Giesecke+Devrient

Which card for your environmentally conscious customers?

A quick guide to sustainable card materials

The world is heading towards environmental crisis

It falls to all of us to make responsible changes to the ways we work and live to move towards a more sustainable world. For card production, this starts with materials. There are many different types of materials from which cards can be manufactured from – but which are the most sustainable?

Plastic pollution: a clear and imminent risk to our ecosystem

8 %
The manufacture of new plastics is said to take up more than 8% of the entire world's petroleum use every year[1]

91 %
of the world's plastic isn't recycled[2]

17.6bn
pounds of plastic leaks into the marine environment from land-based sources every year[3]

#5
The World Economic Forum reports that the top 5 most imminent dangers to our planet are environmental – plastics bear a responsibility in all 5[4]

What materials can be used to produce payment cards?

Material	Source	Composition	End of life options	Impact when incinerated: Environmental (None / Greenhouse gases)	Impact when incinerated: Health (None / Toxic)
PLA	Industrial crops of corn starch and sugar cane (non-food)	Bio-based	Compostable	None	None
rPVC	Post Industrial PVC	Recycled plastic	Fully recyclable	Greenhouse gases	Toxic
Ocean Plastic	Plastic collected by the ocean or ocean shore	Recycled plastic	Partially recyclable	Greenhouse gases	Toxic
Composite Plastics	Mix of rPVC or PLA and virgin plastics (PET, PVC...)	Recycled plastic	Not recyclable	Greenhouse gases	Toxic
rPET	Recycled material from skeleton of pharmacy packaging industry	Recycled plastic	Incineration or landfill	Greenhouse gases	Toxic
rPETG	Recycled material from skeleton of pharmacy packaging industry	Recycled plastic	Incineration or landfill	Greenhouse gases	Toxic
PVC	Salt and petroleum	Petroleum based	Fully recyclable	Greenhouse gases	Toxic
PET	Petroleum	Petroleum based	Recyclable once retaining original properties	Greenhouse gases	Toxic
PETG	Petroleum	Petroleum based	Recyclable once retaining original properties	Greenhouse gases	Toxic

Plastics and the Sustainable Development Goals (SDGs)

The United Nations have identified goals in 17 key areas, called the Sustainable Development Goals, that are designed to enable worldwide improvements in quality of life, in all areas, all across the planet. Adopted by all member states in 2015, the goals "provide a shared blueprint for peace and prosperity for people and the planet, now and into the future."[5]

G+D believe that business plays a crucial role in supporting these goals. We are proud that, by offering cards made from eco-friendly, sustainable sources, we are helping to deliver on these aims, particularly those relation to action on climate change and preserving life, both on land and in the oceans.

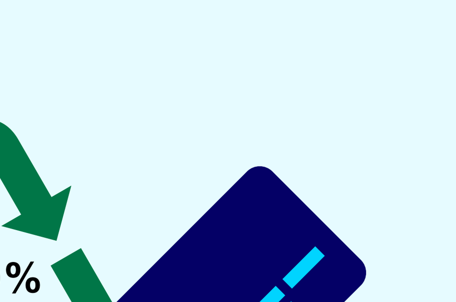
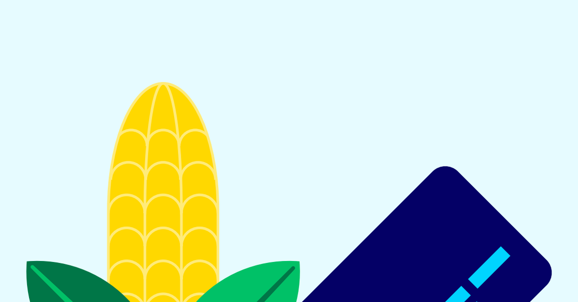
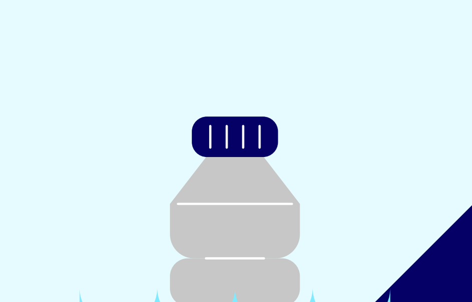
Summary

13 Climate Action	14 Life Below Water	15 Life on Land
Take urgent action to combat climate change and its impacts, by reducing emissions of CO_2 and greenhouse gases	**Conserve and sustainably use the oceans and coastal resources**	**Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss**

The impact of sustainable plastics

PLA production is booming – by 2023 analysts predict that 831000 metric tonnes will be produced every year[6]	Recycled Ocean plastic cards contributes to reducing the 8 Million tonnes of plastic entering our Ocean every year[7]	For every 1 kilo of PVC plastic recycled, 2 kilos of PVC are saved[8]

Our card selection for an environmentally conscious lifestyle

	Convego® Recycled	Convego® Natural	Convego® Ocean
			
Benefits of card material*	100% made of PVC recycled out of post-industrial goods	PLA is sourced from plants	A sustainable source of plastic whilst cleaning up the environment
	100% recyclable to avoid incineration	The material is compostable	100% recyclable to avoid incineration
Purpose	The next industry standard to reduce CO_2 emissions	Re-imagined, re-designed – it's not plastic	Protect vital marine and coastal ecosystems from pollution

* Card body only; excluding chip and antenna

Build a sustainable card solution for your customer

Whether it's sustainable, recycled petroleum-based plastic, reused sources gleaned from the ocean, or innovative new biodegradable plant-based plastics, Giesecke+Devrient (G+D) can help banks to build a sustainable foundation for their card production, with the materials that make sense for their business, and their sustainability policy.

Why not get in touch today?

Sources
1 http://www.plastic-resource-center.com/wp-content/uploads/2018/11/Global-Plastic-Production-RisesRecycling-Lags.pdf
2 https://www.nationalgeographic.org/article/whopping-91-percent-plastic-isnt-recycled/
3 https://oceana.org/our-campaigns/plastics#:~:text=The%20Problem,into%20the%20oceans%20every%20minute
4 https://www.weforum.org/reports/the-global-risks-report-2020
5 https://sdgs.un.org/goals
6 https://www.marketreportsworld.com/global-polylactic-acid-pla-market-12344166
7 G+D Supplier data
8 G+D Supplier data

Creating confidence

Giesecke+Devrient (G+D) is an international Group providing security technology and headquartered in Munich, Germany. Innovations by G+D make the lives of billions of people in the digital and physical world more secure. With its products and solutions, G+D is one of the market and technology leaders in payments, connectivity, identities, and digital infrastructures.

Established in 1852, the company achieved sales of €2.45 billion in the fiscal year 2019 and employs 11,500 people. G+D has a presence in 33 countries. Its customer base includes central and commercial banks, mobile network providers, automotive manufacturers, health insurance companies, and governments and public authorities.

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