# ENVIRONMENTALLY FRIENDLY CARDS



#### THE NEED FOR SUSTAINABILITY

The need for environmentally friendly and sustainable products, has become more important and popular than ever before.

In Europe, this has been the trend for many years, but it has recently become the focus of many hotels in the US as well.

#### THE OPTIONS



WOOD

Biodegradable



#### **RECYCLED PVC**

Made from recycled materials-but not biodegradable



#### PPH BIO

Biodegradable

\*\*NEW Product\*\*

#### PROMOTING SUSTAINABILITY



Developing sustainable products.

#### **ECO FRIENDLY**



#### **LOGO**

This logo will be printed on each card.

#### **GREEN FRIENDLY**



#### **CERTIFICATES**

These orders will receive an eco-friendly Certificate upon request.

#### PVC Cards - Pros and Cons

PVC is the world's third-most widely used synthetic plastic in production. PVC is a dense plastic with extremely good tensile strength, resistant to chemicals and very cost effective. To date, this has been used for most hotel key cards globally. However PVC is toxic and can pose serious health and environmental hazards when burned, as it emits hydrogen chloride (HCI) fumes. PVC cannot be recycled by municipal authorities with recycling programs due to their inability to mix PVC with other plastic types.

The PVC chemical bonds are designed to last forever, and production is cheap, however it is harmful to the environment.

"...production is cheap, however it is harmful to the environment."

## BioPVC, EcoPVC, and other misleading product names

There are other PVC products in the market, however these are marketing brand names and not certified biodegradable products. The products still contain some layer of PVC chemical components that do not biodegrade. There is no evidence or documentation to support the claims made by those marketing and selling these products.



The inherent chemical composition of PVC is designed to last forever and does not allow for the breaking down of the carbon chemical bonds in any way, even when mixed with other plastic types. Therefore any product containing any PVC, cannot be 100% biodegradable.

In Europe and the UK these products were therefore rejected by the market, forcing some hotels to rescind their green points certificates.

(While Cardz Group Africa can source these cards, we do not believe in selling products that are not certified or found to be making false claims. As such we choose not to offer these cards.)

\*\*\*Example of FTC crack down on false biodegradable plastic claims: <a href="https://greenchemicalsblog.com/">https://greenchemicalsblog.com/</a>
2013/11/13/ftc-cracks-down-biodegradable-plastic-claims/

# **Environmentally friendly alternatives to PVC**

There are mainly three environmentally friendly alternatives to PVC:

#### 1. WOOD (BIODEGRADABLE)

Wooden cards provide a great alternative to PVC. There are various wood types to choose from including Cherry, Bamboo, Walnut, Beech, Birch and Sapele wood. The wood texture gives a great feel to the card and provides guests with the feeling of a superior luxury card. Lazer engraving on the wood is usually preferred to color printing.

However, wooden cards can break and they are 2 to 3 times more expensive that PVC.

#### **Wood Cards**



#### Recycled PVC Cards



\*\*Note the Recycled PVC decal on bottom left corner of 3rd card pictured above.

#### 2. RECYCLED PVC

This This means that the cards are made from old, used PVC card stock, instead of creating new PVC. However this can only be done in specialized and dedicated PVC recycling facilities that do not mix other plastic types. This cannot be done in general municipal recycling centers in the US.

Recycled PVC, provides all the benefits of a strong and durable standard PVC card, with only a slightly higher cost of production.

However, the Recycled PVC card itself, is not biodegradable.

#### PPH Bio Cards

#### 3. PPH BIO (BIODEGRADABLE) \*\*(NEW)\*\*

Recently a new product has been developed called PPH. This material is 100% biodegradable. The card is designed to be environmentally friendly and biodegrade in a landfill. PPH cards can be printed in full color with special print effects such as raised gloss UV. All printing is coated with a non-toxic protective varnish and the card body composition is 100% plastics free, while still protecting the print from scratches/blemishes.

We believe that this is the most cost effective alternative to PVC, that is both Biodegradable and Green Friendly. This this was designed for the hotel industry, where key cards only require a short lifespan.



# **Summary of Environmentally Friendly Options:**

	Durability	Lifespan	Waterproof	Print	Cost	Biodegrad- able	Environ- mentally Friendly
PVC	*** STRONG	LONG	YES	FULL COLOR	Cheap	NO	NO
WOOD	** BREAKABLE	SHORT	NO	ENGRAVED	2-3 x more than PVC	YES	YES
Recycled PVC	*** STRONG	LONG	YES	FULL COLOR	Only .05c more	NO	YES
PPH BIO	* CAN TEAR & BEND	SHORT	NO	FULL COLOR	Only .05c more	YES	YES

## cardzgroup africa (pty) ltd

### **PPH Bio Cards**

#### The eco-friendly alternative

The lastest addtion to our range are eco-friendly PPH cards. This material is 100% biodegradable. These cards are designed to be environmentally friendly and biodegrade in a landfill. PPH cards can be printed in full color with special print effects such as raised gloss UV.

We believe that this is the most cost effective alternative to PVC, that is both biodegradable and eco-friendly.

#### Why choose PPH Bio?

The main distinctive features of PPH Cards are that they are entirely biodegradable being wood pulp rather than plastics based, yet unlike cheaper paper cards the compressed pulp fibre makes them extra durable and suitable for re-use unlike thin disposable paper keycards. On our PPH cards we also coat the printing with a non-toxic protective varnish rather than laminating a plastic overlay in order to keep the cardbody composition 100% plastics free while still protecting the scratches/blemishes to ensure a longer card life.



#### Available in a wide range of technologies...

PPH Bio cards are available in the same great range of contactless technologies as our standard PVC cards. These include technologies from leading brands including NXP, Atmel, Infineon, EM Microelectronic and more.



#### **Key Benefits**

- Manufactured using wood pulp making them stronger and more durable than traditional paper based cards.
- Ideal for limited use applications such as hotel key cards, travel passes and more.
- Available in a wide range of contactless technologies
- Customisable with full colour print and UV gloss.









Want further information? Visit www.cardzgroup.co.za or call our sales team on +27 (0) 21 380 0108 (ZA)



# 100% BIO-DEGRADABLE RFID WRISTBANDS

Our planet is home to diverse ecosystems, from terrestrial to marine, each vital for the organisms they support. In this spirit, our wristbands represent a step towards sustainable technology. Crafted from natural wood and organic cotton, they are not only environmentally responsible but also embody a seamless blend of function and natural aesthetics.





#### Habitat

Our eco-friendly RFID wristbands are crafted from FSC-certified wood and responsibly sourced organic cotton, ensuring sustainability and environmental responsibility.



# **CHOOSE YOUR WOOD & COTTON**

Bamboo

Beech

Birch









Cherry

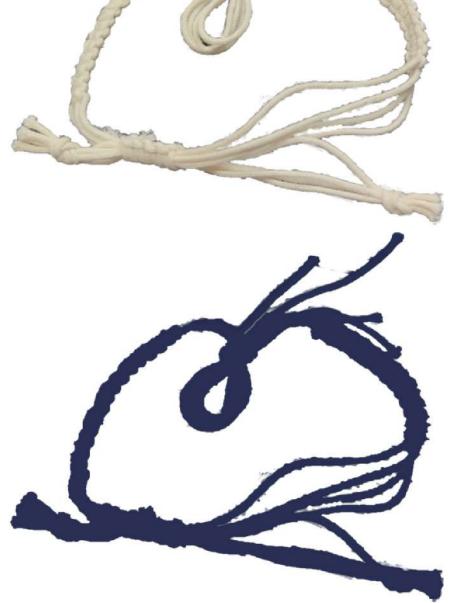
Black Walnut

Sapele









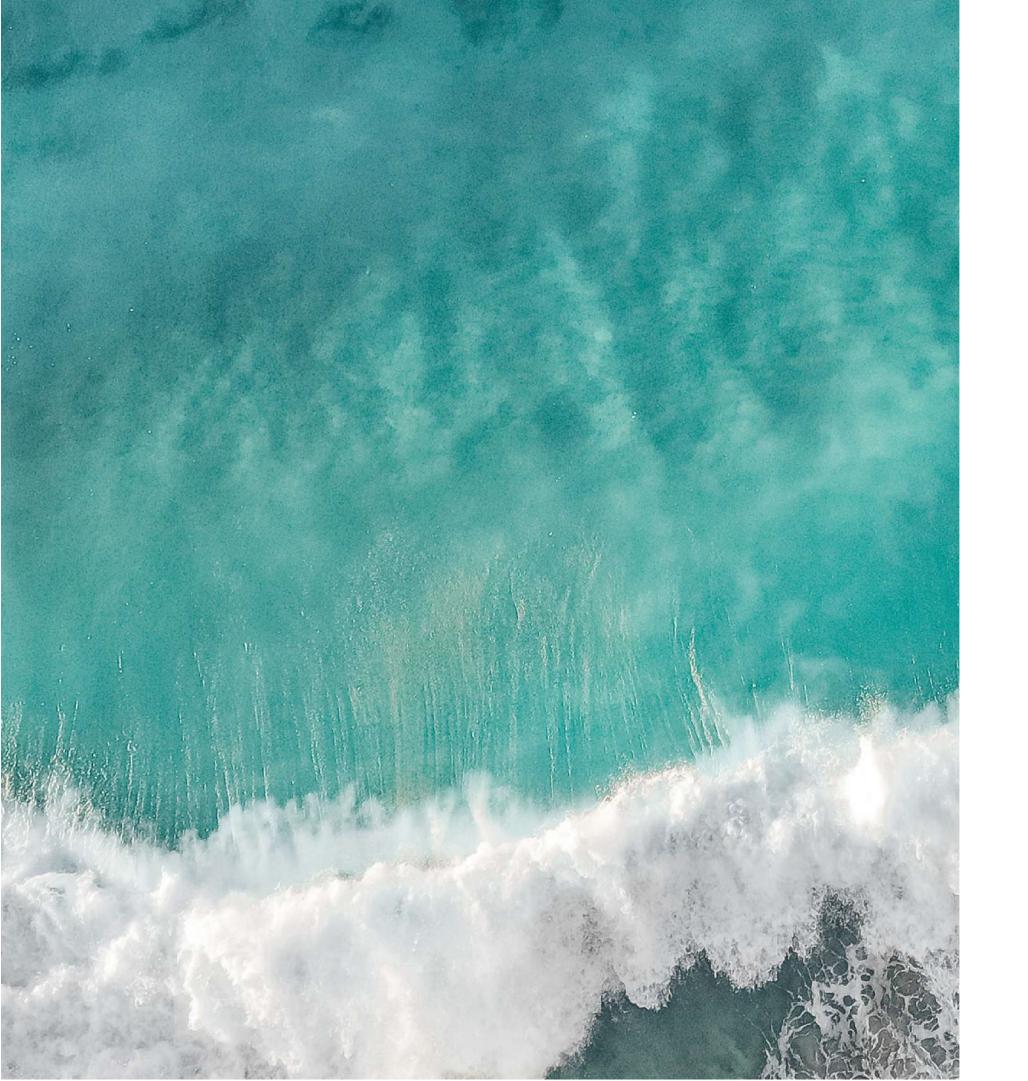












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