

Sustainability Business Case – Biobased Compounds

**The successful introduction of a new line of
sustainable flexible PVC compounds**



Introduction – the case

Sustainability is becoming increasingly relevant and is pushing agencies and companies to establish challenging goals.

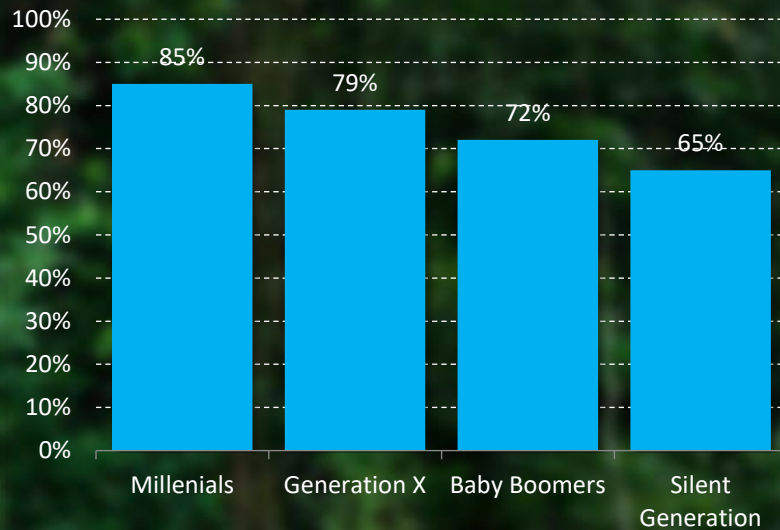
Achieving these goals might come as a new opportunity for PVC compounds, especially as primary bio-based plasticizers are developed.

Dacarto, a well-established compounder in Brazil, envisioned the opportunity and developed a new product line with a strong sustainable identity: **dgreen**.

The product line **dgreen** improved Dacarto's bottom line and ultimately benefited the whole supply chain.

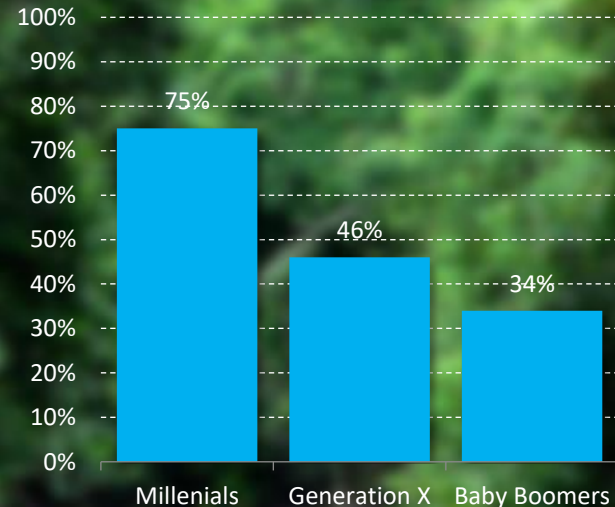
Sustainability is becoming increasingly relevant...

% Respondents, Global



Respondents that said it was **“extremely”** or **“very”** important for the companies to implement programs to improve the environment.

% Respondents, USA



Respondents that would **“definitely”** or **“likely”** change their purchasing habits to reduce their environmental impact

“ALMOST HALF OF THE GLOBAL CONSUMERS INTERVIEWED SAID THAT THEY WOULD ABANDON A BRAND TO PURCHASE MORE SUSTAINABLE PRODUCTS”

...and is pushing agencies and companies to establish challenging goals.

- Initiatives

- UN: Green Chemistry and Chemical Engineering initiative
- Europe: Green Deal
- USA: Green Buildings



- Companies seeking carbon neutrality with clear, measurable goals



- Certification and labels for sustainable products

- Growing focus on carbon footprint and renewables



www.ecolabelindex.com/ecolabels

Achieving these goals might come as a new opportunity for PVC...

- Challenges

- Single-use plastics
- Complex recyclability
- Fossil origin

- PVC – from villain to hero

- Mostly durable applications
- Greater opportunity for recycling
- Composition: 57% from salt (renewable), 43% fossil.

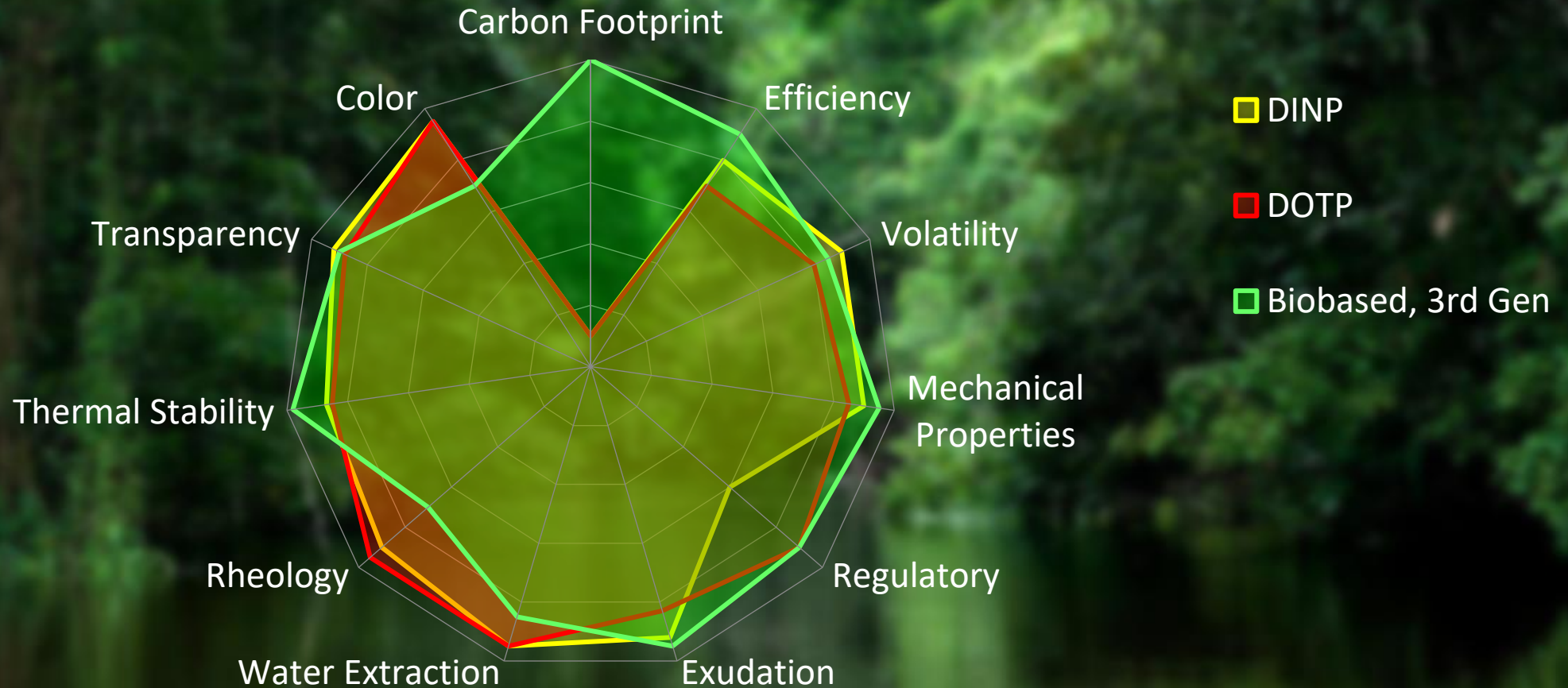
Disposable Plastics,
USA
(Mton/yr)



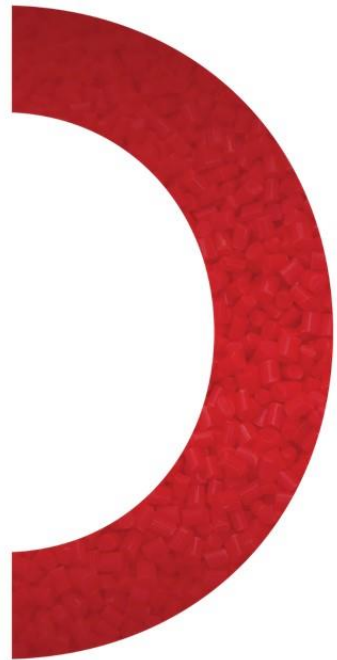
Source: <https://ihsmarkit.com/>

**Increased
renewables
opportunities
with bio-based
plasticizers**

...especially as primary bio-based plasticizers are developed.



Dacarto, a well-established compounder in Brazil,...



TRADITION AND QUALITY

IN THE MANUFACTURE OF PVC COMPOUNDS, MASTERBATCHES AND POLYOLEFIN SPECIALTIES.

With over half a century of history, Dacarto supplies quality raw materials for the manufacturing of a wide array of plastic final products.



FOUNDED IN **1968**

CURRENT HEADQUARTERS
BUILT IN SÃO PAULO IN **1974**

BAHIA UNIT INAUGURATED IN
1986

FORMED JOINT VENTURE WITH
BELGIAN SOLVAY S/A IN
2000 TO FORM DACARTO
BENVIC

EXPANDED AND MODERNIZED
MAIN PLANT IN **2012-2016**

FULLY CONTROLLED BY THE
FOUNDING FAMILIES IN **2017**

IN **2023**, DACARTO
COMPLETES 55 YEARS OF
HISTORY



Simões Filho/BA



Osasco/SP

...envisioned the opportunity...

- Challenge:

- Multi-national Wire & Cable customer
- Requirements
 - No phthalates
 - Performance
- Best cost/performance
- 6-month approval process

- Opportunity:

- Material **performance** (bio-based 3rd generation)
- Adequate **cost**
- Bio-based **claim**
- BiopREFERRED® **certification** (44% to 54% bio content)
- Growth of sustainability **demand**
- Be the **first** in the market

- ☑ Buyer utility (technical fit)
- ☑ Attractive price
- ☑ Marketing differentiation

- ☑ Credibility
- ☑ Market demand
- ☑ No competition

...and developed a new product line with a strong sustainable identity: *dgreen*.

- New customers interested in bio-content
- Basic technical and marketing offering prepared in collaboration with supplier
- BioPreferred® certification submitted
- Approval process initiated
- Internal multi-functional group created
- Advertising agency hired
- *dgreen* project is launched



Oct/2020
Formulation
approved at
Dacarto

August/2022
Project kick-
off

October/2022
First products to get
BioPreferred®
certification (W&C
and Shoes)

March/2023
dgreen launched at
FIMEC/2023
in Novo
Hamburgo/RS

May/2023
Hose
compounds
certification

September/2023
Continuous
implementation of
new products:
140 items

The product line *dgreen* improved Dacarto's bottom line...

- Period between Mar/23 and Oct/23:
 - *Dgreen* line sold to ~50 customers (Shoes/Hoses/Wire & Cable)
 - Sales volume increase: 500 Mtons
 - New accounts: ~25
 - Number of new products: ~6% of total product portfolio
 - No significant fixed costs increases
 - Little investment
- Qualitative improvements:
 - Increased account penetration: estimates as high as 50% increased share in specific customers, considering all products)
 - Improved company brand and image perception
 - Better team motivation



... and ultimately benefited the whole supply chain.

- Raw material suppliers' volume increase
- Customers' volume and margin increase
- Opportunity to show innovation
- Positive press coverage
- Improved perception of PVC (and even plastics in general)

"Dacarto's initiative was one of the best things to promote PVC in recent years" (*resin supplier*)

"The dgreen product line shows Dacarto's commitment in offering ever more sustainable solutions to their customers. It's a business strategy that takes respect to the environment, focused not only in the business, but also in the future." (*shoes customer*)

"We missed the boat on this one. Now we'll have to play catch up" (*competitor*)

"I never new plastic could actually help the environment" (*consumer*)

"Very important action, as it broadens the customer base, and facilitates the expansion to international markets, adding value to its products" (*business partner*)



Thank you

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