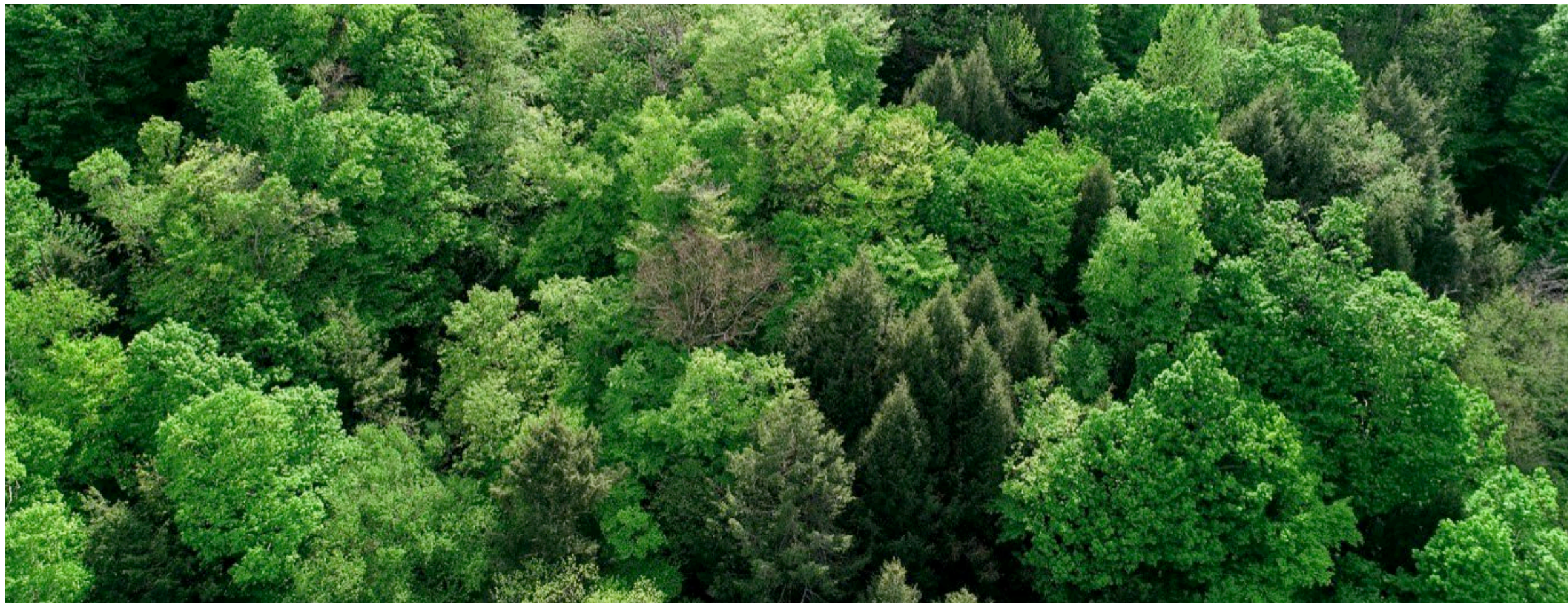


Environmental labels for graphic papers: Blue Angel and EU Ecolabel



Why using environmental labels?

For Consumers:

- ✓ Many consumers ask themselves the question: “What else can I buy without hesitation?”
With every purchase of a product or service, a consumer decides directly or indirectly about pollution of water, soil, air, or his own health.
- ✓ Environmental labels such as the Blue Angel and the EU Ecolabel guide customers to make the right choice as these labels provide reliable and trustworthy information about the environmentally relevant and health effects of a product.
→ This is exactly where environmental labels can help.



Why using environmental labels?

For Producers:

- › For the intention to demonstrate the environmental benefits of their products, enterprises can use Environmental labels as guidelines to look to lowering their environmental impact and guarantee the efficiency of their environmental actions through third party controls.

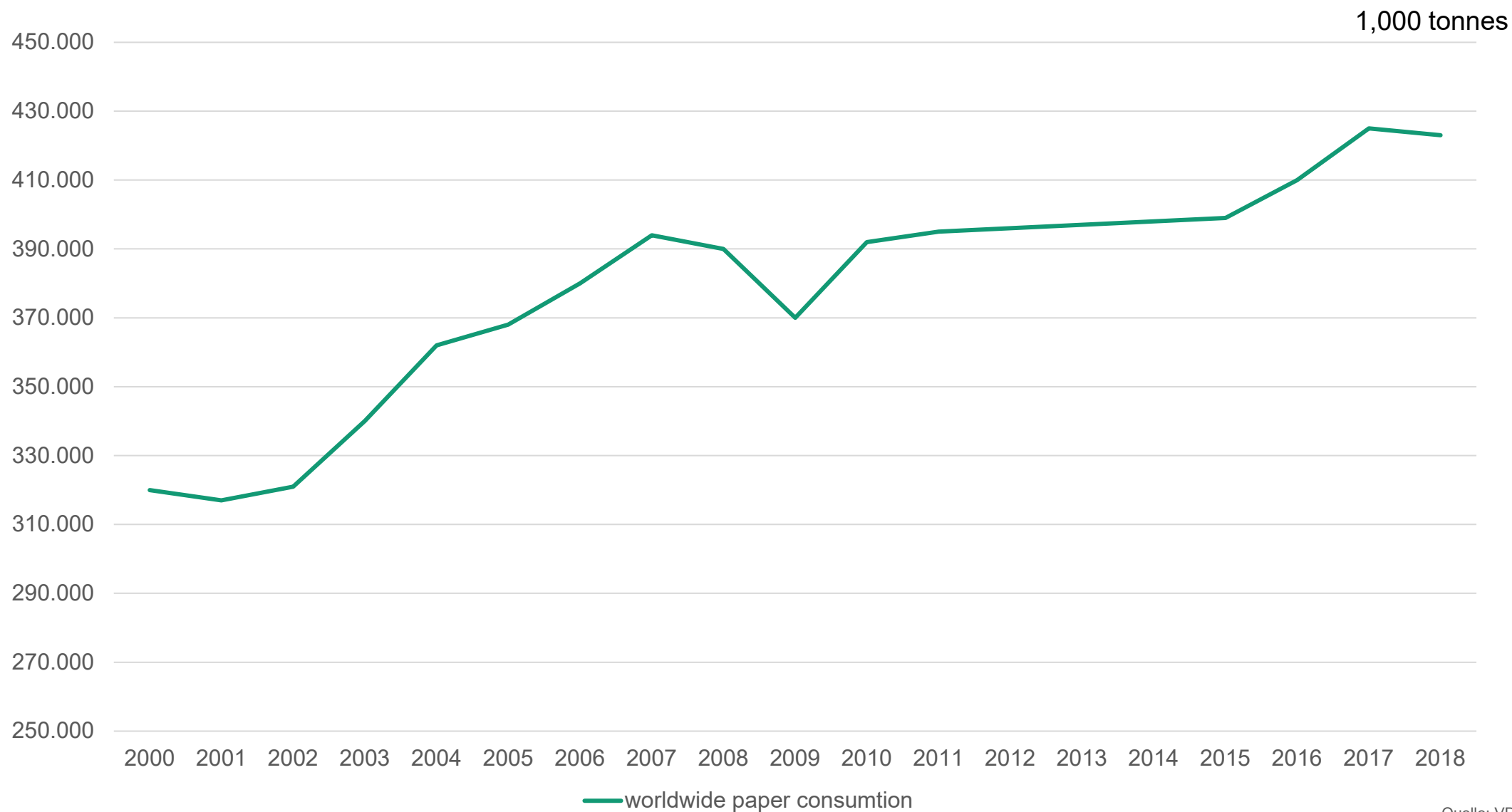


Credibility

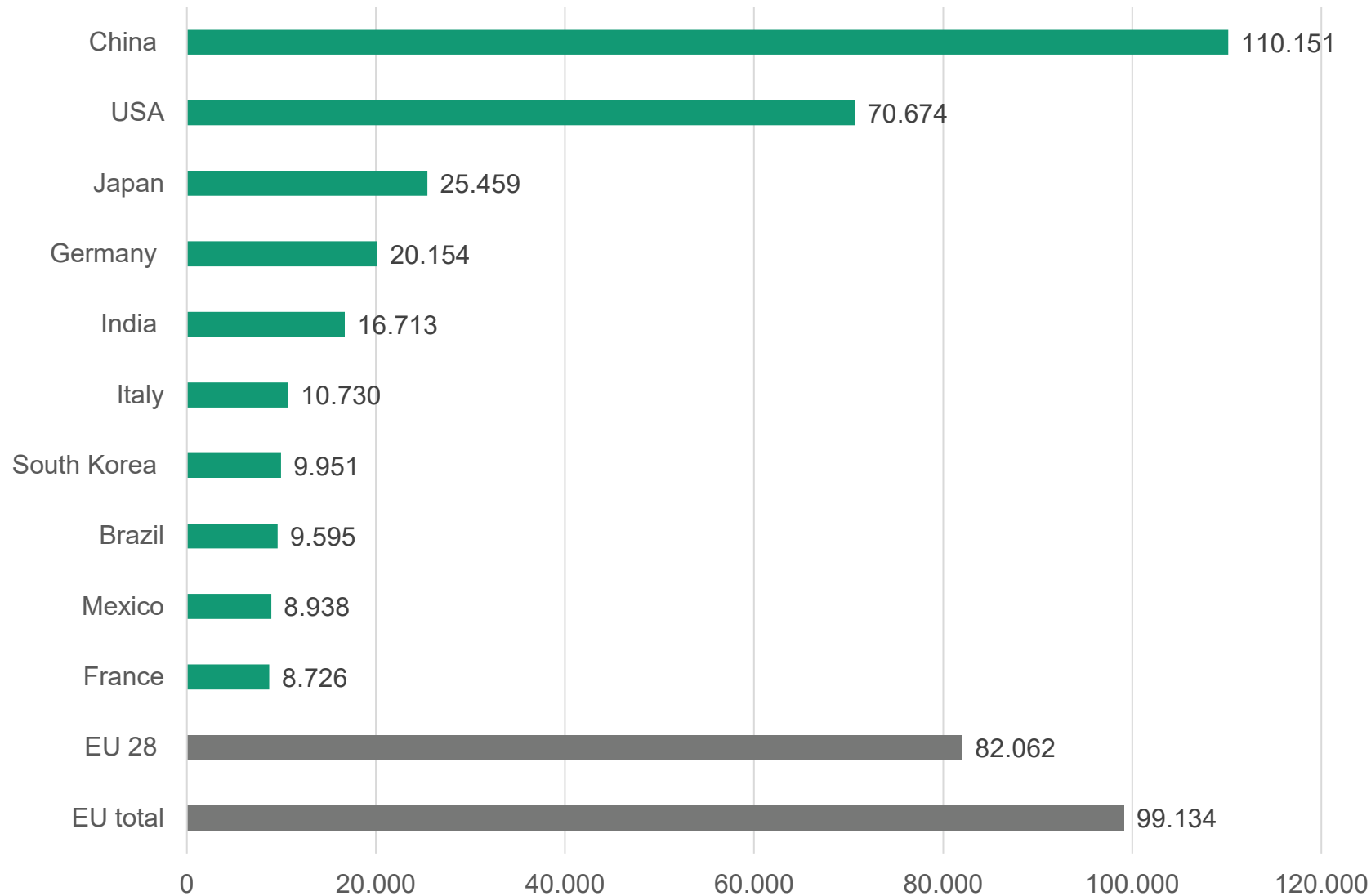
- › The Blue Angel and EU Ecolabel are so-called Type-1 environmental labels according to ISO 14024.
- › They meet highest requirements when it comes to the standards they set, the relevance of the award criteria and their independence, management and transparency of the development and award processes with third party auditing.
- › Whereas the Blue Angel, as a German national label, is well-known in Germany and German speaking nations, the EU Ecolabel puts its focus on international range.



How important is this information for consumers?

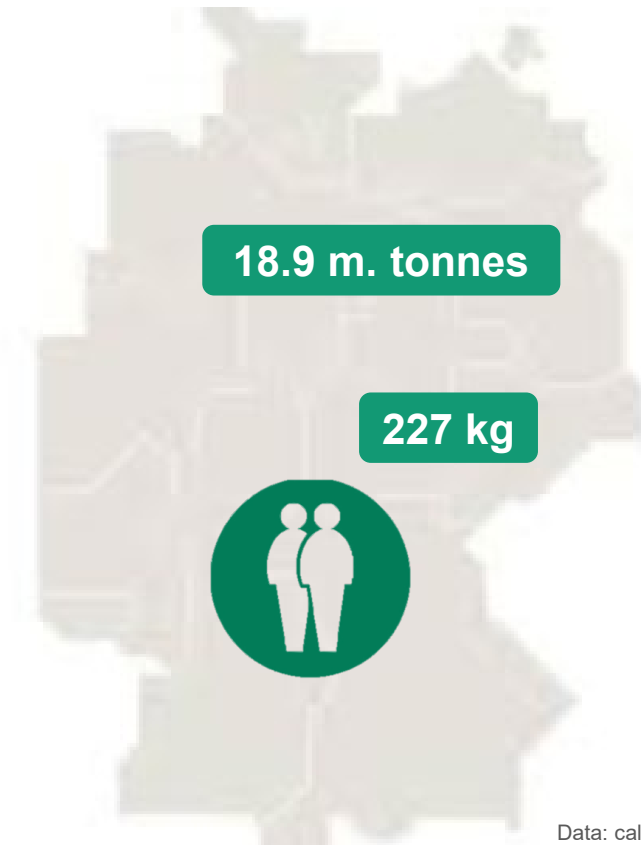


10 Biggest Paper and Board Consuming Countries 2018 (in 1,000 tonnes)



Paper consumption in Germany

- ✓ With a consumption close to 20 million tonnes of paper in 2019, Germany is still the fourth largest consumer of the world
- ✓ In Germany it means yearly 227 kg per capita

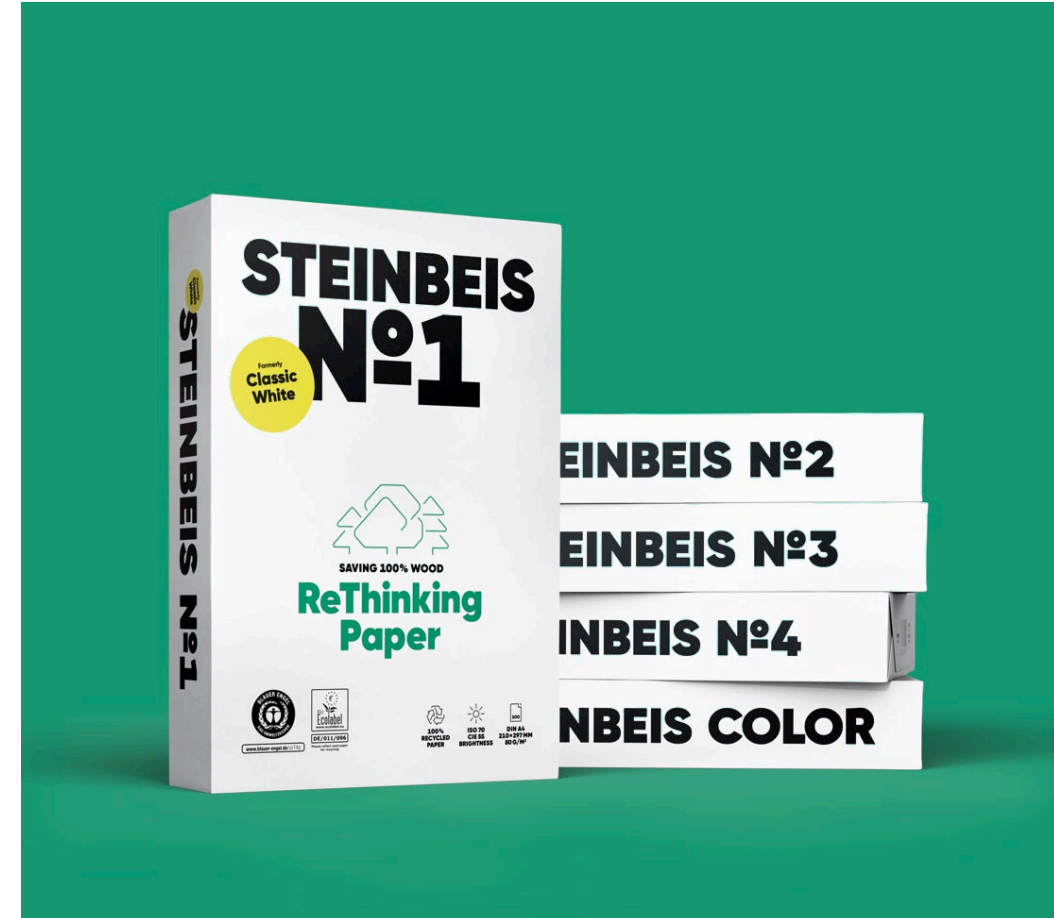


Data: calculated from data derived from VDP, Papier 2020

A long and prolonging history

Environmental labels at Steinbeis Papier

- › All Steinbeis Papier brands are certified for environmental labels
- › Blue Angel: Steinbeis Papier has certified its first brand for UZ 14 in 1983
- › The EU Ecolabel has been awarded to all brands for the first time in 2010



Blue Angel

- › For graphic papers, due to their intended purpose, two criteria exist:
- › DE-UZ 14a
Graphic paper and cardboard made from 100 % paper for recycling (recycled paper and cardboard)
- › DE-UZ 72
Printing and Publication Paper made primarily from paper for recycling (papers must have a minimum recycled content about 800 kg/adt paper)
- › Not intended for paper manufacturer's purpose but still with highest relevance for recycled papers production:
DE-UZ 195 Printed Matters



Products

Awarded by the Blue Angel

- › The world's oldest and most stringent environmental and consumer protection label
- › Guaranteed compliance with the strictest ecological and quality criteria
- › Proof of fitness for use
- › Restricted use of chemicals and auxiliaries and ban of certain chemicals
- › Strict upper limits on critical substances
- › Limited water emissions



Why Blue Angel certified?

- › Relief of forests by using recovered paper with a minimum content of about 65 % of lower/medium grades (EN 643).
- › Less energy and water consumption, lower impact on eutrophication and biodiversity.
- › Customer's protection guided by low risk auxiliaries.



EU Ecolabel

- › The European commission has established the EU Ecolabel criteria for graphic paper and for tissue paper and tissue products.
- › Annex I is setting the criteria for graphic paper.
- › Moreover, the European commission also has established ecological criteria for the award of the EU Ecolabel for printed paper.








Products

Awarded by the EU Ecolabel

- › Proof of fitness for purpose
- › At least 70 % of recycled and/or virgin fibres procured from sustainably managed forests and areas
- › Reduced waste production and emissions in water and air
- › Reduced energy consumption
- › Restricted use of chemicals and auxiliary materials



Comparison of different Ecolabels and their criteria

Valid for product		German Blue Angel	German Blue Angel	EU-Ecolabel	FSC	PEFC
		 Graphic Paper DE-UZ 14a	 Printing Paper DE-UZ 72			
	Recovered paper content	100 % recovered paper, 65 % thereof from lower and medium grades	at least 75% recovered paper (of which 80% from grade 1) and a maximum virgin fibre content of 25%	virgin fibre / recycled fibre	100 % virgin fibre	100 % virgin fibre
	Certified forestry	not applicable	yes, at least 70% of the virgin fibres used must be from certified forestry	at least 70 % from certified forestry, origin of remaining uncertified wood must be known	from certified forestry	from certified forestry
	Bleaching used	no chlorine and no halogen based bleaching agents	no chlorine or other halogen based bleaching agents	no chlorine, however halogenated bleaching agents permitted	not determined	not determined
	Chemicals: Limitation of substances contained	yes	yes	yes	no	no
	Chemicals: Exclusion of particular chemicals	yes (e.g. optical brighteners not permitted)	yes (for instance only 2 OBA types permitted and the use thereof is subject to regulations)	yes	no	no
	Limitation of emissions air/water	yes	yes	yes (System of limitations largely the same as for Nordic (green) Swan)	no	no
	Limitation of energy consumption	no, but since it is recycled paper limit in practice effected	no, but through the high content of recycled paper, this is in practice effected	yes (System of limitations largely the same as for Nordic (green) Swan)	no	no
	Limitation of water consumption	yes	yes	no	no	no
only valid for copier	Determination of running properties	yes (EN 12281)	not applicable	yes Copy (cut sheet): EN 12281 Continuous stationary: EN 12858	no	no
only valid for copier	Limitation of emissions for laser printing (VOC / SVOC)	yes	not applicable	no	no	no
only valid for copier	Ageing resistance	DIN 6738, LDK 24-85 ISO 20494	not applicable	Ageing resistance must be proved in accordance with the relevant standard	no	no
	Verified by	external certification, test institutes and statements from producers	external certification, test institutes and statements from producers	external certification and statements from producers	external certification	external certification

Keeping the circular economy running: Printed Matter – high importance to provide recycled paper stream

- › Both, the Blue Angel UZ 195 and the EU Ecolabel for printed paper provide methods to characterise the recyclability of recovered paper, thus ensuring their fitness for common established industrial processes.
- › Major criteria are:

Deinkability

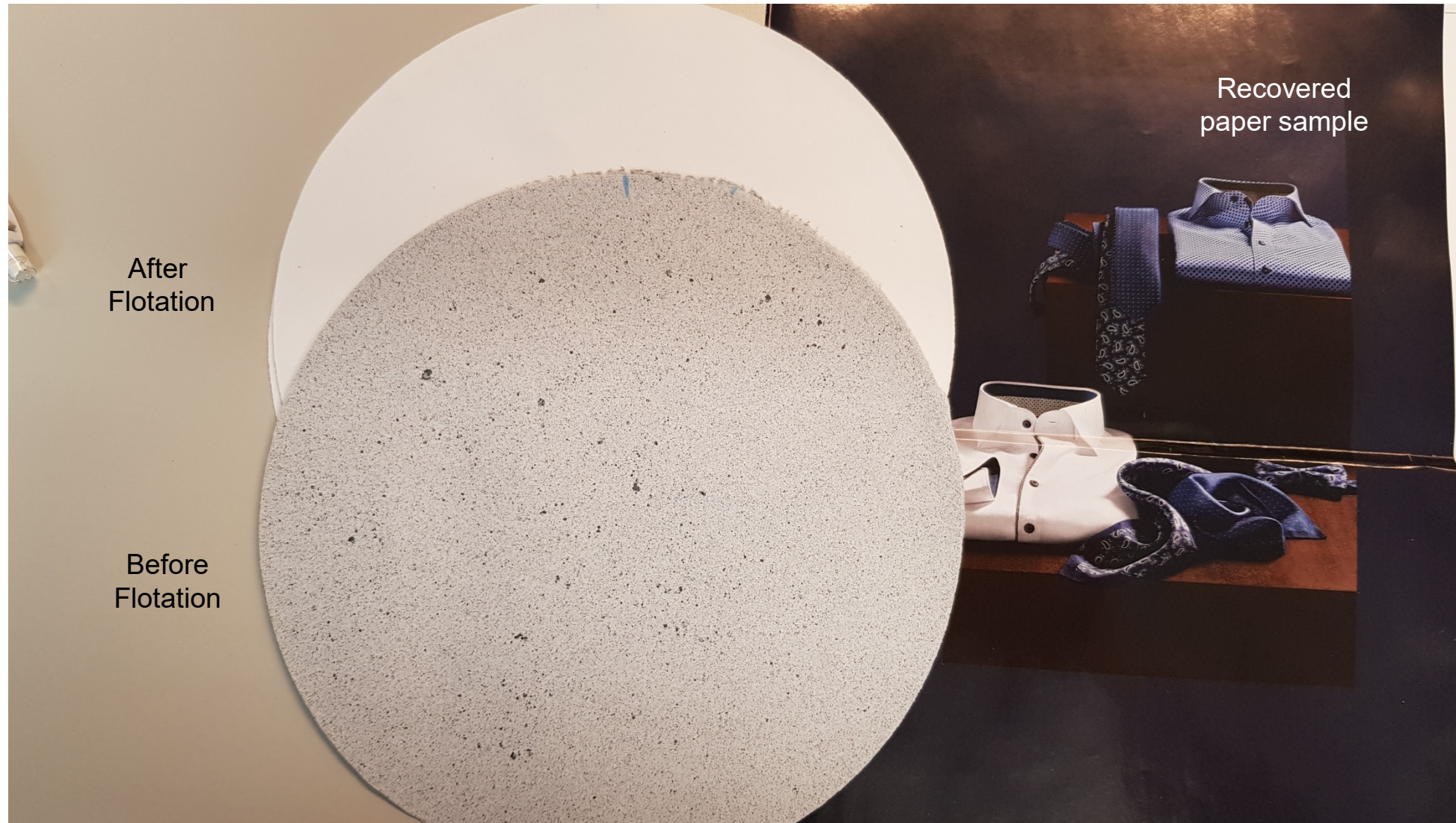
The deinkability shall be proven by using the ‘Deinkability Scorecard’ of the European Paper Recycling Council (EPRC) or equivalent test methods.



Examples for poor deinkability



Examples for good deinkability



Keeping the circular economy running: Printed Matter – high importance to provide recycled paper stream

Recyclability

- › Recyclability for wet strength agents and removability for adhesives
- › The easiness of removal of the non-paper components shall be proven
- › The methods shown by a competent and independent third party as giving equivalent results may also be used



Summary

- › The Blue Angel takes into account the lowest impact on environment and human health
- › The EU Ecolabel is demanding various parameters for all kind of environmental friendly graphic papers
- › Whereas other labels like FSC only put their focus on the origin of fibres without requiring any further parameters
- › Papers certified to Blue Angel and/or EU Ecolabel are offering best in class papers for all kind of purposes and help to protect the environment.



Thank you!



stp.de