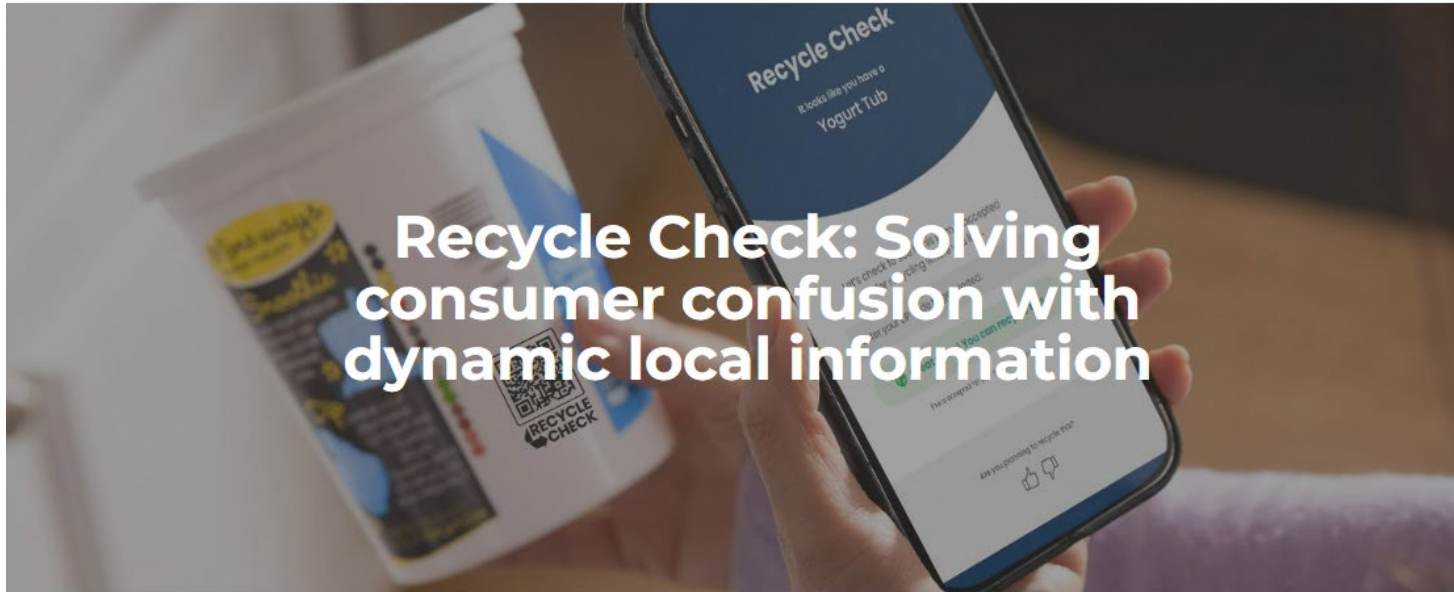
- Consumer confusion when it comes to recyclability labeling that leads to contamination
- Specific recycling instructions for consumers in Oregon that would not conflict with labeling efforts in other states
- Avoids challenges of costly packaging changes
- Significant progress toward reaching labeling goals in SB 582 (Recycling Modernization Act) and Truth in Labeling Task Force



Digital Labels In Practice



[RECYCLING COORDINATORS+](#) [INITIATIVES+](#) [FUNDING PARTNERS](#) [RESOURCES+](#) [ABOUT+](#)



**Recycle Check: Solving
consumer confusion with
dynamic local information**

**60% of consumers are confused about what
and how to recycle.**

Claims Play a Critical Role in Recycling

People want recyclable packages

- **84%¹ expect packages to be easy to recycle**

They are look for recycling instructions

- **78%¹ look at on pack labels to determine if a product is recyclable**

Without it, they often get it wrong

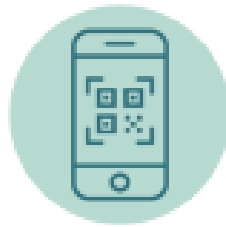
- **When tested, as many as 64%¹ of people are wrong about what to do with plastics**

How Recycle Check Works



Apply

Brands apply for and purchase a customized QR code and link for their eligible package*



Scan item or click link

Recycle Check can be deployed as a customized on-pack QR code or website link for each package. Consumers scan the on pack QR code or click the link.



Find out if it is accepted for recycling locally

This leads to the Recycle Check platform with a pre-filled package type



Recycle or dispose of item

Consumers enter their zip code or allow location permissions and receive a clear, yes-no answer about whether they can recycle the item – in seconds!

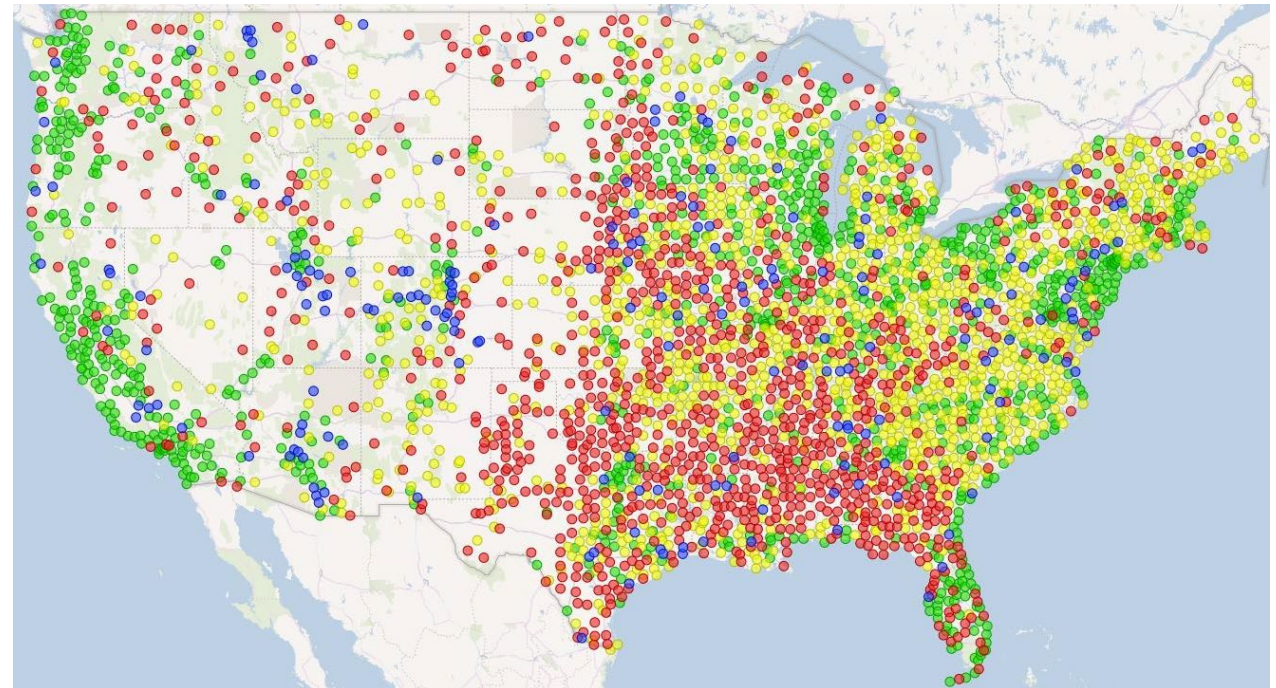
**A brand's application must demonstrate that the package passes design requirements for effective recycling.*



The National Recycling Database

The Recycling Partnership's [National Recycling Database](#) centralizes recycling access information from more than **9,000 U.S. communities covering 97% of the U.S. population.**

The database aims to provide residents & consumers with local, accurate information on what is accepted in their local recycling program



● Curbside ● Subscription ● Drop-off ● None



Updating the Database

Through machine learning, data automation, and computer vision, the database captures local recycling changes to provide up-to-date information.

Strategies for updating the database include:

- Automated searching** for search widgets
- Screenshots, text scraping and processing** for websites
- Manual research** for new PDF guidelines
- Manual verification & updates** for any community where screenshots and scraping do not work

All communities are updated at least once per year, with the more automated processes occurring on a monthly or quarterly basis.



Access and Innovation

- According to a 2021 Pew Research study, 85% of Americans own a smart phone
- There is already federal precedence in the US for using digital links for GMO disclosures on packaging
- EU draft directive on packaging waste would require digital links to aid sortation *and* label for recycling/reuse within 48 months of adoption
- Digital links to enable the recycling of flexible packaging underway in Canada

Expanding Recycling Accessibility

As accessibility and equity become a greater focus in sustainability work, smart labels can be an important tool to help overcome the systemic barriers in accessing information for different segments of the population.

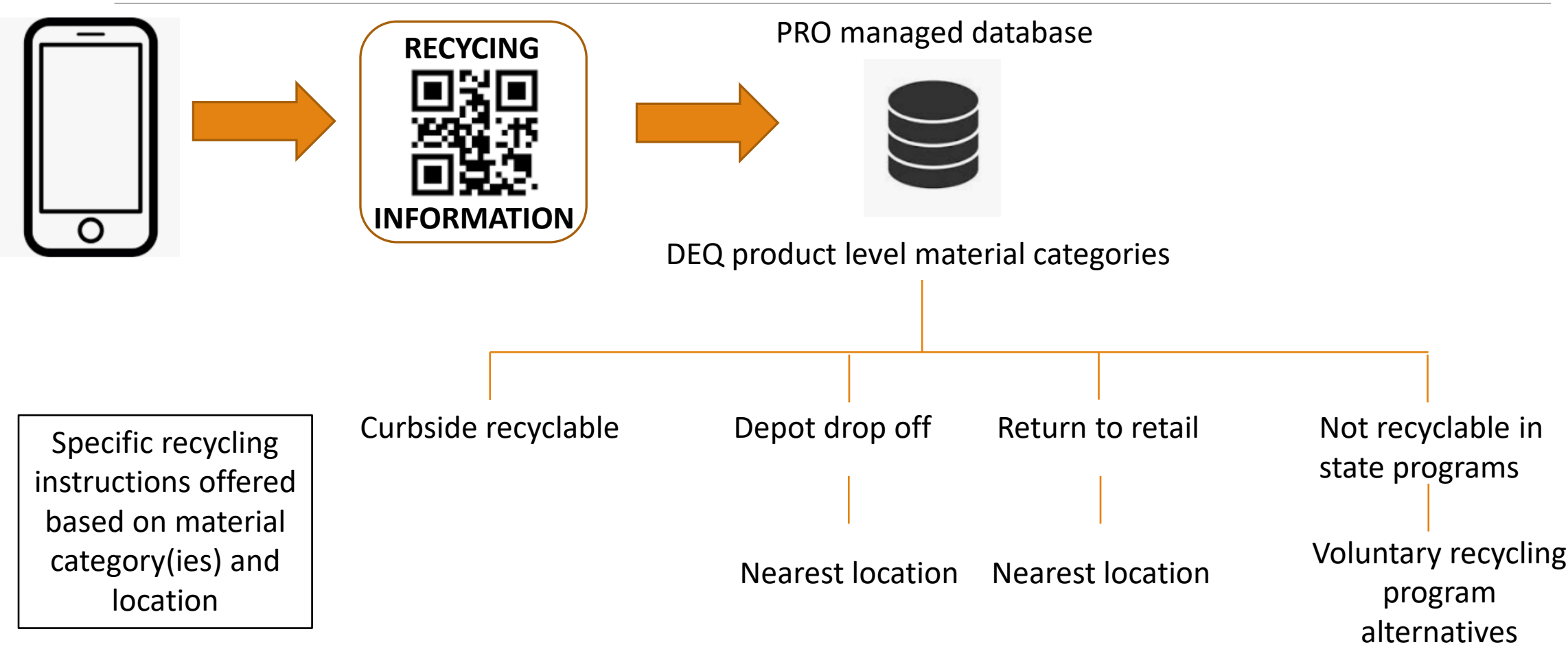
- Language barriers, [Multilingual Digital Labelling and Smart Packaging in an Increasingly Global Marketplace](#)
- Vision impairment assistance, font size enlargement and spoken information (CVS and RFID [Spoken Rx](#) app),
- Health and safety, [nutritional value ingredients and allergens](#)

A grocery store in Spain conducted a [pilot](#) to add digital labels that directed consumers to a range of info, including recycling instruction, demonstrated a 7% increase in recycling participation amongst consumers that didn't recycle before.

Brands exploring digital labels in Europe and the U.S.:



How It Could Work



Contact Information

Andrea Fogue, Oregon Refuse and Recycling Association, andrea@orra.net

Dylan de Thomas, The Recycling Partnership, ddethomas@recyclingpartnership.org

Kim Holmes, 4R Sustainability, kholmes@4RSustainability.com

Thank
You!